

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

\* \* \* \* \*

RE: IN THE MATTER OF ADVICE NO.        )  
1797-ELECTRIC OF PUBLIC SERVICE        )  
COMPANY OF COLORADO TO REVISE        )  
ITS COLORADO P.U.C. NO. 8-            ) PROCEEDING NO. 19AL-\_\_\_\_\_E  
ELECTRIC TARIFF TO IMPLEMENT        )  
RATE CHANGES EFFECTIVE ON            )  
THIRTY-DAYS' NOTICE.                )

**DIRECT TESTIMONY AND ATTACHMENTS OF SARAH W. SOONG**

**ON**

**BEHALF OF**

**PUBLIC SERVICE COMPANY OF COLORADO**

**MAY 20, 2019**

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Attachment SWS-1	Standard & Poor's: <i>Key Credit Factors for the Regulated Utilities Industry</i>
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Attachment SWS-3	S&P's Corporate Methodology: <i>Ratios and Adjustments.</i>
Attachment SWS-4	Moody's: <i>Regulated Electric and Gas Utilities</i>
Attachment SWS-5	Moody's Outlook, June 18, 2018: <i>2019 Outlook Shifts to Negative Due to Weaker Cash Flows, Continued High Leverage</i>
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Attachment SWS-8	Fitch July 11, 2018: <i>Public Service Company of Colorado</i>
Attachment SWS-9	Bank of America Merrill Lynch Equity Report entitled <i>Hitting regulatory speed bumps as Colorado 'rocks' outlook; Reiterate neutral</i>
Attachment SWS-10	Public Service's Recommended Capital Structure and Cost of Capital at March 31, 2019
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**GLOSSARY OF ACRONYMS AND DEFINED TERMS**

<b><u>Acronym/Defined Term</u></b>	<b><u>Meaning</u></b>
ALJ	Administrative Law Judge
CCR	Corporate Credit Rating
CFO	Cash from Operations
Commission	Colorado Public Utilities Commission
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization
FFO	Funds from Operations
Fitch	Fitch Ratings
HTY	2018 Historical Test Year
Moody's	Moody's Investors Service
Public Service or the Company	Public Service Company of Colorado
ROE	Return on Equity
S&P	Standard & Poor's
TCJA	Tax Cuts and Jobs Act of 2017
WACC	Weighted Average Cost of Capital
Xcel Energy	Xcel Energy Inc.
XES	Xcel Energy Services Inc.

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**DIRECT TESTIMONY AND ATTACHMENTS OF SARAH W. SOONG**

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

3 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

4 A. My name is Sarah Soong. 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 and  
8 Treasurer. XES, which is a wholly-owned subsidiary of Xcel Energy Inc. ("Xcel  
9 Energy"), provides an array of support services to Public Service Company of  
10 Colorado ("Public Service" or the "Company") and the other utility operating  
11 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 and Treasurer, I am responsible for recommending and  
5 implementing the financing required to achieve target capital structure objectives  
6 at each of the regulated utility operating companies and at Xcel Energy. I am  
7 also responsible for corporate cash forecasting and management, pension plan  
8 management, hazard risk insurance, treasury services, and financial policies. A  
9 description of my qualifications, duties, and responsibilities is set forth after the  
10 conclusion of my testimony in my Statement of Qualifications.

11 **Q. WHAT RECOMMENDATIONS ARE YOU MAKING IN YOUR DIRECT**  
12 **TESTIMONY?**

13 A. I recommend that the Colorado Public Utilities Commission (“Commission”)  
14 approve a capital structure composed of 56.46 percent equity and 43.54 percent  
15 long-term debt, which was the Company’s actual capital structure at March 31,  
16 2019. I also recommend that the Commission approve the Company’s actual  
17 cost of long-term debt at March 31, 2019, which was 4.18 percent. Finally, I  
18 recommend that the Commission approve an overall Weighted Average Cost of  
19 Capital (“WACC”) of 7.66 percent, which has been calculated based on the  
20 Company’s actual capital structure and actual cost of debt as of March 31, 2019,  
21 as well as the Company’s requested 10.35 percent Return on Equity (“ROE”).  
22 Establishing the WACC based on the actual values as of March 31, 2019 is

1 appropriate because Public Service is asking for approval to recover a return of  
2 and on capital additions that are expected to be placed in service during 2019.

3 If the Commission does not allow Public Service to recover a return of and  
4 on capital additions that are forecasted to be placed in service during 2019, I  
5 recommend that the Commission approve a WACC based on the actual capital  
6 structure and actual cost of long-term debt as of the end of the Historical Test  
7 Year (“HTY”), which was December 31, 2018. On that date, the Company’s  
8 actual capital structure was composed of 56.11 percent equity and 43.89 percent  
9 long-term debt, and the actual cost of long-term debt was 4.27 percent. When  
10 those percentages are combined with the Company’s requested 10.35 percent  
11 ROE, the resulting WACC is 7.68 percent for the HTY.

12 **Q. WHAT TOPICS DO YOU DISCUSS IN SUPPORT OF THOSE**  
13 **RECOMMENDATIONS?**

14 A. I discuss a number of topics related to the Company’s cost of capital in my  
15 testimony. In particular, I:

- 16 1. Discuss financial integrity, its importance to public utilities and its  
17 stakeholders, and the benefits of accessing capital markets to provide  
18 capital for utility expenditures;
- 19 2. Discuss the credit rating agencies’ evaluation criteria;
- 20 3. Provide a current assessment of Public Service’s financial integrity, and  
21 explain how Public Service’s stable overall financial health benefits its  
22 customers, resulting in a lower cost of debt and financing flexibility;

- 1           4. Present and support the use of the Company's actual capital structure as  
2           of March 31, 2019, which consisted of 56.46 percent equity and 43.54  
3           percent long-term debt;
- 4           5. Present and support the Company's actual cost of long-term debt as of  
5           March 31, 2019, which was 4.18 percent;
- 6           6. Present and support the recommended 7.66 percent WACC for the  
7           Electric Department, which is based on the Company's actual March 31,  
8           2019 capital structure and cost of long-term debt, as well as the 10.35  
9           percent ROE that the Company asks Commission to approve in this  
10          proceeding; and
- 11          7. Present and support the Company's alternative proposal if the  
12          Commission does not allow the Company to recover a return of and on  
13          capital additions that are forecasted to be placed in service during 2019,  
14          which results in a 7.68 percent WACC.

15   **Q.    ARE YOU SPONSORING ANY ATTACHMENTS AS PART OF YOUR DIRECT**  
16   **TESTIMONY?**

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

- 18           • Attachment SWS-1, which is a Standard & Poor's Ratings Services ("S&P")  
19           publication entitled *Key Credit Factors for the Regulated Utilities Industry*;
- 20           • Attachment SWS-2, which is a description of the major credit rating agencies'  
21           credit ratings;
- 22           • Attachment SWS-3, which is an S&P publication entitled *Corporate*  
23           *Methodology: Ratios and Adjustments*;



- 1 • Attachment SWS-4, which is a Moody's Investors Service ("Moody's")  
2 publication entitled *Rating Methodology Regulated Electric and Gas Utilities*;
- 3 • Attachment SWS-5, which is a Moody's publication entitled *2019 outlook*  
4 *shifts to negative due to weaker cash flows, continued high leverage*;
- 5 • Attachment SWS-6, which is an S&P publication entitled *Ratings Direct:*  
6 *Public Service Co. of Colorado*;
- 7 • Attachment SWS-7, which is a Moody's publication entitled *Credit Opinion:*  
8 *Public Service Company of Colorado*;
- 9 • Attachment SWS-8, which is a Fitch Ratings ("Fitch") publication entitled  
10 *Public Service Company of Colorado*;
- 11 • Attachment SWS-9, which is a Bank of America Merrill Lynch equity report  
12 entitled *Xcel Energy Inc: Hitting regulatory speed bumps as Colorado 'rocks'*  
13 *outlook; Reiterate neutral*;
- 14 • Attachment SWS-10, which presents Public Service's recommended actual  
15 capital structure and cost of long-term debt at March 31, 2019, and the  
16 resulting WACC; and
- 17 • Attachment SWS-11, which presents Public Service's alternative  
18 recommended actual capital structure and cost of long-term debt at  
19 December 31, 2018 and the resulting WACC if the Commission does not  
20 allow the Company to recover a return of and on capital additions that are  
21 forecasted to be placed in service in 2019.



