

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

* * * * *

IN THE MATTER OF ADVICE LETTER)
NO. 1857-ELECTRIC OF PUBLIC)
SERVICE COMPANY OF COLORADO)
TO REVISE ITS COLORADO PUC NO.)
8-ELECTRIC TARIFF TO REVISE)
JURISDICTIONAL BASE RATE) PROCEEDING NO. 21AL-____E
REVENUES, IMPLEMENT NEW BASE)
RATES FOR ALL ELECTRIC RATE)
SCHEDULES, AND MAKE OTHER)
PROPOSED TARIFF CHANGES)
EFFECTIVE AUGUST 2, 2021)

DIRECT TESTIMONY AND ATTACHMENTS OF PAUL A. JOHNSON

ON

BEHALF OF

PUBLIC SERVICE COMPANY OF COLORADO

July 2, 2021

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Attachment PAJ-1	Credit Ratings Descriptions
Attachment PAJ-2	Moody's Investor's Service: <i>Rating Methodology: Regulated Electric and Gas Utilities</i>
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Attachment PAJ-5	Public Service's Recommended Capital Structure and Cost of Capital at December 31, 2022 (FTY)
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GLOSSARY OF ACRONYMS AND DEFINED TERMS

<u>Acronym/Defined Term</u>	<u>Meaning</u>
2019 Electric Phase I	Proceeding No. 19AL-0268E
AFUDC	Allowance for Funds Used During Construction
BPS	Basis Points
CCR	Corporate Credit Rating
CFO	Cash Flow from Operations
Commission	Colorado Public Utilities Commission
CWIP	Construction Work in Progress
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization
ERP	Electric Resource Plan
FFO	Funds from Operations
Fitch	Fitch Ratings
FTY	Future Test Year
HTY	Historical Test Year
LIBOR	London Inter-Bank Offered Rate
Moody's	Moody's Investors Service
PPA	Power Purchase Agreement
Public Service or the Company	Public Service Company of Colorado
ROE	Return on Equity
S&P	Standard & Poor's
Test Year	12/31/22 Future Test Year

<u>Acronym/Defined Term</u>	<u>Meaning</u>
WACC	Weighted Average Cost of Capital
Xcel Energy	Xcel Energy Inc.
XES	Xcel Energy Services Inc.

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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 of Investor
8 Relations and I will become Treasurer effective July 2, 2021. XES, which is a
9 wholly-owned subsidiary of Xcel Energy Inc. (“Xcel Energy”), provides an array of
10 support services to Public Service Company of Colorado (“Public Service” or the
11 “Company”) and the other utility operating company subsidiaries of Xcel Energy
12 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 Treasurer¹, 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 adequate and appropriate
12 access to information to ensure that they are well positioned to make financial or
13 investment decisions. I also am responsible for working with the various credit
14 rating agencies and providing timely updates as required. A description of my
15 qualifications, duties, and responsibilities is set forth after the conclusion of my
16 testimony in my Statement of Qualifications.

17 **Q. WHAT RECOMMENDATIONS ARE YOU MAKING IN YOUR DIRECT**
18 **TESTIMONY?**

19 A. I recommend that the Colorado Public Utilities Commission (“Commission”)
20 approve Public Service’s forecasted Weighted Average Cost of Capital (“WACC”)
21 for the test year ending December 31, 2022 (“Future Test Year” or “FTY”), as

¹ Effective July 2, 2021, I will be Treasurer.

1 shown in Table PAJ-D-1, below. The requested Return on Equity (“ROE”) of 10.00
2 percent is further supported by Company witnesses Ms. Ann E. Bulkley and Ms.
3 Brooke A. Trammell their Direct Testimonies.

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

		As of December 31, 2022²	
	Ratio	Rate	Wtd Cost
Long-Term Debt	43.07%	3.72%	1.60%
Short-Term Debt	1.29%	0.77%	0.01%
Equity	55.64%	10.00%	5.56%
Total Cost			7.17%

5 The 13-month average equity ratio included in the requested WACC is
6 consistent with the equity ratio authorized by the Commission in the Company’s
7 most recent electric rate case, its 2019 Electric Phase I rate case (Proceeding No.
8 19AL-0268E) (“2019 Electric Phase I”).³ The equity ratio authorized in the 2019
9 Electric Phase I is within three basis points of what the Company is requesting in
10 this proceeding (i.e., 55.64 percent as requested as compared to the currently
11 authorized equity ratio of 55.61 percent). As the Commission concluded in the
12 2019 Electric Phase I, this capital structure “should be adopted because it is
13 balanced, attainable, and intended to support an investment grade rating and
14 attract capital.”⁴ Additionally, the 55.64 percent equity ratio requested in this

² 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 FTY ending December 31, 2022.

³ Proceeding No. 19AL-0268E, Decision No. C20-0096 (mailed date Feb. 11, 2020), Ordering Paragraph 118.

⁴ *Id.*

1 proceeding is the Company's forecasted actual equity ratio as of the FTY. It is
2 based on a tested, data-driven and market-based approach and reflects the capital
3 structure that the Company will actually manage to in order to continue to provide
4 long-term benefits to Colorado customers in the form of safe, reliable and
5 affordable electric service over time. Historically, the Company has managed its
6 actual capital structure to be largely consistent with what is authorized.

7 The 13-month average cost of debt included in the requested WACC
8 appropriately aligns with the composition of the capital structure by using the 13-
9 month average costs of long-term and short-term debt as of December 31, 2022.

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

14 **Q. WHAT TOPICS DO YOU DISCUSS IN SUPPORT OF THOSE**
15 **RECOMMENDATIONS?**

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

- 18 1. Discuss the importance of financial integrity to Public Service, its
19 customers and its other stakeholders, and the need for Public Service
20 to maintain stable financial health in order to attract and raise capital in
21 varied economic conditions and at reasonable costs;
- 22 2. Discuss the criteria that the credit rating agencies use to measure
23 financial integrity;
- 24 3. Provide a current assessment of Public Service's financial integrity and
25 describe the impact that regulatory decisions, changes in cash flow, and

- 1 the timely recovery of prudent utility costs have on Public Service's
2 financial integrity;
- 3 4. Present and support, for informational purposes only, the 13-month
4 average capital structure, 13-month average cost of long-term debt, and
5 13-month average cost of short-term debt for the Electric Department for
6 the period ending December 31, 2020. All of these averages are based
7 on actuals;
- 8 5. Present and support the use of a 13-month average capital structure, a
9 13-month average cost of long-term debt, and 13-month average cost
10 of short-term debt for the Electric Department for FTY ending December
11 31, 2022;
- 12 6. Present and support, for informational purposes only, the 7.60 percent
13 WACC for the Electric Department Company witness Ms. Deborah A.
14 Blair uses in the 2020 historical test year ("HTY") for the period ending
15 December 31, 2020; and
- 16 7. Present and support the recommended 7.17 percent WACC for the
17 Electric Department for the FTY ending December 31, 2022.

