

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO**

\* \* \* \* \*

IN THE MATTER OF ADVICE LETTER )  
NO. 1906-ELECTRIC OF PUBLIC )  
SERVICE COMPANY OF COLORADO )  
TO REVISE ITS COLORADO PUC NO. 8- )  
ELECTRIC TARIFF TO REVISE ) PROCEEDING NO. 22AL-XXXXE  
JURISDICTIONAL BASE RATE )  
REVENUES, IMPLEMENT NEW BASE )  
RATES FOR ALL ELECTRIC RATE )  
SCHEDULES, AND MAKE OTHER )  
PROPOSED TARIFF CHANGES )  
EFFECTIVE DECEMBER 31, 2022. )

**DIRECT TESTIMONY AND ATTACHMENTS OF PAUL A. JOHNSON**

**ON**

**BEHALF OF**

**PUBLIC SERVICE COMPANY OF COLORADO**

**November 30, 2022**

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**LIST OF ATTACHMENTS**

Attachment PAJ-1	Public Service's Capital Structure, Cost of Capital, and Cost of Long Term and Short-Term Debt at June 30, 2022 (Informational HTY)
Attachment PAJ-2	Moody's Investor's Service: <i>Rating Methodology: Regulated Electric and Gas Utilities</i>
Attachment PAJ-3	S&P: <i>Key Credit Factors for the Regulated Utility Industry</i>
Attachment PAJ-4	S&P: <i>Corporate Methodology: Ratios and Adjustments</i>
Attachment PAJ-5	Credit Ratings Descriptions
Attachment PAJ-6	Public Service's Recommended Capital Structure, Cost of Capital, and Cost of Long Term and Short-Term Debt as of December 31, 2023 (Test Year)

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**DIRECT TESTIMONY AND ATTACHMENTS OF PAUL A. JOHNSON**

1 I. **INTRODUCTION, QUALIFICATIONS, PURPOSE OF TESTIMONY, AND**  
2 **RECOMMENDATIONS**

3 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

4 A. My name is Paul A. Johnson. My business address is 401 Nicollet Mall,  
5 Minneapolis, Minnesota 55401.

6 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?

7 A. I am employed by Xcel Energy Services Inc. (“XES”) as Vice President, Treasurer  
8 and Investor Relations. XES, which is a wholly owned subsidiary of Xcel Energy  
9 Inc. (“Xcel Energy”), provides an array of support services to Public Service  
10 Company of Colorado (“Public Service” or the “Company”) and the other utility  
11 operating company subsidiaries of Xcel Energy on a coordinated basis.

1 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THE PROCEEDING?**

2 A. I am testifying on behalf of Public Service.

3 **Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AND QUALIFICATIONS.**

4 A. As Vice President of Investor Relations and Treasurer, I am responsible for  
5 recommending and implementing the financing required to achieve target capital  
6 structure objectives at each of the regulated utility operating companies and at  
7 Xcel Energy. I am also responsible for corporate cash forecasting and  
8 management, pension plan management, hazard risk insurance, treasury  
9 services, and financial policies. In addition, I am responsible for developing and  
10 maintaining relationships with investors, investor analysts, and internal and  
11 external stakeholders to ensure that investors have accurate and appropriate  
12 information to ensure that they are well informed to make financial or investment  
13 decisions. I also am responsible for working with the various credit rating agencies  
14 and providing timely updates as required. A description of my qualifications,  
15 duties, and responsibilities is set forth after the conclusion of my testimony in my  
16 Statement of Qualifications.

17 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

18 A. The purpose of my testimony is to support Public Service's forecasted Weighted  
19 Average Cost of Capital ("WACC") for the test year ending December 31, 2023  
20 ("2023 Test Year" or "Test Year"), as shown in Table PAJ-D-1, below. The  
21 requested Return on Equity ("ROE") of 10.25 percent for the Test Year is further  
22 supported by Company witness Ms. Ann E. Bulkley in her Direct Testimony.

1

**TABLE PAJ-D-1: Requested WACC**

		<b>As of December 31, 2023<sup>1</sup></b>	
	<b>Ratio</b>	<b>Rate</b>	<b>Wtd Cost</b>
Long-Term Debt	42.37%	3.94%	1.67%
Short-Term Debt	1.93%	3.81%	0.07%
Equity	55.70%	10.25%	5.71%
<b>Total Cost</b>			<b>7.45%</b>

2

The 13-month average equity ratio included in the requested WACC is consistent with the settled equity ratio authorized by the Colorado Public Utilities Commission (“Commission”) in the Company’s most recent electric rate case, which was Proceeding No. 21AL-0317E (“2021 Phase I Electric Rate Case”).<sup>2</sup>

3

The equity ratio authorized in the 2021 Phase I Electric Rate Case is within one basis point of what the Company is requesting in this proceeding (i.e., 55.70 percent as requested as compared to the currently authorized equity ratio of 55.69 percent). Additionally, the 55.70 percent equity ratio requested in this proceeding

4

is the Company’s forecasted equity ratio for the Test Year. It is based on a tested, data-driven, and market-based approach, and it reflects the capital structure that the Company will actually manage to in order to continue to provide long-term benefits to Colorado customers in the form of safe, reliable and affordable electric

5

service over time.

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<sup>1</sup> Forecasted 13-month average equity, long-term debt, and short-term debt balances, as well as 13-month average cost of long-term and short-term debt as of the proposed Test Year ending December 31, 2023.

<sup>2</sup> Proceeding No. 21AL-0317E, Decision No. C22-0178 (mailed date Mar. 24, 2022), approving the Unopposed and Comprehensive Settlement Agreement (Except as to One Issue).

1           The 13-month average cost of debt included in the requested WACC  
2 appropriately aligns with the composition of the capital structure by using the 13-  
3 month average costs of long-term and short-term debt as of December 31, 2023.

4           Most importantly, the Company is requesting a capital structure and overall  
5 WACC that positions it to continue to attract capital at favorable rates, lowering the  
6 overall cost of debt ultimately paid by customers, and to help support and maintain  
7 the Company's credit metrics and overall financial integrity.

8 **Q. WHAT TOPICS DO YOU DISCUSS IN SUPPORT OF THOSE**  
9 **RECOMMENDATIONS?**

10 A. I discuss numerous topics related to the Company's cost of capital in my Direct  
11 Testimony. In particular, I:

- 12           1. Discuss the importance of financial integrity to Public Service, its  
13 customers and its other stakeholders, and the need for Public Service  
14 to maintain stable financial health in order to access capital markets and  
15 raise capital in varied economic conditions and at reasonable costs;
- 16           2. Discuss the criteria that the credit rating agencies use to measure  
17 financial integrity;
- 18           3. Provide a current assessment of Public Service's financial integrity and  
19 describe the impact that regulatory decisions, changes in cash flow, and  
20 the timely recovery of prudent utility costs have on Public Service's  
21 financial integrity;
- 22           4. Present and support the use of a 13-month average capital structure, a  
23 13-month average cost of long-term debt, and 13-month average cost  
24 of short-term debt for the Electric Department for Test Year ending  
25 December 31, 2023;
- 26           5. Present and support the recommended 7.45 percent WACC for the  
27 Electric Department for the Test Year ending December 31, 2023.