1 integrity directly affects both the ability of a company to access capital and the  
2 cost of that capital. As a result, a company with weak financial integrity will be  
3 limited in its ability to finance assets or undertake new projects, particularly  
4 during times of capital market volatility. Weak financial integrity at a utility  
5 increases the issued cost of debt and the implied cost of equity, which increases  
6 the overall WACC and the ultimate financing costs that are paid by customers.

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

8 A. The financial integrity of a regulated utility can largely be viewed as a function of  
9 its current capital structure, ROE, and projected cash flow, but other factors can  
10 also affect a utility's financial integrity. For instance, to maintain a strong  
11 financial profile, a utility must have the opportunity to recover all prudently  
12 incurred utility costs in a timely manner.

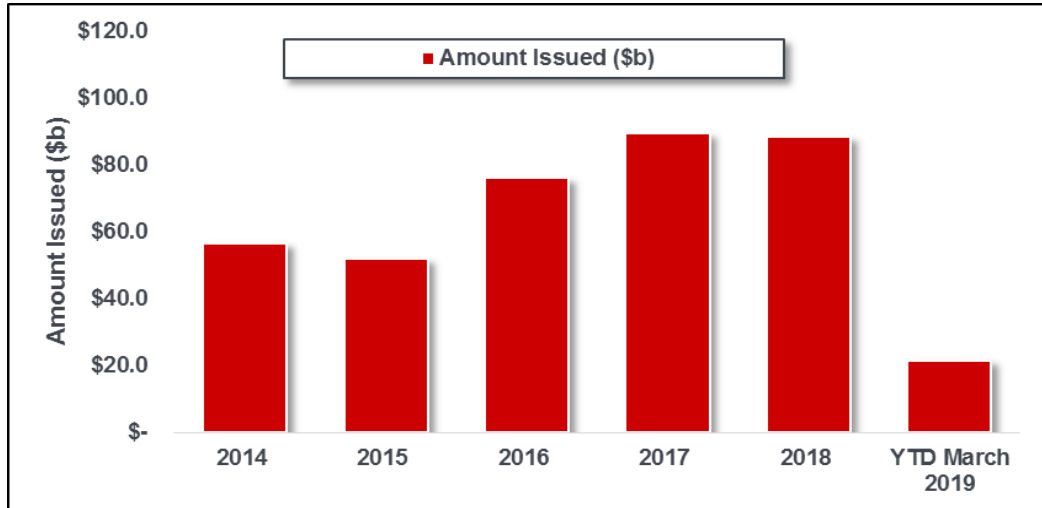
13 **Q. WHAT TYPES OF CAPITAL MARKETS AFFECT THE UTILITY SECTOR?**

14 A. Both the debt and equity capital markets affect the utility sector.

15 **Q. WHY ARE INVESTORS IN DEBT CAPITAL MARKETS IMPORTANT TO  
16 PUBLIC UTILITIES?**

17 A. During the past five years, debt investors have provided nearly \$400 billion of  
18 capital investment to the U.S. utility sector, as reflected below in Table SWS-D-1.  
19 Capital provided from these investors allows utilities to fund a portion of their  
20 capital investment programs.

1 **Chart SWS-D-1: 2014-2019 YTD Debt Amount Issued to the U.S. Utility Sector**



Source: Bloomberg

2 **Q. HOW DO INVESTORS EVALUATE A REGULATED UTILITY'S FINANCIAL**  
3 **INTEGRITY?**

4 A. Debt and equity investors evaluate a regulated utility's current capital structure,  
5 ROE and projected cash flow in combination with investors' expectations of the  
6 future performance of the utility with respect to those factors. Investors and  
7 rating agencies are well aware that a regulated utility's performance in these  
8 areas is highly dependent on actions taken by the state's regulatory commission.

9 Investors also use company-specific credit ratings published by the major  
10 independent credit rating agencies—S&P, Moody's, and Fitch—as an indicator of  
11 a company's financial strength. Credit ratings are assigned after the agencies  
12 conduct an independent, comprehensive quantitative and qualitative analysis of a  
13 company and the business environment in which it operates.

1 **Q. HOW DO DEBT AND EQUITY INVESTORS UTILIZE THE PUBLISHED**  
2 **CREDIT RATINGS?**

3 A. Credit ratings help debt investors differentiate between investment opportunities.  
4 Utility issuers compete not only with other utilities, but also with other companies  
5 outside the utility sector for these same investment dollars.

6 Higher credit ratings are associated with reduced risk, which attracts  
7 investors at a lower cost of debt and positions a utility favorably relative to lower-  
8 rated comparable companies. Equity investors also look at credit ratings as a  
9 source of information to differentiate between utilities. Ultimately, customers of  
10 the higher-rated utilities benefit from lower capital costs.

11 **Q. DO REGULATORY PROCEEDINGS SUCH AS THIS ONE HAVE THE**  
12 **POTENTIAL TO AFFECT A REGULATED UTILITY'S FINANCIAL INTEGRITY?**

13 A. Yes. Rating agencies and investors monitor regulatory proceedings, the  
14 positions taken by interested stakeholders, and the outcomes decided by  
15 regulatory commissions. Achieving a balanced, constructive outcome in a rate  
16 proceeding is an important factor in their assessment of a utility's credit quality.

17 **Q. HOW DO REGULATORY COMMISSION DECISIONS AFFECT A UTILITY'S**  
18 **FINANCIAL INTEGRITY?**

19 A. As noted, rating agencies consider various factors when evaluating a company's  
20 financial integrity. That said, the regulatory commission decisions that most  
21 directly impact financial integrity are those that establish the utility's authorized  
22 capital structure, ROE, and WACC.

1 **Q. HOW DO THOSE COMPONENTS IMPACT A UTILITY'S FINANCIAL**  
2 **STRENGTH?**

3 A. I will address each component in turn:

- 4 • First, the authorized ROE and equity ratio affect utility's earnings and directly  
5 affect its ability to fund capital investment with internally generated funds.  
6 Both debt and equity investors expect a utility to be able to internally generate  
7 a substantial portion of its investment funding.
  
- 8 • Second, the capital structure and authorized costs directly affect all of the  
9 utility's key credit metrics because either total debt or interest expense is a  
10 component of each of the primary credit metrics that rating agencies analyze.
  
- 11 • Third, debt and equity investors expect the utility to be able to recover its  
12 costs in a timely manner and to have an opportunity to earn its authorized  
13 ROE. Investors' and credit rating agencies' perceptions regarding the  
14 regulatory environment in which a utility operates is an important  
15 consideration in assessing a utility's business risk. Investors and rating  
16 agencies track the decisions of regulatory agencies relating to capital  
17 structure, cost of debt, ROE, and forward-looking cost recovery mechanisms,  
18 and they categorize the state regulatory environments in their assessment of  
19 the relative risks of different utility investment opportunities.