18 **Q. ARE YOU SPONSORING ANY ATTACHMENTS AS PART OF YOUR DIRECT**
19 **TESTIMONY?**

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

- 21 • Attachment PAJ-1, which is a description of the major credit rating
22 agencies' credit ratings;
- 23 • Attachment PAJ-2, which is a Moody's Investors Service ("Moody's")
24 publication entitled *Rating Methodology: Regulated Electric and Gas*
25 *Utilities*;
- 26 • Attachment PAJ-3, which is a Standard & Poor's ("S&P's") publication
27 entitled *Key Credit Factors for the Regulated Utilities Industry*;
- 28 • Attachment PAJ-4, which is an S&P publication entitled *Corporate*
29 *Methodology: Ratios and Adjustments*;
- 30 • Attachment PAJ-5, which presents Public Service's recommended
31 capital structure and cost of capital as of the FTY ending December 31,
32 2022, and the resulting WACC; and

1
2
3

- Attachment PAJ-6, which presents Public Service's capital structure and cost of capital as of December 31, 2020, and the resulting WACC. This capital structure is for informational purposes only.

1 Winter Storm Uri, and economic downturns and situations when the capital
2 markets are under financial distress.

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

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

11 It is important to note that the question of a utility's financial integrity is not
12 necessarily binary (i.e., does a utility have financial integrity or not?); rather, the
13 degree of financial integrity and therefore the cost of capital available to a utility
14 lies on a spectrum. Weaker financial integrity at a utility increases the issued cost
15 of debt and the implied cost of equity, which increases the overall WACC and the
16 ultimate financing costs that are paid by customers. Stronger financial integrity
17 produces the opposite effects, which in turn benefits customers.

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

19 A. This case is particularly important, as Public Service is making significant
20 investments to aggressively pursue important policy goals around reduced carbon
21 emissions, such as increasing the portion of generation derived from renewable
22 resources and beneficial electrification. The Company must raise significant
23 outside capital to finance the investments in these customer-benefitting clean-

1 energy initiatives. Consequently, it is important for the Company's capital structure
2 and overall financial integrity to illustrate to credit rating agencies and investors
3 that Public Service represents a high-quality investment. To these ends, the
4 Commission's approval of Public Service's requested 7.17 percent WACC and
5 requested equity ratio would support Public Service's current investment grade
6 credit ratings and demonstrate ratemaking consistency and predictability.

7 **B. Factors Impacting Financial Integrity**

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

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

15 **Q. HOW DO REGULATORY OUTCOMES IMPACT FINANCIAL INTEGRITY AND**
16 **INFLUENCE INVESTOR DECISIONS?**

17 A. Regulatory outcomes affect both a utility's financial integrity and investor decisions
18 in multiple ways. A commission's decisions about the costs a utility may recover
19 and the timing in which they are able to recover, its revenues, and the components
20 of its WACC affect the utility's cash flows and debt levels, which in turn affect both
21 the utility's financial health and the metrics against which rating agencies
22 specifically measure a utility's financial integrity and establish its credit ratings. In
23 turn, these credit ratings – combined with the returns on equity investments

1 authorized by a commission's decisions – affect investors' willingness to provide
2 capital to the utility ultimately used to support its business and provide service to
3 customers. Additionally, rating agencies' stated perceptions of a commission's
4 decisions further impact investors' willingness to invest in a utility.

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

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

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

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

1 when it comes due.

2 Credit ratings project a longer-term view of a company's financial health
3 than other common financial indicators such as the latest quarterly financial
4 results, earnings-per-share, rate of return for a particular reporting period, or the
5 market prices of a company's securities at any given time. Ratings are also an
6 independent opinion offered by firms that have no direct financial stake in the
7 outcome of their analyses. The long-term and independent nature of credit ratings
8 make them an ideal benchmark to help utility regulators navigate through the many
9 decisions they must make in the course of reaching balanced and constructive
10 outcomes.

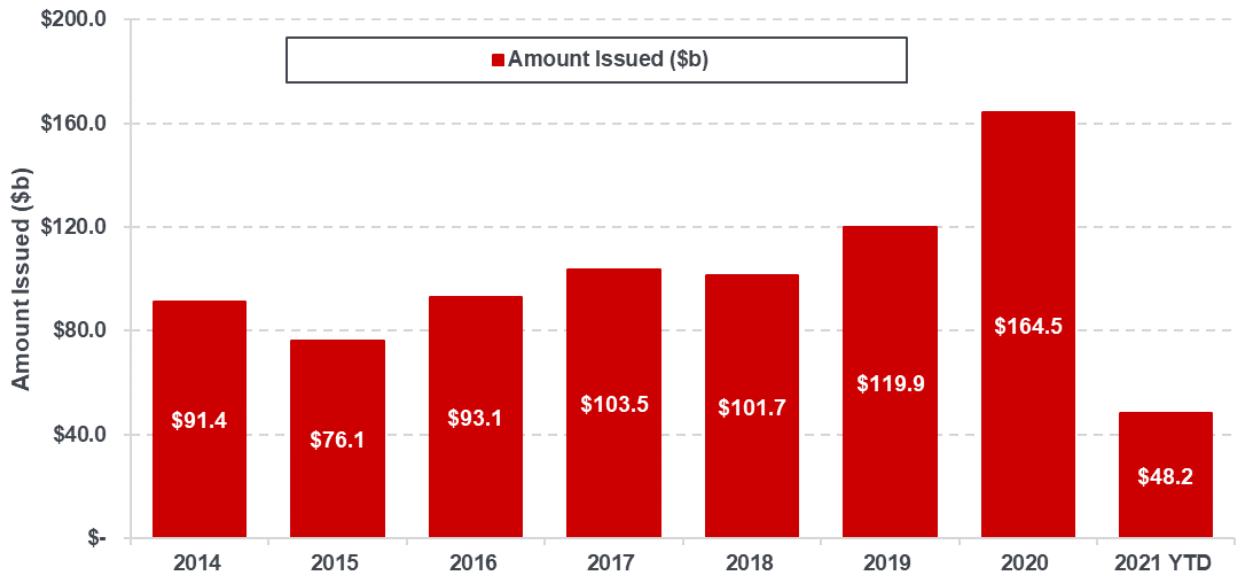
11 **Q. HOW DOES THIS RELATE TO THE UTILITY SECTOR?**

12 A. Utilities must not only compete for capital with other utilities, but also with non-
13 utility companies. Additionally, utilities tend to require significant amounts of
14 capital to fund capital infrastructure investments that are critical to providing safe
15 and reliable electric service to customers.

16 During the period 2014 to April 2021, debt investors have provided
17 approximately \$798 billion of capital investment to the U.S. utility sector. See Chart
18 PAJ-D-1 below.

