

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

---

In the Matter of the Application of	)	
Rocky Mountain Power for Authority to	)	Docket No. 20-035-04
Increase its Retail Electric Utility Service	)	
Rates in Utah and for Approval of its	)	
Proposed Electric Service Schedules and	)	Phase I – Cost of Capital
Electric Service Regulations	)	

---

SURREBUTTAL TESTIMONY OF

DR. J. RANDALL WOOLRIDGE

FOR THE

OFFICE OF CONSUMER SERVICES

OCTOBER 8, 2020

1 **Q. PLEASE STATE YOUR FULL NAME, ADDRESS, AND OCCUPATION.**

2 A. My name is J. Randall Woolridge, and my business address is 120 Haymaker Circle,  
3 State College, PA 16801. I am a Professor of Finance and the Goldman, Sachs & Co.  
4 and Frank P. Smeal Endowed University Fellow in Business Administration at the  
5 University Park Campus of Pennsylvania State University. I previously filed  
6 testimony in this case for the Utah Office of Consumer Services (OCS) to provide an  
7 opinion as to the fair rate of return or cost of capital for PacifiCorp d/b/a Rocky Mountain  
8 Power (“RMP” or the “Company”).

9 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

10 A. I will respond to the rebuttal testimony of RMP witnesses Ms. Nikki L. Kobliha and  
11 Ms. Ann Bulkley.

12 **Q. PLEASE OUTLINE THE ISSUES YOU ARE ADDRESSING IN YOUR**  
13 **SURREBUTTAL TESTIMONY?**

14 A. I am covering the following issues in my surrebuttal testimony:

15 I. Summary of Positions

16 II. Authorized ROEs and Capital Market Conditions

17 III. Capital Structure

18 IV. The Riskiness of RMP

19 V. Equity Cost Rate Issues

20 A. Analysts’ Projected EPS Growth Rates

21 B. CAPM Analysis

22 C. The Expected Earnings Approach

23

24

**I. Summary of Positions**

25

26 **Q. PLEASE REVIEW THE COMPANY'S PROPOSED RATE OF RETURN OR**  
 27 **COST OF CAPITAL.**

28 A. In her rebuttal testimony, RMP witness Ms. Nikki L. Koblaha continues to recommend  
 29 a capital structure consisting of 46.32% long-term debt, 0.01% preferred stock and  
 30 53.67% common equity. She has updated her debt cost rate to reflect the issuance of  
 31 two new series of long-term debt — \$400 million of 2.70% mortgage bonds due  
 32 September 2030 and \$600 million of 3.30% first mortgage bonds due March 2051.  
 33 Her new long-term debt and preferred stock cost rates are 4.79% and 6.75%. RMP  
 34 witness Ms. Ann E. Bulkley has updated her common equity cost rate analysis and has  
 35 maintained that her initial 10.20% recommendation for RMP from her direct  
 36 testimony is still appropriate. However, the Company has chosen to lower its  
 37 requested ROE to 9.80% in its updated filing. As shown in Table 1, the Company's  
 38 overall proposed rate of return is now 7.48%.

39

**Table 1**

40

**RMP's Rate of Return Recommendation**

Component	% of Total	Cost %	Weighted Ave Cost %
Long-Term Debt	46.32 %	4.79%	2.22 %
Preferred Stock	0.01 %	6.75%	— %
Common Stock Equity	53.67 %	9.80%	5.26 %
	100.00 %		7.48 %

41

42

43 **Q. PLEASE REVIEW YOUR RECOMMENDATIONS REGARDING THE**  
 44 **APPROPRIATE MARKET-BASED RATE OF RETURN FOR RMP.**

45 A. I have reviewed the Company's proposed capital structure and overall cost of capital.  
 46 As I noted in my direct testimony, RMP's proposed capitalization has more equity and

47 less financial risk than the average current capitalizations of electric utilities. Hence,  
48 I used a capital structure that is more reflective of the capital structures of electric  
49 utility companies. I am using a capital structure consisting of 50.0% debt/preferred  
50 stock and 50.00% common equity. To estimate an equity cost rate for the Company, I  
51 have applied the Discounted Cash Flow Model (“DCF”) and the Capital Asset Pricing  
52 Model (“CAPM”) to my proxy group of electric utility companies (“Electric Proxy  
53 Group”). I have also applied my analysis to Ms. Bulkley’s Proxy Group (“Bulkley  
54 Proxy Group”). My DCF and CAPM analyses indicate an equity cost rate range of  
55 7.60% to 8.95%.

56 **Q. WHAT IS YOUR PRIMARY RATE OF RETURN RECOMMENDATION FOR**  
57 **RMP?**

58 A. As noted, my equity cost rate studies indicate ROEs between 7.60% and 8.95%. I  
59 believe that this range accurately reflects current capital market data. However, I  
60 recognize that this range is below the authorized ROEs for electric utility companies  
61 nationally. Therefore, my primary ROE recommendation for RMP is 9.0%. This  
62 recommendation: (1) gives weight to the higher authorized ROEs for electric utility  
63 companies; and (2) recognizes the concept of ‘gradualism’ in which authorized ROEs  
64 are adjusted on a gradual basis to reflect changing trends in capital market data. Given  
65 my recommended capitalization ratios and RMP’s updated proposed long-term debt  
66 and preferred stock rates (4.79% and 6.75%), my primary rate of return or cost of  
67 capital recommendation for the Company is 6.90% and is summarized in Table 2.

