

BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN

Joint Application of Wisconsin Electric Power Company
and Wisconsin Gas LLC for Authority to Adjust Electric,
Natural Gas and Steam Rates

Docket No. 5-UR-111

DIRECT TESTIMONY OF ANN E. BULKLEY

1 **I. INTRODUCTION**

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

3 A. My name is Ann E. Bulkley. I am a Principal at The Brattle Group ("Brattle"). My
4 business address is One Beacon Street, Suite 2600, Boston, Massachusetts 02108.

5 **Q. On whose behalf are you submitting this direct testimony?**

6 A. I am submitting this direct testimony before the Wisconsin Public Service
7 Commission ("Commission") on behalf of Wisconsin Electric Power Company
8 ("Wisconsin Electric") and Wisconsin Gas LLC ("Wisconsin Gas") (collectively,
9 "We Energies" or the "Companies").

10 **Q. Please describe your education and experience.**

11 A. I hold a bachelor's degree in Economics and Finance from Simmons College and a
12 master's degree in Economics from Boston University. I have over 25 years of
13 experience consulting to the energy industry. I have advised numerous energy and
14 utility clients on a wide range of financial and economic issues with primary
15 concentrations in valuation and utility rate matters. Many of these assignments
16 have included the determination of the cost of capital for valuation and

1 ratemaking purposes. My resume and a summary of my testimony in other
2 proceedings are included as Ex.-WEPCO WG-Bulkley-1.

3 **Q. What is the purpose of your direct testimony?**

4 A. The purpose of my direct testimony is to present evidence and provide a
5 recommendation regarding the appropriate return on equity (“ROE”) for the
6 Companies, and to assess the reasonableness of their proposed capital structure
7 for ratemaking purposes.

8 **Q. Are you sponsoring any exhibits in support of your direct testimony?**

9 A. Yes. I am sponsoring the following exhibits which were prepared by me or under
10 my direction:

- 11 • **Ex.-WEPCO WG-Bulkley-1** - Resume and Testimony Listing of Ann E.
12 Bulkley
- 13 • **Ex.-WEPCO WG-Bulkley-2(a)** - Summary of Results for Wisconsin Electric
- 14 • **Ex.-WEPCO WG-Bulkley-2(b)** - Summary of Results for Wisconsin Gas
- 15 • **Ex.-WEPCO WG-Bulkley-3(a)** - Proxy Group Screening for Wisconsin
16 Electric
- 17 • **Ex.-WEPCO WG-Bulkley-3(b)** - Proxy Group Screening for Wisconsin Gas
- 18 • **Ex.-WEPCO WG-Bulkley-4(a)** - Constant Growth DCF Results for
19 Wisconsin Electric
- 20 • **Ex.-WEPCO WG-Bulkley-4(b)** - Constant Growth DCF Results for
21 Wisconsin Gas
- 22 • **Ex.-WEPCO WG-Bulkley-5(a)** - CAPM/ECAPM Results for Wisconsin
23 Electric
- 24 • **Ex.-WEPCO WG-Bulkley-5(b)** - CAPM/ECAPM Results for Wisconsin
25 Gas
- 26 • **Ex.-WEPCO WG-Bulkley-6(a)** - Proxy Group Long-Term Beta for
27 Wisconsin Electric
- 28 • **Ex.-WEPCO WG-Bulkley-6(b)** - Proxy Group Long-Term Beta for
29 Wisconsin Gas

- 1 • **Ex.-WEPCO WG-Bulkley-7-** Market Return Calculation
- 2 • **Ex.-WEPCO WG-Bulkley-8(a)** - Bond Yield Risk Premium Results for
- 3 Electric & Natural Gas companies
- 4 • **Ex.-WEPCO WG-Bulkley-8(b)** - Bond Yield Risk Premium Results for
- 5 Natural Gas companies
- 6 • **Ex.-WEPCO WG-Bulkley-9(a)** - Capital Expenditures Analysis for
- 7 Wisconsin Electric
- 8 • **Ex.-WEPCO WG-Bulkley-9(b)** - Capital Expenditures Analysis for
- 9 Wisconsin Gas
- 10 • **Ex.-WEPCO WG-Bulkley-10(a)** - Regulatory Risk Analysis for Wisconsin
- 11 Electric Proxy Group
- 12 • **Ex.-WEPCO WG-Bulkley-10(b)** - Regulatory Risk Analysis for Wisconsin
- 13 Gas Proxy Group
- 14 • **Ex.-WEPCO WG-Bulkley-11(a)** - RRA Rankings Analysis for Wisconsin
- 15 Electric Proxy Group
- 16 • **Ex.-WEPCO WG-Bulkley-11(b)** - RRA Rankings Analysis for Wisconsin
- 17 Gas Proxy Group
- 18 • **Ex.-WEPCO WG-Bulkley-12(a)** - S&P Credit Supportive Analysis for
- 19 Wisconsin Electric Proxy Group
- 20 • **Ex.-WEPCO WG-Bulkley-12(b)** - S&P Credit Supportive Analysis for
- 21 Wisconsin Gas Proxy Group
- 22 • **Ex.-WEPCO WG-Bulkley-13(a)** - Proxy Group Capital Structure Analysis
- 23 for Wisconsin Electric
- 24 • **Ex.-WEPCO WG-Bulkley-13(b)** - Proxy Group Capital Structure Analysis
- 25 for Wisconsin Gas

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27 **Q. Please provide a summary of your recommended range for the ROE in this**
28 **proceeding.**

29 **A.** Reviewing the cost of equity estimation models I developed for my testimony and
30 considering current market conditions and business risk factors, I conclude that a
31 reasonable range for the ROE is 10.25 percent to 11.25 percent. However, the

1 Companies are requesting that the Commission authorize an ROE of 10.00 percent
2 for both Wisconsin Electric and Wisconsin Gas. This requested ROE is at the
3 median result of the Constant Growth DCF model for Wisconsin Electric and
4 below the mean and median Constant Growth DCF model results for Wisconsin
5 Gas. Further, the requested ROE is below the low end of the range of all of the risk
6 premium models that I developed for Wisconsin Electric (CAPM, ECAPM and
7 Bond Yield Risk Premium). Reviewing the natural gas proxy group results, the
8 requested ROE is at the low end of the range of risk premium models that I
9 developed for Wisconsin Gas. Taking into consideration all of the analyses I
10 prepared, I conclude that the requested ROE of 10.00 percent is reasonable.

11 **Q. Please summarize your conclusions about the Companies' capital structures.**

12 A. Based on my review of the capital structures of the utility operating companies
13 owned by the proxy group companies and considering the requested ROE for each
14 of these companies, I conclude that the Companies' requested financial capital
15 structures, which would include 53.50 percent equity, are reasonable and
16 appropriate. A financial capital structure of 53.50 percent equity results in
17 regulatory capital structures for both Wisconsin Electric and Wisconsin Gas that
18 are within the range of my proxy group analyses for both utilities. Particularly in
19 light of the relatively lower ROEs requested by the Companies, I conclude from
20 my analysis that a financial capital structure that includes 53.50 percent equity is
21 reasonable for both Wisconsin Electric and Wisconsin Gas.

1 Q. Please provide a brief overview of the analyses that led to your ROE
2 recommendation.

3 A. I relied on the results of several analytical approaches to estimate the costs of
4 equity for Wisconsin Electric and Wisconsin Gas. I first developed separate proxy
5 groups for Wisconsin Electric and Wisconsin Gas that consist of publicly-traded
6 electric and natural gas companies for Wisconsin Electric and publicly-traded
7 natural gas companies for Wisconsin Gas. The Wisconsin Electric and Wisconsin
8 Gas proxy groups face risks that are generally comparable to those faced by
9 Wisconsin Electric and Wisconsin Gas. As discussed in more detail in Section VI,
10 I estimated the costs of equity for Wisconsin Electric and Wisconsin Gas by
11 applying the Constant Growth form of the Discounted Cash Flow (“DCF”) model
12 and three different risk premium models (*i.e.*, the Capital Asset Pricing Model
13 (“CAPM”), the Empirical Capital Asset Pricing Model (“ECAPM”), and the Bond
14 Yield Risk Premium (“BYRP”)) to the proxy groups. I relied on the results of
15 multiple cost of equity estimation models because, as discussed in Section IV,
16 current and forward capital market conditions are projected to affect the inputs
17 and assumptions of the cost of equity estimation models over the period during
18 which the Companies’ rates will be effective.

19 My recommendation also takes into consideration the Companies’ relative
20 business and regulatory risk as compared with their respective proxy group, and
21 the Companies’ proposed capital structures as compared with the capital
22 structures of the operating utilities of the companies contained in the respective

1 proxy group. Although I do not make specific adjustments to my ROE
2 recommendation for either Wisconsin Electric or Wisconsin Gas for these factors,
3 I did consider them in the aggregate when determining where my recommended
4 ROE falls within the range of the analytical results.

5 **Q. How is the remainder of your testimony organized?**

6 A. The remainder of my testimony is organized as follows:

- 7 • Section II provides a summary of my analyses and conclusions.
- 8 • Section III reviews the regulatory guidelines pertinent to the development
9 of the cost of capital.
- 10 • Section IV discusses current and projected capital market conditions and
11 the effect of those conditions on the Companies' cost of equity.
- 12 • Section V explains my selection of the proxy groups.
- 13 • Section VI describes my analyses and the analytical basis for the
14 recommendation of the appropriate ROE for the Companies.
- 15 • Section VII provides a discussion of specific regulatory, business, and
16 financial risks that have a direct bearing on the ROE to be authorized for
17 the Companies in this case.
- 18 • Section VIII provides an assessment of the reasonableness of the
19 Companies' proposed capital structure.
- 20 • Section IX presents my conclusions and recommendations.

21 **II. SUMMARY OF ANALYSIS AND CONCLUSIONS**

22 **Q. Please summarize the key factors considered in your analyses and upon which**
23 **you base your recommended ROE.**

24 A. The key factors that I considered in my cost of equity analyses and recommended
25 ROE for the Companies in this proceeding are:

- 1 • The United States Supreme Court’s *Hope* and *Bluefield* decisions ¹
2 established the standards for determining a fair and reasonable authorized
3 ROE for public utilities, including consistency of the allowed return with
4 the returns of other businesses having similar risk, adequacy of the return
5 to provide access to capital and support credit quality, and the requirement
6 that the result lead to just and reasonable rates.
- 7 • The effect of and prospective capital market conditions on the cost of equity
8 estimation models and on investors’ return requirements.
- 9 • The results of several analytical approaches that provide estimates of the
10 Companies’ cost of equity. Because the Companies’ authorized ROE should
11 be a forward-looking estimate over the period during which the rates will
12 be in effect, these analyses rely on forward-looking inputs and assumptions
13 (e.g., projected analyst growth rates in the DCF model and forecasted risk-
14 free rate and market risk premium in the CAPM analysis).
- 15 • Although the companies in my proxy groups are generally comparable to
16 Wisconsin Electric and Wisconsin Gas, respectively, each company is
17 unique, and no two companies have the exact same business and financial
18 risk profiles. Accordingly, I considered the Companies’ regulatory,
19 business, and financial risks relative to their respective proxy group of
20 comparable companies in determining where the Companies’ ROEs should
21 fall within the reasonable range of analytical results to appropriately
22 account for any residual differences in risk.

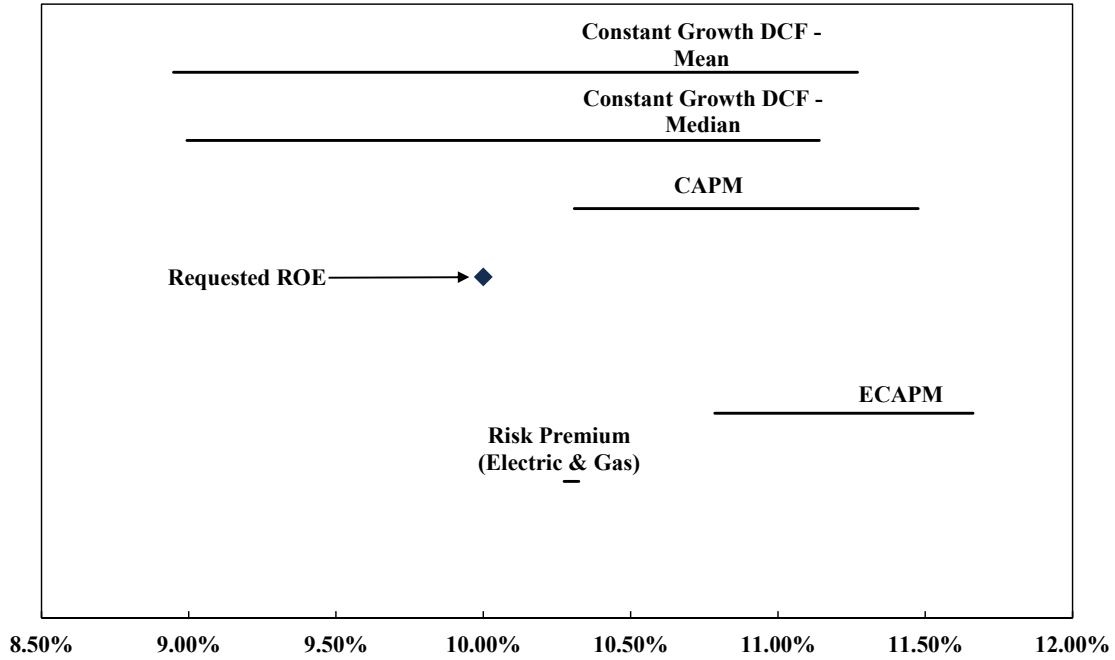
23 **Q. What are the results of the models that you have used to estimate the cost of**
24 **equity for the Companies in this proceeding?**

25 A. Figure 1 summarizes the range of results of my cost of equity analyses for
26 Wisconsin Electric and Figure 2 summarizes the range of results for Wisconsin
27 Gas.

¹ *Fed. Power Comm’n v. Hope Nat. Gas Co.*, 320 U.S. 591 (1944) (“*Hope*”); *Bluefield Waterworks & Improvement Co. v. Pub. Serv. Comm’n of West Virginia*, 262 U.S. 679 (1923) (“*Bluefield*”).

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Figure 1: Summary of Cost of Equity Analytical Results for Wisconsin Electric

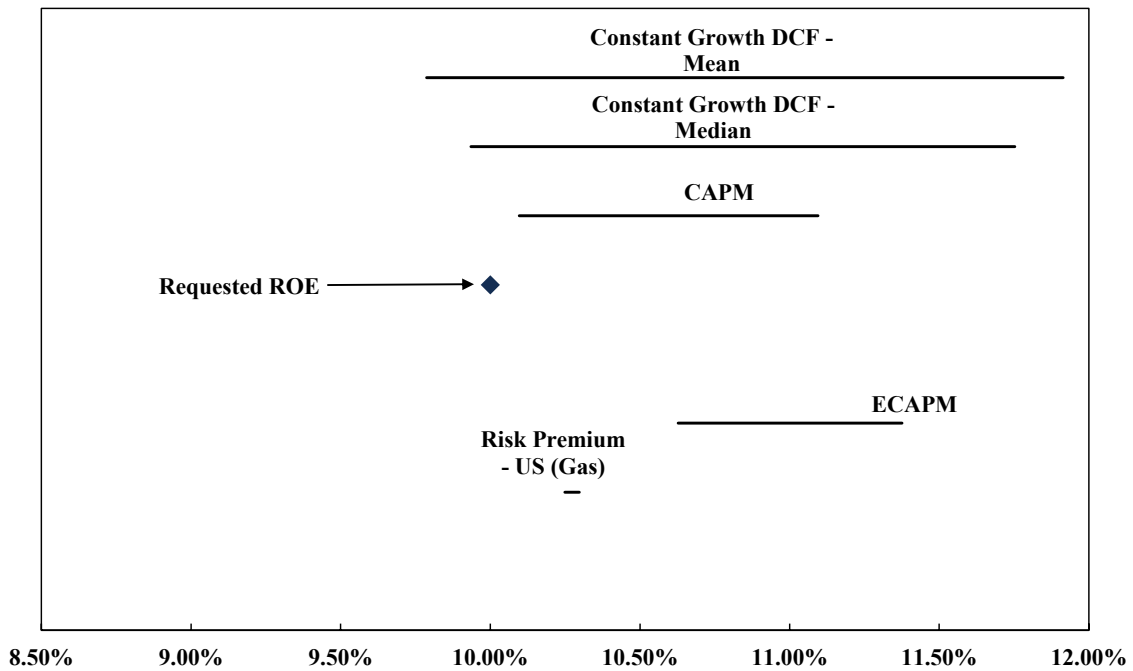


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Figure 2: Summary of Cost of Equity Analytical Results for Wisconsin Gas



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As shown, the range of results across all methodologies is wide. Although it is common to consider multiple models to estimate the cost of equity, it is

1 particularly important when the range of results varies considerably across
2 methodologies.