1
2

**CHART PAJ-D-1:
2014 – 2021 YTD Debt Amount Issued to the U.S. Utility Sector**



3 In order to attract capital at favorable rates in such a competitive environment,
4 protecting the Company's credit ratings is critical.

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

7 A. The need for access to capital becomes even more relevant in a volatile market
8 environment, as recently evidenced during the COVID-19 pandemic and its impact
9 on capital markets, as discussed later in this testimony. Utilities with higher credit
10 ratings are associated with reduced risk, which generally attracts investors at a
11 lower cost of debt (i.e., lower average credit spreads) and favorably positions a
12 utility relative to lower-rated comparable companies. The stronger Public Service's
13 credit ratings, the larger the pool of investors willing to consider investing in Public
14 Service's debt and a larger pool of investors leads to increased investor demand

1 during a bond issuance. More demand can place added pressure on investors to
2 accept a lower interest rate, which can ultimately lead to a lower overall cost of
3 long-term debt paid by Public Service's customers. Investment-grade credit
4 ratings are crucial because the cost of debt increases very rapidly – and the
5 number of potential investors decreases substantially – for those companies rated
6 near the bottom of or below investment grade.

7 Further, credit ratings take on greater importance when economic
8 conditions worsen and credit becomes more difficult to obtain. As credit availability
9 tightens, investors become increasingly more selective regarding which
10 companies qualify for their investment dollars. Therefore, lower credit ratings
11 reduce or eliminate access to capital markets and increase the expense of
12 obtaining capital.

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

15 A. Long-term debt is priced based on the underlying Treasury rate plus a credit
16 spread, which is primarily based on Public Service's credit rating and investors
17 perception of the Company, including its regulatory environment. In general, the
18 lower the credit rating, the higher the credit spread. Issuing debt at a higher rate
19 will increase the cost of long-term debt for Public Service, which is ultimately paid
20 by Public Service's customers.

21 Equity investors also look at credit ratings. Because the income available
22 to common equity holders is subordinate to debt obligations, the weakening of a

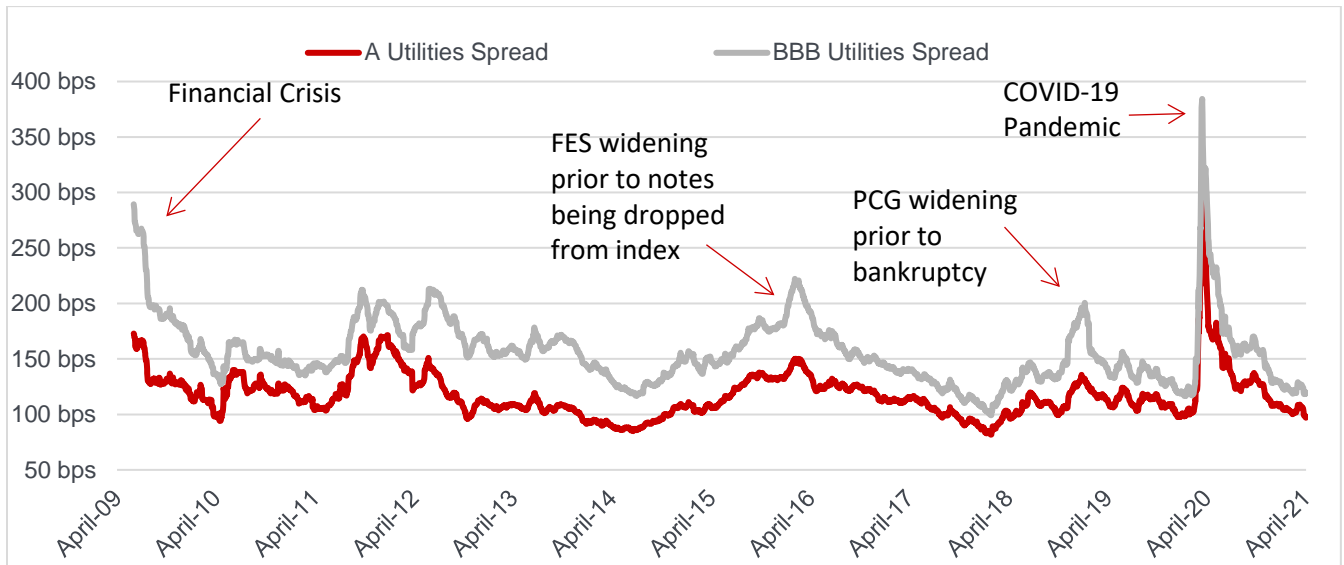
1 company's creditworthiness also increases the cost of equity. Bond and credit
2 ratings are reflective of the types of risks faced by debt holders, and lower credit
3 ratings generally correspond to higher required returns on equity to compensate
4 for higher risk.

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-2 below shows that in general, the credit spreads of
8 BBB rated utility companies are historically wider than those of A rated utility
9 companies, especially in times of market volatility.

10

CHART PAJ-D-2: A vs. BBB Rated Utility Spreads



Source: Bloomberg

11 This chart demonstrates that as of April 2021, the credit spread between A and
12 BBB ratings is approximately 21 basis points; however, in periods of severe market
13 volatility, such as June 2009, the credit spread increased dramatically, at an
14 average spread of approximately 100 basis points. More recently, in April 2020,

1 the credit spread increased at an average spread of approximately 75 basis points
2 due to the COVID-19 pandemic. Under such conditions, a BBB rated utility would
3 pay an additional \$750,000 of interest annually above what an A rated utility would
4 pay for every \$100 million issued in debt. For a 30-year bond, this equates to an
5 additional \$22.5 million of interest over the life of a \$100 million bond.

6 In contrast, a utility in the A range (like Public Service) will incur a lower cost
7 of debt, and therefore save customers money because of the utility's higher
8 financial integrity. From 2011 – 2021, Public Service has issued debt financing in
9 each year, totaling approximately \$550 million annually on average.⁵ If Public
10 Service had issued all of the currently outstanding debt at an additional spread of
11 75 basis points, its resulting weighted average cost of capital would have been
12 approximately 30 basis points higher.⁶

13 In sum, Public Service strives to maintain its current A- credit rating because
14 higher credit ratings result in better access to capital in all market conditions and
15 at lower costs of debt, a point made even more true in times of extreme market
16 volatility. Public Service appreciates the Commission's support in enabling the
17 Company to maintain quality credit ratings and, in turn, to manage the cost of debt
18 and its impact to our customers.