20 **B. Rating Agency Methodologies**

21 **Q. WHAT CONSIDERATIONS GO INTO ASSIGNING A CREDIT RATING?**

22 A. The primary drivers of credit ratings are business and financial risk. Rating  
23 agencies analyze the relationship between business risk and financial risk in  
24 determining their ratings.

25 **Q. GENERALLY SPEAKING, HOW DO THE RATING AGENCIES DEFINE**  
26 **BUSINESS RISK?**

27 A. Business risk relates to the potential sources of variability in a company's cash  
28 flow from its operating conditions as a result of various business factors

1 including: regulatory environment and trends,<sup>1</sup> operational performance,  
2 regulatory outcomes, fuel mix and geographic dispersion, and management  
3 decisions. Business risk is determined by a company's industry characteristics  
4 and peer group comparisons.

5 **Q. IN GENERAL, HOW DO THE RATING AGENCIES DEFINE FINANCIAL RISK?**

6 A. Financial risk relates to the ability of a company to make scheduled payments of  
7 interest and principal on its financial obligations. To assess a company's  
8 financial risk, credit rating agencies evaluate certain financial ratios to determine  
9 whether the company has sufficient levels of cash flow to cover its future interest  
10 expense and principal payments. It is therefore important for Public Service to  
11 maintain certain financial ratios in order to maintain its credit ratings.

12 The credit rating agencies also evaluate the relative amounts of debt and  
13 equity in the capital structure to determine whether the company is appropriately  
14 capitalized given its business risk profile and to determine whether the company  
15 has the ability to issue additional debt to fund its utility capital expenditures. The  
16 rating agencies include off-balance sheet obligation adjustments in their debt  
17 valuation, placing further pressure on the financial metrics. The credit rating  
18 agencies are very concerned with a company's available liquidity to meet its  
19 short-term capital needs under conditions of financial stress, and they factor in

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<sup>1</sup> In a report identifying the key credit factors for regulated utilities, S&P noted that the regulatory framework "is of critical importance when assessing regulated utilities' credit risk because it defines the environment in which a utility operates and has a significant bearing on a utility's financial performance." See Attachment SWS-1 at 6. The document contains an extensive discussion regarding the importance of the regulatory environment in which the utility operates.

1 the debt portfolio maturity schedule, access to alternative sources of liquidity (i.e.,  
2 commercial paper and revolving credit facilities) and other future obligations as  
3 part of this assessment.

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

5 A. Credit rating agencies provide ratings for both the business entity as a whole and  
6 for the various debt issuances of the entity. For example, S&P issues a  
7 Corporate Credit Rating (“CCR”), which reflects the general credit risk of the  
8 business enterprise and S&P’s opinion of the issuer’s *overall* capacity to pay its  
9 scheduled financial obligations. It is not a rating of individual securities, but is the  
10 core rating of the business enterprise from which ratings of individual securities  
11 are derived. *Issue* ratings reflect the likelihood that principal and interest on  
12 *specific debt issues* will be paid in a timely manner and take into account the  
13 recovery prospects in the event of default.

14 The investment-grade rating categories include the High Grade (Triple-A  
15 and Double-A) and the Medium Grade category (Single-A and Triple-B ratings).  
16 The ratings are generally further delineated by S&P and Fitch through the use of  
17 pluses or minuses to show a company’s relative standing within the categories.<sup>2</sup>  
18 The highest rating is AAA; the lowest investment-grade rating is BBB-. Debt  
19 rated BB+ or below is considered speculative grade. Attachment SWS-2

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<sup>2</sup> Moody’s uses numbers to show a company’s standing within a category.



1 contains a description of the ratings used by S&P and the corresponding ratings  
2 used by Moody's and Fitch.

3 **Q. EARLIER YOU TESTIFIED THAT A REGULATORY COMMISSION SHOULD**  
4 **BE AWARE OF THE EFFECT ITS DECISIONS HAVE ON A UTILITY'S**  
5 **FINANCIAL INTEGRITY. SHOULD A REGULATORY COMMISSION ALSO BE**  
6 **CONCERNED WITH MORE GRANULAR INDICATIONS OF FINANCIAL**  
7 **INTEGRITY, SUCH AS A UTILITY'S CREDIT RATINGS?**

8 A. Yes. Regulatory agencies should be concerned with a utility's credit ratings  
9 because those ratings affect the availability and cost of both long-term capital  
10 and short-term capital. Banks and investors rely on the credit ratings to  
11 determine the return that they require on their debt and equity capital. Utility  
12 customers pay the return demanded by investors through the rates of return  
13 authorized by the Commission.

14 **Q. HOW DOES THE UTILITY'S CREDIT RATING AFFECT ITS COST OF DEBT?**

15 A. When a company issues bonds, the interest rate is based on adding a credit  
16 spread to the benchmark United States Treasury bond having a similar maturity  
17 to the new bond that the company is issuing. Companies with lower credit  
18 ratings generally face wider credit spreads and a resulting higher debt coupon  
19 rate because they are deemed more risky than companies with higher credit  
20 ratings. Companies with lower credit ratings may also find it more difficult to  
21 access capital when credit market conditions are tighter.

22

1 **Q. DOES THE UTILITY'S CREDIT RATING ALSO AFFECT ITS COST OF**  
2 **EQUITY?**

3 A. Yes. An equity investor's return is residual, meaning that equity investors receive  
4 their return after the bond investors. A lower credit rating results in greater risk to  
5 both the bond and equity investor. Both the debt and equity investors require  
6 higher returns to be compensated for the additional risk.

7 **Q. WHAT ARE THE PRIMARY FINANCIAL RATIOS THAT CREDIT RATING**  
8 **AGENCIES ANALYZE?**

9 A. The primary financial metrics evaluated by the major credit rating agencies  
10 include some version of the following: (i) the ratio of Funds from Operations or  
11 Cash from Operations to Total Debt ("FFO/Total Debt" or "CFO/Debt"); (ii) the  
12 ratio of Funds from Operations or Cash from Operations to Interest  
13 ("FFO/Interest" or "CFO/Interest"); (iii) the ratio of Debt to Earnings Before  
14 Interest, Taxes, Depreciation, and Amortization ("Debt/EBITDA"); and to a lesser  
15 extent (iv) the ratio of Total Debt to Total Capital ("Total Debt/Total Capital").  
16 These financial metrics are a composite measure of the utility's ability to meet its  
17 financial obligations when they are due. The greater the *business* risk of a  
18 particular company, the stronger these financial metrics must be to provide  
19 sufficient evidence to the credit rating agencies and investors that the company  
20 can withstand the financial effect of both macroeconomic and company-specific  
21 risks.

1 **Q. WHAT IS THE SIGNIFICANCE OF THE RATIOS THE CREDIT RATING**  
2 **AGENCIES EVALUATE?**

3 A. The ratios help determine whether a company will be able to service its existing  
4 debt obligations at the required level and will have the flexibility to take on  
5 incremental debt. Because strong cash flow coverage is critical to cover existing  
6 and future obligations, the equity ratio and ROE are crucial to a utility's financial  
7 integrity because both affect cash flow. The ratio of Total Debt/Total Capital  
8 provides a long-term measure of a company's financial risk, and historically a  
9 debt-to-capital ratio of 45 percent to 50 percent was the S&P guideline for a  
10 "significant" financial risk profile. The total debt in these metrics includes  
11 amounts for on-balance sheet obligations such as capital leases and short-term  
12 debt, as well as off-balance sheet obligations.<sup>3</sup> As the level of debt in a  
13 company's capital structure increases, so does the level of interest expense that  
14 must be serviced. An increased level of interest expense requires higher levels  
15 of cash flow to produce adequate levels of interest coverage. All else equal, a  
16 lower equity ratio will generate less cash flow, assuming the equity return is held  
17 constant. In general, the more the amount of debt in a capital structure, the more  
18 pressure on cash flow metrics and credit ratings.

