

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

**IN THE MATTER OF THE)
APPLICATION OF ROCKY) CASE NO. PAC-E-21-07
MOUNTAIN POWER FOR)
AUTHORITY TO INCREASE ITS) Direct Testimony of Ann E. Bulkley
RATES AND CHARGES IN IDAHO)
AND APPROVAL OF PROPOSED)
ELECTRIC SERVICE SCHEDULES)
AND REGULATIONS)**

ROCKY MOUNTAIN POWER

CASE NO. PAC-E-21-07

May 2021

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ATTACHED EXHIBITS

Exhibit No. 9—Resume and Testimony Listing

Exhibit No. 10—Summary of ROE Analysis

Exhibit No. 11—Proxy Group Screening

Exhibit No. 12—Constant Growth DCF Analysis

Exhibit No. 13 (1) and (2)—CAPM and ECAPM Analysis

Exhibit No. 14—Long-Term Beta Analysis

Exhibit No. 15—Risk Premium Analysis

Exhibit No. 16—Expected Earnings Analysis

Exhibit No. 17 (1) and (2)—Capital Expenditures Analysis

Exhibit No. 18—Regulatory Risk Assessment

Exhibit No. 19—Capital Structure Analysis

1 **I. INTRODUCTION AND QUALIFICATIONS**

2 **Q. Please state your name and affiliation.**

3 A. My name is Ann E. Bulkley. I am a Senior Vice President employed by Concentric
4 Energy Advisors, Inc. ("Concentric"). My business address is 293 Boston Post Road
5 West, Suite 500, Marlborough, Massachusetts 01752.

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

7 A. I am submitting this direct testimony before the Idaho Public Utilities Commission
8 ("Commission") on behalf of PacifiCorp d/b/a Rocky Mountain Power ("RMP" or the
9 "Company"), which is an indirect wholly owned subsidiary of Berkshire Hathaway
10 Energy ("BHE").

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

12 A. I hold a Bachelor's degree in Economics and Finance from Simmons College and a
13 Master's degree in Economics from Boston University, with over 25 years of
14 experience consulting to the energy industry. I have advised numerous energy and
15 utility clients on a wide range of financial and economic issues with primary
16 concentrations in valuation and utility rate matters. Many of these assignments have
17 included the determination of the cost of capital for valuation and ratemaking purposes.
18 My resume and a summary of testimony that I have filed in other proceedings are
19 provided as Exhibit No. 9.

20 **Q. Please describe Concentric's activities in energy and utility engagements.**

21 A. Concentric provides financial and economic advisory services to many and various
22 energy and utility clients across North America. Our regulatory, economic, and market
23 analysis services include utility ratemaking and regulatory advisory services; energy

1 market assessments; market entry and exit analysis; corporate and business unit
2 strategy development; demand forecasting; resource planning; and energy contract
3 negotiations. Our financial advisory activities include buy and sell-side merger,
4 acquisition and divestiture assignments; due diligence and valuation assignments;
5 project and corporate finance services; and transaction support services. In addition,
6 we provide litigation support services on a wide range of financial and economic issues
7 on behalf of clients throughout North America.

8 II. PURPOSE AND OVERVIEW OF DIRECT TESTIMONY

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

10 A. The purpose of my direct testimony is to present evidence and provide a
11 recommendation regarding the appropriate Return on Equity (“ROE”) for RMP’s
12 electric utility operations in Idaho and to provide an assessment of its proposed capital
13 structure to be used for ratemaking purposes.¹ My analyses and recommendations are
14 supported by the data presented in Exhibit No. 10 through Exhibit No. 19, which were
15 prepared by me or under my direction.

16 **Q. Please provide a brief overview of the analyses that led to your ROE**
17 **recommendation.**

18 A. As discussed in more detail in Section VII, I applied the Constant Growth Discounted
19 Cash Flow (“DCF”) model, the Capital Asset Pricing Model (“CAPM”), the Empirical
20 Capital Asset Pricing Model (“ECAPM”), the Risk Premium Approach, and the
21 Expected Earnings Analysis. My recommendation also takes into consideration: (1)
22 RMP’s capital expenditure requirements; (2) the regulatory environment in which RMP

¹ Throughout my direct testimony, I interchangeably use the terms “ROE” and “cost of equity.”

1 operates; and (3) RMP's planned investments in renewable generation assets compared
2 to its current generation portfolio. Finally, I considered RMP's proposed capital
3 structure as compared to the capital structures of the proxy companies.² While I did not
4 make any specific adjustments to my ROE estimates for any of these factors, I did take
5 them into consideration in aggregate when determining where RMP's ROE falls within
6 the range of analytical results.

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

8 A. The remainder of my direct testimony is organized in eight sections. Section III
9 provides a summary of my analyses and conclusions. Section IV reviews the regulatory
10 guidelines pertinent to the development of the cost of capital. Section V discusses
11 current and prospective capital market conditions and the effect of those conditions on
12 RMP's cost of equity. Section VI explains my selection of a proxy group of electric
13 utilities. Section VII describes my analyses and the analytical basis for the
14 recommendation of the appropriate ROE for RMP. Section VIII provides a discussion
15 of specific business and regulatory risks that have a direct bearing on the ROE to be
16 authorized for RMP in this case. Section IX discusses RMP's capital structure as
17 compared with the capital structures of the utility operating company subsidiaries of
18 the proxy group companies. Section X presents my conclusions and recommendations.

² The selection and purpose of developing a group of comparable companies will be discussed in detail in Section VI of my direct testimony.

1 **III. SUMMARY OF ANALYSIS AND CONCLUSIONS**

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

4 A. My analyses and recommendations considered the following:

- 5 • The *Hope* and *Bluefield* decisions³ that established the standards for
6 determining a fair and reasonable authorized ROE, including consistency of the
7 authorized return with other businesses having similar risk, adequacy of the
8 return to provide access to capital and support credit quality, and the principle
9 that the end result must lead to just and reasonable rates.
- 10 • The effect of current and prospective capital market conditions on the ROE
11 estimation models and on investors' return requirements.
- 12 • The Company's regulatory, business, and financial risks relative to the proxy
13 group of comparable companies and the implications of those risks in arriving
14 at the appropriate ROE.

15 **Q. Please explain how you considered those factors.**

16 A. I have relied on several analytical approaches to estimate RMP's cost of equity based
17 on a proxy group of publicly-traded companies. As shown in Figure 1, those ROE
18 estimation models produce a wide range of results.

19 My conclusion as to where, within that range of results, RMP's cost of equity
20 falls is based on market conditions, and the Company's business and financial risk
21 relative to the proxy group. Although the companies in my proxy group are generally

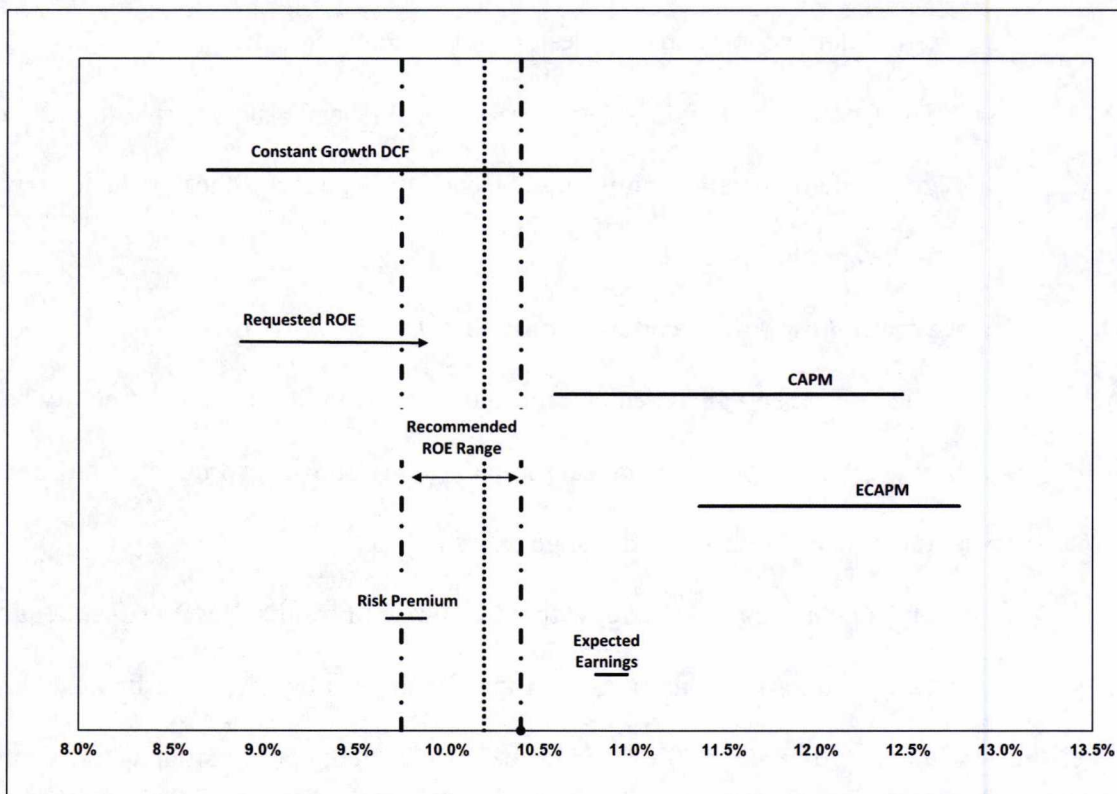
³ *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944) ("*Hope*"); *Bluefield Waterworks & Improvement Co., v. Public Service Commission of West Virginia*, 262 U.S. 679 (1923) ("*Bluefield*").

1 comparable to RMP, the Company's electric business faces higher risk than the proxy
2 group companies in several important ways that will be discussed later in my
3 testimony. In order for RMP to compete for capital on reasonable terms, those
4 additional risk factors should be reflected in the Company's authorized ROE.

5 **Q. Please summarize the results of the ROE estimation models that you considered
6 to establish the range of ROEs for RMP.**

7 A. Figure 1 summarizes the range of results produced by the Constant Growth DCF,
8 CAPM, ECAPM, Bond Yield Plus Risk Premium analysis, and Expected Earnings
9 analyses.

10 **Figure 1: Summary of Analytical Results**



1 While it is common to consider multiple models to estimate the cost of equity,
2 it is particularly important to do so when the range of results is wide, in order to
3 appropriately consider the factors that have resulted in the diverging range of results.
4 Based on current market conditions, my ROE recommendation considers the results
5 of the DCF models, forward-looking CAPM and ECAPM analyses, a Risk Premium
6 analysis, and an Expected Earnings analysis. I also consider company-specific risk
7 factors and current and prospective capital market conditions.

8 **Q. What is your recommended ROE for RMP?**

9 A. Based on the analysis presented in Section IX of my testimony, I conclude that RMP's
10 proposed 52.83 percent common equity is reasonable. To make this determination, I
11 reviewed the capital structures of the utility subsidiaries of the proxy companies. As
12 shown in Exhibit No. 19, the results of that analysis demonstrate that the average equity
13 ratios for the utility operating companies of the proxy group range from 47.62 percent
14 to 61.30 percent with an average of 52.75 percent. RMP's proposed common equity
15 ratio of 52.83 percent closely approximates the average equity ratio for the utility
16 operating subsidiaries of the proxy group companies and is well below the high end of
17 the range.

18 Furthermore, a fundamental aspect of the financial regulation of utilities is the
19 assurance that the subject utility has a reasonable opportunity to earn a return on
20 capital consistent with the return available on investments of similar risk. While this
21 principle is most often discussed in terms of the allowed ROE, it is equally applicable
22 to all aspects of the overall Rate of Return ("ROR"). The equity return, which is the
23 product of the ROE and the equity ratio, (*i.e.*, the Weighted Return on Equity

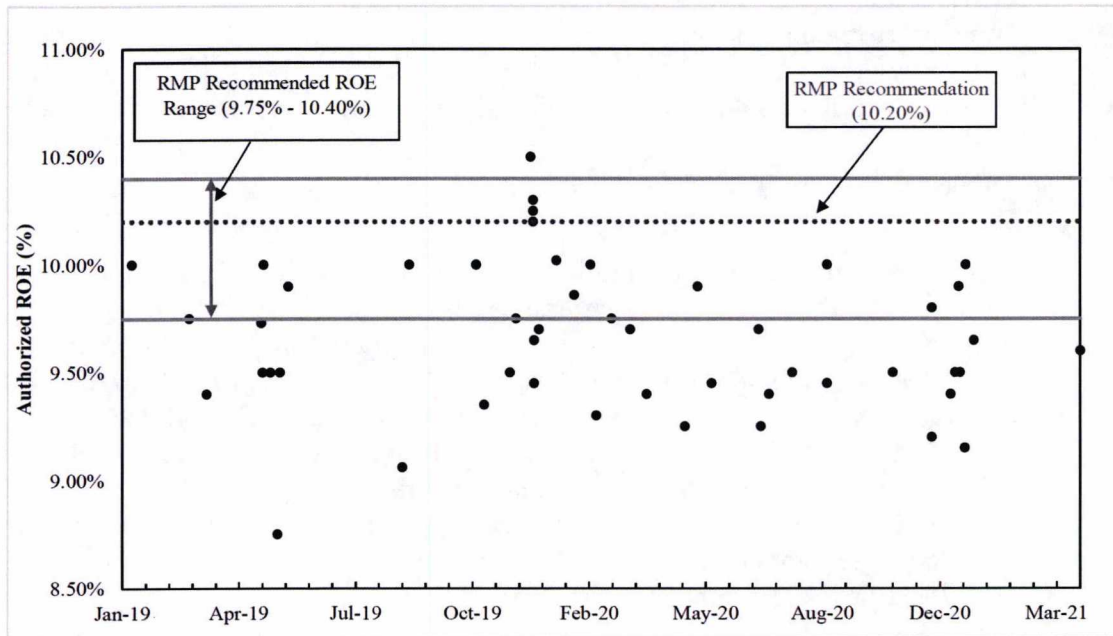
1 (“WROE”)), ultimately defines the return to shareholders, and the product of the cost
2 of debt and the debt ratio ensures that a company’s debt obligations are met.
3 Therefore, it is necessary to consider both the rates that are applied to debt and equity
4 and the composition of the capital structure to determine the reasonableness of the
5 ROR. Taken together, RMP’s proposed common equity ratio of 52.83 percent and its
6 requested ROE of 10.20 percent, result in a WROE of 5.39 percent. This return
7 reasonably balances the interests of customers and shareholders by enabling RMP to
8 maintain its financial integrity and therefore its ability to attract capital at reasonable
9 terms and conditions under a variety of economic and financial market conditions.