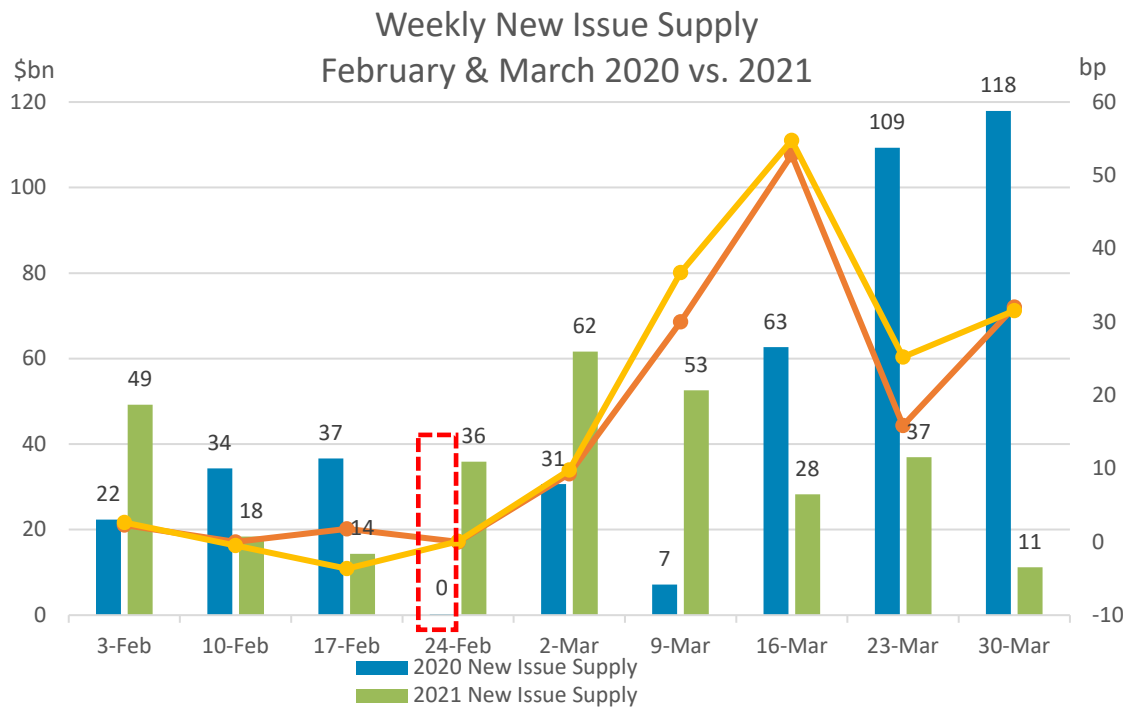
⁵ Public Service issued \$6 billion of long-term debt during the period 2011 – 2021.

⁶ Using Public Service's actual capital structure as of December 31, 2020.

1 **Q. CAN YOU GIVE OTHER EXAMPLES OF THE IMPORTANCE OF STRONG**
 2 **CREDIT METRICS TO PROTECT CUSTOMERS AGAINST PERIODS OF**
 3 **VOLATILITY AND PRESERVE ACCESS TO FINANCIAL MARKETS?**

4 A. Yes. By way of further example, the COVID-19 pandemic introduced volatility into
 5 the market and made it challenging for companies to access capital, regardless of
 6 credit rating. Due to this market volatility, the investment grade markets were
 7 inaccessible the week of February 24, 2020, with no issuances coming to market
 8 as shown in Chart PAJ-D-3 below.

9 **CHART PAJ-D-3: Weekly New Issue Supply February & March 2020 vs. 2021**



10 During this time, investment grade issuers were not willing to issue given market
 11 volatility and pricing risk. The following week, while some issuers were able to
 12 access the markets and issue \$31 billion of debt, the cost to issue that debt was

1 elevated. Issuers with a BBB credit rating paid on average a spread of
2 approximately 25 basis points above what issuers with an A credit rating paid
3 during this week. This illustrates the importance of maintaining financial integrity
4 in order to manage through all market conditions, and that companies with higher
5 credit ratings will have more financial flexibility to fund operations at lower costs.

6 While the world may have moved past the COVID-19 pandemic's initial
7 liquidity crisis, this event is crucial for the Commission to consider because it
8 illustrated how Public Service's financial integrity and strong credit metrics
9 positioned the Company to deliver on its capital investments even in a time of
10 unexpected macroeconomic crises disrupting the financial markets. Additionally,
11 during such unexpected macroeconomic events, there typically is not meaningful
12 time for the Company and the Commission to discuss how to best adjust the
13 Company's capital structure, as needed, to protect it and the customers in which it
14 serves. As such, the Commission and the Company should continue to seek
15 balanced and constructive outcomes that will continue to adequately insulate
16 Public Service from these risks so that the utility can continue to serve its
17 customers in a reliable, safe, and affordable manner no matter economic
18 conditions.

19 **C. Rating Agency Methodologies**

20 **Q. CAN YOU EXPLAIN CREDIT RATINGS IN MORE DETAIL?**

21 A. Yes. A credit rating measures credit risk, which is the ability and willingness of an
22 issuer to fulfill its financial obligations in full and on time. A portion of the analysis

1 that goes into the credit rating includes a forward-looking forecast of operating
2 income, internally generated cash flows, and debt burden.

3 Credit rating agencies publish credit analyses of the issuers and issuances
4 to explain the ratings to the investment community. Ratings are expressed in a
5 series of letters, numbers, and/or symbols to summarize the relative
6 creditworthiness of the entity or issue. The ratings scales of the major rating
7 agencies appear in Attachment PAJ-1.

8 **Q. HOW IS A CREDIT RATING ESTABLISHED?**

9 A. The analysis centers on two main areas of analysis: qualitative analysis and
10 quantitative analysis. The qualitative side is the assessment of business risk,
11 which is built up from the broad macro-environment risks at the country and
12 industry level. For a utility, regulatory risk is the most significant overall business
13 risk, as I describe below. The issuer's more specific risk within its business and
14 economic environment is then determined. The quantitative side of the analysis
15 examines financial ratios to analyze the financial risk of the issuer.

16 Business risk and financial risk can be viewed as complementary sides of
17 the total risk of an entity, so that more of one risk must be offset by less of the other
18 risk to arrive at a specific rating. Because utilities are subject to regulation,
19 qualitative analysis—specifically, regulatory risk—is a key consideration in ratings
20 outcomes.⁷

⁷ Attachment PAJ-2 at 3; Attachment PAJ-3 at 6.

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

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

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

12 A. No. Rating agencies also place high value on transparency, predictability, and
13 consistency in regulation.⁹ Rating agencies rate many types and tenors of fixed
14 income securities, but they regard debtholders who extend credit over long periods
15 as their primary audience and strive to rate long-term debt as accurately as
16 possible over the longest timeframe as possible. Utilities ultimately fund capital
17 expenditures primarily with long-dated maturities to match the long-lived assets
18 they are supporting, and utility investors value ratings that are stable. Regulatory
19 frameworks and practices that allow rating agencies to confidently project future
20 cash flows and debt leverage will naturally be accorded a better business risk

⁸ 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%).

