BEFORE THE NORTH DAKOTA
PUBLIC SERVICE COMMISSION

IN THE MATTER OF THE APPLICATION   §
OF NORTHERN STATES POWER   §
COMPANY FOR AUTHORITY TO   §   **DOCKET NO. PU-24-376**
INCREASE RATES FOR ELECTRIC   §
SERVICE IN NORTH DAKOTA   §

DIRECT TESTIMONY

OF

MAUREEN L. RENO

ON BEHALF OF

THE ADVOCACY STAFF OF THE
NORTH DAKOTA PUBLIC SERVICE COMMISSION

JULY 8, 2025

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EXHIBITS

1		**I. <u>INTRODUCTION AND QUALIFICATIONS</u>**
2	**Q.**	**PLEASE STATE YOUR FULL NAME, OCCUPATION, AND BUSINESS**
3		**ADDRESS.**
4	A.	My name is Maureen L. Reno. I am an economist with a specialization in public utility
5		economics and finance. I am the founder and principal consultant of Reno Energy
6		Consulting Services, L.L.C. My business address is 19 Hope Hill Road, Derry, New
7		Hampshire 03038.
8	**Q.**	**PLEASE SUMMARIZE YOUR EDUCATION.**
9	A.	I received a Bachelor of Arts degree in Economics from the University of Maine at
10		Orono, Maine in 1996. In 1998, I earned a Master of Arts degree in Economics from
11		the University of New Hampshire in Durham, New Hampshire, where I also completed
12		all course work and examination requirements for a Ph.D. degree in Economics, except
13		for my dissertation. My areas of academic concentration included industrial
14		organization and environmental economics.
15	**Q.**	**WHAT IS YOUR PROFESSIONAL BACKGROUND?**
16	A.	I have 25 years of professional experience in the regulated utilities and energy sectors.
17		From 2001 to 2011, I served as a utility analyst and program manager with the New
18		Hampshire Public Utilities Commission, advising the Commissioners on regulated
19		utilities' cost of capital and return on equity ("ROE"), among other regulatory matters.
20		From 2011 to 2012, I served as a Senior Energy Economist with the Union of
21		Concerned Scientists, advising on the intricacies of the regulated utility industry and
22		helping to develop alternative financing programs for renewable energy investments.
23		Since 2012, I have served as an independent consultant to multiple firms, including
24		Exeter Associates, Inc. and TAHOEconomics, LLC on utility cost of capital, ROE, and
25		capital structure; Stephenson Strategic Communications, LLC on federal climate and

1		energy policy; and TrueLight Energy, LLC on regulated utility rate impacts and energy
2		markets.
3	**Q.**	**HAVE YOU PREVIOUSLY TESTIFIED AS AN EXPERT WITNESS BEFORE**
4		**A PUBLIC SERVICE COMMISSION?**
5	A.	Yes. My testimony was presented and accepted in 44 regulated utility proceedings in
6		several states, including Alaska, Arizona, California, Delaware, Georgia, Kansas,
7		Missouri, New Hampshire, New Mexico, North Carolina, Oklahoma, Pennsylvania,
8		South Carolina, and Texas, on a wide range of issues concerning regulated utilities,
9		retail and wholesale energy markets, and renewable energy. (See Appendix A for my
10		curriculum vitae and qualifications.)
11	**Q.**	**ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**
12	A.	I am serving as an expert witness on cost of capital, ROE, and capital structure on
13		behalf of the Advocacy Staff of the North Dakota Public Service Commission
14		("NDPSC").
15	**Q.**	**HOW IS YOUR TESTIMONY ORGANIZED?**
16	A.	My testimony is organized into nine sections including this one. In Section II, I discuss
17		the purpose of my testimony, which is to compare the rate of return ("ROR") proposed
18		by Northern States Power ("NSP" or "Company") with the ROR that I am
19		recommending. In Section III, I review current and near-term economic and financial
20		conditions in the United States and North Dakota. In Section IV, I evaluate NSPs
21		proposed capital structure and discuss my recommended capital structure. In Section
22		V, I summarize NSP's proposed cost of debt. In Section VI, I discuss different types of
23		risks for regulated electric utilities and evaluate whether NSP is facing greater or lesser
24		risks than its peers in the proxy group that I use in my ROE analysis. In Section VII, I
25		present my ROE analysis which includes the methodologies that I applied to develop

1   my ROE recommendation. I also evaluate NSP's proposed ROE. In Section VIII, I

2   critique Mr. Nowak's application of a flotation cost adjustment to his ROE estimates.

3   Finally, in Section IX, I summarize my recommendations concerning a fair and

4   reasonable ROR, which includes my recommended capital structure and ROE.

5

6   **II. PURPOSE AND SUMMARY OF RECOMMENDATIONS**

7   **Q.   WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

8   A.   The purpose of my testimony is to recommend an ROR for ratemaking purposes.[1] I

9   recommend a different ROR—to include a different ROE and capital structure—than

10   that proposed by NSP. My ROE recommendation was determined in accordance with

11   the standards identified in *Bluefield Water Works v. Public Service Commission*, 262

12   U.S. 679, 692-93 (1923) ("*Bluefield*") and *Federal Power Commission v. Hope Natural*

13   *Gas Co.*, 320 U.S. 591, 605 (1944) ("*Hope*"). In *Bluefield* and *Hope*, the U.S. Supreme

14   Court established the principle that a public utility may be allowed to earn a return

15   comparable to a return on investments in other enterprises having similar risks that

16   allow the utility, under efficient management, to maintain financial integrity so that it

17   can attract capital on reasonable terms and maintain its credit.

18   **Q.   WHAT IS THE RATE OF RETURN THAT NSP IS PROPOSING?**

19   A.   For the test year defined as the calendar year 2025 ("future test period" or "future test

20   year"), NSP proposed an ROR of 7.56%, which is composed of (1) a capital structure

21   of 52.50% common equity, 46.71% long-term debt, and 0.79% short-term debt; (2) a

22   cost of long-term debt of 4.51%; (3) a cost of short-term debt of 5.31%; and (4) an ROE

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[1] For the purpose of my testimony, I will utilize the term "rate of return," or ROR, which I consider to be synonymous with the terms "return on rate base" or "weighted average cost of capital."

1	of 10.30%.[2] See Table 1 at the end of this section of my testimony for a comparison of
2	the proposed and recommended RORs.
3	**Q.** **HOW DOES NSP'S PROPOSED RATE OF RETURN OF 7.56% COMPARE**
4	**TO RATE OF RETURNS AUTHORIZED BY REGULATORY**
5	**COMMISSIONS IN THE U.S.?**
6	**A.** Between January 1, 2015, and May 15, 2025, there were 270 general rate cases
7	involving vertically integrated electric utilities in which state commissions authorized
8	an ROR.[3] Of these 270 cases, the average ROR authorized is 6.97% with a median of
9	7.17% and a mode of 7.18%, highlighting how excessive NSP's proposed ROR of
10	7.56% is in the context of national regulatory precedent.
11	Focusing specifically on North Dakota, there were seven electric rate cases for
12	vertical integrated utilities during this same period in which the Commission adopted
13	an ROR.[4] Among those, the highest being 7.64%, awarded to Otter Tail Power
14	Company in December 2018.[5] This data strongly underscores the excessive nature of
15	NSP's proposed ROR. The proposed ROR of 7.56% is significantly above levels
16	typically authorized by regulators and is inconsistent with recent and historical
17	precedent.
18	**Q.** **SHOULD THE COMMISSION ACCEPT NSP'S PROPOSED RATE OF**
19	**RETURN?**
20	**A.** No. The Commission should reject NSP's proposed ROR because of three main
21	considerations. First, it is based on an overstated ROE that does not accurately reflect
22	investors' current expected returns on utility stocks. Second, NSP's proposed ROR of

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[2] Halama Direct, Exhibit___(BCH-1), Schedule 3.
[3] Derived from data provided by S&P MI, reflecting only vertically integrated electric utilities for which S&P MI reported an ROR value.
[4] Id.
[5] Id.

1		7.56% is high and inconsistent with the RORs typically allowed for electric utilities.
2		Third, it is inconsistent with the regulatory compact in utility ratemaking, specifically
3		as it relates to the proposed equity ratio.
4	Q.	**WHAT IS THE REGULATORY COMPACT IN THE CONTEXT OF**
5		**UTILITY RATEMAKING?**
6	A.	The regulatory compact is an implied agreement between a regulated utility and state
7		regulators whereby the utility agrees to provide safe, adequate, nondiscriminatory
8		service to all customers within its assigned service territory. In exchange, the state
9		grants the utility an exclusive franchise and the opportunity to recover prudently
10		incurred costs and earn a reasonable return on investment. This relationship has been
11		recognized by courts and regulatory bodies as the legal and economic foundation of
12		traditional rate-of-return regulation.
13	Q.	**SPECIFICALLY, AS IT RELATES TO THE ROR, PLEASE EXPLAIN THE**
14		**IMPORTANCE OF THE REGULATORY COMPACT.**
15	A.	The rate of return is a central component of a utility's revenue requirement and is
16		fundamentally tied to the regulatory compact. It is designed to ensure that the utility
17		remains financially sound, can attract capital on reasonable terms, and continues to
18		invest in the infrastructure necessary to serve the public interest. At the same time, the
19		rate of return must not be excessive, so as to avoid placing an undue burden on
20		customers.
21		The rate of return is typically calculated as the weighted average cost of capital,
22		using the following formula: ROR = (Debt ratio × Cost of Debt) + (Equity ratio ×
23		Allowed ROE). This formula makes clear that the utility's capital structure, i.e., the
24		relative proportions of debt and equity financing, has a direct and material impact on
25		the overall ROR.

1   In general, equity is more expensive than debt because investors demand a

2   higher return for assuming greater risk. Consequently, a capital structure with a higher

3   equity component leads to a higher ROR, which in turn generally increases the utility's

4   revenue requirement and, ultimately, customer rates. While it is important that the

5   utility earns a return sufficient to attract capital and maintain financial health, regulators

6   must also ensure that the resulting rates are just and reasonable. This requires a careful

7   balance between the interests of shareholders and those of ratepayers.

8   NSP's proposed capital structure, which includes an equity ratio of 52.50%,[6] is

9   unreasonably high when compared to the capital structures of its peers and prevailing

10   industry norms. For calendar year ("CY") 2025, through May 27, there have been

11   twelve vertically integrated electric utilities for which U.S. regulators approved a

12   capital structure. For these utilities, the average equity ratio was 47.42%, with a median

13   of 48.14%. Over a longer time horizon, from CY 2015 through May 27, 2025,

14   regulatory commissions approved capital structures for 244 vertically integrated

15   electric utilities. Across these cases, the average equity ratio was 49.08%, the median

16   was 50.45%, and the mode was 52.00%.[7]

17   If adopted as proposed, this capital structure would unnecessarily increase the

18   utility's overall ROR and revenue requirement, resulting in higher costs to customers.

19   Such an outcome would be inconsistent with the intent of the regulatory compact,

20   which aims to provide a fair return to investors while protecting customers from

21   excessive charges. It is therefore essential that the Commission thoroughly evaluates

22   NSP's proposed capital structure to ensure that it supports the utility's financial

23   stability without imposing unjustified costs on ratepayers.

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[6] Halama Direct, Exhibit___(BCH-1), Schedule 3.
[7] All figures are based on data provided by S&P Global Market Intelligence (S&P MI).

| 1 | Q. | **HOW DOES NSP'S PROPOSED ROR VIOLATE THE REGULATORY** |

1   Q.   **HOW DOES NSP'S PROPOSED ROR VIOLATE THE REGULATORY**

2   **COMPACT?**

3   A.   NSP's excessive rate of return, which is unreasonably high due in part to its equity-

4   heavy capital structure and elevated return on equity request, contravenes the

5   regulatory compact because it disrupts the fundamental balance the compact is intended

6   to preserve between the utility's right to earn a fair return and the public's right to just

7   and reasonable rates. When a utility earns a return that exceeds what is necessary to

8   attract capital and maintain financial integrity—as articulated in *Hope* and *Bluefield*—

9   it imposes unjust and unreasonable rates on captive customers, thereby breaching the

10   public interest obligations embedded in the compact. This undermines regulatory

11   fairness and exploits the utility's monopoly position. As discussed previously NSP's

12   proposed ROR far exceeds ROR's authorized across the U.S.

13   Q.   **SHOULD THE COMMISSION ACCEPT NSP'S PROPOSED CAPITAL**

14   **STRUCTURE?**

15   A.   No. NSP's proposed equity ratio of 52.5%, based on the test period ending December

16   31, 2025, is inconsistent with regulated utility sector trends and recently observed

17   average capital structures allowed by commissions across the U.S. It also places a

18   greater economic burden on ratepayers since equity is more expensive than debt.

19   Q.   **SHOULD THE COMMISSION ACCEPT NSP'S PROPOSED COST OF**

20   **LONG-TERM DEBT?**

21   A.   Yes. NSP's long-term debt costs appear to be based on the Company's embedded cost

22   of long-term debt with individual debt costs in line with market rates in play during the

23   time of each debt issuance.

24   Q.   **SHOULD THE COMMISSION ACCEPT NSP'S PROPOSED COST OF**

25   **SHORT-TERM DEBT?**

1   A.   Yes. NSP's short-term debt costs appear to be based on the Company's embedded cost

2   of short-term debt with individual debt costs in line with market rates in play during

3   the time of each debt issuance.

4   **Q.**   **SHOULD THE COMMISSION ACCEPT NSP'S PROPOSED ROE?**

5   A.   No. The 10.30% ROE proposed by NSP witness Joshua C. Nowak does not comport

6   with current market trends and the return on equity investors expect for a stock from a

7   vertically integrated electric utility with similar risk.

8   Mr. Nowak skews his analysis through over-reliance on inputs with an upward

9   bias. For example, he relies exclusively on earnings growth estimates, which has the

10   effect of inflating his Discounted Cash Flow ("DCF") Model results. Relying

11   exclusively on earnings growth estimates also inflates his estimated total market risk

12   premium and resulting Expected Market Return, a key input in his DCF-based Capital

13   Asset Pricing Model ("CAPM"). By contrast, I rely on a combination of earnings

14   growth estimates as well as dividend growth, book value growth, and sustainable

15   growth to produce more accurate results.

16   **Q.**   **WHAT DO YOU RECOMMEND AS THE APPROPRIATE ROR FOR NSP?**

17   A.   For NSP, I recommend an overall ROR of 6.97%, which is composed of (1) a capital

18   structure of 50.00% equity, 49.21% long-term debt (different from the Company's

19   claim), and 0.79% short-term debt; (2) a cost of long-term debt of 4.51% (no difference

20   from the Company's claim) and a cost of short-term debt of 5.31% (no difference from

21   the Company's claim); and (3) an ROE of 9.41% (again, different from the Company's

22   claim). See Table 1 below for a comparison of the proposed and recommended RORs.

23   **Q.**   **WHY SHOULD THE COMMISSION ACCEPT YOUR RECOMMENDED**

24   **ROE?**

1	A.	My ROE recommendation of 9.41% is based on the midpoint of my DCF results and
2		falls within my ROE range of 8.50% to 10.31%. I recommend an ROE based on the
3		midpoint of my DCF range because it represents a fair and reasonable ROE for NSP in
4		consideration of its risks and investors' current valuation of public utilities and equity
5		assets in general. I discuss my modeling in greater detail further in my testimony.
6	**Q.**	**DID YOU EMPLOY ANY OTHER MODELS WHEN ESTIMATING YOUR**
7		**ROE RESULTS?**
8	A.	Yes. I also use the CAPM as a check on the reasonableness of my DCF results;
9		however, my recommended ROE is not based on the CAPM results. I use the CAPM
10		to estimate a range of ROE results of 8.18% to 11.12%, with a midpoint of 9.65%. This
11		midpoint CAPM result is 24 basis points greater than my DCF midpoint. The average
12		of both my DCF midpoint and my CAPM midpoint is 9.53%. As noted, these CAPM
13		results serve as a check on my DCF results to demonstrate that my recommendation
14		based on the DCF model is reasonable and should be accepted by the Commission.
15	**Q.**	**HAVE YOU PREPARED A TABLE THAT COMPARES NSP'S REQUESTED**
16		**ROR TO THE ROR THAT YOU RECOMMEND?**
17	A.	Yes, see Table 1.
18		

TABLE 1. COMPARISON OF PROPOSED & RECOMMENDED RATES OF RETURN

	NSP WITNESSES HALAMA & NOWAK			ADVOCACY STAFF WITNESS RENO		
	Weight	Cost of Capital	Weighted Cost	Weight	Cost of Capital	Weighted Cost
Long-Term Debt	46.71%	4.51%	2.11%	49.21%	4.51%	2.22%
Short-Term Debt	0.79%	5.31%	0.04%	0.79%	5.31%	0.04%
Common Equity	52.50%	10.30%	5.41%	50.00%	9.41%	4.71%
Total Capital Structure	100.00%		7.56%	100.00%		6.97%

Amounts may not add up due to rounding.
Source: Halama Direct, Exhibit___(BCH-1), Schedule 3.

III. MACROECONOMIC AND FINANCIAL MARKET CONDITIONS

Q. WHY IS IT IMPORTANT TO CONSIDER MACROECONOMIC CONDITIONS IN DEVELOPING A RECOMMENDED ROE, COST OF DEBT, AND ROR?

A. I present current and expected macroeconomic conditions in this section to set the context for my ROE, cost of debt, and resulting ROR recommendations to the Commission. With respect to the expected ROE, investors evaluate both economic and monetary conditions when assessing the opportunity costs of their investments. Global, national, and regional economic conditions affect investor expectations regarding investment returns, as measured by stock prices, interest rates, and sustainable dividend growth — each of which serves as inputs in my DCF and CAPM analyses. Additionally, investors closely monitor market interest rates and the return on fixed-income securities, in particular U.S. Treasury bonds, as they weigh alternative investment options when making capital allocation decisions. The cost of new debt issuances is also determined according to the expectations set by bondholders.

1	Q.	**HOW ARE INTEREST RATES ON FIXED-INCOME SECURITIES**
2		**DETERMINED?**

3   A.   Interest rates or bond yields on long-term bonds are determined by investors'

4   expectations on economic growth and inflation over the duration of a particular bond.

5   Interest rates on short-term bonds are also determined by these expectations but are

6   largely driven by the actions of the U.S. Federal Reserve Bank ("Federal Reserve"),

7   specifically the Federal Open Markets Committee ("FOMC"), when they adjust the

8   Federal Funds Rate (the overnight interest rate it charges commercial banks) and buy

9   or sell U.S. Treasury securities to meet certain policy objectives.

10   Q.   **PLEASE ELABORATE ON THE FEDERAL RESERVE'S POLICY**

11   **OBJECTIVES.**

12   A.   The Federal Reserve has two policy objectives: the first is to maintain full employment

13   or the total amount of employment that the economy can experience without any overt

14   inflationary pressures; and the second is to maintain a target rate of inflation of 2.0%

15   over the long run.[8] Thus, the Federal Reserve monitors key economic indicators to

16   gauge whether it is necessary to adjust the Federal Funds Rate to influence borrowing

17   behaviors and/or to adjust its balance of securities to change the level of money supply

18   in the economy.

19   Q.   **WHAT ECONOMIC INDICATORS DO BOTH THE FEDERAL RESERVE**

20   **AND INVESTORS MONITOR?**

21   A.   The Federal Reserve and investors monitor economic indicators including measures of

22   economic growth, such as real Gross Domestic Product ("GDP"), the unemployment

23   rate, and measures of inflation, such as the Consumer Price Index ("CPI"), among

24   others.

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[8] https://www.federalreserve.gov/faqs/economy_14400.htm

1	Q.	**HOW WOULD YOU DESCRIBE THE CURRENT STATE OF THE U.S.**
2		**ECONOMY?**
3	A.	In general, economic signals show a slight slowdown considering stubborn inflation,
4		although current inflation remains far lower than in 2022. Recent economic growth, as
5		measured by real GDP, shows that the U.S. economy is slowing after experiencing a
6		post-COVID-19 pandemic rebound. Although inflation has fallen since it peaked in
7		2022, inflation is not falling at the rate the Federal Reserve had hoped. Therefore,
8		investors remain uncertain about if the Federal Reserve will continue to decrease
9		interest rates after reversing course of aggressively increasing interest rates as they did
10		in July 2023.
11	Q.	**HOW HAS ECONOMIC GROWTH CHANGED SINCE THE COVID-19**
12		**PANDEMIC?**
13	A.	In 2021, real GDP growth reached an annual high of 6.1%, falling to 2.5% in 2022 and
14		then rebounding slightly to 2.9% in 2023 and 2.8% in 2024. During Q1 2025, however,
15		real GDP decreased by 0.3%.[9]
16	Q.	**HOW HAS UNEMPLOYMENT CHANGED SINCE THE COVID-19**
17		**PANDEMIC?**
18	A.	Unemployment decreased from 5.3% in 2021 to 3.6% in 2022 and 2023, respectively.
19		Unemployment has increased slightly to 4.0% in 2024 and 4.2% in Q1 2025.[10]
20	Q.	**HOW HAS INFLATION CHANGED SINCE THE COVID-19 PANDEMIC?**
21	A.	Inflation, as measured by the CPI, remains the primary concern to the economy, though
22		it decreased from its peak of 8.0% in 2022 to 2.9% in 2024 and 2.4% in Q1 2025.[11]

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[9] Council of Economic Advisers, "Economic Indicators" (April 2025), at 3.
[10] Id., at 11.
[11] Id., at 24.

1	Q.	**HOW HAS THE FEDERAL RESERVE RESPONDED TO THESE**
2		**ECONOMIC TRENDS?**
3	A.	Since July 2023, the FOMC has paused its campaign of aggressively increasing the
4		federal funds rate to dampen stubborn inflationary pressures, reducing the amount of
5		money circulating through the economy, and driving down aggregate demand. Since
6		then, the FOMC decreased the federal funds rate three consecutive times in 2024. In a
7		recent press release issued on May 7, 2025, the FOMC states that "[r]ecent indicators
8		suggest that economic activity has continued to expand at a solid pace. The
9		unemployment rate has stabilized at a low level in recent months, and labor market
10		conditions remain solid. Inflation remains somewhat elevated."[12] The FOMC
11		continued by stating, "[t]he Committee seeks to achieve maximum employment and
12		inflation at the rate of 2 percent over the long run. Uncertainty about the economic
13		outlook has increased further." Thus, the FOMC decided to maintain the current target
14		range for the federal funds rate between 4.25% to 4.50%.[13] The FOMC further stated,
15		"[i]n considering the extent and timing of additional adjustments to the target range for
16		the federal funds rate, the Committee will carefully assess incoming data, the evolving
17		outlook, and the balance of risks."[14]
18	Q.	**HOW HAVE INVESTORS RESPONDED TO THESE ECONOMIC TRENDS?**
19	A.	According to *Value Line Investment Survey* ("*Value Line*"), inflation moderated last
20		month, and the labor market has held up well with April's job-creation figures being
21		better than expected. However, *Value Line* cautions that the growth outlook is unclear
22		with GDP contracting in Q1 2025 amid concerns about the Trump Administration's

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[12] Federal Open Market Committee, Federal Reserve Bank, "Press Release" (May 7, 2025), at 1.
[13] Id.
[14] Id.