10 **Q. How does your recommended ROE compare with recently authorized ROEs for**
11 **vertically integrated electric utilities?**

12 A. As shown in Figure 2 below, the range that I have established is within the range of
13 recently authorized ROEs. Furthermore, the Company’s requested ROE of 10.20
14 percent is reasonable considering recently authorized ROEs and the relative risk of the
15 Company as compared to the proxy group, which is discussed in greater detail in
16 Section VII of my testimony.

1

Figure 2: Summary of Recently Authorized ROEs⁴



2

IV. REGULATORY GUIDELINES

3

Q. Please describe the guiding principles to be used in establishing the cost of capital for a regulated utility.

4

5

A. The United States Supreme Court’s precedent-setting *Hope* and *Bluefield* cases established the standards for determining the fairness or reasonableness of a utility’s allowed ROE. Among the standards established by the Court in those cases are: (1) consistency with other businesses having similar or comparable risks; (2) adequacy of the return to support credit quality and access to capital; and (3) that the end result, as opposed to the methodology employed, is the controlling factor in arriving at just and reasonable rates.⁵

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⁴ Source: S&P Global. Includes only vertically integrated electric utility ROEs between January 1, 2019 and March 31, 2021. This data excludes a recent determination for Green Mountain Power (8.20 percent), because it was not a market-based determination, but rather was the result of a formula rate plan.

⁵ *Hope*, 320 U.S. at 603; *Bluefield*, 262 U.S. at 692-93.

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

3 A. Yes. In a 2010 RMP rate case, the Commission findings were based on the standards
4 established in *Hope* and *Bluefield*:

5 The standards for determining a fair cost of common equity for a
6 regulated utility have been framed by two decisions of the U.S.
7 Supreme Court: *Bluefield Water Works & Improvement Co. v. Public*
8 *Serv. Commission of West Virginia*, 262 U.S. 679 (1923) and *Federal*
9 *Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944).
10 The standards to be considered provide that the authorized return
11 should: (1) be sufficient to maintain financial integrity; (2) be
12 sufficient to attract capital under reasonable terms; and (3) be
13 commensurate with returns investors could earn by investing in other
14 enterprises of comparable risk.⁶

15 This guidance is in accordance with the *Hope* and *Bluefield* decisions and the
16 principles that I employed to estimate the ROE for RMP, including the principle that
17 an allowed rate of return must be sufficient to enable regulated companies like RMP
18 to attract capital on reasonable terms. Furthermore, the methodologies that I have
19 employed are consistent with the Commission's recognition, as discussed below, that
20 it is important to consider other information beyond the results of the financial model
21 analysis to establish a rate of return on equity that is reasonable and reflects the
22 investor-required return.

⁶ *In the matter of the application of PacifiCorp DBA Rocky Mountain Power for Approval of Changes to its Electric Service Schedules*, Case No. PAC-E-10-07, Order No. 32196, at 10, 2011 WL 770798 (Idaho P.U.C. February 28, 2011).

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

3 A. An ROE that is adequate to attract capital at reasonable terms enables the Company to
4 continue to provide safe, reliable electric utility service while maintaining its financial
5 integrity. To the extent the Company has the opportunity to earn its market-based cost
6 of capital, neither customers nor shareholders are disadvantaged.

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

9 A. Yes. Utilities compete directly for capital with other investments of similar risk, which
10 include other natural gas and electric utilities. Therefore, the ROE awarded to a utility
11 sends an important signal to investors regarding the level of regulatory support for
12 financial integrity, dividends, growth, and fair compensation for business and financial
13 risk. The cost of capital represents an opportunity cost to investors. If higher returns
14 are available for other investments of comparable risk, investors have an incentive to
15 direct their capital to those investments. Thus, an authorized ROE significantly below
16 authorized ROEs for other natural gas and electric utilities would inhibit RMP's ability
17 to attract capital for investment.

18 **Q. Has the Commission considered the authorized ROEs in other jurisdictions?**

19 A. Yes. In RMP's 2010 case, the Commission relied on Staff's analysis of comparable
20 earnings to determine the appropriate ROE for RMP: "The comparable earnings
21 method evaluates returns earned by other companies, including utilities, to quantify an

1 investor's expected return, taking into account the risks associated with a particular
2 investment.”⁷ The earnings of other utilities are based on their ROEs.

3 **Q. What methodologies has the Commission considered to determine an appropriate**
4 **rate of return on common equity?**

5 A. In RMP's 2010 case, the Commission considered multiple models, including DCF,
6 comparable earnings, risk premium analysis, and the capital asset pricing model.⁸

7 **Q. What are your conclusions regarding regulatory guidelines?**

8 A. The ratemaking process is premised on the principle that, for investors and companies
9 to commit the capital needed to provide safe and reliable utility services, a utility must
10 have the opportunity to recover the return of, and the market-required return on, its
11 invested capital. Because utility operations are capital-intensive, regulatory decisions
12 should enable the utility to attract capital at reasonable terms under a variety of
13 economic and financial market conditions; doing so balances the long-term interests of
14 the utility and its customers.

15 The financial community carefully monitors the current and expected
16 financial condition of utility companies and the regulatory framework in which they
17 operate. In that respect, the regulatory framework is one of the most important factors
18 in both debt and equity investors' assessments of risk. The Commission's order in this
19 proceeding, therefore, should establish rates that provide RMP with the opportunity
20 to earn a ROE that is: (1) adequate to attract capital at reasonable terms under a variety
21 of economic and financial market conditions; (2) sufficient to ensure good financial

⁷ *Id.*

⁸ *Id.*

1 management and firm integrity; and (3) commensurate with returns on investments in
2 enterprises with similar risk. To the extent RMP is authorized to earn its market-based
3 cost of capital, the proper balance is achieved between customers' and shareholders'
4 interests.

5 V. CAPITAL MARKET CONDITIONS

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

7 A. The ROE estimation models rely on market data that are specific to the proxy group,
8 in the case of the DCF model, or the market risk, in the case of the CAPM. The results
9 of ROE estimation models can be affected by prevailing market conditions at the time
10 the analysis is performed. While the ROE that is established in a rate proceeding is
11 intended to be forward-looking, the practitioner uses current and projected market data,
12 specifically stock prices, dividends, growth rates, and interest rates in the ROE
13 estimation models to estimate the required return for the subject company.

14 Analysts and regulatory commissions recognize that current market
15 conditions affect the results of the ROE estimation models. Accordingly, it is
16 important to consider the effect of these conditions on the ROE estimation models
17 when determining the appropriate range and recommended ROE for a future period.
18 If investors do not expect current market conditions to be sustained in the future, the
19 ROE estimation may not provide an accurate estimate of investors' required return
20 during that rate period. Therefore, it is very important to consider projected market
21 data to estimate the return for that forward-looking period.

1 **Q. What factors affect the cost of equity for regulated utilities in the current and**
2 **prospective capital markets?**

3 A. The cost of equity for regulated utility companies is affected by several factors in the
4 current and prospective capital markets, including: (1) the dramatic shifts in market
5 conditions during 2020 and the expectations for 2021, and the effect of these changes
6 on the assumptions used in the ROE estimation models; and (2) as the economy
7 recovers from the COVID-19 recession, investors are expected to rotate into cyclical
8 sectors; thus utilities, a defensive sector, are expected to underperform the market over
9 the near-term. In this section, I discuss these factors and how they affect the models
10 used to estimate the cost of equity for regulated utilities.

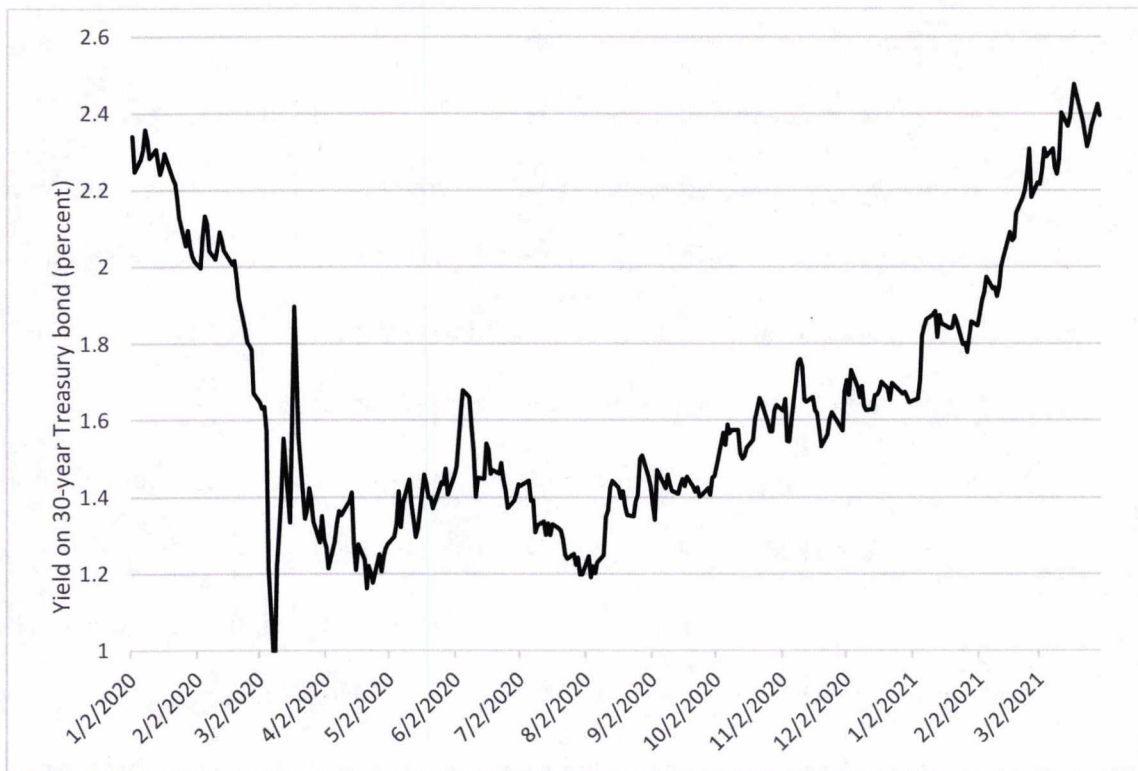
11 **A. Current Market Conditions and Effect on Valuations**

12 **Q. Have you reviewed key indicators in the financial markets?**

13 A. Yes. Market conditions were extremely volatile throughout 2020, and although the
14 volatility has abated from the highs in 2020, volatility is still higher than the historical
15 average. Throughout 2020 and into 2021, stock indices were volatile, reaching new
16 threshold levels in early 2020 prior to the spread of the COVID-19 pandemic to the
17 U.S, responding with significant volatility throughout 2020 to the uncertainty resulting
18 from the global pandemic, and in 2021, more likely facing a “V” shaped economic
19 recovery, stocks have rebounded. Further, as shown in Figure 3, interest rates faced a
20 similar pattern, as the yield on the 30-year Treasury bond started January 2020 at 2.33
21 percent, yet since a low of 1.19 percent in August 2020, have been steadily increasing
22 to an average of 2.41 percent as of the end of March 2021.

1

Figure 3: Yield on 30-Year Treasury Bond January 1, 2020- March 31, 2021⁹



2

The market response over the past 15 months has demonstrated that market

3

conditions can significantly affect the assumptions used in the ROE estimation

4

models and need to be considered in the development of any analysis. Further, the

5

rapid changes that have been seen in market conditions demonstrate the need to ensure

6

that utilities are positioned to have access to capital on reasonable terms in any market

7

conditions.

8

Q. What steps have the Fed and Congress taken to stabilize financial markets and support the economy in 2020?

9

10

A. In the past year, the Federal Reserve has:

⁹ Bloomberg Professional.

- 1 • decreased the Federal Funds rate twice in March 2020, resulting in a target
2 range of 0.00 percent to 0.25 percent;
- 3 • increased its holdings of both Treasury and mortgaged-back securities;
- 4 • started expansive programs to support credit to large employers – the Primary
5 Market Corporate Credit Facility to provide liquidity for new issuances of
6 corporate bonds; and the Secondary Market Corporate Credit Facility to provide
7 liquidity for outstanding corporate debt issuances; and
- 8 • supported the flow of credit to consumers and businesses through the Term
9 Asset-Backed Securities Loan Facility.

10 In addition, Congress also passed the Coronavirus Aid, Relief, and Economic
11 Security (“CARES”) Act in March 2020, the Consolidated Appropriations Act, 2021
12 in December 2020 and the American Rescue Plan Act in March 2021, which included
13 \$2.2 trillion, \$900 billion and \$1.9 trillion, respectively, in fiscal stimulus also aimed
14 at mitigating the economic effects of COVID-19. These expansive monetary and
15 fiscal programs have provided for greater price stability by mitigating the economic
16 effects of the COVID-19 pandemic.

17 **Q. Has the Federal Reserve signaled a continuation of its accommodating monetary**
18 **policy?**

19 A. Yes. On March 17, 2021, the Federal Reserve Chairman stated that, “[o]ur forward
20 guidance for the federal funds rate, along with our balance sheet guidance, will ensure
21 that the stance of monetary policy remains highly accommodative as the recovery

1 progresses.”¹⁰ The Federal Reserve also indicated that it has kept the federal funds rate
2 near zero and will continue to maintain its sizeable asset purchases of both treasuries
3 and mortgage-backed securities until substantial further progress has been made toward
4 its dual goals of maximum employment and price stability, noting that, “the economic
5 recovery remains uneven and far from complete, and the path ahead remains
6 uncertain.”¹¹

7 **Q. What effect, if any, will the Federal Reserve’s accommodative monetary policy**
8 **have on long-term interest rates over the near-term?**

9 A. Although the current accommodative monetary policy is expected to keep short-term
10 interest rates low, the Federal Reserve has not committed to keeping long-term interest
11 rates low. Long-term interest rates can and have increased even though monetary policy
12 is accommodative. For example, the current yield on the 30-year Treasury bond has
13 increased to nearly twice the yield on this instrument in August 2020, when bond yields
14 were at their lowest.

15 **Q. Have you reviewed any recent projections of economic activity for 2021?**

16 A. Yes. Economic projections indicate the expectation for a strong recovery in 2021. The
17 Federal Open Market Committee (“FOMC”) issued its Summary of Economic
18 Projections in March 2021, where the FOMC’s median projection for GDP growth from
19 Q4 2020 to Q4 2021 is 6.5 percent.¹² The Congressional Budget Office (“CBO”) issued
20 its outlook on economic conditions in February 2021. In that report, the CBO projected
21 strong GDP growth for 2021 and significant strength in overall economic conditions:

¹⁰ FOMC Press Conference, March 17, 2021; <https://www.federalreserve.gov/monetarypolicy/fomc.htm>.