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<sup>3</sup> Off-balance sheet obligations are payment obligations that do not appear on the balance sheet as debt, but rating agencies may treat them as debt in terms of calculating ratios because the utility has little or no discretion in terms of payment. Please refer to pages 14 to 16 of Attachment SWS-1 for further discussion on purchased power adjustments, and please refer to Attachment SWS-3 for discussion on S&P's Corporate Methodology: Ratios and Adjustments.

1 **Q. DO THE RATING AGENCIES CONSIDER IDENTICAL FACTORS IN**  
 2 **ESTABLISHING CREDIT RATINGS?**

3 A. No. The factors are not identical, but each of the agencies conducts some form  
 4 of business risk and financial ratio analysis. S&P’s methodology includes  
 5 financial ratios and risk matrices, some of which are shown in Tables SWS-D-1  
 6 and SWS-D-2:

7 **Table SWS-D-1: S&P’s Business and Financial Risk Matrix**

<b>Business Risk</b>	<b>Financial Risk Profile</b>			
	<b>Modest</b>	<b>Intermediate</b>	<b>Significant*</b>	<b>Aggressive</b>
<b>Excellent*</b>	AA	A	A-	BBB
<b>Strong</b>	A	A-	BBB	BB
<b>Satisfactory</b>	BBB+	BBB	BB+	BB-

\* Denotes Public Service’s current risk profiles

8 **Table SWS-D-2: S&P’s Financial Risk Indicative Ratios: Medial Volatility**

	<b>FFO/Debt (%)</b>	<b>Debt/EBITDA (x)</b>	<b>EBITDA/Interest (x)</b>
<b>Modest</b>	35 – 50	1.75 - 2.5	9 – 14
<b>Intermediate</b>	23 – 35	2.5 - 3.5	5 – 9
<b>Significant</b>	13 – 23	3.5 - 4.5	2.75 – 5
<b>Aggressive</b>	9 – 13	4.5 - 5.5	1.75 – 2.75

9 **Q. PLEASE EXPLAIN TABLES SWS-D-1 AND SWS-D-2.**

10 A. Table SWS-D-1 illustrates the S&P matrix that reflects a company’s likely CCR  
 11 based on its combination of business and financial risk. Table SWS-D-2 shows  
 12 the required ratios under the medial volatility matrix (as assigned to Public  
 13 Service by S&P) at the various levels of financial risk. For example, a  
 14 “Significant” financial risk profile requires a company to consistently have a

1 FFO/Debt ratio of 13-23 (or greater), a Debt-to-EBITDA ratio of 3.5-4.5 (or less),  
2 and an EBITDA-to-Interest ratio of 2.75 (or greater.) As indicated in Table  
3 SWS-D-1, a decline in business risk from Excellent to Strong, paired with a  
4 Significant Financial Risk profile, no longer supports an A- rating, but declines to  
5 the BBB category. This matrix stresses the importance and interdependence of  
6 both business risk and the financial risk profile.

7 **Q. HAS ANY OTHER RATING AGENCY BESIDES S&P ISSUED GUIDANCE TO**  
8 **EXPLAIN ITS METHODOLOGY FOR ASSIGNING CREDIT RATINGS?**

9 A. While the rating agencies vary in their methodology (and to the extent to which  
10 they explain their methodology to the public), Moody's has provided a fairly  
11 complete picture of its methodology. That methodology is useful to illustrate how  
12 rating agencies and investors evaluate financial integrity. In June 2017, Moody's  
13 issued a report titled *Regulated Electric and Gas Utilities*, which provides rating  
14 methodology guidance for regulated electric utilities. I have provided a copy of  
15 that report as Attachment SWS-4. In that report, Moody's identifies four key  
16 rating factors that are weighted as follows:

17 **Table SWS-D-3: Key Rating Factors**

<b>Factor</b>	<b>Weighting</b>
Regulatory Framework	25%
Ability to Recover Costs and Earn Returns	25%
Diversification	10%
Financial Strength	40%
Total	100%

Source: Regulated Electric and Gas Utilities, Moody's June 2017

1 With respect to the “Regulatory Framework” factor, Moody’s states that the  
2 regulatory framework is “the foundation for how all the decisions that affect  
3 utilities are made (including the setting of rates), as well as the predictability and  
4 consistency of decision-making provided by that foundation.”<sup>4</sup>

5 The second factor, the “Ability to Recover Costs and Earn Returns,” is  
6 also fundamentally dependent on regulatory commission actions. Moody’s  
7 evaluates the regulatory elements that directly affect the ability of the utility to  
8 generate cash flow and service its debt over time.<sup>5</sup> Moody’s views the ability to  
9 recover costs on a timely basis and to attract debt and equity capital as crucial  
10 credit considerations, and, therefore, Moody’s seeks to estimate the lag between  
11 the time that a utility incurs a major construction expenditure and the time that  
12 the utility starts to earn a return of and return on that expenditure. According to  
13 Moody’s, “[t]he inability to recover costs...has been one of the greatest drivers of  
14 financial stress in this sector.”<sup>6</sup> That is particularly true when utilities’ capital  
15 expenditures exceed their cash from operations, resulting in negative cash flow,  
16 so any lack of timely recovery or an insufficiency of rates can strain access to  
17 capital markets.

18 The third factor is “Diversification,” which considers many of the same  
19 business risk factors that S&P evaluates. Moody’s evaluates the balance among

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<sup>4</sup> Attachment SWS-4 at 6.

<sup>5</sup> Attachment SWS-4 at 12.

<sup>6</sup> Attachment SWS-4 at 12.

1 businesses, geographic regions, regulatory regimes, and generating plants or  
2 fuel sources.<sup>7</sup>

3 The fourth factor, “Financial Strength,” comprises 40 percent of the  
4 Moody’s rating. Similar to S&P, Moody’s considers both historical and future  
5 data to calculate financial strength ratios and to analyze trends. Public Service’s  
6 financial strength is necessary to attract capital at a reasonable cost to fund its  
7 utility investment and fulfill its service obligations to customers at a reasonable  
8 cost.

9 **Q. HAVE THE RATING AGENCIES EXPLAINED THE ROLE OF REGULATION IN**  
10 **THEIR METHODOLOGIES?**

11 A. Yes. S&P states specifically in the 2013 report that “[t]he regulatory  
12 framework/regime’s influence is of critical importance when assessing regulated  
13 utilities’ credit risk,”<sup>8</sup> and it observes further that “[w]e base our assessment of  
14 the regulatory framework’s credit supportiveness on our view of how regulatory  
15 stability; efficiency of tariff setting procedures, financial stability, and regulatory  
16 independence protect a utility’s credit quality and its ability to recover its costs  
17 and earn a timely return.”<sup>9</sup>

18 Moody’s provides a Rating Factor Grid in its 2017 report demonstrating  
19 that 50 percent of the weight of its rating analysis is based on regulation,  
20 including the regulatory framework and the ability for companies to recover costs

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<sup>7</sup> Attachment SWS-4 at 16.

<sup>8</sup> Attachment SWS-1 at 6.

<sup>9</sup> Attachment SWS-1 at 6.