3 **Q. Are prospective capital market conditions expected to affect the cost of equity**
4 **for the Companies during the period in which the rates established in this**
5 **proceeding will be in effect?**

6 A. Yes. Capital market conditions are expected to affect the results of the cost of
7 equity estimation models. Specifically:

- 8 • Long-term interest rates have increased substantially in the past two years
9 and are expected to remain relatively high at least over the next year in
10 response to inflation.
- 11 • Because (i) utility dividend yields are less attractive than the risk-free rates
12 of government bonds; (ii) interest rates are expected to remain near current
13 levels over the next year, and (iii) utility stock prices are inversely related
14 to changes in interest rates; utility share prices may remain depressed.
- 15 • Rating agencies have responded to the risks of the utility sector, citing
16 factors including elevated capital expenditures, interest rates, and inflation
17 that create pressures for customer affordability and prompt rate recovery,
18 and have noted the importance of regulatory support in their current
19 outlooks.
- 20 • Similarly, equity analysts have noted the increased risk for the utility sector
21 as a result of rising interest rates and expect the sector to underperform in
22 2024.
- 23 • Consequently, it is important to consider that if utility share prices decline,
24 the results of the DCF model, which relies on current utility share prices,
25 would understate the cost of equity during the period that the Companies'
26 rates will be in effect.

1 It is appropriate to consider all of these factors when estimating a
2 reasonable range of the investor-required cost of equity and the recommended
3 ROEs for the Companies.

4 **Q. Are the Companies' requested ROEs in this proceeding reasonable?**

5 A. Yes. Considering the range of analytical results of the cost of equity models,
6 current and prospective capital market conditions, and the Companies'
7 regulatory, business, and financial risk relative to their proxy group, the
8 Companies' requested ROE of 10.00 percent for both Wisconsin Electric and
9 Wisconsin Gas is reasonable.

10 **Q. Are the Companies' requested capital structures reasonable and appropriate?**

11 A. Yes. Wisconsin Electric's proposed equity ratio of 53.5 percent and Wisconsin
12 Gas's proposed equity ratio of 53.5 percent is well within the range of the actual
13 capital structures of the utility operating subsidiaries of their respective proxy
14 group companies. Further, the Companies' proposed equity ratios are reasonable
15 considering credit rating agencies' continued concern with the negative effect on
16 the cash flows and credit metrics associated relatively high interest rates and
17 inflation, record levels of capital spending, and the need to fund capital spending
18 in a credit supportive manner.

1 **III. REGULATORY GUIDELINES**

2 **Q. Please describe the guiding principles used in establishing the cost of capital**
3 **for a regulated utility.**

4 A. The U.S. Supreme Court’s precedent-setting *Hope* and *Bluefield* cases established
5 the standards for determining the fairness or reasonableness of a utility’s
6 authorized ROE. Among the standards established by the Court in those cases are:
7 (1) consistency with other businesses having similar or comparable risks; (2)
8 adequacy of the return to support credit quality and access to capital; and (3) the
9 principle that the specific means of arriving at a fair return are not important, only
10 that the end result (*i.e.*, an ROE that reflects investors’ requirements for
11 investments of comparable risks and supports a utility’s credit quality and access
12 to capital) leads to just and reasonable rates.²

13 **Q. Has the Commission provided similar guidance in establishing the appropriate**
14 **return on common equity?**

15 A. Yes. The Commission follows the precedents of the *Hope* and *Bluefield* cases by
16 acknowledging that utility investors are entitled to a fair and reasonable return.
17 For example, in the Companies’ previous 2022 rate case (Docket No. 5-UR-110),
18 the Commission stated that:

19 The principal factor used to determine the appropriate ROE is the
20 investors’ required return. Authorized returns of less than the
21 investors’ required return would fail to compensate capital
22 providers for the risks they face when providing funds to the utility.
23 Such sub-par returns would make it difficult for a utility to raise
24 capital on an ongoing basis. On the other hand, authorized returns

2 *Bluefield*, 262 U.S. at 692-93; *Hope*, 320 U.S. at 603.

1 that exceed the investors' required return would provide windfalls
2 to utility investors as they would receive returns that are in excess of
3 the necessary level. Such high returns would be unfair to utility
4 consumers who ultimately pay for those returns. In reaching its
5 determination as to the appropriate ROE, the Commission must
6 balance the needs of investors with the needs of consumers, with due
7 considerations to economic and financial conditions, along with
8 public policy considerations.³

9 This guidance is in accordance with my view that an authorized rate of
10 return on equity must be sufficient to enable regulated companies, like Wisconsin
11 Electric and Wisconsin Gas, to attract equity capital on reasonable terms.

12 **Q. Why is it important for a utility to be allowed the opportunity to earn an ROE**
13 **that is adequate to attract capital at reasonable terms?**

14 A. An ROE that is adequate to attract capital at reasonable terms enables the
15 Companies to continue to provide safe, reliable electric and natural gas service
16 while maintaining their financial integrity. That return should be commensurate
17 with returns expected elsewhere in the market for investments of equivalent risk.
18 If it is not, debt and equity investors will seek alternative investment opportunities
19 for which the expected return reflects the perceived risks, thereby inhibiting the
20 ability of the Companies to attract capital at reasonable cost.

21 **Q. Is a utility's ability to attract capital also affected by the ROEs that are**
22 **authorized for other utilities?**

23 A. Yes. Utilities compete directly for capital with other investments of similar risk,
24 which includes other utilities. Therefore, the ROE authorized for a utility sends an

³ Final Decision, Docket No. 5-UR-110 (PSC REF#: 455451) (Dec. 29, 2022), at 56.

1 important signal to investors regarding whether there is regulatory support for
2 financial integrity, dividends, growth, and fair compensation for business and
3 financial risk. The cost of capital represents an opportunity cost to investors. If
4 higher returns are available for other investments of comparable risk, over the
5 same time period, investors have an incentive to direct their capital to those
6 alternative investments. Thus, an authorized ROE significantly below authorized
7 ROEs for other utilities can inhibit the utility's ability to attract capital for
8 investment.

9 **Q. What is the standard for setting the ROE in a jurisdiction?**

10 A. The stand-alone ratemaking principle is the foundation of jurisdictional
11 ratemaking. This principle requires that the rates that are charged in any operating
12 jurisdiction be for the costs incurred in that jurisdiction. The stand-alone
13 ratemaking principle ensures that customers in each jurisdiction only pay for the
14 costs of the service provided in that jurisdiction, which is not influenced by the
15 business operations in other operating companies. In order to maintain this
16 principle, the cost of equity analysis is performed for an individual operating
17 company as a stand-alone entity. As such, I have evaluated the investor-required
18 return for Wisconsin Electric's electric and natural gas operations in Wisconsin
19 and Wisconsin Gas's natural gas operations in Wisconsin.

1 **Q. Does the fact that the Companies are wholly-owned by WEC Energy Group, a**
2 **publicly-traded company, affect your analysis?**

3 A. No. In this proceeding, consistent with stand-alone ratemaking principles, it is
4 appropriate to establish the cost of equity for Wisconsin Electric and Wisconsin
5 Gas, not their publicly-traded parent, WEC Energy Group, Inc. ("WEC"). More
6 importantly, however, it is appropriate to establish a cost of equity and capital
7 structure for each utility that provide them the ability to attract capital on
8 reasonable terms, both on a stand-alone basis and within WEC. Although
9 Wisconsin Electric and Wisconsin Gas are committed to investing the required
10 capital to provide safe and reliable service, because they are subsidiaries of WEC,
11 the Companies compete with the other WEC subsidiaries for discretionary
12 investment capital. In determining how to allocate its finite discretionary capital
13 resources, it would be reasonable for WEC to consider the authorized ROE of each
14 of its subsidiaries.

15 **Q. Is the regulatory framework, including the authorized ROE and equity ratio,**
16 **important to the financial community?**

17 A. Yes. The regulatory framework is one of the most important factors in investors'
18 assessments of the risk of utilities. Specifically, the authorized ROE and equity
19 ratio for regulated utilities is very important for determining the degree of
20 regulatory support for a utility's creditworthiness and financial stability in the
21 jurisdiction. To the extent that authorized returns in a jurisdiction are lower than
22 the returns that have been authorized more broadly, such actions are considered

1 by both debt and equity investors in the overall risk assessment of the regulatory
2 jurisdiction in which the company operates.

3 **Q. Are you aware of any utilities that have experienced a credit rating downgrade
4 and/or market response related to the financial effects of a rate case decision?**

5 A. Yes. There are numerous examples in which utilities have experienced a negative
6 market response related to the financial effects of a rate decision, including credit
7 rating downgrades and material stock price declines. For example, ALLETE, Inc.,⁴
8 CenterPoint Energy Houston Electric,⁵ and Pinnacle West Capital Corporation
9 (“PNW”)⁶ each received credit rating downgrades following rate case decisions in
10 the past few years for reasons that included below average authorized ROEs. The
11 most recent example is the decision by the Illinois Commerce Commission (“ICC”)
12 in mid-December 2023 that rejected the multiyear grid plan proposals of Ameren
13 Illinois Co. (“Ameren IL”) and Commonwealth Edison Co. (“ComEd”) and
14 authorized lower-than-expected ROEs for both utilities. Specifically, the ICC
15 authorized an ROE for Ameren IL of 8.72 percent and 8.905 percent for ComEd,
16 which was a significant reduction from the Administrative Law Judge’s
17 recommendations of 9.24 percent and 9.28 percent, respectively.⁷ In addition, the

⁴ Moody’s Investors Service, “Credit Opinion: ALLETE, Inc. Update following downgrade,” April 3, 2019, at 3.

⁵ Fitch Ratings, “Fitch Downgrades CenterPoint Energy Houston Electric to BBB+; Affirms CNP; Outlooks Negative,” February 19, 2020.

⁶ S&P Capital IQ Pro; Fitch Ratings, “Fitch Downgrades Pinnacle West Capital & Arizona Public Service to ‘BBB+’; Outlooks Remain Negative,” October 12, 2021; and Moody’s Investors Service, “Rating Actions: Moody’s downgrades Pinnacle West to Baa1 and Arizona Public Service to A3; outlook negative,” November 17, 2021.

⁷ Allison Good, “Ameren, Exelon shares fall after Illinois regulators reject grid plans,” *Platts*, December 15, 2023.

1 ICC issued decisions for the natural gas utilities, including Peoples Gas and North
2 Shore Gas that resulted in low authorized ROEs and significant disallowances.⁸

3 **Q. How did the market respond to the ICC's Decisions for these utilities?**

4 A. Although the Standard & Poor's ("S&P") 500 Index was increasing, the share
5 prices of the parent companies of both Ameren IL and ComEd (*i.e.*, Ameren Corp.
6 and Exelon Corp., respectively) each dropped more than 7 percent on December
7 14, 2023 after the ICC's decisions, and declined again by more than 4.4 percent and
8 6.4 percent the following day, respectively.⁹ As of the close on January 5, 2023,
9 stock prices Ameren and Exelon were, respectively, 8.9 percent and 11.4 percent
10 below where their stock prices closed on December 13, 2023, the day immediately
11 prior to the ICC's decisions.¹⁰

12 In addition, the reactions of equity analysts were universally negative, and
13 questioned whether the parents of both Ameren IL and ComEd (*i.e.*, Ameren Corp.
14 and Exelon Corp., respectively) will shift their capital spending out of the
15 jurisdiction as a result of the uncertainty associated with the multiyear rate plan
16 and low authorized ROEs. For example:

- 17 • Barclays characterized the ICC's ROE authorizations as "draconian" and
18 "one of the lowest awarded in recent memory, especially in an elevated
19 interest rate and cost of capital environment."¹¹ Barclays also stated it found
20 it hard to believe utilities "can deploy capital under the same magnitude on

⁸ Peoples Gas and North Shore Gas were authorized ROEs of 9.38 percent. *See* Illinois Commerce Commission Docket Nos. 23-0069 and 23-0068.

⁹ Yahoo! Finance.

¹⁰ Ameren Corp.'s stock price closed at \$81.32 on December 13, 2023 and \$74.05 on January 5, 2023. Exelon Corp.'s stock price closed at \$41.00 on December 13, 2023 and \$36.31 on January 5, 2023.

¹¹ Barclays, "AEE/EXC: Coal Stocking-Stuffer in Illinois," December 14, 2023.

1 the updated grid plans to be filed, especially under the current proposed
2 ROE framework.”

- 3 • In its assessment of the impact on Exelon, the parent of ComEd, UBS stated
4 that, “[t]he actions taken by the ICC today call into question, in our view,
5 the regulatory backdrop in which [Exelon] operates.”¹²
- 6 • Wells Fargo stated that it was not mincing words, that the ICC’s orders
7 were “onerous” and that:

8 We now view IL as one of the worst regulatory jurisdictions
9 in the U.S. (nipping at CT’s heels). We think the totality of the
10 recent orders suggest that the regulatory balancing act
11 between customers and investors is currently heavily skewed
12 toward customers. As a result, we wonder if AEE & EXC will
13 allocate capital away from IL. Keep in mind, IL represents
14 ~25% of both AEE’s & EXC’s total rate base.”¹³

- 15 • In its evaluation of Ameren IL, BofA Securities characterized the ICC’s
16 decision as “punitive” and stated that it was a surprise based on numerous
17 conversations with investors that believed the ICC may authorize an ROE
18 above the ALJ’s recommendation, not substantially lower, and that the
19 downside surprise was one of the biggest in recent memory for their
20 regulated utility coverage.¹⁴ Although BofA Securities acknowledged that
21 Ameren IL represents less than 20 percent of Ameren Corp.’s consolidated
22 rate base, it will nonetheless need offsets or capital expenditures elsewhere
23 in order to hit its earnings growth rate targets.¹⁵
- 24 • After the decisions, Guggenheim questioned, “Is Illinois Becoming the Next
25 Connecticut?” Guggenheim noted that investors questioned whether
26 Illinois was “slowly becoming a CT-esque jurisdiction,” and that equity and
27 debt holders are going to be wary of Illinois as a jurisdiction going forward
28 and that the ICC is “simply sending a negative message to investors.”¹⁶

¹² UBS, First Read Exelon Corp., “Negative Rate Case Outcome – Rating and PT Under Review,” December 14, 2023.

¹³ Wells Fargo, “The ICC Delivers a Lump of Coal for AEE & EXC,” December 14, 2023.

¹⁴ BofA Securities, Ameren Corporation, “Illinois delivers downside surprise,” December 15, 2023.

¹⁵ *Id.*

¹⁶ Guggenheim, “IL: Is Illinois Becoming the Next Connecticut? To Be Determined, but Taking a Neutral Stance on the State,” December 15, 2023.

1 Also after the ICC’s decisions, Regulatory Research Associates (“RRA”)
2 lowered its rating of the Illinois regulatory jurisdiction from Average/2 to
3 Average/3 due to the “concerning pattern of restrictive” rate actions in the state.¹⁷

4 **Q. How did the companies respond to the Illinois rate decision?**

5 A. Ameren reduced its capital spending plan significantly following the rate
6 decisions.¹⁸ WEC Energy Group took an impairment related to the ICC
7 disallowance in the amount of \$178.0 million and reduced its capital plans for
8 Illinois gas delivery by \$800 million.¹⁹

9 **Q. What are your conclusions regarding the regulatory principles to be used in**
10 **establishing the cost of capital in this proceeding?**

11 A. The ratemaking process is premised on the principle that, in order for investors
12 and companies to commit the capital needed to provide safe and reliable utility
13 services, a utility must have a reasonable opportunity to recover the return of, and
14 the market-required return on, its invested capital. Accordingly, the Commission’s
15 order in this proceeding should establish rates that provide the Companies with a
16 reasonable opportunity to earn an ROE that is: (1) adequate to attract capital on
17 reasonable terms; (2) sufficient to ensure their financial integrity; and (3)
18 commensurate with returns on investments in enterprises with similar risk. It is
19 important for the ROEs authorized in this proceeding to take into consideration
20 current and projected capital market conditions, as well as investors’ expectations

¹⁷ Regulatory Research Associates, Commission reviews accessed March 1, 2024.