¹¹ *Ibid.*

¹² Federal Open Market Committee, Summary of Economic Projections, March 17, 2021, at 2.

- 1 • Real GDP growth of 3.7 percent, which is a significant change from the
2 negative 2.5 percent in 2020.
- 3 • Inflation indicators nearing the 2.0 percent threshold in 2021-2022.
- 4 • Labor force expected to be restored to pre-pandemic levels in 2022.
- 5 • Interest rates on federal borrowing increasing in 2024.¹³

6 Further, consumer confidence has been projected to be at a high level,
7 exceeding levels established prior to the pandemic.¹⁴ Finally, Bloomberg recently
8 forecasted growth of 6.9 percent, which would largely reverse the contraction seen in
9 2020, the definition of a “V” shaped recovery. Bloomberg also projects inflation to
10 increase in the months ahead.¹⁵ High growth is expected to drive an increase in U.S.
11 bond yields and inflation in 2021, which may result in modest monetary tightening.¹⁶
12 U.S. bond yields have already rebounded considerably in the past year, with 30-year
13 Treasury bond yields up 114 basis points between April 1, 2020 and March 31, 2021,
14 and further rebounding expected throughout the year. These trends indicate strong
15 economic recovery over the next year, with robust consumer spending expected.

16 **Q. Have you reviewed other market indicators to determine investors’ expectations**
17 **regarding the economy over the near-term?**

18 A. Yes, I have. Specifically, I reviewed the yield curve, calculated as the difference
19 between the yield on the 10-year Treasury Bond and the yield on the 2-year Treasury
20 Bond from January 2015 through March 2021. I selected the 10-year Treasury Bond

¹³ Congressional Budget Office, An Overview of the Economic Outlook 2021 to 2031, February 2021.

¹⁴ IPSOS-Forbes Advisor U.S. Consumer Confidence Weekly Tracker, April 8, 2021.

¹⁵ Bloomberg, “It’s a ‘V’- World Growth to Hit 60-Year High, April 13, 2021.

¹⁶ Van Roye, Bjorn and Tom Orlik. “Tantrums, Spillovers and the \$1.9T U.S. Stimulus.” Bloomberg Briefs, accessed April 13, 2021.

1 yield to represent long-term interest rates and the yield on the 2-year Treasury Bond to
2 represent short-term interest rates. As shown in Figure 4, the yield curve has been
3 steepening, with the spread increasing to approximately 160 basis points, which is a
4 level not seen since the middle of 2015. The steepening of the yield curve indicates that
5 investors expect economic growth and inflation to increase in the near-term, and as a
6 result they are rotating out of long-term government bonds to avoid being locked into
7 to low interest rates for the long-term. The steep yield curve signals that higher yields
8 are required by investors to invest in long-term government bonds.

9 **Figure 4: 10-year Treasury Bond Yield Minus 2-year Treasury Bond Yield –**
10 **January 2015 – March 2021¹⁷**



¹⁷ Federal Reserve Bank of St. Louis, 10-Year Treasury Constant Maturity Minus 2-Year Treasury Constant Maturity [T10Y2Y], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/T10Y2Y>, March 31, 2021.

1 **Q. What have equity analysts said about the steepening of the yield curve?**

2 A. Several equity analysts have noted that the yield curve is steepening and is expected to
3 continue to steepen into 2021, which is an indicator that the economy is entering the
4 early expansion phase of the business cycle. For example, in a recent Bloomberg article,
5 Morgan Stanley indicated that they expected a “V-shaped” economic recovery and
6 therefore advised investors to underweight government bonds and overweight
7 equities.¹⁸ Similarly, Goldman Sachs strategists recently noted the following:

8 As the economic recovery consolidates next year, we expect to see
9 more differentiation across the curve, with policymakers committing
10 to keeping front-end rates low, but higher expectations for real growth
11 and inflation driving long-end rates higher,” Goldman strategists
12 including Zach Pandl wrote in the report, released Tuesday.

13 This should be especially true in the U.S. due to the Federal Reserve’s
14 new average inflation targeting framework, which commits the central
15 bank to holding off on rate hikes until inflation has reached its target
16 and is on track to overshoot it.¹⁹

17 More recently, BTG Pactual Asset Management noted the following regarding
18 increasing interest rates:

19 “We’re talking about a fair amount of stimulus -- both fiscal and
20 monetary – going forward,” BTG Pactual Asset Management’s John
21 Fath said, referring to the \$1.9 trillion pandemic-relief bill and
22 prospects for more, along with the Federal Reserve’s pledge to stay
23 accommodative. “We potentially could grow a lot faster and inflation
24 could come into the horizon a lot quicker,” which begets higher rates.²⁰

¹⁸ Ossinger, Joanna. “Morgan Stanley Says Go Risk-On and ‘Trust the Recovery’ in 2021.” Bloomberg.com, 15 Nov. 2020, www.bloomberg.com/news/articles/2020-11-16/morgan-stanley-says-go-risk-on-and-trust-the-recovery-in-2021.

¹⁹ McCormick, Liz. “Goldman Goes All-In for Steeper U.S. Yield Curves as 2021 Theme.” Bloomberg.com, 10 Nov. 2020, www.bloomberg.com/news/articles/2020-11-10/goldman-goes-all-in-for-steeper-u-s-yield-curves-as-2021-theme.

²⁰ Spratt, Stephen, et al. “Treasury Yields Leap Past Key Level to 1.64%, Highest in a Year.” Bloomberg.com, Bloomberg, 12 Mar. 2021, www.bloomberg.com/news/articles/2021-03-12/treasury-yields-surge-to-test-key-level-in-sudden-selling-bout.

1 Finally, Citigroup also recently projected that the yield on the 10-year
2 Treasury Bond is expected to increase in 2021, which prompted Citigroup's
3 recommendation to overweight equities and favor cyclical sectors over defensive
4 sectors, such as utilities.²¹

5 **Q. How has the utility sector historically performed during periods in which the yield**
6 **curve is steepening, and the economy is in the early stages of the business cycle?**

7 A. Several market analysts have noted that utilities underperform when the economy is in
8 the early stages of the business cycle. This is because utilities are considered a
9 defensive sector for investors, meaning utilities are affected less by changes in the
10 business cycle relative to other market sectors since consumers need utility services
11 regardless of the phase of the business cycle. As such, utility stocks generally perform
12 well during periods of uncertainty where the prospect of slowing economic growth
13 increases.

14 In a recent report, Fidelity noted that the utility sector has historically been
15 one of the worst performing sectors during the early phase of the business cycle with
16 a geometric average return of -10.5 percent.²² This conclusion is further supported by
17 studies conducted by both Goldman Sachs and Deutsche Bank that examined the
18 sensitivity of share prices of different industries to changes in interest rates over the
19 past five years. Both Goldman Sachs and Deutsche Bank found that utilities had one
20 of the strongest negative relationships with bond yields (i.e., increases in bond yields

²¹ Keown, Callum. "10-Year Treasury Yields Will Rise Into 2021, Citi Says. This 'Aggressive' Equity Strategy Can Outperform." Barrons.com, 16 Nov. 2020, www.barrons.com/articles/10-year-treasury-yields-will-rise-into-2021-citi-says-this-aggressive-equity-strategy-can-outperform-51605543920.

²² Fidelity Investments, "The Business Cycle Approach to Equity Sector Investing," 2020.

1 resulted in the decline of utility share prices).²³ This is important because if the utility
2 sector underperforms over the near term, and prices of utility stocks decline, then the
3 DCF model, which relies on historical averages of share prices, is likely to understate
4 the cost of equity for the Company over the near term or the period that Company's
5 rates will be in effect.

6 Barron's recently conducted its Big Money poll of 152 professional investors
7 regarding the outlook for the next twelve months. The majority of respondents
8 projected the yield on the 10-year Treasury Bond to be between 2.00 percent and 2.50
9 percent at the end of the next twelve months which is a significant increase from the
10 current 30-day average 10-year Treasury Bond yield as of March 31, 2021 of 1.56
11 percent.²⁴ Furthermore, the utility sector was selected as the sector which will perform
12 the worst over the next twelve months.²⁵ Therefore, the professional investors
13 surveyed by Barron's are projecting that utilities will underperform the broader
14 market in 2021.

15 Similarly, Charles Schwab has classified the utilities sector overall as
16 "Underperform," noting that:

17 The Utilities sector has tended to perform relatively better when
18 concerns about slowing economic growth resurface, and to
19 underperform when those worries fade. That's partly because of the
20 sector's traditional defensive nature and steady revenues—people
21 need water, gas and electric services during all phases of the business
22 cycle. And low interest rates that typically come with a weak economy

²³ Lee, Justina. "Wall Street Is Rethinking the Treasury Threat to Big Tech Stocks." Bloomberg.com, 11 Mar. 2021, www.bloomberg.com/news/articles/2021-03-11/wall-street-is-rethinking-the-treasury-threat-to-big-tech-stocks.

²⁴ Jasinski, Nicholas. This Bull Market Is Far From Over, Pros Say. Where They're Investing Now. Barron's, 26 Apr. 2021, www.barrons.com/articles/stocks-have-more-room-to-rise-says-barrons-big-money-poll-51619222301?mod=past_editions.

²⁵ *Ibid.*

1 provide cheap funding for the large capital expenditures required in
2 this industry.

3 However, valuations have been driven up in recent years as investors
4 have reached for yield in this new era of low interest rates; this may
5 decrease the sector's traditional defensive characteristics. And while
6 interest rates are expected to remain generally low, they could edge
7 higher as the economy continues to expand. On the flip side, there is
8 the potential for a renewed decline in the economy to push rates even
9 lower, or there could be significant government funding to Utilities as
10 part of clean-energy initiatives that would benefit the sector's profit
11 outlook.²⁶

12 As Charles Schwab noted, the utility sector underperforms in periods of
13 economic growth; however, given the high valuations of the utility sector, even if
14 volatility were to increase, the utility sector might still underperform in a market
15 setting where utilities had traditionally been overperformers.

16 **Q. Are the valuations of the electric utilities stocks currently considered high?**

Yes. The electric utility sector's valuations remain above the long-term historical average. As shown in Figure 5, the price-to-earnings ("P/E") ratio of the proxy group is currently approximately 21.3, or above the long-term average of the proxy group over this period of approximately 16.6.

²⁶ Charles Schwab, Utilities Sector Rating: Underperform, February 11, 2021.

1
2

**Figure 5: P/E Ratios of Proxy Group Relative to the Long-Term Average,
January 2000 – March 2021²⁷**



3
4
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8

Q. What is the effect of high valuations of utility stocks on the DCF model?

A. High valuations have the effect of depressing dividend yields, which results in overall lower estimates of the cost of equity resulting from the DCF model. The relatively low dividend yields demonstrated over the longer historical period imply that the ROE calculated using historical market data in the DCF model may understate the forward-looking cost of equity.

²⁷ Bloomberg Professional.

1 **Q. What are your conclusions regarding the effect of current market conditions on**
2 **the cost of equity for RMP?**

3 A. Given the uncertainty and volatility that has characterized capital markets over the past
4 year, and the steady increase in interest rates since market lows in August 2020, it is
5 reasonable that equity investors would now require a higher return on equity to
6 compensate for the additional risk associated with owning common stock under these
7 market conditions. Likewise, if electric and other utilities underperform the broader
8 market going forward as expected by investors as the economy rebounds, this will
9 indicate that investors see added risk associated with such investments, which will in
10 turn imply an increase in the cost of equity.

11 Investors' current expectations regarding the economy highlights the
12 importance of using forward-looking inputs in the models used to estimate the cost of
13 equity. While the growth rate in the DCF model can be estimated using projections,
14 the DCF model relies on historical average share prices. As discussed, relatively high
15 current utility stock valuations result in low dividend yields for those companies,
16 which means that DCF models using recent *historical* data are likely to underestimate
17 investors' required return for RMP. Conversely, two out of three inputs (i.e., risk-free
18 rate and market risk premium) in the CAPM can be estimated using forward-looking
19 projections. Similarly, the Bond Yield Risk Premium and Expected Earnings analyses
20 also use forward-looking data. Therefore, the CAPM is likely to capture more
21 effectively the economic conditions expected by investors over the near-term. This
22 highlights the importance of considering the results of each of the models to reflect

1 investors' expectations of market conditions over the period that the rates established
2 in this proceeding will be in effect.

3 **Q. What conclusions do you draw from your analysis of capital market conditions?**

4 A. The important conclusions regarding capital market conditions are:

- 5 • The assumptions used in the ROE estimation models have been affected by
6 recent, historically atypical market conditions. Therefore, it is important to
7 allow the results of multiple ROE estimation models to inform the decision on
8 the appropriate ROE for RMP in this proceeding.
- 9 • Recent market conditions reflect short-term exogenous shocks that are not
10 expected to persist over the long term. As a result, the recent atypical market
11 conditions do not reflect the market conditions that are expected to be present
12 when the rates for RMP will be in effect.
- 13 • With currently relatively high electric stock valuations, rising interest rates,
14 analysts' expectations of a steepening yield curve, and strength in economic
15 conditions in 2021 as the economy begins to rebound, it is increasingly
16 important to consider a rate of return that supports the Company's cash flow
17 metrics to enable RMP the ability to attract capital at reasonable terms during
18 the period that rates will be in effect.

19 VI. PROXY GROUP SELECTION

20 **Q. Why have you used a group of proxy companies to estimate the Cost of Equity for**
21 **RMP?**

22 A. In this proceeding, I am estimating the cost of equity for an electric utility company
23 that is not itself publicly traded. Because the cost of equity is a market-based concept

1 and given that RMP's electric operations in Idaho do not make up the entirety of a
2 publicly traded entity, it is necessary to establish a group of companies that is both
3 publicly traded and comparable to RMP in certain fundamental business and financial
4 respects to serve as its "proxy" in the ROE estimation process.

5 Even if RMP were a publicly traded entity, it is possible that transitory events
6 could bias its market value over a given period. A significant benefit of using a proxy
7 group is that it moderates the effects of unusual events that may be associated with
8 any one company. The proxy companies used in my analyses all possess a set of
9 operating and risk characteristics that are substantially comparable to RMP, and thus
10 provide a reasonable basis to derive an estimate of the appropriate ROE for RMP.