68

69

70  
71

**Table 2**  
**OCS' Updated Primary Rate of Return Recommendation**

<b>Capital Source</b>	<b>Capitalization Ratios</b>	<b>Cost Rate</b>	<b>Weighted Cost Rate</b>
<b>Long-Term Debt</b>	<b>49.99%</b>	<b>4.79%</b>	<b>2.39%</b>
<b>Preferred Stock</b>	<b>0.01%</b>	<b>6.75%</b>	<b>0.00%</b>
<b>Common Equity</b>	<b><u>50.00%</u></b>	<b><u>9.00%</u></b>	<b><u>4.50%</u></b>
<b>Total Capital</b>	<b>100.00%</b>		<b>6.90%</b>

72

73 **Q DID YOU ALSO PROVIDE AN ALTERNATIVE RATE OF RETURN**  
74 **RECOMMENDATION FOR RMP?**

75 A. Yes. My alternative rate of return recommendation uses RMP's proposed capital  
76 structure of 46.32% long-term debt, 0.01% preferred stock, and 53.67% common  
77 equity as well as RMP's updated long-term debt cost and preferred stock cost rates of  
78 4.79% and 6.75%. With respect to the equity component of my recommendation for  
79 rate of return, my alternative ROE recommendation is 8.75%, which is at the high end  
80 of my equity cost rate range of 7.60% to 8.95%. Given my alternative capitalization  
81 ratios and senior capital cost rates, based on the Company's proposed capital structure,  
82 my alternative rate of return or cost of capital recommendation for the Company is  
83 6.92% and is summarized in Table 3.

84  
85  
86

**Table 3**  
**OCS' Updated Alternative Rate of Return Recommendation**

<b>Capital Source</b>	<b>Capitalization Ratios</b>	<b>Cost Rate</b>	<b>Weighted Cost Rate</b>
<b>Long-Term Debt</b>	<b>46.32%</b>	<b>4.79%</b>	<b>2.22%</b>
<b>Preferred Stock</b>	<b>0.01%</b>	<b>6.75%</b>	<b>0.00%</b>
<b>Common Equity</b>	<b><u>53.67%</u></b>	<b><u>8.75%</u></b>	<b><u>4.70%</u></b>
<b>Total Capital</b>	<b>100.00%</b>		<b>6.92%</b>

87 **II. Authorized ROEs and Capital Market Conditions**

88

89 **Q. PLEASE REVIEW THE COMMISSION'S ORDER ON ROE IN RMP'S LAST**  
90 **RATE CASE.**

91 A. On August 29, 2014, the Commission approved a settlement between the Company  
92 and intervenors in Docket No, 13-035-184. The settlement included a capital structure  
93 of 48.55% long-term debt, 0.02% preferred stock, and 51.43% common stock equity, debt  
94 and preferred cost rates of 5.20% and 6.75%, and a ROE of 9.80%. The overall rate of  
95 return on rate base was 7.57%.<sup>1</sup>

96 **Q. HAVE CAPITAL COSTS INCREASED OR DECREASED SINCE THE**  
97 **COMPANY'S LAST RATE CASE?**

98 A. Interest rates and capital costs have declined since the last case. As I showed in my  
99 direct testimony, the 30-year Treasury yield averaged about 3.0% between 2012 and  
100 2018. During that time, the authorized ROEs in Utah were in the 9.80% range.  
101 However, the economy slowed and interest rates declined in 2019, and these yields  
102 continued to decline in 2020 and then dropped significantly when the novel  
103 coronavirus hit, significantly impacting the world's population, economy, and  
104 financial markets. This decline in interest rates and capital costs is one reason why  
105 RMP's authorized ROE must be lower than the 9.80% set in 2014 in RMP's last rate  
106 case, contrary to RMP's rebuttal position.

---

<sup>1</sup> *In the Matter of the Application of Rocky Mountain Power Company for authority to Increase its Retail Electric Utility Service Rates in Utah and for Approval for its Proposed Electric Service Schedules and Electric Service Regulations, August 29, 2014.*

107 **Q. WHAT HAS HAPPENED TO AUTHORIZED ROES IN UTAH?**

108 A. The only recent ROE determination in Utah was for the gas distribution service of  
109 Dominion Energy Utah, which was awarded a 9.5% ROE in a fully-litigated case. The  
110 Order in that case was dated February 25, 2020, which is effectively pre-coronavirus.

111 **Q. AT PAGE 23 OF HER REBUTTAL TESTIMONY, MS. BULKLEY REFERS**  
112 **TO THE COMPANY'S RECENT ROE FROM ITS RATE CASE**  
113 **SETTLEMENT IN WASHINGTON. PLEASE RESPOND.**

114 A. Ms. Bulkley refers to 2016 and 2020 rate cases in Washington involving PacifiCorp.  
115 She notes that the 9.50% ROE adopted in 2020 is the same ROE authorized in the  
116 2016 case and uses this observation to suggest that: (1) ROEs have not declined despite  
117 the decline in interest rates; and (2) this Commission should keep RMP's authorized  
118 ROE in Utah at 9.80%, which it was awarded in 2014. There are several issues with  
119 these observations. First, the 2020 Washington case is a settlement. As Ms. Bulkley  
120 acknowledges, there are usually give-and-take items in a rate case settlement, which  
121 can include ROE, capital structure, and many different elements in a rate case.  
122 Second, the agreed upon capital structure in the 2020 Washington case included a  
123 common equity ratio of 49.10%,<sup>2</sup> which is much lower than RMP's proposed common  
124 equity ratio of 53.67%. Because higher equity means less risk, a 9.50% ROE at  
125 49.10% equity means RMP should accept an ROE lower than 9.50% at a much higher  
126 equity ratio, such as at its requested 53.67% in this case.

127

---

<sup>2</sup> See Washington Utilities and Transportation Commission Docket No. UE-191024, Stipulation dated July 17, 2020. The stipulation adopts the capital structure from PacifiCorp's last rate case in Washington, filed in 2015, in which the WUTC authorized a 49.10% equity ratio.

128 **Q. WHAT ARE THE REVENUE REQUIREMENT IMPLICATIONS OF THESE**  
 129 **ALTERNATIVE CAPITAL STRUCTURE – AUTHORIZED ROE**  
 130 **SCENARIOS FROM THE WASHINGTON RATE CASE SETTLEMENT?**

131 A. OCS witness Ms. Ramas has provided the revenue requirement implications of the  
 132 alternative capital structure – authorized ROEs scenarios discussed above. They are  
 133 provided in Table 4.