¹⁸ Ameren Corporation FQ4 2023 Earnings Call Transcript, February 23, 2024, p.11.

¹⁹ WEC Energy Group, 2023 Year End Earnings Released February 1, 2024, at pp. 5, 17.

1 and requirements for both risks and returns. Because utility operations are capital-
2 intensive, regulatory decisions should enable utilities to attract capital at
3 reasonable terms under a variety of economic and financial market conditions.
4 Providing the opportunity to earn a market-based cost of capital supports the
5 financial integrity of the Companies, which is in the interest of both customers and
6 shareholders.

7 **IV. CAPITAL MARKET CONDITIONS**

8 **Q. Why is it important to analyze capital market conditions?**

9 A. The models used to estimate the cost of equity rely on market data and thus the
10 results of those models can be affected by prevailing market conditions at the time
11 the analysis is performed. Although the ROE established in a rate proceeding is
12 intended to be forward-looking, the analysis uses current and projected market
13 data, including stock prices, dividends, growth rates, and interest rates, in the cost
14 of equity estimation models to estimate the investor-required return for the subject
15 company.

16 Analysts and regulatory commissions recognize that current market
17 conditions affect the results of the cost of equity estimation models. As a result, it
18 is important to consider the effect of market conditions on these models when
19 determining an appropriate range for the ROE, and the reasonableness of an ROE
20 to be used for ratemaking purposes for a future period. If investors do not expect
21 current market conditions to continue, it is possible that the cost of equity
22 estimation models will not provide an accurate estimate of investors' required

1 return while rates are in effect. Therefore, it is very important to consider projected
2 market data to estimate the return for that forward-looking period.

3 **Q. What factors are affecting the cost of equity for regulated utilities in the current
4 and prospective capital markets?**

5 A. The cost of equity for regulated utility companies is being affected by several
6 factors in the current and prospective capital markets, including: (1) relatively high
7 inflation; (2) changes in monetary policy; and (3) elevated interest rates that are
8 expected to remain relatively high over the next few years. These factors affect the
9 assumptions used in the cost of equity estimation models.

10 **A. Inflation is Expected to Remain Above the Federal Reserve’s Target
11 Level in the Near-Term.**

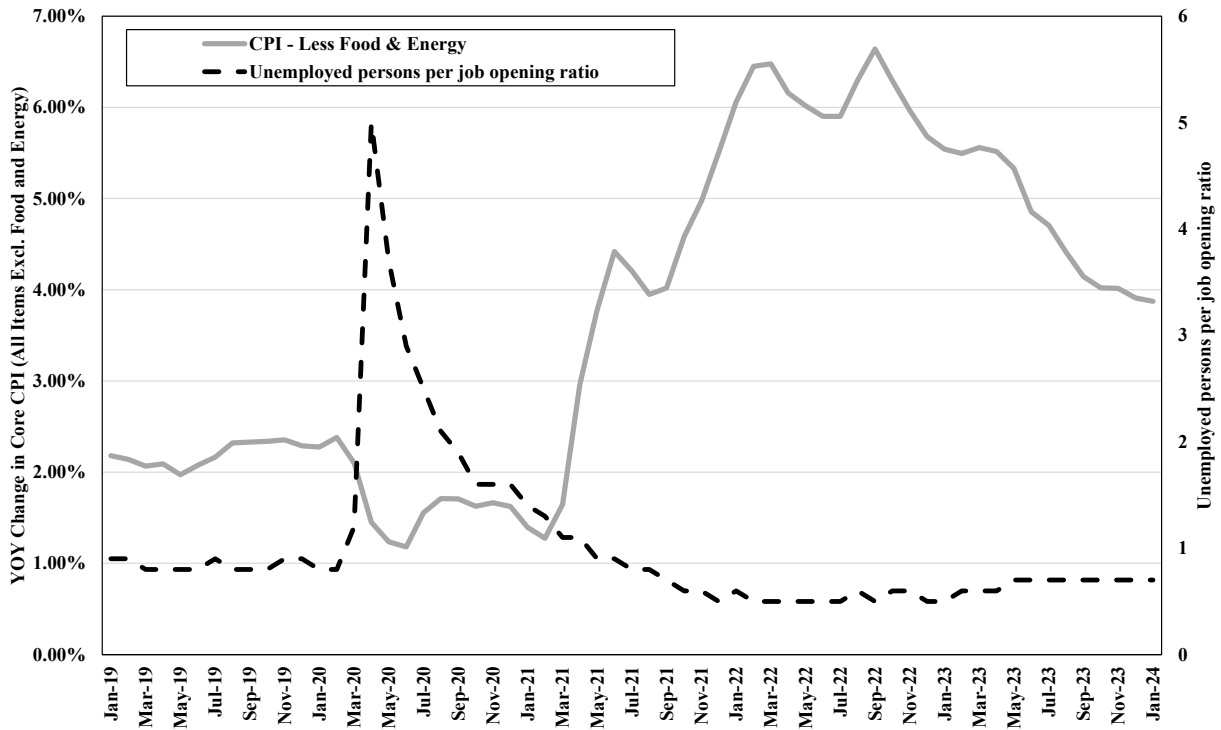
12 **Q. What has the level of inflation been over the past few years?**

13 A. As shown in Figure 3, core inflation increased steadily beginning in early 2021,
14 rising from 1.40 percent in January 2021 to a high of 6.64 percent in September
15 2022, which was the largest 12-month increase since 1982.²⁰ Since that time,
16 although core inflation has declined in response to the Federal Reserve’s monetary
17 policy, it continues to remain above the Federal Reserve’s target level of 2.0
18 percent.

²⁰ The year-over-year (“YOY”) change in core inflation, as measured by the Consumer Price Index (“CPI”) excluding food and energy prices as published by the Bureau of Labor Statistics, is considered because it is the preferred inflation indicator of the Federal Reserve for determining the direction of monetary policy. Core inflation is preferred by the Federal Reserve because it removes the effect of food and energy prices, which can be highly volatile.

1 In addition, as shown in Figure 3**Error! Reference source not found.**, I have
2 also considered the ratio of unemployed persons per job opening, which is
3 currently 0.7 and has been consistently below 1.0 since 2021, despite the Federal
4 Reserve’s accelerated policy normalization. This metric indicates sustained
5 strength in the labor market. Given the Federal Reserve’s dual mandate of
6 maximum employment and price stability, continued increased levels of core
7 inflation coupled with strength in the labor market has resulted in the Federal
8 Reserve’s sustained focus on the priority of reducing inflation through monetary
9 policy.

1 **Figure 3: Core Inflation and Unemployed Persons-to-Job Openings, January 2019 to January**
 2 **2024²¹**



3
 4 **Q. What are expectations for inflation in the near-term?**

5 A. The Federal Reserve has indicated it expects inflation will remain elevated above
 6 its target level until 2026 and that the extent to which it maintains restrictive
 7 monetary policy will depend on market indicators going forward. For example,
 8 Federal Reserve Chair Jerome Powell observed during the Federal Open Market
 9 Committee (“FOMC”) meeting on January 31, 2024 that although inflation is less
 10 than its recent highs, progress towards the Federal Reserve’s target of 2 percent
 11 inflation is not assured and may require policy rates to remain elevated for longer.

²¹ Bureau of Labor Statistics.

1 ²² The FOMC concluded their January 2024 FOMC meeting with a unanimous
2 decision to leave the federal funds rate unchanged.

3 More recently, Chairman Powell addressed Congress on March 6, 2024,
4 indicating that “the central bank’s policy-setting committee still isn’t convinced
5 that continued progress toward their 2% inflation objective is ‘assured’, and that it
6 won’t make sense to cut interest rates until it is confident.”²³ Chairman Powell
7 further noted that the labor market remains relatively tight even though inflation
8 has eased notably.²⁴ Finally, at the March 2024 meeting the FOMC decided
9 maintain the target range for the federal funds rate at 5.25 percent to 5.50 percent.
10 In his speech following the meeting, Chairman Powell noted the continued
11 economic strength, and that the FOMC remains highly attentive to inflation risks
12 and is prepared to maintain the current federal funds rate for longer, if
13 appropriate.²⁵

14 **Q. What is the market’s expectation about interest rate cuts?**

15 A. The market has recognized the strength in the economy and the labor market and
16 has tempered its expectations that regarding how much the FOMC will decrease
17 the federal funds rate in 2024. The CME Group, which publishes a “FedWatch”
18 probability chart of FOMC activity, is currently reporting less than a ten percent
19 probability that the FOMC will reduce rates in May.²⁶

²³ Barron’s, Powell Testimony” Fed Won’t Rush Rate Cuts, March 6, 2024.

²⁴ *Id.*

²⁵ Federal Reserve, Transcript of Chair Powell’s Press Conference, March 20, 2024, at 16.

²⁶ CME Group, CME FedWatch Tool, accessed March 28, 2024.

1 **B. The Federal Reserve is Likely to Continue Use of Monetary Policy to**
2 **Address Inflation.**

3 **Q. What policy actions has the Federal Reserve taken to respond to increased**
4 **inflation?**

5 A. The dramatic increase in inflation since 2021 has prompted the Federal Reserve to
6 pursue an aggressive normalization of monetary policy, removing the
7 accommodative policy programs used to mitigate the economic effects of COVID-
8 19. Since its March 2022 meeting, the Federal Reserve increased the target federal
9 funds rate through a series of increases from a range of 0.00 – 0.50 percent to a
10 range of 5.25 percent to 5.50 percent.²⁷ Further, as noted above, although the
11 Federal Reserve acknowledges that inflation has declined from its peak, it still is
12 well above the target of 2 percent. Therefore, the Federal Reserve anticipates the
13 continued need to maintain the federal funds rate at a restrictive level in order to
14 achieve its goal of 2 percent inflation over the long-run.

15 **C. The Federal Reserve’s Monetary Policy to Combat Inflation Has**
16 **Increased Short- and Long-Term Interest Rates and the Investor-**
17 **Required Return.**

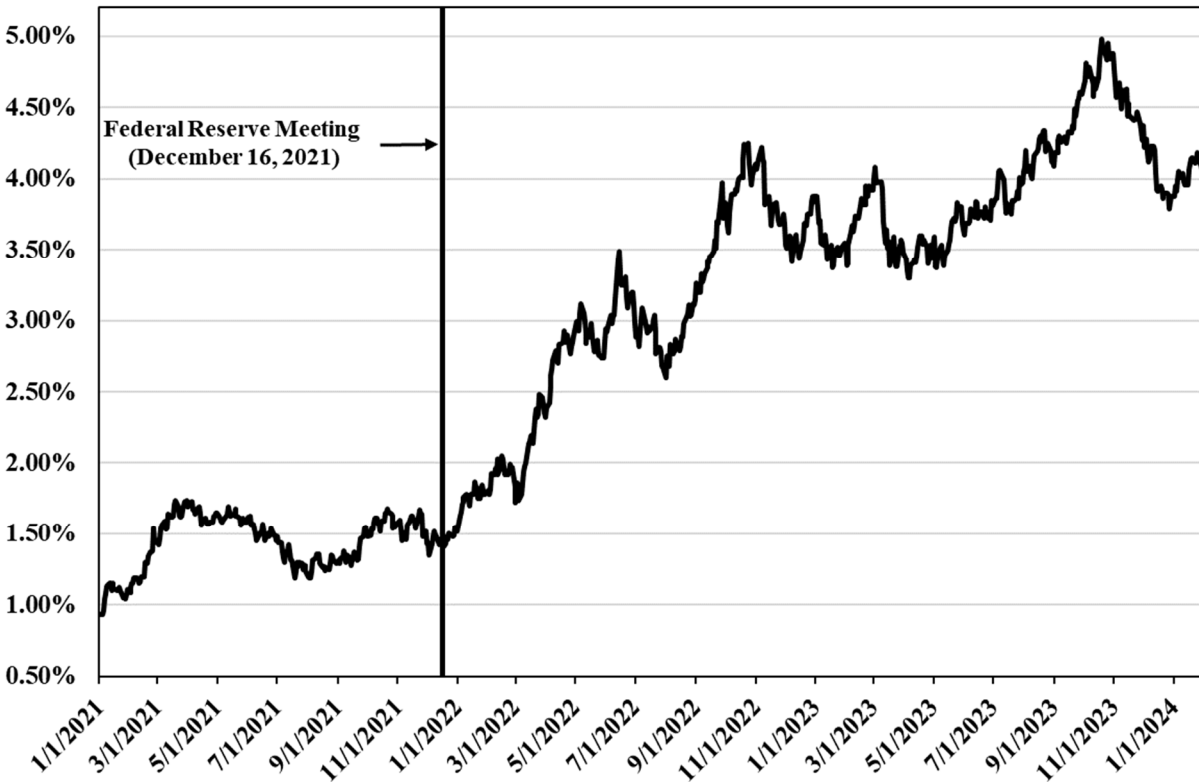
18 **Q. Have yields on long-term government bonds increased in response to inflation**
19 **and the Federal Reserve’s normalization of monetary policy?**

20 A. Yes. As the Federal Reserve has substantially increased the federal funds rate and
21 decreased its holdings of Treasury bonds and mortgage-backed securities in
22 response to increased levels of inflation that have persisted for longer than

²⁷ Federal Reserve Board of Governors Policy Tools, Open Market Operations, FOMC’s target federal funds rate or range.

1 originally projected, longer term interest rates have also increased. For example,
2 as shown in Figure 4, since the Federal Reserve's December 2021 meeting, the yield
3 on 10-year Treasury bonds have increasing from 1.47 percent on December 15,
4 2021 to 3.99 percent at the end of January 2024.

5 **Figure 4: 10-Year Treasury Bond Yield, January 2021 - January 2024**



6
7 **Q. How have interest rates and inflation changed since the Companies' last rate**
8 **case?**

9 A. As shown in

10 A. Figure 5, both short-term and long-term interest rates have increased since the
11 Commission authorized an ROE of 9.80 percent for both Wisconsin Electric and
12 Wisconsin Gas in the Companies' last full rate proceeding. Specifically, long-term
13 interest rates have increased by 50 basis points over this period, which is indicative

1 of an increase in the cost of equity. As discussed, as a result of the Federal Reserve’s
 2 monetary policy of substantially increasing short-term interest rates, core inflation
 3 has declined since the last rate proceeding, although inflation remains above the
 4 Federal Reserve’s long-term target value of 2.0 percent.

5 **Figure 5: Change in Market Conditions Since the Companies’ Last Rate Case²⁸**

Docket	Date	Federal Funds Rate	30-Day Avg. of 30- Year Treasury Bond Yield	Core Inflation Rate
Docket No. 5-UR- 110	12/29/2022	4.33%	3.70%	5.68%
Current	1/31/2024	5.33%	4.19%	3.87%

6
 7 **Q. What have equity analysts said about long-term government bond yields?**

8 A. Leading equity analysts have noted that they expect the yields on long-term
 9 government bonds to remain elevated. For example, according to the *Blue Chip*
 10 *Financial Forecasts* report, the consensus estimate of the average yields on the 10-
 11 year and 30-year Treasury bonds are approximately 3.88 percent and 4.10 percent,
 12 respectively, through the second quarter of 2025.²⁹ Therefore, investors expect
 13 interest rates to remain elevated for at least the next 15 months.

²⁸ St. Louis Federal Reserve Bank; Bureau of Labor Statistics.

²⁹ *Blue Chip Financial Forecasts*, Vol. 43, No. 2, February 1, 2024, at 2.