11 **Q. Please provide a brief profile of RMP.**

12 A. RMP is an electric utility, which is an indirect, wholly owned subsidiary of Berkshire
13 Hathaway Energy Company. PacifiCorp provides electric utility service to
14 approximately 2.0 million residential, commercial, and industrial customers in
15 California, Idaho, Oregon, Utah, Washington, and Wyoming.²⁸ In Idaho, RMP provides
16 electric service to approximately 84,500 residential, commercial, and industrial
17 customers.²⁹ As of December 31, 2020, RMP had a net utility electric plant allocated
18 to Idaho of \$1.048 billion.³⁰ RMP's electric operations in Idaho represented 6.5 percent
19 of PacifiCorp's electric sales in 2020.³¹ PacifiCorp currently has an investment grade

²⁸ Berkshire Hathaway 2020 Form 10-K at 3.

³⁸ Data provided by PacifiCorp.

³⁹ Data provided by PacifiCorp.

⁴⁰ Data provided by PacifiCorp.

1 long-term rating of A (Outlook: Stable) from S&P and A3 (Outlook: Stable) from
2 Moody's.³²

3 **Q. How did you select the companies included in your proxy group?**

4 A. I began with the group of 37 domestic companies that Value Line classifies as electric
5 utilities and I simultaneously applied the following screening criteria to exclude
6 companies that:

- 7 • pay consistent quarterly cash dividends, because companies that do not cannot
8 be analyzed using the Constant Growth DCF model;
- 9 • have investment grade long-term issuer ratings from S&P and/or Moody's;
- 10 • are covered by at least two utility industry analysts;
- 11 • have positive long-term earnings growth forecasts from at least two utility
12 industry equity analysts;
- 13 • own regulated generation assets that are in rate base;
- 14 • have more than 5 percent of owned regulated generation capacity come from
15 regulated coal-fired power plants;
- 16 • derive more than 60 percent of their total operating income from regulated
17 operations;
- 18 • derive more than 60 percent of regulated operating income from regulated
19 electric operations;
- 20 • were not parties to a merger or transformative transaction during the analytical
21 periods relied on; and

³² SNL Financial. Accessed April 20, 2021.

- 1 • have a mean Constant DCF ROE of at least 7 percent.

2 **Q. Please explain why you excluded companies from your proxy group with a mean**
3 **Constant Growth DCF result less than 7 percent?**

4 A. It is appropriate to exclude companies from the proxy group with a mean Constant
5 Growth DCF result below a specified threshold at which equity investors would
6 consider such returns to provide an insufficient return increment above long-term debt
7 costs. For example, the average credit rating for the companies in my proxy group is
8 BBB+.³³ The average yield on Moody's Baa-rated utility bonds for the 30 trading days
9 ending March 31, 2021, was 3.67 percent.³⁴ Thus, I have eliminated companies from
10 my proxy group with mean Constant Growth DCF results lower than 7.00 percent
11 because such returns would provide equity investors a risk premium only 333 basis
12 points above Baa-rated utility bonds.

13 **Q. Did your 7 percent risk premium screen result in the exclusion of any additional**
14 **companies from your electric proxy group?**

15 A. Yes, it did. IDACORP, Inc. had mean DCF result for the 30-day average price scenario
16 of 6.30 percent, and thus was excluded from the proxy group.

17 **Q. What is the composition of your proxy group?**

18 A. My proxy group consists of the companies shown in Figure 6.

³³ The average credit rating is calculated by assigning a numerical scale of 1 to 22 to the range of S&P and Moody's rating tiers. For the proxy group the average is 8.0. This corresponds to a rating of BBB+ on the S&P scale.

³⁴ Source: Bloomberg Professional.

Figure 6: Proxy Group

Company	Ticker
ALLETE, Inc.	ALE
Alliant Energy Corporation	LNT
Ameren Corporation	AEE
American Electric Power Company, Inc.	AEP
Avista Corporation	AVA
CMS Energy Corporation	CMS
DTE Energy Company	DTE
Duke Energy Corporation	DUK
Entergy Corporation	ETR
Evergy, Inc.	EVRG
NextEra Energy, Inc.	NEE
NorthWestern Corporation	NWE
OGE Energy Corporation	OGE
Otter Tail Corporation	OTTR
Pinnacle West Capital Corporation	PNW
Portland General Electric Company	POR
Southern Company	SO
Xcel Energy Inc.	XEL

2

VII. COST OF EQUITY ESTIMATION3 **Q. Please briefly discuss the ROE in the context of the regulated rate of return.**

4 A. The overall rate of return for a regulated utility is based on its weighted average cost of
5 capital, in which the cost rates of the individual sources of capital are weighted by their
6 respective book values. While the costs of debt and preferred stock can be directly
7 observed, the cost of equity is market-based and, therefore, must be estimated based on
8 observable market data.

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

10 A. The required ROE is estimated using one or more analytical techniques that rely on
11 market-based data to quantify investor expectations regarding required equity returns,

1 adjusted for certain incremental costs and risks. Informed judgment is then applied to
2 determine where the Company's Cost of Equity falls within the range of results. The
3 key consideration in determining the Cost of Equity is to ensure that the methodologies
4 employed reasonably reflect investors' views of the financial markets in general, as
5 well as the subject company (in the context of the proxy group) in particular.

6 **Q. What methods did you use to determine the Company's ROE?**

7 A. I considered the results of the Constant Growth DCF model, the CAPM and ECAPM
8 analysis, a Bond Yield Plus Risk Premium methodology, and an Expected Earnings
9 analysis. In addition, I considered the range of recently authorized ROEs for electric
10 utilities, which is generally consistent with the Commission's prior consideration of a
11 comparable earnings analysis. As discussed in more detail below, a reasonable ROE
12 estimate appropriately considers alternative methodologies and the reasonableness of
13 their individual and collective results.

14 **A. Importance of Multiple Analytical Approaches**

15 **Q. Why is it important to use more than one analytical approach?**

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

1 estimating the cost of equity. For example, Copeland, Koller, and Murrin³⁵ suggest
2 using the CAPM and Arbitrage Pricing Theory model, while Brigham and Gapenski³⁶
3 recommend the CAPM, DCF, and Bond Yield Plus Risk Premium approaches.

4 **Q. Do current market conditions increase the importance of using more than one**
5 **analytical approach?**

6 A. Yes. Low interest rates and the effects of the investor “flight to quality” can be seen in
7 high utility share valuations, relative to historical levels and relative to the broader
8 market. Higher utility stock valuations produce lower dividend yields and result in
9 lower cost of equity estimates from a DCF analysis. Low interest rates also affect the
10 CAPM in two ways: (1) the risk-free rate is lower, and (2) because the market risk
11 premium is a function of interest rates (i.e., it is the return on the broad stock market
12 less the risk-free interest rate), the risk premium should move higher when interest rates
13 are lower. Therefore, it is important to use multiple analytical approaches to moderate
14 the impact that the current low interest rate environment is having on the ROE estimates
15 for the proxy group and, where possible, consider using projected market data in the
16 models to estimate the return for the forward-looking period.

17 **Q. Has the Commission recognized that it is important to consider the results of**
18 **multiple ROE estimation models?**

19 A. Yes. As discussed above, it is my understanding that in determining the authorized ROE
20 for a company, the Commission has supported consideration of the evidence presented

³⁵ Tom Copeland, Tim Koller and Jack Murrin, Valuation: Measuring and Managing the Value of Companies, 3rd Ed. (New York: McKinsey & Company, Inc., 2000), at 214.

³⁶ Eugene Brigham, Louis Gapenski, Financial Management: Theory and Practice, 7th Ed. (Orlando: Dryden Press, 1994), at 341.

1 by the parties in the rate case which has included a range of ROEs from models such
2 as the DCF, CAPM, Risk Premium and Comparable Earnings.³⁷

3 **Q. What are your conclusions about the results of the DCF and CAPM models?**

4 A. Recent market data that is used as the basis for the assumptions for both models have
5 been affected by market conditions. As a result, relying exclusively on historical
6 assumptions in these models, without considering whether these assumptions are
7 consistent with investors' future expectations, will underestimate the cost of equity that
8 investors would require over the period that the rates in this case are to be in effect. In
9 this instance, relying on the historically low dividend yields that are not expected to
10 continue over the period that the new rates will be in effect will underestimate the ROE
11 for RMP.

12 Furthermore, as discussed in Section V above, Treasury bond yields have
13 experienced unprecedented volatility in recent months due to the economic effects of
14 COVID-19 and the subsequent intervention into the Treasury bond market by the
15 Federal Reserve. However, long-term interest rates have increased since August 2020
16 and this trend is expected to continue over the near-term as the economy enters the
17 recovery phase of the business cycle. Therefore, the use of current averages of
18 Treasury bond yields as the estimate of the risk-free rate in the CAPM is not
19 appropriate since recent market conditions are not expected to continue over the long-
20 term. Instead, analysts should rely on projected yields of Treasury Bonds in the
21 CAPM. The projected Treasury Bond yields results in CAPM estimates that are more

³⁷ *In the matter of the application of PacifiCorp DBA Rocky Mountain Power for Approval of Changes to its Electric Service Schedules*, Case No. PAC-E-10-07, Order No. 32196 at 10-12 (Feb. 28, 2011).

1 reflective of the market conditions that investors expect during the period that the
2 Company's rates will be in effect.

3 **B. Constant Growth DCF Model**

4 **Q. Please describe the DCF approach.**

5 A. The DCF approach is based on the theory that a stock's current price represents the
6 present value of all expected future cash flows. In its most general form, the DCF model
7 is expressed as follows:

$$8 \quad P_0 = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + \dots + \frac{D_\infty}{(1+k)^\infty} \quad P_0 = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + \dots + \frac{D_\infty}{(1+k)^\infty} \quad [1]$$

9 Where P_0 represents the current stock price, $D_1 \dots D_\infty$ are all expected future
10 dividends, and k is the discount rate, or required ROE. Equation [1] is a standard
11 present value calculation that can be simplified and rearranged into the following
12 form:

$$13 \quad k = \frac{D_0(1+g)}{P_0} + g \quad k = \frac{D_0(1+g)}{P_0} + g \quad [2]$$

14 Equation [2] is often referred to as the Constant Growth DCF model in which
15 the first term is the expected dividend yield and the second term is the expected long-
16 term growth rate.

17 **Q. What assumptions are required for the Constant Growth DCF model?**

18 A. The Constant Growth DCF model requires the following assumptions: (1) a constant
19 growth rate for earnings and dividends; (2) a stable dividend payout ratio; (3) a constant
20 price-to-earnings ratio; and (4) a discount rate greater than the expected growth rate.

1 To the extent that any of these assumptions is violated, considered judgment and/or
2 specific adjustments should be applied to the results.

3 **Q. What market data did you use to calculate the dividend yield in your Constant**
4 **Growth DCF model?**

5 A. The dividend yield in my Constant Growth DCF model is based on the proxy
6 companies' current annualized dividend and average closing stock prices over the 30-,
7 90-, and 180-trading days ended March 31, 2021.

8 **Q. Why did you use 30-, 90-, and 180-day averaging periods?**

9 A. In my Constant Growth DCF model, I use an average of recent trading days to calculate
10 the term P_0 in the DCF model to ensure that the ROE is not skewed by anomalous
11 events that may affect stock prices on any given trading day. The averaging period
12 should also be reasonably representative of expected capital market conditions over the
13 long-term. However, the averaging periods that I use rely on historical data that are not
14 consistent with the forward-looking market expectations. Therefore, the results of my
15 Constant Growth DCF model using historical data may underestimate the forward-
16 looking cost of equity. As a result, I place more weight on the mean to mean-high results
17 produced by my Constant Growth DCF model.

18 **Q. Did you make any adjustments to the dividend yield to account for periodic**
19 **growth in dividends?**

20 A. Yes, I did. Because utility companies tend to increase their quarterly dividends at
21 different times throughout the year, it is reasonable to assume that dividend increases
22 will be evenly distributed over calendar quarters. Given that assumption, it is
23 reasonable to apply one-half of the expected annual dividend growth rate for purposes

1 of calculating the expected dividend yield component of the DCF model. This
2 adjustment ensures that the expected first-year dividend yield is, on average,
3 representative of the coming twelve-month period, and does not overstate the
4 aggregated dividends to be paid during that time.

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

7 A. In its Constant Growth form, the DCF model (*i.e.*, Equation [2]) assumes a single
8 growth estimate in perpetuity. In order to reduce the long-term growth rate to a single
9 measure, one must assume a constant payout ratio, and that earnings per share,
10 dividends per share and book value per share all grow at the same constant rate. Over
11 the long run, however, dividend growth can only be sustained by earnings growth. It,
12 therefore, is important to incorporate a variety of sources of long-term earnings growth
13 rates into the Constant Growth DCF model.

14 **Q. Which sources of long-term earnings growth rates did you use?**

15 A. My Constant Growth DCF model incorporates three sources of long-term earnings
16 growth rates: (1) consensus estimates from Zacks Investment Research; (2) consensus
17 estimates from Thomson First Call (provided by Yahoo! Finance); and (3) Value Line
18 Investment Survey.

19 **C. DCF Model Results**

20 **Q. How did you calculate the range of results for the DCF model?**

21 A. I calculated the low results for the DCF model using the minimum growth rate (*i.e.*, the
22 lowest of the First Call, Zacks, and Value Line earnings growth rates) for each of the
23 proxy group companies. Thus, the low results reflect the minimum DCF result for the

1 proxy group. I used a similar approach to calculate the high results, using the highest
2 growth rate for each proxy group company. The mean results were calculated using the
3 average growth rates from all three sources.

4 **Q. Please summarize the results of your DCF analysis.**

5 A. Figure 7 summarizes the results of my DCF analyses. As shown in Figure 7, the mean
6 DCF results range from 9.85 percent to 9.93 percent and the mean high results are in
7 the range of 10.73 percent to 10.82 percent. While I also summarize the mean low DCF
8 results, I do not believe that the low DCF results provide a reasonable spread over the
9 expected yields on Treasury bonds to compensate investors for the incremental risk
10 related to an equity investment.

11 **Figure 7: Constant Growth Discounted Cash Flow Results³⁸**

	Mean Low	Mean	Mean High
30-Day Average	8.66%	9.85%	10.73%
90-Day Average	8.69%	9.88%	10.77%
180-Day Average	8.74%	9.93%	10.82%

12 **D. CAPM Analysis**

13 **Q. Please briefly describe the Capital Asset Pricing Model.**

14 A. The CAPM is a risk premium approach that estimates the Cost of Equity for a given
15 security as a function of a risk-free return plus a risk premium to compensate investors
16 for the non-diversifiable or “systematic” risk of that security. This second component
17 is the product of the market risk premium and the Beta coefficient, which measures the
18 relative riskiness of the security being evaluated.