1   tariff policies. Value Line notes that a federal tax deal and increased deregulation in the

2   energy and financial markets will be necessary to drive growth over the next year.[15]

3 **Q.** **HOW DO INVESTOR'S EXPECTATIONS INFLUENCE YOUR ROE**

4   **RESULTS?**

5 **A.** Investors consider actions of the Federal Reserve, and the economic conditions

6   discussed above when estimating the opportunity cost of investing in a share of utility

7   stock, or their expected return on equity in the long run. Thus, in addition to assessing

8   economic growth, unemployment, and inflation, they will consider the yields or the

9   return on fixed-income securities (e.g., interest rates on bonds), in particular interest

10   rates on U.S. Treasury bonds.

11 **Q.** **HOW HAVE INTEREST RATES AND INVESTOR EXPECTATIONS**

12   **CHANGED IN RECENT YEARS?**

13 **A.** Figure 1 below shows how the interest rates have changed from 2019 to May 2025.

14   Yields on short-term U.S. Treasury bonds have currently peaked at elevated levels in

15   2023 in response to the FOMC's recent actions. Yields on long-term U.S. Treasury

16   bonds and corporate bonds also appear to have peaked.

17

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[15] The Value Line Investment Survey, "Selection & Opinion", Issue 6, (May 30, 2025), at 2297.

FIGURE 1. INTEREST RATES AND BOND YIELDS (2019 - May 2025)
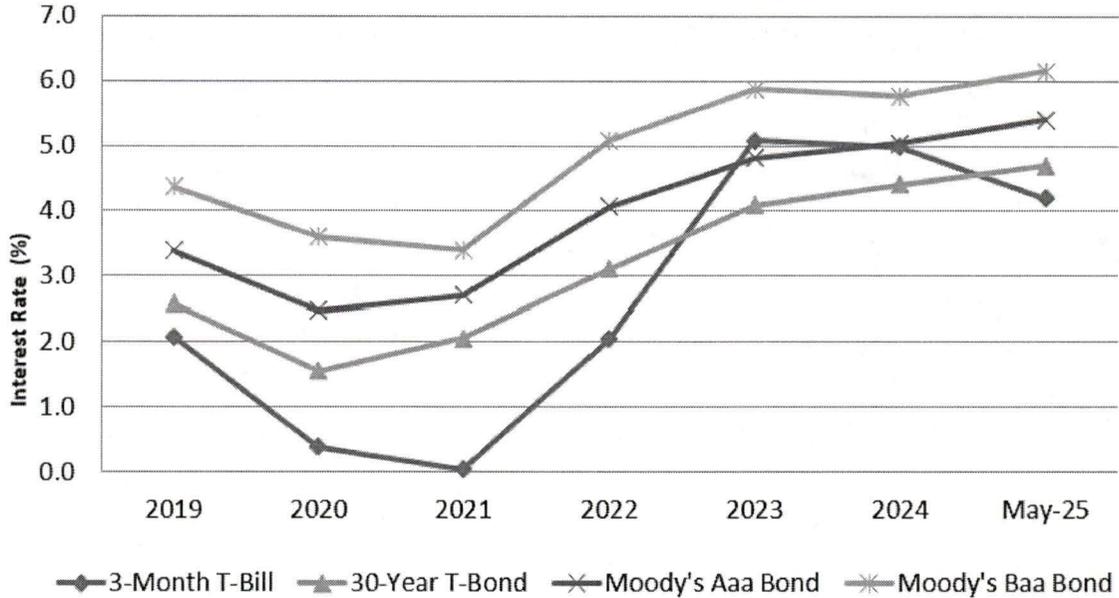
Exhibit___(MLR-2a) (Interest Rates and Bond Yields (2019 - May 2025)).

1   Yields on long-term bonds (reference the 30-Year Treasury Bond or "T-Bond,"

2   shown in green in Figure 1 above) rose from 2.06% in 2021 to 4.41% in 2024 and

3   4.70% in May 2025.[16] The cost of debt for Moody's Investors Service ("Moody's")

4   Baa-rated corporations peaked in 2023 at 5.87% and fell slightly to 5.76% in 2024 but

5   rebounded to 6.15% in May 2025.[17] Moreover, short-term interest rates (reference the

6   3-Month U.S. Treasury Bill or "T-Bill," shown in blue in Figure 1 above) rebounded

7   from 0.04% in 2021 to 4.98% in 2024 and fell to 4.20% in May 2025.[18]

8   Short-term interest rates are primarily determined by the FOMC's policy

9   actions. Recent decreases in short-term interest rates followed after the FOMC

10   decreased the Federal Funds rate and reduced its holdings of Treasury and agency

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[16] Council of Economic Advisers, "Economic Indicators" (April 2025), at 30.
[17] Id.
[18] Id.

1   mortgage-backed securities to increase money supply.[19] Long-term interest rates are

2   primarily determined by market forces, including investor expectations of future levels

3   of inflation and economic growth.

4   Figure 2 below shows the yields on the different types of T-Bills and T-Bonds,

5   with values along the horizontal axis representing the maturity of each T-Bill or T-Bond

6   and the vertical axis showing the corresponding yield or interest rate. Each line

7   represents the yields associated with each type of asset on a particular date and is

8   referred to by financial analysts as the "yield curve." The yield curve reflects the bond

9   market's consensus opinion of future financial market conditions as investors decide

10   which bill or bond to purchase in response to expected levels of inflation and interest

11   rates.

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[19] Monetary Policy Report, February 2025.

FIGURE 2. TREASURY SECURITY YIELD CURVE

Source: http://www.treasury.gov
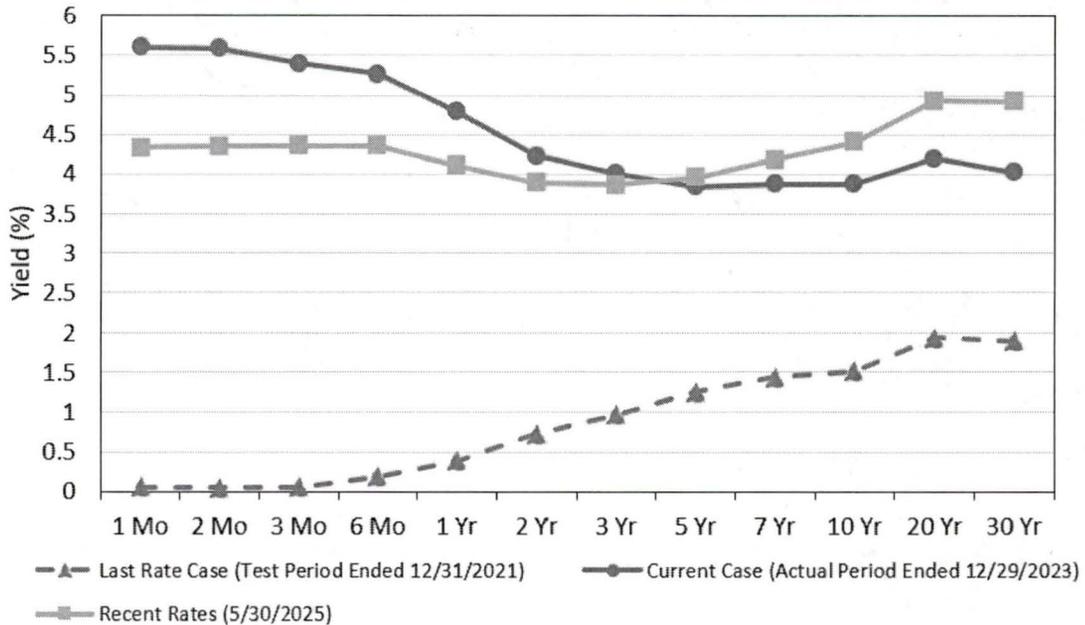
1	Q.	**HOW HAS THE YIELD CURVE CHANGED IN RECENT YEARS?**

2 A.   It is important to recall the evolution of the yield curve in recent years. During NSP's

3   last rate case which incorporated a test period ended December 31, 2021, the yield

4   curve was upward-sloping with yields ranging from 0.06% for 1-month T-Bills to

5   1.90% for 30-year T-Bonds. The yields on short-term T-Bills were near 0% in response

6   to FOMC actions, while the yields on some long-term T-Bonds were increasing

7   slightly, showing that investors were expecting an economic rebound from the

8   pandemic.

9   The shape of the yield curve has since flipped in 2023 and is inverted. As shown

10   in Figure 2 above, yields on long-term T-Bonds are lower than the yields on short-term

11   T-Bills as of December 29, 2023 (i.e., the last trading day of test period). This shows

12   that investors were expecting a sustained economic slowdown and for the FOMC to

13   shift its monetary policy and start decreasing interest rates to avoid an economic

1   slowdown. However, the increasing yield curve on May 30, 2025, shows that yields on

2   longer-term bonds are increasing while yields on short-term T-Bills are falling slightly

3   due to recent decreases in short-term interest rates by the FOMC late in 2024.

4 **Q.** **WHAT OTHER MEASURES OF INVESTORS' EXPECTATIONS DO YOU**

5   **CONSIDER?**

6 A.   Another metric by which to gauge investor expectations regarding long-term inflation

7   is the Treasury Inflation-Protected Securities ("TIPS") spread, or the difference

8   between yields on long-term nominal Treasury securities and long-term TIPS. The

9   yield on a long-term conventional Treasury bond pays its holder a fixed nominal

10   coupon and principal to compensate the investor for future inflation, and it includes the

11   real rate of interest and inflation compensation. For TIPS, the coupons and principal

12   both rise and fall with inflation, as measured by the CPI. The published yield includes

13   only the real rate of interest. Therefore, the difference, roughly speaking, between the

14   prevailing yields on these two types of Treasury securities reflects the inflation

15   compensation over that maturity horizon that is expected by bond investors.

16   The 30-day average difference in the yield on the 30-year T-Bond and 30-year

17   TIPS for the period ended May 30, 2025, equals 2.28% and represents the market's

18   most recent expectations for long-term inflation. In other words, this data confirms that

19   investors are anticipating that the rate of inflation over the long term is expected to

20   stabilize at a higher rate than the FOMC's goal of 2.0%, which may further feed fears

21   that the FOMC may delay interest rate cuts.

22 **Q.** **WHAT ARE THE EXPECTATIONS FOR THE U.S. ECONOMY IN THE**

23   **NEAR FUTURE?**

24 A.   As the FOMC continues to pause reducing short-term interest rates in response to

25   persistent inflation, the economy is still expected to slow down in the near term and

1		then hover around 2.0% in the longer term. Specifically, according to the Q2 2025
2		edition of *Survey of Professional Forecasters* published by the Federal Reserve Bank
3		of Philadelphia, economic growth, as measured by real GDP, is expected to increase
4		from 1.4% during 2025 to 1.6% during 2026 and 2.2% during 2027. Long-run
5		economic growth beyond 2027 is expected to hover near 2.0% in 2028.[20]
6		Over the next year, inflation is expected to decrease but remain near moderate
7		levels, with the CPI remaining near 3.3% in 2025 and then falling to 2.7% in 2026 and
8		2.4% in 2027. Another inflation metric closely watched by the FOMC is the Personal
9		Consumption Expenditures ("PCE") index because it represents a broader measure of
10		inflation. The PCE is expected to decrease from 3.2% in 2025 to 2.5% in 2026 and
11		2.1% in 2027, nearly matching the FOMC's monetary policy goal of inflation. The data
12		also show that analysts expect the national unemployment rate to increase slightly from
13		4.3% in 2025 to 4.5% in 2026 and 4.6% in 2027.[21]
14	**Q.**	**HOW DOES THE NORTH DAKOTA ECONOMY COMPARE TO THE U.S.**
15		**ECONOMY?**
16	A.	The North Dakota economy is weaker than the national economy. North Dakota's real
17		GDP for the most recent quarter for which data is available (Q4 2024) is 2.1%
18		compared to the national average of 2.4%.[22] However, personal income grew faster
19		than the national average over the same period, with an increase of 5.1% compared to
20		the U.S. average of 4.6%.[23] North Dakota's unemployment rate of 2.4% in 2024 was
21		lower than the national unemployment rate of 4.0%.[24]

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[20] Federal Reserve Bank of Philadelphia, "Survey of Professional Forecasters: Second Quarter 2025" (May 16, 2025), at 8 & 10.

[21] Id.

[22] Bureau of Economic Analysis, "Gross Domestic Product by State and Personal Income by State, 4th Quarter 2024 and Preliminary 2024" (March 28, 2025), available at https://www.bea.gov/news/2025/gross-domestic-product-state-and-personal-income-state-4th-quarter-2024-and-preliminary

[23] Id.

[24] www.bls.gov/news.release/pdf/srgune.pdf.

1		According to the Federal Reserve Bank of Minneapolis, economic activity in
2		the Ninth District declined slightly. Employment remained steady, while wages rose
3		moderately. Overall prices rose moderately as input costs saw more pressure.
4		Manufacturing and vehicle sales showed slight growth. However, consumer spending
5		and construction declined modestly, with residential real estate down and commercial
6		real estate unchanged. Agriculture remained weak but stable.[25]

7 **Q. ARE INVESTORS AWARE OF NORTH DAKOTA'S ECONOMIC**

8 **CONDITION?**

9 A. Yes. Investors consider local, regional, and national economic conditions when making

10 their investment decisions. For example, investors often compare NSP to its affiliates

11 in other states that have similar or lower credit ratings. Investors also consider the

12 expected returns on utility stocks in relation to the return of other stocks and securities.

13 **Q. HOW DO INVESTORS VIEW UTILITY STOCKS?**

14 A. In general, investors view utility stocks as a safe investment, especially during times of

15 uncertainty, because of the industry's defensive fundamentals and high dividend yields.

16 Utility stocks are considered defensive by investors because electric service is essential,

17 and utilities are regulated monopolies. *Value Line* reports that during the past 12

18 months, utilities under its coverage have gained 17.1% in value on average versus a

19 0.7% rise in the *Value Line Arithmetic Index*. According to *Value Line*, this defensive

20 group has performed substantially better than the broader market of the last 12 months,

21 supported by recession concerns and falling interest rates.[26] Total returns on utility

22 stocks are dependent on investors' expectations of where interest rates will go next and

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[25] Federal Reserve System, "The Beige Book: Summary of Commentary on Current Economic Conditions by Federal Reserve District" (May 2025), at 34-37.
[26] Value Line Investment Survey, "Electric Utility East" (May 9, 2025), at 129.

1   prospects for the economy in general as investors may prefer these stocks (with low

2   betas) over economically sensitive, higher-risk stocks during an economic downturn.

3 **Q.** **HOW DO INVESTORS' EXPECTATIONS OF AN ECONOMIC**

4   **SLOWDOWN RELATE TO NSP'S ROE?**

5 **A.** As discussed previously in this testimony, despite a slight reprieve in inflation earlier

6   last year, inflation has increased again, causing the Federal Reserve to delay any

7   changes in its monetary policy. Persistent high interest rates are contributing to lower

8   economic growth. Although the stock market performed well throughout 2024,

9   investors seem to be anxious about when the FOMC will resume decreasing interest

10   rates. Furthermore, investors are weary of the uncertainties regarding the Trump

11   Administration's tariffs on imports across many goods from multiple countries—

12   inducing fears of yet higher inflation and plummeting consumer confidence. Given this

13   uncertainty, investors may choose more defensive stocks, such as utility stocks, that

14   typically have a lower expected return compared to higher-risk stocks. This trend is

15   demonstrated by my cost of equity study estimates.

16

17   **IV. CAPITAL STRUCTURE**

18 **Q.** **WHAT IS MEANT BY THE TERM "CAPITAL STRUCTURE"?**

19 **A.** Capital structure refers to the relative percentage of equity, preferred stock, and debt

20   that a company uses to finance its investments.

21   Equity (or common equity) represents ownership in a company and its

22   investments. It includes common stock, retained earnings, and additional paid-in

23   capital. Equity financing is more expensive than debt financing for two reasons.

24   Because companies have a legal obligation to pay debt before equity, stockholders

25   expect a higher return to compensate for this risk. In addition, returns on equity (or

1 dividends) are not tax deductible as a business expense like a company's interest

2 payments on debt.

3   Preferred stock is a type of stock that offers greater benefits than common

4 equity. Preferred stockholders receive a fixed dividend and have priority for payment

5 over common stockholders.

6   Debt consists of financial obligations that are recorded as liabilities on a

7 company's balance sheet. These obligations must be paid before any distributions—

8 such as dividends or liquidation proceeds—can be made to preferred or common

9 shareholders. Corporate debt generally includes two time horizons: (1) long-term debt

10 that matures over a period of more than one year; and (2) short-term debt that matures

11 within one year.

12 **Q.** **HOW IS A UTILITY'S TOTAL RATE OF RETURN CALCULATED?**

13 A. The total rate of return is composed of the weighted costs of long-term debt and equity

14 capital. Long-term debt costs are typically computed using the utility's actual debt costs

15 as of a certain date, such as the last day of the test year. In some jurisdictions, such as

16 North Dakota, short-term debt is included in the capital structure for ratemaking

17 purposes. Unlike the debt components of the capital structure, equity cost rates must be

18 estimated.

19   The utility's total ROR is developed by multiplying the percentage of each type

20 of financing (common equity and long-term debt) by their specific cost rates and then

21 totaling the results for a total after-tax ROR. This rate is then converted to pre-tax

22 returns by grossing up the common equity and the preferred stock dividends for taxes.

23 The final pre-tax return is then multiplied by the utility's rate base to determine the

24 amount of money that customers must pay to the utility for the return on investment

25 and associated tax payments.

1	Q.	**HOW DOES THE CAPITAL STRUCTURE IMPACT THE TOTAL RATE OF**
2		**RETURN?**
3	A.	The cost of equity is generally higher than the cost of debt, so ratepayers bear higher
4		costs when the utility finances more of its rate base investment with common equity
5		and preferred stock. As explained above, stockholders expect a higher return because
6		companies are contractually obligated to repay their debt where no such obligation
7		exists for equity. Additionally, equity is also more expensive than debt because debt
8		financing is tax deductible while stock dividend payments are not. Thus, if a utility is
9		allowed to use a capital structure for ratemaking purposes that has more equity than
10		debt, ratepayers also pay a higher tax burden.
11	Q.	**HOW DO INVESTORS VIEW THE CAPITAL STRUCTURE?**
12	A.	On the one hand, investors may view a high reliance on debt as risky (referred to as
13		financial or leverage risk) because debt has priority of payment over equity. Given that
14		creditors must be paid before investors, a company's relatively high debt burden can
15		lead to a higher required ROE relative to similar investment opportunities to
16		accommodate the higher risk. On the other hand, excessive equity, while reducing
17		financial risk for an enterprise's creditors and investors, increases the overall cost of
18		capital (and therefore the return on rate base), which must be recovered through rates
19		for customers (giving rise to investor concern over affordability of utility rates in the
20		context of macroeconomic inflation conditions).
21	Q.	**WHAT CAPITAL STRUCTURE IS NSP REQUESTING FOR USE IN THIS**
22		**CASE?**

1   A.   For the future test year ending December 31, 2025, NSP is proposing a capital structure

2   of 52.50% common equity and 47.50% debt (46.71% long-term debt and 0.79% short-

3   term debt).[27]

4   Q.   **WHAT IS NSP'S ALLOWED CAPITAL STRUCTURE THAT WAS SET IN**

5   **NSP'S LAST RATE CASE?**

6   A.   In NSP's last rate case, PSC Case No. 20-441, NSP reached an agreement with NDPSC

7   Advocacy Staff and intervenors that set NSP's capital structure at 52.5% equity and

8   47.50% debt (46.72% long-term debt and 0.78% short-term debt).[28]

9   Q.   **SHOULD THE COMMISSION ACCEPT NSP'S PROPOSED CAPITAL**

10   **STRUCTURE?**

11   A.   No. The Commission should reject NSP's proposed capital structure for a series of

12   reasons that I will discuss below. I recommend that the Commission require NSP to

13   manage its capital structure such that it maintains a required equity ratio of 50.00%.

14   Q.   **WHY SHOULD THE COMMISSION REJECT NSP'S PROPOSED CAPITAL**

15   **STRUCTURE?**

16   A.   NSP's proposed equity ratio of 52.50% falls outside the range of annual average equity

17   ratios approved by regulatory commissions for regulated electric utilities since 2020,

18   which are in the range of 49.67% to 50.95% (as shown in Figure 3 below).[29] For

19   example, the average equity ratio approved by regulatory commissions for regulated

20   electric utilities was 50.95% in Calendar Year CY 2023 and 49.84% in CY 2024.[30]

21   Furthermore, NSP's proposed equity ratio of 52.50% exceeds the proxy group average

22   of 43.50% and median of 44.00% that is expected for 2025.[31]

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[27] Nowak Direct, at 51.

[28] Order on Settlement in PSC Case No. PU-20-441 (August 18, 2021), at 3.

[29] S&P Global Market Intelligence, "RRA Regulatory Focus - Major Energy Rate Case Decisions in the US January – March 2025" (April 25, 2025), at 7.

[30] Id.

[31] Exhibit___(MLR-4) (Sample Characteristics).

FIGURE 3. AVERAGE AUTHORIZED EQUITY RATIO

Average authorized equity ratio (%)
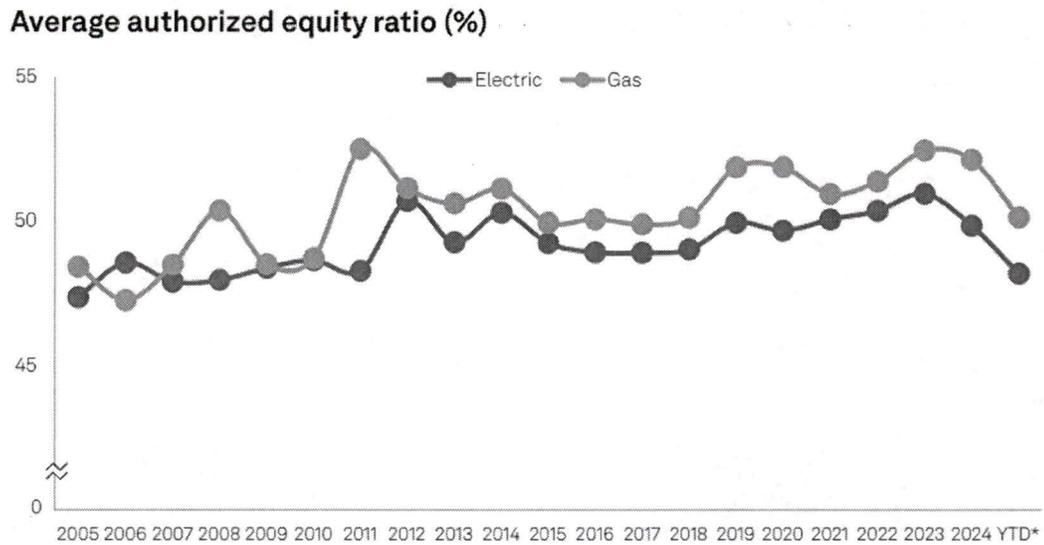
Data compiled April 22, 2025.
* Year to date through March 31, 2025.
Sources: Regulatory Research Associates, a group within S&P Global Commodity Insights; US Treasury Department.
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S&P Global Market Intelligence ("S&P MI"), "RRA Regulatory Focus - Major Energy Rate Case Decisions in the US – January – March 2025" (April 25, 2025), at 7.