1 **D. Expected Performance of Utility Stocks and the Investor-Required**
2 **Return on Utility Investments.**

3 **Q. Are utility share prices correlated to changes in the yields on long-term**
4 **government bonds?**

5 A. Yes. Interest rates and utility share prices are inversely correlated, which means
6 that increases in interest rates result in declines in the share prices of utilities and
7 vice versa. For example, Goldman Sachs and Deutsche Bank examined the
8 sensitivity of share prices of different industries to changes in interest rates over a
9 five-year period. Both Goldman Sachs and Deutsche Bank found that utilities had
10 one of the strongest negative relationships with bond yields (*i.e.*, increases in bond
11 yields resulted in the decline of utility share prices).³⁰

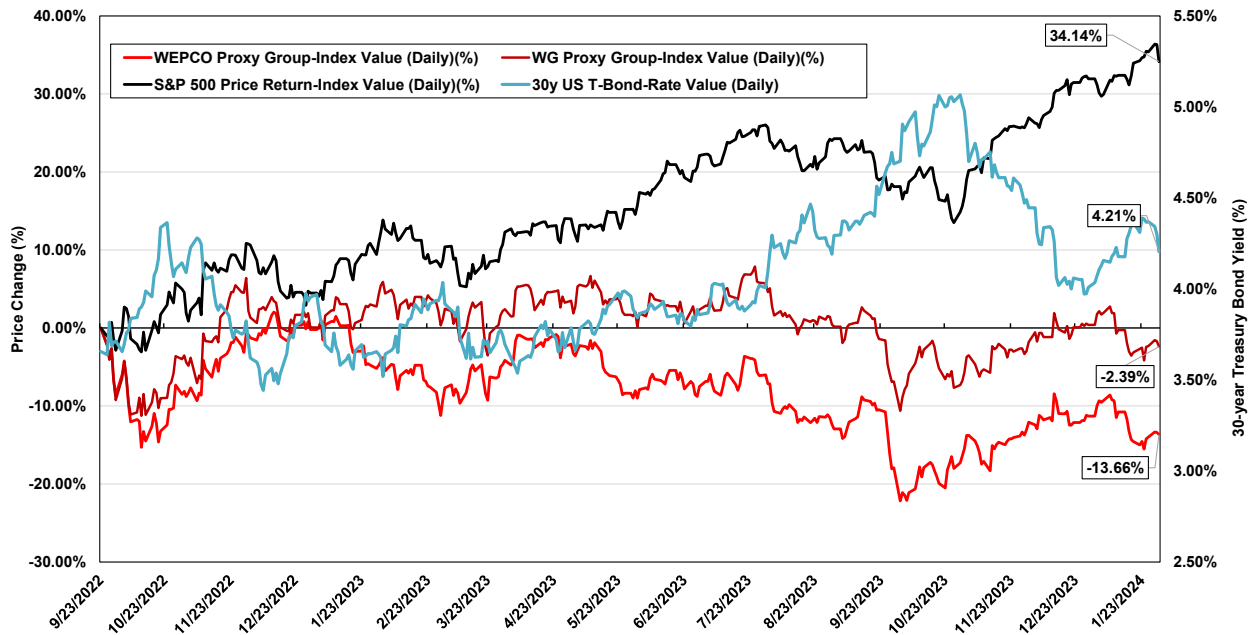
12 **Q. In the Companies’ last full rate proceeding, you discussed equity analysts’**
13 **expected underperformance of the utility sector. Did that occur?**

14 A. Yes. Since I filed my rebuttal testimony in the Companies’ last full rate proceeding
15 in the fall of 2022, utility stocks have significantly underperformed the broader
16 market, as Treasury bond yields have increased. For example, as shown in Figure
17 6, since September 23, 2022 (*i.e.*, the filing date of my rebuttal testimony in the
18 Companies’ last rate proceeding), the yield on the 30-year Treasury bond has
19 increased by approximately 60 basis points, while the share prices for the utilities
20 included in my proxy group (discussed in the following section) for Wisconsin
21 Electric *declined* by 13.66 percent and the utilities included in my proxy group for

³⁰ Lee, Justina, “Wall Street Is Rethinking the Treasury Threat to Big Tech Stocks.” Bloomberg.com, March 11, 2021.

1 Wisconsin Gas *declined* by 2.39 percent. During that same period the S&P 500 Index
 2 *increased* by 34.14 percent. The stock price under-performance for the utility sector
 3 indicates that the cost of equity has increased since the Companies' last rate
 4 proceeding.

5 **Figure 6: Relative Performance of the Proxy Groups and the S&P 500 Index,**
 6 **September 23, 2022 to January 31, 2024³¹**



7
 8
 9
 10 **Q. How do equity analysts expect the utilities sector to perform in 2024?**
 11 A. Equity analysts have recently projected the continued underperformance of the
 12 utility sector, and have not changed their views on the sector:

- 13 • Fidelity Investments classifies the utility sector as underweight;³²

³¹ S&P Capital IQ Pro.

³² Fidelity Investments. "First Quarter 2024 Investment Research Update." January 30, 2024.

- 1 • Bank of America recently noted that they are “not so constructive on
2 [u]tilities” given that the dividend yields for utilities are below both the
3 yields available on long- and short-term treasury bonds;³³
- 4 • UBS recently classified the 11 sectors of the S&P 500 as most preferred,
5 natural and least preferred for 2024 with the utility sector being classified
6 as one of UBS’s three least preferred sectors, along with materials and real
7 estate;³⁴ and
- 8 • Professional investors surveyed by *Barron’s* in its most recent Big Money
9 poll selected the utility sector as one of the four equity sectors that they
10 liked the least over the next twelve months, indicating they are projecting
11 that utilities will underperform the broader market in 2024.³⁵

12 Finally, although Ned Davis Research classified the utility sector as
13 marketweight, they cited risks going forward that could result in a downgrade of
14 their rating to underweight:

15 Key drivers: Falling yields have made Utilities’ dividend yield more
16 attractive, but the sector still yields less than the 10-year Treasury.
17 At the end of December, only 40% of the sector’s stocks yielded more
18 than the 10-year Treasury, 0.6 standard deviations below its long-
19 term average. Lower interest rates or a continuation of the sector’s
20 decline in price will be needed to attract dividend-hungry investors.

21 Indicators to watch: Utilities saw slight sector model score
22 deterioration in December, as one of its relative
23 overbought/oversold indicators flipped from bullish to neutral
24 during the month. Utilities starts 2024 tied with Consumer Staples
25 and Financials for the lowest composite scores among all sectors. We
26 see the possibility for more defensive leadership in the new year, but
27 the sector model has us much closer to a downgrade of the sector
28 than an upgrade.³⁶

³³ Dumoulin-Smith, Julien, *et. al.* “US Electric Utilities & IPPs: As the leaves fall, preparing for Autumn utility outlook. Macro still has potholes.” BofA Securities, September 6, 2023.

³⁴ Capul, Jason. “UBS Prefers Info Tech, Consumer Staples and Energy in 2024.” Seeking Alpha, December 12, 2023.

³⁵ Jasinski, Nicholas. “Big Money Pros Are Split on the Outlook for Stocks. But They Are Fans of Bonds.” *Barron’s*. October 27, 2023.

³⁶ Ned Davis Research, “Risk-on leadership closes out 2023, January 4, 2024, at 18.

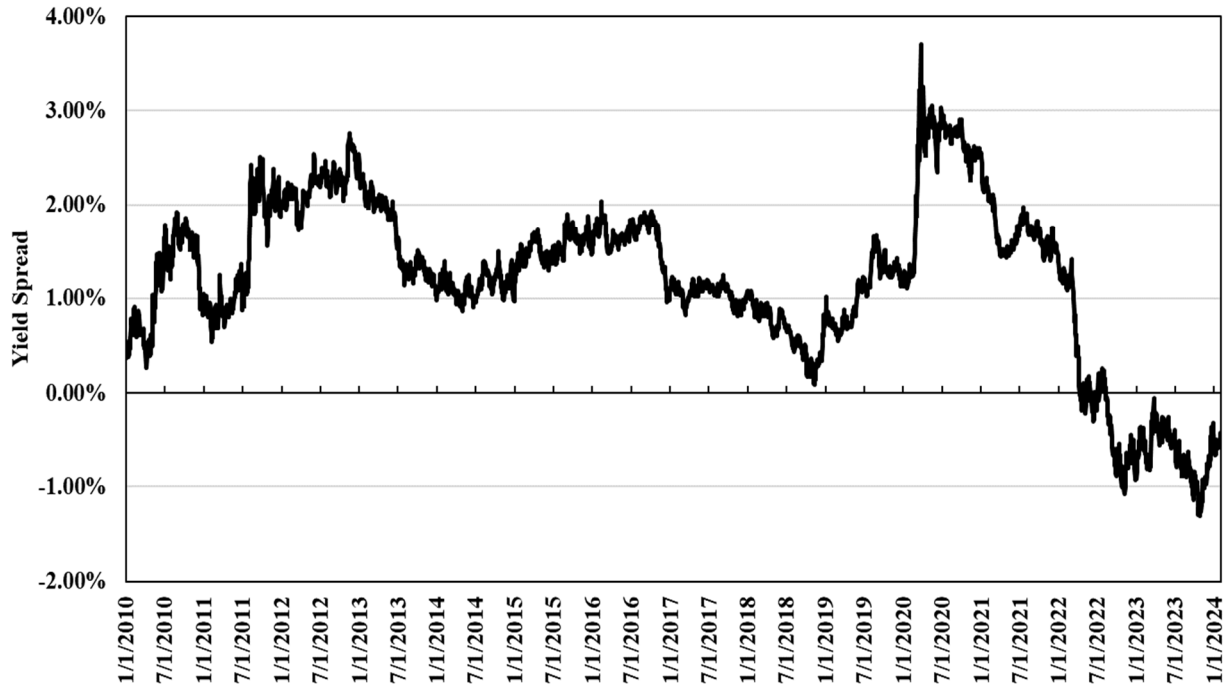
1 **Q. Why do equity analysts expect the utility sector to underperform in the near-**
2 **term?**

3 A. Equity analyst expect the utility sector to continue to underperform given that
4 utility dividend yields remain higher than the yields on long-term government
5 bonds. To illustrate this point, I have examined the difference between the
6 dividend yields of utility stocks and the yields on long-term government bonds
7 from January 2010 through January 2024 (“yield spread”). I selected the dividend
8 yield on the S&P’s Utilities Index as the measure of the dividend yields for the
9 utility sector and the yield on the 10-year Treasury bond as the estimate of the
10 yield on long-term government bonds.

11 As shown in Figure 7, the recent significant increase in long-term
12 government bonds yields has resulted in the yield on long-term government
13 bonds exceeding the dividend yields of utilities. The yield spread as of January 31,
14 2024 was negative 0.42 percent, meaning that the yield on the 10-year Treasury
15 bond exceeds the dividend yield for the S&P Utilities Index. However, the long-
16 term average yield spread from 2010 to 2023 is 1.21 percent. Therefore, the current
17 yield spread is well below the long-term average. Because of the fact that the yield
18 spread is currently well below the long-term average, and the expectation that
19 interest rates will remain relatively high through at least the next year, it is
20 reasonable to conclude that the utility sector will most likely underperform over
21 the near-term. This is because investors that purchased utility stocks as an
22 alternative to the lower yields on long-term government bonds would otherwise

1 be inclined to rotate back into government bonds, particularly as the yields on
2 long-term government bonds remain elevated, thus resulting in a decrease in the
3 share prices of utilities.

4 **Figure 7: Spread between the S&P Utilities Index Dividend Yield and the 10-year Treasury**
5 **Bond Yield, January 2010 – January 2024³⁷**



6
7 **E. Conclusion.**

8 **Q. What are your conclusions regarding the effect of current market conditions on**
9 **the cost of equity for the Companies?**

10 **A. Due to their effect on the estimated cost of equity, it is important that current and**
11 **projected market conditions be considered in setting the forward-looking ROE in**
12 **this proceeding. The combination of high inflation and the Federal Reserve's**
13 **changes in monetary policy indicate that the cost of equity has increased since the**

³⁷ S&P Capital IQ Pro and Bloomberg Professional.

1 Companies' last rate proceeding. Additionally, as demonstrated above, (i) there is
2 a strong historical inverse correlation between interest rates (*i.e.*, yields on long-
3 term government bonds) and the share prices of utility stocks (*i.e.*, as interest rates
4 increase, utility share prices decline, and thus utility dividend yields increase); and
5 (ii) the yields on long-term government bonds currently exceed the dividend
6 yields of utilities, when historically long-term government bond yields have been
7 lower than the dividend yields of utilities. Given these factors, it is possible that
8 the cost of equity could increase over the near-term for utilities. As a result, cost of
9 equity estimates based in whole or in part on historical or current market
10 conditions, as opposed to projected market conditions, may understate the cost of
11 equity during the future period that the Companies' rates will be in effect.
12 Therefore, these current and expected market conditions support consideration of
13 forward-looking cost of equity estimation models such as the CAPM and ECAPM,
14 which better reflect expected market conditions.

15 **V. PROXY GROUP SELECTION**

16 **Q. Please provide a brief profile of Wisconsin Electric.**

17 A. Wisconsin Electric provides electric generation, transmission, and distribution
18 services to approximately 1,148,000 electric customers and 500,000 natural gas
19 customers located in eastern and southeast Wisconsin.³⁸ Wisconsin Electric has a
20 peak monthly electric demand of approximately 5,400 MW, serving customers

³⁸ PSCW, Wisconsin Electric Power Company, Annual Report for Year Ended December 31, 2022, April 28, 2023, Schedule E-3 and Schedule G-3.

1 with approximately 19,600 miles of overhead distribution lines and 25,000 miles
2 of buried cable.³⁹ Wisconsin Electric provides gas service through approximately
3 68 million feet of distribution main and in 2022 distributed approximately 100
4 million dth of natural gas.⁴⁰ Wisconsin Electric's current long-term issuer ratings
5 are: (1) A- (outlook stable) from S&P; and (2) A2 (outlook Stable) from Moody's.⁴¹

6 **Q. Please provide a brief profile of Wisconsin Gas.**

7 A. Wisconsin Gas provides natural gas distribution service to approximately 647,000
8 natural gas customers throughout Wisconsin.⁴² Wisconsin Gas provides service
9 through approximately 75 million feet of distribution main and in 2022 distributed
10 approximately 200 million dth of natural gas.⁴³ Wisconsin Gas's current long-term
11 issuer ratings are: (1) A (outlook stable) from S&P; and (2) A3 (outlook Stable) from
12 Moody's.⁴⁴

13 **Q. Why have you used proxy groups of publicly traded companies to estimate the**
14 **cost of equity for Wisconsin Electric and Wisconsin Gas?**

15 A. In this proceeding, I am estimating the cost of equity for Wisconsin Electric and
16 Wisconsin Gas, rate-regulated subsidiaries of WEC Energy. Because the cost of
17 equity is a market-based concept and the Companies do not make up the entirety
18 of a publicly-traded entity, it is necessary to establish a group of companies that is

³⁹ *Id.*, Schedule E-23 and Schedule E-27.

⁴⁰ *Id.*, Schedule G-20 and Schedule G-24.

⁴¹ S&P Global Ratings and Moody's Investors Service, accessed February 29, 2024.

⁴² PSCW, Wisconsin Gas LLC, Annual Report for Year Ended December 31, 2022, April 28, 2023, Schedule G-23.

⁴³ *Id.*, Schedule G-20 and Schedule G-24.

⁴⁴ S&P Global Ratings and Moody's Investors Service, accessed February 29, 2024.

1 both publicly traded and comparable to Wisconsin Electric and Wisconsin Gas in
2 certain fundamental business and financial respects to serve as a “proxy” for
3 purposes of estimating the cost of equity.

4 The overall purpose of developing a set of screening criteria is to select a
5 proxy group of companies that aligns with the financial and operational
6 characteristics of Wisconsin Electric and Wisconsin Gas that investors would view
7 as comparable to the Companies. I developed the screens and thresholds for each
8 screen based on judgment with the intention of balancing the need to maintain a
9 proxy group that is of sufficient size with the need to establish a proxy group of
10 companies that are comparable in business and financial risk to Wisconsin Electric
11 and Wisconsin Gas.

12 Even if the Companies’ regulated utility business made up the entirety of a
13 publicly-traded entity, it is possible that transitory events could bias its market
14 value over a given time period. A significant benefit of using a proxy group is that
15 it mitigates the effects of anomalous events that may be associated with any one
16 company. The proxy companies used in my analyses all possess a set of operating
17 and financial risk characteristics that are substantially comparable to Wisconsin
18 Electric and Wisconsin Gas, respectively, and, therefore, provide a reasonable
19 basis to estimate the cost of equity for the Companies.

1 **Q. How did you select your proxy group for Wisconsin Electric?**

2 A. I began with the group of 45 companies that *Value Line Investment Survey* (“*Value*
3 *Line*”) classifies as Electric Utilities and Natural Gas Distribution Utilities and
4 applied screening criteria to select companies that:

- 5 • pay consistent quarterly cash dividends, because companies that do not
6 cannot be analyzed using the Constant Growth DCF model;
- 7 • have investment grade long-term issuer ratings from S&P and/or Moody’s;
- 8 • are covered by more than one utility industry analyst;
- 9 • have positive long-term earnings growth forecasts from at least two utility
10 industry equity analysts;
- 11 • own generation assets included in rate base;
- 12 • have more than 30.00 percent of company-owned generation;
- 13 • derive more than 60.00 percent of their total operating income from
14 regulated operations; and,
- 15 • were not party to a merger or transformative transaction during the
16 analytical period considered or had a material event that would have
17 affected the market data for the company.