³⁸ See Exhibit No. 12.

1 The CAPM is defined by four components, each of which must theoretically
2 be a forward-looking estimate:

3
$$K_e = r_f + \beta(r_m - r_f) \quad [3]$$

4 Where:

5 K_e = the required market ROE;

6 β = Beta coefficient of an individual security;

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

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

9 In this specification, the term $(r_m - r_f)$ represents the market risk premium.

10 According to the theory underlying the CAPM, since unsystematic risk can be
11 diversified away, investors should only be concerned with systematic or non-
12 diversifiable risk. Non-diversifiable risk is measured by Beta, which is defined as:

$$\beta = \frac{\text{Covariance}(r_e, r_m)}{\text{Variance}(r_m)} \quad [4]$$

13 The variance of the market return (*i.e.*, *Variance* (r_m)) is a measure of the
14 uncertainty of the general market, and the covariance between the return on a specific
15 security and the general market (*i.e.*, *Covariance* (r_e, r_m)) reflects the extent to which
16 the return on that security will respond to a given change in the general market return.
17 Thus, Beta represents the risk of the security relative to the general market.

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

2 A. I relied on three sources for my estimate of the risk-free rate: (1) the current 30-day
3 average yield on 30-year U.S. Treasury bonds (*i.e.*, 2.31 percent);³⁹ (2) the projected
4 30-year U.S. Treasury bond yield for Q3 2021 through Q3 2022 of 2.60 percent;⁴⁰ and
5 (3) the projected 30-year U.S. Treasury bond yield for 2022 through 2026 of 2.80
6 percent.⁴¹

7 **Q. Would you place more weight on one of these scenarios?**

8 A. Yes. Based on current market conditions, I place more weight on the results of the
9 projected yields on the 30-year Treasury bonds. As discussed previously, the estimation
10 of the cost of equity in this case should be forward-looking because it is the return that
11 investors would receive over the future rate period. Therefore, the inputs and
12 assumptions used in the CAPM analysis should reflect the expectations of the market
13 at that time. While I have included the results of a CAPM analysis that relies on the
14 current average risk-free rate, this analysis fails to take into consideration the effect of
15 the market's expectations for interest rate increases on the cost of equity.

16 **Q. What Beta coefficients did you use in your CAPM analysis?**

17 A. As shown on Exhibit No. 13, I used the average Beta coefficients for the proxy group
18 companies as reported by Bloomberg and Value Line. The Bloomberg Beta coefficients
19 are calculated based on ten years of weekly returns relative to the S&P 500 Index. Value
20 Line's calculation is based on five years of weekly returns relative to the New York
21 Stock Exchange Composite Index.

³⁹ Bloomberg Professional, as of March 31, 2021.

⁴⁰ Blue Chip Financial Forecasts, Vol. 40, No. 4, April 1, 2021, at 2.

⁴¹ Blue Chip Financial Forecasts, Vol. 39, No. 12, December 1, 2020, at 14.

1 Additionally, as shown in Exhibit No. 14, I also considered an additional
2 CAPM analysis which relies on the long-term average utility Beta coefficient for the
3 companies in my proxy group. The long-term average utility Beta coefficient was
4 calculated as an average of the Value Line Beta coefficients for the companies in my
5 proxy group from 2011 through 2020.

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

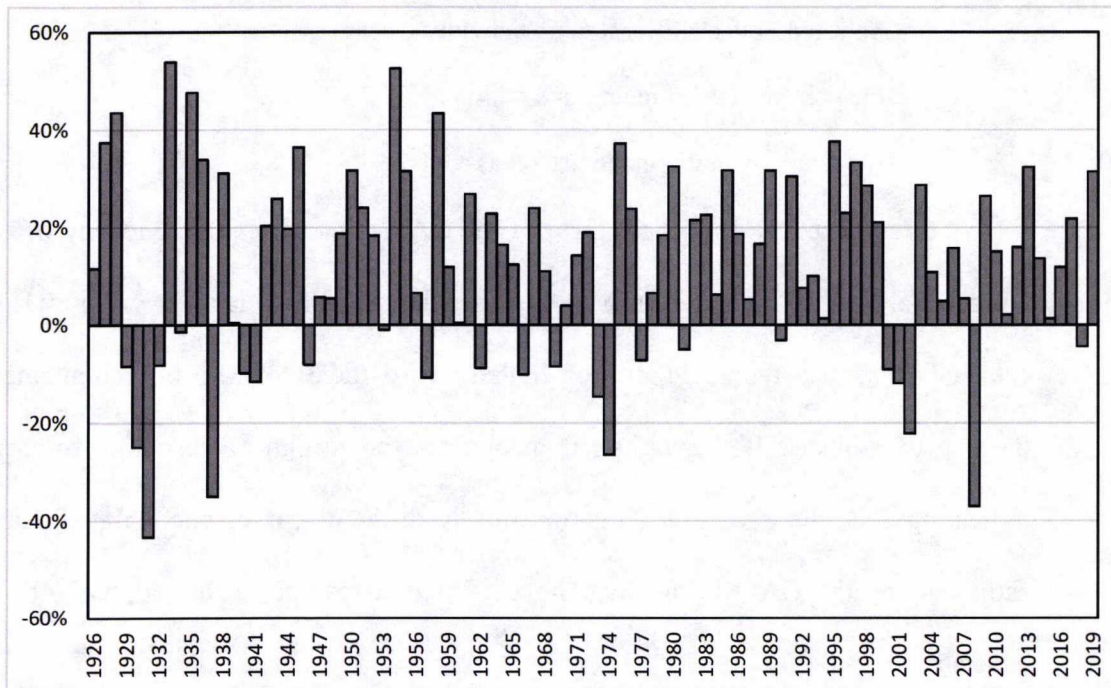
7 A. I estimated the Market Risk Premium (“MRP”) as the difference between the implied
8 expected equity market return and the risk-free rate. The expected return on the S&P
9 500 Index is calculated using the Constant Growth DCF model discussed earlier in my
10 testimony for the companies in the S&P 500 Index for which dividend yields and Value
11 Line long-term earnings projections are available. Based on an estimated market
12 capitalization-weighted dividend yield of 1.50 percent and a weighted long-term
13 growth rate of 12.11 percent, the estimated required market return for the S&P 500
14 Index is 13.71 percent. The implied market risk premium over the current 30-day
15 average of the 30-year U.S. Treasury bond yield, and projected yields on the 30-year
16 U.S. Treasury bond, ranges from 10.91 percent to 11.40 percent.

17 **Q. How does the current expected market return of 13.71 percent compare to**
18 **observed historical market returns?**

19 A. Given the range of annual equity returns that have been observed over the past century
20 (shown in Figure 8), a current expected return of 13.71 percent is not unreasonable. In
21 47 out of the past 94 years (or roughly 50 percent of observations), the realized equity
22 return was at least 13.71 percent or greater.

1

Figure 8: Realized U.S. equity market returns (1926-2019)⁴²



2 **Q. Did you consider another form of the CAPM in your analysis?**

3 A. Yes. I have also considered the results of an ECAPM or alternatively referred to as the
4 Zero-Beta CAPM⁴³ in estimating the cost of equity for RMP. The ECAPM calculates
5 the product of the adjusted Beta coefficient and the market risk premium and applies a
6 weight of 75.00 percent to that result. The model then applies a 25.00 percent weight
7 to the market risk premium, without any effect from the Beta coefficient. The results
8 of the two calculations are summed, along with the risk-free rate, to produce the
9 ECAPM result, as noted in Equation [5] below:

10
$$k_e = r_f + 0.75\beta(r_m - r_f) + 0.25(r_m - r_f) \quad [5]$$

11 Where:

⁴² Depicts total annual returns on large company stocks, as reported in the 2020 Duff and Phelps SBBI Yearbook.

⁴³ See e.g., Roger A. Morin, *New Regulatory Finance*, Public Utilities Reports, Inc., 2006, at 189.

- 1 k_e = the required market ROE;
- 2 β = Adjusted Beta coefficient of an individual security;
- 3 r_f = the risk-free rate of return; and
- 4 r_m = the required return on the market as a whole.

5 In essence, the Empirical form of the CAPM addresses the tendency of the
6 “traditional” CAPM to underestimate the cost of equity for companies with low Beta
7 coefficients such as regulated utilities. In that regard, the ECAPM is not redundant to
8 the use of adjusted Betas; rather, it recognizes the results of academic research
9 indicating that the risk-return relationship is different (in essence, flatter) than
10 estimated by the CAPM, and that the CAPM underestimates the “alpha,” or the
11 constant return term.⁴⁴

12 As with the CAPM, my application of the ECAPM uses the forward-looking
13 market risk premium estimates, the three yields on 30-year Treasury securities noted
14 earlier as the risk-free rate, and the Bloomberg, Value Line, and long-term average
15 Beta coefficients.

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

17 A. As shown in Figure 9 (*see also* Exhibit No. 13 and Exhibit No. 14), relying on the long-
18 term average beta, the results of the CAPM are 10.58 percent to 10.72 percent. The
19 entire range of the CAPM analysis is from 10.58 percent to 12.47 percent. The ECAPM
20 analysis results range from 11.36 percent to 12.78 percent.

⁴⁴ *Id.*, at 191.

1

Figure 9: CAPM Results

	Current Risk-Free Rate (2.31%)	Q3 2021 – Q3 2022 Projected Risk-Free Rate (2.60%)	2022-2026 Projected Risk-Free Rate (2.80%)
CAPM			
Value Line Beta	12.41%	12.44%	12.47%
Bloomberg Beta	11.48%	11.53%	11.57%
Long-term Avg. Beta	10.58%	10.66%	10.72%
ECAPM			
Value Line Beta	12.73%	12.76%	12.78%
Bloomberg Beta	12.03%	12.08%	12.11%
Long-term Avg. Beta	11.36%	11.42%	11.47%

2

E. Bond Yield Plus Risk Premium Analysis

3

Q. Please describe the Bond Yield Plus Risk Premium approach.

4

A. This approach is based on the fundamental principle that because bondholders have a superior right to be repaid, equity investors bear a residual risk associated with equity ownership and therefore require a premium over the return they would have earned as a bondholder. That is, because returns to equity holders have greater risk than returns to bondholders, equity investors must be compensated to bear that risk. Risk premium approaches, therefore, estimate the cost of equity as the sum of the equity risk premium and the yield on a “risk-free” class of bonds.

5

6

7

8

9

10

11

Q. Are there other considerations that should be addressed in conducting this analysis?

12

13

A. Yes, there are. It is important to recognize both academic literature and market evidence indicating that the equity risk premium (as used in this approach) is inversely related

14

1 to the level of interest rates. That is, as interest rates increase, the equity risk premium
2 decreases, and vice versa. Consequently, it is important to develop an analysis that: (1)
3 reflects the inverse relationship between interest rates and the equity risk premium; and
4 (2) relies on recent and expected market conditions. Such an analysis can be developed
5 based on a regression of the risk premium as a function of U.S. Treasury bond yields.
6 In my analysis, I used actual authorized returns for electric utility companies and
7 corresponding long-term Treasury yields as the historical measure of the cost of equity
8 to determine the risk premium. If we let authorized ROEs for electric utilities serve as
9 the measure of required equity returns and define the yield on the long-term U.S.
10 Treasury bond as the relevant measure of interest rates, the risk premium simply would
11 be the difference between those two points.⁴⁵

12 **Q. Is the Bond Yield Plus Risk Premium analysis relevant to investors?**

13 A. Yes, it is. Investors are aware of ROE awards in other jurisdictions, and they consider
14 those awards as a benchmark for a reasonable level of equity returns for utilities of
15 comparable risk operating in other jurisdictions. Because my Bond Yield Plus Risk
16 Premium analysis is based on authorized ROEs for utility companies relative to
17 corresponding Treasury yields, it provides relevant information to assess the return
18 expectations of investors.

⁴⁵ See e.g., S. Keith Berry, Interest Rate Risk and Utility Risk Premia during 1982-93, Managerial and Decision Economics, Vol. 19, No. 2 (March 1998), in which the author used a methodology similar to the regression approach described below, including using allowed ROEs as the relevant data source, and came to similar conclusions regarding the inverse relationship between risk premia and interest rates. See also Robert S. Harris, Using Analysts' Growth Forecasts to Estimate Shareholders Required Rates of Return, Financial Management, Spring 1986, at 66.

1 **Q. What did your Bond Yield Plus Risk Premium analysis reveal?**

2 A. As shown in Figure 10 below, from 1992 through March 2021, there was a strong
3 negative relationship between risk premia and interest rates. To estimate that
4 relationship, I conducted a regression analysis using the following equation:

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

5
6 Where:

7 RP = Risk Premium (difference between allowed ROEs and the yield on 30-
8 year U.S. Treasury bonds)

9 a = intercept term

10 b = slope term

11 T = 30-year U.S. Treasury bond yield

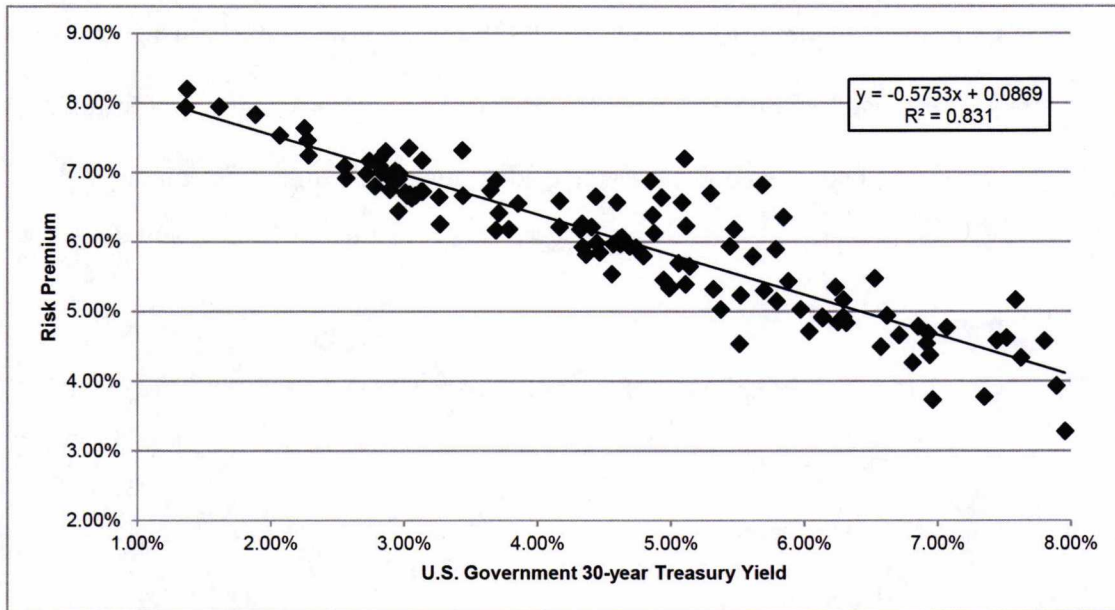
12 Data regarding allowed ROEs were derived from 654 vertically integrated
13 electric utility rate cases from 1992 through March 2021 as reported by Regulatory
14 Research Associates (“RRA”).⁴⁶ This equation’s coefficients were statistically
15 significant at the 99.00 percent level.