⁹ Attachment PAJ-2 at 10; Attachment PAJ-3 at 6-8.

1 profile. This predictability offers creditors the ability to accurately assess risk over
2 most of the debt's term and improves the ability of the company to manage its
3 business activities and capital program for the long-term benefit of ratepayers.

4 **Q. HAVE CREDIT RATING AGENCIES COMMENTED ON THE IMPORTANCE OF**
5 **THE REGULATORY FRAMEWORK IN EVALUATING A UTILITY'S FINANCIAL**
6 **INTEGRITY?**

7 A. Yes. S&P has noted that the regulatory framework "is of critical importance when
8 assessing regulated utilities' credit risk because it defines the environment in which
9 a utility operates and has a significant bearing on a utility's financial
10 performance."¹⁰ S&P observes further that "we base our assessment of the
11 regulatory framework's relative credit supportiveness on our view of how regulatory
12 stability, efficiency of tariff setting procedures, financial stability, and regulatory
13 independence protect a utility's credit quality and its ability to recover its costs and
14 earn a timely return."¹¹

15 **Q. WHAT FINANCIAL CONSIDERATIONS CONSTITUTE THE QUANTITATIVE**
16 **SIDE OF CREDIT ANALYSIS?**

17 A. Credit analysis is distinguished by its emphasis on cash flow. Recognizing that
18 servicing debt requires not just earnings but actual cash, credit analysts strive to
19 understand the cash-flow dynamics of a company's financial results as much as or
20 more than the earnings. A recent example of this was the effect of tax reform on
21 utilities, which placed downward pressure on utility ratings because of its negative

¹⁰ Attachment PAJ-3 at 6.

¹¹ Attachment PAJ-3 at 6.

1 cash-flow impact despite relatively neutral earnings implications. The primary
2 measure that rating agencies use as a base for most cash-flow metrics is Cash
3 Flow from Operations (“CFO”) or some derivation of it.¹² The other major element
4 of financial risk to a credit analyst is the total amount of debt or debt-like
5 obligations, also referred to as off-balance sheet debt, on the issuer’s balance
6 sheet. Items that the rating agencies regard as debt-like include lease liabilities,
7 long-term power purchase obligations, pension obligations, and asset-retirement
8 obligations.

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

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

¹² 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 company can withstand the financial effect of both macroeconomic and company-
2 specific risks.

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

5 A. The total debt calculated by rating agencies includes amounts for debt and debt-
6 like obligations, including on-balance sheet obligations such as finance and
7 operating leases as well as off-balance sheet obligations. Off-balance sheet
8 obligations are payment obligations (as discussed earlier, these include items such
9 as long-term purchase power agreements, pension obligations, and asset
10 retirement obligations) that do not appear on the balance sheet as debt; however,
11 rating agencies may treat them as debt because the utility has little or no discretion
12 whether to pay for these obligations.¹³

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

15 A. This rate case outcome will affect the ratios I described earlier. The ratios help
16 rating agencies and investors determine whether a company will be able to service
17 its existing debt obligations at the required level and will have the flexibility to take
18 on incremental debt. Including existing off-balance sheet obligations in calculating
19 a company's total debt affects many of the financial metrics the rating agencies
20 rely upon. In general, the higher the proportion of debt in a capital structure, the

¹³ See Attachments PAJ-2, PAJ-3 and PAJ-4 for a discussion of adjustments for off-balance sheet obligations.

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

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

5 A. In order to provide safe, reliable, and clean service, utilities require significant and
6 consistent capital investment. When a utility is unable to recover its costs through
7 rates on a timely basis, the utility's cash flow is reduced compared to the cash it
8 must utilize to service its obligations. To cover the shortfall, the utility is under
9 increased pressure to issue more debt. If debt levels increase too much relative
10 to cash flows from operations, the credit ratings will likewise deteriorate and the
11 utility's access to capital markets can become strained. The alternative would be
12 to reduce levels of investment, which is not supportive of economic growth and
13 may affect the quality of service the utility can provide.

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

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

17 The investment-grade rating categories include the High Grade (Triple-A
18 and Double-A) and the Medium Grade category (Single-A and Triple-B ratings).
19 The ratings are generally further delineated by S&P and Fitch Ratings ("Fitch")
20 through the use of pluses or minuses to show a company's relative standing within
21 the categories.¹⁴ The highest investment-grade rating is AAA; the lowest

¹⁴ Moody's uses numbers to show a company's standing within a category.

1 investment-grade rating is BBB-. Debt rated BB+ or below is considered
2 speculative grade. Attachment PAJ-1 contains a description of the ratings used
3 by the agencies.

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

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

6 A. Public Service currently has a Corporate Credit Rating ("CCR") of A- or its
7 equivalent by all three of the major rating agencies, as reflected in Table PAJ-D-2
8 below.

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

	S&P	Moody's	Fitch
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

10 **Q. HAS THE COMPANY ALWAYS HAD THE SOLID CREDIT RATINGS IT HAS**
11 **TODAY?**

12 A. No. In 2002, Public Service had an unsecured credit rating of BBB- by S&P, which
13 is one notch above non-investment grade or "junk bond" status, in large part
14 because of its low authorized equity ratio and extensive off-balance sheet
15 obligations such as purchased power agreements.

16 It took many years to climb out of this difficult position. With the
17 Commission's support, Public Service began taking steps to avoid a further

1 potential downgrade and obtained Commission approval of a 60 percent regulated
2 equity ratio in Proceeding No. 06S-234EG (combined gas and electric case), as
3 well as a Purchased Capacity Cost Adjustment that further mitigated the imputed
4 debt effects of purchased power agreements. In subsequent years, Public Service
5 was also able to avail itself of similar types of recovery mechanisms, such as the
6 Transmission Cost Adjustment (electric), the Demand-Side Management Cost
7 Adjustment (gas/electric), the Clean Air-Clean Jobs Act Rider (electric), the
8 Pipeline System Integrity Adjustment (gas), and the Renewable Energy Standard
9 Adjustment (electric). In addition, the Commission has also approved recovery of
10 the Company-owned wind projects through the Electric Commodity Adjustment,
11 prior to being included in base rates. With those steps and the advent of more
12 aggressive bonus depreciation, Public Service was able to slowly reduce its
13 requested equity ratios while maintaining its financial integrity and improving its
14 credit ratings.

15 The Company has also received decisions in their recent rate cases that
16 have allowed Public Service to maintain its current credit rating. Most recently, in
17 Decision No. C20-0096, Public Service's 2019 Electric Phase I, the Commission
18 adopted a 13-month average capital structure including short-term debt as of
19 August 31, 2019, which included an equity ratio of 55.61 percent.¹⁵ Likewise, in
20 the Company's 2020 Gas Phase I and II Rate Case, the Commission approved a

¹⁵ Proceeding No. 19AL-0268E, Decision No. C20-0096, Ordering Paragraph 118 (mailed date Feb. 11, 2020).