28           I also provide data illustrating the 13-month average capital structure, 13-  
29 month average cost of long-term debt, and 13-month average cost of short-term

1 debt for the Electric Department for the 2022 Informational Historical Test Year  
2 consisting of the 12-month period ending June 30, 2022 (“HTY”).<sup>3</sup>

3 **Q. ARE YOU SPONSORING ANY ATTACHMENTS AS PART OF YOUR DIRECT**  
4 **TESTIMONY?**

5 A. Yes, I am sponsoring the following attachments:

- 6 • Attachment PAJ-1, which presents Public Service’s Capital Structure,  
7 Cost of Capital, and Cost of Long Term and Short-Term Debt as of June  
8 30, 2022 (Informational HTY), and the resulting WACC. This capital  
9 structure is for informational purposes only;
- 10 • Attachment PAJ-2, which is a Moody’s Investors Service (“Moody’s”)  
11 publication entitled *Rating Methodology: Regulated Electric and Gas*  
12 *Utilities*;
- 13 • Attachment PAJ-3, which is a Standard & Poor’s (“S&P’s”) publication  
14 entitled *Key Credit Factors for the Regulated Utilities Industry*;
- 15 • Attachment PAJ-4, which is an S&P publication entitled *Corporate*  
16 *Methodology: Ratios and Adjustments*;
- 17 • Attachment PAJ-5, which is a description of the major credit rating  
18 agencies’ credit ratings; and
- 19 • Attachment PAJ-6, which presents Public Service’s Recommended  
20 Capital Structure, Cost of Capital, and Cost of Long Term and Short-  
21 Term Debt as of the Test Year ending December 31, 2023, and the  
22 resulting WACC.

23 **Q. ARE YOU THE ONLY PUBLIC SERVICE WITNESS SPONSORING**  
24 **TESTIMONY RELATED TO PUBLIC SERVICE’S COST OF CAPITAL?**

25 A. No. Ms. Bulkley is presenting testimony regarding Public Service’s required ROE,  
26 and she addresses capital structure as well.

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<sup>3</sup> Attachment PAJ-1.



1        **II.     FINANCIAL INTEGRITY, RATING AGENCY METHODOLOGIES,**  
2                        **APPLICATION TO PUBLIC SERVICE**

3        **Q.     WHAT IS THE PURPOSE OF THIS SECTION OF YOUR DIRECT TESTIMONY?**

4        A.     In this section of my Direct Testimony, I will:

- 5                • Discuss financial integrity and the importance of maintaining it over time so  
6                the utility can serve and respond to customer needs;
- 7                • Provide a current assessment of Public Service’s financial integrity and the  
8                related impact to Public Service’s customers;
- 9                • Identify both how Public Service is working to maintain its financial integrity  
10                and how its financial integrity could be strengthened through a supportive  
11                regulatory decision in this case; and
- 12                • Present and support the recommended capital structure composed of 55.70  
13                percent equity, 42.37 percent long-term debt, and 1.93 percent short-term  
14                debt, and the 7.45 percent WACC for the Test Year ending December 31,  
15                2023.

16        **A.     Financial Integrity**

17        **Q.     WHAT IS FINANCIAL INTEGRITY?**

18        A.     “Financial integrity” refers to a company’s financial strength and its ability to attract  
19                capital at reasonable rates to support ongoing operations and infrastructure  
20                investment in various market conditions. The ability to attract capital at a  
21                reasonable cost in varying market conditions is essential for a utility to be able to  
22                fulfill its obligation to provide safe and reliable utility service to customers.  
23                Achieving and maintaining strong financial integrity ensures that a utility will have  
24                the flexibility and liquidity needed to withstand and access the capital markets  
25                during negative unanticipated macroeconomic events outside of its control, such  
26                as the COVID-19 pandemic, abnormal events such as Winter Storm Uri and  
27                wildfires, and economic downturns and situations when the capital markets are

1 under financial distress.

2 **Q. HOW DOES MAINTAINING FINANCIAL INTEGRITY BENEFIT PUBLIC**  
3 **SERVICE'S CUSTOMERS?**

4 A. Financial integrity directly affects both the Company's ability to access capital to  
5 ensure liquidity for day-to-day operations and fund necessary investments on  
6 behalf of customers, and the cost of that capital is ultimately included in overall  
7 rates. Attracting reasonably priced capital in all market conditions, including  
8 following unexpected macroeconomic events outside the Company's control, is  
9 critical to being able to invest in the infrastructure necessary for Public Service to  
10 provide safe and reliable utility service.

11 Weaker financial integrity at a utility increases the issued cost of debt and  
12 the implied cost of equity, which increases the overall WACC and the ultimate  
13 financing costs that are paid by customers. Weaker financial integrity can also  
14 limit liquidity and access to capital markets, particularly in times of financial  
15 distress. Stronger financial integrity produces the opposite effects, which in turn  
16 benefits customers.

17 **Q. HOW DO THESE PRINCIPLES AFFECT THIS RATE CASE?**

18 A. This case is particularly important, as Public Service is making significant  
19 investments by adding transmission to enable renewables, to upgrade the  
20 distribution system, and to make the clean energy transition to reduce greenhouse  
21 gas emission. The Company must raise significant outside capital to finance the  
22 investments in these customer-benefitting clean-energy initiatives. Consequently,  
23 it is important for the Company's capital structure and overall financial integrity to  
24 illustrate to credit rating agencies and investors that Public Service represents a

1 high-quality investment. To these ends, the Commission's approval of Public  
2 Service's requested 7.45 percent WACC and requested equity ratio would support  
3 Public Service's current investment grade credit ratings and demonstrate  
4 ratemaking consistency and predictability.

5 **B. Factors Impacting Financial Integrity**

6 **Q. WHAT FACTORS CONTRIBUTE TO A UTILITY'S FINANCIAL INTEGRITY?**

7 A. The financial integrity of a regulated utility is largely a function of its capital  
8 structure, ROE, and cash flow, but other factors can also affect it. To maintain  
9 strong financial health, a utility needs to have the opportunity to recover all  
10 prudently incurred utility costs in a timely manner, which includes not only the costs  
11 of capital investments and operations and maintenance expense, but also the  
12 costs of servicing debt and providing a fair return for equity investors.

13 **Q. HOW DO REGULATORY OUTCOMES IMPACT FINANCIAL INTEGRITY AND**  
14 **INFLUENCE INVESTOR DECISIONS?**

15 A. Regulatory outcomes affect both a utility's financial integrity and investor decisions  
16 in multiple ways. Commission decisions affect the utility's cash flows and debt  
17 levels, including decisions about the costs a utility may recover, the timing in which  
18 those costs are recovered, the level of revenues recovered, and the components  
19 of the utility's WACC. Those decisions in turn affect both the utility's financial  
20 health and the metrics which rating agencies specifically measure a utility's  
21 financial integrity and establish its credit ratings. These credit ratings – combined  
22 with the returns on equity investments authorized by a commission's decisions –  
23 affect investors' willingness to provide capital to the utility ultimately used to

1 support its business and provide service to customers. Additionally, rating  
2 agencies' stated perceptions of a commission's decisions further impact investors'  
3 willingness to invest in a utility.

4 **Q. PLEASE EXPLAIN IN MORE DETAIL HOW CREDIT RATINGS ARE RELATED**  
5 **TO FINANCIAL INTEGRITY.**

6 A. Credit ratings are an independent assessment of a utility's financial integrity.  
7 Rating agencies determine credit ratings, which investors use to assist in making  
8 investment decisions, including which companies to invest in and the price that  
9 they will charge to lend to or invest in a company. Ratings are helpful because  
10 they are based on a consistent approach to assessing risk over time. A utility's  
11 credit ratings become an indicator of that utility's financial integrity to the investor  
12 community. Thus, a utility's credit ratings impact its ability to access capital on  
13 reasonable terms. This is especially true at times when the capital markets are  
14 under financial distress.

15 **Q. CAN YOU PROVIDE MORE DISCUSSION OF HOW A UTILITY'S CREDIT**  
16 **RATINGS AFFECT ITS ABILITY TO ACCESS CAPITAL ON REASONABLE**  
17 **TERMS?**

18 A. Yes. More specifically, a credit rating measures credit risk, which is the ability and  
19 willingness of an issuer to fulfill its financial obligations in full and on time. Ratings  
20 address the relative probability that an issuer or an issue will experience default,  
21 i.e., the failure to pay either the required periodic interest payment or the principal  
22 when it comes due.