134 **Table 4**  
 135 **Utah Revenue Requirement Implications of Alternative**  
 136 **Capital Structure – ROE Scenarios**  
 137

<u>OCS Direct Testimony Position on Adjustments</u>	Revenue Change*
As filed 50% Equity @ 9.0% ROE	(59,285,929)
49.1% Equity @ 9.50% ROE (WA Settlement)	(39,970,796)
53.67% Equity @ 9.0% ROE	(39,964,158)
<b><u>RMP Rebuttal Filing - Step 1 Increase (1/1/2021)</u></b>	
Co. Request 53.67% Equity @ 9.80% ROE	49,511,653
49.1% Equity @ 9.50% ROE (WA Settlement)	5,963,188
53.67% Equity @ 9.0% ROE	6,039,814
<b><u>RMP Rebuttal Filing - Total Increase After Step 2 (7/1/2021)</u></b>	
Co. Request 53.67% Equity @ 9.80% ROE	72,049,907
49.1% Equity @ 9.50% ROE (WA Settlement)	27,653,609
53.67% Equity @ 9.0% ROE	27,731,727
*This shows JAM model revenue requirement differences from RMP's current revenue requirement at each specified ROE and equity percentages.	

138  
 139

140



141 As discussed above, if RMP is authorized a 53.67% equity ratio in Utah, the company  
142 would be less risky than with its 49.1% equity ratio in Washington. This means that  
143 RMP's ROE in Utah should be lower than the 9.50% that it recently agreed to in  
144 Washington. Table 4 above shows that at a 53.67% equity ratio, RMP's ROE in Utah  
145 should be 9.0%, to be equivalent to its settlement in the Washington case.

146 **Q. HAS MS. BULKLEY RECOGNIZED THAT INTEREST RATES AND**  
147 **CAPITAL COSTS HAVE DECLINED?**

148 A. No. She clearly ignores the impact of low interest rates which seems to suggest that  
149 she believes that the level of interest rates has nothing to do with the return the equity  
150 investors require. Ms. Bulkley's direct and rebuttal testimonies and the results of her  
151 analyses indicate that the decline in interest rates does not matter to capital costs. This  
152 ignores the direct relationship between lower interest rates and lower capital costs.

153 **Q. DOES RMP WITNESS BULKLEY HIGHLIGHT THE ACTIONS OF THE**  
154 **FEDERAL RESERVE IN RESPONSE TO THE CORONAVIRUS**  
155 **PANDEMIC?**

156 A. Yes. Ms. Bulkley notes that the Federal Reserve has been active in monetary policy  
157 to support the economy in the wake of the coronavirus pandemic. Incredibly, she  
158 ignored a recent major pronouncement by Federal Reserve Chair Jerome Powell. In  
159 an interview on NPR on September 4th, Mr. Powell stated that the Fed would keep  
160 interest rates low for a number of years: "We think that the economy's going to need  
161 low interest rates, which support economic activity, for an extended period of time ...  
162 It will be measured in years."<sup>3</sup> Subsequently, on September 15, 2020, Federal Reserve

---

<sup>3</sup> Jeff Cox, "Powell says duration of low interest rates 'will be measured in years'," CNBC, September 4,

163 officials made more specific Mr. Powell's September 4<sup>th</sup> comments, projecting  
164 that they would keep interest rates near zero through 2023 to help the economy fully  
165 recover from the pandemic.<sup>4</sup>

166 **Q. MS BULKLEY DOES NOT DISCUSS HOW THE FED'S ACTIONS HAVE**  
167 **IMPACTED UTILITY BOND YIELDS. HAVE UTILITY BONDS YIELDS**  
168 **DECLINED WITH TREASURY BOND YIELDS?**

169 A. Yes. Figure 1 shows 30-year Treasury yields (Panel A), long-term 'A' rated utility  
170 yields (Panel B), and the yield differentials between these two yields (Panel C) over  
171 the 2000-20 time period. The yield differentials in Panel C shows that the spread  
172 between utility and Treasury yields has increased dramatically during the 2008  
173 financial crisis and during March of this year as a result of the coronavirus. The yield  
174 differential has declined significantly in recent months, and is now back to the 1.0%  
175 to 1.5% range which it has been historically.

176

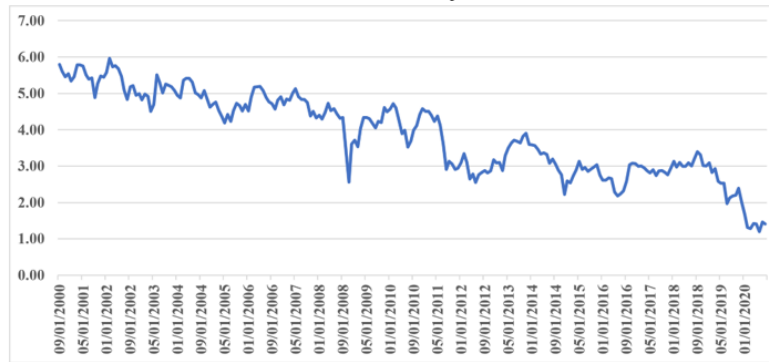
---

2020.

<sup>4</sup> <https://www.politico.com/news/2020/09/16/federal-reserve-zero-interest-rate416202#:~:text=Federal%20Reserve%20officials%20on%20Wednesday,probably%20have%20to%20do%20more.>