16

⁴⁶ This analysis began with a total of 1,287 electric utility cases, which were screened to eliminate limited issue rider cases, transmission cases, distribution only cases, and cases that did not specify an authorized ROE. After applying those screening criteria, the analysis was based on data for 654 cases.

1

Figure 60: Risk Premium Results



2

As shown on Exhibit No. 15, based on the current 30-day average of the 30-

3

year U.S. Treasury bond yield (i.e., 2.31 percent), the risk premium would be

4

7.37 percent, resulting in an estimated ROE of 9.67 percent. Based on the near-term

5

(Q3 2021 – Q3 2022) projections of the 30-year U.S. Treasury bond yield (i.e.,

6

2.60 percent), the risk premium would be 7.20 percent, resulting in an estimated ROE

7

of 9.80 percent. Based on longer-term (2022 – 2026) projections of the 30-year U.S.

8

Treasury bond yield (i.e., 2.80 percent), the risk premium would be 7.08 percent,

9

resulting in an estimated ROE of 9.88 percent.

10 **Q.**

How did the results of the Bond Yield Risk Premium inform your recommended ROE for RMP?

11

12 **A.**

I have considered the results of the Bond Yield Risk Premium analysis in setting my recommended ROE for RMP. As noted above, investors consider the ROE award of a company when assessing the risk of that company as compared to utilities of comparable risk operating in other jurisdictions. The Risk Premium analysis considers

15

1 this comparison by estimating the return expectations of investors based on the current
2 and past ROE awards of electric utilities across the U.S.

3 **F. Expected Earnings Analysis**

4 **Q. Have you considered any additional analysis to estimate the cost of equity for the**
5 **Company?**

6 A. Yes. I have considered an Expected Earnings analysis based on the projected ROEs for
7 each of the proxy group companies.

8 **Q. What is an Expected Earnings analysis?**

9 A. The Expected Earnings methodology is a comparable earnings analysis that calculates
10 the earnings that an investor expects to receive on the book value of a stock. The
11 Expected Earnings analysis is a forward-looking estimate of investors' expected
12 returns. The use of an Expected Earnings approach based on the proxy companies
13 provides a range of the expected returns on a group of risk comparable companies to
14 the subject company. This range is useful in helping to determine the opportunity cost
15 of investing in the subject company, which is relevant in determining a company's
16 ROE.

17 **Q. Have any regulators considered the use of an Expected Earnings analysis?**

18 A. Yes. In its order in Docket No. ER12111052 for Jersey Central Power and Light
19 Company, the New Jersey Board of Public Utilities ("NJ Board") noted that rate of
20 return experts use a number of models including the DCF, CAPM, Risk Premium, and
21 Comparable Earnings to estimate the return required by investors. Specifically, the
22 Board noted:

23 In determining the cost of equity capital for a regulated utility, rate of
24 return experts typically use a variety of financial models to simulate

1 the returns assertedly required by investors. These include Discounted
2 Cash Flow (DCF) models, Risk Premium models, Capital Asset
3 Pricing Models (CAPM), Comparable Earnings models and variations
4 thereof. However, it is widely acknowledged that these economic
5 models constitute estimates, which, although probative, are not
6 necessarily precise. The imprecision in the estimates provided by these
7 models is more pronounced as a result of the current economic
8 environment still recovering from the Great Recession, characterized
9 by some as the worst economy since the Great Depression.⁴⁷

10 The Indiana Utility Regulatory Commission (“IURC”) has also allowed the
11 use of Expected Earnings, stating in another rate case, for example:

12 Four models were used to determine a cost of equity: DCF; CAPM;
13 Risk Premium; and Expected Earnings. Each was discussed in varying
14 degrees by the Parties in this Cause. The expert witnesses of each Party
15 used the same proxy group of seventeen electric utility companies to
16 conduct their respective analyses. While Dr. Avera also submitted
17 analyses using a proxy group of non-utility companies, we give little
18 weight to those analyses due to the inherent differences between
19 regulated utilities and non-utility companies operating in a free-market
20 system.⁴⁸

21 The IURC further supported the use of Expected Earnings in its authorized
22 rate decision, citing the projected returns, in this case over the following 3 to 5 years:

23 Vectren South submitted evidence supporting an 11.5% ROE but
24 moderated its request to 10.7% to limit the amount of the proposed
25 increase in this case. The OUCC proposes an ROE of 9.25% and the
26 Industrial Group proposes an ROE of 9.85%. Vectren South must
27 compete for capital attraction with other utilities. The expert witnesses
28 of each party have used the same proxy group of 17 electric utility
29 companies. Dr. Avera’s exhibits show that these companies are
30 projected by Value Line to have returns on average common equity of
31 11.5% over the next 3 to 5 years. In his Sustainable Growth Rate DCF
32 calculation, Mr. Gorman has projected a return on year-end equity for

⁴⁷ *JCP&L Co. – Base Rate 2012 Increase Adjustments Rates and Charges for Electric Service*, BPU Docket No. ER12111052, OAL Docket No. PUC16310-12, Order Adopting Initial Decision with Modifications and Clarifications, at 71 (NJ Board March 18, 2015).

⁴⁸ *Petition of Southern Indiana Gas and Electric Company for Approval of and Authorization for Rate Increase* Cause No. 43839, Order, at 28 (Ind. U.R.C. April 27, 2011).

1 these companies of 10.87%. Vectren South currently has an authorized
2 ROE of 10.40%. (Emphasis added)⁴⁹

3 **Q. How did you develop the Expected Earnings approach?**

4 A. I relied on Value Line projections of the return on equity capital for the proxy
5 companies for the period from 2024-2026.⁵⁰ I adjusted those projected ROEs to account
6 for the fact that the ROEs reported by Value Line are calculated on the basis of common
7 shares outstanding at the end of the period, as opposed to average shares outstanding
8 over the period. As shown in Exhibit No. 16, the Expected Earnings analysis for the
9 proxy group results in a mean of 10.98 percent and median of 10.81 percent.

10 **VIII. REGULATORY AND BUSINESS RISKS**

11 **Q. Do the mean DCF, CAPM, Risk Premium and Expected Earnings results for the**
12 **proxy group provide an appropriate estimate of the Cost of Equity for RMP?**

13 A. No. These results provide only a range of the appropriate estimate of the Company's
14 Cost of Equity. There are additional factors that must be taken into consideration when
15 determining where the Company's Cost of Equity falls within the range of analytical
16 results. I have also considered the regulatory risk faced by RMP in determining the
17 overall risk profile of the Company as compared with the proxy group and RMP's
18 projected level of capital expenditures.

⁴⁹ *Id.*, at 28.

⁵⁰ Due to the timing of the release of the Value Line Reports, Year 0 and Years 4-6 are 2019 and 2023-2025 for AVA, NWE, PNW, POR and XEL, respectively, and Year 0 and Years 4-6 are 2020 and 2024-2026 for all other proxy group companies.

1 **A. Capital Expenditure Plan**

2 **Q. Please summarize the PacifiCorp's projected capital expenditure requirements.**

3 A. PacifiCorp's current projections for 2022 through 2026 include approximately
4 \$11.2 billion in capital investments for the period.⁵¹ Based on PacifiCorp's net utility
5 plant of approximately \$20.9 billion as of December 31, 2020, the \$11.2 billion
6 anticipated capital expenditures are approximately 53.41 percent.⁵²

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

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

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

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

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

⁵¹ Berkshire Hathaway 2020 Form 10-K at 113 (2022-2023); 2024-2026 estimated as average of 2022-2023.

⁵² Berkshire Hathaway 2020 Form 10-K at 230.

1 that make it susceptible to construction delays. Broad support for all
2 capital spending is the most credit-sustaining. Support for only
3 specific types of capital spending, such as specific environmental
4 projects or system integrity plans, is less so, but still favorable for
5 creditors. Allowance of a cash return on construction work-in-progress
6 or similar ratemaking methods historically were extraordinary
7 measures for use in unusual circumstances, but when construction
8 costs are rising, cash flow support could be crucial to maintain credit
9 quality through the spending program. Even more favorable are those
10 jurisdictions that present an opportunity for a higher return on capital
11 projects as an incentive to investors.⁵³

12 Therefore, to the extent that RMP's rates do not continue to permit the
13 recovery of its capital investments on a regular basis, the Company would face
14 increased recovery risk and thus increased pressure on its credit metrics.

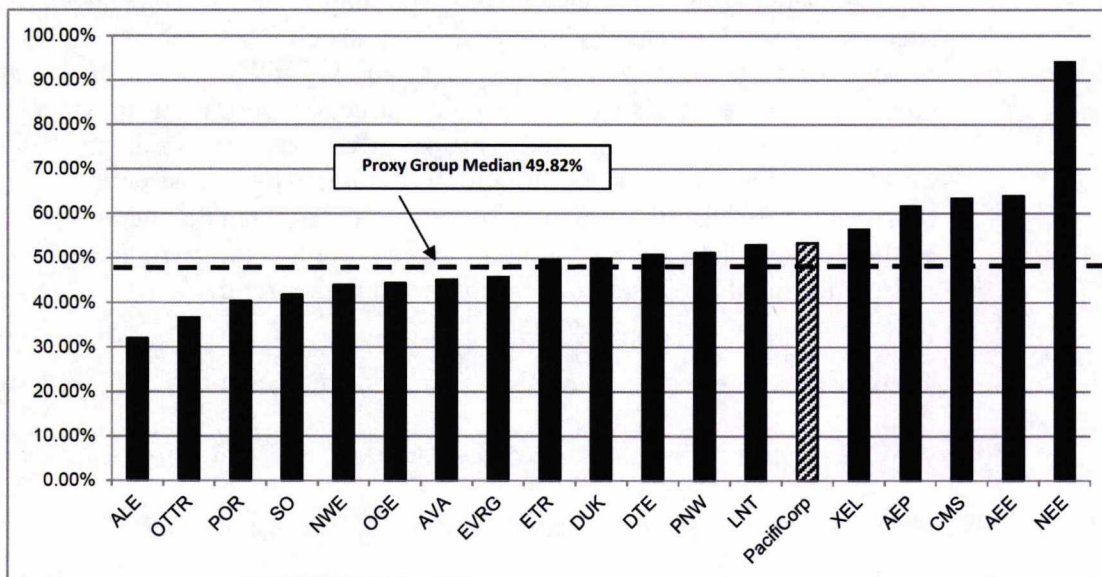
15 **Q. How do PacifiCorp's capital expenditure requirements compare to those of the**
16 **proxy group companies?**

17 A. As shown in Exhibit No. 17, I calculated the ratio of expected capital expenditures to
18 net utility plant for PacifiCorp and each of the companies in the proxy group by
19 dividing each company's projected capital expenditures for the period from 2022-2026
20 by its total net utility plant as of December 31, 2020. As shown in Exhibit No. 17 (*see*
21 also Figure 12 below), PacifiCorp's ratio of capital expenditures as a percentage of net
22 utility plant of 53.41 percent is approximately 1.07 times the median for the proxy
23 group companies of 49.82 percent. This result indicates greater risk to the Company,
24 relative to the companies in the proxy group.

⁵³ S&P Global Ratings, "Assessing U.S. Investor-Owned Utility Regulatory Environments," August 10, 2016, at 7.

1

Figure 71: Comparison of Capital Expenditures – Proxy Group Companies



2 **Q. How does RMP’s ability to recover capital expenditures compare with the proxy**
3 **companies?**

4 A. RMP has the ability to recover major capital expenditures on a case by case basis, for
5 instance through the Resource Tracking Mechanism (“RTM”), which is consistent with
6 the cost recovery of significant infrastructure investments by the proxy group
7 companies. As shown in Exhibit No. 18, 51.72 percent of the proxy group utilities
8 recover costs through capital tracking mechanisms. On this basis, RMP is comparable
9 to the proxy group companies.

10 **B. Regulatory Risk Assessment**

11 **Q. Please explain how the regulatory environment affects investors’ risk assessments.**

12 A. The ratemaking process is premised on the principle that, for investors and companies
13 to commit the capital needed to provide safe and reliable utility service, the subject
14 utility must have the opportunity to recover the return of, and the market-required
15 return on, invested capital. Regulatory authorities recognize that because utility

1 operations are capital intensive, regulatory decisions should enable the utility to attract
2 capital at reasonable terms; doing so balances the long-term interests of investors and
3 customers. Utilities must finance their operations and require the opportunity to earn
4 a reasonable return on their invested capital to maintain their financial profiles. RMP
5 is no exception. In that respect, the regulatory environment is one of the most important
6 factors considered in both debt and equity investors' risk assessments.

7 From the perspective of debt investors, the authorized return should enable
8 the utility to generate the cash flow needed to meet its near-term financial obligations,
9 make the capital investments needed to maintain and expand its systems, and maintain
10 the necessary levels of liquidity to fund unexpected events. This financial liquidity
11 must be derived not only from internally generated funds, but also by efficient access
12 to capital markets. Moreover, because fixed income investors have many investment
13 alternatives, even within a given market sector, the utility's financial profile must be
14 adequate on a relative basis to ensure its ability to attract capital under a variety of
15 economic and financial market conditions. Equity investors require that the
16 authorized return be adequate to provide a risk-comparable return on the equity
17 portion of the utility's capital investments. Because equity investors are the residual
18 claimants on the utility's cash flows (which is to say that the equity return is
19 subordinate to interest payments), they are particularly concerned with the strength of
20 regulatory support and its effect on future cash flows.