18 **Q. How did you select the companies included in your proxy group for Wisconsin**
19 **Gas?**

20 A. I began with the group of 9 companies that *Value Line* classifies as Natural Gas
21 Distribution Utilities and applied screening criteria to select companies that:

- 22 • pay consistent quarterly cash dividends, because companies that do not
23 cannot be analyzed using the Constant Growth DCF model;
- 24 • have investment grade long-term issuer ratings from S&P and/or Moody’s;
- 25 • are covered by more than one utility industry analyst;
- 26 • have positive long-term earnings growth forecasts from at least two utility
27 industry equity analysts;

- 1 • derive more than 70.00 percent of their total operating income from
2 regulated operations;
- 3 • derive more than 60.00 percent of their regulated operating income from
4 regulated natural gas operations; and,
- 5 • were not party to a merger or transformative transaction during the
6 analytical period considered or had a material event that would have
7 affected the market data for the company.

8 **Q. What is the composition of the proxy groups?**

9 A. The screening criteria just discussed for the Companies resulted in a proxy group
10 for Wisconsin Electric consisting of the companies shown in

- 1 A. Figure 8 and a proxy group for Wisconsin Gas consisting of the companies shown
- 2 in Figure 9.
- 3

1

Figure 8: Wisconsin Electric Proxy Group

Company	Ticker
NiSource Inc.	NI
ALLETE, Inc.	ALE
Alliant Energy Corporation	LNT
Ameren Corporation	AEE
American Electric Power Company, Inc.	AEP
Avista Corporation	AVA
Black Hills Corporation	BKH
CMS Energy Corporation	CMS
Duke Energy Corporation	DUK
Entergy Corporation	ETR
Evergy, Inc.	EVRG
IDACORP, Inc.	IDA
MGE Energy, Inc.	MGEE
NextEra Energy, Inc.	NEE
NorthWestern Corporation	NWE
OGE Energy Corporation	OGE
Pinnacle West Capital Corporation	PNW
Portland General Electric Company	POR
Southern Company	SO
Xcel Energy Inc.	XEL

2

Figure 9: Wisconsin Gas Proxy Group

Company	Ticker
Atmos Energy Corporation	ATO
NiSource	NI
Northwest Natural Gas Company	NWN
ONE Gas, Inc.	OGS
Spire, Inc.	SR

3

4

VI. COST OF EQUITY ESTIMATION.

5

Q. Please explain the ROE in the context of the regulated rate of return.

6

A. The rate of return for a regulated utility is the weighted average cost of capital, in

7

which the costs of the individual sources of capital are weighted by their respective

8

proportion (*i.e.*, book values) in the utility's capital structure. The ROE is the cost

1 rate applied to the equity capital in calculating the rate of return. Although the
2 costs of debt and preferred stock can be directly observed, the cost of equity is
3 market-based and, therefore, must be estimated based on observable market data.

4 **Q. How is the required ROE determined?**

5 A. A range of the required cost of equity is estimated by using analytical techniques
6 that rely on market-based data to quantify investor expectations regarding equity
7 returns. Within that range, the ROE that is recommended is based on a review of
8 the business, regulatory, and financial risks of the subject utility as compared with
9 the proxy group, including the capital structure of the subject utility. A key
10 consideration in determining the cost of equity is to ensure that the methodologies
11 employed reasonably reflect investors' views of the financial markets in general,
12 as well as the subject company (in the context of the proxy group), in particular. It
13 is also important that the ROE that is authorized takes into consideration the
14 financial risk resulting from the authorized capital structure of the subject utility.
15 An authorized capital structure that has a greater amount of leverage results in
16 greater risk, because equity is the last claimant in the event of the dissolution of a
17 company. Therefore, as the leverage in the capital structure increases, it is
18 necessary for the ROE to increase to recognize the incremental risk to equity
19 holders.

1 **Q. What methods do you use to estimate the costs of equity for the Companies in**
2 **this proceeding?**

3 A. I consider the results of the constant growth DCF model, the CAPM, the ECAPM,
4 and a BYRP analysis. A reasonable cost of equity estimate appropriately considers
5 alternative methodologies and the reasonableness of their individual and
6 collective results.

7 **Q. Why is it important to use more than one analytical approach to estimate the**
8 **cost of equity?**

9 A. Because the cost of equity is not directly observable, it must be estimated based on
10 both quantitative and qualitative information. When faced with the task of
11 estimating the cost of equity, analysts and investors are inclined to gather and
12 evaluate as much relevant data as reasonably can be analyzed. Several models
13 have been developed to estimate the cost of equity, and I use multiple approaches
14 to estimate the cost of equity. As a practical matter, however, all of the models
15 available for estimating the cost of equity are subject to limiting assumptions or
16 other methodological constraints. Consequently, many well-regarded finance
17 texts recommend using multiple approaches when estimating the cost of equity.
18 For example, Copeland, Koller, and Murrin⁴⁵ suggest using the CAPM and

⁴⁵ Tom Copeland, Tim Koller and Jack Murrin, *Valuation: Measuring and Managing the Value of Companies*, New York, McKinsey & Company, Inc., 3rd Ed., 2000, at 214.

1 Arbitrage Pricing Theory model, while Brigham and Gapenski⁴⁶ recommend the
2 CAPM, DCF, and BYRP approaches.

3 Further, recent changes in market conditions highlight the benefit of using
4 multiple models because each model relies on different assumptions, and these
5 assumptions better reflect current and projected market conditions at different
6 times. For example, the CAPM, ECAPM, and BYRP analyses rely directly on
7 interest rates as an assumption in the models and therefore may more directly
8 reflect the market conditions expected when the Companies' rates are in effect.
9 Accordingly, it is important to use multiple analytical approaches to ensure that
10 the cost of equity results reflect market conditions that are expected during the
11 period that the Companies' rates will be in effect.

12 **Q. Has the Commission recognized that it is important to consider the results of**
13 **multiple models?**

14 A. Yes. For example, in the last full rate proceeding for the Companies, the
15 Commission considered the range of results of each of the models presented by
16 the witnesses, which included the DCF, CAPM, ECAPM and Risk Premium
17 models and also considered trends for authorized ROEs in other states, ultimately
18 authorizing a 9.80 percent ROE.⁴⁷

⁴⁶ Eugene Brigham, Louis Gapenski, *Financial Management: Theory and Practice*, Orlando, Dryden Press, 1994, at 341.

⁴⁷ Final Decision, Docket No. 5-UR-110 (PSC REF#: 455451) (Dec. 29, 2022) at 56-57.

1 **Q. What market data did you use to calculate the dividend yield in your constant**
2 **growth DCF model?**

3 A. The dividend yield in my constant growth DCF model is based on the current
4 annualized dividend and average closing stock prices of the proxy group
5 companies over the most recent 30, 90, and 180 trading days ended January 31,
6 2024.

7 **Q. Why did you use three averaging periods for stock prices?**

8 A. In my constant growth DCF model, I use an average of recent trading days to
9 calculate the term P_0 to ensure that the cost of equity is not skewed by anomalous
10 events that may affect stock prices on any given trading day. The averaging period
11 should also be reasonably representative of expected capital market conditions
12 over the long term.

13 **Q. Do you make any adjustment to the dividend yield to account for periodic**
14 **growth in dividends?**

15 A. Yes. Because utility companies tend to increase their quarterly dividends at
16 different times throughout the year, it is reasonable to assume that dividend
17 increases will be evenly distributed over calendar quarters. Given that
18 assumption, it is reasonable to apply one-half of the expected annual dividend
19 growth rate for purposes of calculating the expected dividend yield component of
20 the DCF model. This adjustment ensures that the expected first-year dividend
21 yield is, on average, representative of the coming twelve-month period, and does
22 not overstate the aggregated dividends to be paid during that time.

1 **Q. Why is it important to select appropriate measures of long-term growth in**
2 **applying the DCF model?**

3 A. In its constant growth form, the DCF model (*i.e.*, Equation [2]) assumes a single
4 growth estimate in perpetuity. To reduce the long-term growth rate to a single
5 measure, one must assume that the payout ratio remains constant and that
6 earnings per share (“EPS”), dividends per share and book value per share all grow
7 at the same constant rate. However, over the long run, dividend growth can only
8 be sustained by earnings growth, meaning earnings are the fundamental driver of
9 a company’s ability to pay dividends. Therefore, projected EPS growth is the
10 appropriate measure of a company’s long-term growth. In contrast, changes in a
11 company’s dividend payments are based on management decisions related to cash
12 management and other factors. For example, a company may decide to retain
13 earnings rather than pay out a portion of those earnings to shareholders through
14 dividends. Therefore, dividend growth rates are less likely than earnings growth
15 rates to accurately reflect investor perceptions of a company’s growth prospects.
16 Accordingly, I have incorporated a number of sources of long-term EPS growth
17 rates into the constant growth DCF model.

18 **Q. Which sources of long-term earnings growth rates do you use in your DCF**
19 **analysis?**

20 A. I incorporate three sources of long-term EPS growth rates: (1) *Zacks Investment*
21 *Research*; (2) Yahoo! Finance; and (3) *Value Line*.

1 **Q. How do you calculate a range of results for the constant growth DCF model?**

2 A. I calculate the low-end result for the constant growth DCF model using the
3 minimum growth rate of the three sources (*i.e.*, the lowest of the *Zacks*, *Yahoo!*
4 *Finance*, and *Value Line* projected EPS growth rates) for each of the companies in
5 the proxy groups. I use a similar approach to calculate a high-end result, using the
6 maximum growth rate of the three sources for each of the companies in the proxy
7 groups. Lastly, I also calculate results using the average EPS growth rate from all
8 three sources for each company.

9 **Q. What are the results of your constant growth DCF analyses?**

10 A. The results of my constant growth DCF analyses are presented in Ex.-WEPCO
11 WG-Bulkley-4(a) and Ex.-WEPCO WG-Bulkley-4(b) and summarized in Figure 10
12 and Figure 11 for Wisconsin Electric and Wisconsin Gas, respectively.

13 **Figure 10: Wisconsin Electric Summary of DCF Results⁴⁸**

	Minimum Growth Rate	Average Growth Rate	Maximum Growth Rate
Mean Results:			
30-Day Avg. Stock Price	8.93%	10.14%	11.25%
90-Day Avg. Stock Price	9.01%	10.22%	11.33%
180-Day Avg. Stock Price	8.90%	10.11%	11.22%
Average	8.95%	10.16%	11.27%
Median Results:			
30-Day Avg. Stock Price	8.97%	9.98%	11.04%
90-Day Avg. Stock Price	9.02%	10.07%	11.17%
180-Day Avg. Stock Price	8.99%	10.06%	11.21%
Average	8.99%	10.03%	11.14%

⁴⁸ DCF results exclude the results for Black Hills Corporation because they do not provide a reasonable equity risk premium over the current yields on the Moody's A rated and Baa rated utility bond indices, which were 5.42 percent and 5.67 percent, respectively, based on a 30-day average ending January 31, 2024.

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Figure 11: Wisconsin Gas Summary of DCF Results

	<u>Minimum Growth Rate</u>	<u>Average Growth Rate</u>	<u>Maximum Growth Rate</u>
Mean Results:			
30-Day Avg. Stock Price	9.79%	10.71%	11.92%
90-Day Avg. Stock Price	9.87%	10.78%	11.99%
180-Day Avg. Stock Price	9.70%	10.62%	11.83%
Average	9.79%	10.70%	11.91%
Median Results:			
30-Day Avg. Stock Price	9.90%	10.17%	11.76%
90-Day Avg. Stock Price	9.98%	10.25%	11.85%
180-Day Avg. Stock Price	9.93%	10.20%	11.64%
Average	9.94%	10.21%	11.75%

Q. Have regulatory commissions acknowledged that the DCF model might understate the cost of equity given the current capital market conditions of high inflation and increased interest rates?

A. Yes. For example, in its May 2022 decision establishing the cost of equity for Aqua Pennsylvania, Inc., the Pennsylvania Public Utility Commission concluded that the current capital market conditions of high inflation and increased interest rates has resulted in the DCF model understating the utility cost of equity, and that weight should be placed on risk premium models, such as the CAPM, in the determination of the ROE:

To help control rising inflation, the Federal Open Market Committee has signaled that it is ending its policies designed to maintain low interest rates. Aqua Exc. at 9. Because the DCF model does not directly account for interest rates, consequently, it is slow to respond to interest rate changes. However, I&E’s CAPM model uses forecasted yields on ten-year Treasury bonds, and accordingly, its methodology captures forward looking changes in interest rates.

1 *Variance* (r_m) represents the variance of the market return, which is a
2 measure of the uncertainty of the general market. *Covariance* (r_e, r_m) represents the
3 covariance between the return on a specific security and the general market, which
4 reflects the extent to which the return on that security will respond to a given
5 change in the general market return. Thus, beta represents the risk of the security
6 relative to the general market.

7 **Q. What risk-free rate did you use in your CAPM analysis?**

8 A. I relied on three sources for my estimate of the risk-free rate: (1) the current 30-day
9 average yield on 30-year Treasury bonds;⁵³ (2) the average projected 30-year
10 Treasury bond yield for the second quarter of 2024 through the second quarter of
11 2025;⁵⁴ and (3) the average projected 30-year Treasury bond yield for 2025 through
12 2029.⁵⁵

13 **Q. What beta coefficients did you use in your CAPM analysis?**

14 A. As shown on Ex.-WEPCO WG-Bulkley-5(a) and Ex.-WEPCO WG-Bulkley-5(b), I
15 use the beta coefficients for the companies in the proxy groups reported by
16 *Bloomberg Professional* (“*Bloomberg*”) and *Value Line*. The beta coefficients reported
17 by *Bloomberg* are calculated using ten years of weekly returns relative to the S&P
18 500 Index. The beta coefficients reported by *Value Line* are calculated based on five
19 years of weekly returns relative to the New York Stock Exchange Composite
20 Index. Additionally, as shown on Ex.-WEPCO WG-Bulkley-5(a), Ex.-WEPCO WG-

⁵³ Bloomberg Professional as of January 31, 2024.

⁵⁴ *Blue Chip Financial Forecasts*, Vol. 43, No. 2, February 1, 2024, at 2.

⁵⁵ *Blue Chip Financial Forecasts*, Vol. 42, No. 12, December 1, 2023, at 14.

1 Bulkley-5(b), Ex.-WEPCO WG-Bulkley-6(a) and Ex.-WEPCO WG-Bulkley-6(b), I
2 also consider an additional CAPM analysis that relies on the long-term average
3 beta coefficient reported by *Value Line* for the companies in each proxy group from
4 2013 through 2023.