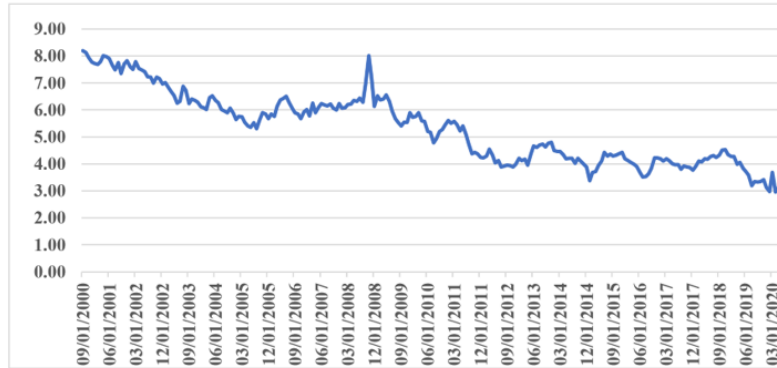
**Figure 1**

**Panel A**  
**30-Year Treasury Yield**



Source: <https://fred.stlouisfed.org/series/DGS30>

**Panel B**  
**Long-Term 'A' Utility Bond Yields**



Source: <https://mergent.com>

**Panel C**  
**Long-Term 'A' Utility Bond Yields - 30-Year Treasury Yield**

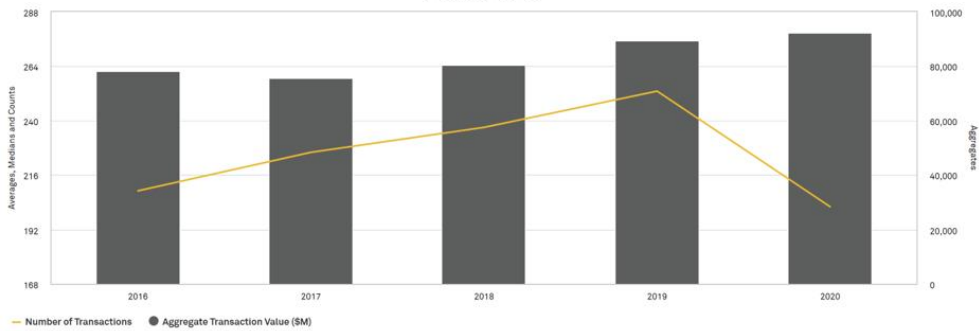


178 **Q. HAVE UTILITIES TAKEN ADVANTAGE OF THE LOWER BOND YIELDS**  
179 **TO RAISE CAPITAL?**

180 A. Yes. Figure 2 shows the amount of capital raised in debt (Panel A) and equity capital  
181 markets from 2016-2020. Utilities have especially taken advantage of the low interest  
182 rates; as of October 2, 2020, they have already raised a record amount of capital in the  
183 debt markets this year. The amount of equity raised by utilities is shown in Panel B.  
184 For 2020 year-to-date, the amount of equity is down a little relative to 2019, but this  
185 figure is only for the first nine months of 2020.

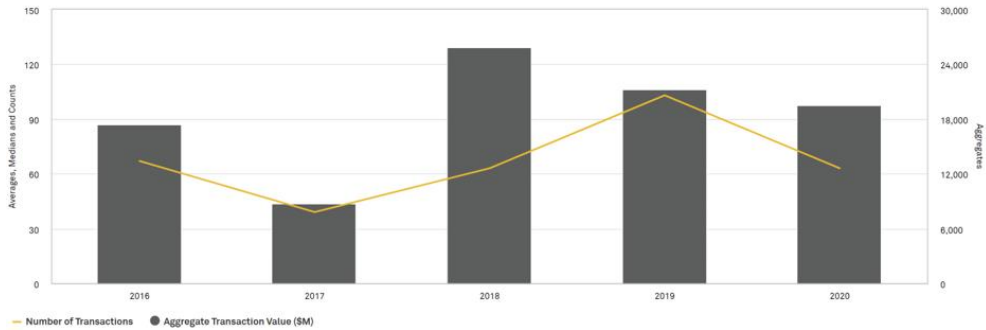
Figure 2

Panel A  
Utility Debt Offerings  
2016-2020



Source: S&P Global Market Intelligence.

Panel B  
Utility Equity Offerings  
2016-2020



Source: S&P Global Market Intelligence.

186

187

188 **Q. IN HER DIRECT AND REBUTTAL TESTIMONIES, MS. BULKLEY IMPLIES**  
189 **THAT INTEREST RATES AND CAPITAL COSTS ARE ABOUT TO**  
190 **INCREASE, AND SHE USES HIGHER PROJECTED INTEREST RATES IN**  
191 **HER CAPM AND RISK PREMIUM MODELS. PLEASE RESPOND.**

192 A. Ms. Bulkley argues that my ROE recommendations for RMP are not justified by current  
193 and expected market conditions. In her discussion of capital market conditions, Ms.  
194 Bulkley points to forecasts of long-term interest rates to imply that capital costs are about  
195 to increase and uses these forecasts in her CAPM and risk premium approaches.

196 **Q. PLEASE DISCUSS THE FORECASTS OF HIGHER INTEREST RATES BY**  
197 **ECONOMISTS AND OTHER PROFESSIONAL FORECASTERS.**

198 A. In my direct testimony, I highlighted that the consensus forecasts of economists are that  
199 interest rates are going higher and these forecasts are continually wrong. On this issue,  
200 I highlighted the following: (1) after the announcement of the end of Quantitative  
201 Easing III (“QEIII”) program in 2014, all the economists in Bloomberg’s interest rate  
202 survey forecasted interest rates would increase in 2014, and 100% of the economists  
203 were wrong;<sup>5</sup> (2) *Bloomberg* reported that the Federal Reserve Bank of New York has  
204 gone as far as stopping use of interest rate estimates of professional forecasters in its  
205 interest rate model;<sup>6</sup> (3) a study entitled “How Interest Rates Keep Making People on  
206 Wall Street Look Like Fools,” which evaluated economists’ forecasts for the yield on

---

<sup>5</sup> Ben Eisen, “Yes, 100% of economists were dead wrong about yields, *Market Watch*,” October 22, 2014.

<sup>6</sup> Susanne Walker and Liz Capo McCormick, “Unstoppable \$100 Trillion Bond Market Renders Models Useless,” *Bloomberg.com* (June 2, 2014). <http://www.bloomberg.com/news/2014-06-01/the-unstoppable-100-trillion-bond-market-renders-models-useless.html>.