1 and earn returns.<sup>10</sup> Also, in a June 18, 2018, report in which Moody's changed  
2 the outlook for the entire regulated utility sector from "Stable" to "Negative,"  
3 Moody's stated that the "underpinning of the sector outlook returning to stable or  
4 changing to positive is a supportive regulatory environment."<sup>11</sup>

5 **Q. HAVE THE RATING AGENCIES MORE RECENTLY STRESSED THE**  
6 **IMPORTANCE OF REGULATORY DECISIONS ON CREDIT METRICS?**

7 A. Yes. As I noted in the previous answer, Moody's changed the outlook of the  
8 entire regulated utility industry sector to "Negative" in June 2018, primarily  
9 because of the effects of tax reform on utility cash flows. In that report and other  
10 reports addressing the effects of tax reform, Moody's has repeatedly stressed  
11 that a supportive regulatory environment is one of the keys to maintaining a  
12 utility's credit metrics. As discussed in the Direct Testimony of Ann E. Bulkley,  
13 without adequate regulatory support, the Tax Cuts and Jobs Act of 2017 ("TCJA")  
14 will have a negative effect on utility cash flows, which increases investor risk  
15 expectations for utilities, which in turn, translates to an increased cost of capital  
16 for customers.

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<sup>10</sup> Attachment SWS-4 at 4.

<sup>11</sup> Attachment SWS-5 at 1, 8.



1 **C. Public Service's Financial Integrity and Credit Metrics**

2 **Q. WHAT TOPICS DO YOU DISCUSS IN THIS SUBSECTION OF YOUR**  
3 **TESTIMONY?**

4 A. I describe Public Service's credit ratings and explain how they have changed  
5 over time. I also describe Public Service's business and financial risks, including  
6 regulatory risk.

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

8 A. Public Service currently has a corporate credit rating of A- or its equivalent by all  
9 three rating agencies, as reflected in Table SWS-D-4 below.

10 **Table SWS-D-4: Public Service's Current Credit Ratings**

	<b>S&amp;P</b>	<b>Moody's</b>	<b>Moody's S&amp;P Equivalent*</b>	<b>Fitch</b>
Corporate Rating	A- <sup>12</sup>	A3 <sup>13</sup>	A-	A- <sup>14</sup>
Senior Secured	A	A1	A+	A+
Senior Unsecured	A-	A3	A-	A

\* S&P equivalent rating of Moody's rating

11 **Q. HAS THE COMPANY ALWAYS HAD THE STRONG CREDIT RATING IT HAS**  
12 **TODAY?**

13 A. No. In 2006, Public Service's authorized regulated equity ratio was 51.40  
14 percent and its unsecured credit rating was BBB- by S&P, which is one notch

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<sup>12</sup> Attachment SWS-6 at 2.

<sup>13</sup> Attachment SWS-7 at 9.

<sup>14</sup> Attachment SWS-8 at 13.

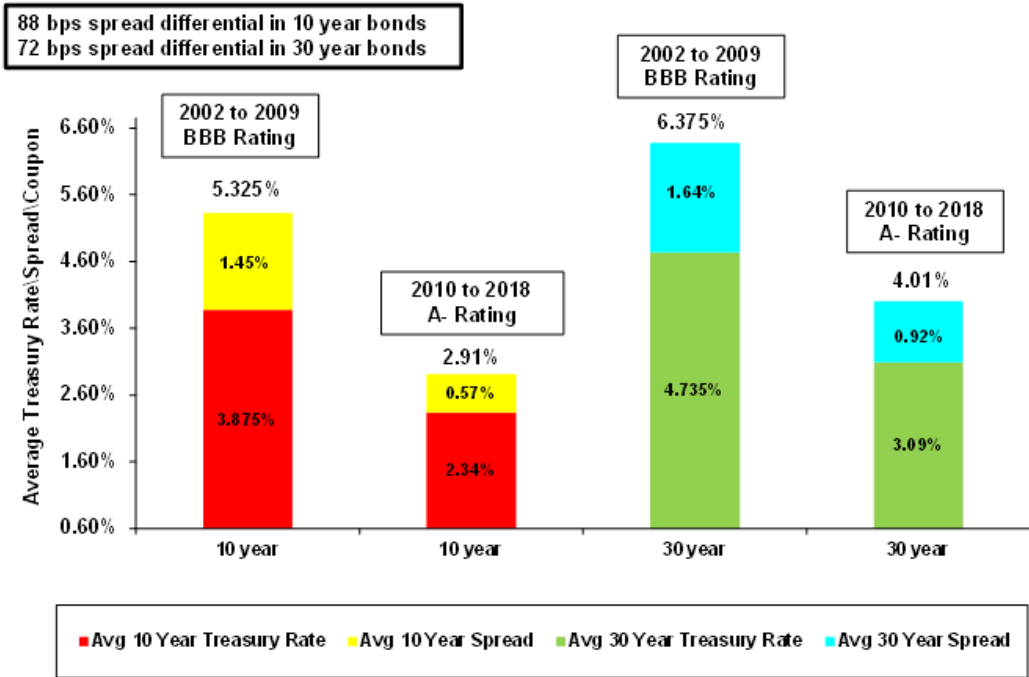
1 above speculative or “junk bond” status, in large part because of the extensive  
2 off-balance sheet obligations such as purchased power agreements. With the  
3 Commission’s approval, Public Service began taking steps to avoid a potential  
4 downgrade, such as requesting that Xcel Energy infuse more equity into Public  
5 Service. In Proceeding No. 06S-234EG, Public Service obtained Commission  
6 approval of a 60 percent regulated equity ratio, as well as a Purchased Capacity  
7 Cost Adjustment, which further mitigated the imputed debt effects of purchased  
8 power agreements. In subsequent years, Public Service was also able to avail  
9 itself of similar types of recovery mechanisms, such as the Transmission Cost  
10 Adjustment, the Demand-Side Management Cost Adjustment, the Clean Air-  
11 Clean Jobs Act Rider, and the Pipeline System Integrity Adjustment. With those  
12 steps and the advent of more aggressive bonus depreciation starting in 2008,  
13 Public Service’s cash flow and credit metrics began to strengthen. As a result,  
14 Public Service began asking the Commission to approve a lower regulated equity  
15 ratio. In Proceeding No. 09AL-299E, the authorized equity ratio was reduced to  
16 58.56 percent, and in Proceeding No. 11AL-947E, the regulated equity ratio was  
17 set at 56 percent.

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

20 A. The Company’s improved financial strength has resulted in a lower overall cost of  
21 debt, which is directly passed on to customers. In 2006, the Public Service  
22 unsecured rating from S&P was BBB-, but it improved to BBB in 2007 and to

1 BBB+ in 2008. During that time, Public Service issued eight bond offerings in  
 2 which the average 10- and 30-year bond coupons were 5.325 percent and 6.375  
 3 percent, respectively. Between 2010 and 2018, Public Service had an A-  
 4 unsecured rating and issued twelve bonds with average coupon rates of  
 5 approximately 2.90 percent for a 10-year bond and approximately 4.00 percent  
 6 for a 30-year bond. Although market conditions have changed over this period  
 7 with declining U.S. Treasury yields, the differentials in Public Service's average  
 8 credit spreads were approximately 88 basis points on the 10-year bonds and 72  
 9 basis points on the 30-year bonds. Chart SWS-D-2 illustrates this below. The  
 10 overall embedded cost of debt declined from 6.38 percent in 2006 to 4.27  
 11 percent in 2018, again reflecting not only a change in market conditions but also  
 12 the improvement in Public Service's financial health and credit rating.