23 Credit ratings project a long-term view of a company's financial health.

1 Ratings are also an independent opinion, which are used by investors to determine  
2 whether to invest in a company and the required return or cost of capital for their  
3 investment.

4 **Q. HOW DO RECENT ECONOMIC CONDITIONS UNDERSCORE A UTILITY'S**  
5 **NEED FOR FINANCIAL INTEGRITY?**

6 A. The need for access to capital becomes even more relevant in a volatile market  
7 environment, as recently evidenced during the COVID-19 pandemic and its impact  
8 on capital markets. Utilities with higher credit ratings are associated with reduced  
9 risk, which generally attracts investors at a lower cost of debt (i.e., lower average  
10 credit spreads) and favorably positions a utility relative to lower-rated comparable  
11 companies. Generally, the stronger the Company's credit ratings, the larger the  
12 pool of investors willing to consider investing in Public Service's debt, and a larger  
13 pool of investors leads to increased investor demand during a bond issuance.  
14 More demand can place added leverage on investors to accept a lower interest  
15 rate, which can ultimately lead to a lower overall cost of long-term debt paid by  
16 Public Service's customers. Strong investment-grade credit ratings are crucial  
17 because the cost of debt increases very rapidly – and the number of potential  
18 investors decreases substantially – for those companies rated near the bottom of,  
19 or below, investment grade.

20 Further, credit ratings take on greater importance when economic  
21 conditions worsen, and credit becomes more difficult to obtain. As credit  
22 availability tightens, investors become increasingly more selective regarding which  
23 companies qualify for their investment dollars. Therefore, lower credit ratings

1 reduce or eliminate access to capital markets and increase the expense of  
2 obtaining capital.

3 **Q. HOW CAN CREDIT RATINGS AFFECT PUBLIC SERVICE COMPANY'S COST**  
4 **OF CAPITAL?**

5 A. It is important to recognize that Public Service needs to access the capital markets  
6 directly to issue its own debt. Its long-term debt is priced based on the underlying  
7 Treasury rate plus a credit spread, which is primarily based on Public Service's  
8 credit rating and investors' perception of the Company, including its regulatory  
9 environment. In general, the higher the credit rating, the lower the credit spread,  
10 which benefits Public Service's customers.

11 Equity investors also look at credit ratings. Because the income available  
12 to common equity holders is subordinate to debt obligations, the weakening of a  
13 company's creditworthiness also increases the cost of equity. Bond and credit  
14 ratings are reflective of the types of risks faced by debt holders, and lower credit  
15 ratings generally correspond to higher required returns on equity to compensate  
16 for higher risk.

17 **Q. DOES PUBLIC SERVICE ALSO HAVE ITS OWN CREDIT RATINGS?**

18 A. Yes. Rating agencies perform an operating company-specific, bottoms up review  
19 on Public Service to determine credit quality. Moody's and Fitch both perform  
20 Public Service-specific analysis and generally do not consider the parent company  
21 in this analysis. While S&P does assign a "family style" rating, it also assigns a  
22 Public Service-specific rating through the Stand-Alone Credit Profile.

23 In addition, Public Service publishes its own financial statements, has its

1 own credit ratings, and has its own unique operating environment and regulatory  
2 construct. All of these company-specific factors are taken into consideration by  
3 both fixed income and equity investors when they determine their required cost of  
4 capital to invest in Public Service.

5 **Q. DO CREDIT SPREADS DIFFER BASED ON CREDIT RATINGS?**

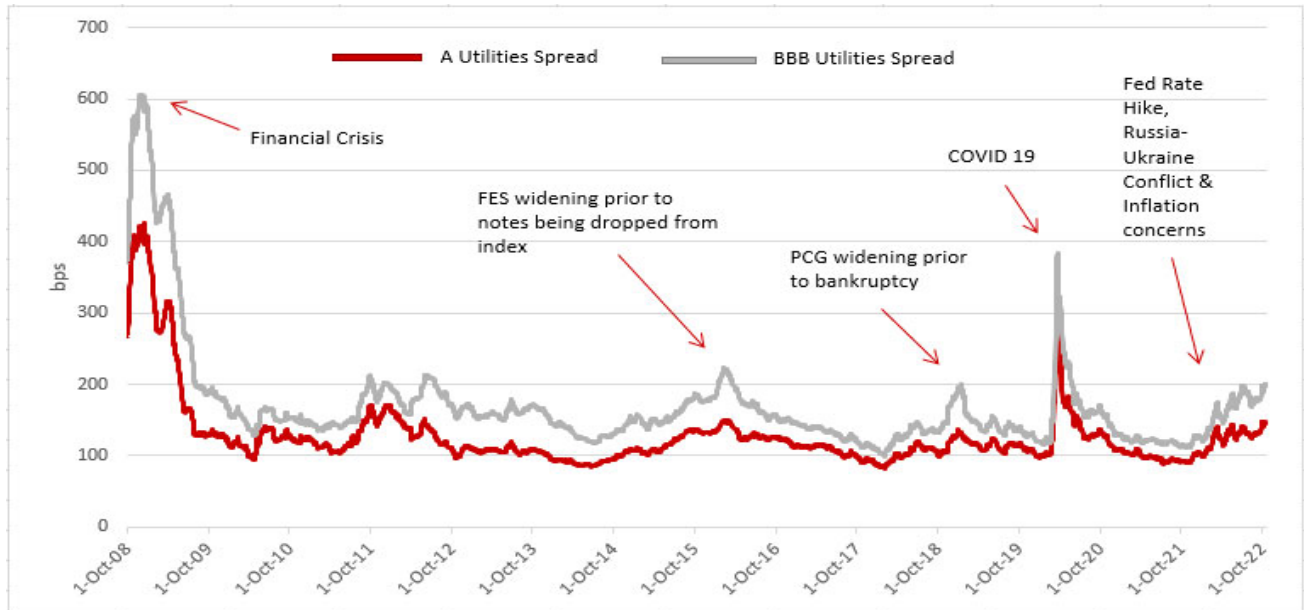
6 A. Yes. Lower credit ratings are seen as riskier and therefore investors demand a  
7 higher spread. Chart PAJ-D-1 below shows that the credit spreads of BBB rated  
8 utility companies are historically wider than those of A rated utility companies,  
9 especially in times of market volatility. This chart demonstrates that although in  
10 current market conditions the credit spread between A and BBB ratings is  
11 approximately 51 basis points,<sup>4</sup> in periods of market volatility, such as June 2009,  
12 the credit spread increased dramatically, at an average spread of 100 basis points.  
13 More recently, in March 2020, the credit spread increased at an average spread  
14 of 75 basis points due to the COVID-19 pandemic. At an average spread of 51  
15 basis points, a BBB rated utility would pay an additional \$510,000 of interest  
16 *annually* above what an A rated utility would pay for every \$100 million issued in  
17 debt. For a 30-year bond, this would equate to an additional \$15.3 million of  
18 interest over the life of the bond.

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<sup>4</sup> Source: Bloomberg. Based on average utility spreads for October 1-14, 2022.

1

### CHART PAJ-D-1: A vs. BBB Rated Utility Spreads October 2008 – October 2022



Source: Bloomberg

2 To further support this position, Dr. Roger Morin, a noted expert on regulatory  
3 finance, analyzes the optimal capital structure for utilities in his book *Modern*  
4 *Regulatory Finance*. Based on that analysis, Dr. Morin concludes that an A rated  
5 utility is in the best interest of the customers and utilities:

6 The model results show that on an incremental basis, a strong A  
7 bond rating generally results in the lowest pre-tax cost of capital  
8 for utilities, especially under adverse economic conditions, which  
9 are far more relevant to the question of capital structure. This  
10 result prevails over a wide range of cost of common equity  
11 models and estimates utilized, and remains robust to changes in  
12 key assumptions.