207 ten-year Treasury bonds at the beginning of the year for the last ten years.<sup>7</sup> The results  
208 demonstrated that economists consistently predict that interest rates will go higher,  
209 and interest rates have not fulfilled the predictions; and (4) a study that tracked  
210 economists' forecasts for the yield on ten-year Treasury bonds on an ongoing basis  
211 from 2010 until 2015, entitled "Interest Rate Forecasters Are Shockingly Wrong  
212 Almost All of the Time," demonstrate how economists continually forecast that  
213 interest rates are going up, and they do not.<sup>8</sup>

214 **Q. PLEASE SUMMARIZE YOUR DISCUSSION OF THE INTEREST RATE**  
215 **FORECASTS USED BY MS. BULKLEY.**

216 A. I recommend that the Commission ignore these forecasts because, as demonstrated in the  
217 above studies, economists are always predicting that interest rates are going up, and they  
218 have consistently been wrong. Ms. Bulkley makes a significant error in suggesting that  
219 investors share economists' views of higher rates and that these views are incorporated  
220 into their decision making. I highlight that investors would not be buying long-term  
221 Treasury bonds at current yields today if they followed economists' interest rate forecasts  
222 because a near-term increase in interest rates would result in a negative rate of return on  
223 those bonds.

224

225

226

---

<sup>7</sup> Joe Weisenthal, "How Interest Rates Keep Making People on Wall Street Look Like Fools," Bloomberg.com, March 16, 2015. <http://www.bloomberg.com/news/articles/2015-03-16/how-interest-rates-keep-making-people-on-wall-street-look-like-fools>.

<sup>8</sup> Akin Oyedele, "Interest Rate Forecasters Are Shockingly Wrong Almost All of the Time," *Business Insider*, July 18, 2015. <http://www.businessinsider.com/interest-rate-forecasts-are-wrong-most-of-the-time-2015-7>.

227

**III. Capital Structure**

228

229 **Q. PLEASE REVIEW THE CAPITAL STRUCTURE ISSUES IN THIS CASE.**

230 A. The Company has proposed a capital structure consisting of 46.32% long-term debt,  
231 0.01% preferred stock and 53.67% common equity. I demonstrated that this capital  
232 structure has a higher common equity ratio than the Company's parent company and  
233 other electric utility companies. As a result, in my primary rate of return  
234 recommendation I have recommended a capital structure with a common equity ratio  
235 of 50.00%. In my alternative rate of return recommendation, I have used the  
236 Company's proposed capital structure, but with a lower ROE of 8.75% to reflect the  
237 higher common equity ratio and lower financial risk of RMP's proposed capital  
238 structure.

239 **Q. IN ITS REBUTTAL TESTIMONY, THE COMPANY CRITICIZES YOUR**  
240 **PROPOSED CAPITAL STRUCTURE. PLEASE RESPOND.**

241 A. In their rebuttal testimonies, Ms. Koblaha and Ms. Bulkley make several observations on  
242 my assessment of a proposed capital structure for RMP. They claim that: (1) it is  
243 appropriate to compare the common equity ratios of the operating electric utilities and  
244 not the holding companies; (2) I should not include short-term debt in assessing common  
245 equity ratios; and (3) there is no double leverage in the Company's capitalization relative  
246 to its parent, Berkshire Hathaway Energy (BHE).

247 **Q. PLEASE ADDRESS THESE THREE ISSUES.**

248 A. On the first issue, contrary to RMP's assertions, the appropriate comparison when it  
249 comes to common equity ratios is between the common equity ratio as proposed by

250 the Company and the average common equity ratios for the holding companies in the  
251 proxy groups. The reason is that both Ms. Bulkley and myself use the holding  
252 companies to estimate a cost of equity capital for the Company. That is because the  
253 holding companies have common stock outstanding, stock that is traded in the market,  
254 which enables us to apply DCF and CAPM equity cost rate modeling approaches.  
255 Without these holding company stock prices and dividends paid, we could not employ  
256 the DCF and CAPM models. Therefore, it is the holding companies' common equity  
257 ratios that are appropriate for comparison purposes, since their common equity ratio  
258 is what reflects their financial risk. The common equity ratios of the operating utilities  
259 are higher and therefore they are subject to less financial risk.

260 Second, it is appropriate to include short-term debt for the holding companies  
261 when making assessments regarding common equity ratios. I have not recommended  
262 the inclusion of short-term debt in the Company's capital structure. However, when  
263 assessing the financial leverage and risk associated with debt financing, it is appropriate  
264 to include short-term debt. And while Ms. Bulkley is correct that short-term debt tends  
265 to vary over time for utilities, that is irrelevant when it comes to evaluating financial risk  
266 when using holding company financial data. In assessing financial risk, short-term debt  
267 is included because, just like long-term debt, short-term has a higher claim on the assets  
268 and earnings of the company and requires timely payment of interest and repayment of  
269 principal. This is consistent with the approach used by S&P and Moody's in evaluating  
270 financial integrity and credit worthiness.<sup>9</sup>

---

<sup>9</sup> For example, see Moody's June 27, 2019 Credit Opinion on PacifiCorp provided as part of Ms. Koblaha's direct testimony as Confidential Workpaper NLK 1, page 1, where Moody's uses "Total Debt".



271 Third, Ms. Koblaha claims there is no double leverage in assessing the  
272 Company's proposed capitalization relative to that of its parent, BHE. However, she  
273 does not directly address the issue. The point that I have made is that BHE is taking  
274 advantage of double leverage in its management of RMP because regulators, such as  
275 the Utah Commission, allow the Company to double leverage if regulators set rates on  
276 RMP's capital structure and not based on BHE's consolidated capital structure. As I  
277 demonstrated in my direct testimony, BHE's consolidated capital structure has more  
278 leverage than RMP's. This is evidence that at least some of the equity in RMP has  
279 been financed by debt from BHE. The Commission should consider this fact in setting  
280 the capital structure and/or the ROE for RMP.

281 **Q. ON A RELATED ISSUE, HOW DOES RMP'S PROPOSED COMMON**  
282 **EQUITY RATIO COMPARE TO THE COMMON EQUITY RATIOS**  
283 **APPROVED FOR ELECTRIC UTILITIES IN THE US?**

284 A. While the Company's witnesses have discussed authorized ROEs for electric utilities,  
285 they have not made comparisons between their proposed common equity ratio and those  
286 adopted for electric utilities. According to S&P Global Market Intelligence – RRA, the  
287 average authorized common equity ratio for electric utilities in 2019-20 in the U.S. was  
288 51.15%.<sup>10</sup> As such, RMP's proposed capitalization includes a higher common equity  
289 ratio than those approved by other state utility commissions.