1 settlement agreement that included an equity ratio of 55.62 percent.¹⁶ Those
2 equity ratios, similar to the ratio being requested in this proceeding, put the
3 Company within S&P and Moody's credit metric guidelines to maintain its current
4 credit ratings.

5 **Q. IS THE COMPANY FACING CIRCUMSTANCES THAT CREATE INCREASED**
6 **RISK GOING FORWARD?**

7 A. Yes. By way of example, the Company is looking at a future with increased power
8 purchase agreements ("PPAs") to facilitate its move to a cleaner energy future;
9 such agreements tend to have negative impacts on a utility's credit metrics.
10 Additionally, the Company's current position depends on the continuation of certain
11 cost recovery mechanisms that are important to its overall credit metrics and cash
12 position.

13 **Q. CAN YOU PLEASE EXPLAIN WHY PURCHASED POWER AGREEMENTS**
14 **CREATE OFF-BALANCE SHEET DEBT AND NEGATIVELY IMPACT THE**
15 **EQUITY RATIO?**

16 A. Yes. S&P views long-term PPAs as fixed, debt-like financial obligations that
17 represent substitutes for debt-financed capital investments in generation capacity.
18 If lease liabilities on a company's balance sheet exclude PPAs because of contract
19 terms, S&P may add to total debt an appropriate percentage (using an analytically
20 determined risk factor) of the present value of the stream of capacity payments

¹⁶ Proceeding No. 20AL-0049G, Decision No. R20-0673, Ordering Paragraph 52 (mailed date Sept. 22, 2020).

1 associated with the PPAs (using a company-specific discount rate).¹⁷ Thus, in
2 more simplistic terms, when the Company enters into additional PPA agreements,
3 the amount of off-balance sheet debt imputed by S&P increases, which lowers the
4 equity component of the capital structure.

5 Further, when credit rating agencies, such as S&P, add these off-balance
6 sheet obligations to total debt, the capital structures that they calculate and arrive
7 at are oftentimes referred to as economic capital structures, as compared to
8 regulatory capital structures (i.e., the capital structures authorized in regulatory
9 proceedings such as this). Economic capital structures are always lower than the
10 capital structures authorized in regulatory proceedings because they include off-
11 balance sheet obligations. It's important to note that economic capital structure
12 are the structures used by credit rating agencies when performing credit analysis
13 and determining the appropriate credit rating for a company.

14 Based on Public Service's actual economic capital structure as of
15 December 31, 2020; each additional \$50 million in off-balance sheet debt imputed
16 results in a reduction to the equity ratio of approximately 18 basis points. As Public
17 Service continues to increase investments in renewable generation through PPAs,
18 these agreements will continue to adversely affect the Company's credit metrics.
19 The Company is not asking for a specific adjustment in this case, but it is important
20 to continue to underscore that a strong equity ratio is critical to support the
21 implementation carbon-reducing initiatives, such as the Clean Energy Plan

¹⁷ Attachment PAJ-4 at 32.

1 through our proposed Electric Resource Plan (“ERP”).

2 **Q. CAN YOU ALSO EXPLAIN THE RISK YOU DESCRIBED IN RELATION TO**
3 **RIDERS?**

4 A. Yes. Additionally, rating agencies attribute less risk to tariff provisions that operate
5 outside the rate case cycle and adjust rates automatically or with some flexibility
6 to match revenues to expenses, thereby minimizing regulatory lag. Fuel clauses
7 and increasingly other varieties of riders are the kinds of rate mechanisms that
8 stabilize earnings and cash flows to the benefit of the business risk profile, which
9 is supportive of higher credit ratings. To that end, Public Service’s current rating
10 is based to some extent on the existence of such recovery mechanisms, such as
11 those mentioned above.

12 If one or more of those mechanisms was removed or limited for either the Gas
13 or Electric business, earnings and cash flow would become less stable and would
14 therefore increase Public Service’s business risk. However, it is important to note
15 that while fuel clauses and other riders typically improve cash flow and credit
16 metrics as compared to recovery thru base rates, this improvement is mitigated if
17 the return is not consistent with prevailing authorized WACCs.

18 **Q. HOW HAS PUBLIC SERVICE’S IMPROVED FINANCIAL STRENGTH**
19 **IMPACTED CUSTOMERS TO DATE?**

20 A. The Company’s improved financial integrity exhibited in recent capital structure
21 outcomes has resulted in a lower overall cost of debt, which is directly passed on
22 to customers. Public Service improved from its unsecured rating from S&P of BBB-

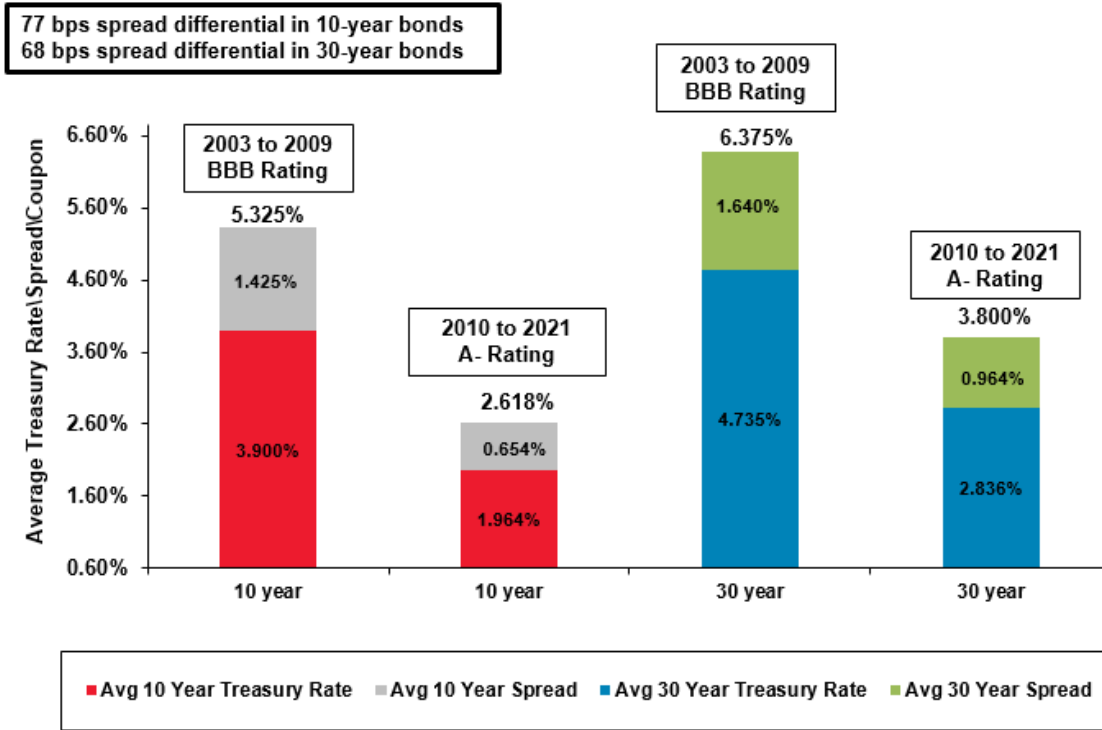
1 in 2002 to BBB in 2007, and to BBB+ in 2008. From 2003 through 2009, Public
2 Service issued seven bond offerings in which the average 10- and 30-year bond
3 coupons were 5.325 percent and 6.375 percent, respectively. Between 2010 and
4 2021, Public Service had an A- unsecured rating and issued seventeen bonds with
5 average coupon rates of approximately 2.618 percent for a 10-year bond and
6 approximately 3.800 percent for a 30-year bond. Although market conditions have
7 changed over this period with declining U.S. Treasury yields, the differentials in
8 Public Service's average credit spreads were approximately 77 basis points on the
9 10-year bonds and 68 basis points on the 30-year bonds. Chart PAJ-D-4 illustrates
10 this below. The average 30-year coupon rate declined from 6.375 percent in 2009
11 to 3.800 percent¹⁸ in 2021, reflecting not only a change in market conditions but
12 also the improvement in Public Service's financial health and credit rating. In other
13 words, the costs of capital to the Company and ultimately its customers were
14 substantially reduced over time as its credit rating improved.