1 **Q. Please explain how credit rating agencies consider regulatory risk in establishing**
2 **a company's credit rating.**

3 A. Both S&P and Moody's consider the overall regulatory framework in establishing
4 credit ratings. Moody's establishes credit ratings based on four key factors: (1)
5 regulatory framework; (2) the ability to recover costs and earn returns; (3)
6 diversification; and (4) financial strength, liquidity, and key financial metrics. Of these
7 criteria, regulatory framework, and the ability to recover costs and earn returns are each
8 given a broad rating factor of 25.00 percent. Therefore, Moody's assigns regulatory
9 risk a 50.00 percent weighting in the overall assessment of business and financial risk
10 for regulated utilities.⁵⁴

11 S&P also identifies the regulatory framework as an important factor in credit
12 ratings for regulated utilities, stating: "One significant aspect of regulatory risk that
13 influences credit quality is the regulatory environment in the jurisdictions in which a
14 utility operates."⁵⁵ S&P identifies four specific factors that it uses to assess the credit
15 implications of the regulatory jurisdictions of investor-owned regulated utilities: (1)
16 regulatory stability; (2) tariff-setting procedures and design; (3) financial stability;
17 and (4) regulatory independence and insulation.⁵⁶

⁵⁴ Moody's Investors Service, Rating Methodology: Regulated Electric and Gas Utilities, June 23, 2017, at 4.

⁵⁵ Standard & Poor's Global Ratings, Ratings Direct, U.S. and Canadian Regulatory Jurisdictions Support Utilities' Credit Quality—But Some More So Than Others, June 25, 2018, at 2.

⁵⁶ *Id.*, at 1.

1 **Q. Have you performed a regulatory risk assessment of Idaho as compared to the**
2 **jurisdictions in which the proxy group companies operate?**

3 A. Yes. Specifically, I examined the following factors that affect the business risk of RMP
4 and the proxy group companies: (1) test year convention; (2) rate base convention; (3)
5 fuel cost recovery; (4) use of revenue decoupling mechanisms or other clauses that
6 mitigate volumetric risk; and (5) prevalence of capital cost recovery between rate cases.
7 The results of this regulatory risk assessment are shown in Exhibit No. 18 and are
8 summarized below.

- 9 • Test year convention: RMP uses a historical test year adjusted for known and
10 measurable changes in Idaho, while 36.78 percent of the operating companies
11 held by the proxy group that provide service in jurisdictions that use a fully or
12 partially forecast test year.
- 13 • Rate Base: RMP is relying on a year-end rate base in this proceeding, which is
14 consistent with approximately 39 percent of the operating subsidiaries held by
15 the proxy group.
- 16 • Fuel and Energy Cost Recovery: RMP has an Energy Cost Adjustment
17 Mechanism (“ECAM”) to recover power costs. However, while traditional fuel
18 cost recovery mechanisms allow all variances between projected fuel costs and
19 actual fuel costs to be recovered from or refunded to customers, the ECAM for
20 RMP only allows recovery of 90 percent of the difference between projected
21 and actual fuel costs. As a result, the ECAM does not fully mitigate the power
22 cost risk for RMP. This is important to recognize because fuel and purchased
23 power costs typically account for a significant percentage of the total operating

1 costs for a regulated utility. Moreover, according to SNL Financial, there are
2 only seven states (i.e., Hawaii, Idaho, Missouri, Montana, Oregon, Washington
3 and Wyoming) that have fuel cost recovery mechanisms with sharing bands.⁵⁷

4 The remaining 43 states either have restructured and the electric utilities do not
5 own generation or have fuel cost recovery mechanisms with a true-up between
6 actual and forecasted fuel costs. Finally, 91.86 percent of the operating
7 companies held by my proxy group are allowed to pass through fuel costs and
8 purchased power costs directly to customers, without deadbands and sharing
9 bands.

- 10 • Volumetric Risk: RMP does not have protection against volumetric risk in
11 Idaho. In contrast, 49.43 percent of the operating companies held by the proxy
12 group have some form of protection against volumetric risk through either a
13 partial or full revenue decoupling mechanism that mitigates the effect of
14 fluctuations in volume on revenues.
- 15 • Capital Cost Recovery: Despite being able to recover costs on a case by case
16 basis, RMP does not have an ongoing and structured capital tracking
17 mechanism to recover major new capital investments between rate cases. A total
18 of 51.72 percent of the operating companies held by the proxy group have some
19 form of capital cost recovery mechanism in place.

⁵⁷ Source: SNL Financial, Commission Profiles as of May 11, 2020.

1 Q. Has RRA provided recent commentary regarding its regulatory ranking for
2 RMP?

3 A. Yes. In April 2020, RRA updated its evaluation of the regulatory environment in Idaho
4 indicating an average ranking based on the recovery mechanisms and decoupling
5 mechanisms that have been implemented for several utilities:

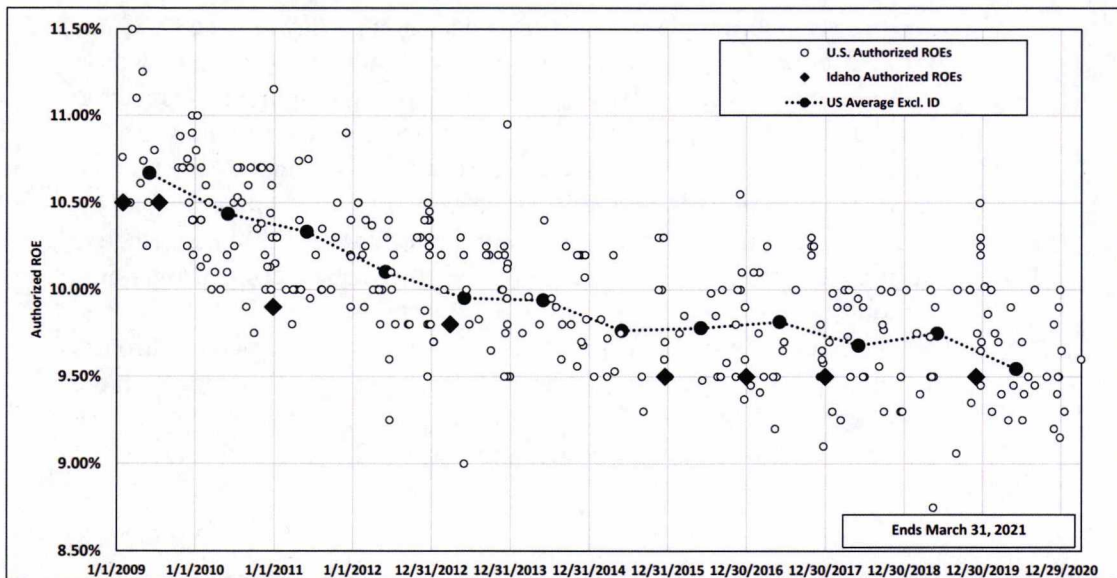
6 Idaho regulation is relatively balanced from an investor viewpoint
7 according to Regulatory Research Associates, a group within S&P
8 Global Market Intelligence. Recent rate proceedings have been
9 resolved via settlements, the vast majority of which have been silent
10 with respect to rate-of-return parameters. However, historically, when
11 the PUC established equity returns for the utilities, the returns
12 specified were below prevailing industry-wide averages at the time
13 authorized. One utility operates under an earnings sharing
14 mechanism that effectively allows the company to retain earnings up
15 to a 10% ROE, which is above current industry average return
16 authorizations. The state's electric utilities remain vertically integrated
17 and are regulated under a traditional paradigm. At times, the PUC has
18 utilized a partially forecast test period. State law permits electric
19 utilities to request "binding" ratemaking treatment from the
20 commission for the recovery of costs associated with new power
21 generation or transmission facilities, and in accordance with the law,
22 an electric utility was granted ratemaking assurances for one facility.
23 Power cost adjustment mechanisms are in effect for the state's electric
24 utilities; these mechanisms contain symmetrical sharing provisions.
25 Decoupling mechanisms are in place for certain electric utilities, and
26 gas utilities operating in the state recover commodity costs through
27 semiautomatic adjustment clauses. Utility mergers generally have
28 been approved by the PUC without onerous restrictions. Regulatory
29 Research Associates continues to accord Idaho an Average/2
30 ranking.⁵⁸

⁵⁸ Source: S&P Global, Regulatory Research, accessed April 20, 2021.

1 Q. How do recent returns in Idaho compare to the authorized returns in other
2 jurisdictions?

3 A. As noted in RRA's evaluation above, the authorized ROEs for electric and natural gas
4 utilities in Idaho, while partially the result of settlement agreements approved by the
5 Commission, have been below the average authorized ROEs for electric and natural
6 gas utilities across the U.S. Figure 12 below shows the authorized returns for vertically
7 integrated electric utilities in other jurisdictions since January 2009, and the returns
8 authorized in Idaho. As shown in Figure 12, the authorized returns in Idaho have
9 historically been below the average authorized ROE for vertically integrated electric
10 utilities in other jurisdictions.

11 **Figure 82: Comparison of Idaho and U.S. Authorized Electric Returns⁵⁹**



⁵⁹ Source: S&P Global Market Intelligence.

1 **Q. Is there any reason that the Commission should be concerned about authorizing**
2 **equity returns that are at the low end of the range established by other state**
3 **regulatory jurisdictions?**

4 A. Yes. Credit rating agencies take the authorized ROE into consideration in the overall
5 risk analysis of a company. Therefore, to the extent that the returns in a jurisdiction are
6 lower than the returns that have been authorized more broadly, credit rating agencies
7 will consider this in the overall risk assessment of the regulatory jurisdiction in which
8 the company operates. For example, Moody's recently downgraded ALLETE, Inc.
9 from A3 to Baa1 for reasons that included the less than favorable outcome in Minnesota
10 Power's last rate case in Minnesota. Moody's viewed Minnesota Power's recent rate
11 case decision as credit negative for reasons which included: (1) the below average
12 authorized ROE of 9.25 percent which resulted in a reduction of approximately
13 \$20 million between the requested and approved revenue requirement; (2) the
14 disallowance of certain expenses such as prepaid pension expenses; and (3) the decision
15 to not adopt the annual rate review mechanism ("ARRM") which if adopted would
16 have mitigated the effect of industrial customers scaling back production in response
17 to changes in economic conditions.⁶⁰

18 In addition, FitchRatings recently downgraded CenterPoint Energy Houston
19 Electric's ("CEHE") Long-Term Issuer Default rating from A- to BBB+ and revised
20 the rating outlook from Stable to Negative following the approval of an unfavorable
21 outcome in a recent rate case in Texas. FitchRatings indicated that the unfavorable
22 outcome signals a more challenging environment in Texas for CEHE and that the

⁶⁰ Moody's Investors Service, Credit Opinion: ALLETE, Inc. Update following downgrade, at 3 (April 3, 2019).

1 authorized ROE and equity ratio, as well as tax reform refunds will create pressure
2 on credit metrics. FitchRatings also indicated that further negative rating action could
3 be possible if the company's FFO leverage remains above 5x.⁶¹

4 RMP must compete for capital with other utilities and businesses; therefore,
5 placing RMP at the low end of authorized ROEs outside Idaho over the longer term
6 can negatively impact its access to capital.

7 **Q. How should the Commission use the information regarding authorized ROEs in**
8 **other jurisdictions in determining the ROE for RMP?**

9 A. As discussed above, the companies in the proxy group operate in multiple jurisdictions
10 across the U.S. Since RMP must compete directly for capital with investments of
11 similar risk, it is appropriate to review the authorized ROEs in other jurisdictions. The
12 comparison is important because investors are considering the authorized returns across
13 the U.S. and are likely to invest equity in those utilities with the highest returns.
14 Furthermore, investors are also likely to consider business and financial risks for a
15 company like RMP which faces increased risk as a result of its capital expenditure plan
16 and limited cost recovery mechanisms. Therefore, authorizing an ROE for RMP that is
17 equivalent to the average authorized ROE for other vertically integrated electric utilities
18 is not sufficient to compensate investors for the added risk of RMP. As such, it is
19 important that the Commission consider, as I have in my recommendation, the
20 additional risk of RMP and place the authorized ROE for RMP towards the high end of
21 authorized ROEs for other vertically integrated electric utilities.

⁶¹ FitchRatings, Fitch Downgrades CenterPoint Energy Houston Electric to BBB+; Affirms CNP; Outlooks Negative, February 19, 2020.

1 **Q. What are your conclusions regarding the perceived risks related to the Idaho**
2 **regulatory environment?**

3 A. As discussed throughout this section of my testimony, both Moody's and S&P have
4 identified the supportiveness of the regulatory environment as an important
5 consideration in developing their overall credit ratings for regulated utilities. Many of
6 the companies in the proxy group have more timely cost recovery through fuel cost
7 recovery mechanisms, fully forecasted test years, year-end rate base in all cases, capital
8 cost recovery trackers, and revenue stabilization mechanisms than RMP has in Idaho.
9 Additionally, authorized ROEs in Idaho have been below the average authorized ROEs
10 for electric and gas utilities across the U.S. Considering all of the similarities and
11 differences, I conclude that the authorized ROE for RMP should be higher than the
12 proxy group mean.

13 **C. Generation Ownership**

14 **Q. How does the business risk of vertically integrated electric utilities compare to the**
15 **business risk of other regulated utilities?**

16 A. According to Moody's, generation ownership causes vertically integrated electric
17 utilities to have higher business risk than either electric transmission and distribution
18 companies, or natural gas distribution or transportation companies.⁶² As a result of this
19 higher business risk, integrated electric utilities typically require a higher ROE or
20 percentage of equity in the capital structure than other electric or gas utilities.

⁶² Moody's Investors Service, Rating Methodology: Regulated Electric and Gas Utilities, June 23, 2017, at 21-22.

1 **Q. Are there other risk factors specific to vertically integrated electric utilities that**
2 **the credit rating agencies consider when determining the credit rating of a**
3 **company that owns generation?**

4 A. Yes. As discussed above, Moody's establishes credit ratings based on four key factors:
5 (1) regulatory framework; (2) the ability to recover costs and earn returns;
6 (3) diversification; and (4) financial strength, liquidity and key financial metrics. The
7 third factor, diversification, which Moody's assigns a 10.00 percent weighting in the
8 overall assessments of a company's business risk, considers the fuel source diversity of
9 a utility with generation. Moody's notes:

10 For utilities with electric generation, fuel source diversity can mitigate
11 the impact (to the utility and to its rate-payers) of changes in
12 commodity prices, hydrology and water flow, and environmental or
13 other regulations affecting plant operations and economics. We have
14 observed that utilities' regulatory environments are most likely to
15 become unfavorable during periods of rapid rate increases (which are
16 more important than absolute rate levels) and that fuel diversity leads
17 to more stable rates over time.⁶³

18 For that reason, fuel diversity can be important even if fuel and purchased
19 power expenses are an automatic pass-through to the utility's ratepayers. Changes in
20 environmental, safety and other regulations have caused vulnerabilities for certain
21 technologies and fuel sources during the past five years. These vulnerabilities have
22 varied widely in different countries and have changed over time.⁶⁴

⁶³ *Id.*, at 16.