290

291

---

<sup>10</sup> S&P Global Market Intelligence, *RRA Regulatory Focus*, 2020. The 51.14% figure excludes the approved common equity ratios for utilities in states which include cost-free capital items such as investment tax credits in the approved capitalizations.

**IV. The Riskiness of RMP**

292

293

294 **Q. WHAT IS THE COMPANY'S TESTIMONY REGARDING THE RELATIVE**  
295 **RISK OF RMP?**

296 A. Ms. Bulkley indicated in her direct testimony that she considered several other risk  
297 factors in arriving at her 10.20% ROE recommendation. She claims that (1) RMP's  
298 higher than average capital expenditures increase its risk relative to the proxy utility  
299 companies; (2) RMP's regulatory risk is high due to operating in Utah; and (3) RMP's  
300 generation ownership and fuel sources makes it riskier than other utilities.

301 **Q. DO YOU AGREE WITH MS. BULKLEY THAT RMP IS RISKIER THAN**  
302 **OTHER ELECTRIC UTILITIES?**

303 A. No. Ms. Bulkley's conclusion that RMP's capital expenditures and regulatory risk  
304 make RMP riskier than other electric utilities is erroneous. These two factors are risk  
305 factors that are already considered in the credit-rating process used by major rating  
306 agencies. RMP's issuer credit rating is A according to S&P and A3 according to  
307 Moody's. RMP's S&P rating (A) is two notches above the average S&P rating for the  
308 Electric and Bulkley Proxy Groups (BBB+). RMP's Moody's rating of A3 is one  
309 notch above the average Moody's rating for the Electric and Bulkley Proxy Groups  
310 (Baa1). As such, RMP is less risky than the utilities in the Electric and Bulkley Proxy  
311 Groups.

312 In addition, in terms of Utah regulatory risk, Ms. Bulkley claims that Utah  
313 ROEs are below those of other states. This is erroneous. For example, consider that  
314 the Commission approved a ROE of 9.50% for the gas distribution operations of

315 Dominion Energy Utah in February of this year. This compares to a national average  
316 gas distribution utility ROE of 9.40% in 2020.<sup>11</sup>

317 **Q. DOES MS. BULKLEY ADDRESS UTAH'S RESOURCE PREAPPROVAL**  
318 **STATUTES IN MAKING HER CLAIM THAT RMP IS MORE RISKY THAN**  
319 **THE COMPANIES IN HER PROXY GROUP BECAUSE OF RMP'S RECENT**  
320 **AND PLANNED LARGE CAPITAL EXPENDITURES?**

321 A. No. To recap, in her direct testimony Ms. Bulkley argues that RMP is riskier than her  
322 proxy group of companies because of RMP's recent and planned large capital  
323 expenditures and the fact that RMP does not have a capital tracking mechanism, such  
324 as 52% of her proxy group utilities, to recover large capital costs.<sup>12</sup> Ms. Bulkley  
325 repeats this claim in her rebuttal testimony.<sup>13</sup> However, Utah has two statutory  
326 mechanisms to receive Commission preapproval of large capital expenditures.

327 **Q. WHAT ARE UTAH'S STATUTORY MECHANISMS THAT LESSEN THE**  
328 **RISK OF LARGE CAPITAL EXPENDITURES?**

329 A. Utah's Significant Energy Resource Approval statute, Utah Code §§ 54-17-302  
330 through 54-17-304 and Voluntary Request for Resource Decision Review statute,  
331 Utah Code §§ 54-17-401 through 54-17-404, provide mechanisms for RMP to obtain  
332 preapproval of projected costs of significant capital expenditures. Once preapproval  
333 is obtained from the Commission, which will occur prior to the expenditure of any  
334 substantial funds, RMP will be guaranteed recovery up to that amount preapproved in

---

<sup>11</sup> S&P Global Market Intelligence, *RRA Regulatory Focus*, 2020.

<sup>12</sup> Direct Testimony of Ann E. Bulkley, p. 60-63.

<sup>13</sup> Rebuttal Testimony of Ann E. Bulkley, p. 76.

335 the next rate case. RMP has recently utilized these statutes in recent cases involving  
336 large capital expenditures for wind resources and transmission lines to insulate itself  
337 from risk related to the cost recovery for these projects.<sup>14</sup>

338 **Q. AS A REGULATED UTILITY, DO THESE STATUTES SIGNIFICANTLY**  
339 **MITGATE THE RISKS ASSOCIATED WITH RMP'S LARGE CAPITAL**  
340 **INVESTMENTS?**

341 A. Yes, that is one the results of these statutes.

342 **Q. ARE THERE ANY OTHER STATUTES THAT REDUCE RMP'S RISK OF**  
343 **CAPITAL EXPENDITURE RECOVERY IN RATES?**

344 A. Yes, Utah Code §§ 54-7-13.4, Alternative Cost Recovery for Major Plant Addition,  
345 allows RMP to begin recovery of costs in rates for major capital expenditures in  
346 between rate cases. This reduces regulatory lag that would otherwise occur due to  
347 waiting until the next rate case and would increase the utility's cash flow.

348 **Q. DOES MS. BULKLEY ACKNOWLEDGE THE RESOURCE PREAPPROVAL**  
349 **AND MAJOR PLANT ADDITION STATUTES IN HER ANALYSIS OF**  
350 **RMP'S BUSINESS RISKS IN UTAH?**

351 A. No she does not.

352

---

<sup>14</sup> See *Voluntary Request of Rocky Mountain Power for Approval of Resource Decision to Repower Wind Facilities*, Docket 17-035-39; *Application of Rocky Mountain Power for Approval of a Significant Energy Resource Decision and Voluntary Request for Approval of Resource Decision*, Docket 17-035-40.