13 The message from the model is clear: over the long run, a strong  
14 A bond rating will minimize the pre-tax cost of capital to  
15 ratepayers. Long-term achievement of at least an A rating is in  
16 the utility's and ratepayers' best interests. Progressive attainment  
17 of this goal will minimize ratepayer burden, all else remaining  
18 constant.<sup>5</sup>

<sup>5</sup> Roger A. Morin, *Modern Regulatory Finance* 571 (2021).



1 **Q. HOW HAS THE PERSISTENT MARKET VOLATILITY IN 2022 IMPACTED THE**  
2 **CAPITAL MARKETS?**

3 A. Thirty-year Treasury rates have risen approximately 235 basis points, as of  
4 November 9, 2022, since the end of 2021<sup>6</sup> and credit spreads for A ratings have  
5 also widened approximately 44 basis points<sup>7</sup>. As a result, debt is more expensive  
6 to issue and access to capital has become somewhat more limited<sup>8</sup>, where year-  
7 over-year issuances have decreased approximately 10 percent with investors  
8 demanding a higher premium.

9 **Q. CAN YOU PROVIDE OTHER RECENT EXAMPLES OF VOLATILITY THAT**  
10 **IMPACTED THE CAPITAL MARKETS?**

11 A. Another recent example is the COVID-19 pandemic, which introduced volatility into  
12 the market and made it challenging for companies to access capital, regardless of  
13 credit rating. Due to this market volatility, the investment grade markets were  
14 inaccessible the week of February 24, 2020, with no issuances coming to market.

15 Investment Grade Issuers were not willing to issue given market volatility  
16 and pricing risk. The following week, while some issuers were able to access the  
17 markets, the cost to issue that debt was elevated. This illustrates the importance  
18 of maintaining financial integrity in order to manage through all market conditions.

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<sup>6</sup> Source: [federalreserve.gov](https://www.federalreserve.gov).

<sup>7</sup> Source: Bloomberg. Spread is for A Rated Utilities, such as Public Service. The increase in “BBB” rated utilities spreads between December 31, 2021 and October 19, 2022 is approx. 72 basis points.

<sup>8</sup> YTD October 14, 2021 utility debt issuance = \$96.5 billion vs. YTD October 2022 issuance = \$89.2 billion. Source: Bloomberg.

1 In addition it shows that companies with higher credit ratings will have more  
2 financial flexibility to fund operations at lower costs.

3 In summary, higher investment grade ratings (ratings in the A- or A  
4 category, and an equivalent Moody's ratings of A3 or A2) provide greater financial  
5 flexibility and access to debt capital at most times in the market cycle, even in  
6 distressed markets. Conversely, lower ratings in the range of BBB and BBB- (or  
7 Baa3 to Baa3) can put a utility in circumstances of reduced access to funding and  
8 at risk of loss of liquidity in the event of a credit downgrade or market stress  
9 occurrence.

10 **C. Rating Agency Methodologies**

11 **Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?**

12 A. In this section, I explain how rating agencies measure risk among different utilities,  
13 and address how that assessment of risk factors into commission's decisions  
14 regarding the appropriate capital structure to assign a regulated utility.

15 **Q. CAN YOU EXPLAIN HOW PUBLIC SERVICE'S CREDIT RATINGS ARE  
16 ESTABLISHED?**

17 A. Yes. Credit ratings are established through determining the business and financial  
18 risk of a company. The assessment of business risk is determined from the broad  
19 macro-environment risks at the country and industry level. For a utility, regulatory  
20 risk is the most significant overall business risk. The issuer's more specific risk  
21 within its business and economic environment is then determined. The  
22 assessment of financial risk examines financial ratios to analyze the financial risk  
23 of the issuer.

1 Business risk and financial risk can be viewed as complementary sides of  
2 the total risk of an entity, so that more of one risk must be offset by less of the other  
3 risk to arrive at a specific rating. Because utilities are subject to regulation,  
4 regulatory risk is a key consideration in ratings outcomes.<sup>9</sup>

5 **Q. HOW IS REGULATORY RISK ANALYZED?**

6 A. For Moody's, regulatory risk constitutes up to 60 percent of the credit profile, and  
7 for S&P it is up to 80 percent.<sup>10</sup> Both focus on the basic regulatory framework,  
8 including: (1) the legal foundation for utility regulation, (2) the ratemaking policies  
9 and procedures that determine how well the utility is afforded the opportunity to  
10 earn a reasonable return with a reasonable cash component, and (3) the history  
11 of regulatory behavior by the governing bodies applying those laws, policies and  
12 procedures. Rating agencies then examine the mechanics of regulation,  
13 particularly the rate-setting process.

14 **Q. ARE THE FRAMEWORK AND THE MECHANICS OF REGULATION THE ONLY**  
15 **CONSIDERATIONS IN DETERMINING REGULATORY RISK?**

16 A. No. Rating agencies also place a high value on transparency, predictability, and  
17 consistency in regulation.<sup>11</sup> Rating agencies rate many types and tenors of fixed  
18 income securities, but they regard debtholders who extend credit over long periods  
19 as their primary audience and strive to rate long-term debt as accurately as  
20 possible over the longest timeframe as possible. Utilities ultimately fund capital

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<sup>9</sup> Attachment PAJ-2 at 3; Attachment PAJ-3 at 6.

<sup>10</sup> Attachment PAJ-2 at 4 (Regulatory Framework (25%) plus Ability to Cover Costs and Earn Returns (25%) plus Diversification (10%); Attachment PAJ-3 at 6,9 (Competitive Advantage (60%) plus Scale, Scope and Diversity (20%).

<sup>11</sup> Attachment PAJ-2 at 10; Attachment PAJ-3 at 6-8.

1 expenditures primarily with long-dated maturities to match the long-lived assets  
2 they are supporting, and utility investors value ratings that are stable. Regulatory  
3 frameworks and practices that allow rating agencies to confidently project future  
4 cash flows and debt leverage will naturally be accorded a better business risk  
5 profile. This predictability offers creditors the ability to accurately assess risk over  
6 most of the debt's term and improves the ability of the company to manage its  
7 business activities and capital program for the long-term benefit of ratepayers.

8 **Q. HAVE CREDIT RATING AGENCIES COMMENTED ON THE IMPORTANCE OF**  
9 **THE REGULATORY FRAMEWORK IN EVALUATING A UTILITY'S FINANCIAL**  
10 **INTEGRITY?**

11 A. Yes. S&P has noted that the regulatory framework "is of critical importance when  
12 assessing regulated utilities' credit risk because it defines the environment in which  
13 a utility operates and has a significant bearing on a utility's financial  
14 performance."<sup>12</sup> S&P observes further that "we base our assessment of the  
15 regulatory framework's relative credit supportiveness on our view of how regulatory  
16 stability, efficiency of tariff setting procedures, financial stability, and regulatory  
17 independence protect a utility's credit quality and its ability to recover its costs and  
18 earn a timely return."<sup>13</sup>

19 **Q. WHAT FINANCIAL CONSIDERATIONS CONSTITUTE THE QUANTITATIVE**  
20 **SIDE OF CREDIT ANALYSIS?**

21 A. Credit analysis is distinguished by its emphasis on cash flow. The primary

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<sup>12</sup> Attachment PAJ-3 at 6.

<sup>13</sup> Attachment PAJ-3 at 6.

1 measure that rating agencies use as a base for most cash-flow metrics is Cash  
2 Flow from Operations (“CFO”) or some variation of it.<sup>14</sup> The other major element  
3 of financial risk to a credit analyst is the total amount of debt or debt-like  
4 obligations, also referred to as off-balance sheet debt, on the issuer’s balance  
5 sheet. Items that the rating agencies regard as debt-like include lease liabilities,  
6 long-term power purchase agreements (“PPA”), pension obligations, and asset-  
7 retirement obligations.