1

1

2   **V. COST OF DEBT**

3   **Q.   WHAT DOES NSP PROPOSE AS THE COST OF LONG-TERM DEBT?**

4   A.   NSP's proposed cost of long-term debt of 4.51% is the embedded cost of debt at the

5   end of the test year.[32]

6   **Q.   DO YOU CONSIDER THE COMPANY'S REQUESTED OVERALL COST OF**

7   **LONG-TERM DEBT REASONABLE?**

8   A.   Yes. The Company's proposed cost of debt of 4.51% is reasonable when compared to

9   the prevailing yields on equivalent long-term debt for utilities of similar risk profiles at

10   the time of its issuances. For instance, current (2025) expected market rates for

11   Moody's Aaa-rate corporate bonds are 5.39% and Baa-rated corporate bonds are

12   6.13%, NSP most recent long-term debt issuances were issued at a debt cost within this

13   this range.[33] .

14 **Q.   DO YOU RECOMMEND THAT THE COMMISSION ACCEPT NSP'S**

15   **REQUESTED COST OF LONG-TERM DEBT?**

16 A.   Yes. Given the current financial circumstances, this rate is reasonable.

17 **Q.   WHAT DOES NSP PROPOSE AS THE COST OF SHORT-TERM DEBT?**

18 A.   NSP's proposed cost of short-term debt of 5.31% is the embedded cost of debt at the

19   end of the test year. The cost of short-term debt in the test year includes a forecasted

20   4.82% interest expense for commercial paper, plus a 0.49% monthly financing fee

21   associated with its participation in the credit facility, which provides the back-up

22   liquidity required for its commercial paper program.

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[32] Nowak Direct, at 53-54.

[33] Exhibit___(MLR-3) (Survey of Professional Forecasters) and Exhibit___(MLR-8) (NSP response to interrogatory NDPSC Data Request No. 16-6, Attachment A).

| 1 | Q. | **DO YOU CONSIDER THE COMPANY'S REQUESTED OVERALL COST OF** |

1   Q.   **DO YOU CONSIDER THE COMPANY'S REQUESTED OVERALL COST OF**

2   **SHORT-TERM DEBT REASONABLE?**

3   A.   Yes. The Company's proposed cost of short-term debt is reasonable when compared to

4   the prevailing yields on equivalent short-term debt for utilities of similar risk profiles

5   at the time of its issuances. For instance, NSP's forecasted interest expense for each

6   month within the test period is in line with Secured Overnight Financing Rates during

7   the same period.[34]

8   Q.   **DO YOU RECOMMEND THAT THE COMMISSION ACCEPT NSP'S**

9   **REQUESTED COST OF SHORT-TERM DEBT?**

10   A.   Yes. Given the current financial circumstances, this rate is reasonable.

11

12   **VI. RETURN ON EQUITY**

13   Q.   **HOW DO YOU DETERMINE THE ROE FOR A REGULATED UTILITY?**

14   A.   For ratemaking purposes, the cost of equity must be estimated because it cannot be

15   directly observed, and it varies with changing expectations of financial market

16   conditions. The cost of equity is the long-term annualized market return that investors

17   (in general) expect when they purchase equity shares of a particular company. It reflects

18   the risk factors of that investment as compared to alternative investment opportunities

19   and investors' current opportunity cost of investing in the securities of that company

20   (i.e., the investors' risk-adjusted alternatives).

21   Because NSP is a wholly owned subsidiary of Xcel Energy, Inc. ("Xcel Energy"

22   or "the Parent"), it is not possible to directly apply cost of equity models to the

23   Company. As an alternative, I calculate an estimate of NSP's cost of equity by deriving

---

[34] Exhibit___(MLR-9) (NSP response to NDPSC Data Request No. 16-5, Attachment A); and
https://www.newyorkfed.org/markets/reference-rates/sofr

1   average expected market returns for a proxy group of regulated electric utility

2   companies with comparable risk.

3 **Q.** **HOW DID MR. NOWAK CHOOSE THE COMPANIES FOR HIS UTILITY**

4   **PROXY GROUP?**

5 **A.** For his electric utility proxy group, Mr. Nowak begins with a group of 36 electric

6   utilities that are publicly traded and included in *Value Line*. He then applies a series of

7   criteria for his utility proxy group, which includes companies that consistently pay

8   quarterly cash dividends; maintain an investment grade long-term issuer rating (BBB-

9   or higher) from S&P; is covered by more than one equity analyst; has positive growth

10   rates; has company-owned generation assets in rate base; regulated net operating

11   income making up more than 80% of the consolidated company's net operating

12   income; regulated electric net operating income making up more than 80% of the

13   consolidated company's regulated net operating income; and is not involved in a

14   significant merger, or other transformative transaction.

15 **Q.** **IN YOUR ANALYSIS, DO YOU MAKE ANY CHANGES TO MR. NOWAK'S**

16   **UTILITY PROXY GROUP?**

17 **A.** Yes. Based on Mr. Nowak's response to NDPSC Data Request No. 10-14, I add

18   Dominion Energy Corporation and FirstEnergy Corporation to his proxy group because

19   sufficient time has passed after significant transactions that no longer affect their stock

20   value and resulting ROE estimates.[35] I also exclude TXNM Energy, Inc. because it

21   recently announced a proposed acquisition by Blackstone Infrastructure on May 19,

22   2025.[36] I use Mr. Nowak's other utility proxy group companies because they meet

23   criteria that appear reasonable.[37] I typically also require companies in my sample to

---

[35] Exhibit___(MLR-10) (NSP Response to NDPSC Data Request No. 10-14).
[36] https://www.txnmenergy.com/investors/acquisition.aspx
[37] Exhibit___(MLR-4) (Sample Characteristics).

1		have no ongoing involvement in a major merger or acquisition, have an investment-
2		grade credit rating (BBB- or higher), and have no cuts in dividend payments during the
3		past six months. The companies in Mr. Nowak's proxy group meet these criteria. I
4		typically exclude firms involved in any significant merger or acquisition activity
5		because the market values of such firms differ significantly from those companies not
6		involved in such activities. This difference would be reflected in a company's stock
7		price and dividend yields, which would distort the estimated cost of equity. I also
8		exclude companies that have recently cut dividend payments to shareholders because
9		such a management decision is usually perceived by investors as a sign of financial
10		distress.
11	Q.	**PLEASE DESCRIBE NSP AND ITS OPERATIONS.**
12	A.	NSP is a regulated electric utility serving approximately 1.5 million retail electric
13		customers and 600,000 natural gas customers in North Dakota, Minnesota, and South
14		Dakota.[38] Its operations include electricity generation, transmission, and distribution
15		and natural gas distribution.
16	Q.	**PLEASE DISCUSS THE DIFFERENT TYPES OF RISK THAT A**
17		**REGULATED MONOPOLY, SUCH AS AN ELECTRIC UTILITY, MAY**
18		**FACE.**
19	A.	An investor's expected return on an investment is composed of the risk-free rate and
20		different types of risk, to include inflation risk, interest rate risk, business risk, financial
21		risk, and regulatory risk.
22		The risk-free rate is the level of return investors can achieve without assuming
23		any risk. In general, most investors agree that a Treasury bond is an asset perceived by
24		the market as having relatively less risk than other market instruments because the

---

[38] Nowak Direct, at 26.

1   federal government's access to tax proceeds to fulfill its debt obligations and strong

2   credit rating make Treasury securities practically default-free. However, Treasury

3   bonds are not absolutely risk-free because they incorporate a risk premium associated

4   with interest rate risk. This is the premium investors require to compensate them for

5   the foregone opportunity cost of an alternative, higher interest rate later.

6   From an investor's perspective, inflation risk, also called purchasing power

7   risk, is the chance that the cash flows from an investment will not be worth as much in

8   the future because of changes in purchasing power due to inflation.

9   Interest rate risk is the risk that arises for investors from the variability in returns

10   caused by fluctuating interest rates, which depends on how sensitive an asset's price is

11   to interest rate changes in the market. For bonds, for example, their price sensitivity to

12   interest rates depends on the bond's time to maturity and the coupon rate of the bond.

13   Business risk, as perceived by investors, includes all the operating factors that

14   increase the probability that expected future cash flows accruing to investors may not

15   be realized. Business risk would include such factors as sales volatility and operating

16   leverage. A utility's business risk is a function of factors such as customer base

17   diversity, necessary capital expenditures, the regional and national economy, and the

18   regulatory environment in which the utility operates.

19   Financial risk relates to the capital structure of a company, including its fixed

20   contractual obligations and ability to pay interest on its debt and refinance that debt

21   when it is due. Credit-rating agencies assess the financial health of a company through

22   the use of key financial ratios that measure the extent to which a company can pay its

23   debt, including principal and interest. Corporate rating designations that are commonly

24   used are shown later in Table 2 of my testimony, which identifies rating categories used

25   by S&P, Fitch, and Moody's for investment-grade issuances.

1   One of the key financial ratios used by credit-rating agencies is the debt ratio.

2   The higher the portion of the capital structure that is comprised of debt or leverage, the

3   higher the risk of default on those debt obligations.

4   Regulatory risk is based on the investor's perceived understanding of the

5   current regulatory environment along with possible changes to that regulatory

6   environment. How regulators treat regulatory lag is one example of regulatory risk. To

7   the extent that companies face a time lag between incurring expenses and cost recovery,

8   such risk is best measured by choosing a proxy group of companies that face similar

9   regulatory oversight and earn the majority of their revenues from regulated operations.

10

11   **A.   INFLATION RISK**

12   **Q.   IN YOUR VIEW, DOES NSP FACE GREATER INFLATION RISK THAN**

13   **OTHER REGULATED UTILITIES IN THE PROXY GROUP?**

14   A.   No. The risks associated with current inflation trends, which have decreased from a

15   CPI of 8.0% in 2022 to 2.4% in Q1 2025,[39] are shared by all regulated utilities and, as

16   a result, are reflected in the utility proxy group's calculated costs of equity.

17

18   **B.   INTEREST RATE RISK**

19   **Q.   IN YOUR VIEW, DOES NSP FACE GREATER INTEREST RATE RISK**

20   **THAN OTHER REGULATED UTILITIES IN THE PROXY GROUP?**

21   A.   No. Since changes in interest rates affect borrowing costs, the effect of such risk

22   depends on the company's credit rating and portion of debt to total financial capital

23   compared to the proxy group. As I discuss in greater detail in the financial risk section

24   below, NSP's current long-term issuer credit ratings include a Standard & Poor's

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[39] Exhibit___(MLR-1).

1		("S&P") credit rating of A- with a Negative outlook; Moody's Investors Service
2		("Moody's") rating of A2 with a Stable outlook; and a Fitch Ratings ("Fitch") rating
3		of A- with a Stable outlook.[40] These credit ratings are higher than the proxy group
4		where a majority have a Moody's credit rating of Baa2 or Baa1 and an S&P rating of
5		BBB+.[41] Thus, NSP faces lower debt costs than the proxy group, all else equal.
6		

<div align="center">

C. BUSINESS RISK

</div>

8	Q.	**IN YOUR VIEW, DOES NSP FACE GREATER BUSINESS RISK THAN**
9		**OTHER REGULATED UTILITIES IN THE PROXY GROUP?**
10	A.	No. The fundamental comparison here is to the proxy group. Every utility is different,
11		but I do not believe that NSP has greater business risk than its peers in the proxy group.
12		

<div align="center">

D. FINANCIAL RISK

</div>

14	Q.	**IN YOUR VIEW, DOES NSP FACE GREATER FINANCIAL RISK THAN**
15		**OTHER REGULATED UTILITIES IN THE PROXY GROUP?**
16	A.	NSP faces lower financial risk than the proxy group because the Company has a higher
17		credit rating than the proxy group and has lower leverage risk relative to the proxy
18		group. Specifically, NSP has a long-term issuer credit rating of A- (S&P), A2
19		(Moody's); and A- (Fitch). By way of comparison, the utility proxy group has an
20		average S&P rating of BBB+ and a Moody's rating of Baa2, which is slightly lower
21		than NSP's credit ratings, as shown in Table 2 below. Note that the proxy group average
22		ratings are highlighted.
23		

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[40] Nowak Direct, at 27.
[41] Exhibit___(MLR-4).

1

Table 2. Rating Categories	
(Investment Grade)	
S&P and Fitch	Moody's
AAA	Aaa
AA+	Aa1
AA	Aa2
AA-	Aa3
A+	A1
A	A2
A-	A3
BBB+	Baa1
BBB	Baa2
BBB-	Baa3

2   **Q.**   **DOES THE CAPITAL STRUCTURE OF NSP INDICATE THAT IT IS**

3   **EXPOSED TO LESS FINANCIAL RISK THAN OTHER MEMBERS OF THE**

4   **PROXY GROUP?**

5   A.   NSP's current allowed capital structure of 47.5% debt (46.71% long-term debt and

6   0.79% short-term debt) is lower than the utility proxy group's debt-to-total-capital ratio

7   average of 56.41% and median of 56.00%, meaning that NSP faces lower financial or

8   leverage risk than the proxy group.[42]

9

10   **E.**   **REGULATORY RISK**

11   **Q.**   **IN YOUR VIEW, DOES NSP FACE GREATER REGULATORY RISK THAN**

12   **OTHER REGULATED UTILITIES IN THE PROXY GROUP?**

---

[42] Exhibit___(MLR-4) (Sample Characteristics).

1   A.   No. The uncertainties discussed by NSP Witness Nowak are felt across the vertically

2   integrated electric utility sector and thus are reflected in the proxy group and resulting

3   ROE estimates. S&P Market Intelligence lists the ranking of North Dakota as

4   "Average/1."[43]

5   Q.   **DOES NSP HAVE ANY RATE MECHANISMS THAT CAN IMPROVE COST**

6   **RECOVERY IN BETWEEN RATE CASES?**

7   A.   Yes. NSP has a series of rate mechanisms or adjustment clauses that allow it to recover

8   associated costs in between cases, thereby reducing recovery lag and regulatory risk.

9   Such mechanisms also reduce business risk because they provide more predictable

10   earnings and consistent cash flow than otherwise. These rate mechanisms include the

11   Renewable Energy Rider ("RER"), Transmission Cost Rider ("TCR"), and Fuel Cost

12   Rider ("FCR").[44]

13   Q.   **DO THESE RATE MECHANISMS REDUCE NSP'S REGULATORY RISK?**

14   A.   Yes. Because the recovery in between rate cases is guaranteed for qualifying prudently

15   incurred expenses, these mechanisms counterbalance other factors that may increase

16   NSP's regulatory risk relative to the other utilities in the proxy group.

17   Q.   **HOW DO INVESTORS AND CREDIT RATING AGENCIES VIEW THESE**

18   **RATE MECHANISMS?**

19   A.   Investors and credit rating agencies view these rate mechanisms favorably because they

20   reduce regulatory lag and permit utilities to recover variable costs in between rate cases.

21   Credit rating agencies, such as S&P, consider these rate mechanisms as constructive,

22   but also looks at the frequency with which the adjustments occur and whether there is

23   a true-up mechanism.[45] The rate adjustment mechanisms mentioned above all allow

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[43] S&P Global Market Intelligence, "RRA State Regulatory Evaluations – Energy" (March 11, 2025), at 4, 8-9.
[44] Exhibit__(MLR-11) (NSP Response to NDPSC Data Request No. 10-7).
[45] S&P Global Market Intelligence, "RRA State Regulatory Evaluations – Energy" (January 2025), at 11.

1		frequent recovery of eligible costs in between rate cases. For instance, the RER and the
2		TCR are adjusted annually, while the FCR is adjusted monthly.
3	**Q.**	**HOW DOES MR. NOWAK CHARACTERIZE NSP REGULATORY RISK**
4		**AND RESULTING BUSINESS RISK?**
5	A.	In his direct testimony, Witness Nowak assesses NSP's business risk as broadly
6		comparable to that of the proxy group used in his return on equity (ROE) analysis,
7		while acknowledging certain distinctions that he believes could elevate NSP's risk
8		profile. He identifies regulatory framework characteristics as a central determinant of
9		business risk, noting that credit rating agencies like Moody's and S&P assign a
10		combined 50% weight to regulatory factors when evaluating utility creditworthiness.[46]
11		Within this framework, Nowak highlights NSP's lack of revenue decoupling—an
12		earnings-stabilizing mechanism used by 52% of proxy group companies—as a key
13		differentiator. This absence exposes NSP to volumetric risk from weather or load
14		volatility, which many peers are insulated from.[47]
15		Nowak also discusses the limitations of NSP's cost recovery tools. While NSP
16		utilizes riders such as the Renewable Energy Rider and Transmission Cost Recovery
17		Rider, he notes that these mechanisms are not as broad as infrastructure replacement
18		mechanisms used by 82% of proxy group utilities to mitigate regulatory lag.[48]
19		Additionally, he observes that NSP calculates rate base on an average, rather than year-
20		end, basis—another feature that may understate revenue requirements compared to
21		jurisdictions that use year-end rate base.[49] Despite these factors, Nowak concludes that
22		NSP's overall business risk is "comparable, but not identical" to the proxy group, and
23		uses this judgment to support an ROE recommendation of 10.30%—below the

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[46] Nowak Direct, at 45-46.
[47] Id., at 46-47.
[48] Id., at 47.
[49] Id., at 46; 10-18.

1   midpoint of his model estimates but above the national average—on the basis that it

2   reflects a conservative approach that accounts for NSP's modestly elevated risks.[50]

3 **Q.   DO YOU AGREE THAT NSP'S BUSINESS RISK JUSTIFIES AN ROE OF**

4   **10.30%?**

5 A.   No. NSP's actual business risk is not materially greater than that of its proxy group,

6   and in several respects it may be lower. For example, NSP operates within a vertically

7   integrated, rate-regulated environment with stable demand and well-established

8   regulatory processes in North Dakota. While NSP emphasizes the absence of revenue

9   decoupling, this is common among vertically integrated utilities in low-volatility

10   regions. Moreover, NSP has operated for years without decoupling and remains

11   financially healthy, calling into question whether such mechanisms are necessary to

12   maintain its credit profile.

13 **Q.   NSP CLAIMS THAT THE LACK OF DECOUPLING INCREASES ITS RISK.**

14   **IS THAT PERSUASIVE?**

15 A.   Not particularly. NSP's exposure to volumetric risk is modest, especially given the

16   stability of its residential and commercial load. While some proxy group utilities have

17   revenue decoupling, many do not, and yet earn similar or lower ROEs than NSP is

18   requesting. As NSP's own testimony shows, only 52% of its proxy group benefits from

19   revenue decoupling—meaning a significant portion of peers face similar revenue

20   variability without such a high ROE.[51] Furthermore, NSP offers no quantitative

21   evidence that the absence of decoupling has harmed its earnings, access to capital, or

22   credit ratings.

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[50] Id., at 4; 17–27.
[51] Id., at 46-47.

1	Q.	HOW WOULD YOU CHARACTERIZE NSP'S USE OF COMPARATIVE
2		REGULATORY FRAMEWORKS?
3	A.	NSP overstates the risk implications of its regulatory framework. For example, it cites
4		the lack of infrastructure cost recovery mechanisms (such as trackers or riders) as a
5		risk, but it does use riders for renewable and transmission cost recovery. These riders
6		already mitigate substantial capital cost exposure. NSP presents a "check-the-box"
7		comparison of regulatory tools without addressing the magnitude or materiality of the
8		costs those tools address. This lacks economic rigor. A more thorough analysis would
9		estimate the impact of these tools on earnings variability or cash flow risk—something
10		NSP has not done.
11		
12		**VII. ROE METHODOLOGIES**
13	Q.	WHAT METHODOLOGIES DO YOU USE TO DERIVE YOUR COST OF
14		EQUITY RECOMMENDATION?
15	A.	I use the Constant-Growth DCF model to form the basis of my recommendation of a
16		9.41% ROE, which is the midpoint of the range of my DCF results for NSP. My
17		recommendation is further supported by the average of the results of my DCF and
18		CAPM analyses of 9.53%, which is within the range of my DCF results, demonstrating
19		the reasonableness of my DCF analysis.
20	Q.	WHAT IS THE PREDOMINANT ROE MODEL UTILIZED BY
21		REGULATORY BODIES IN THE UNITED STATES?
22	A.	For decades, the FERC and public utility commissions across the United States have
23		relied primarily on the DCF model to develop a range of returns earned on investments
24		in companies with corresponding risks for purposes of determining the ROE for

1	regulated entities.[52] Although I use variants of the Constant-Growth DCF model and
2	the CAPM, I rely on my Constant-Growth DCF to form the basis of my
3	recommendation of a 9.41% ROE for NSP.
4	
5	**A. CONSTANT-GROWTH DISCOUNTED CASH FLOW MODEL**
6	**Q. PLEASE DESCRIBE THE CONSTANT-GROWTH DCF MODEL.**
7	A. The Constant-Growth DCF model is based on the dividend discount model first
8	proposed by J.B. Williams in 1938.[53] The model is based on the premise that since cash
9	dividends are the only income from a share of stock held to infinity, the value of that
10	stock will be the present value of its stream of dividends, where the discount rate is the
11	market's required return. The model can be modified to account for the (more common)
12	situation whereby shares of stock are bought and sold, producing capital gains income
13	in addition to dividend income. To simplify the mathematics of the model, expected
14	future dividends are represented by applying a constant-growth rate to the current
15	observable dividend. Mathematically, the present value of an asset (common stock) is
16	expressed as:

$$P_0 = \frac{D_1}{(K-g)},$$

Where:

D_1 is the dividend payment in one year from today or the expected dividend;

K is the rate of return used by investors to discount future dividends; and

g is the growth rate of the dividend payment.

The estimated cost of equity, K, is specified as:

$$K = \frac{D_1}{P_0} + g,$$

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[52] S&P MI, "RRA Regulatory Focus, FERC and Electric ROEs – 2022 Update" (September 26, 2022), at 3.
[53] J.B. Williams, *The Theory of Investment Value* (1938), at 45-48.

1   Where:

2   D_1 is the expected dividend, represented by $D_1 = D_0 (1 + g)$

3   Where:

4   D_0 is the current annual dividend per share.

5   Therefore, the market ROE capital is the sum of the dividend yield (anticipated

6   dividend payments divided by the market price) and the expected growth in dividend

7   income.

8 Q. **PLEASE DESCRIBE HOW YOU DERIVE THE DIVIDEND YIELD**

9   **COMPONENT OF YOUR DCF ANALYSIS.**

10 A. The dividend yield in my DCF analysis is the annual dividend per share over the next

11   12 months, divided by the stock price average for different historical periods ending

12   May 31, 2025. I first calculate the dividend yields using the 30-calendar day average

13   of closing stock prices. I also use a 90-calendar day average of closing stock prices for

14   capturing longer market trends.

15   In general, the most recent price of a security can be used to calculate the

16   dividend yield because it represents current valuations in equity markets, calculating

17   an average over time to mitigate any irregularities as necessary. However, using the

18   average over a range of dates (e.g., 30 and 90 days) helps reduce the bias that might

19   occur from day trading-driven irregularities or short-term volatility. The average 30-

20   calendar day stock price for the proxy group is $73.21 per share, which is less than the

21   90-calendar day average stock price of $73.53 per share.[54]

22   I then estimate the expected dividend yield by applying the growth rate

23   component of my Constant-Growth DCF analysis. I use three variants for calculating

24   the growth rate component which I will discuss later in my testimony. These methods

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[54] Exhibit___(MLR-5a) through Exhibit___(MLR-6f).