¹⁸ The 3.800 percent average coupon rate is based on the average of all coupon rates for bonds issued during the period 2010-2021. This is not reflective of additional bond issuance expenses as noted in the actual requested cost of debt.

1

CHART PAJ-D-4

PSCo: Historical S&P Credit Ratings and Average Bond Issuance Spreads



2 In turn, over the last five years (2016 – 2020), the Company has invested
 3 approximately \$7.5 billion in electric, gas, and steam utility infrastructure. Those
 4 investments have continued to build the operational strength and reliability of the
 5 Company’s systems, all to better serve our customers.

6 **Q. HOW ELSE DO CUSTOMERS BENEFIT FROM A STRONG CREDIT RATING?**

7 A. Strong credit ratings benefit customers in the form of access to a reasonable cost
 8 of capital. Conversely, a downgrade to a lower credit rating could affect Public
 9 Service’s cost of supporting daily business. Supporting Public Service’s
 10 operations requires access to funding, which can come from different sources such
 11 as commercial paper, a credit facility, and letters of credit. The cost of each of

1 these types of funding varies and is dependent on the credit rating of the borrower.
2 If Public Service were downgraded such that it lost its A2/P2/F2 commercial paper
3 rating, Public Service would need to borrow directly from its \$700 million credit
4 facility and pay up to 110 basis points higher than its current commercial paper
5 rate.¹⁹ For illustrative purposes, for each \$100 million borrowed every year, that
6 would equate to an additional \$1.1 million per year in customer costs.

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

12 **E. Maintaining and Strengthening Public Service's Financial Integrity**

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

16 **A.** I will address each component in turn:

- 17 • First, the authorized ROE and equity ratio affect Public Service's
18 earnings and directly affect its ability to fund capital investment with
19 internally generated cash flow. In addition to credit ratings, investors
20 also assess the capital structure and ROE when making judgments
21 about the credit quality of a regulatory jurisdiction. As such, the
22 ROE/equity ratio combination is a powerful and effective communication
23 tool to underscore the interest of regulators in attracting capital to
24 provide safe, reliable, and environmentally-sound electric service in this
25 State.

¹⁹ Public Service 30-day Commercial Paper rate at May 14, 2021 vs. One-Month London Inter-Bank Offered Rate ("LIBOR") as of May 14, 2021, plus credit facility drawn spread.

- 1 • Second, the capital structure and authorized costs directly affect all of
2 Public Service’s key credit metrics, because either total debt or interest
3 expense is a component of each of the primary credit metrics that rating
4 agencies analyze. The credit rating agencies also evaluate the relative
5 amounts of debt and equity in the Company’s capital structure to
6 determine whether the Company is appropriately capitalized given its
7 business risk profile, and to determine whether the Company has the
8 ability to issue additional debt to fund its utility capital expenditures. The
9 credit rating agencies are very interested in Public Service’s liquidity to
10 meet its short-term capital needs should conditions of financial stress
11 arise, and they consider the debt portfolio maturity schedule and other
12 future obligations as part of this assessment.
- 13 • Third, debt and equity investors expect Public Service to be able to
14 recover its costs in a timely manner and to have a reasonable
15 opportunity to earn its authorized ROE. Investors and rating agencies
16 track the decisions of regulatory agencies relating to capital structure,
17 cost of debt, ROE, and forward-looking cost recovery mechanisms, and
18 they categorize the state regulatory environments in their assessment
19 of the relative risks of different utility investment opportunities.
- 20 • Finally, as previously noted, for regulated utilities, investors tend to
21 prefer stable, predictable, regulatory environments (so long as they are
22 constructive) because this simplifies pricing risk and enables investors
23 to generate predictable returns. If investor perceive more risk, they will
24 demand a high return. Therefore, a consistent and constructive
25 regulatory environment. This benefits customers because it keeps costs
26 down long-term.

27 **Q. WHAT IS PUBLIC SERVICE’S PROPOSED EQUITY RATIO IN THIS**
28 **PROCEEDING?**

29 A. Public Service supports a capital structure composed of 55.64 percent equity,
30 43.07 percent long-term debt, and 1.29 percent short-term debt, to reflect its
31 anticipated capital structure based on a 13-month average for the FTY ending
32 December 31, 2022. The inclusion of short-term debt in the capital structure, as
33 mentioned earlier in my Direct Testimony, requires construction work in progress
34 (“CWIP”) in rate base with an allowance for funds used during construction

1 (“AFUDC”) offset to earnings.

2 **Q. HOW IS THE 13-MONTH AVERAGE CALCULATED?**

3 A. The 13-month average uses balances taken at the month-end of 13 consecutive
4 months in order to capture 12 full months of financial data. For 2021, four months
5 of actual balances were available, and nine months of forecasted balances were
6 used to calculate the 13-month average.²⁰ For the FTY 2022, thirteen months of
7 forecasted balances were used to calculate the 13-month average.²¹

8 **Q. WHAT WAS THE ACTUAL CAPITAL STRUCTURE OF PUBLIC SERVICE AS**
9 **OF DECEMBER 31, 2020?**

10 A. The actual capital structure of Public Service as of December 31, 2020 is shown
11 below and is included in the Company’s 2020 informational HTY supplied by
12 Company witness Ms. Blair in Direct Testimony.