5 **Q. How did you estimate the market risk premium in the CAPM?**

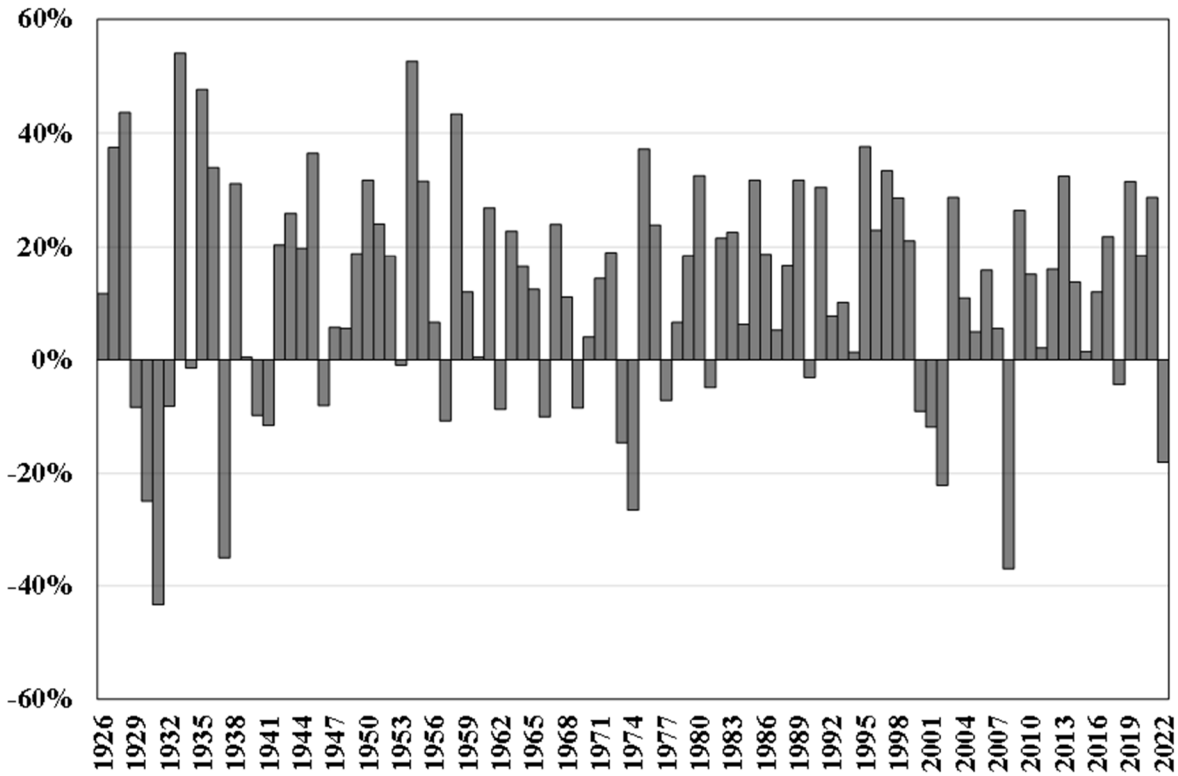
6 A. I estimate the market risk premium as the difference between the implied expected
7 equity market return and the risk-free rate. As shown in Ex.-WEPCO WG-Bulkley-
8 7, the expected market return is calculated using the constant growth DCF model
9 discussed earlier in my testimony for the companies in the S&P 500 Index. Based
10 on an estimated market capitalization-weighted dividend yield of 1.63 percent and
11 a weighted long-term growth rate of 10.51 percent, the estimated required market
12 return for the S&P 500 Index as of January 31, 2024 is 12.22 percent.

13 **Q. How does the current expected market return compare to observed historical
14 returns?**

15 A. Based on historical returns, a current expected market return of 12.22 percent is
16 reasonable. As shown in Figure 12, In 51 out of the past 97 years (or roughly 53
17 percent of observations), the realized equity market return was 12.22 percent or
18 greater.

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Figure 12: Realized U.S. Equity Market Returns (1926-2022)⁵⁶



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3 Q. Do you also consider another form of the CAPM in your analysis?

4 A. Yes. I have also considered the results of an ECAPM analysis in estimating the cost
 5 of equity for the Companies.⁵⁷ The ECAPM calculates the product of the adjusted
 6 beta coefficient and the market risk premium and applies a weight of 75.00 percent
 7 to that result. The model then applies a 25.00 percent weight to the market risk
 8 premium without any effect from the beta coefficient. The results of the two
 9 calculations are summed, along with the risk-free rate, to produce the ECAPM
 10 result, as noted in Equation [5] below:

11

$$k_e = r_f + 0.75\beta(r_m - r_f) + 0.25(r_m - r_f) \quad [5]$$

⁵⁶ Depicts total annual returns on large company stocks, as reported in the 2022 *Kroll S&P 500 Yearbook*.

⁵⁷ See, e.g., Roger A. Morin, *New Regulatory Finance*. Public Utilities Reports, Inc., 2006, at 189.

1 Where:

2 k_e = the required market ROE;

3 β = adjusted beta coefficient of an individual security;

4 r_f = the risk-free rate of return; and

5 r_m = the required return on the market as a whole.

6 The ECAPM addresses the tendency of the “traditional” CAPM to
7 underestimate the cost of equity for companies with low beta coefficients such as
8 regulated utilities. In that regard, the ECAPM is not redundant to the use of
9 adjusted betas in the traditional CAPM; rather, it recognizes the results of
10 academic research indicating that the risk-return relationship is different (in
11 essence, flatter) than estimated by the CAPM, and that the CAPM underestimates
12 the “alpha,” or the constant return term.⁵⁸

13 Consistent with my CAPM, my application of the ECAPM uses the same
14 three yields on the 30-year Treasury bonds as the risk-free rate, forward-looking
15 market risk premium estimate, and beta coefficients.

16 **Q. What are the results of your CAPM and ECAPM analyses?**

17 A. The results of my CAPM and ECAPM analyses are summarized in Figure 13 and
18 Figure 14, as well as presented in Ex.-WEPCO WG-Bulkley-5(a) and Ex.-WEPCO
19 WG-Bulkley-5(b), for Wisconsin Electric and Wisconsin Gas, respectively.

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⁵⁸ *Id.*, at 191.

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Figure 13: Wisconsin Electric Summary of CAPM and ECAPM Results

	30-Year Treasury Bond Yield		
	Current 30-Day Avg.	Near-Term Projected	Longer-Term Projected
CAPM:			
Current <i>Value Line</i> Beta	11.48%	11.47%	11.47%
Current Bloomberg Beta	10.53%	10.51%	10.51%
Long-term Avg. <i>Value Line</i> Beta	10.33%	10.31%	10.31%
ECAPM:			
Current <i>Value Line</i> Beta	11.66%	11.66%	11.66%
Current Bloomberg Beta	10.95%	10.94%	10.94%
Long-term Avg. <i>Value Line</i> Beta	10.80%	10.79%	10.79%

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Figure 14: Wisconsin Gas Summary of CAPM and ECAPM Results

	30-Year Treasury Bond Yield		
	Current 30-Day Avg.	Near-Term Projected	Longer-Term Projected
CAPM:			
Current <i>Value Line</i> Beta	11.09%	11.08%	11.08%
Current Bloomberg Beta	10.31%	10.29%	10.29%
Long-term Avg. <i>Value Line</i> Beta	10.12%	10.10%	10.10%
ECAPM:			
Current <i>Value Line</i> Beta	11.38%	11.37%	11.37%
Current Bloomberg Beta	10.79%	10.77%	10.77%
Long-term Avg. <i>Value Line</i> Beta	10.64%	10.63%	10.63%

4

5 **C. BYRP Analysis.**

6 **Q. Please describe the BYRP analysis.**

7 A. In general terms, this approach is based on the fundamental principle that equity
8 investors bear the residual risk associated with equity ownership and therefore
9 require a premium over the return they would have earned as bondholders. In

1 other words, because returns to equity holders have greater risk than returns to
2 bondholders, equity holders require a higher return to compensate for that
3 incremental risk. Thus, risk premium approaches, like the BYRP, estimate the cost
4 of equity as the sum of the equity risk premium and the yield on a particular class
5 of bonds. In my analysis, I used actual authorized returns for natural gas and
6 electric utilities as the historical measure of the cost of equity to determine the risk
7 premium for Wisconsin Electric, and the actual authorized returns for natural gas
8 utility companies as the historical measure of the cost of equity to determine the
9 risk premium for Wisconsin Gas.

10 **Q. What is the fundamental relationship between the equity risk premium and**
11 **interest rates?**

12 A. It is important to recognize both academic literature and market evidence
13 indicating that the equity risk premium (as used in this approach) is inversely
14 related to the level of interest rates (*i.e.*, as interest rates increase, the equity risk
15 premium decreases, and vice versa). Consequently, it is important to develop an
16 analysis that: (1) reflects the inverse relationship between interest rates and the
17 equity risk premium; and (2) relies on recent and expected market conditions. Such
18 an analysis can be developed based on a regression of the risk premium as a
19 function of U.S. Treasury bond yields. In my analysis, I used actual authorized
20 returns and corresponding long-term Treasury yields. When the authorized ROEs
21 serve as the measure of required equity returns and the yield on the long-term U.S.

1 Treasury bond is defined as the relevant measure of interest rates, the risk
2 premium is the difference between those two points.⁵⁹

3 **Q. Is the BYRP analysis relevant to investors?**

4 A. Yes. Investors are aware of authorized ROEs in other jurisdictions and they
5 consider those authorizations as a benchmark for a reasonable level of equity
6 returns for utilities of comparable risk operating in other jurisdictions. As
7 discussed previously, utilities have experienced credit rating downgrades and
8 been subject to negative market reactions related to the financial effects of a rate
9 case decision that included a below average authorized ROE. Because my BYRP
10 analysis is based on authorized ROEs for utility companies relative to
11 corresponding Treasury yields, it provides relevant information to assess the
12 return expectations of investors in the current interest rate environment.

13 **Q. What does your BYRP analysis reveal?**

14 A. As shown in Figure 15 and Figure 16, from 1980 through January 2024, there was
15 a strong negative relationship between risk premia and interest rates. To estimate
16 that relationship, I conducted a regression analysis using the following equation:

17
$$RP = a + b(T) \quad [6]$$

18 Where:

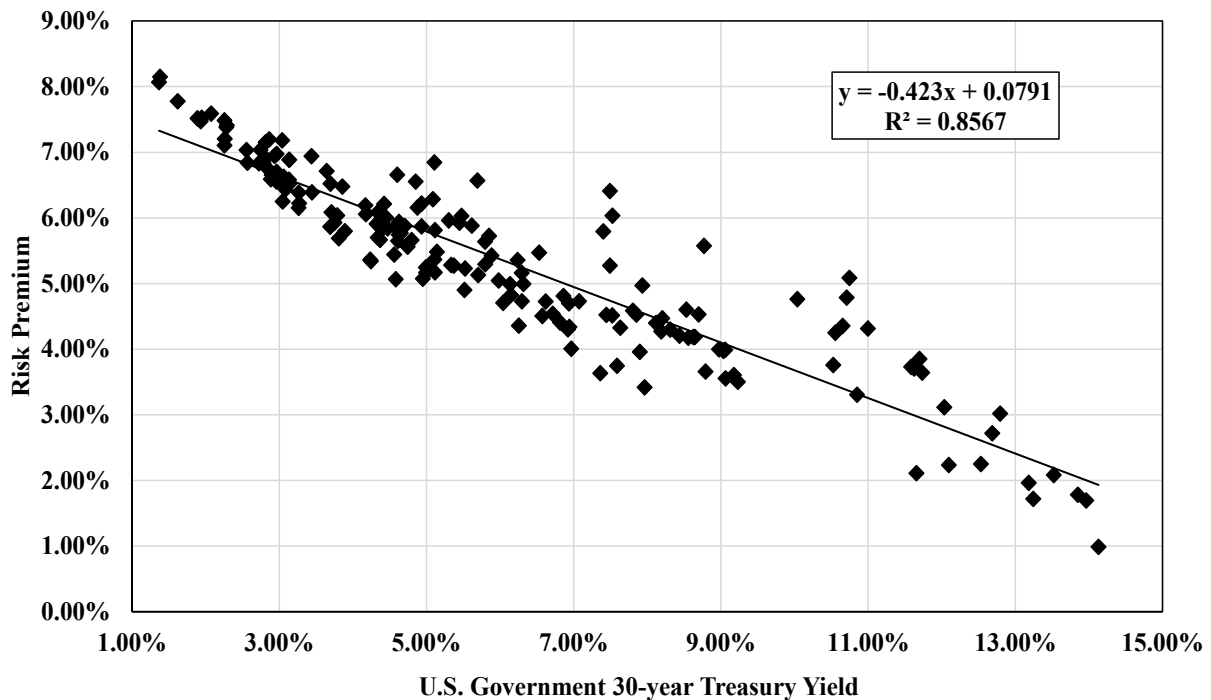
19 RP = Risk Premium (difference between authorized ROEs and the
20 yield on 30-year U.S. Treasury bonds);

⁵⁹ See e.g., S. Keith Berry, "Interest Rate Risk and Utility Risk Premia during 1982-93," *Managerial and Decision Economics*, Vol. 19, No. 2, March, 1998 (the author used a similar methodology, including using authorized ROEs as the relevant data source, and came to similar conclusions regarding the inverse relationship between risk premia and interest rates). See also Robert S. Harris, "Using Analysts' Growth Forecasts to Estimate Shareholder Required Rates of Return," *Financial Management*, Spring 1986, at 66.

1 a = intercept term;
2 b = slope term; and
3 T = 30-year U.S. Treasury bond yield.

4 Data regarding authorized ROEs are derived from all electric and natural
5 gas distribution rate cases over this period for Wisconsin Electric and from natural
6 gas distribution rate cases over this period for Wisconsin Gas, as reported by
7 Regulatory Research Associates (“RRA”).⁶⁰ These equations’ coefficients were
8 statistically significant at the 99.00 percent level.⁶¹

9 **Figure 15: Risk Premium Regression Analysis – U.S. Electric and Natural Gas Utilities**

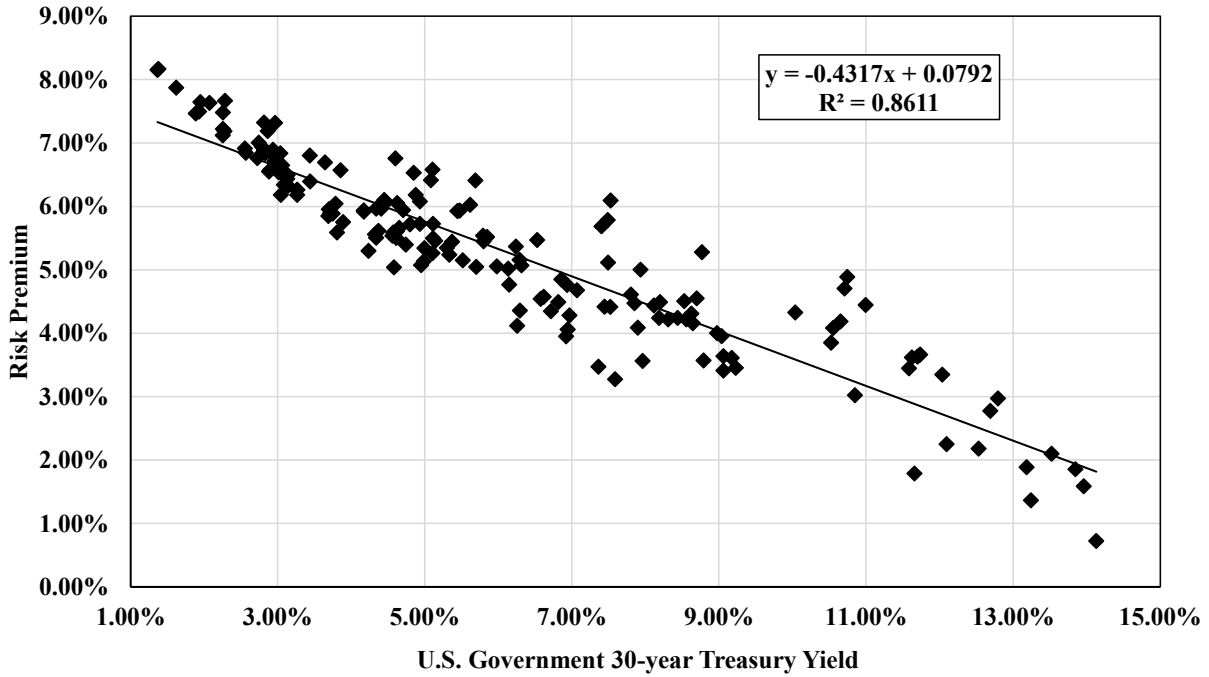


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⁶⁰ The data was screened to eliminate limited issue rider cases, transmission cases, and cases that were silent with respect to authorized ROE.

⁶¹ See Ex.-WEPCO/WG-Bulkley 8(a) and Ex.-WEPCO/WG-Bulkley 8(b).

1 **Figure 16: Risk Premium Regression Analysis - U.S. Natural Gas Utilities**



2
3 **Q. What are the results of your BYRP analysis?**

4 **A.** Figure 17 presents the results of my BYRP analysis, which are also presented in
5 more detail in Ex.-WEPCO WG-Bulkley-8(a), and Ex.-WEPCO WG-Bulkley-8(b).

6 **Figure 17: BYRP Results**

	30-Year Treasury Bond Yield		
	Current 30-Day Avg.	Near-Term Projected	Longer-Term Projected
US Elec & Gas Utilities	10.32%	10.27%	10.27%
US Gas Utilities	10.30%	10.25%	10.25%

7
8 **VII. REGULATORY AND BUSINESS RISKS.**

9 **Q. Do the results of the cost of equity analyses alone provide an appropriate**
10 **estimate of the cost of equity for the Companies?**

11 **A.** No. The model results provide only a range for the appropriate estimate of
12 Wisconsin Electric's and Wisconsin Gas's costs of equity. Several additional factors

1 must be considered when determining where costs of equity for Wisconsin Electric
2 and Wisconsin Gas fall within the range of analytical results. These risk factors,
3 discussed below, should be considered with respect to their overall effect on the
4 Companies' risk profiles relative to their respective proxy group.