1	produce a range of expected dividend yields from 3.81% to 3.85% using the proxy
2	group.[55]
3	**Q.**	**DO YOU MAKE ANY FURTHER ADJUSTMENTS TO YOUR EXPECTED**
4		**DIVIDEND YIELD?**
5	**A.**	Yes. I adjust the dividend yield by one-half the expected growth to reflect growth over
6		the coming year. Since I use annualized dividends, I make this adjustment to account
7		for the fact that companies tend to announce changes in dividends at different times
8		throughout the year.
9	**Q.**	**PLEASE DESCRIBE THE GROWTH RATE COMPONENT OF YOUR DCF**
10		**ANALYSIS.**
11	**A.**	My first set of growth rates is based on published earnings per share ("EPS") forecasts
12		because investors typically view earnings growth as an indicator of future dividend
13		growth. Investors also incorporate other sources of information when setting their
14		expectations of dividend growth, which I will discuss shortly.

I calculate the estimated earnings growth rates by averaging analysts' forecasts (which typically cover roughly the next five years) from Value Line, S&P MI, and Zacks. The S&P MI and Zacks websites report results incorporating forward-looking surveys of securities analysts' EPS projections. Value Line, in contrast, uses an historical base period average value for 2022-2024 and a forecast for 2028-2030 to calculate its growth rates that is not derived from a survey. The average expected earnings growth rate using the proxy group of companies is 6.65% [and median DCF results of 10.296and 10.31%].

I then refine my growth rate by averaging Value Line's dividends per share ("DPS") and book value per share ("BVPS") estimates with the previously estimated

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[55] Id.

1		earnings growth rate projections weighted equally. I include these three components of
2		growth in my analysis because investors are not only concerned with earnings growth
3		but also dividend and book value growth as an assurance that dividend growth will be
4		sustained. Moreover, dividend growth rates are more stable than expected earnings
5		growth. These calculations produce an average growth rate of 5.44% [and median DCF
6		results of 9.08% and 9.09%].
7	Q.	**WHAT IS MR. NOWAK'S OVERALL DCF-DERIVED ROE RESULT?**
8	A.	Mr. Nowak applies the DCF model using a constant growth model that is similar to my
9		methodology and that uses three sets of average stock prices; 30-day, 90-day, and 180-
10		day averages. Using the constant growth DCF model, he uses low, mean, and high
11		earnings growth rates to estimate a range of ROE results from 9.04% to 11.02% (30-
12		day stock price averages), 9.20% to 11.18% (90-day stock price averages), 9.43% to
13		11.42% (180-day stock price averages), before adjusting for flotation costs.[56] Mr.
14		Nowak offers such a wide range of estimates in his three DCF models because he
15		isolates the growth rates by calculating a set of results for his minimum growth rates,
16		mean or average growth rates, and maximum growth rates. As discuss later in my
17		testimony, this practice is misleading. In contrast, I average all my growth rates. Thus,
18		for simplicity, I will compare my EPS growth rate results to Mr. Nowak's mean or
19		average growth rates.
20	Q.	**WHY ARE YOUR DCF RESULTS USING EPS GROWTH RATES SIMILAR**
21		**TO SOME OF MR. NOWAK'S ROE RESULTS?**
22	A.	When comparing our DCF results, my DCF results using only EPS growth rates fall
23		within Mr. Nowak's DCF results. Specifically, my DCF results of 10.26% to 10.31%
24		calculated using only EPS growth rates fall within his median utility proxy group range

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[56] Nowak Direct, at 34, Table 3.

1   of 10.13% to 10.54%. The notable difference between his mean results and my results

2   is due to the different time periods used for stock price averages, which reflect varying

3   market trends. Specifically, the ending period of my stock price averages for both 30-

4   calendar day and 90-calendar day averages is May 31, 2025, while the ending date for

5   his 30-, 90-, and 180-trading days ended October 31, 2024. By way of comparison, his

6   30-day stock price average is $76.19, while my average 30-day stock price is $73.21.

7   Mr. Nowak's 90-trading day stock price average is $72.88, while my 90-calendar stock

8   price average is $73.53. These results, shown in Table 3 below, indicate that, on

9   average, stock prices for the proxy group decreased over the past month, compared to

10   Mr. Nowak's 30-day stock price average.

11

TABLE 3. STOCK PRICE COMPARISON

	30-Day Stock Price	90-Day Stock Price	Median DCF Result w/ only EPS Growth and 30-Day Stock Price)	Median DCF Result w/ only EPS Growth and 90-Day Stock Price)
Period Ended 10/31/24 (Nowak)	$76.19	$72.88	10.08%	10.33%
Period Ended 5/31/25 (Reno)	$73.21	$73.53	10.26%	10.31%

12   **Q.   WHY ARE MR. NOWAK'S DCF GROWTH RATES PROBLEMATIC?**

13   A.   Although his mean DCF results using the utility proxy group are similar to my results,

14   Mr. Nowak's growth rates are problematic because he only uses the EPS growth rates.

15   Although earnings growth is an important indicator of dividend growth, investors also

16   incorporate other financial data when estimating their required returns, such as

17   dividend growth and book value growth. Moreover, dividend growth rates are more

18   stable than expected earnings growth because dividends are determined by the

1 company's dividend payout policy. Later in this testimony, I will show that

2 incorporating other growth rates yields even lower ROE estimates.

3   Mr. Nowak's growth rates are also problematic because he isolates the growth

4 rates by calculating a set of results for his minimum growth rates, mean or average

5 growth rates, and maximum growth rates. This practice is misleading because he

6 appears to only use his DCF results that are based on his highest growth rates when

7 selecting his recommended ROE of 10.30%.

8 **Q.** **WHAT EFFECT DO MR. NOWAK'S GROWTH RATES HAVE ON HIS DCF**

9 **RESULTS?**

10 A. If Mr. Nowak were to incorporate more than just earnings growth, as I have done with

11 respect to dividend growth and book value growth, his DCF estimates would be lower.

12

13 **B.**   **SUSTAINABLE-GROWTH DISCOUNTED CASH FLOW MODEL**

14 **Q.** **DO YOU EMPLOY OTHER METHODS TO DERIVE GROWTH RATES IN**

15 **YOUR DCF MODEL?**

16 A. Yes. I also use the sustainable growth method to estimate the rate of dividend growth.

17 The standard DCF model assumes only one source of equity financing, namely the

18 retention of earnings. Growth in earnings and dividends, however, can also be achieved

19 by the sale of new common equity.[57] The basic Constant-Growth DCF model of:

20

21 $$K = \frac{D_1}{P} + g$$

22 can be rewritten to assume that external sources of financing influence investor

23 expectations of dividend growth, and is represented as the following:

---

[57] This expanded version of the DCF model allows for the value of stocks to vary from book values. If the stock prices equal book value, then the equity held by new shareholders is equal to the funds they invest and the existing shareholders' equity is not changed. If, however, stock prices are greater than book value, a portion of the funds accrues to the existing shareholders, thereby increasing their expectations of dividend growth in the future. David Parcell, *The Cost of Capital – A Practitioner's Guide* (2010), at 144-145.

1
$$K = \frac{D_1}{P} + br + sv$$

2   Therefore:

3          $G = br + sv,$

4   Where:

5   G is the retention growth rate;

6   b is the portion of retained earnings or 1 minus payout ratio;

7   r is the earned rate of return;

8   s represents the funds raised from the sale of stock as a fraction of existing
9   common equity; and

10   v is the fraction of funds raised from the sale of stock that accrues to current
11   shareholders.

12   I use *Value Line* expectations regarding retention ratios and ROEs for five years

13   into the future to derive estimates for b and r, which in turn are used to calculate the

14   expected internal growth component, br. To incorporate external financing growth, sv,

15   I use *Value Line* data to derive the market-to-book ratio (which is an actual, observed

16   figure) and expected growth in the number of outstanding shares. The average

17   sustainable growth rate for my proxy group is 5.08% and a resulting range of median

18   ROE estimates of 8.50% to 8.54%.[58]

19 Q. **DO YOU APPLY A REASONABLENESS SCREEN TO YOUR INDIVIDUAL**

20   **ROE RESULTS USING THE DCF METHOD?**

21 A. Yes. After adding the growth-rate estimates and the dividend-yield estimates for each

22   company in my proxy group to obtain the individual ROE estimates, I examined

23   individual company ROE results for reasonableness to determine whether some results

24   are extreme outliers. Thus, in lieu of relying on the average of my proxy group results

25   for each model, I use the median. The median is the middle value of a set of data and

26   is not skewed by outliers.

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[58] Exhibit___(MLR-6c) and Exhibit___(MLR-6f).

1   **Q.**   **PLEASE SUMMARIZE YOUR DCF MODEL RESULTS.**

2   **A.**   As shown in Table 4 below, I employ three different methods for deriving the growth

3   rate in the DCF model, yielding three sets of estimates of the ROE for my proxy group.

4   First, I use the Constant-Growth DCF model using only EPS growth rates. When I

5   assume that investors are only concerned with earnings growth when valuing a

6   company's stock (i.e., only using EPS growth in the DCF model), I derive ROE

7   estimates of 10.26% (30-calendar day stock prices) and 10.31% (90-calendar day stock

8   prices).[59]

9   Second, I use the Constant-Growth DCF model using EPS, DPS, and BVPS

10   growth rates. Once I allow other sources of growth, such as DPS and BVPS growth

11   rates, to influence investors' expectations of the return on a particular equity, my

12   analyses yield lower results. For instance, incorporating DPS and BVPS growth rates

13   results in median ROE estimates of 9.09% (30-calendar day stock prices) and 9.08%

14   (90-calendar day stock prices).[60]

15   Third, I use the Sustainable-Growth DCF model. When I allow for both internal

16   and external funding sources to drive growth in investor income, for my sustainable

17   growth rate model, I derive median ROE results of 8.54% (30-calendar day stock

18   prices) and 8.50% (90-calendar day stock prices), after adjusting for reasonable growth

19   rates.[61] The overall range of these ROE estimates using my DCF is 8.50% to 10.31%,

20   with a midpoint of 9.41% as shown on Table 4.

21

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[59] Exhibit___(MLR-5a) and Exhibit___(MLR-5c).
[60] Exhibit___(MLR-5b) and Exhibit___(MLR-5d).
[61] Exhibit___(MLR-6c) and Exhibit___(MLR-6f).

TABLE 4. RENO DCF RESULTS
(AVERAGE RESULTS)

Estimated Return on Equity	ROE		
DCF Methodology	30-Day Stock Price	90-Day Stock Price	Midpoint
Constant-Growth DCF (EPS Growth)	10.26%	10.31%	
Constant-Growth DCF (DPS, EPS and BVPS)	9.09	9.08	
Sustainable-Growth DCF	8.54	8.50	
DCF Range (Min. & Max.)[1]	**8.50%**	**10.31%**	**9.41%**

[1] ROE range (minimum and maximum values) for the 30-day and 90-day DCF results.

1   **Q.**   **HOW DOES YOUR METHODOLOGY FOR CALCULATING THE DCF**

2   **GROWTH RATE DIFFER FROM THAT OF MR. NOWAK?**

3   **A.**   The major differences in our Constant-Growth DCF methodologies are that Mr. Nowak

4   only uses earnings growth rates in his DCF model to develop his ROE

5   recommendation. As discussed previously, if Mr. Nowak were to conduct his DCF

6   using other growth rates in addition to EPS growth, he would derive lower ROE

7   estimates. Applying Mr. Nowak's EPS-only growth rate approach yields ROE results

8   of 10.26% and 10.31% over the 30-day and 90-day periods, as shown above in Table

9   4. However, because the DCF estimate is derived from the concept that cash dividends

10   are the only income from a share of stock, in principle, the growth component should

11   only include dividends. Investors, however, are also concerned about whether

12   dividends are sustainable, and they are concerned over how earnings and book value

13   growth affect dividend growth sustainability. As a result, investors may not necessarily

14   use a single growth estimate when valuing a utility's stock. Therefore, I believe it

15   appropriate to include other estimates for the growth component in my analysis.

16

| 1 | | C. | **CAPITAL ASSET PRICING MODEL** |

2   **Q.**   **DO YOU USE ANY OTHER METHODOLOGIES TO ESTIMATE THE ROE**

3   **FOR NSP?**

4   **A.**   Yes. I also apply the CAPM to derive a total of three ROE estimates, which serves as

5   a check on the reasonableness of my DCF results. However, my recommended ROE

6   is not based on my CAPM results. My CAPM results range from 8.18% to 11.12% with

7   a midpoint of 9.65%.

8   **Q.**   **PLEASE DESCRIBE THE CAPM.**

9   **A.**   The CAPM is a version of the "risk premium" approach that is rooted in modern

10   portfolio theory. It recognizes that common equity capital is riskier than debt from an

11   investor's perspective because debt holders are typically paid before shareholders, and

12   as such, investors require higher returns on stocks than on bonds to be compensated for

13   the additional risk.[62] The cost of common equity is represented by the following

14   equation:

15
$$K_e = R_f + \beta_s * RP,$$

16   Where:

17   K_e is the cost of equity;

18   R_f is the yield on risk-free securities;

19   β_s or Beta coefficient ("Beta") is a company-specific measure that reflects the
20   movement in a company's stock price relative to movements in a composite
21   group of companies representing the stock market. Beta measures the
22   investment risk that cannot be eliminated by holding a diverse portfolio of
23   assets; and

24   RP is the equity risk premium ("ERP") demanded by shareholders to accept
25   equity relative to debt.

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[62] The CAPM is generally superior to the simple risk premium method because the CAPM recognizes the risk of a particular company or industry through the use of betas, whereas the simple risk premium method assumes the same risk premium for all companies exhibiting similar bond ratings.

1	Q.	**PLEASE DESCRIBE THE RISK-FREE RATE YOU USE IN YOUR CAPM**
2		**ANALYSIS.**
3	A.	The first term in the CAPM is the risk-free rate (R_f). I use the yield on the 30-year
4		T-bond observed over a recent 30-day period ending May 31, 2025, of 4.90%, based
5		on recent market information.[63] I also include in one of my CAPM analyses the Kroll
6		(formerly Duff & Phelps) Normalized Risk-Free Rate of 3.50%.[64]
7	Q.	**DOES YOUR RISK-FREE RATE DIFFER FROM THE RISK-FREE RATE**
8		**USED BY MR. NOWAK?**
9	A.	Yes. Mr. Nowak relies on three estimates of the risk-free rate: (1) the current 30-day
10		average yield on 30-year Treasury bonds (4.30%), (2) a projected 30-year Treasury
11		yield for Q1 2025 through Q1 2026 (4.20%), and (3) the projected 30-year U.S.
12		Treasury bond yield for 2026 through 2030 (4.30%).[65] His projected 30-year Treasury
13		rates are the average of a series of forecasted rates provided by *Blue Chip Financial*
14		*Forecasts* ("*Blue Chip*").[66] By comparison, I derive a risk-free rate of 4.90%, using the
15		30-day average yield on the 30-year T-bond, ended May 31, 2025. Both our actual risk-
16		free rate averages are higher than published forecasts for the expected risk-free rate of
17		3.50% published by Kroll.
18	Q.	**HOW DO YOU CALCULATE THE EQUITY RISK PREMIUM?**
19	A.	In each of my three CAPM analyses, I use different estimates of the ERP that range
20		from 5.50% to 7.31%. For the high end of this range, I use the Kroll estimate of the
21		historical arithmetic average of real market returns over the period 1926 to 2024, which

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[63] Federal Reserve, "Selected Interest Rates" (Daily), available at https://www.federalreserve.gov/releases/h15/.

[64] Kroll, "Kroll Cost of Capital Inputs Updated to Reflect Heighted Uncertainty in Global Economy" (April 15, 2025).

[65] Nowak Direct, at 36-37.

[66] Id., at 37.

1   is the total return on common stocks (S&P 500) including capital appreciation, less the

2   income returns on T-bond investments.[67]

3   Kroll also provides an updated Ibbotson & Chen supply-side model, which

4   found that the market risk premium based on the S&P 500 was influenced by an

5   abnormal experience of price-to-earnings ("P/E") ratios relative to earnings and

6   dividend growth over the last 30 years. Thus, Kroll adjusted this market risk premium

7   and published a long-horizon, supply-side ERP of 6.26%.[68]

8   Kroll also recommends a forward-looking ERP that was derived in conjunction

9   with a normalized risk-free rate. Thus, my final CAPM analysis uses the Kroll

10   Recommended U.S. ERP of 5.50% and Normalized Risk-Free Rate of 3.50%.[69]

11   Therefore, the estimated ERP used across my three CAPM methods ranges from 5.50%

12   to 7.31%.

13   **Q.   DO YOU CALCULATE YOUR ERP IN THE SAME WAY AS MR. NOWAK?**

14   A.   No. While I rely on historical market return data from Kroll that are in line with the

15   current expectations of market returns, Mr. Nowak developed an estimate of the

16   expected market return using the market capitalization-weighted DCF model using

17   companies listed in the S&P 500 Index. Applying this methodology, Mr. Nowak

18   estimates an expected market return of 15.07% and then limits the applicable

19   companies in the S&P 500 to companies with growth rates that are between 0% and

20   20%, for an expected market return of 11.41%.[70]

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[67] Exhibit___(MLR-7a) and Exhibit___(MLR-7b).
[68] Exhibit___(MLR-7c) and Exhibit___(MLR-7d).
[69] Exhibit___(MLR-7e) and Exhibit___(MLR-7f); Kroll, "Kroll Cost of Capital Inputs Updated to Reflect Heighted Uncertainty in Global Economy" (April 15, 2025).
[70] Nowak Direct, at 37-38.

| 1 | Q. | **WHY ARE YOU CONCERNED ABOUT MR. NOWAK'S FORWARD-** |

1 Q. **WHY ARE YOU CONCERNED ABOUT MR. NOWAK'S FORWARD-**

2 **LOOKING DCF APPROACH TO ESTIMATING THE MARKET RETURN?**

3 A. Although the S&P 500 is a popular index used by the investment community to

4 estimate overall market returns, relying on October 31, 2024, expected returns

5 overestimates investors' expected returns looking forward. Moreover, Mr. Nowak

6 estimates these expected returns using the DCF with only EPS growth rates. As I

7 showed in the previous section of my testimony, using only EPS growth rates produces

8 higher return estimates than using other types of growth rates, such as DPS, BVPS, and

9 sustainable growth rates. Thus, Mr. Nowak's estimated market returns are based on

10 extremely high estimates of total market returns that far exceed investors' current

11 expectations of equity returns and only serve to inflate his average equity risk premium

12 and resulting ROE estimates.

13 Q. **HOW DO YOU ACCOUNT FOR THE VARIABILITY IN EQUITY**

14 **MARKETS?**

15 A. To capture investors' expected equity market returns, I focus on longer trends in stock

16 market returns from 1928 to 2024. This period shows annual stock returns over multiple

17 business cycles, avoiding the influence of any given period.[71]

18 Q. **HOW DO YOU ADJUST THE EQUITY RISK PREMIUM TO ACCOUNT**

19 **FOR COMPANY-SPECIFIC RISK?**

20 A. I multiply company-specific betas by the ERPs to account for company-specific risk. I

21 rely on *Value Line* betas because *Value Line* is widely used by the utility regulatory

22 community and investment community in general. It is also known that *Value Line*

23 adjusts its betas to account for the long-term tendencies of stocks to converge to a beta

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[71] A business cycle typically includes an expansion and a recession that can vary in duration.

1   of one (1.0).[72] As a result, *Value Line* betas tend to have higher values than betas

2   provided by some other sources. The average *Value Line* beta for the proxy group is

3   0.85. A beta value of 0.85 means that the stock price movement is less than the

4   movement, in percentage terms, of the overall stock market. The price of an electric

5   utility stock is, therefore, less volatile and less risky than the overall market.

6 **Q.**   **WHAT ARE THE RESULTS OF YOUR CAPM ANALYSES?**

7 **A.**   As shown in Table 5 below, applying the same risk-free rates, market risk premium,

8   and betas from the proxy group, I estimate expected returns ranging from 8.18% to

9   11.12%.

TABLE 5. CAPM ESTIMATED ROE RESULTS

	ERP	Beta-Adjusted ERP	Risk-Free Rate	CAPM ROE	Max	Midpoint
CAPM (Hist. L-T ERP)	7.31	6.21	4.90	11.12%		
CAPM (Supply-Side ERP)	6.26	5.32	4.90	10.23%		
CAPM (Kroll Recommended ERP)	5.50	4.68	3.50	8.18%		
CAPM Range				8.18%	11.12%	9.65%

10 **Q.**   **WHY DO YOUR RESULTS DIFFER FROM MR. NOWAK'S RESULTS?**

11 **A.**   My results, shown in Table 5 above, are lower than Mr. Nowak's CAPM results, which

12   range from 11.38% to 12.83%. In contrast, the range of my CAPM result is 8.18% to

13   11.12% with a midpoint of 9.65%. As stated previously in my testimony, his preference

14   for inflated market returns and EPS growth rates and resulting high equity risk

15   premiums exaggerate his CAPM estimates.

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[72] Marshall Blume investigated the regression tendency of betas and reached the conclusion that betas have the tendency to approach a value of one (1) over time. That is, high-beta portfolios tend to decline over time toward one (1), while low-beta portfolios tend to increase to one (1). Marshall Blume, "Betas and Their Regression Tendencies," Journal of Finance (1975), at 785-796.

1	Q.	**DO YOU HAVE ANY OTHER CONCERNS REGARDING MR. NOWAK'S**
2		**ROE METHODOLOGIES?**
3	A.	Yes. In addition to Mr. Nowak's focus on earnings growth in his DCF, reliance on
4		inflated market equity returns and resulting estimated proxy group specific returns, as
5		discussed earlier in this testimony, he also wrongly applies his Bond Yield Plus Risk
6		Premium and Expected Earnings Analyses.
7	Q.	**HOW DOES MR. NOWAK APPLY HIS BOND YIELD PLUS RISK**
8		**PREMIUM APPROACH?**
9	A.	Mr. Nowak applies the Risk Premium approach that estimates the cost of equity as the
10		sum of the equity risk premium and the yield on a particular class of bonds. He first
11		estimates the equity risk premium using the difference of authorized ROEs and the
12		prevailing 30-year Treasury bond yield, using the authorized ROEs from 762 vertically
13		integrated electric utility rate proceedings between January 1, 1992, and October 31,
14		2024. To apply this relationship to current and expected bond yields, Mr. Nowak uses
15		three estimates of the 30-year Treasury yield, including the current 30-day average, a
16		near-term Blue Chip consensus forecast for Q1 2025 – Q1 2026, and a Blue Chip
17		consensus forecast for 2026–2030. He then applies a regression analysis to estimate the
18		relationship between these bond yields and the equity risk premium. Using linear
19		regression, he finds that the equity risk premium increases as interest rates fall. Mr.
20		Nowak uses average 30-year treasury bond yields of 4.30% (Current 30-day average),
21		4.19% (Projected Q1 2025-2026), and 4.30% (Projected 2026-2030), and risk
22		premiums of 6.16%, 6.20%, and 6.16%, to estimate ROEs of 10.46%. 10.41% and
23		10.46%.[73]

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[73] Nowak Direct, Table 5, at 41.

1	Q.	**WHAT IS PROBLEMATIC ABOUT MR. NOWAK'S BOND YIELD PLUS**
2		**RISK PREMIUM APPROACH?**

3   A.   Mr. Nowak's application of this model is problematic for a couple of reasons. First, his

4   approach assumes a simplistic inverse relationship without any regard to differences in

5   investment risk. Although interest rates are an important factor in assessing current and

6   expected market equity risk premiums, the risk premium is also determined by changes

7   in the market's perception of investment risk of debt and equity securities. This

8   relationship can also be influenced by interest rate volatility. Moreover, his analysis

9   focuses on nominal interest rates, thereby ignoring the effect of inflation on risk

10   premiums.