353 **Q. CONSIDERING THIS ISSUE OF REDUCED UTAH-SPECIFIC RISKS, IS**  
354 **THE COMPANY'S POSITION IN THIS CASE CONSISTENT WITH ITS**  
355 **POSITION IN ITS CURRENT RATE CASE IN WYOMING?**

356 A. No. RMP lists some of the same risk factors in its current rate case in Wyoming but  
357 then provides additional Wyoming specific risks. In the Wyoming case, Ms. Bulkley  
358 is the ROE witness and, as in this case, the Company in rebuttal has moderated its  
359 ROE request to 9.80%. However, Ms. Bulkley in the Wyoming proceeding argues  
360 that RMP deserves a higher ROE in Wyoming since the state has unique risk factors  
361 associated with limited cost recovery mechanisms. In addition, RMP witness  
362 Hoogeveen argues that Wyoming's treatment of coal-fired generation increases  
363 RMP's risk in that state.<sup>15</sup> Because Utah does not have these Wyoming specific issues,  
364 RMP's ROE in Utah should be lower than in Wyoming.

365 **Q. MS. KOBLIHA STATES THAT RMP'S SUPERIOR CREDIT RATINGS ARE**  
366 **IN JEOPARDY IF COMMISSIONS DO NOT SUPPORT RMP'S CASH FLOW**  
367 **AND DEBT RATIOS BY AUTHORIZING A GENEROUS EQUITY RATIO**  
368 **PERCENTAGE.<sup>16</sup> DO YOU AGREE?**

369 A. No. First, as noted above, RMP's S&P and Moody's issuer credit ratings of A and A3  
370 are already significantly better than the average of the two proxy groups. Second, as  
371 shown on page 2 of my direct testimony Exhibit JRW-3.2, RMP has achieved its superior  
372 credit rating with an average common equity ratio of 51.79% over the past three years.

---

<sup>15</sup> See Docket No. 20000-578-ER-20, Wyoming Public Service Commission, Direct testimony of Anne Bulkley, pp. 66-73; Rebuttal testimony of Anne Bulkley, pp. 5, 63; Rebuttal testimony of Gary Hoogeveen, pp. 3.

<sup>16</sup> Koblaha Rebuttal testimony, pages 6 – 7.

373 Third, this is an erroneous conclusion because awarding a generous common equity ratio  
374 only takes money from ratepayers and puts it in the pockets of PacifiCorp's shareholders.  
375 Furthermore, in the Washington rate case settlement referenced earlier, PacifiCorp  
376 accepted a 49.1% equity ratio with a 9.50% ROE.

377 **Q. IN CONCLUSION, WHAT IS THE IMPLICATION OF RMP HAVING LESS**  
378 **INVESTMENT RISK THAN OTHER ELECTRIC UTILITIES?**

379 A. The clear implication is that the companies in the Electric and Bulkley Proxy Groups are  
380 riskier than RMP and therefore using these firms will produce a higher ROE than RMP  
381 requires. As a result, the Commission should recognize the lower investment risk of  
382 RMP in setting the ROE in this case.

383

384

## V. Equity Cost Rate Issues

385 **1. DCF Approach**

386

387 **Q. INITIALLY, PLEASE DISCUSS MS. BULKLEY'S COMMENTS ON YOUR**  
388 **PROXY GROUP.**

389 A. In her rebuttal testimony, Ms. Bulkley criticizes my proxy group because it includes  
390 distribution companies. However, the proxy group is not an issue, since I also use her  
391 proxy group. In addition, I use credit ratings as a measure of risk, and RMP is less  
392 risky than either proxy group.

393 **Q. PLEASE HIGHLIGHT THE ISSUES YOU IDENTIFIED WITH MS**  
394 **BULKLEY'S DCF ANALYSIS.**

395 A. In my direct testimony, I identified a number of errors in Ms. Bulkley's DCF analysis.  
396 As I highlighted in my testimony, Ms. Bulkley has seriously overstated her reported  
397 DCF results in four ways: (1) she selectively eliminated low-end DCF results; (2) she  
398 has exclusively used the overly optimistic and upwardly biased EPS growth rate  
399 forecasts of Wall Street analysts and *Value Line*; (3) she has created her own new  
400 version of the DCF model – the projected constant-growth DCF model - in which she  
401 projects DCF inputs into the future; and (4) she has claimed that the DCF results  
402 underestimate the market-determined cost of equity capital due to high utility stock  
403 valuations and low dividend yields.

404 **Q. HAS MS. BULKLEY ADDRESSED THESE ISSUES IN HER REBUTTAL**  
405 **TESTIMONY?**

406 A. No, not in any meaningful way.

407 (1) With respect to her asymmetric low-end DCF eliminations, I noted that  
408 without the low-end eliminations, her DCF results go from an average of 8.93% down  
409 to 8.59%. As I indicated in my initial testimony, by eliminating asymmetric low-end  
410 results, she has committed a basic statistics error called errors-in-variables (EIV). She  
411 has not addressed her statistical error in rebuttal.

412 (2) With respect to her exclusively using the overly optimistic and upwardly  
413 biased EPS growth rate forecasts of Wall Street analysts and *Value Line*, Ms. Bulkley  
414 claims: (1) the Global Analysts Settlement "reduced or eliminated" the upward bias;  
415 and (2) cites the results of a study I cited by Hovakimian and Saenyasiri who report  
416 that the bias declined in response to the Global Analysts Settlement. There are two  
417 errors here. First, the Hovakimian and Saenyasiri study did not use or evaluate long-

418 term EPS growth rates, but instead used short-term EPS growth rate forecasts. In  
419 addition, I addressed the “changes in regulation” issue in my initial testimony. I cited  
420 a number of studies published since that time which highlight the upward bias in analysts’  
421 EPS growth rate estimates. In addition, a McKinsey study entitled “Equity Analysts:  
422 Still Too Bullish” evaluated the accuracy on analysts long-term EPS growth rate  
423 forecasts. The authors conclude that after a decade of stricter regulation, analysts’  
424 long-term earnings forecasts continue to be excessively optimistic. They made the  
425 following observation:<sup>17</sup>