5 **A. Capital Expenditures.**

6 **Q. Please summarize the Companies' capital expenditure requirements.**

7 A. As of December 31, 2023, Wisconsin Electric had had net utility plant of
8 approximately \$10.8 billion, and currently projects capital expenditures for 2024
9 through 2028 of approximately \$11.2 billion.⁶² While, as of December 31, 2023,
10 Wisconsin Gas had net utility plant of approximately \$2.2 billion, and currently
11 projects capital expenditures for 2024 through 2028 of approximately \$1.2 billion.⁶³
12 Therefore, Wisconsin Electric's and Wisconsin Gas's projected capital
13 expenditures represent approximately 103 percent and 54.55 percent, respectively,
14 of their net utility plant as of December 31, 2023.

15 **Q. How do the Companies' capital expenditure requirements compare to those of**
16 **their respective proxy group companies?**

17 A. As shown on Ex.-WEPCO WG-Bulkley-9(a) and Ex.-WEPCO WG-Bulkley-9(b), I
18 have calculated the ratio of expected capital expenditures to net utility plant for
19 the Companies and each of the companies in their respective proxy group by
20 dividing each company's projected capital expenditures for the period from 2024

⁶² Data provided by the Companies.

⁶³ *Id.*

1 through 2028 by its total net utility plant as of December 31, 2023. As shown,
2 Wisconsin Electric's ratio of capital expenditures as a percentage of net utility
3 plant is higher than the median for the companies in the Wisconsin Electric proxy
4 group while Wisconsin Gas's ratio of capital expenditures as a percentage of net
5 utility plant is slightly lower than the median for the companies in the Wisconsin
6 Gas proxy group.

7 **Q. How is the Companies' risk profile affected by its substantial capital**
8 **expenditure requirements?**

9 A. As with any utility faced with substantial capital expenditure requirements, the
10 Companies' risk profile may be adversely affected in two significant and related
11 ways: (1) the heightened level of investment increases the risk of under-recovery
12 or delayed recovery of the invested capital; and (2) an inadequate return would
13 put downward pressure on key credit metrics.

14 **Q. Do credit rating agencies recognize the risks associated with elevated levels of**
15 **capital expenditures?**

16 A. Yes. From a credit perspective, the additional pressure on cash flows associated
17 with high levels of capital expenditures exerts corresponding pressure on credit
18 metrics and, therefore, credit ratings. To that point, S&P explains the importance
19 of regulatory support for a significant amount of capital projects:

20 When applicable, a jurisdiction's willingness to support large capital
21 projects with cash during construction is an important aspect of our
22 analysis. This is especially true when the project represents a major
23 addition to rate base and entails long lead times and technological
24 risks that make it susceptible to construction delays. Broad support

1 for all capital spending is the most credit-sustaining. Support for
2 only specific types of capital spending, such as specific
3 environmental projects or system integrity plans, is less so, but still
4 favorable for creditors. Allowance of a cash return on construction
5 work-in-progress or similar ratemaking methods historically were
6 extraordinary measures for use in unusual circumstances, but when
7 construction costs are rising, cash flow support could be crucial to
8 maintain credit quality through the spending program. Even more
9 favorable are those jurisdictions that present an opportunity for a
10 higher return on capital projects as an incentive to investors.⁶⁴

11 Recently, S&P evaluated capital expenditure trends in the utility sector,
12 noting that the balance between operating with negative discretionary cash flow
13 from operations offset by reliable access to capital markets for financing may be
14 tested by ever-increasing capital expenditure requirements as a result of the
15 transformation of the energy sector through the focus on low/no carbon
16 generation, electrification, and the replacement of aging infrastructure:

17 Some companies have been unable to support financial metrics
18 consistent with former ratings as their discretionary cash flow
19 deteriorated. This trend was a significant contributor to the sector
20 seeing the median rating decline to 'BBB+' from 'A-' for the first time
21 in 2022. What is less clear is whether or not management teams will
22 take steps to forestall another step down in credit quality as high
23 capital outlays persist. So far in 2023, we have not seen evidence that
24 equity issuance is keeping pace with debt issuance to fill ever-
25 deepening discretionary cash flow shortfalls, but time will tell.

26

27 Despite the improvement in the economic outlook, we expect
28 inflation, high interest rates, higher capital spending, and the
29 strategic decision by many companies to operate with only minimal
30 financial cushion from their downgrade thresholds to continue to
31 pressure the industry's credit quality. We are cautious about the
32 durability of the current stable ratings outlook given persistently

⁶⁴ S&P Global Ratings, "Assessing U.S. Investor-Owned Utility Regulatory Environments," August 10, 2016, at 7.

1 high capital spending that now supports a trend of deterioration in
2 discretionary cash flow. Without a commensurate focus on balance
3 sheet preservation through equity support of discretionary cash flow
4 deficits, limited financial cushions could give rise to another round
5 of negative rating actions. The question then comes back to
6 management priorities and financial policy decisions, or utilities
7 may be faced with another step down in the median ratings.⁶⁵

8 Therefore, to the extent that the Companies' rates do not permit the
9 opportunity to recover their capital investments on a regular and timely basis, they
10 will face increased recovery risk and increased pressure on its credit metrics.

11 **Q. Do the Companies currently have a capital tracking mechanism to recover the**
12 **costs associated with its capital expenditures plan between rate cases?**

13 A. Currently, unless the Companies request and are granted deferral accounting
14 treatment, neither Wisconsin Electric nor Wisconsin Gas have a capital cost
15 recovery mechanism to recover capital costs between rate cases. Therefore, the
16 Companies still depend on rate case filings for the majority of the costs included
17 in their capital expenditure plans. However, significant programs like WEPCO's
18 and WG's that drive capital expenditure requirements generally receive cost
19 recovery through infrastructure and capital trackers. As shown in Ex.-WEPCO
20 WG-Bulkley-10(a) and Ex.-WEPCO WG-Bulkley-10(b), approximately 71.3
21 percent of the operating companies in the Wisconsin Electric's proxy group and
22 71.4 percent of the operating companies in the Wisconsin Gas's proxy group have
23 some form of capital cost recovery mechanism in place. Because neither Wisconsin

⁶⁵ S&P Global Ratings, "Record CapEx Fuels Growth Along With Credit Risk For North American Investor-Owned Utilities," September 12, 2023, at 5, 7-8.

1 Electric nor Wisconsin Gas currently have a capital tracking mechanism, their risk
2 relative to their respective proxy group is increased.

3 **Q. What are your conclusions regarding the effect of Wisconsin Electric's and**
4 **Wisconsin Gas's capital spending requirements on their risk profile and cost of**
5 **capital?**

6 A. The capital expenditure requirements of both Wisconsin Electric and Wisconsin
7 Gas as a percentage of their net utility plant are significant and are expected to
8 continue over the next few years. Furthermore, unlike a majority of the companies
9 in the proxy groups, Wisconsin Electric and Wisconsin Gas do not have capital
10 cost recovery mechanisms to allow for timely recovery of their capital
11 expenditures between rate cases. Therefore, all else equal, Wisconsin Electric's and
12 Wisconsin Gas's capital expenditure plans and limited ability to recover their
13 capital investments as incurred results in a risk profile for both Wisconsin Electric
14 and Wisconsin Gas that is greater than that of their respective proxy groups.

15 **B. Regulatory Risk.**

16 **Q. How does the regulatory environment affect investors' risk assessments?**

17 A. The ratemaking process is premised on the principle that, for investors and
18 companies to commit the capital needed to provide safe and reliable utility service,
19 the utility must have the opportunity to recover the return of, and the market-
20 required return on, invested capital. Regulatory commissions recognize that
21 because utility operations are capital intensive, their decisions should enable the
22 utility to attract capital at reasonable terms, and that doing so balances the long-

1 term interests of investors and customers. Utilities must finance their operations
2 and thus require the opportunity to earn a reasonable return on their invested
3 capital to maintain their financial profiles. The Companies are no exception.
4 Therefore, the regulatory environment is one of the most important factors
5 considered in both debt and equity investors' risk assessments.

6 From the perspective of debt investors, the authorized return should enable
7 the utility to generate the cash flow needed to meet its near-term financial
8 obligations, make the capital investments needed to maintain and expand its
9 systems, and maintain the necessary levels of liquidity to fund unexpected events.
10 This financial liquidity must be derived not only from internally generated funds,
11 but also by efficient access to capital markets. Moreover, because fixed income
12 investors have many investment alternatives, even within a given market sector, a
13 utility's financial profile must be adequate relative to other investments to ensure
14 the utility is able to attract capital under a variety of economic and financial market
15 conditions.

16 Equity investors require that the authorized return be adequate to provide
17 a risk-comparable return on the equity portion of the utility's capital investments.
18 Because equity investors are the residual claimants on the utility's cash flows (*i.e.*,
19 the equity return is subordinate to interest payments), they are particularly
20 concerned with the strength of regulatory support and its effect on future cash
21 flows.

1 Q. Do credit rating agencies consider regulatory risk in establishing a company's
2 credit rating?

3 A. Yes. Both S&P and Moody's consider the overall regulatory framework in
4 establishing credit ratings. Moody's establishes credit ratings based on four key
5 factors: (1) regulatory framework; (2) the ability to recover costs and earn returns;
6 (3) diversification; and (4) financial strength, liquidity and key financial metrics.
7 Of these criteria, regulatory framework and the ability to recover costs and earn
8 returns are each given a broad rating factor of 25.00 percent. Therefore, Moody's
9 assigns regulatory risk a 50.00 percent weighting in the overall assessment of
10 business and financial risk for regulated utilities.⁶⁶

11 S&P also identifies the regulatory framework as an important factor in
12 credit ratings for regulated utilities, stating: "One significant aspect of regulatory
13 risk that influences credit quality is the regulatory environment in the jurisdictions
14 in which a utility operates."⁶⁷ S&P identifies four specific factors that it uses to
15 assess the credit implications of the regulatory jurisdictions of investor-owned
16 regulated utilities: (1) regulatory stability; (2) tariff-setting procedures and design;
17 (3) financial stability; and (4) regulatory independence and insulation.⁶⁸

⁶⁶ Moody's Investors Service, Rating Methodology: Regulated Electric and Gas Utilities, June 23, 2017, at 4.

⁶⁷ S&P Global Ratings. Ratings Direct. "Assessing U.S. Investor-Owned Utility Regulatory Environments." August 10, 2016, at 2.

⁶⁸ *Id.*

1 **Q. How does the regulatory environment in which a utility operates affect its**
2 **access to and cost of capital?**

3 A. The regulatory environment can significantly affect both access to and cost of
4 capital in several ways. First, the proportion and cost of debt capital available to
5 utility companies are influenced by the rating agencies' assessment of the
6 regulatory environment. As noted by Moody's, for rate-regulated utilities, "the
7 regulatory environment and how the utility adapts to that environment are the
8 most important credit considerations."⁶⁹ Moody's also highlights the importance
9 of a stable and predictable regulatory environment to a utility's credit quality,
10 noting: "[b]roadly speaking, the Regulatory Framework is the foundation for how
11 all the decisions that affect utilities are made (including the setting of rates), as well
12 as the predictability and consistency of decision-making provided by that
13 foundation."⁷⁰

14 **Q. Have you conducted an analysis to compare the cost recovery mechanisms of**
15 **the Companies to the cost recovery mechanisms approved in the jurisdictions**
16 **in which the companies in your proxy groups operate?**

17 A. Yes. I have evaluated the regulatory framework in Wisconsin considering three
18 factors that are important in terms of providing a regulated utility a reasonable
19 opportunity to earn its authorized ROE: (1) test year convention (*i.e.*, forecast vs.
20 historical); (2) use of rate design or other mechanisms that mitigate volumetric risk

⁶⁹ Moody's Investors Service, "Rating Methodology: Regulated Electric and Gas Utilities," June 23, 2017, at 6.

⁷⁰ *Id.*

1 and stabilize revenue; and (3) prevalence of capital cost recovery between rate
2 cases. Each are described below and are summarized in Ex.-WEPCO WG-Bulkley-
3 10(a) and Ex.-WEPCO WG-Bulkley-10(b):

4 Test Year Convention: Wisconsin Electric and Wisconsin Gas use a fully-
5 forecast test year, and similarly, approximately half of the utility operating
6 subsidiaries of the companies in each proxy group also use forecast or
7 partially forecast test years.

8 Volumetric Risk: Wisconsin Electric and Wisconsin Gas do not have
9 protection against volumetric risk through either a decoupling or other
10 revenue stabilization mechanism; however, approximately 59 percent of
11 the utility operating subsidiaries in Wisconsin Electric's proxy group and
12 approximately 91 percent of the utility operating subsidiaries in Wisconsin
13 Gas's proxy group have some form of revenue stabilization through either
14 decoupling, formula-based rates, or straight-fixed variable rate design that
15 separate customer usage from revenues.

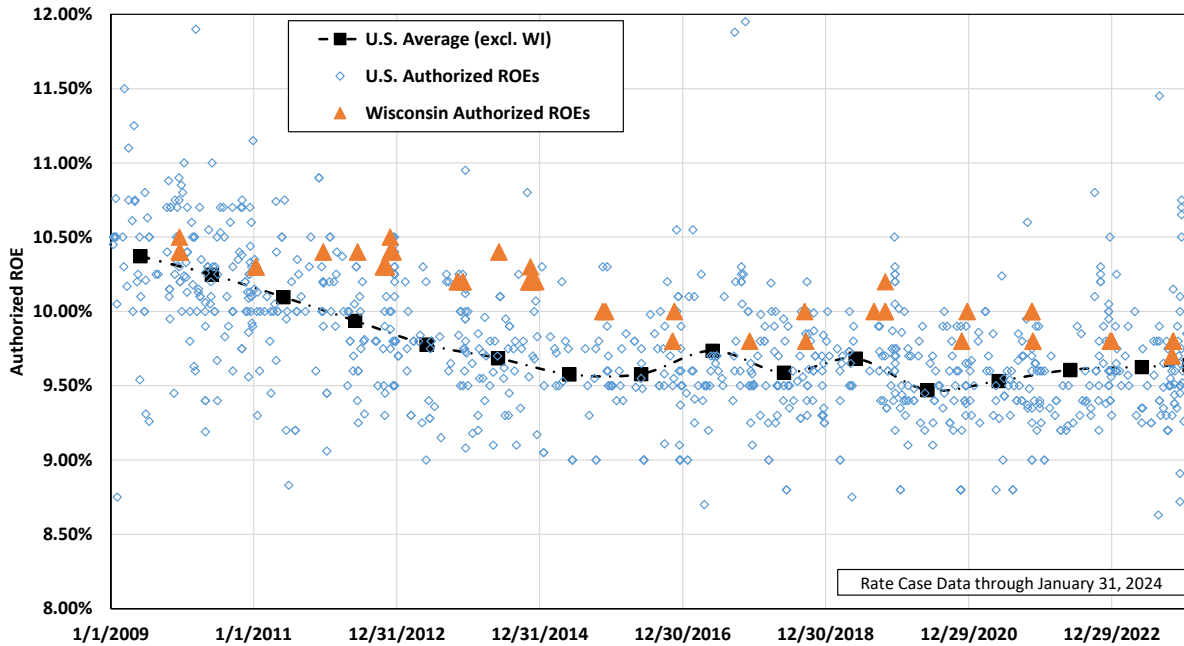
16 Capital Cost Recovery: As noted previously, unless deferral accounting
17 treatment is sought and granted, Wisconsin Electric and Wisconsin Gas do
18 not have a capital tracking mechanism to recover capital investment costs
19 between rate cases. However, approximately 71 percent of the utility
20 operating subsidiaries in both proxy groups have some form of capital cost
21 recovery mechanism.