11   Second, Mr. Nowak's use of the authorized ROEs means that the risk premium

12   measures commission decisions not investor behavior. Equity and bond rates in general

13   reflect the financial decisions of investors considering company specific financial data,

14   such as dividend yields, expected growth rates, assessments of risk and the opportunity

15   cost of other investments. However, authorized ROEs reflect other factors considered

16   by commissions such as capital structure, credit ratings and other risk measures,

17   particularly if authorized returns were set through settlements and not fully litigated.

18	Q.	**WHAT OTHER METHOD DOES MR. NOWAK USE TO ESTIMATE AN**
19		**ROE FOR NSP?**

20   A.   Mr. Nowak also uses the Expected Earning Model to estimate an ROE for NSP.

21   According to Mr. Nowak, the Expected Earnings methodology is a comparable

22   earnings analysis that calculates the earnings that an investor expects to receive on the

23   book value of a stock.[74] He relies on the projected ROE for his proxy group companies

24   as reported by *Value Line* for the period 2027-2029. Mr. Nowak then adjusts those

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[74] Nowak Direct, at 41-42.

1   projected ROEs to account for the fact that the ROEs reported by *Value Line* are

2   calculated based on common shares outstanding at the end of the period, as opposed to

3   average shares outstanding over the entire period. His Expected Earnings analysis

4   (before considering the effect of flotation costs) results in a mean of 10.17% and a

5   median of 10.12%.

6 **Q.** **WHY ARE MR. NOWAK'S EXPECTED EARNINGS ROE ESTIMATES**

7   **PROBLEMATIC?**

8 **A.** Mr. Nowak merely reports the book value returns as reported by *Value Line* when the

9   ultimate goal should be to estimate investors' return expectations for investing in an

10   electric utility stock. He then applies an adjustment factor based on the compounded

11   growth of equity shares. His analysis lacks any other meaningful indicators of company

12   growth and stock valuations, thereby ignoring investors' acceptance of utility stock

13   valuations at these expected book value returns.

14

15   **VIII. CRITIQUE OF MR. NOWAK'S FLOTATION COST ADDER**

16 **Q.** **WHAT FLOTATION COST ADJUSTMENT DOES MR. NOWAK ADD TO**

17   **HIS ROE RESULTS?**

18 **A.** Mr. Nowak estimates the flotation cost for Xcel Energy to equal about 1.86% of gross

19   equity raised over a 75-year period. He then applies this percentage to the stock prices

20   used in his DCF analysis to estimate an increased average ROE incorporating flotation

21   costs. The difference between this flotation cost-adjusted ROE and his initial DCF

22   results yield a 7-basis point flotation cost. Although Mr. Nowak does not explicitly add

23   this 7 basis point adder to his ROE results, he states that he considers the effect of

24   flotation costs in his recommendation.

25 **Q.** **WHAT ARE FLOTATION COSTS?**

1	A.	Flotation costs are the costs associated with the sale of common stock issuances that
		include out-of-pocket expenditures for preparation, filing, underwriting, and other
		issuance costs.

1   A.   Flotation costs are the costs associated with the sale of common stock issuances that

2   include out-of-pocket expenditures for preparation, filing, underwriting, and other

3   issuance costs.

4   Q.   **WHY DOES MR. NOWAK BELIEVE THAT AN ADJUSTMENT TO HIS**

5   **ROE RECOMMENDATION TO ACCOUNT FOR FLOTATION COSTS IS**

6   **NECESSARY?**

7   A.   Mr. Nowak considers flotation costs when making his ROE recommendation because

8   he believes that there is no mechanism to recapture such costs in the ratemaking

9   paradigm since flotation costs are charged to capital accounts and are not expensed on

10   a utility's income statement.

11   Q.   **DO YOU AGREE THAT A FLOTATION COST ADJUSTMENT FOR NSP IS**

12   **NECESSARY?**

13   A.   No. This adder is not based on the recovery of NSP's prudent and verifiable actual

14   flotation costs. As shown in his Exhibit___(JCN-1), Schedule 9, Mr. Nowak estimates

15   a flotation cost using equity issuances made by Xcel Energy and are thus not based on

16   NSP's costs that are known and measurable.

17   **IX. ROR AND ROE RESULTS SUMMARY**

18   Q.   **PLEASE SUMMARIZE YOUR ROR RESULTS.**

19   A.   For NSP, I recommend an overall ROR of 6.97%, which is composed of (1) a capital

20   structure of 50.00% equity, 49.21% long-term debt, and 0.79% short-term debt; (2) a

21   cost of long-term debt of 4.51% and a cost of short-term debt of 5.31%; and (3) an ROE

22   of 9.41%.

23   Q.   **HOW DOES YOUR PROPOSED ROR OF 6.97% COMPARE TO RECENT**

24   **AND HISTORICAL ALLOWED ROR VALUES APPROVED BY**

25   **REGULATORY COMMISSIONS ACROSS THE COUNTRY?**

1   A.   According to data published by S&P MI, as of May 27, 2025, the average allowed ROR

2   for vertically integrated electric utilities in the U.S. in 2025 was 6.85%, with both the

3   median and mode at 6.90 %.[75] For CY 2024, the average authorized ROR was 7.09%,

4   the median was 7.26%, and the mode was 6.81%.[76] Over the broader period from

5   January 1, 2020, through May 27, 2025, the average allowed ROR was 6.91%, with a

6   median of 7.07% and a mode of 7.18%.[77]

7   While I acknowledge that ROR values for different utilities are influenced by

8   factors such as approved ROE level, capital structure, and cost of debt, it is noteworthy

9   that NSP's proposed ROR of 7.56% is significantly above recent national trends and is

10   not supported by historical, or current approval trends.

11   Approving an ROR that significantly deviates from historical norms risks

12   setting a precedent that could lead to unjustified rate increases for consumers and

13   undermine regulatory consistency.

14   **Q.**   **PLEASE SUMMARIZE YOUR ROE RESULTS.**

15   A.   As shown in Table 6 below, my ROE recommendation of 9.41% is the midpoint of my

16   DCF results and falls within my DCF range of 8.50% to 10.31% and represents a fair

17   and reasonable ROE for NSP for the reasons I have previously discussed. The

18   minimum of my range is the minimum of my DCF results, and the maximum of my

19   range is the maximum result derived from my DCF results. Moreover, my

20   recommendation of 9.41% should be accepted as reasonable because it is only 11 basis

21   points lower than the average of my DCF and CAPM results.

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[75] Derived from data provided by S&P MI, reflecting only vertically integrated electric utilities for which S&P MI reported an ROR value.
[76] Id.
[77] Id.

TABLE 6. ROE ESTIMATES (%)			
DCF Methodology	**30-Day Stock Price**	**90-Day Stock Price**	**Midpoint**
Constant-Growth DCF (EPS Growth)	10.26	10.31	
Constant-Growth DCF (DPS, EPS and BVPS)	9.09	9.08	
Sustainable-Growth DCF	8.54	8.50	
DCF Range (Minimum & Maximum):	**8.50**	**10.31**	**9.41**
CAPM Methodology	**CAPM**	**Max**	**Midpoint**
Capital Asset Pricing Model (Lg. Stock ERP, 30-yr T-Bond Rate)	11.12		
Capital Asset Pricing Model (Supply-Side ERM, 30-yr T-Bond Rate)	10.23		
Capital Asset Pricing Model (Kroll Normalized Rate)	8.18		
CAPM Range (Minimum & Maximum):	**8.18**	**11.12**	**9.65**
Summary			
DCF-Based ROE Average			9.30
DCF & CAPM Average			9.53
	Min	**Max**	**Midpoint**
ROE Range	8.50	10.31	9.41
Recommended ROE (%)			**9.41**

1 **Q. WHY IS YOUR ROE RECOMMENDATION OF 9.41% BASED ON A**

2 **RANGE DERIVED FROM YOUR DCF METHODOLOGIES?**

3 A. I place more emphasis on my DCF-derived results because they are widely used by

4   both the finance community and public utility commissions across the country and

5   yield more reliable results. It is a forward-looking model that directly incorporates

6   investors' expectations of company dividend income through current market pricing

7   signals, particularly in the case of utility stocks where stock valuations are telling a

8   different story than the general market. The DCF also reflects recent developments in

9   management decisions regarding key financials reflected in expected dividend and

10 earnings growth.

1		The CAPM results, by contrast, are largely reliant on financial market outcomes
2		complicated by monetary policy and investors' expectations of inflation and economic
3		growth over the long run. Specifically, the estimated risk-free rate has a direct impact
4		on the estimated ROE and is largely influenced by the analyst's assumptions.
5		Moreover, the CAPM lacks a direct and immediate link between stock prices to the
6		results. Although the beta coefficient in the CAPM reflects changes in the ROE, such
7		information is delayed. However, I do rely on my CAPM results as a reasonableness
8		check.
9	Q.	**HOW DOES YOUR RECOMMENDATION COMPARE TO RECENTLY**
10		**ALLOWED EQUITY RETURNS?**
11	A.	My recommended ROE of 9.41% is in line with current allowed ROEs issued by
12		regulatory commissions across the country. S&P MI reports that the average allowed
13		equity return for vertically integrated electric utilities for 2024 was 9.84% and 9.83%
14		for Q1 2025.[78] My recommended ROE of 9.41% is only 43 basis-points lower than the
15		average allowed ROE for vertically integrated electric utilities in 2024.
16	Q.	**HOW DOES NSP'S ROE RECOMMENDATION COMPARE TO RECENTLY**
17		**ALLOWED EQUITY RETURNS?**
18	A.	NSP's recommended ROE of 10.30% is 46 basis-points higher than the average
19		allowed ROE for vertically integrated electric utilities for 2024. Thus, if the
20		Commission grants NSP's recommended ROE, it would be an outlier relative to the
21		average allowed ROE for vertically integrated electric utilities throughout the U.S.
22	Q.	**DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**
23	A.	Yes, it does. However, I reserve the right to supplement my testimony as new
24		information becomes available.

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[78] S&P MI, "RRA Regulatory Focus - Major Energy Rate Case Decisions in the US – January-March 2025" (April 25, 2025), at 3.

APPENDIX A: CURRICULUM VITAE AND QUALIFICATIONS
Maureen L. Reno

Maureen Reno is a seasoned expert with 24 years of experience in the field of public utility regulation. After she completed her Ph.D. studies in Economics at the University of New Hampshire, Ms. Reno launched her career in public utility regulation as a utility analyst and program manager at the New Hampshire Public Utilities Commission, where she worked for the next 10 years. In this capacity, she provided expert testimony on rate of return (to include return on equity) in electricity, natural gas, and water utility rate cases. Ms. Reno also led the development and implementation of New Hampshire's Renewable Portfolio Standard program, helping both owners of distributed generation and load serving entities meet compliance requirements and maneuver the dynamic wholesale energy and renewable energy certificate markets. In addition, she managed New Hampshire's participation in the Regional Greenhouse Gas Initiative. Finally, Ms. Reno served as an expert witness on financial issues regarding the regulation of electric, natural gas, and water utilities, to include cost of capital and return on shareholder equity.

Subsequently, Ms. Reno served as a Senior Energy Economist with the Union of Concerned Scientists. In this capacity, she developed clean energy financing policies and advocated for electricity sector solutions to global warming.

Since 2012, Ms. Reno has served as an independent consultant, working with other small businesses to advise government and industry clients on diverse utility-related matters. In addition, she has served as an expert witness on rate design and rate of return (to include return on equity) in numerous cases. Her testimony has been presented to public utility commissions across the United States, to include the Regulatory Commission of Alaska, Arizona Corporation Commission, California Public Utilities Commission, Delaware Public Service Commission, Georgia Public Service Commission, Kansas Corporation Commission, Missouri Public Service Commission, New Hampshire Public Utilities Commission, New Mexico Public Regulation Commission, North Carolina Utilities Commission, Oklahoma Corporation Commission, Pennsylvania Public Utility Commission, South Carolina Public Service Commission, and Public Utility Commission of Texas. Ms. Reno's testimony has been consistently accepted by public utility commissions.

Ms. Reno stays abreast of the latest developments in utility regulatory law and policy through her research and professional activities. Given the complexity of Federal and state regulations that affect her clients, Ms. Reno dedicates significant time and energy to reviewing regulatory developments enacted by the U.S. Department of Energy, the Federal Energy Regulatory Commission (FERC), and the U.S. Environmental Protection Agency. For instance, Ms. Reno recently evaluated Maryland's RPS in light of FERC rulings on PJM's Capacity Auction to assess the financial viability of renewable energy projects within Maryland.

EDUCATION

- Completed all course work and exam requirements towards the Doctorate of Philosophy in Economics – University of New Hampshire, Durham.
  Fields of Specialization: Industrial Organization and Environmental Economics
- Master of Arts in Economics – University of New Hampshire, Durham, 1998
- Bachelor of Arts in Economics – University of Maine, Orono, 1996

PROFESSIONAL EXPERIENCE

- Independent Consultant and Principal, Reno Energy Consulting Services, LLC (2016-Present)
- Rates and Market Policy Director, New Hampshire Office of the Consumer Advocate (2021-2022)
- Independent Consultant (2012-2016)
- Senior Energy Economist, Union of Concerned Scientists (2011-2012)
- Analyst, Program Manager, Utility Analyst, and Economist, New Hampshire Public Utilities Commission (2001-2011)
- Survey Manager, New Hampshire Small Business Development Center (1999-2001)
- Adjunct Instructor, University of New Hampshire (1999-2001)

PROFESSIONAL WORK

As an independent consultant (as a prime contractor with Reno Energy Consulting Services, LLC and subcontractor under Exeter Associates, TAHOEconomics, and Nordee Enterprise LLC), Ms. Reno:

- Reviewed, analyzed, and prepared oral and written testimony in electric, natural gas, and water utility rate cases on topics that include rate design (revenue decoupling mechanisms); rate of return (including return on equity, capital structure, and accounting adjustments), and mergers and acquisitions.

- Worked with solar power installer to assess return on investment and payback period for investments in energy storage that included analyzing customer load profiles, utility tariffs, tax credits, and potential revenues from wholesale markets and state programs.

- Prepared report that included assessment of electricity options and projected revenues and costs for the Army & Air Force Exchange Service's West Coast Distribution Center, which included analyzing Pacific Gas & Electric Company's tariffs and potential revenues from wholesale markets for investments in solar power and energy storage.

As the Rates and Market Policy Director at the New Hampshire Office of the Consumer Advocate, Ms. Reno:

- Reviewed and analyzed utility filings and prepared written recommendations in two natural gas utility proceedings pertaining to a revenue decoupling adjustment mechanism and a renewable natural gas contract.

- Reviewed and analyzed utility filings and provided oral testimony in an electric utility's electric vehicle make-ready program and proposed tariff rates.

- Reviewed, analyzed and prepared oral and written recommendations for the Consumer Advocate on utility requests for changes in energy service rate charges (electric default service and cost of gas) and other surcharges reflected in utility company tariffs.

As an independent consultant for Exeter Associates Inc., Ms. Reno:

- Preparing the financial analysis and ratepayer impacts of a long-term contract requirement under Maryland's RPS for the Power Plant Research Program (PPRP) on behalf of the Maryland Department of Natural Resources.

  Evaluated utility proposals for deployment, cost-benefit analysis, and cost recovery of Maryland's Statewide Electric Vehicle Portfolio on behalf of the Maryland Energy Administration through the PPRP in Case No. 9478 In the Matter of the Petition of the Electric Vehicle Work Group for Implementation of a Statewide Electric Vehicle Portfolio.

- Conducted research and drafted sections of regional energy market operations manuals for the US Department of Energy's Federal Energy Management Program. The reports focused on how federal facilities were pursuing renewable energy development under the different market constructs, such as by vertically integrated electric utilities, electric utilities with the PJM footprint, and electric utilities in California, and how those market constructs affected the prospects for future renewable energy development.

As an independent consultant for TAHOEconomics LLC, Ms. Reno:

- Provided written and oral testimony and legal briefs on behalf of the City of Clovis, New Mexico, in a water utility rate cases before the New Mexico Public Regulation Commission. Assessed EPCOR Water New Mexico Inc.'s weighted average cost of capital and estimated the rate of return on equity using discounted cash flow, risk premium, and capital asset pricing models.

As an independent consultant for Stephenson Strategic Communications, LLC, Ms. Reno:

- Provided consulting services to build support in New Hampshire for strong national climate and energy policies on behalf of a nationally recognized, non-profit environmental organization.

- Mobilized experts and leaders in New Hampshire to engage elected federal, state and local officials through targeted Senator visits, media interviews, public events, letters to the editor, and opinion and editorial articles.

- Communicated directly with targeted legislators and their staff to determine their positions on climate and clean air policies and address their concerns.

As an independent consultant for TrueLight Energy, LLC, Ms. Reno:

- Acted as director of regulatory affairs to expand upon current services to provide clients with guidance on how to navigate the dynamic deregulated electricity industry.

- Developed regulatory service product for clients, which includes ISO/utility tariff tracking and rate impact analysis, policy analysis, new market identification and participation in regulatory processes.

- Identified and originated new commercial opportunities in the U.S. to support principle product/service lines: retail supplier solutions; generation asset management; and sustainability management solutions for large energy users.

- Developed and implemented business development and business-to-business marketing strategies in coordination with senior management.

As a senior economist at the Union of Concerned Scientists, Ms. Reno:

- Promoted the development of clean energy technologies and policies in the electricity sector. Designed and evaluated energy policies at the state, regional, and national levels to maximize economic benefits and overcome market barriers to renewable energy.

- Evaluated and developed alternative financial policies to national and state renewable energy standards. Completed internal documents and research focusing on master limited partnerships and real estate investment trusts as possible sources of financing capital for renewable energy projects.

- Informed and enhanced coalition strategies by evaluating and developing appropriate responses to federal policy opportunities, including a low-carbon electricity standard, production tax credit, and other emerging opportunities.

- Evaluated the net benefits and opportunities for economic development in renewable energy manufacturing and the supply chain.

As an analyst and program manager at the New Hampshire Public Utilities Commission, Ms. Reno:

- Developed and managed New Hampshire's RPS Program.

- Developed internal protocols for managing New Hampshire's RPS program pursuant to PUC's RPS program rules (N.H. Code of Administrative Rules PUC 2500), including designing resource eligibility application forms.

- Verified electricity providers' compliance with New Hampshire's RPS program and processed applications for renewable energy source eligibility.

- Prepared and submitted annual RPS compliance reports, including program evaluation and policy analysis, to the State legislature on behalf of the PUC.

- Monitored and forecasted renewable energy certificate market trends in New England and New Hampshire to estimate available revenues supporting rebate programs.

- Maintained an RPS program website and renewable energy sources database.

- Participated in various regional working groups, including the RGGI Allowance and Offset Market Groups, and the GIS Regulators' Caucus to develop and maintain the NEPOOL GIS Operating Rules.

- Developed Greenhouse Gas Emissions Reduction Fund Cost Effectiveness Analysis model for request for proposal applicants.

As a utility analyst and economist at the New Hampshire Public Utilities Commission, Ms. Reno:

- Reviewed, analyzed and prepared oral and written recommendations in eight electric, natural gas and water utility rate cases in which she calculated each company's weighted average cost of capital and estimated the rate of return on equity using discounted cash flow, risk premium, and capital asset pricing models.

- Advised the PUC on utilities' debt financings, bond issuances, power plant retrofit, advanced/net metering, demand response, environmental disclosure, and incentives for in-state energy efficiency programs.

- Collaborated on behalf of the PUC with public and private entities to write New Hampshire's RPS law (HB 873), state participation in RGGI (HB 1434) and the PUC's RPS program rules (N.H. Code of Administrative Rules Puc 2500).

5

- Advised the Commissioners on the development of the RGGI carbon dioxide emission limits and the Allowance Auction Market.

- Prepared fiscal impact statements regarding proposed legislation and regulations in the State of New Hampshire using cost-benefit analysis.

As a Survey Manager for the New Hampshire Small Business Development Center, Ms. Reno:

- Designed and distributed a survey to collect data on the characteristics of New Hampshire manufacturers.

- Managed collection of survey data, designed a database for the data collected and oversaw data entry efforts.

- Analyzed the economic and behavioral factors that lead to the growth of New Hampshire manufacturing companies using multivariate regression, factor and cluster analysis of survey data.

As an Adjunct Instructor for the University of New Hampshire, Ms. Reno:

- Taught undergraduate courses in Principles of Macroeconomics and Microeconomics, including lectured on a daily basis, and developed lesson plans and teaching materials.
- Managed teaching assistant's work correcting and grading testing materials and writing assignments.