13 **Chart SWS-D-2: Public Service's Historical S&P Unsecured Credit Ratings and**  
 14 **Average Bond Issuance Spreads**



1 Favorable pricing continues, as demonstrated in June 2018, when Public  
2 Service issued \$350 million of 10-year “green” bonds with a coupon of 3.70  
3 percent,<sup>15</sup> as well as \$350 million of 30-year “green” bonds with a coupon of 4.10  
4 percent in a transaction that generated well over \$2.8 billion in investor interest.  
5 As of March 31, 2019, the embedded cost of long-term debt was 4.18 percent – a  
6 savings of 49 basis points from the 4.67 percent debt corporate entity cost  
7 approved by the Commission in Proceeding No. 14AL-0660E. Although the  
8 decrease is partially attributable to the low Treasury yields in recent years, Public  
9 Service’s strengthening financial health has also been an important driver of this  
10 improvement, as evidenced by the strong investor demand.

11 In addition, Public Service’s credit strength provides timing flexibility to  
12 proactively take advantage of favorable market conditions for the benefit of  
13 customers. Public Service has a strong balance sheet that provides the ability to  
14 take actions such as accelerating financing schedules to prefund bonds ahead of  
15 maturity. This may not be possible with a weaker credit quality.

16 Finally, as a result of Public Service’s financial strength, Public Service  
17 has been able to make needed large investments in its utility infrastructure. Over  
18 the last five years (2014 - 2018), the Company has invested approximately \$6.2  
19 billion in electric, gas and steam utility infrastructure. Those investments have  
20 continued to build the operational strength of the system.

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<sup>15</sup> A “green” bond is a bond specifically earmarked to be used for climate and environmental projects.

1 **Q. IS IT IMPORTANT FOR THE COMPANY TO MAINTAIN ITS FINANCIAL**  
2 **HEALTH GOING FORWARD?**

3 A. Yes. It is important for Public Service to maintain its financial health because the  
4 Company plans to spend approximately \$7.0 billion in capital expenditures during  
5 the five-year period from 2019-2023 to add production, transmission, and  
6 distribution facilities to serve Public Service customers. The Company will  
7 require external funds to finance these expenditures, and maintaining its financial  
8 health will enable Public Service to continue to access capital markets on  
9 favorable terms relative to the market conditions at the time.

10 Additionally, Public Service's financial integrity is critical to maintaining  
11 access to the short-term debt markets to fund its daily utility operations, including  
12 fuel inventories and the initial phases of construction projects. Regardless of the  
13 macroeconomic conditions, the Company needs to be in a position to access the  
14 financial markets for short-term and long-term debt needs.

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

17 A. Yes. First, Public Service must contend with a number of business and financial  
18 risks that could jeopardize its current credit ratings and outlooks. For example,  
19 as I noted earlier, Public Service will be making substantial capital investments  
20 over the next few years, and it will need access to the debt and equity markets to  
21 fund a portion of those investments.

22 Second, the Company has a number of off-balance sheet obligations such

1 as purchased power commitments, operating leases, guarantees, asset  
 2 retirement obligations, underfunded pension or other benefit plans, and other  
 3 obligations. During 2018, S&P identified \$1,287.9 million of debt adjustments for  
 4 off-balance sheet items for Public Service, of which approximately 65 percent  
 5 were for purchased power agreements and operating leases. After those off-  
 6 balance sheet obligations are taken into account, the actual economic equity  
 7 ratio considered by the rating agencies is far lower than the regulated equity  
 8 ratio. For example, a regulated equity ratio of 56.46 percent translates to an  
 9 economic equity ratio of approximately 50.1 percent under S&P's methodology.  
 10 The regulated equity ratio understates true leverage because it excludes off-  
 11 balance sheet items as well as short-term debt. The regulated and economic  
 12 capital structures are shown in Table SWS-D-5 below.

**Table SWS-D-5: Public Service's Regulated and Economic  
 Capital Structures as of March 31, 2019**

as of 03/31/19	Regulated		Economic		
Short-term Debt	\$ -	0.00%	\$ 239.0	1.9%	
Off Balance Sheet Deb	\$ -	0.00%	\$ 1,287.9	10.0%	
Long-term Debt	\$ 4,909.6	43.54% Debt	\$ 4,846.1	38.0%	49.9% Debt
Common Equity	\$ 6,366.3	56.46% Equity	\$ 6,388.5	50.1%	50.1% Equity
	<u>\$11,275.9</u>	<u>100.00%</u>	<u>\$12,761.5</u>	<u>100.00%</u>	<u>100.0%</u>

14 As Table SWS-D-5 demonstrates, the regulated equity ratio measures debt and  
 15 equity differently than an economic ratio. Because rating agencies include  
 16 imputed debt obligations when calculating debt, it is imperative to differentiate  
 17 between the regulatory calculation and the economic calculation to ensure that  
 18 equity ratios are set at the appropriate level to satisfy credit metrics and avoid

1 downward pressure on current credit ratings.

2 Third, the Company faces regulatory risk from principles and precedents  
3 recently adopted by the Commission in the Company's most recent gas rate  
4 case, Proceeding No. 17AL-0363G. As I explained earlier, rating agencies place  
5 significant weight on consistent and predictable regulatory treatment. Deviation  
6 from long-standing precedents can be perceived by investors as introducing risk  
7 into the likelihood of capital return. This is likely to increase the cost that  
8 investors require to purchase the Company's securities – and, ultimately, the cost  
9 that is passed on to customers.

10 **Q. HAS COLORADO TRADITIONALLY HAD A CONSISTENT AND**  
11 **PREDICTABLE REGULATORY ENVIRONMENT?**

12 A. Until recently, Colorado has had a relatively consistent and predictable  
13 regulatory environment with respect to electric regulatory decisions that affected  
14 ROE, capital structure, and cost of debt. For example, the prior decisions  
15 discussed earlier in my testimony have facilitated the Company's efforts to  
16 improve its credit quality to current levels, to the benefit of customers. Some  
17 recent decisions have been less constructive, such as the recent decision in  
18 Public Service's gas rate case to lower the equity ratio to 54.6 percent (even  
19 though it was not the Company's actual equity ratio during the HTY the  
20 Commission chose to use to set rates) and to use an average rate base. The  
21 Company has requested review of that decision in the Denver County District

1 Court.<sup>16</sup>

2 **Q. WHY DO YOU STATE THAT THE COMMISSION'S DECISION IN**  
3 **PROCEEDING NO. 17AL-0363G TO AUTHORIZE A CAPITAL STRUCTURE**  
4 **COMPOSED OF 54.6 PERCENT EQUITY AND 45.4 PERCENT LONG-TERM**  
5 **DEBT WAS NOT CONSTRUCTIVE?**

6 A. I make that statement for several reasons. First, the Public Service Gas  
7 Department's actual equity ratio at the end of the 2016 HTY in that case was  
8 56.06 percent, not 54.6 percent. It is my understanding that the Colorado  
9 Supreme Court has stated that a utility's actual capital structure should be used  
10 to calculate rates unless it is demonstrated by a substantial showing that  
11 ratepayers are materially prejudiced by that outcome.<sup>17</sup> We believe the  
12 Commission erred in departing from that long-standing precedent.

13 Second, the Company disagrees with the methodology the Commission  
14 adopted to arrive at the 54.6 percent equity ratio. The Commission approved a  
15 2016 HTY for Public Service in that case, and it was undisputed that the  
16 Company's actual equity ratio was 56.06 percent at the end of the 2016  
17 HTY. Contrary to precedent, the Commission accepted the Administrative Law  
18 Judge's ("ALJ") decision to reach forward beyond the end of the test year to

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<sup>16</sup> *Public Service Company of Colorado v. Public Utilities Commission of Colorado, et al.*, Case No. 2019-CV-31247 (Denver Cty. Dist. Ct., filed April 10, 2019).