13 **TABLE PAJ-D-3: Capital Structure and WACC**
14 **as of December 31, 2020**

	As of December 31, 2020		
	Ratio	Rate	Wtd Cost
Long-Term Debt	43.42%	3.99%	1.73%
Short-Term Debt	0.87%	2.09%	0.02%
Equity	55.71%	10.50%	5.85%
Total Cost			7.60%

²⁰ Actual month-end balances to determine the 13-month average for 2021 included month-end balances for December 2020, January 2021, February 2021, and March 2021. Forecasted balances as of month-end were used for April 2021 through December 2021.

²¹ Forecasted month-end balances were used to calculate the 13-month average for the FTY ending December 31, 2022 and included month-end balances from December 2021 to December 2022.

1 **Q. ARE THERE ANY DIFFERENCES IN THE METHODOLOGIES USED TO**
2 **CALCULATE THE CAPITAL STRUCTURE, INCLUDING COST OF LONG- AND**
3 **SHORT-TERM DEBT, FOR THE INFORMATIONAL HTY AS COMPARED TO**
4 **THE FTY ENDING DECEMBER 31, 2022?**

5 A. No. As noted earlier in my testimony, 13-month averages were used to calculate
6 the capital structure, as well as the cost of long- and short-term debt, for both the
7 FTY and HTY periods. The only difference, which does not represent a departure
8 in terms of methodology, is that the capital structure for the informational HTY is
9 based on actuals. The FTY for the period ending December 31, 2022 is based on
10 four months of actuals and nine months of forecasted data, as noted above.

11 **Q. HAVE YOU ASSESSED HOW THIS PROPOSED EQUITY RATIO FITS WITH**
12 **THE FINANCIAL METRICS PUBLIC SERVICE MUST MAINTAIN IN ORDER TO**
13 **MAINTAIN ITS CURRENT CREDIT RATINGS?**

14 A. Yes. The Company's proposed 55.64 percent regulated equity ratio (in
15 combination with earning a 10.00 percent ROE for the FTY) will continue to support
16 the current A3 rating from Moody's and A- ratings from S&P and Fitch.

17 **Q. WHY IS IT IMPORTANT FOR PUBLIC SERVICE TO MAINTAIN ITS A-**
18 **CORPORATE RATING?**

19 A. Earlier in my Direct Testimony I demonstrated that when Public Service issued
20 bonds as a corporation with an unsecured BBB credit rating versus issuing bonds
21 with an unsecured A rating, the pricing differential was 77 basis points for 10-year
22 bonds and 68 basis points when issuing 30-year bonds. This is a real cost that

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

5 The message from the model is clear: over the long run, a strong
6 A bond rating will minimize the pre-tax cost of capital to
7 ratepayers. Long term achievement of at least an A rating is in
8 the electric utility company's and ratepayers' best interests.

9 The model results show that on an incremental cost basis, a
10 strong A bond rating generally results in the lowest pre-tax cost
11 of capital for electric utilities, especially under adverse economic
12 conditions, which are far more relevant to the question of capital
13 structure.²²

²² Roger A. Morin, *New Regulatory Finance* 515 (2006).

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 seek 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 3.72 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, 2022. The detailed
13 calculation is shown on Attachment PAJ-5. The cost of long-term debt is based
14 on a yield-to-maturity calculation where the debt expenses include interest as well
15 as fees associated with issuing the bond, such as costs for legal, underwriting, and
16 rating agency fees (these fees are unavoidable for public debt issuances). These
17 annualized costs are divided by the 13-month average principal amount of the
18 bonds to derive an overall cost of long-term debt for Public Service.

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

21 A. The Company is recommending the Commission approve a 0.77 percent
22 embedded cost of short-term debt, which is the Company's 13-month average

1 forecasted cost of short-term debt as of December 31, 2022. The cost of short-
2 term debt is based on forecasted short-term debt interest rates as well as actual
3 short-term debt costs, including interest on commercial paper as well as fees
4 associated with maintaining the Company's credit facility. These annualized costs
5 are divided by the 13-month average amount of the short-term debt outstanding to
6 derive an overall cost of short-term debt for Public Service.

1 **IV. OVERALL RECOMMENDATION AND 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 FTY ending December
7 31, 2022, as shown in Table PAJ-D-4 below. The Electric ROE is set at 10.00
8 percent, as supported by Ms. Bulkeley and Ms. Trammell in their Direct Testimonies.

9 **TABLE PAJ-D-4: Public Service's Proposed WACC**

		December 31, 2022	
	Ratio	Rate	Wtd Cost
Long-Term Debt	43.07%	3.72%	1.60%
Short-Term Debt	1.29%	0.77%	0.01%
Equity	55.64%	10.00%	5.56%
Total Cost			7.17%

10 Detailed supporting schedules for the calculation of long-term and short-term debt
11 are included in Attachment PAJ-5.

12 **Q. WHY DOES PUBLIC SERVICE SUPPORT A CAPITAL STRUCTURE**
13 **COMPOSED OF 55.64 PERCENT EQUITY, 43.07 PERCENT LONG-TERM**
14 **DEBT, AND 1.29 PERCENT SHORT-TERM DEBT?**

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

- 17
 - Reflects the Company's 13-month average forecasted regulated equity

1 ratio as of December 31, 2022;²³

2 • Supports Public Service's financial integrity, which will allow continued
3 long-term debt financing at reasonable rates and ultimately lower the
4 cost of service to its customers through lower interest expense;

5 • If approved, would signal continued regulatory environment stability and
6 a balanced outcome; and

7 • Is consistent with rating agency expectations of a credit-supportive
8 environment and sufficient capital to maintain the utility's capital
9 structure.

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

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

²³ Attachment PAJ-5 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

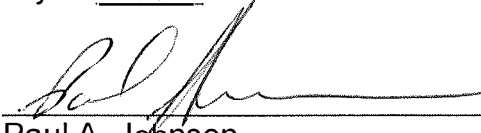
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IN THE MATTER OF ADVICE LETTER)
NO. 1857-ELECTRIC OF PUBLIC)
SERVICE COMPANY OF COLORADO)
TO REVISE ITS COLORADO PUC NO.)
8-ELECTRIC TARIFF TO REVISE)
JURISDICTIONAL BASE RATE) PROCEEDING NO. 21AL-____E
REVENUES, IMPLEMENT NEW BASE)
RATES FOR ALL ELECTRIC RATE)
SCHEDULES, AND MAKE OTHER)
PROPOSED TARIFF CHANGES)
EFFECTIVE AUGUST 2, 2021)

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 in Minneapolis, MN, this 24 day of June, 2021.



Paul A. Johnson
Vice President of Investor Relations and Treasurer

Subscribed and sworn to before me this 24th day of June, 2021.


Notary Public

My Commission expires Jun. 31, 2026