⁶⁴ *Id.*, at 16.

1 **Q. Is PacifiCorp subject to legislative mandates regarding renewable generation in**
2 **any jurisdictions?**

3 A. Yes. PacifiCorp is subject to renewable mandates in Oregon, Washington and Utah. In
4 March 2016, Oregon Senate Bill No. 1547-B, the Clean Electricity and Coal Transition
5 Plan, was signed into law. Senate Bill No. 1547-B requires that coal-fueled resources
6 are eliminated from Oregon's allocation of electricity by January 1, 2030 and increases
7 the current RPS target from 25 percent in 2025 to 50 percent by 2040. Similarly, the
8 Washington Clean Energy Transformation Act (“CETA”) will require PacifiCorp to
9 remove coal-fired generation from rates by 2025, be greenhouse gas neutral by 2030,
10 and serve retail customers with 100 percent non-emitting resources by 2045.⁶⁵ Electric
11 utilities must also eliminate coal-fired resources from rates by December 31, 2025.⁶⁶
12 Finally, in Utah, the Community Renewable Energy Act (i.e., Utah House Bill (HB)
13 411) was signed into law in March 2019 which provides the ability for municipalities
14 and counties in Utah to achieve a net-100 percent renewable electric portfolio by 2030.
15 The communities who opt into the program will work directly with RMP who will be
16 responsible for contracting the renewable energy necessary to achieve the net-100
17 percent renewable goal for each of the communities by 2030.

⁶⁵ Washington State, Legislature. Engrossed Second Substitute Senate Bill 5116. Washington State Legislature, 7 May 2019, <https://lawfilesexternal.wa.gov/biennium/2019-20/Pdf/Bills/Session%20Laws/Senate/5116-S2.SL.pdf>.

⁶⁶ Berkshire Hathaway Energy 2020 Form 10-K, at 71.

1 **Q. Is a transition to renewable resources supported by all regulatory jurisdictions**
2 **where PacifiCorp operates?**

3 A. No, it is not. I am aware of several bills that were enacted in the 2019 and 2020
4 legislative sessions for Wyoming which would not support the transition to renewable
5 resources. For example, Wyoming Senate File 159 (“WY SF 159”), which was signed
6 in 2019 restricts utilities from recovering the costs of new generation assets replacing
7 Wyoming-based coal generating plants unless utilities first make “a good faith effort”
8 to sell the closing facilities. Restrictions such as this that inhibit RMP from seeking the
9 optimal, low-cost resources for their customers can impose additional costs to
10 customers and risks to investors. That is, if RMP's resource planning process concludes
11 that new investments are more cost-effective for customers than continued operation
12 of certain Wyoming, coal-based resources, SF 159 will require that RMP undergo a
13 potentially protracted and costly sale process for the uneconomic coal plants before it
14 may retire them and recover the costs of lower-cost replacement resources. Wyoming
15 House Bill 200 passed in 2020 requires a portion of the public utility's generation
16 portfolio be met with low carbon generating resources using “carbon capture,
17 utilization and storage technologies.” In addition, this bill limits the recovery of the
18 costs of new resources to replace retired coal facilities.

19 **Q. Do the legislative initiatives in Oregon, Utah, Washington, and Wyoming present**
20 **risk for RMP?**

21 A. Yes. Utah House Bill 411, Oregon Senate Bill 1547 and Washington's CETA are in
22 conflict with the Wyoming legislation, SF159. The Wyoming legislation requires that
23 the Company attempt to sell any Wyoming-based coal-fired generating assets that

1 would be retired before the Company could recover the cost of a replacement
2 generating asset. In addition, SF159 requires that the Company engage in a purchase
3 power agreement to buy back the power from the generating asset. This will present
4 challenges to PacifiCorp as it diverges from energy policies in other states, such as
5 Oregon and Washington legislation mandating that the Company transition from coal
6 to renewable resources. While the Company could assign the costs of some amount of
7 coal-fired generation directly to the Wyoming customers, the size of the Company's
8 Wyoming coal fleet exceeds the capacity requirements of its Wyoming customers.
9 Therefore, the legislative initiatives of these four states are conflicting and create
10 uncertainty and risk surrounding the recovery of the cost of retired generating assets.
11 This risk is not uniformly represented in the proxy group companies.

12 **Q. Have you conducted an analysis to compare the fuel sources for the generation**
13 **portfolio of RMP to the companies in your proxy group?**

14 A. Yes, I have. Specifically, I calculated for PacifiCorp, and each company in the proxy
15 group, the percentage of regulated owned generation capacity that was derived from
16 one of the following fuel sources: oil/natural gas, coal, nuclear, hydro, and other. As
17 shown in Figure 13, approximately 51.37 percent of PacifiCorp's regulated, owned
18 generation came from coal-fired power plants with approximately 78.70 percent
19 coming from either oil, natural gas, or coal-fired power plants. Therefore, PacifiCorp
20 is more reliant on a limited number of fuel sources for its regulated generation and
21 overall slightly less diversified than the companies in the proxy group.

1
2

Figure 93: Regulated Owned Generation Capacity⁶⁷

Fuel Mix for PacifiCorp and Proxy Group

Proxy Group Company	Oil & Natural Gas	Coal	Nuclear	Hydro	Other	Total Generation
ALLETE, Inc.	5.37%	49.92%	0.00%	7.51%	37.20%	100.00%
Alliant Energy Corporation	50.76%	32.27%	0.00%	0.84%	16.13%	100.00%
Ameren Corporation	31.36%	49.97%	11.14%	7.35%	0.18%	100.00%
American Electric Power Company, Inc.	34.84%	51.92%	9.53%	3.61%	0.10%	100.00%
Avista Corporation	33.60%	10.41%	0.00%	53.55%	2.43%	100.00%
CMS Energy Corporation	52.94%	23.18%	0.00%	19.59%	4.29%	100.00%
DTE Energy Company	27.64%	50.70%	9.78%	8.58%	3.30%	100.00%
Duke Energy Corporation	48.36%	27.95%	16.66%	6.39%	0.64%	100.00%
Entergy Corporation	68.26%	13.07%	18.34%	0.33%	0.01%	100.00%
Evergy, Inc.	34.96%	50.00%	10.03%	0.05%	4.96%	100.00%
NextEra Energy, Inc.	76.20%	8.56%	11.46%	0.00%	3.78%	100.00%
NorthWestern Corporation	24.67%	32.54%	0.00%	33.01%	9.78%	100.00%
OGE Energy Corp.	55.16%	37.97%	0.00%	0.00%	6.86%	100.00%
Otter Tail Corporation	15.54%	66.95%	0.00%	0.51%	17.00%	100.00%
PacifiCorp	27.33%	51.37%	0.00%	10.96%	10.34%	100.00%
Pinnacle West Capital Corporation	53.85%	25.20%	17.55%	0.00%	3.40%	100.00%
Portland General Electric Company	48.74%	20.81%	0.00%	12.14%	18.30%	100.00%
The Southern Company	46.11%	32.58%	11.64%	9.11%	0.57%	100.00%
Xcel Energy Inc.	45.49%	32.85%	8.83%	2.81%	10.03%	100.00%

⁶⁷ Source: S&P Global. © 2021 S&P Global Market Intelligence (and its affiliates, as applicable) (individually and collectively, "S&P"). All rights reserved. For intended recipient only. No further distribution or reproduction permitted without S&P's prior written permission. A reference to or any observation concerning a particular investment, security or credit rating in the S&P information is not a recommendation to buy, sell, or hold such investment or security or make any other investment decisions. S&P and its third party licensors: (1) do not guarantee the accuracy, completeness, timeliness or availability of any information and are not responsible for any errors or omissions or for the results obtained from the use of such content; and (2) give no express or implied warranties of any kind. In no event shall S&P or its third party licensors be liable for any damages, including, without limitation, direct and indirect damages in connection with any use of the S&P information.

1 **Q. Is PacifiCorp's generation portfolio currently in a state of transition?**

2 A. Yes. As further discussed in the testimony of Mr. Rick T. Link, the Company is
3 responding to changing market conditions and is taking near term actions to retire
4 uneconomic coal units, invest in new renewable generation, and invest in associated
5 transmission.

6 **Q. How does PacifiCorp's generation investment plan affect its business risk?**

7 A. The Company's 2019 IRP action plan includes significant investment in building
8 transmission and adding new wind and solar generation. This significant investment in
9 transmission and renewable energy will require continued access to capital markets,
10 which highlights the importance of granting PacifiCorp an allowed ROE and equity
11 ratio that is sufficient to attract capital at reasonable terms.

12 **Q. What are your conclusions regarding the perceived risks related to the fuel mix of**
13 **RMP's generation portfolio?**

14 A. RMP generates a significant percentage of its electricity using coal-fired generation. As
15 renewable resources have become more economic, PacifiCorp has planned to reduce
16 customer costs by making sizable future capital expenditures to become less dependent
17 on coal-fired generation. While the Company intends to improve fuel diversity over the
18 long run, the plans will require continued access to capital markets to finance the new
19 investments. The Company's existing generation portfolio and proposed transmission
20 and generation investment plans increase the overall risk profile as compared with the
21 proxy group.

1 **IX. CAPITAL STRUCTURE**

2 **Q. Is the capital structure of RMP an important consideration in the determination**
3 **of the appropriate ROE?**

4 A. Yes, it is. Assuming other factors equal, a higher debt ratio increases the risk to
5 investors. For debt holders, higher debt ratios result in a greater portion of the available
6 cash flow being required to meet debt service, thereby increasing the risk associated
7 with the payments on debt. The result of increased risk is a higher interest rate. The
8 incremental risk of a higher debt ratio is more significant for common equity
9 shareholders. Common shareholders are the residual claimants on the cash flow of
10 RMP. Therefore, the greater the debt service requirement, the less cash flow available
11 for common equity holders.

12 **Q. What is RMP's proposed capital structure?**

13 A. As described in the testimony of Ms. Nikki L. Kobliha, RMP's proposal is to establish
14 a capital structure consisting of 52.83 percent common equity, 47.16 percent long-term
15 debt, and 0.01 percent preferred equity.

16 **Q. Have you conducted any analysis to determine if the Company's capital structure**
17 **is reasonable?**

18 A. Yes. I reviewed RMP's proposed capital structure and the capital structures of the utility
19 operating subsidiaries of the proxy companies. Because the ROE is set based on the
20 return that is derived from the risk-comparable proxy group, it is reasonable to look to
21 the proxy group average capital structure to benchmark the equity ratio for RMP.

1 **Q. Please discuss your analysis of the capital structures of the proxy group**
2 **companies.**

3 A. My analysis of the proxy group companies' actual capital structures is provided in
4 Exhibit No. 19. As shown in that exhibit, I calculated the mean proportions of common
5 equity and long-term debt over the most recent eight quarters⁶⁸ for each of the proxy
6 group companies at the operating company level. The Company's proposed equity ratio
7 of 52.83 percent is near the average of the proxy group, which had a range between
8 47.62 percent and 61.30 percent, with a mean of 52.75 percent.

9 **Q. What is your conclusion regarding an appropriate capital structure for RMP?**

10 A. Considering the actual capital structures of the proxy group operating companies, I
11 believe that RMP's proposed common equity ratio of 52.83 percent is reasonable. The
12 proposed equity ratio is well within the range established by the capital structures of
13 the utility operating subsidiaries of the proxy companies. In addition, it is reasonable
14 to rely on a higher equity ratio than RMP may have relied on in prior cases as a result
15 of RMP's above average business risk profile as compared to the proxy group. The
16 proposed equity ratio in combination with my recommended ROE are reasonable and
17 would be adequate to support capital attraction on reasonable terms.

18 **X. CONCLUSIONS AND RECOMMENDATION**

19 **Q. What is your conclusion regarding a just and reasonable ROE for RMP?**

20 A. Based on the analytical results discussed throughout my direct testimony and
21 summarized in Figure 14 below, I believe a range from 9.75 percent to 10.40 percent is

⁶⁸ Source: SNL Financial and FERC Form 1 quarterly reports. Includes quarterly data from Q4 2018 through Q3 2020.

1 reasonable. Within that range, the Company's requested ROE of 10.20 percent is
2 reasonable. This recommendation reflects the range of results for the proxy group
3 companies, the relative business, financial, and regulatory risk of RMP's electric
4 operations in Idaho as compared to the proxy group, and current capital market
5 conditions. This ROE would enable the Company to maintain its financial integrity and
6 therefore its ability to attract capital at reasonable terms under a variety of economic
7 and financial market conditions, while continuing to provide safe, reliable, and
8 affordable electric utility service to customers in Idaho.

Figure 104: Summary of Analytical Results⁶⁹

<i>Constant Growth DCF</i>			
	Mean Low	Mean	Mean High
30-Day Average	8.66%	9.85%	10.73%
90-Day Average	8.69%	9.88%	10.77%
180-Day Average	8.74%	9.93%	10.82%
<i>Capital Asset Pricing Model</i>			
	Current Risk-Free Rate (2.31%)	Q3 2021 - Q3 2022 Projected Risk-Free Rate (2.60%)	2022-2026 Projected Risk-Free Rate (2.80%)
Value Line Beta	12.41%	12.44%	12.47%
Bloomberg Beta	11.48%	11.53%	11.57%
Long-term Average Beta	10.58%	10.66%	10.72%
<i>Empirical Capital Asset Pricing Model</i>			
Value Line Beta	12.73%	12.76%	12.78%
Bloomberg Beta	12.03%	12.08%	12.11%
Long-term Average Beta	11.36%	11.42%	11.47%
<i>Treasury Yield Plus Risk Premium</i>			
	Current Risk-Free Rate (2.31%)	Q3 2021 - Q3 2022 Projected Risk-Free Rate (2.60%)	2022-2026 Projected Risk-Free Rate (2.80%)
Risk Premium Analysis	9.67%	9.80%	9.88%
<i>Expected Earnings Analysis</i>			
	Mean	Median	
Expected Earnings Result	10.98%	10.81%	

2 **Q. What is your conclusion with respect to RMP's proposed capital structure?**

3 A. My conclusion is that RMP's proposal to establish a capital structure consisting of
4 52.83 percent common equity, 47.16 percent long-term debt, and 0.01 percent preferred
5 equity is reasonable when compared to the capital structures of the companies in the
6 proxy group, and therefore should be adopted.

7 **Q. Does this conclude your direct testimony?**

8 A. Yes.

⁶⁹ See Exhibit No. 10.