<sup>17</sup> *Peoples Natural Gas v. Public Utilities Commission*, 567 P.2d 377 (Colo. 1977) ("Unless it has been demonstrated by a substantial showing that ratepayers are materially prejudiced by the actual capital structure which finances utility operations, the PUC should use the actual capital structure in calculating rates.").



1 capture a June 2017 debt issuance. The point-in-time date the ALJ chose to  
2 measure capital structure, however, was immediately after the June 2017 debt  
3 issuance and before the Company had a chance to rebalance the capital  
4 structure with equity infusions and retained earnings. In Public Service's view, it  
5 was arbitrary and capricious for the ALJ to select a point-in-time capital structure  
6 that was outside of the HTY period used to establish rate base and that was not  
7 representative of the Company's ongoing capital structure. Additionally, this  
8 action was taken by the ALJ and not recommended by any party to the  
9 proceeding. Accordingly, the Company had no opportunity to present evidence  
10 as to why this action was unreasonable and why the Commission should reject  
11 the ALJ's recommendation. That is why Public Service has appealed the  
12 Commission's capital structure decision in Proceeding No. 17AL-0363G.

13 **Q. WERE THE COMMISSION'S DECISIONS IN THE GAS RATE CASE**  
14 **POTENTIALLY HARMFUL TO PUBLIC SERVICE'S CREDIT RATING?**

15 A. Yes. Public Service is one company with consolidated financial statements.  
16 Financial metrics are calculated on the legal entity that is issuing debt, not on  
17 business segments. Credit rating agencies do not break apart the three utilities  
18 within Public Service and assign individual ratings unless their financial  
19 statements are reported as separate, audited companies that each issue their  
20 own debt securities. By lowering the equity ratio of one indistinct entity within the  
21 Public Service group, the credit metrics on the total entity would be negatively  
22 affected and could result in a lower long-term debt rating for Public Service, a

1 higher cost of debt capital at Public Service, and increased costs to customers in  
2 the long-term.

3 **Q. BASED ON YOUR EXPERTISE AND YOUR REVIEW OF INDUSTRY**  
4 **PUBLICATIONS, WHAT DO YOU PERCEIVE AS EQUITY INVESTORS' MOST**  
5 **PRESSING CONCERN ABOUT THE COLORADO REGULATORY PROCESS**  
6 **IN GENERAL?**

7 A. For regulated utilities, investors tend to prefer stable regulatory environments  
8 because this simplifies pricing risk and enables investors to generate predictable  
9 returns. Equity investors base their decisions on growth and future returns, so  
10 their models focus on forward-looking projections as described by Ms. Bulkley in  
11 her Direct Testimony. In addressing this prospective emphasis, equity analyst  
12 comments tend to be predictive. In July 2018, Bank of America Merrill Lynch  
13 commented to investors that it viewed Colorado “hitting regulatory speed bumps  
14 as Colorado ‘rocks’ regulatory outlook” in an issued report. The report notes that  
15 “the PSCo Gas Case outcome disappoints on lower returns...as the Commission  
16 not only lowered authorized equity ratios substantially from 56.5% to 54.6%  
17 despite tax reform but also notched down the ROE to 9.35% from 9.5%.” Bank  
18 of America Merrill Lynch also states that the “reduced ROE and the rejection of a  
19 multi-year rate plan are clear negatives in regards to the jurisdiction’s relative

1           attractiveness...[and] greater exposure for the still to be filed PSCo Electric case  
2           where the earned ROE currently is trending around 8.81%.”<sup>18</sup>

3   **Q.    SHOULD THE COMMISSION BE CONCERNED WITH THESE STATEMENTS?**

4    A.    Yes.  Because the financial integrity of the Company directly affects customer  
5           bills, the Commission should be aware of the value investors place on a stable,  
6           constructive regulatory environment.

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<sup>18</sup> Attachment SWS-9.

1                   **III. CAPITAL STRUCTURE RECOMMENDATION**

2   **Q.   WHAT WERE PUBLIC SERVICE'S ACTUAL CAPITAL STRUCTURE AND**  
3   **COST OF CAPITAL AS OF MARCH 31, 2019?**

4   A.   The actual capital structure and cost of debt as of March 31, 2019 are shown in  
5   Table SWS-D-6 below. The ROE is set at 10.35 percent, consistent with the  
6   proposed ROE in this case. The detailed schedules are included in Attachment  
7   SWS-10.

8   **Table SWS-D-6: Public Service's Requested WACC at March 31, 2019**

	<b>Ratio</b>	<b>Rate</b>	<b>Weighted Cost</b>
Long-Term Debt	43.54%	4.18%	1.82%
Common Equity	56.46%	10.35%	5.84%
<b>Total Cost</b>			<b>7.66%</b>

9   **Q.   WHAT IS PUBLIC SERVICE'S RECOMMENDED CAPITAL STRUCTURE?**

10   A.   Public Service recommends a capital structure consisting of 56.46 percent equity  
11   and 43.54 percent long-term debt. As I explained in the previous answer, 56.46  
12   percent was the Company's actual equity ratio at the end of the most recent  
13   calendar quarter, and Colorado precedent supports the use of a utility's actual  
14   capital structure. The use of the Company's actual capital structure at March 31,  
15   2019 is reasonable in this case because the Company is asking to recover a  
16   return of and on capital additions that are forecasted to be placed in service in  
17   2019. In addition, an equity ratio of 56.46 percent will support maintaining the  
18   Company's current crediting ratings, although there is strain on meeting the  
19   metric thresholds even at this equity ratio.

1 **Q. IS APPROVAL OF THE COMPANY'S ACTUAL EQUITY OF 56.46 PERCENT**  
2 **AS THE REGULATED EQUITY RATIO NECESSARY FOR THE COMPANY TO**  
3 **AVOID DOWNWARD PRESSURE ON ITS FINANCIAL STRENGTH?**

4 A. Yes. Even at 56.46 percent equity, the downward pressure on Public Service's  
5 credit metrics will continue. An equity ratio below 56.46 percent will not produce  
6 the cash flow necessary to meet the credit rating agencies' published metrics for  
7 an A3/A- public utility.

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

10 A. Earlier in my testimony I demonstrated that when Public Service issued bonds as  
11 a corporation with an unsecured BBB credit rating versus issuing bonds with an  
12 unsecured A- rating, the pricing differential exceeded 88 basis points for 10 year  
13 bonds and exceeded 72 basis points when issuing 30-year bonds. This is a real  
14 cost that affects what rates the customers pay. To further support this position,  
15 Dr. Roger Morin, a noted expert on regulatory finance, analyzes the optimal  
16 capital structure for utilities in his book *New Regulatory Finance*. Based on that  
17 analysis, Dr. Morin concludes that an A rated utility is in the best interest of the  
18 customers and utilities:

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

23 The model results show that on an incremental cost basis, a strong  
24 A bond rating generally results in the lowest pre-tax cost of capital

1 for electric utilities, especially under adverse economic conditions,  
2 which are far more relevant to the question of capital structure.<sup>19</sup>

3 **Q. IF THE COMMISSION DOES NOT ALLOW THE COMPANY TO RECOVER A**  
4 **RETURN OF AND ON THE PLANT INVESTMENT THAT IS FORECASTED TO**  
5 **BE PLACED IN SERVICE IN 2019, DOES THE COMPANY HAVE AN**  
6 **ALTERNATIVE CAPITAL STRUCTURE RECOMMENDATION?**

7 A. Yes. If the Commission denies the Company's request to recover a return of and  
8 on plant investment that is forecasted to be placed in service during 2019, Public  
9 Service requests that the Commission approve a 7.68 percent WACC, which is  
10 based on the actual capital structure and actual cost of long-term debt at  
11 December 31, 2018, the end of the HTY. Table SWS-D-7 below shows the  
12 calculation of the 7.66 percent WACC. The detailed schedules are included in  
13 Attachment SWS-11.