8 **Q. WHAT ARE THE PRIMARY FINANCIAL METRICS THAT CREDIT RATING**  
9 **AGENCIES ANALYZE?**

10 A. The primary financial metrics evaluated by the major credit rating agencies include  
11 some version of the following coverage ratios: (i) the ratio of Funds from  
12 Operations (“FFO”) or CFO to total debt (“FFO/Debt” or “CFO/Debt”); (ii) the ratio  
13 of FFO or CFO to interest (“FFO/Interest” or “CFO/Interest”); and (iii) the ratio of  
14 debt to earnings before interest, taxes, depreciation, and amortization  
15 (“Debt/EBITDA”). These financial metrics are a composite measure of the utility’s  
16 ability to manage its debt burden over time and to meet its financial obligations as  
17 they come due. The greater the business risk of a particular company, the stronger  
18 these financial metrics must be to provide sufficient evidence to the credit rating  
19 agencies and investors that the company can withstand the financial effect of both  
20 macroeconomic and company-specific risks.

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<sup>14</sup> For Moody’s, the measurement is called “CFO pre-Working Capital-to-Debt.” S&P has a similar measure, called “Funds-From-Operations” (“FFO”), which they also compare to the overall debt burden.

1 **Q. WHAT TYPES OF DEBT OBLIGATIONS DO RATING AGENCIES INCLUDE IN**  
2 **THEIR CREDIT METRICS CALCULATIONS?**

3 A. The total debt calculated by rating agencies includes amounts for debt and debt-  
4 like obligations, including on-balance sheet obligations such as finance and  
5 operating leases as well as off-balance sheet obligations. Off-balance sheet  
6 obligations are payment obligations (as discussed earlier, these include items such  
7 as long-term purchase power agreements, pension obligations, and asset  
8 retirement obligations) that do not appear on the balance sheet as debt; however,  
9 rating agencies may treat them as debt because the utility has little or no discretion  
10 whether to pay for these obligations.<sup>15</sup> In 2021, S&P imputed additional debt onto  
11 Public Service's balance sheet for off-balance sheet obligations. The majority of  
12 those costs were related to PPAs and leases.

13 **Q. HOW DO OFF-BALANCE SHEET OBLIGATIONS IMPACT PUBLIC SERVICES'**  
14 **CREDIT METRICS AND CREDIT RATINGS?**

15 A. Public Service has a number of off-balance sheet obligations such as purchased  
16 power agreements, operating leases, guarantees, asset retirement obligations,  
17 underfunded pension or other benefit plans, among other items. After those off-  
18 balance sheet obligations are taken into account, the actual *economic* equity ratio  
19 considered by the rating agencies is far lower than the authorized regulated equity  
20 ratio. This lower economic equity ratio is generally a drag on Public Service's  
21 credit ratings. During 2021, S&P identified \$764.4 million of incremental debt

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<sup>15</sup> See Attachments PAJ-2, PAJ-3 and PAJ-4 for a discussion of adjustments for off-balance sheet obligations.

1 obligations for off-balance sheet items for Public Service. After those off-balance  
2 sheet obligations are taken into account, the actual economic equity ratio  
3 considered by the rating agencies is far lower than the regulated equity ratio. For  
4 example, a regulated equity ratio of 55.66% (in the informational HTY) translates  
5 to an economic equity ratio of 53.19% under S&P's methodology. The regulated  
6 equity ratio thus understates Public Service's true leverage because it excludes off  
7 balance sheet items.

8 **Q. WHY IS IT IMPORTANT FOR THE COMMISSION TO CONSIDER THE**  
9 **ECONOMIC CAPITAL STRUCTURE IN ITS DECISION IN THIS CASE?**

10 A. The rating agencies perform their analysis including the additional imputed debt to  
11 determine their credit metrics. Therefore, as long as Public Service carries these  
12 additional liabilities, the economic equity ratio will always be lower than the  
13 authorized regulated equity ratio. The Commission should set an authorized equity  
14 ratio that will be sufficient to maintain credit ratings after the rating agency  
15 adjustments have been made.

16 **Q. DOES IT ALSO MATTER THAT PUBLIC SERVICE ISSUES ITS OWN DEBT,**  
17 **HAS ITS OWN CREDIT RATING, AND IS PROPOSING A CAPITAL**  
18 **STRUCTURE WITHIN THE RANGE OF SIMILAR UTILITIES?**

19 A. Yes. Similar to how credit rating agencies evaluate Public Service, the  
20 Commission should set rates and establish the capital structure and cost of equity  
21 based on the specific facts and circumstances for Public Service, which the  
22 Colorado Commission regulates. Using the holding company's capital costs or  
23 capital structure as any kind of proxy ignores not only that the risk differs between

1 utilities, but also that the holding company family includes both regulated and  
2 unregulated entities and that different utility operating companies operate in  
3 different environments. To this end, FERC has stated that it “continues to prefer  
4 to examine objective, concrete considerations, such as whether the applicant  
5 issues its own non-guaranteed debt and has its own bond rating separate from  
6 that of its corporate parent” when evaluating issues like the appropriate return on  
7 equity and capital structure of a regulated utility.<sup>16</sup> Similarly, NARUC’s December  
8 2019 Cost of Capital and Capital Markets: A Primer for Utility Regulators notes that  
9 “[a]ctual capital structure ratios are generally used for a utility that has market-  
10 traded stock and/or debt directly issued to investors. Utilities that are subsidiaries  
11 of parent companies may interface with the capital markets at the parent level  
12 instead. If so, that parent capital structure can be considered for ratemaking  
13 purposes. However, parent companies may have significant non-utility operations  
14 of different risk that may render the use of the parent company capital structure  
15 inappropriate.”<sup>17</sup>

16 **Q. WHAT IS THE SIGNIFICANCE TO THIS RATE CASE OF THE RATIOS THE**  
17 **CREDIT RATING AGENCIES EVALUATE?**

18 A. This rate case outcome will affect the financial ratios and credit metrics. Including  
19 existing off-balance sheet obligations in calculating a company’s total debt affects  
20 many of the financial metrics the rating agencies rely upon. In general, the higher  
21 the proportion of debt in a capital structure, the more downward pressure on cash

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<sup>16</sup> *Transcontinental Gas Pipe Line Corp.*, 84 FERC ¶ 61,084, 61,415 (1998).

<sup>17</sup> <https://pubs.naruc.org/pub.cfm?id=CAD801A0-155D-0A36-316A-B9E8C935EE4D>, at p. 12 (emphasis added).



1 flow metrics and credit ratings, and the more upward pressure on cost of capital to  
2 the utility and its customers.

3 **Q. HOW DOES REGULATORY LAG IMPACT A REGULATED UTILITY'S CREDIT**  
4 **METRICS?**

5 A. Regulatory lag reduces cash flow and increases debt levels – both of which have  
6 a negative impact on credit metrics. When a utility is unable to recover its costs  
7 on a timely basis, the utility's cash flow is reduced. To cover the shortfall, the utility  
8 needs to issue more debt. If debt levels increase too much relative to cash flows  
9 from operations, the credit ratings will likewise deteriorate and the utility's access  
10 to capital markets can become strained.

11 **Q. PLEASE EXPLAIN THE RATING AGENCY SCALES.**

12 A. Credit rating agencies provide ratings for both the business entity as a whole and  
13 for the various debt issuances of the entity.

14 The highest investment-grade rating is AAA; the lowest investment-grade  
15 rating is BBB-. Debt rated BB+ or below is considered speculative grade.  
16 Attachment PAJ-5 to my Direct Testimony contains a description of the ratings  
17 used by the agencies.