22 **Q. How have ROE authorizations in Wisconsin, and in particular for the**
23 **Companies, compared to authorized ROEs for electric and natural gas utilities**
24 **in other jurisdictions?**

25 A. The Commission has been generally supportive of the capital needs of regulated
26 utilities. As shown in Figure 18, the Commission has historically authorized ROEs
27 that are comparable to the national average for electric and natural gas utilities
28 during the same period. This sends an important signal to investors that there is
29 regulatory support for financial integrity, dividends, growth and fair
30 compensation for business and financial risk. Both S&P and Moody's have

1 identified a credit-supportive regulatory environment as a being important factors
 2 in the Companies' credit profiles.⁷¹ However, Moody's notes that the credit rating
 3 agency's opinion of the regulatory environment could change if the controversy
 4 surrounding WEC subsidiaries' 2022 general rate case leads to a permanent
 5 deterioration in the relationship with the Commission. Moody's noted this
 6 uncertainty tempers the credit quality of Wisconsin Gas and WEPCO, particularly
 7 following recent Commission changes in March 2023.⁷²

8 **Figure 18: Authorized ROEs for Wisconsin Utilities v. U.S. Average⁷³**



9

⁷¹ S&P Global Ratings, Ratings Direct, Wisconsin Electric Power Co., May 5, 2023; S&P Global Ratings, Ratings Direct, Wisconsin Gas LLC, May 5, 2023. Moody's Investors Service, Credit Opinion, Wisconsin Electric Power Company, May 17, 2023; Moody's Investors Service, Credit Opinion, Wisconsin Gas LLC, October 10, 2023.

⁷² Moody's Investors Service, Credit Opinion, Wisconsin Electric Power Company, May 17, 2023; Moody's Investors Service, Credit Opinion, Wisconsin Gas LLC, October 10, 2023.

⁷³ S&P Capital IQ Pro. Electric and natural gas rate case decisions from January 1, 2009 through January 31, 2024. The chart does not display either the 12.88% ROE that was authorized for Alaska Electric Light and Power on September 2, 2011 or the 12.55% ROE that was authorized for ENSTAR Natural Gas Co. on August 9, 2010. The chart also excludes: 1) the authorized returns for electric utilities in Illinois and Vermont since they are established based on a formulaic approach that is directly linked to interest

1
2 **Q. Have you developed any additional analyses to evaluate the regulatory**
3 **environment in Wisconsin as compared to the jurisdictions in which the**
4 **companies in your proxy groups operate?**

5 A. Yes. I have conducted two additional analyses to compare the regulatory
6 framework of Wisconsin to the jurisdictions in which the companies in both my
7 Wisconsin Electric proxy group and Wisconsin Gas proxy group operate.
8 Specifically, I considered two different rankings: (1) the RRA ranking of regulatory
9 jurisdictions; and (2) S&P's ranking of the credit supportiveness of regulatory
10 jurisdictions.

11 **Q. Please explain how you used the RRA ratings to compare the regulatory**
12 **jurisdictions of the companies in the proxy groups.**

13 A. RRA develops their ranking based on their assessment of how investors perceive
14 the regulatory risk associated with ownership of utility securities in that
15 jurisdiction, specifically reflecting their assessment of the probable level and
16 quality of earnings to be realized by the state's utilities as a result of regulatory,
17 legislative, and court actions. RRA assigns a ranking for each regulatory
18 jurisdiction between "Above Average/1" to "Below Average/3," with nine total
19 rankings between these categories. I applied a numeric ranking system to the RRA

rates and therefore is affected by market conditions and monetary policy; 2) the authorized returns awarded in Arizona because it is a state that relies on fair value rate base usually calculated based on a weighting of original cost rate case and rate base estimated using the replacement cost new less depreciation method; and 3) authorized returns that reflect a utility-specific penalty because an authorized ROE that includes a penalty is not indicative of a market-derived cost of equity.

1 rankings with "Above Average/1" assigned the highest ranking ("1") and "Below
2 Average/3" assigned the lowest ranking ("9"). RRA ranks Wisconsin as an
3 Above Average/3, which is the third highest score of the nine tiers. As shown in
4 Ex.-WEPCO WG-Bulkey-11(a) and 11(b), the average ranking of the proxy groups
5 for Wisconsin Electric Wisconsin Gas is between Average/2 and Average/1,
6 meaning that Wisconsin is generally ranked higher than the average of both proxy
7 groups.

8 **Q. How did you conduct your analysis of the proxy groups using S&P's rankings?**

9 A. For credit supportiveness, S&P classifies each regulatory jurisdiction into five
10 categories that range from "Credit Supportive" to "Most Credit Supportive." My
11 analysis using S&P's rankings of the regulatory jurisdictions for the companies in
12 the proxy groups is similar to my analysis using RRA regulatory rankings. I
13 assigned a numerical ranking to each category, from Most Credit Supportive ("1")
14 to Credit Supportive ("5"). As shown in Ex.-WEPCO WG-Bulkey-12(a) and 12(b),
15 similar to the RRA regulatory rankings discussed above, the Wisconsin
16 jurisdictional classification of "Most Credit Supportive" was above the average
17 ranking for both proxy groups, which averaged between "Highly Credit
18 Supportive" and "Very Credit Supportive."

19 **Q. What is your conclusion regarding the relative regulatory risk of Wisconsin
20 Electric and Wisconsin Gas as compared to their respective proxy groups?**

21 A. The Companies have greater volumetric risk and greater risk around cost recovery
22 relative to the companies in their respective proxy groups. All else equal, this

1 would support an ROE toward the upper end of the range of ROE results.
2 However, historically the Commission has maintained a more supportive
3 regulatory environment for Wisconsin utilities, and Wisconsin utilities typically
4 enjoy a slight equity return premium when compared to utilities nationally. So,
5 although other utilities may have less risk related to cost recovery, the
6 Commission has historically provided Wisconsin utilities a buffer to weather such
7 risks. This constructive regulatory environment has the added advantage of
8 providing additional credit support for the utilities that will ultimately lower debt
9 costs. In other words, the risk to earnings from less automatic recovery is generally
10 mitigated by the premium Wisconsin utilities have historically earned on their
11 equity.

12 **VIII. CAPITAL STRUCTURE.**

13 **Q. Is the capital structure of the Companies an important consideration in the**
14 **determination of the appropriate ROE?**

15 **A.** Yes. The equity ratio is the primary indicator of financial risk for a regulated
16 utility. All else equal, a higher debt ratio increases the risk to investors. For debt
17 holders, higher debt ratios result in a greater portion of the available cash flow
18 being required to meet debt service, thereby increasing the risk associated with the
19 payments on debt. The result of increased risk is a higher interest rate. The
20 incremental risk of a higher debt ratio is more significant for common equity
21 shareholders, whose claim on the cash flow of the Companies is secondary to debt

1 holders. Therefore, the greater the debt service requirement, the less cash flow is
2 available for common equity holders.

3 **Q. What are the Companies' proposed capital structures?**

4 A. Wisconsin Electric proposes to establish a financial capital structure of 53.50
5 percent common equity. After imputing off balance sheet financial obligations
6 consistent with guidance from ratings agencies, Wisconsin Electric's requested
7 financial capital structure results in a ratemaking capital structure consisting of
8 56.86 percent common equity, 37.76 percent long-term debt, 0.28 percent preferred
9 equity and 5.10 percent short-term debt for Test Year 2025. Wisconsin Gas also
10 proposes to establish a financial capital structure of 53.50 percent common equity,
11 which similarly results in a ratemaking capital structure consisting of 52.75 percent
12 common equity, 39.19 percent long-term debt, and 8.06 percent short-term debt
13 for Test Year 2025.

14 **Q. Did you analyze whether the requested equity ratios are reasonable?**

15 A. Yes. I compared the Companies' proposed capital structures relative to the actual
16 capital structures of the utility operating subsidiaries of the companies in their
17 respective proxy groups. The cost of equity is estimated based on the return that
18 is derived from the companies in their respective proxy groups that are
19 comparable in risk to the Companies; however, those companies must be publicly-
20 traded in order to apply the cost of equity models. The operating utility
21 subsidiaries of their respective proxy group companies are most comparable to the
22 Companies in terms of risk, and it is therefore reasonable to look to the average

1 capital structure of the operating utilities of their respective proxy groups to
2 benchmark the equity ratios for the Companies. Specifically, I calculated the
3 average proportion of common equity, long-term debt, preferred equity and short-
4 term debt for the most recent three years for each of the utility operating
5 subsidiaries of the companies in both proxy groups. As shown in Ex.-WEPCO WG-
6 Bulkley-13(a), the common equity ratios for the operating subsidiaries of
7 companies Wisconsin Electric's proxy group over the past three years ranged from
8 44.40 percent to 59.99 percent, with an average of 52.10 percent. As shown in Ex.-
9 WEPCO WG-Bulkley-13(b), the common equity ratios for the operating
10 subsidiaries of companies in Wisconsin Gas's proxy group over the past three
11 years ranged from 44.57 percent to 59.79 percent, with an average of 53.73 percent.
12 Therefore, the Companies' proposed equity ratios are well within the range of
13 equity ratios for the utility operating subsidiaries of their respective proxy group
14 companies.

15 **Q. Are there other factors to be considered in setting the Companies' capital**
16 **structure?**

17 A. Yes, there are other factors that should be considered in setting the Companies'
18 capital structure, namely the challenges that the credit rating agencies have
19 highlighted as placing pressure on the credit metrics for utilities.

20 For example, although Moody's recently revised its credit outlook for the
21 utility sector from "negative" to "stable," Moody's continues to note that high
22 interest rates and increased capital spending will place pressure on credit metrics.

1 Thus, Moody's highlights constructive regulatory outcomes that promote timely
2 cost recovery as a key factor in supporting utility credit quality.⁷⁴

3 S&P also recently revised its outlook for the industry; however, S&P
4 downgraded its outlook from stable to negative.⁷⁵ S&P noted that for the fifth
5 consecutive year it expects downgrades will exceed upgrades with the industry
6 facing significant risks over the near-term as a result of physical risks due to
7 climate change, increased levels of capital spending and cash-flow deficits that are
8 not being "funded in a sufficiently credit supportive manner."⁷⁶ In regard to the
9 effect of increased capital spending, S&P noted:

10 The industry's capital spending remains at record levels, supporting
11 initiatives for safety, reliability, energy transition, and growth. We
12 consider these trends long term and expect that capital spending will
13 only continue to increase over this decade.

14 Accordingly, cash flow deficits have increased, pressuring the
15 industry's credit quality. For 2024, our base case assumes that the
16 industry will fund its approximate \$85 billion of cash flow deficits
17 with about \$40 billion in asset sales and equity issuance.

18 For 2023, the industry's actual equity issuance was considerably
19 below our expectations, resulting in a weakening of financial
20 performance and credit quality. If this trend persists, credit quality
21 will again likely experience pressure in 2024.⁷⁷

⁷⁴ Moody's Investors Service, Outlook, "Outlook turns stable on low prices and credit-supportive regulation," September 7, 2023.

⁷⁵ S&P Global Ratings, "Rising Risks: Outlook For North American Investor-Owned Regulated Utilities Weakens, February 14, 2024.

⁷⁶ *Id.*

⁷⁷ *Id.*, at 6-8.

1 Fitch Ratings (“Fitch”) has maintained a “deteriorating outlook” on the U.S.
2 utility sector in 2024 based on elevated capital spending and continuing higher
3 interest rates that place pressure on credit metrics.⁷⁸

4 The continued concerns of credit ratings agencies about the negative effects
5 of inflation, higher interest rates, and increased capital expenditures underscore
6 the importance of maintaining adequate cash flow metrics for the industry as a
7 whole, and for Wisconsin Electric and Wisconsin Gas in particular, in the context
8 of this proceeding.

9 **Q. Will the capital structure and ROE authorized in this proceeding affect the**
10 **Companies’ access to capital at reasonable rates?**

11 A. Yes. The level of earnings authorized by the Commission directly affects the ability
12 of the Companies to fund their operations with internally generated funds. Both
13 bond investors and rating agencies expect a significant portion of ongoing capital
14 investments to be financed with internally-generated funds. In addition, it is
15 important to recognize that because a utility’s investment horizon is very long,
16 investors require the assurance of a sufficiently high return to satisfy the long-term
17 financing requirements of the assets placed into service. Those assurances, which
18 often are measured by the relationship between internally generated cash flows
19 and debt (or interest expense), depend quite heavily on the capital structure.

⁷⁸ Fitch Ratings, “North American Utilities, Power & Gas Outlook,” S&P Market Intelligence, November 13, 2023.

1 Therefore, both the ROE and capital structure are very important to debt and
2 equity investors, particularly given current capital market conditions.

3 **IX. CONCLUSIONS AND RECOMMENDATION.**

4 **Q. What is your conclusion regarding a fair ROE for the Companies?**

5 A. Both Wisconsin Electric's and Wisconsin Gas's requested ROE of 10.00 percent are
6 reasonable based on the quantitative and qualitative analyses I conducted and the
7 Companies' business and financial risks as compared to their respective proxy
8 groups. Figure 19 and Figure 20 summarizes the results of my cost of equity
9 analyses.

1

Figure 19: Wisconsin Electric Summary of Analytical Results⁷⁹

<i>Constant Growth DCF</i>			
	Minimum Growth Rate	Average Growth Rate	Maximum Growth Rate
Mean Results:			
30-Day Avg. Stock Price	8.93%	10.14%	11.25%
90-Day Avg. Stock Price	9.01%	10.22%	11.33%
180-Day Avg. Stock Price	8.90%	10.11%	11.22%
Average	8.95%	10.16%	11.27%
Median Results:			
30-Day Avg. Stock Price	8.97%	9.98%	11.04%
90-Day Avg. Stock Price	9.02%	10.07%	11.17%
180-Day Avg. Stock Price	8.99%	10.06%	11.21%
Average	8.99%	10.03%	11.14%
<i>CAPM/ECAPM/Bond Yield Risk Premium</i>			
	30-Year Treasury Bond Yield		
	Current	Near-Term	Longer-Term
	30-Day Avg.	Projected	Projected
CAPM:			
Current <i>Value Line</i> Beta	11.48%	11.47%	11.47%
Current Bloomberg Beta	10.53%	10.51%	10.51%
Long-term Avg. <i>Value Line</i> Beta	10.33%	10.31%	10.31%
ECAPM:			
Current <i>Value Line</i> Beta	11.66%	11.66%	11.66%
Current Bloomberg Beta	10.95%	10.94%	10.94%
Long-term Avg. <i>Value Line</i> Beta	10.80%	10.79%	10.79%
Bond Yield Risk Premium:			
US Elec & Gas Utilities	10.32%	10.27%	10.27%

2

3

⁷⁹ DCF results exclude the results for Black Hills Corporation because they do not provide a reasonable equity risk premium over the current yields on the Moody's A rated and Baa rated utility bond indices, which were 5.42 percent and 5.67 percent, respectively, based on a 30-day average ending January 31, 2024.

Figure 20: Wisconsin Gas Summary of Analytical Results

<i>Constant Growth DCF</i>			
	Minimum Growth Rate	Average Growth Rate	Maximum Growth Rate
Mean Results:			
30-Day Avg. Stock Price	9.79%	10.71%	11.92%
90-Day Avg. Stock Price	9.87%	10.78%	11.99%
180-Day Avg. Stock Price	9.70%	10.62%	11.83%
Average	9.79%	10.70%	11.91%
Median Results:			
30-Day Avg. Stock Price	9.90%	10.17%	11.76%
90-Day Avg. Stock Price	9.98%	10.25%	11.85%
180-Day Avg. Stock Price	9.93%	10.20%	11.64%
Average	9.94%	10.21%	11.75%
<i>CAPM/ECAPM/Bond Yield Risk Premium</i>			
	30-Year Treasury Bond Yield		
	Current 30-Day Avg	Near-Term Projected	Longer- Term Projected
CAPM:			
Current <i>Value Line</i> Beta	11.09%	11.08%	11.08%
Current Bloomberg Beta	10.31%	10.29%	10.29%
Long-term Avg. <i>Value Line</i> Beta	10.12%	10.10%	10.10%
ECAPM:			
Current <i>Value Line</i> Beta	11.38%	11.37%	11.37%
Current Bloomberg Beta	10.79%	10.77%	10.77%
Long-term Avg. <i>Value Line</i> Beta	10.64%	10.63%	10.63%
Bond Yield Risk Premium:			
US Gas Utilities	10.30%	10.25%	10.25%

1 Q. What is your conclusion with respect to the Companies' proposed capital
2 structures?

3 A. The Companies' proposal to establish financial capital structures based on 53.50
4 percent common equity is well within the range of the actual capital structures of
5 companies in their respective proxy groups. Further, taking into consideration the
6 impact of current and projected market conditions on the cash flows of utilities as
7 raised by the credit rating agencies, I conclude that the Companies' proposals are
8 reasonable and should be adopted for ratemaking purposes.

9 Q. Does this conclude your direct testimony?

10 A. Yes.