UTILITY LITIGATION

State	Client	Citation/Utility	Industry	Topics
Texas	U.S. Department of Defense (DoD)	57568/El Paso Electric Co.	Electric	Cost of Capital and Return on Equity
New Mexico	New Mexico Department of Justice (DOJ)	25-00027-UT/ Southwestern Public Service Company	Electric	Recovery of Solar Power Generation Assets in Renewable Portfolio Standard Rider
New Mexico	DOJ	24-00270-UT/ Southwestern Public Service Company	Electric	Recovery of Production and Investment Tax Credits through Fuel Adjustment Clause
Alaska	DoD	U-24-030/U-24-031/ Golden Heart Utilities, Inc. and College Utilities Corporation	Water, Waste Water	Cost of Capital and Return on Equity
Pennsylvania	Office of Consumer Advocate (PA OCA)	R-2024-3052359/Pike County Light & Power Co.	Electric	Cost of Capital and Return on Equity
Pennsylvania	PA OCA	R-2024-3052357/Pike County Light & Power Co.	Gas	Cost of Capital and Return on Equity
New Mexico	Bernalillo County (BC)	24-00089-UT/Public Service Co. of New Mexico	Electric	Cost of Capital and Return on Equity
South Carolina	DoD	2024-34-E/Dominion Energy South Carolina, Inc.	Electric	Cost of Capital and Return on Equity
New Mexico	BC	22-00058-UT/ Public Service Co. of New Mexico	Electric	Grid Modernization Cost-Benefit Analysis
Delaware	Public Service Commission Staff (DE PSC Staff)	23-0601/Artesian Water Company, Inc.	Water	Cost of Capital and Return on Equity
New Mexico	U.S. Department of Energy (DOE)	23-00255-UT/New Mexico Gas Company. Inc.	Natural Gas	Cost of Capital and Return on Equity

California	Small Business Utility Advocates	23-01-008/San Diego Gas & Electric Company	Electric	Rate Design & Cost of Service
Kansas	DoD	23-EKCE-775-RTS/Evergy Kansas Central, Inc. & Evergy Kansas Metro,	Electric	Cost of Capital and Return on Equity
Delaware	DE PSC Staff	22-0897/Delaware Power & Light	Electric	Cost of Capital and Return on Equity
Texas	DOE	54634/Southwestern Public Service Company	Electric	Cost of Capital, Return on Equity, and Rate Design Impacts on Risk
New Mexico	BC	22-00270-UT/ Public Service Co. of New Mexico	Electric	Cost of Capital, Return on Equity, and Rate Design Impacts on Risk
North Carolina	DoD	E-2, SUB 1300/ Duke Energy Progress, LLC	Electric	Cost of Capital, Return on Equity, and Rate Design Impacts on Risk
Georgia	DoD	44280/ Georgia Power Company	Electric	Cost of Capital, Return on Equity, and Rate Design Impacts on Risk
Texas	DoD	53601/ Oncor Electric Delivery Company	Electric	Cost of Capital and Return on Equity
New Hampshire	Office of the Consumer Advocate (NH OCA)	DE 21-078/ Eversource	Electric	Electric Vehicle Make-Ready and Demand Charge Alternative
Alaska	DoD	U-21-070/U-21-071/ Golden Heart Utilities, Inc. and College Utilities Corporation	Water, Wastewater	Cost of Capital and Return on Equity
New Hampshire	NH OCA	DG 21-104/ Northern Utilities, Inc.	Natural Gas	Rate Design: Revenue Decoupling Adjustment Mechanism and Impacts on Risk
New Hampshire	NH OCA	DG 21-036/ Liberty Utilities	Natural Gas	Cost-Effectiveness of a Renewable NG Supply Agreement
Texas	DoD	52195/ El Paso Electric Company	Electric	Cost of Capital and Return on Equity
New Mexico	BC	20-00222-UT/ Public Service Co. of New Mexico	Electric	Mergers & Acquisitions: Benefits and Risks

New Mexico	BC	20-00121-UT/ Public Service Co. of New Mexico	Electric	Rate Design: Decoupling Mechanism
New Mexico	Public Regulation Commission Staff	19-00170-UT/ Southwestern Public Service Company	Electric	Cost of Capital and Return on Equity
Georgia	DoD	42516/ Georgia Power Company	Electric	Cost of Capital, Return on Equity, and Rate Design Impacts on Risk
Arizona	DoD	E-01933A-19-0028/ Tucson Electric Power Company	Electric	Cost of Capital and Return on Equity
New Mexico	City of Clovis, NM	18-00124-UT/ EPCOR Water New Mexico Inc.	Water	Cost of Capital and Return on Equity
Oklahoma	DoD	PUD 201700151/ Public Service Co. of Oklahoma	Electric	Cost of Capital and Return on Equity
Oklahoma	DoD	PUD 201500208/ Public Service Co. of Oklahoma	Electric	Cost of Capital, Return on Equity, and Rate Design Impacts on Risk
Texas	DOE	43695/ Southwestern Public Service Company	Electric	Cost of Capital and Return on Equity
Missouri	DOE	ER-2014-0370/ Kansas City Power & Light Co.	Electric	Cost of Capital and Return on Equity
Texas	DOE	41791/ Entergy Texas, Inc.	Electric	Cost of Capital and Return on Equity
New Hampshire	Public Utilities Commission (NH PUC)	DE 05-178/ Unitil Energy Systems, Inc.	Electric	Cost of Capital and Return on Equity
New Hampshire	NH PUC	DE 04-177/ Public Service Co. of New Hampshire (generation assets)	Electric	Cost of Capital and Return on Equity
New Hampshire	NH PUC	DW 04-056/ Pennichuck Water Works, Inc.	Water	Cost of Capital and Return on Equity
New Hampshire	NH PUC	DE 03-200/ Public Service Co. of New Hampshire	Electric	Cost of Capital and Return on Equity
New Hampshire	NH PUC	DE 03-166/ Public Service Co. of New Hampshire	Electric	Financial Incentives Associated with a Power Plant Retrofit from Coal to Biomass

New Hampshire	NH PUC	DE 01-247/ Concord Electric Co. and Exeter & Hampton Electric Co.	Electric	Cost of Capital and Return on Equity
New Hampshire	NH PUC	DE 01-168/ Public Service Co. of New Hampshire	Electric	Refinancing of Long-term Debt, Short-term Debt Limit, and Utilization of Derivative Instruments
New Hampshire	NH PUC	DG 01-182/ Northern Utilities, Inc.	Natural Gas	Cost of Capital and Return on Equity
New Hampshire	NH PUC	DW 01-081/ Pennichuck Water Works, Inc.	Water	Cost of Capital and Return on Equity

UTILITY-RELATED MATTERS

State	Client	Description
New Mexico	Bernalillo County	Provided Comments regarding incorporating Cost-Benefit Analyses and related modifications to Grid Modernization Rule, Title 17, Chapter 9, in a new Part 587 in Docket No. 22-00089-UT.
New Jersey	Division of the Rate Counsel	Provided cost of capital and return on equity to client for settlement purposes in Jersey City Power & Light EnergizeNJ Case No. EO-23110793.
California	Small Business Utility Advocates	Provided Comments on utility draft annual reports concerning California's RPS Rulemaking Case Nos. 18-07-003 and 24-01-017.
New Hampshire & Massachusetts	Nordee Enterprise LLC	Worked with solar power installer to assess return on investment and payback period for investments in energy storage that included analyzing customer load profiles, utility tariffs, tax credits, and potential revenues from wholesale markets and state programs.
New Hampshire	Office of the Consumer Advocate (OCA)	Negotiated Settlement terms in DE 21-119 Eversource Energy's Proposed Tariff Amendment to Residential Time-of-Day Rate
New Hampshire	OCA	Negotiated Settlement terms in DE 20-170 Electric Distribution Utilities' Electric Vehicle Time of Use Rates
New Hampshire	OCA	Evaluated utility proposal and ratepayer impacts of Liberty Utilities cost of gas proposal in DG 21-130 (EnergyNorth Natural Gas) and DG 21-132 (Liberty-Keene Division)
New Hampshire	OCA	Evaluated Liberty Utilities' Firm Transportation Agreement with Tennessee Gas Pipeline Company LLC in DG 21-008
Maryland	Department of Natural Resources (DNR)	Prepared the financial analysis and ratepayer impacts of a long-term contract requirement under Maryland's RPS. The report titled "Final Report Concerning the Maryland Renewable Portfolio Standard as Required by Chapter 393 of the Acts of

		the Maryland General Assembly of 2017" was publicly released in December 2019.
Maryland	Energy Administration (EA)	Evaluated utility proposals for deployment, cost-benefit analysis, and cost recovery of Maryland's Statewide Electric Vehicle Portfolio in Case No. 9478 In the Matter of the Petition of the Electric Vehicle Work Group for Implementation of a Statewide Electric Vehicle Portfolio.
Federal	US Department of Energy (DOE)	Conducted research and drafted sections of regional energy market operations manuals for the US Department of Energy's Federal Energy Management Program. The reports focused on how federal facilities were pursuing renewable energy development under different market constructs, such as by vertically integrated electric utilities, electric utilities with the PJM footprint, and electric utilities in California.
New Hampshire	Derry Town Council	Oversaw town energy committee's involvement in various energy cost saving projects or initiatives, such as installing a large solar array on the town's landfill, updating streetlights with LED fixtures, building a new transfer station that meets LEED certification, installing an electric vehicle charging station downtown, and hosting/managing resident participation in two Solar Up campaigns.
New Hampshire	Derry Town Council	Advised town council on establishing the Derry Net Zero Task Force and town goal of becoming Net Zero by 2025.
Massachusetts	Union of Concerned Scientists (UCS)	Evaluated and developed alternative financial policies to national and state renewable energy standards. Completed internal documents and research focusing on master limited partnerships and real estate investment trusts as possible sources of financing capital for renewable energy projects.
Massachusetts	UCS	Manufacturing Supply Chain Analysis of Wind Power Systems

New Hampshire	Public Utilities Commission (PUC)	Developed internal protocols for managing New Hampshire's RPS program pursuant to NHPUC's RPS program rules (N.H. Code of Administrative Rules PUC 2500), including designing resource eligibility application forms.
New Hampshire	PUC	Verified electricity providers' compliance with New Hampshire's RPS program and processed applications for renewable energy source eligibility.
New Hampshire	PUC	Prepared and submitted annual RPS compliance reports to the State legislature on behalf of the NHPUC.
New Hampshire	PUC	Developed Greenhouse Gas Emissions Reduction Fund Cost Effectiveness Analysis model for grant proposals.
New Hampshire	PUC	Collaborated on behalf of the NHPUC with public and private entities to write New Hampshire's RPS law (HB 873), law concerning state participation in Regional Greenhouse Gas Initiative (RGGI) (HB 1434) and the NHPUC's RPS program rules (N.H. Code of Administrative Rules Puc 2500).
New Hampshire	PUC	Advised the Commissioners on the development of the RGGI carbon dioxide emission limits and the RGGI Allowance Auction Market.
New Hampshire	PUC	Assisted researchers at the University of New Hampshire in estimating the net benefits of New Hampshire's RPS and its participation in RGGI for the state legislature.

Exhibit MLR-1 - Historical Economic Trends (Percent Change from Previous Period)							
	2019	2020	2021	2022	2023	2024	Q1 2025
Real GDP	2.6	-2.2	6.1	2.5	2.9	2.8	-0.3
GDP Price Index	1.7	1.3	4.5	7.1	3.6	2.4	3.7
Consumer Price Index	1.8	1.2	4.7	8.0	4.1	2.9	2.4
Personal Consumption Expenditures	1.4	1.1	4.1	6.6	3.8	2.5	3.6
Core Personal Consumption Exp.	1.6	1.3	3.6	5.4	4.1	2.8	3.5
Unemployment Rate	3.7	8.1	5.3	3.6	3.6	4.0	4.2
Employment/Population Ratio	60.8	56.8	58.4	60.0	60.3	60.1	60
Labor Force Participation Rate	63.1	61.7	61.7	62.2	62.6	62.6	62.6

Source: Economic Indicators, Prepared for the Joint Economic Committee by the Council of Economic Advisors, April 2025, at 3, 11, and 24.

Preliminary data for 2025 Q1.

Core personal consumption expenditures shows expenditures minus food and energy.

Unemployment rate, employment/population ratio, and labor force participation rate show data for April 2025.

Exhibit MLR-2a - Interest Rates and Bond Yields (2019 to May 2025)							
	2019	2020	2021	2022	2023	2024	May-25
3-Month T-Bill	2.08	0.38	0.04	2.04	5.08	4.98	4.20
10-Year T-Bond	2.14	0.89	1.45	2.95	3.96	4.21	4.23
30-Year T-Bond	2.58	1.56	2.06	3.11	4.09	4.41	4.70
Moody's Aaa Bond	3.39	2.47	2.70	4.07	4.81	5.04	5.40
Moody's Baa Bond	4.37	3.60	3.40	5.08	5.87	5.76	6.15
Prime Interest Rate	5.28	3.54	3.25	4.86	8.20	8.31	7.50
Federal Funds Rate	2.16	0.37	0.08	1.69	5.03	5.14	4.33

Source: Economic Indicators, April 2025, Prepared for the Joint Economic Committee by the Council of Economic Advisors at 30.

Moody's Baa-rated Corporate Bond Rates Source: https://fred.stlouisfed.org

Annual data reflects averages and May data shows rate in effect at end of the week for May 3rd, 2025.

Figure 1. Interest Rates and Bond Yields 2019 to 2025 (May)

Source: Economic Indicators, April 2025 Prepared for the Joint Economic Committee by the Council of Economic Advisors and https://fred.stlouisfed.org
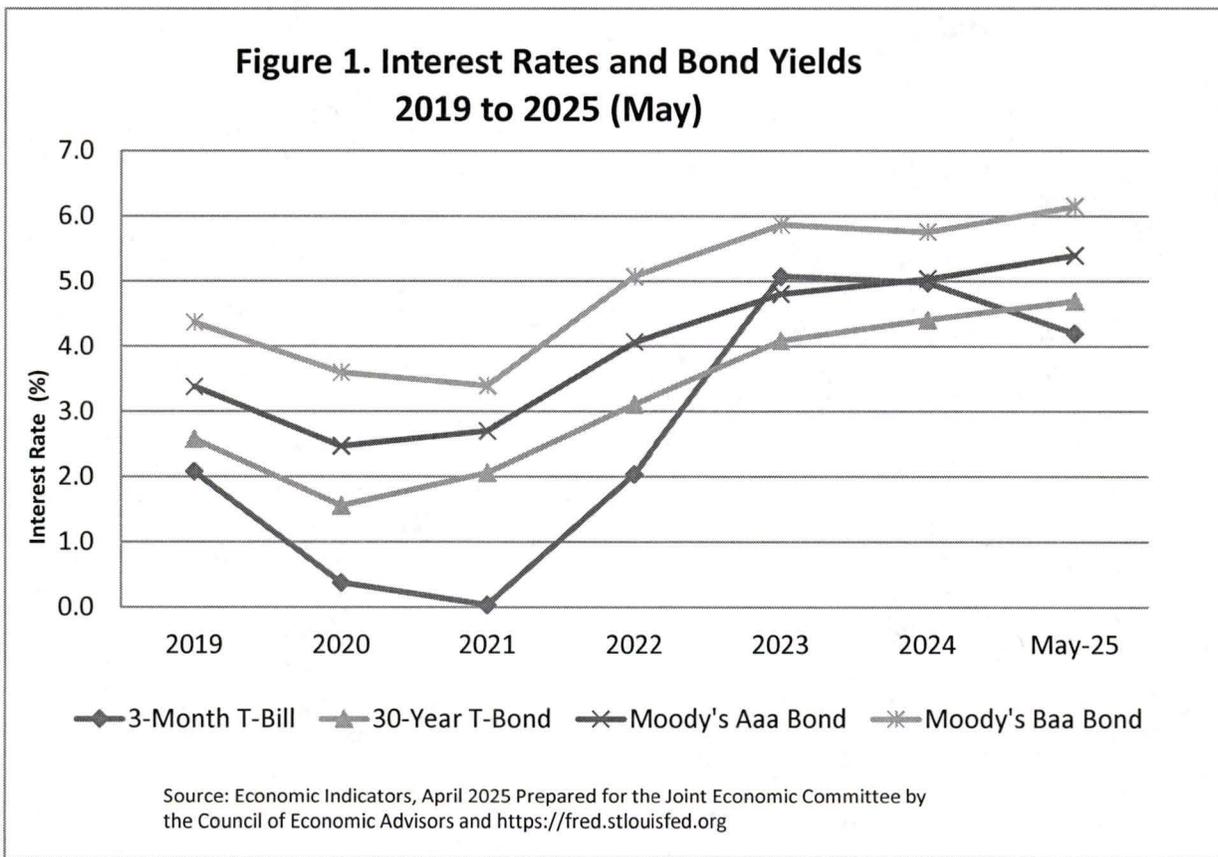
Exhibit MLR-2b - Daily Yields on Treasury Securities (%)			
	Last Rate Case (Test Period Ended 12/31/2021)	Current Case (Actual Period Ended 12/29/2023)	Recent Rates (5/30/2025)
1 Mo	0.06	5.60	4.33
2 Mo	0.05	5.59	4.35
3 Mo	0.06	5.40	4.36
6 Mo	0.19	5.26	4.36
1 Yr	0.39	4.79	4.11
2 Yr	0.73	4.23	3.89
3 Yr	0.97	4.01	3.87
5 Yr	1.26	3.84	3.96
7 Yr	1.44	3.88	4.18
10 Yr	1.52	3.88	4.41
20 Yr	1.94	4.20	4.93
30 Yr	1.90	4.03	4.92

Figure 2. Treasury Security Yield Curve
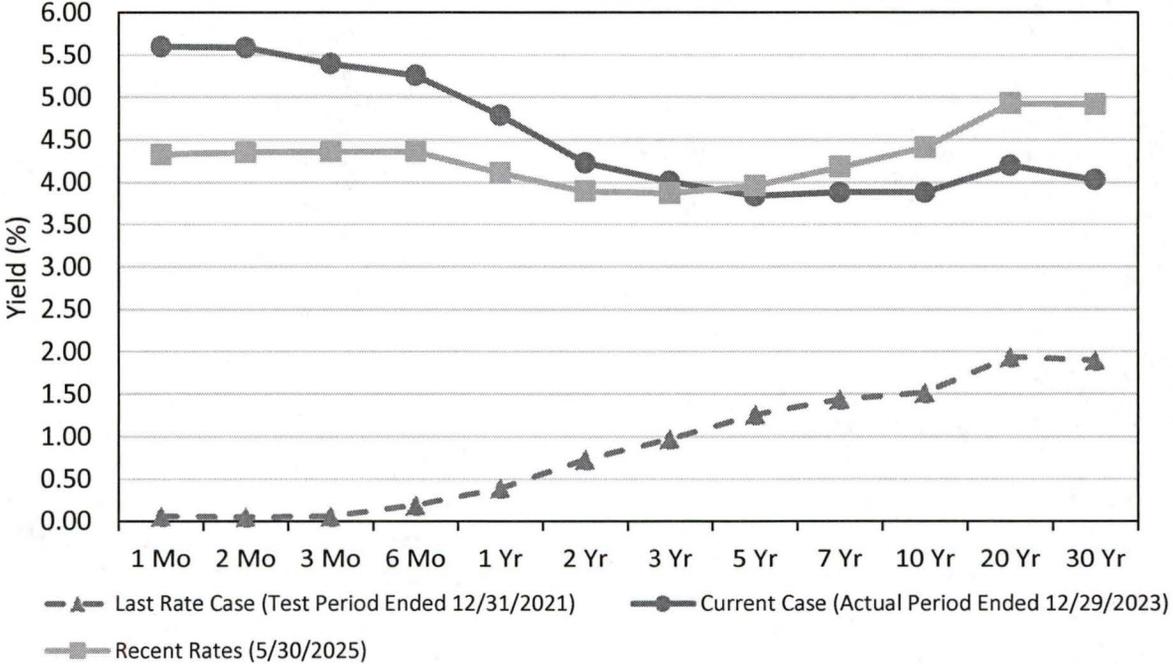
Source: www.treasury.gov

Exhibit MLR-2c - Daily Average TIPS Spread			
Date	Yield on 30-yr T-Bond	Yield on 30-yr T-Bond (Inflation Indexed)	30-Day TIPs Spread
3/3/2025	4.45	2.2	2.25
3/4/2025	4.53	2.28	2.25
3/5/2025	4.57	2.33	2.24
3/6/2025	4.58	2.33	2.25
3/7/2025	4.62	2.36	2.26
3/10/2025	4.54	2.31	2.23
3/11/2025	4.59	2.35	2.24
3/12/2025	4.63	2.37	2.26
3/13/2025	4.59	2.36	2.23
3/14/2025	4.62	2.38	2.24
3/17/2025	4.6	2.37	2.23
3/18/2025	4.58	2.35	2.23
3/19/2025	4.56	2.32	2.24
3/20/2025	4.55	2.31	2.24
3/21/2025	4.59	2.35	2.24
3/24/2025	4.66	2.4	2.26
3/25/2025	4.65	2.39	2.26
3/26/2025	4.69	2.41	2.28
3/27/2025	4.73	2.44	2.29
3/28/2025	4.64	2.37	2.27
3/31/2025	4.59	2.32	2.27
4/1/2025	4.52	2.3	2.22
4/2/2025	4.54	2.32	2.22
4/3/2025	4.49	2.31	2.18
4/4/2025	4.41	2.28	2.13
4/7/2025	4.58	2.42	2.16
4/8/2025	4.71	2.52	2.19
4/9/2025	4.72	2.5	2.22
4/10/2025	4.86	2.68	2.18
4/11/2025	4.85	2.68	2.17
4/14/2025	4.8	2.6	2.2
4/15/2025	4.79	2.63	2.16
4/16/2025	4.74	2.6	2.14
4/17/2025	4.8	2.59	2.21
4/21/2025	4.91	2.68	2.23
4/22/2025	4.88	2.63	2.25
4/23/2025	4.83	2.58	2.25
4/24/2025	4.77	2.52	2.25
4/25/2025	4.74	2.53	2.21
4/28/2025	4.69	2.5	2.19
4/29/2025	4.64	2.46	2.18

4/30/2025	4.66	2.47	2.19
5/1/2025	4.74	2.53	2.21
5/2/2025	4.79	2.56	2.23
5/5/2025	4.83	2.58	2.25
5/6/2025	4.81	2.56	2.25
5/7/2025	4.77	2.54	2.23
5/8/2025	4.83	2.59	2.24
5/9/2025	4.83	2.6	2.23
5/12/2025	4.89	2.64	2.25
5/13/2025	4.94	2.65	2.29
5/14/2025	4.97	2.65	2.32
5/15/2025	4.91	2.61	2.3
5/16/2025	4.89	2.59	2.3
5/19/2025	4.92	2.6	2.32
5/20/2025	4.96	2.65	2.31
5/21/2025	5.08	2.75	2.33
5/22/2025	5.05	2.73	2.32
5/23/2025	5.04	2.73	2.31
5/27/2025	4.94	2.65	2.29
5/28/2025	4.97	2.67	2.3
5/29/2025	4.92	2.63	2.29
5/30/2025	4.92	2.61	2.31
30-Day Average	**4.90**	**2.62**	**2.28**
90-Day Average	**4.74**	**2.50**	**2.24**

https://www.federalreserve.gov/releases/h15/

Exhibit MLR-3 - Survey of Professional Forecasters (U.S. Quarterly and Annual Forecasts)									
Percent (%) Growth at Annual Rates									
	Quarterly					Year-Over-Year			
	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026	2025	2026	2027	2028
Real Gross Domestic Product ("GDP")	1.50	0.90	1.40	1.70	1.90	1.40	1.60	2.20	2.00
Nominal GDP	4.60	4.40	4.00	4.70	4.60	4.50	4.40	N.A.	N.A.
GDP Price Index	3.10	3.10	2.80	2.80	2.50	3.00	2.70	N.A.	N.A.
Consumer Price Index ("CPI")	3.10	3.50	3.20	2.90	2.60	3.30	2.70	2.40	N.A.
CORE CPI	3.40	3.80	3.20	3.00	2.70	3.50	2.70	2.40	N.A.
Personal Consumption Expenditure ("PCE")	3.20	3.40	3.00	2.70	2.40	3.20	2.50	2.10	N.A.
CORE PCE	3.10	3.40	2.80	2.70	2.50	3.30	2.50	2.10	N.A.
Unemployment Rate	4.20	4.30	4.50	4.50	4.50	4.30	4.50	4.60	4.40
3-Month Treasury Bill	4.20	4.10	3.90	3.60	3.40	4.10	3.40	3.00	3.00
10-Year Treasury Bond	4.30	4.30	4.20	4.10	4.10	4.30	4.10	4.00	4.00
Moody's AAA Corp. Bond	5.45	5.40	5.35	5.34	5.30	5.39	5.34	N.A.	N.A.
Moody's BAA Corp. Bond	6.16	6.16	6.20	6.20	6.20	6.13	6.20	N.A.	N.A.

Source: Research Department, Federal Reserve Bank of Philadelphia, Survey of Professional Forecasters, Second Quarter 2025, May 16, 2025, at 8 and 10.

Note: The figures above represent medians of 36 forecasters.

Proxy Group	VL Beta (1.00 = Market)	S&P Credit Rating	Moody's Credit Rating	Common Equity Ratio (2025)	Long-Term Debt Ratio (2025)
Alliant Energy Corp	0.95	BBB+	Baa2	44.50	55.50
Ameren Corp	0.90	BBB+	Baa1	47.00	52.50
American Electric Power Company Inc	0.85	BBB+	Baa2	42.00	58.00
Dominion Energy, Inc.	0.75	BBB+	Baa2	39.50	59.00
Duke Energy Corp	0.70	BBB+	Baa2	38.50	61.00
Entergy Corp	1.00	BBB+	Baa2	36.50	63.50
Evergy Inc.	0.95	BBB+	Baa2	48.00	52.00
FirstEnergy Corp.	0.75	BBB	Baa3	34.00	66.00
IDACORP Inc	0.75	BBB	Baa2	54.00	46.00
NextEra Energy Inc	0.90	A-	Baa1	40.00	60.00
NorthWestern Energy Group, Inc.	0.80	BBB	Baa2	50.50	49.50
OGE Energy Corp	1.05	BBB+	Baa1	48.50	51.50
Pinnacle West Capital Corp	0.80	BBB+	Baa2	44.50	55.50
Portland General Electric Company	0.80	BBB+	A3	43.50	56.50
PPL Corporation	0.90	A-	Baa1	49.00	51.00
Southern Co	0.75	A-	Baa1	36.00	64.00
Sample Average	**0.85**			**43.50**	**56.34**
Sample Median	**0.83**			**44.00**	**56.00**

Table title: **Exhibit MLR-4 - Sample Characteristics**

Source: Value Line Investment Survey, Issue 11 (Electric Utility West), April 18, 2025; Issue 5 (Electric Utility Central), March 7, 2025; and Issue 1 (Electric Utility East), May 9, 2025.