18 **D. Public Service's Financial Integrity and Credit Metrics**

19 **Q. WHAT ARE PUBLIC SERVICE'S CURRENT CREDIT RATINGS?**

20 A. Public Service's credit ratings are reflected in Table PAJ-D-2 below.

1 **TABLE PAJ-D-2: Public Service's Current Corporate Credit Ratings**

	<b>S&amp;P</b>	<b>Moody's</b>	<b>Fitch</b>
Corporate Rating	A-	A3	A-
Senior Unsecured*		A3	--
Senior Secured	A	A1	A+
Commercial Paper	A-2	P-2	F-2

\*Public Service currently issues only senior secured debt

2 **Q. HOW DO PUBLIC SERVICE'S CUSTOMERS BENEFIT FROM A STRONG**  
3 **CREDIT RATING?**

4 A. Strong credit ratings benefit customers by providing access to capital at a  
5 reasonable cost. Conversely, a downgrade to a lower credit rating could affect  
6 Public Service's cost of supporting daily business. Supporting Public Service's  
7 operations requires access to funding, which can come from different sources such  
8 as commercial paper, a credit facility, and letters of credit. The cost of each of  
9 these types of funding varies and is dependent on the credit rating of the borrower.

10 Above and beyond the increased borrowing cost discussed above, the  
11 lower credit quality also impacts access to and the cost of equity, which in turn will  
12 necessitate a higher equity return. In short, maintaining strong financial metrics  
13 and credit ratings minimizes the Company's costs of capital investments and  
14 customer costs in multiple respects.

15 **Q. DOES PUBLIC SERVICE FACE BUSINESS AND FINANCIAL RISK THAT**  
16 **COULD NEGATIVELY IMPACT ITS CURRENT CREDIT RATINGS AND**  
17 **OUTLOOKS?**

18 A. Yes. Public Service will be making substantial capital investments over the next

1 few years. In order to fund these investments, Public Service must meet the needs  
2 of its various stakeholders, including customers, bondholders and shareholders, in  
3 order to ensure continued access to capital markets on reasonable terms.

4 **Q. ARE THERE ANY RISK FACTORS SPECIFIC TO THIS CASE THAT COULD**  
5 **INFLUENCE CREDIT RATINGS?**

6 A. Yes. Rating agencies attribute less risk to riders and other recovery mechanisms  
7 that operate outside the rate case cycle and adjust rates automatically or with  
8 some flexibility to match revenues to expenses, thereby minimizing regulatory lag.  
9 Fuel clauses and riders are rate mechanisms that stabilize earnings and cash flows  
10 to the benefit of the business risk profile, which is supportive of higher credit  
11 ratings. The Company's electric investment is significant and will remain  
12 significant in future years. Recovery of this investment in base rates will generally  
13 cause a lag in recovery and this impact is magnified with the use of a historic test  
14 year, particularly if it is a historic test year based on an average rate base while  
15 investment is growing. This will impact cash flow and credit metrics, and thus also  
16 increases business risk to Public Service.

17 Additionally, in our last electric rate case the Commission expressed  
18 interest in reducing the amount of equity in the Company's capital structure, which  
19 presents additional risk to Public Service's financial integrity.

20 **Q. WHAT IS THE RISK OF INCREASING THE AMOUNT OF LEVERAGE IN THE**  
21 **CAPITAL STRUCTURE?**

22 A. A greater proportion of debt (and correspondingly lower proportion of equity) in the  
23 capital structure increases risk due to the increased volatility of earnings and cash

1 flow, which will require both equity and fixed income investors to require a high  
2 rate of return due to increased risk of default. Dr. Morin, a noted expert on  
3 regulatory finance, expresses the result of financial leverage as follows:

4 “[m]ore generally, a financial risk premium is required by both  
5 bondholders and common shareholders. There are also  
6 implications for utility customers. In my professional  
7 experience, public utilities with greater financial leverage and  
8 heightened default risk typically are less able to fund  
9 investments in their network, leading to lower levels of  
10 reliability and customer service. In summary, funding the  
11 utility with a greater proportion of debt capital and a lower  
12 proportion of equity capital increases financial risk for  
13 shareholders, bondholders, lenders, and trade creditors, while  
14 increasing reliability and service quality risk for utility  
15 consumers.”<sup>18</sup>

16  
17 Later in my Direct Testimony, I discuss various means of managing to desired  
18 outcomes with respect to the Company’s costs, capital needs, and credit metrics.

19 **E. Potential Financial Integrity Effects of the Inflation Reduction Act**

20 **Q. CAN YOU EXPLAIN THE POTENTIAL IMPACTS OF THE INFLATION**  
21 **REDUCTION ACT PASSED IN AUGUST 2022?**

22 A. While the bill has many components, the authorization of tax credit transferability  
23 has the potential to improve the company’s liquidity and credit metrics. This  
24 transferability feature permits the sale of tax credits between project owners (like  
25 Public Service) and unrelated taxpayers who are able to utilize them.

26 **Q. DO ALL TAX CREDITS QUALIFY FOR TRANSFERABILITY?**

27 A. No, only the production tax credits that are generated in 2023 and thereafter will  
28 qualify to be transferred. The Company expects to monetize approximately \$100

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<sup>18</sup> Roger A. Morin *Modern Regulatory Finance* (2021).

1 million annually in the forecast, contingent upon appropriate regulatory  
2 mechanisms and the development of a market for the sale of credits.

3 **Q. SPECIFICALLY, HOW DOES TAX CREDIT TRANSFERABILITY IMPACT THE**  
4 **FFO/DEBT AND CFO PRE-WC/DEBT METRICS?**

5 A. Transferability allows for timely monetization of tax credits that would otherwise be  
6 deferred until a future point in time when the Company's level of tax liability is large  
7 enough to fully utilize the credits. Avoiding this deferral period via credit transfers  
8 could improve the key cash flow to debt relationships.

9 **Q. WOULD TAX CREDIT TRANSFERABILITY IMPROVE PUBLIC SERVICE'S**  
10 **KEY CREDIT METRICS?**

11 A. Potentially, assuming appropriate regulatory mechanisms and development of a  
12 market for the sale of credits. At the current time, a market for the sale of tax  
13 credits to a third party does not exist. There would need to be an active market for  
14 the sale of these credits in order for Public Service to be able to monetize them  
15 and recognize the cash flow. Further, regulatory preapproval may be necessary  
16 in order for Public Service to participate in this market and monetize tax credits  
17 generated in the future. As such, any adjustment for tax credit transferability would  
18 be premature at this time.

19 **F. Maintaining and Strengthening Public Service's Financial Integrity**

20 **Q. TYING THE PIECES TOGETHER, WHY ARE CONSTRUCTIVE OUTCOMES IN**  
21 **THIS RATE CASE RELATED TO ROE, EQUITY RATIO/CAPITAL STRUCTURE,**  
22 **AND TIMELINESS OF COST RECOVERY IMPORTANT TO PUBLIC SERVICE?**

23 A. I will address each component in turn:

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- First, the authorized ROE and equity ratio affect Public Service's earnings and directly affect its ability to fund capital investment with internally generated cash flow. In addition to credit ratings, investors also assess the capital structure and ROE when making judgments about the credit quality of a regulatory jurisdiction. As such, the ROE/equity ratio combination is a powerful and effective communication tool to underscore the interest of regulators in attracting capital to provide safe, reliable, and environmentally sound electric service in this State.
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- Second, the capital structure and authorized costs directly affect all of Public Service's key credit metrics, because either total debt or interest expense is a component of each of the primary credit metrics that rating agencies analyze. The credit rating agencies also evaluate the relative amounts of debt and equity in the Company's capital structure to determine whether the Company is appropriately capitalized given its business risk profile, and to determine whether the Company has the ability to issue additional debt to fund its utility capital expenditures. The credit rating agencies are very interested in Public Service's liquidity to meet its short-term capital needs if conditions of financial stress arise, and they consider the debt portfolio maturity schedule and other future obligations as part of this assessment.
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- Third, debt and equity investors expect Public Service to be able to recover its costs in a timely manner and to have a reasonable opportunity to earn its authorized ROE. Investors and rating agencies track the decisions of regulatory agencies relating to capital structure, cost of debt, ROE, overall cost recovery and forward-looking cost recovery mechanisms, and they categorize the state regulatory environments in their assessment of the relative risks of different utility investment opportunities.
- 30
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- Finally, for regulated utilities, investors tend to prefer stable, predictable, regulatory environments (so long as they are constructive) because this reduces pricing. If investors perceive more risk or uncertainty, they will demand a high return. Therefore, a consistent and constructive regulatory environment benefits customers because it reduces the overall cost of capital.