14 **Table SWS-D-7: Public Service's Alternative WACC at December 31, 2018**

	<b>Ratio</b>	<b>Rate</b>	<b>Weighted Cost</b>
Long-Term Debt	43.89%	4.27%	1.87%
Common Equity	56.11%	10.35%	5.81%
<b>Total Cost</b>			<b>7.68%</b>

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<sup>19</sup> Roger A. Morin, *New Regulatory Finance* 515 (2006).

1           **IV. COST OF LONG-TERM DEBT RECOMMENDATION**

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

4   A. The Company is recommending the Commission approve a 4.18 percent  
5   embedded cost of long-term debt, which was the Company's actual cost of long-  
6   term debt as of March 31, 2019. The detailed calculation is shown in page 2 of  
7   Attachment SWS-10 and is consistent with the method this Commission has  
8   approved in the past. The cost of debt is based on a yield-to-maturity calculation  
9   where the debt expenses include interest as well as fees associated with issuing  
10   the bond, such as legal, underwriting, rating agency and other costs. These  
11   annualized costs are divided by the principal amount of the bonds outstanding to  
12   derive an overall cost of debt for Public Service.

13   **Q. DOES THE COMPANY HAVE AN ALTERNATIVE REQUEST CONCERNING**  
14   **THE COST OF LONG-TERM DEBT?**

15   A. Yes. If the Commission does not allow the Company to earn a return of and on  
16   plant investment that is forecasted to be placed in service during 2019, the  
17   Company asks the Commission to approve a 4.27 percent embedded cost of  
18   long-term debt, as shown on Attachment SWS-11. That was the Company's  
19   actual cost of long-term debt at December 31, 2018, the end of the HTY.

1 **V. CONCLUSION**

2 **Q. PLEASE SUMMARIZE THE RECOMMENDATIONS YOU ARE MAKING IN**  
3 **THIS PROCEEDING.**

4 A. Table SWS-D-8 lists the capital structure, cost of long-term debt, cost of equity,  
5 and WACC that I recommend the Commission approve in this proceeding:

6 **Table SWS-D-8: Public Service's Requested WACC at March 31, 2019**

	<b>Ratio</b>	<b>Rate</b>	<b>Weighted Cost</b>
Long-Term Debt	43.54%	4.18%	1.82%
Common Equity	56.46%	10.35%	5.84%
<b>Total Cost</b>			<b>7.66%</b>

7 **Q. WHY DOES PUBLIC SERVICE SUPPORT A CAPITAL STRUCTURE**  
8 **COMPOSED OF 56.46 PERCENT EQUITY AND 43.54 PERCENT LONG-TERM**  
9 **DEBT?**

10 A. Public Service proposes a capital structure composed of 56.46 percent equity  
11 and 43.54 percent long-term debt because it:

- 12 • Reflects the Company's actual regulated capital structure as of March 31,  
13 2019, and Colorado precedent supports the use of a utility's actual capital  
14 structure;
- 15 • Supports Public Service's financial integrity, which will allow continued long-  
16 term debt financings at reasonable rates;
- 17 • Maintains regulatory environment stability and a balanced outcome; and
- 18 • Is consistent with rating agency expectations of a credit-supportive  
19 environment and sufficient capital from Xcel Energy to maintain the utility's  
20 capital structure.



1 **Q. WHY DOES PUBLIC SERVICE SUPPORT A 4.18 PERCENT COST OF LONG-**  
2 **TERM DEBT?**

3 A. Public Service supports a 4.18 percent cost of long-term debt because that was  
4 the Company's actual long-term cost of debt as of March 31, 2019.

5 **Q. IF THE COMMISSION DOES NOT ALLOW THE COMPANY TO RECOVER A**  
6 **RETURN OF AND ON THE PLANT INVESTMENT THAT IS FORECASTED TO**  
7 **BE PLACED IN SERVICE IN 2019, DOES THE COMPANY HAVE AN**  
8 **ALTERNATIVE CAPITAL STRUCTURE RECOMMENDATION?**

9 A. Yes. If the Commission denies the Company's request to recover a return of and  
10 on plant investment that is forecasted to be placed in service during 2019, Public  
11 Service requests that the Commission approve a 7.68 percent WACC, which is  
12 based on the actual capital structure and actual cost of long-term debt at  
13 December 31, 2018, the end of the HTY.

14 **Table SWS-D-9: Public Service's Alternative WACC at December 31, 2018**

	<b>Ratio</b>	<b>Rate</b>	<b>Wtd Cost</b>
Long-Term Debt	43.89%	4.27%	1.87%
Equity	56.11%	10.35%	5.81%
<b>Total Cost</b>			<b>7.68%</b>

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

16 A. Yes, it does.

## **Statement of Qualifications**

### **Sarah W. Soong**

I received my Bachelor of Arts degree in Government in 1992 from the College of William and Mary, my Master of Arts degree in Western European and French Studies in 1997 from Lauder Institute at the University of Pennsylvania and my Master of Business Administration degree in Finance in 1997 from The Wharton School at the University of Pennsylvania.

My current position with Xcel Energy is Vice President and Treasurer. I have been employed by Xcel Energy Inc. since August 2018. I am responsible for recommending and implementing the financing required to achieve target capital structure objectives at each of the regulated utility operating companies and at Xcel Energy. I am also responsible for corporate cash forecasting and management, pension plan management, hazard risk insurance, treasury services and financial policy.

I worked for ONCOR Electric Delivery Company, LLC in Dallas, Texas from 2017 through 2018 as the Vice President and Treasurer. I also worked for Hunt Consolidated Inc. in Dallas, Texas from 2005 through 2017. I started as the Manager of Corporate Finance from 2005 through 2010, followed by the Director of Project Finance from 2010 through 2012 and finally as the Vice President of Project Finance from 2012 through 2017.

From 2004 through 2005 I worked for The Neiman Marcus Group Inc. in Dallas, Texas as the Manager of Corporate Finance. I worked for Exodus Energy, LLC., in

Houston, Texas in 2003 as the Director and for Enron Corporation in Houston, Texas from 1997 through 2002 as the Manager of Global Finance and Treasury.

I worked for ABN Amro Bank, Netherlands, Czech Republic from 1993 through 1995 as the Relationships Manager, Global Clients. I worked for N.M. Rothschild and ČESKOSLOVENSKÁ OBCHODNÍ BANKA (ČSOB), Prague, Czech Republic during 1993 as the Financial Advisor and Consultant to N.M. Rothschild on behalf of ČSOB.

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO

\* \* \* \*

RE: IN THE MATTER OF ADVICE )  
NO. 1797-ELECTRIC OF PUBLIC )  
SERVICE COMPANY OF )  
COLORADO TO REVISE ITS ) PROCEEDING NO. 19AL-\_\_\_\_E  
COLORADO P.U.C. NO. 8- )  
ELECTRIC TARIFF TO IMPLEMENT )  
RATE CHANGES EFFECTIVE ON )  
THIRTY-DAYS' NOTICE. )

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AFFIDAVIT OF SARAH W. SOONG  
ON BEHALF OF  
PUBLIC SERVICE COMPANY OF COLORADO

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I, Sarah W. Soong, 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 14<sup>th</sup> day of May, 2019.

Sarah W. Soong  
Sarah W. Soong  
Vice President and Treasurer

Subscribed and sworn to before me this 14<sup>th</sup> day of May, 2019.

Pamela C. Wilson  
Notary Public

My Commission expires 1-31-2020