Credit Ratings as of June 18, 2025; reporterd by S&P Global Market Intelligence.

Exhibit MLR-5a - Constant Growth DCF Results, EPS Growth Method (30-Stock Price)								
Proxy Group	30-Day Stock Price Ave., P0	DPS (2025), D0	Current Div Yield, D0/P0	Expected Div Yield, D0/P0*(1+0.5g)	S&P Capital IQ Expected EPS Growth Next 5 yrs[1]	Zacks Expected EPS Growth Next 5 yrs[2]	VL Expected EPS Growth	Average Expected Earnings Growth Rate, g	1St DCF w/Earnings Growth, (D1/P0)+g
Alliant Energy Corp	61.52	2.04	3.32	3.42	6.42	6.60	6.00	6.34	9.76
Ameren Corp	97.22	2.85	2.93	3.03	6.98	7.00	6.50	6.83	9.86
American Electric Power Company Inc	103.67	3.80	3.67	3.79	6.76	6.40	6.50	6.55	10.34
Dominion Energy, Inc.	55.51	2.67	4.81	5.06	11.99	13.60	6.00	10.53	15.59
Duke Energy Corp	117.61	4.22	3.59	3.70	6.36	6.30	6.00	6.22	9.92
Entergy Corp	82.79	2.43	2.94	3.04	8.88	9.50	3.00	7.13	10.17
Evergy Inc.	66.82	2.71	4.06	4.18	5.72	5.70	7.50	6.31	10.49
FirstEnergy Corp.	42.29	1.78	4.21	4.33	6.65	6.40	4.50	5.85	10.18
IDACORP Inc	115.60	3.52	3.04	3.16	8.52	8.10	6.00	7.54	10.70
NextEra Energy Inc	69.75	2.27	3.25	3.38	7.68	7.70	8.50	7.96	11.34
NorthWestern Energy Group, Inc.	56.10	2.64	4.71	4.84	5.73	6.90	4.50	5.71	10.55
OGE Energy Corp	44.32	1.71	3.86	3.98	6.74	6.30	6.50	6.51	10.50
Pinnacle West Capital Corp	91.56	3.61	3.94	4.02	5.20	2.10	5.00	4.10	8.12
Portland General Electric Company	42.22	2.09	4.95	5.07	4.76	3.40	6.50	4.89	9.96
PPL Corporation	35.00	1.09	3.11	3.23	7.42	7.50	7.50	7.47	10.70
Southern Co	89.39	2.96	3.31	3.42	6.59	6.50	6.50	6.53	9.95
Sample Average	73.21	2.65	3.73	3.85	7.03	6.88	6.06	6.65	10.51
Sample Median									10.26

Source: Value Line Investment Survey, Issue 11 (Electric Utility West), April 18, 2025; Issue 5 (Electric Utility Central), March 7, 2025; and Issue 1 (Electric Utility East), May 9, 2025.

Exhibit MLR-5b - Constant Growth DCF Results, Expected EPS, DPS and BVPS Growth Method (30-Day Stock Price)								
Proxy Group	30-Day Stock Price Ave., P0	DPS (2025), D0	Current Div Yield, D0/P0	Expected Div Yield, D0/P0*(1+0.5g)	Average Expected Earnings Growth Rate, g^1	VL Expected DPS Growth	VL Expected BVPS Growth	Average Expected Growth Rate (EPS, DPS, BVPS), g	1st DCF using EPS, DPS, BV Growth Rates, (D1/P0)+g
Alliant Energy Corp	61.52	2.04	3.32	3.41	6.34	6.00	4.00	5.45	8.85
Ameren Corp	97.22	2.85	2.93	3.03	6.83	6.50	6.50	6.61	9.64
American Electric Power Company Inc	103.67	3.80	3.67	3.78	6.55	5.50	6.00	6.02	9.79
Dominion Energy, Inc.	55.51	2.67	4.81	4.97	10.53	.	3.00	6.77	11.74
Duke Energy Corp	117.61	4.22	3.59	3.67	6.22	3.50	3.50	4.41	8.07
Entergy Corp	82.79	2.43	2.94	3.02	7.13	5.50	4.50	5.71	8.73
Evergy Inc.	66.82	2.71	4.06	4.17	6.31	7.00	3.50	5.60	9.77
FirstEnergy Corp.	42.29	1.78	4.21	4.32	5.85	4.50	5.50	5.28	9.60
IDACORP Inc	115.60	3.52	3.04	3.13	7.54	5.50	4.50	5.85	8.98
NextEra Energy Inc	69.75	2.27	3.25	3.39	7.96	9.50	8.00	8.49	11.88
NorthWestern Energy Group, Inc.	56.10	2.64	4.71	4.78	5.71	1.50	2.50	3.24	8.02
OGE Energy Corp	44.32	1.71	3.86	3.96	6.51	3.00	5.50	5.00	8.96
Pinnacle West Capital Corp	91.56	3.61	3.94	4.01	4.10	1.50	4.00	3.20	7.21
Portland General Electric Company	42.22	2.09	4.95	5.07	4.89	5.50	4.50	4.96	10.03
PPL Corporation	35.00	1.09	3.11	3.21	7.47	6.50	4.00	5.99	9.20
Southern Co	89.39	2.96	3.31	3.39	6.53	3.50	3.50	4.51	7.90
Sample Average	**73.21**	**2.65**	**3.73**	**3.83**	**6.65**	**5.00**	**4.56**	**5.44**	**9.27**
Sample Median									**9.09**

Source: Value Line Investment Survey, Issue 11 (Electric Utility West), April 18, 2025; Issue 5 (Electric Utility Central), March 7, 2025; and Issue 1 (Electric Utility East), May 9, 2025.

1. Average Expected EPS Growth from Exhibit MLR-5a.

Proxy Group	90-Day Stock Price Ave., P0	DPS (2025), D0	Current Div Yield, D0/P0	Expected Div Yield, D0/P0*(1+0.5g)	S&P Capital IQ Expected EPS Growth Next 5 yrs[1]	Zacks Expected EPS Growth Next 5 yrs[2]	VL Expected EPS Growth	Average Expected Earnings Growth Rate, g	1St DCF w/Earnings Growth, (D1/P0)+g
Alliant Energy Corp	62.00	2.04	3.29	3.39	6.42	6.60	6.00	6.34	9.73
Ameren Corp	98.19	2.85	2.90	3.00	6.98	7.00	6.50	6.83	9.83
American Electric Power Company Inc	104.98	3.80	3.62	3.74	6.76	6.40	6.50	6.55	10.29
Dominion Energy, Inc.	54.52	2.67	4.90	5.15	11.99	13.60	6.00	10.53	15.68
Duke Energy Corp	118.65	4.22	3.56	3.67	6.36	6.30	6.00	6.22	9.89
Entergy Corp	83.13	2.43	2.92	3.03	8.88	9.50	3.00	7.13	10.15
Evergy Inc.	67.16	2.71	4.04	4.16	5.72	5.70	7.50	6.31	10.47
FirstEnergy Corp.	40.89	1.78	4.35	4.48	6.65	6.40	4.50	5.85	10.33
IDACORP Inc	115.87	3.52	3.04	3.15	8.52	8.10	6.00	7.54	10.69
NextEra Energy Inc	69.42	2.27	3.27	3.40	7.68	7.70	8.50	7.96	11.36
NorthWestern Energy Group, Inc.	56.50	2.64	4.67	4.81	5.73	6.90	4.50	5.71	10.52
OGE Energy Corp	44.61	1.71	3.83	3.96	6.74	6.30	6.50	6.51	10.47
Pinnacle West Capital Corp	92.57	3.61	3.90	3.98	5.20	2.10	5.00	4.10	8.08
Portland General Electric Company	43.03	2.09	4.86	4.98	4.76	3.40	6.50	4.89	9.86
PPL Corporation	35.06	1.09	3.11	3.23	7.42	7.50	7.50	7.47	10.70
Southern Co	89.93	2.96	3.29	3.40	6.59	6.50	6.50	6.53	9.93
Sample Average	**73.53**	**2.65**	**3.72**	**3.85**	**7.03**	**6.88**	**6.06**	**6.65**	**10.50**
Sample Median									**10.31**

Exhibit MLR-5c - Constant Growth DCF Results, EPS Growth Method (90-Day Stock Price)

Source: Value Line Investment Survey, Issue 11 (Electric Utility West), April 18, 2025; Issue 5 (Electric Utility Central), March 7, 2025; and Issue 1 (Electric Utility East), May 9, 2025.

Exhibit MLR-5d - Constant Growth DCF Results, Expected EPS, DPS and BVPS Growth Method (90-Day Stock Price)								
Proxy Group	90-Day Stock Price Ave., P0	DPS (2025), D0	Current Div Yield, D0/P0	Expected Div Yield, D0/P0*(1+0.5g)	Average Expected Earnings Growth Rate, g^1	VL Expected DPS Growth	VL Expected BVPS Growth	Average Expected Growth Rate (EPS, DPS, BVPS), g	1st DCF using EPS, DPS, BV Growth Rates, (D1/P0)+g
Alliant Energy Corp	62.00	2.04	3.29	3.38	6.34	6.00	4.00	5.45	8.83
Ameren Corp	98.19	2.85	2.90	3.00	6.83	6.50	6.50	6.61	9.61
American Electric Power Company Inc	104.98	3.80	3.62	3.73	6.55	5.50	6.00	6.02	9.75
Dominion Energy, Inc.	54.52	2.67	4.90	5.06	10.53	.	3.00	6.77	11.83
Duke Energy Corp	118.65	4.22	3.56	3.63	6.22	3.50	3.50	4.41	8.04
Entergy Corp	83.13	2.43	2.92	3.01	7.13	5.50	4.50	5.71	8.72
Evergy Inc.	67.16	2.71	4.04	4.15	6.31	7.00	3.50	5.60	9.75
FirstEnergy Corp.	40.89	1.78	4.35	4.47	5.85	4.50	5.50	5.28	9.75
IDACORP Inc	115.87	3.52	3.04	3.13	7.54	5.50	4.50	5.85	8.97
NextEra Energy Inc	69.42	2.27	3.27	3.41	7.96	9.50	8.00	8.49	11.90
NorthWestern Energy Group, Inc.	56.50	2.64	4.67	4.75	5.71	1.50	2.50	3.24	7.98
OGE Energy Corp	44.61	1.71	3.83	3.93	6.51	3.00	5.50	5.00	8.93
Pinnacle West Capital Corp	92.57	3.61	3.90	3.96	4.10	1.50	4.00	3.20	7.16
Portland General Electric Company	43.03	2.09	4.86	4.98	4.89	5.50	4.50	4.96	9.94
PPL Corporation	35.06	1.09	3.11	3.20	7.47	6.50	4.00	5.99	9.19
Southern Co	89.93	2.96	3.29	3.37	6.53	3.50	3.50	4.51	7.88
Sample Average	73.53	2.65	3.72	3.82	6.65	5.00	4.56	5.44	9.26
Sample Median									9.08

Source: Value Line Investment Survey, Issue 11 (Electric Utility West), April 18, 2025; Issue 5 (Electric Utility Central), March 7, 2025; and Issue 1 (Electric Utility East), May 9, 2025.

1. Average Expected EPS Growth from Exhibit MLR-5c.

Proxy Group	Expected DPS (28-30)	Expected EPS (28-30)	BVPS (2025)	Expected BVPS (28-30)	Book Value Growth	Expected ROE = EPS/BVPS	Adjustment Factor	Adjusted ROE, r	Payout Ratio, DPS/EPS	Retention Rate, b	Internal Growth Rate, r*b
Alliant Energy Corp	2.43	4.25	28.85	31.90	0.020	13.32	1.01	13.46	0.57	0.43	5.76
Ameren Corp	3.57	6.50	45.95	52.65	0.028	12.35	1.01	12.51	0.55	0.45	5.64
American Electric Power Company Inc	4.31	7.50	52.35	60.90	0.031	12.32	1.02	12.50	0.57	0.43	5.32
Dominion Energy, Inc.	2.67	4.25	31.65	37.25	0.033	11.41	1.02	11.60	0.63	0.37	4.31
Duke Energy Corp	5.00	8.00	65.55	76.50	0.031	10.46	1.02	10.62	0.63	0.38	3.98
Entergy Corp	3.00	4.20	36.50	43.45	0.035	9.67	1.02	9.83	0.71	0.29	2.81
Evergy Inc.	3.25	5.00	45.65	47.50	0.008	10.53	1.00	10.57	0.65	0.35	3.70
FirstEnergy Corp.	2.10	3.30	22.25	26.75	0.038	12.34	1.02	12.56	0.64	0.36	4.57
IDACORP Inc	4.20	7.10	66.65	74.00	0.021	9.59	1.01	9.69	0.59	0.41	3.96
NextEra Energy Inc	3.22	5.10	26.05	36.00	0.067	14.17	1.03	14.62	0.63	0.37	5.39
NorthWestern Energy Group, Inc.	2.80	4.30	47.40	53.55	0.025	8.03	1.01	8.13	0.65	0.35	2.84
OGE Energy Corp	1.79	2.95	23.75	26.25	0.020	11.24	1.01	11.35	0.61	0.39	4.46
Pinnacle West Capital Corp	3.85	6.25	58.00	70.00	0.038	8.93	1.02	9.10	0.62	0.38	3.49
Portland General Electric Company	2.60	4.00	36.00	42.25	0.033	9.47	1.02	9.62	0.65	0.35	3.37
PPL Corporation	1.40	2.40	20.55	23.45	0.027	10.23	1.01	10.37	0.58	0.42	4.32
Southern Co	3.10	5.60	31.75	32.25	0.003	17.36	1.00	17.39	0.55	0.45	7.76
Sample Average	**3.08**	**5.04**	**39.93**	**45.92**	**0.03**	**11.34**	**1.01**	**11.50**	**0.61**	**0.39**	**4.48**
Sample Median											**4.32**

Exhibit MLR-6a - Sustainable Growth DCF (Internal Growth Component)

Source: Value Line Investment Survey, Issue 11 (Electric Utility West), April 18, 2025; Issue 5 (Electric Utility Central), March 7, 2025; and Issue 1 (Electric Utility East), May 9, 2025.

Exhibit MLR-6b - Sustainable Growth DCF (External Growth Component)									
Proxy Group	30-Day Stock Price Ave., P0	BVPS (2025)	Market-to-Book Ratio, P0/BVPS	Comm Shares Outstanding (mil) 2024	Expected Comm Shares Outstanding in 5yrs	Growth in # Shares	Expected Growth in # of shares, s	Expected Profit of stock investment, v	External Growth, s*v
Alliant Energy Corp	61.52	28.85	2.13	256.69	257.00	0.02	0.05	0.53	0.03
Ameren Corp	97.22	45.95	2.12	266.93	285.00	1.32	2.79	0.53	1.47
American Electric Power Company Inc	103.67	52.35	1.98	532.90	550.00	0.63	1.25	0.50	0.62
Dominion Energy, Inc.	55.51	31.65	1.75	852.00	880.00	0.65	1.14	0.43	0.49
Duke Energy Corp	117.61	65.55	1.79	776.00	780.00	0.10	0.18	0.44	0.08
Entergy Corp	82.79	36.50	2.27	429.58	460.00	1.38	3.12	0.56	1.75
Evergy Inc.	66.82	45.65	1.46	230.00	230.00	0.00	0.00	0.32	0.00
FirstEnergy Corp.	42.29	22.25	1.90	576.61	595.00	0.63	1.20	0.47	0.57
IDACORP Inc	115.60	66.65	1.73	53.96	56.00	0.74	1.29	0.42	0.55
NextEra Energy Inc	69.75	26.05	2.68	2057.00	2200.00	1.35	3.62	0.63	2.27
NorthWestern Energy Group, Inc.	56.10	47.40	1.18	61.32	64.00	0.86	1.02	0.16	0.16
OGE Energy Corp	44.32	23.75	1.87	200.90	200.20	-0.07	-0.13	0.46	-0.06
Pinnacle West Capital Corp	91.56	58.00	1.58	119.10	125.00	0.97	1.53	0.37	0.56
Portland General Electric Company	42.22	36.00	1.17	109.35	120.00	1.88	2.20	0.15	0.32
PPL Corporation	35.00	20.55	1.70	738.03	738.00	0.00	0.00	0.41	0.00
Southern Co	89.39	31.75	2.82	1096.00	1120.00	0.43	1.22	0.64	0.79
Sample Average	73.21	39.93	1.88	522.27	541.26	0.68	1.28	0.44	0.60
Sample Median									0.52

Source: Value Line Investment Survey, Issue 11 (Electric Utility West), April 18, 2025; Issue 5 (Electric Utility Central), March 7, 2025; and Issue 1 (Electric Utility East), May 9, 2025.

Exhibit MLR-6c - Sustainable Growth DCF (Results) (30-Day Stock Price)						
Proxy Group	30-Day Stock Price Ave., P0	DPS (2025), D0	Current Div Yield, D0/P0	Expected Div Yield, D0/P0*(1+0.5g)	Sustainable Growth Rate, rb+sv[1]	Sustainable Growth DCF, (D1/P0)+rb+sv
Alliant Energy Corp	61.52	2.04	3.32	3.41	5.79	9.20
Ameren Corp	97.22	2.85	2.93	3.04	7.11	10.15
American Electric Power Company Inc	103.67	3.80	3.67	3.77	5.94	9.71
Dominion Energy, Inc.	55.51	2.67	4.81	4.93	4.80	9.73
Duke Energy Corp	117.61	4.22	3.59	3.66	4.06	7.72
Entergy Corp	82.79	2.43	2.94	3.00	4.56	7.56
Evergy Inc.	66.82	2.71	4.06	4.13	3.70	7.83
FirstEnergy Corp.	42.29	1.78	4.21	4.32	5.14	9.45
IDACORP Inc	115.60	3.52	3.04	3.11	4.51	7.62
NextEra Energy Inc	69.75	2.27	3.25	3.38	7.66	11.04
NorthWestern Energy Group, Inc.	56.10	2.64	4.71	4.78	2.99	7.77
OGE Energy Corp	44.32	1.71	3.86	3.94	4.40	8.35
Pinnacle West Capital Corp	91.56	3.61	3.94	4.02	4.06	8.08
Portland General Electric Company	42.22	2.09	4.95	5.04	3.69	8.73
PPL Corporation	35.00	1.09	3.11	3.18	4.32	7.50
Southern Co	89.39	2.96	3.31	3.45	8.55	12.01
Sample Average	**73.21**	**2.65**	**3.73**	**3.82**	**5.08**	**8.90**
Sample Median						**8.54**

1. See Exhibit MLR-6a for internal growth component, rb and Exhibit MLR-6b for external growth component, sv.

Source: Value Line Investment Survey, Issue 11 (Electric Utility West), April 18, 2025; Issue 5 (Electric Utility Central), March 7, 2025; and Issue 1 (Electric Utility East), May 9, 2025.

Proxy Group	Expected DPS (28-30)	Expected EPS (28-30)	BVPS (2025)	Expected BVPS (28-30)	Book Value Growth	Expected ROE = EPS/BVPS	Adjustment Factor	Adjusted ROE, r	Payout Ratio, DPS/EPS	Retention Rate, b	Internal Growth Rate, r*b
Alliant Energy Corp	2.43	4.25	28.85	31.90	0.020	13.32	1.01	13.46	0.57	0.43	5.76
Ameren Corp	3.57	6.50	45.95	52.65	0.028	12.35	1.01	12.51	0.55	0.45	5.64
American Electric Power Company In	4.31	7.50	52.35	60.90	0.031	12.32	1.02	12.50	0.57	0.43	5.32
Dominion Energy, Inc.	2.67	4.25	31.65	37.25	0.033	11.41	1.02	11.60	0.63	0.37	4.31
Duke Energy Corp	5.00	8.00	65.55	76.50	0.031	10.46	1.02	10.62	0.63	0.38	3.98
Entergy Corp	3.00	4.20	36.50	43.45	0.035	9.67	1.02	9.83	0.71	0.29	2.81
Evergy Inc.	3.25	5.00	45.65	47.50	0.008	10.53	1.00	10.57	0.65	0.35	3.70
FirstEnergy Corp.	2.10	3.30	22.25	26.75	0.038	12.34	1.02	12.56	0.64	0.36	4.57
IDACORP Inc	4.20	7.10	66.65	74.00	0.021	9.59	1.01	9.69	0.59	0.41	3.96
NextEra Energy Inc	3.22	5.10	26.05	36.00	0.067	14.17	1.03	14.62	0.63	0.37	5.39
NorthWestern Energy Group, Inc.	2.80	4.30	47.40	53.55	0.025	8.03	1.01	8.13	0.65	0.35	2.84
OGE Energy Corp	1.79	2.95	23.75	26.25	0.020	11.24	1.01	11.35	0.61	0.39	4.46
Pinnacle West Capital Corp	3.85	6.25	58.00	70.00	0.038	8.93	1.02	9.10	0.62	0.38	3.49
Portland General Electric Company	2.60	4.00	36.00	42.25	0.033	9.47	1.02	9.62	0.65	0.35	3.37
PPL Corporation	1.40	2.40	20.55	23.45	0.027	10.23	1.01	10.37	0.58	0.42	4.32
Southern Co	3.10	5.60	31.75	32.25	0.003	17.36	1.00	17.39	0.55	0.45	7.76
Sample Average	**3.08**	**5.04**	**39.93**	**45.92**	**0.03**	**11.34**	**1.01**	**11.50**	**0.61**	**0.39**	**4.48**
Sample Median											**4.32**

Source: Value Line Investment Survey, Issue 11 (Electric Utility West), April 18, 2025; Issue 5 (Electric Utility Central), March 7, 2025; and Issue 1 (Electric Utility East), May 9, 2025.