36 **Q. WHAT IS PUBLIC SERVICE'S PROPOSED EQUITY RATIO IN THIS**  
37 **PROCEEDING?**

38 A. Public Service supports a capital structure composed of 55.70 percent equity,

1 42.37 percent long-term debt, and 1.93 percent short-term debt, to reflect its  
2 anticipated capital structure based on a 13-month average for the Test Year ending  
3 December 31, 2023. The inclusion of short-term debt in the capital structure,  
4 requires construction work in progress (“CWIP”) in rate base with an allowance for  
5 funds used during construction (“AFUDC”) offset to earnings. This equity ratio is  
6 only one basis point above the 55.69 percent equity ratio the Commission  
7 approved in the settlement of our 2021 Electric Phase I.

8 **Q. WHAT WAS THE ACTUAL CAPITAL STRUCTURE OF PUBLIC SERVICE AS**  
9 **OF JUNE 30, 2022?**

10 A. The actual 13-month average capital structure of Public Service as of June 30,  
11 2022 was 55.66 percent equity, 43.90 percent long-term debt, and 0.44 percent  
12 short-term debt. Again, this equity ratio is within four basis points of the Company’s  
13 requested equity ratio for the Test Year. The Company’s actual capital structure  
14 for this period, along with the associated cost of debt and proposed WACC, are  
15 shown on Attachment PAJ-1 to my Direct Testimony and are included in the  
16 Company’s 2022 IHTY supplied by Company witness Mr. Freitas.

17 **Q. HAVE YOU ASSESSED HOW THE COMPANY’S PROPOSED TEST YEAR**  
18 **EQUITY RATIO FITS WITH THE FINANCIAL METRICS PUBLIC SERVICE**  
19 **MUST MAINTAIN IN ORDER TO MAINTAIN ITS CURRENT CREDIT RATINGS?**

20 A. Yes. The Company’s proposed 55.70 percent regulated equity ratio in combination  
21 with the proposed 10.25 percent ROE for the Test Year will continue to support the  
22 current A3 rating from Moody’s and A- ratings from S&P and Fitch, assuming base  
23 rate recovery is roughly in line with historical outcomes.

1 **Q. ARE THERE MULTIPLE WAYS TO MANAGE THE COST OF CAPITAL WHILE**  
2 **PROTECTING PUBLIC SERVICE'S FINANCIAL INTEGRITY?**

3 A. Yes. When seeking to manage the relationship between cash flow and debt (the  
4 key quantitative items used by the rating agencies for credit evaluation), there are  
5 several levers that can be employed to reach the desired outcome. Levers include  
6 the equity ratio, the authorized ROE, and depreciation lives and amortization rates.  
7 Additionally, mechanisms to reduce regulatory lag, such as use of a forecasted  
8 test year, year-end rate base and the use of riders, can positively impact the  
9 Company cash flow and credit metrics. The efficiency of each of these levers can  
10 be measured by their impact to key credit metrics relative to their impact to revenue  
11 requirements.

12 **Q. WHICH LEVER IS THE MOST COST-EFFICIENT WAY TO SUSTAIN THE**  
13 **COMPANY'S FINANCIAL HEALTH AND PRESERVE ITS CREDIT RATINGS?**

14 A. Managing key credit metrics through the authorized equity ratio is an efficient lever,  
15 having lower than a one-for-one impact to revenue requirements. This is because  
16 changing the equity ratio has a favorable impact to both the cash flow and debt  
17 sides of the credit metric equation and it does so while displacing debt interest  
18 expense. Increasing depreciation rates or increasing the authorized ROE would  
19 generate increased cash flow and improve cash flow metrics. Both mechanisms,  
20 however, would increase the revenue requirement to at least a one-for-one basis.

21 Increasing the equity ratio would also produce net income that needs to be  
22 grossed up for taxes, but that mechanism has the offsetting benefit of reducing the  
23 debt ratio. The debt ratio is used either in the numerator or denominator of many



1 of the credit metrics used by the rating agencies, so changing the debt ratio is a  
2 much more powerful lever for improving the financial ratios than the other  
3 mechanisms. Mitigating the credit impacts solely through higher depreciation  
4 expense or higher ROE would be more costly to the revenue requirement than  
5 mitigating through a higher equity ratio.

6 **Q. CAN YOU SUMMARIZE THE REASONS MANAGING KEY CREDIT METRICS**  
7 **THROUGH THE AUTHORIZED EQUITY RATIO IS MOST COST-EFFICIENT?**

8 A. Managing key credit metrics through the authorized equity ratio is cost-efficient for  
9 the following reasons:

- 10 • A strong equity ratio is efficient for customers as it displaces debt and lowers  
11 interest expense.
- 12 • Xcel Energy would retain more equity in Public Service, which would reduce  
13 the amount of new debt issuance at Public Service to bring the capital  
14 structure in line with the regulatory authorization.
- 15 • A strong equity ratio positively affects the numerator and the denominator  
16 of nearly all key credit metrics used by credit rating agencies.
- 17 • In contrast, using the ROE lever not only increases the net income, but also  
18 the grossed-up income tax amount required with that return, and therefore,  
19 the overall costs for customers.

20 For every 100-basis point reduction to the equity ratio, Public Service's  
21 weighted average ROE would need to be increased by approximately 55 basis  
22 points in order to maintain current credit metrics, all else equal.

23 In addition, the higher authorized equity ratio is needed to offset some of  
24 the negative impact from power purchase agreements (PPAs) and other off-  
25 balance sheet debt imputation by the rating agencies, which can add hundreds of  
26 millions of dollars to the debt portion of the capital structure.

1 **Q. IS PUBLIC SERVICE PROPOSING A CAPITAL STRUCTURE IN THIS CASE**  
2 **THAT IS WITHIN A REASONABLE RANGE COMPARED TO OTHER**  
3 **UTILITIES?**

4 A. Yes. Company witness Ms. Bulkley demonstrates that Public Service's capital  
5 structure is within the range of her proxy group's capital structures and discusses  
6 the specific risks specific to Public Service, illustrating the Company's proposed  
7 capital structure is reasonable.

8 Further, although Public Service's equity may appear higher than some  
9 other utilities' equity ratios without context, our recommendations in this case are  
10 specific to Public Service and take into consideration all factors that affect the  
11 Company's cash flow and credit rating, and ultimately the cost of capital for  
12 customers. While Public Service has been authorized an equity ratio  
13 approximately 200 basis points higher than NSP-Minnesota and NSP-Wisconsin,  
14 its key credit metrics are approximately 200-300 basis points worse.

15 **Q. WHAT IS PUBLIC SERVICE'S CONCLUSION WITH RESPECT TO THE**  
16 **POTENTIAL FOR A LOWER EQUITY RATIO IF CURRENT CREDIT METRICS**  
17 **AND RATINGS CAN BE MAINTAINED?**

18 A. There are various alternative regulatory approaches that would maintain the  
19 current level of credit metrics and ratings while lowering the authorized equity ratio.  
20 However, the Company encourages the Commission to avoid conceptions that  
21 reducing the equity ratio is, by itself, in customers' best interests. There are many  
22 different ways of ensuring financial integrity, strong credit metrics and credit  
23 ratings, to help ensure an efficient cost of capital and access to capital markets at

1 favorable terms. The Company's recommendations in this proceeding were, and  
2 remain, designed to maintain the Company's financial integrity while also  
3 supporting a reasonable cost of capital for customers.