Exhibit MLR-6e - Sustainable Growth DCF - External Growth Component								
Proxy Group	90-Day Stock Price Ave., P0	BVPS (2025)	Market-to-Book Ratio, P0/BVPS	Comm Shares Outstanding (mil) 2024	Expected Comm Shares Outstanding in 5yrs	Growth in # Shares	Expected Growth in # of shares, s	Expected Profit of stock investment, v	External Growth, s*v
Alliant Energy Corp	62.00	28.85	2.15	256.69	257.00	0.02	0.05	0.53	0.03
Ameren Corp	98.19	45.95	2.14	266.93	285.00	1.32	2.82	0.53	1.50
American Electric Power Company In	104.98	52.35	2.01	532.90	550.00	0.63	1.27	0.50	0.64
Dominion Energy, Inc.	54.52	31.65	1.72	852.00	880.00	0.65	1.12	0.42	0.47
Duke Energy Corp	118.65	65.55	1.81	776.00	780.00	0.10	0.19	0.45	0.08
Entergy Corp	83.13	36.50	2.28	429.58	460.00	1.38	3.14	0.56	1.76
Evergy Inc.	67.16	45.65	1.47	230.00	230.00	0.00	0.00	0.32	0.00
FirstEnergy Corp.	40.89	22.25	1.84	576.61	595.00	0.63	1.16	0.46	0.53
IDACORP Inc	115.87	66.65	1.74	53.96	56.00	0.74	1.30	0.42	0.55
NextEra Energy Inc	69.42	26.05	2.66	2057.00	2200.00	1.35	3.61	0.62	2.25
NorthWestern Energy Group, Inc.	56.50	47.40	1.19	61.32	64.00	0.86	1.02	0.16	0.17
OGE Energy Corp	44.61	23.75	1.88	200.90	200.20	-0.07	-0.13	0.47	-0.06
Pinnacle West Capital Corp	92.57	58.00	1.60	119.10	125.00	0.97	1.55	0.37	0.58
Portland General Electric Company	43.03	36.00	1.20	109.35	120.00	1.88	2.24	0.16	0.37
PPL Corporation	35.06	20.55	1.71	738.03	738.00	0.00	0.00	0.41	0.00
Southern Co	89.93	31.75	2.83	1096.00	1120.00	0.43	1.23	0.65	0.80
Sample Average	73.53	39.93	1.89	522.27	541.26	0.68	1.28	0.44	0.60
Sample Median									0.50

Source: Value Line Investment Survey, Issue 11 (Electric Utility West), April 18, 2025; Issue 5 (Electric Utility Central), March 7, 2025; and Issue 1 (Electric Utility East), May 9, 2025.

Proxy Group	90-Day Stock Price Ave., P0	DPS (2025), D0	Current Div Yield, D0/P0	Expected Div Yield, D0/P0*(1+0.5g)	Sustainable Growth Rate, rb+sv[1]	Sustainable Growth DCF, (D1/P0)+rb+sv
Exhibit MLR-6f - Sustainable Growth DCF (Results) (90-Day Stock Price)						
Alliant Energy Corp	62.00	2.04	3.29	3.39	5.79	9.18
Ameren Corp	98.19	2.85	2.90	3.01	7.14	10.15
American Electric Power Company In	104.98	3.80	3.62	3.73	5.95	9.68
Dominion Energy, Inc.	54.52	2.67	4.90	5.01	4.78	9.79
Duke Energy Corp	118.65	4.22	3.56	3.63	4.07	7.69
Entergy Corp	83.13	2.43	2.92	2.99	4.57	7.56
Evergy Inc.	67.16	2.71	4.04	4.11	3.70	7.81
FirstEnergy Corp.	40.89	1.78	4.35	4.46	5.10	9.56
IDACORP Inc	115.87	3.52	3.04	3.11	4.51	7.62
NextEra Energy Inc	69.42	2.27	3.27	3.40	7.64	11.04
NorthWestern Energy Group, Inc.	56.50	2.64	4.67	4.74	3.00	7.74
OGE Energy Corp	44.61	1.71	3.83	3.92	4.40	8.32
Pinnacle West Capital Corp	92.57	3.61	3.90	3.98	4.07	8.05
Portland General Electric Company	43.03	2.09	4.86	4.95	3.73	8.68
PPL Corporation	35.06	1.09	3.11	3.18	4.32	7.50
Southern Co	89.93	2.96	3.29	3.43	8.56	11.99
Sample Average	**73.53**	**2.65**	**3.72**	**3.81**	**5.08**	**8.90**
Sample Median						**8.50**

1. See Exhibit MLR-6d for internal growth component, rb and Exhibit MLR-6e for external growth component, sv.

Source: Value Line Investment Survey, Issue 11 (Electric Utility West), April 18, 2025; Issue 5 (Electric Utility Central), March 7, 2025; and Issue 1 (Electric Utility East), May 9, 2025.

Exhibit MLR-7a - CAPM & ECAPM Assumptions	
(Historical Large Stock Return, 30-yr T-Bond)	**%**
Historical L-T Equity Risk Premium (1926-2024): Arithmetic Ave.[1]	7.31
Yield on T-Bond (Risk-Free Rate)	4.90
VL Sample Beta	0.85
VL Beta Adjusted Risk Premium	6.21
CAPM ROE	**11.12**

1. www.costofcapital.kroll.com.

2. Risk-free Rate based on 30-day average of yield on 30-Year Treasury bonds. See Exhibit MLR-7b. Source: https://www.federalreserve.gov/releases/h15/

Exhibit MLR-7b - CAPM & ECAPM Results (Historical Large Stock, 30-yr T-Bond)				
Proxy Group	**Risk-Free Rate**	**VL Beta (1.00 = Market)**	**Historical L-T Equity Risk Premium**	**CAPM ROE**
Alliant Energy Corp	4.90	0.95	7.31	11.85
Ameren Corp	4.90	0.90	7.31	11.48
American Electric Power Company Inc	4.90	0.85	7.31	11.12
Dominion Energy, Inc.	4.90	0.75	7.31	10.39
Duke Energy Corp	4.90	0.70	7.31	10.02
Entergy Corp	4.90	1.00	7.31	12.21
Evergy Inc.	4.90	0.95	7.31	11.85
FirstEnergy Corp.	4.90	0.75	7.31	10.39
IDACORP Inc	4.90	0.75	7.31	10.39
NextEra Energy Inc	4.90	0.90	7.31	11.48
NorthWestern Energy Group, Inc.	4.90	0.80	7.31	10.75
OGE Energy Corp	4.90	1.05	7.31	12.58
Pinnacle West Capital Corp	4.90	0.80	7.31	10.75
Portland General Electric Company	4.90	0.80	7.31	10.75
PPL Corporation	4.90	0.90	7.31	11.48
Southern Co	4.90	0.75	7.31	10.39
Sample Average	**4.90**	**0.85**	**7.31**	**11.12**

Source: Value Line Investment Survey, Issue 11 (Electric Utility West), April 18, 2025; Issue 5 (Electric Utility Central), March 7, 2025; and Issue 1 (Electric Utility East), May 9, 2025.

Exhibit MLR-7c - CAPM & ECAPM Assumptions	
(Supply-Side ERP, 30-yr T-Bond)	%
Supply-Side Equity Risk Premium (1926-2024): Arithmetic Ave.[1]	6.26
Yield on T-Bond (Risk-Free Rate)	4.90
VL Sample Beta	0.85
VL Beta Adjusted Risk Premium	5.32
CAPM ROE	**10.23**

1. www.costofcapital.kroll.com.

2. Risk-free Rate based on 30-day average of yield on 30-Year Treasury bonds. See Exhibit MLR-7d. Source: https://www.federalreserve.gov/releases/h15/

Exhibit MLR-7d - CAPM & ECAPM Results (Supply-Side Equity ERP, 30-yr T-Bond)				
Proxy Group	Risk-Free Rate	VL Beta (1.00 = Market)	Supply-Side Risk Premium	CAPM ROE
Alliant Energy Corp	4.90	0.95	6.26	10.85
Ameren Corp	4.90	0.90	6.26	10.54
American Electric Power Company Inc	4.90	0.85	6.26	10.23
Dominion Energy, Inc.	4.90	0.75	6.26	9.60
Duke Energy Corp	4.90	0.70	6.26	9.29
Entergy Corp	4.90	1.00	6.26	11.16
Evergy Inc.	4.90	0.95	6.26	10.85
FirstEnergy Corp.	4.90	0.75	6.26	9.60
IDACORP Inc	4.90	0.75	6.26	9.60
NextEra Energy Inc	4.90	0.90	6.26	10.54
NorthWestern Energy Group, Inc.	4.90	0.80	6.26	9.91
OGE Energy Corp	4.90	1.05	6.26	11.48
Pinnacle West Capital Corp	4.90	0.80	6.26	9.91
Portland General Electric Company	4.90	0.80	6.26	9.91
PPL Corporation	4.90	0.90	6.26	10.54
Southern Co	4.90	0.75	6.26	9.60
Sample Average	**4.90**	**0.85**	**6.26**	**10.23**

Source: Value Line Investment Survey, Issue 11 (Electric Utility West), April 18, 2025; Issue 5 (Electric Utility Central), March 7, 2025; and Issue 1 (Electric Utility East), May 9, 2025.

Exhibit MLR-7e - CAPM & ECAPM Assumptions	
(D&P Normalized RF Rate)	%
D&P Recommended US ERP[1]	5.50
D&P Normalized Risk-Free Rate[1]	3.50
VL Sample Beta	0.85
VL Beta Adjusted Risk Premium	4.68
CAPM ROE	**8.18**

1. Kroll, Kroll Cost of Capital Inputs Updated to Reflect Heighted Uncertainty in Global Economy, April 15, 2025.

Exhibit MLR-7f - CAPM & ECAPM Results (D&P Normalized RF Rate)				
Proxy Group	Normalized Risk-Free Rate[1]	VL Beta (1.00 = Market)	Recommended Market Risk Premium[1]	CAPM ROE
Alliant Energy Corp	3.50	0.95	5.50	8.73
Ameren Corp	3.50	0.90	5.50	8.45
American Electric Power Company Inc	3.50	0.85	5.50	8.18
Dominion Energy, Inc.	3.50	0.75	5.50	7.63
Duke Energy Corp	3.50	0.70	5.50	7.35
Entergy Corp	3.50	1.00	5.50	9.00
Evergy Inc.	3.50	0.95	5.50	8.73
FirstEnergy Corp.	3.50	0.75	5.50	7.63
IDACORP Inc	3.50	0.75	5.50	7.63
NextEra Energy Inc	3.50	0.90	5.50	8.45
NorthWestern Energy Group, Inc.	3.50	0.80	5.50	7.90
OGE Energy Corp	3.50	1.05	5.50	9.28
Pinnacle West Capital Corp	3.50	0.80	5.50	7.90
Portland General Electric Company	3.50	0.80	5.50	7.90
PPL Corporation	3.50	0.90	5.50	8.45
Southern Co	3.50	0.75	5.50	7.63
Sample Average	**3.50**	**0.85**	**5.50**	**8.18**

and Issue 1 (Electric Utility East), May 9, 2025.

1. Kroll, Kroll Lowers Its Recommendations and Potential Upcoming Changes - February 8, 2024 Update.

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Xcel Energy		Data Request No.	16-6
Case No.:	PU-24-376		
Response To:	North Dakota Public Service Commission		
Requestor:	Karl Pavlovic		
Date Received:	June 10, 2025		

Question:

Reference Nowak Direct at Exhibit JCN-1, Schedule 11.

a.) Does NSP plan to issue more long-term debt to replace the $83,319 First Mortgage Bond due to Mature in July 2025?

b.) If your response to subpart (a.) is yes, please provide details on the new issue amounts and estimated coupon rates.

c.) Has NSP initiated the process for issuing new debt?

d.) If your response to subpart c.) is yes, please provide support.

Response:

a.) Yes.

b.) Please reference Attachment A to this response for details on the new issue amounts and actual coupon rates.

c.) NSP has completed the process for issuing new debt as of May 5, 2025.

d.) Please reference Attachment A to this response for NSP's May 2025 bond issuances support.

Witness:	Joshua C. Nowak
Preparer:	Lucas A. Asmus
Title:	Manager, Corporate Finance
Department:	Treasury
Telephone:	612-330-6832
Date:	June 24, 2025

NORTHERN STATES POWER COMPANY
(a Minnesota corporation)

$600,000,000 5.05% FIRST MORTGAGE BONDS, SERIES DUE MAY 15, 2035
$500,000,000 5.65% FIRST MORTGAGE BONDS, SERIES DUE MAY 15, 2055

Issuer:	Northern States Power Company (a Minnesota corporation)	
Issue Format:	SEC Registered	
Expected Ratings*:	Aa3/A/A+ (Stable/Negative/Stable) (Moody's/S&P/Fitch)	
Security Type:	First Mortgage Bonds	
Pricing Date:	April 28, 2025	
Settlement Date:	May 5, 2025 (T+5)	
	2035 Bonds	2055 Bonds
Principal Amount:	$600,000,000	$500,000,000
Maturity Date:	May 15, 2035	May 15, 2055
Interest Payment Dates:	Semi-annually on May 15 and November 15, commencing on November 15, 2025	Semi-annually on May 15 and November 15, commencing on November 15, 2025
Reference Benchmark Treasury:	4.625% due February 15, 2035	4.500% due November 15, 2054
Benchmark Treasury Price:	103-04+	96-22+
Benchmark Treasury Yield:	4.229%	4.708%
Spread to Benchmark Treasury:	+83 bps	+98 bps
Yield to Maturity:	5.059%	5.688%
Coupon:	5.05%	5.65%
Price to the Public:	99.928% of the principal amount	99.454% of the principal amount
Net Proceeds to Issuer:	$595,668,000 (after deducting the underwriting discount but before transaction expenses)	$492,895,000 (after deducting the underwriting discount but before transaction expenses)
Make-Whole Call:	Prior to November 15, 2034 (the par call date), T+12.5 bps (calculated to the par call date)	Prior to November 15, 2054 (the par call date), T+15 bps (calculated to the par call date)
Par Call:	On or after November 15, 2034, at par	On or after November 15, 2054, at par
CUSIP/ISIN:	665772 CZ0 / US665772CZ03	665772 DA4 / US665772DA43
Minimum Denominations:	$2,000 and integral multiples of $1,000 in excess thereof	
Joint Book-Running Managers:	Mizuho Securities USA LLC	
	PNC Capital Markets LLC	
	Scotia Capital (USA) Inc.	
	TD Securities (USA) LLC	
	BMO Capital Markets Corp.	
	MUFG Securities Americas Inc.	
	SMBC Nikko Securities America, Inc.	
Co-Manager:	Academy Securities, Inc.	

* **Note**: A securities rating is not a recommendation to buy, sell or hold securities and may be subject to revision or withdrawal at any time.

The issuer has filed a registration statement (including a prospectus) with the SEC for the offering to which this communication relates. Before you invest, you should read the prospectus in that registration statement and other documents the issuer has filed with the SEC for more complete information about the issuer and this offering. You may get these documents for free by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, any underwriter or any dealer participating in the offering will arrange to send you the prospectus if you request it by

calling Mizuho Securities USA LLC toll-free at (866) 271-7403, PNC Capital Markets LLC toll-free at (855) 881-0697, Scotia Capital (USA) Inc. toll-free at (800) 372-3930 or TD Securities (USA) LLC toll-free at (855) 495-9846.

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Xcel Energy	Data Request No. 16-5

Case No.:	PU-24-376
Response To:	North Dakota Public Service Commission
Requestor:	Karl Pavlovic
Date Received:	June 10, 2025

Question:

Reference Nowak Direct at 54: 8-14. a.) Provide support for the use of the forecasted 4.82% interest expense for commercial paper. b.) Provide support for the use of a 0.49% monthly financing fee associated with the company's participation in the patent [sic] company's credit facility.

Response:

a.) The cost of short-term debt established at 4.82%, for the test period, reflects the average monthly interest expense, which is a function of the weighted average short-term debt outstanding and projected interest rates. These projections are predicated on the S&P Global Insights forecast of Secured Overnight Financing Rate (SOFR), plus a 9-basis point spread, calculated over the average of month-end short-term debt balances. Please reference Attachment A to this response for the calculation of NSP's weighted average cost of short-term debt at 4.82%.

b.) The monthly credit facility financing fee is based on the summation of the monthly fees, which represents an commitment fee of 10-basis points multiplied by number of days in the month over 360 (as stipulated in 'NSP's Fourth Amendment, Restatement and Joinder Agreement'), to get the daily rate and that is then applied to the undrawn base amount minus any outstanding letters of credit. Please reference Exhibit NDPSC 16-5 for the calculation of NSP's monthly financing fee associated with the participation in its credit facility.

Witness:	Joshua C. Nowak
Preparer:	Lucas A. Asmus
Title:	Manager, Corporate Finance
Department:	Treasury
Telephone:	612-330-6832
Date:	June 24, 2025

NDPSC DR No. 16-5a
NSP's Weighteed Average Cost of Short-Term Debt

	Month End Short Term Debt NSPM 1/	Average of Daily Balances 2/	NSPM Rate	Days	Monthly Interest Expense 3/
2025 Jan	$394,405,770	$255,192,085	5.13%	31	$1,127,355
Feb	$398,436,805	$396,421,287	5.13%	28	$1,581,783
Mar	$187,805,770	$293,121,288	5.13%	31	$1,294,914
Apr	$296,670,368	$242,238,069	4.86%	30	$981,105
May	$0	$148,335,184	4.86%	31	$620,808
Jun	$0	$0	4.86%	30	$0
Jul	$0	$0	4.46%	31	$0
Aug	$0	$0	4.46%	31	$0
Sep	$0	$0	4.46%	30	$0
Oct	$95,949,617	$47,974,809	3.97%	31	$164,015
Nov	$184,472,239	$140,210,928	3.97%	30	$463,888
Dec	$197,820,319	$191,146,279	3.97%	31	$653,488
Total				365	$ 6,887,355
Average	$ 146,296,741	$142,886,661			4.82%

1/ Month-end balances.
   Includes commercial paper, utility money pool or direct borrowings under the credit facility.

2/ 12 month average of average daily balances.

3/ Monthly Interest Expense based on weighted average of short term debt outstanding

NDPSC DR No. 16-5b
NSP's Weighteed Average Cost of Short-Term Debt

	Credit Facility Base Amount	Letters of Credit	Days	Undrawn Credit Facility Fee	Monthly Fees Expense 1/	
2025 Jan	$700,000,000	$14,634,206	31	0.1000%	$59,018	
Feb	$700,000,000	$14,634,234	28	0.1000%	$53,306 2/	
Mar	$700,000,000	$14,634,206	31	0.1000%	$59,018	
Apr	$700,000,000	$14,634,280	30	0.1000%	$57,114	
May	$700,000,000	$11,700,903	31	0.1000%	$59,270	
Jun	$700,000,000	$11,700,880	30	0.1000%	$57,358	
Jul	$700,000,000	$14,641,987	31	0.1000%	$59,017	
Aug	$700,000,000	$14,634,206	31	0.1000%	$59,018	
Sep	$700,000,000	$14,634,280	30	0.1000%	$57,114	
Oct	$700,000,000	$14,634,206	31	0.1000%	$59,018	
Nov	$700,000,000	$14,634,280	30	0.1000%	$57,114	
Dec	$700,000,000	$14,634,206	31	0.1000%	$59,018	
Total			365		$ 695,381	
Average					0.49%	5.31%

1/ Ongoing fees for NSP-MN's five year credit facility.
   Credit facility is used as back up for commercial paper and letters of credit.
   Monthly Cost of NSP-MN Unused Portion of the Credit Facility.
   NSPM re-syndicated its credit agreement September 19, 2022.
   Upfront expenses for the five year credit facility are amortized over the life of the facility and are
   included in the cost of long term debt.

2/ The original Exhibit___(JCN-1), Schedule 11, Page 4 of 4,
   calculated the February Monthly Fee Expense using 29 days in February.
   This Exhibit NDPSC 16-5b has updated to reflect the 28 days that are in February 2025.
   This update results in immaterial changes and rate of 0.49% is applicable.

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Xcel Energy   Data Request No.   10-14
Case No.:   PU-24-376
Response To: North Dakota Public Service Commission
Requestor: Karl Pavlovic
Date Received: April 24, 2025

Question:

Reference to Nowak Direct Testimony pages 27-29, please answer the following:

a.   If Mr. Nowak were to write his testimony today and apply his proxy group criteria to his universe of companies that Value Line classifies as Electric Utilities, would his list of proxy group companies differ from the list provided in Table 2? If so, please update Table 2 of his testimony; and

b.   How would his recommended authorized return on equity range and point estimate change because of changes to his proxy group?

Response:

a. Mr. Nowak had excluded Dominion Energy Inc. and FirstEnergy Corp due to significant transactions that were potentially distorting the inputs to the DCF or CAPM analyses as of October 31, 2024 – the date of Mr. Nowak's analyses. However, those transactions closed in 2024 and are therefore unlikely to distort the DCF and CAPM result based on analysis as of April 30, 2025. As such, it is appropriate to add those two companies to Mr. Nowak's proxy group listed in Table 2 of his testimony. The revised list of proxy companies is listed below:

Company	Ticker
Alliant Energy Corporation	LNT
Ameren Corporation	AEE
American Electric Power Company, Inc.	AEP
Dominion Resources, Inc.	D
Duke Energy Corporation	DUK
Entergy Corporation	ETR
FirstEnergy Corporation	FE
Evergy, Inc.	EVRG
IDACORP, Inc.	IDA
NextEra Energy, Inc.	NEE
NorthWestern Corporation	NWE

OGE Energy Corporation	OGE
Pinnacle West Capital Corporation	PNW
Portland General Electric Company	POR
PPL Corporation	PPL
Southern Company	SO
TXNM Energy, Inc.	TXNM

b. Analytical results with the updated proxy group and market data through April 30, 2025 are provided in NDPSC Data Request No. 10-14, Attachment A. Mr. Nowak continues to consider an ROE range of 10.00 percent to 11.00 percent to be reasonable and somewhat conservative. Mr. Nowak's ROE recommendation of 10.30 percent continues to fall below the average of the DCF, CAPM, and Risk Premium analyses and therefore represents a conservative estimate of NSP's cost of equity.

Witness:	Joshua C. Nowak
Preparer:	Joshua C. Nowak
Title:	Vice President
Department:	Concentric Energy Advisors
Telephone:	508-263-6278
Date:	May 8, 2025

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Xcel Energy	Data Request No. 10-7
Case No.: PU-24-376	
Response To: North Dakota Public Service Commission	
Requestor: Karl Pavlovic	
Date Received: April 24, 2025	

Question:

Provide a list of all fuel adjustment clauses, rate mechanisms, trackers and/or riders that the Commission allows the Company to employ to recover costs between general rate cases. Please also Include in your response the most recent docket numbers and copies of the corresponding Commission decisions concerning such rate mechanisms.

Objection:

The Company objects to the request as overly broad, unduly burdensome, and vague to the extent that it requests all such clauses, trackers, and/or riders without regard to whether they are currently in use and to the extent that it seeks copies of publicly filed documents that are as easily obtained by the requester as they are by the Company.

Subject to and without waiving the foregoing objections, the Company responds as follows:

Response:

The Company is not able to guarantee that the list below contains every clause, mechanism, or tracker that may be available for our electric service, but provides the following list of cases in which current cost recovery mechanisms are submitted for review:

Table 1
Electric Service Cost Recovery Mechanisms

Mechanism	Most Recent Case No.	Commission Decision
Renewable Energy Rider	PU-24-341	https://www.psc.nd.gov/database/documents/24-0341/014-010.pdf
Transmission Cost Rider	PU-24-349	https://www.psc.nd.gov/database/documents/24-0349/017-010.pdf
Fuel Cost Rider	PU-25-011	https://apps.psc.nd.gov/cases/pscasedetail?getId=25&getId2=11#[1]

Preparer:	Amber Hedlund	Zeviel Simpser
Title:	Manager, Regulatory Affairs	
Department:	NSPM Regulatory	Dorsey & Whitney, LLP
Telephone:	612-337-2268	(612) 492-6129
Date:	May 8, 2025	

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[1] This link is to the case detail for Case No. PU-25-011, where we submit our monthly Fuel Cost Rider filings – governed by ND Administrative Code 69-09-02-39.