1                   **III.    COST OF LONG- AND SHORT-TERM DEBT**

2   **Q.    HOW DOES THE COST OF DEBT FACTOR INTO THE COMPANY'S OVERALL**  
3   **RECOMMENDED COST OF CAPITAL?**

4   A.    As described above, the Company must utilize debt to fund investments on behalf  
5   of customers and seeks to do so at reasonable costs of debt. In this section of my  
6   Direct Testimony, I identify the reasonable costs of debt the Company anticipates  
7   for the Test Year.

8   **Q.    WHAT EMBEDDED COST OF LONG-TERM DEBT IS PUBLIC SERVICE**  
9   **ASKING THE COMMISSION TO APPROVE?**

10   A.    The Company is recommending the Commission approve a 3.94 percent  
11   embedded cost of long-term debt, which is the Company's 13-month average  
12   forecasted cost of long-term debt as of December 31, 2023. The detailed  
13   calculation is shown on Attachment PAJ-6 to my Direct Testimony. The cost of  
14   long-term debt is based on a yield-to-maturity calculation where the debt expenses  
15   include interest as well as fees associated with issuing the bond, such as costs for  
16   legal, underwriting, and rating agency fees (these fees are unavoidable for public  
17   debt issuances).

18   **Q.    WHAT EMBEDDED COST OF SHORT-TERM DEBT IS PUBLIC SERVICE**  
19   **ASKING THE COMMISSION TO APPROVE?**

20   A.    The Company is recommending the Commission approve a 3.81 percent  
21   embedded cost of short-term debt, which is the Company's 12-month average  
22   forecasted cost of short-term debt as of December 31, 2023. The cost of short-  
23   term debt is based on forecasted short-term debt interest rates as well as actual

1 short-term debt costs, including interest on commercial paper as well as fees  
2 associated with maintaining the Company's credit facility.

3 **Q. HOW DO THE COMPANY'S CURRENT COSTS OF LONG-TERM AND SHORT-**  
4 **TERM DEBT COMPARE TO THE COSTS OF DEBT IN RECENT PRIOR YEARS,**  
5 **INCLUDING THE IHTY?**

6 A. Current interest rates have risen significantly in recent years, driving up the  
7 Company's overall cost of debt. Because the Company's cost of long-term debt is  
8 based on the combination of the Company's debt issuances over time, these  
9 interest rate increases most impact recent issuances and have a somewhat lesser  
10 impact on the overall cost of long-term debt. However, these ongoing market  
11 changes underscore that the Company's cost of debt is likely to be higher in the  
12 test year and the future than it has been in recent years and recent Public Service  
13 rate cases.<sup>19</sup>

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<sup>19</sup> This is a further reason the IHTY cost of debt, as opposed to the test year amounts, is not likely to be sufficiently representative of conditions during the period rates will be in effect.

1 **IV. CONCLUSION**

2 **Q. IN LIGHT OF THESE ANALYSES, WHAT IS PUBLIC SERVICE'S PROPOSED**  
3 **CAPITAL STRUCTURE AND OVERALL COST OF CAPITAL?**

4 A. To maintain the Company's financial integrity and remain within credit rating  
5 agency guidelines for an A3/A- rated Company, Public Service proposes its 13-  
6 month average capital structure and costs of debt for the Test Year ending  
7 December 31, 2023, as shown in Table PAJ-D-3 below. The ROE is set at 10.25  
8 percent, as supported by Ms. Bulkley in her Direct Testimony.

9 **TABLE PAJ-D-3: Public Service's Proposed WACC**

		<b>December 31, 2023</b>	
	<b>Ratio</b>	<b>Rate</b>	<b>Wtd Cost</b>
Long-Term Debt	42.37%	3.94%	1.67%
Short-Term Debt	1.93%	3.81%	0.07%
Equity	55.70%	10.25%	5.71%
<b>Total Cost</b>			<b>7.45%</b>

10 Detailed supporting schedules for the calculation of long-term and short-term debt  
11 are included in Attachment PAJ-6.

12 **Q. WHY DOES PUBLIC SERVICE SUPPORT A CAPITAL STRUCTURE**  
13 **COMPOSED OF 55.70 PERCENT EQUITY, 42.37 PERCENT LONG-TERM**  
14 **DEBT, AND 1.93 PERCENT SHORT-TERM DEBT?**

15 A. As discussed throughout my Direct Testimony, Public Service proposes this capital  
16 structure because it:

- 1           • Reflects the Company's 13-month average forecasted regulated equity ratio  
2           as of December 31, 2023;<sup>20</sup>
- 3           • Supports Public Service's financial integrity, which will allow continued long-  
4           term debt financing at reasonable rates and ultimately lower the cost of  
5           service to its customers through lower interest expense;
- 6           • If approved, would signal continued regulatory environment stability and a  
7           balanced outcome; and
- 8           • Is consistent with rating agency expectations of a credit-supportive  
9           environment and sufficient capital to maintain the utility's capital structure.

10 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

11 **A.** Yes, it does.

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<sup>20</sup> Attachment PAJ-6 at 1.

**Statement of Qualifications**

**Paul A. Johnson**

I received my Bachelor of Science in Business from Winona State University and my MBA from the University of St. Thomas. I am a CFA charter holder and passed the CPA and CMA exams.

I currently serve as the Vice President of Investor Relations and Treasurer and have held this position since July 2021. Prior to this role, I served in the following roles during my tenure at Xcel Energy: Vice President, Investor Relations (2013-2021); Vice President, Investor Relations and Business Development (2012-2013); Vice President, Investor Relations and Financial Management (2011-2012); Managing Director of Investor Relations and Assistant Treasurer (2008-2011); Managing Director of Investor Relations (2007-2008); Director of Investor Relations (2001-2006); Director of External Reporting (1998-2001); Controller and Assistant Treasurer for Energy Masters (1995-1998); and Administrator in Internal Reporting (1992-1995).



BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO


\* \* \* \*

IN THE MATTER OF ADVICE LETTER )  
NO. 1906-ELECTRIC OF PUBLIC )  
SERVICE COMPANY OF COLORADO )  
TO REVISE ITS COLORADO PUC NO. )  
8-ELECTRIC TARIFF TO REVISE )  
JURISDICTIONAL BASE RATE ) PROCEEDING NO. 22AL-XXXXE  
REVENUES, IMPLEMENT NEW BASE )  
RATES FOR ALL ELECTRIC RATE )  
SCHEDULES, AND MAKE OTHER )  
TARIFF PROPOSALS EFFECTIVE )  
DECEMBER 31, 2022. )

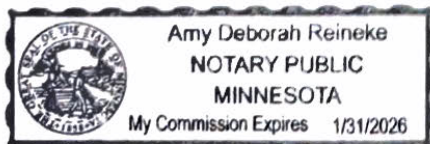
AFFIDAVIT OF PAUL A. JOHNSON  
ON BEHALF OF  
PUBLIC SERVICE COMPANY OF COLORADO

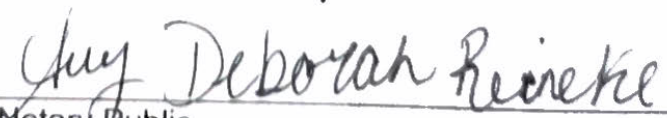
I, Paul A. Johnson, being duly sworn, state that the Direct Testimony and attachments were prepared by me or under my supervision, control, and direction; that the Direct Testimony and attachments are true and correct to the best of my information, knowledge and belief; and that I would give the same testimony orally and would present the same attachments if asked under oath.

Dated at Minneapolis, Minnesota, this 29<sup>th</sup> day of November, 2022.

  
\_\_\_\_\_  
Paul A. Johnson  
Vice President, Treasurer and Investor Relations

Subscribed and sworn to before me this 29<sup>th</sup> day of November 2022.



  
\_\_\_\_\_  
Notary Public  
My Commission expires 01/31/2026