426 Alas, a recently completed update of our work only reinforces this view—  
427 despite a series of rules and regulations, dating to the last decade, that were  
428 intended to improve the quality of the analysts’ long-term earnings forecasts,  
429 restore investor confidence in them, and prevent conflicts of interest. For  
430 executives, many of whom go to great lengths to satisfy Wall Street’s  
431 expectations in their financial reporting and long-term strategic moves, this is  
432 a cautionary tale worth remembering. This pattern confirms our earlier  
433 findings that analysts typically lag behind events in revising their forecasts to  
434 reflect new economic conditions. When economic growth accelerates, the size  
435 of the forecast error declines; when economic growth slows, it increases. So as  
436 economic growth cycles up and down, the actual earnings S&P 500 companies  
437 report occasionally coincide with the analysts’ forecasts, as they did, for  
438 example, in 1988, from 1994 to 1997, and from 2003 to 2006. Moreover,  
439 analysts have been persistently overoptimistic for the past 25 years, with  
440 estimates ranging from 10 to 12 percent a year, compared with actual earnings  
441 growth of 6 percent. Over this time frame, actual earnings growth surpassed  
442 forecasts in only two instances, both during the earnings recovery following a  
443 recession. On average, analysts’ forecasts have been almost 100 percent too  
444 high. (emphasis added).

445 This is the same observation made in a *Bloomberg Businessweek* article.<sup>18</sup> The  
446 author concluded:

---

<sup>17</sup> Marc H. Goedhart, Rishi Raj, and Abhishek Saxena, “Equity Analysts, Still Too Bullish,” *McKinsey on Finance*, pp. 14-17, (Spring 2010).

<sup>18</sup> Roben Farzad, “For Analysts, Things Are Always Looking Up,” *BloombergBusinessweek* (June 10, 2010).



447                   **The bottom line:** Despite reforms intended to improve Wall Street research,  
448 stock analysts seem to be promoting an overly rosy view of profit prospects.  
449

450                   (3) As noted above, given her low DCF results, she has created her own new  
451 version of the DCF model – the projected constant-growth DCF model. In this case  
452 she projects DCF inputs into the future and then computes a DCF five years in the  
453 future. Ms. Bulkley has no defense for this approach, since she is using a ROE model  
454 she created which has no foundation in the field of finance.

455                   (4) As a last ditch effort to defend her results, she has claimed that the DCF  
456 results underestimate the market-determined cost of equity capital due to high utility  
457 stock valuations and low dividend yields. She does this at several places in her  
458 testimony. She has made similar claims in her testimonies in recent years, to  
459 “discredit” her own low DCF results, even as utility stock prices have continued to  
460 increase. The bottom line is that she is claiming that she knows more about the  
461 valuation of utility stocks than investors and the markets.

462 **Q. ON PAGES 95-96 OF HER REBUTTAL TESTIMONY, MS. BULKLEY**  
463 **IMPLIES THAT YOU USE HISTORIC GROWTH RATES IN YOUR DCF**  
464 **ANALYSIS. IS THIS CORRECT?**

465 A. No. I did review historical growth rates, since most data available to investors is  
466 historical. However, as discussed in my testimony, in arriving at my DCF growth  
467 rates, I used the overall range of the projected growth rate indicators, and gave primary  
468 weight to the projected EPS growth rate of Wall Street analysts. In doing so, I  
469 recognized that: (1) analysts’ growth rate forecasts have a significant impact on  
470 investors’ expectations; and (2) the scientific evidence on analysts’ long-term EPS

471 growth rate forecasts indicates that these forecasts are overly optimistic and upwardly  
472 biased, therefore one should not solely rely on these forecasts.

473 **Q. ON PAGES 96-97 OF HER REBUTTAL TESTIMONY MS. BULKLEY**  
474 **CRITICIZES YOUR SUSTAINABLE GROWTH RATE CALCULATION.**  
475 **PLEASE RESPOND.**

476 A. I have used internal sustainable growth as one of my thirteen measures of growth for both  
477 the Electric and Bulkley Proxy Groups. Sustainable growth includes: (1) internal growth  
478 which is measured as the retention rate (“B”) times the expected ROE (“R”) and is  
479 referred to as “B \* R”; and (2) external growth which is measured as the growth in the  
480 number of shares (“S”) times the portion of the market-to-book ratio that exceeds 1.0  
481 (“V”) and is referred to as “S \* V.”<sup>19</sup> I have relied upon internal growth because, of the  
482 two measures, (1) internal growth is the predominant component of sustainable growth  
483 and (2) external growth is speculative in that the calculation includes projections of a  
484 future market-to-book ratio as well as future issues of stock. Ms. Bulkley’s incorrect  
485 objection is that I only used the B \* R form of sustainable growth.

486 **Q. IS MS. BULKLEY CORRECT IN HER ASSERTION THAT YOU DID NOT**  
487 **INCLUDE S \* V GROWTH?**

488 A. No. Whereas I calculate sustainable growth as B \* R as one of my DCF growth rate  
489 measures, I have also used *Value Line*’s projected book value per share growth rate. This  
490 growth rate calculation includes *Value Line*’s explicit estimate of sustainable growth,  
491 which presumably includes B\*R and S\*V.

---

<sup>19</sup> The retention rate is the percent of earnings retained by a company and reinvested in the company’s asset base. The market to book ratio is the market value of a company’s equity (i.e., the stock price) dividend by the book value (the value on the balance sheet).

492

493

**2. CAPM Approach**

494

495 **Q. PLEASE DISCUSS THE ISSUES WITH MS BULKLEY'S CAPM ANALYSIS.**

496 A.

In my initial testimony, I identified a number of issues with Ms. Bulkley's CAPM analysis. These issues were: (1) her long-term projected (3.20%) 30-year Treasury yields are well in excess of current market yields; (2) she has employed the Empirical CAPM ("ECAPM") version of the CAPM, which makes inappropriate adjustments to the risk-free rate and the market risk premium; and (3) most significantly, she has computed a market risk premium of 12.49%. The 12.49% market risk premium is much larger than: (1) indicated by historic stock and bond return data; and (2) found in the published studies and surveys of the market risk premium. In addition, I demonstrate that the 12.49% market risk premium is based on totally unrealistic assumptions of future economic and earnings growth and stock returns. To compute her market risk premium, Ms. Bulkley has applied the DCF to the S&P 500 and employed analysts' three-to-five-year earnings per share ("EPS") growth-rate projections as a growth rate to compute an expected market return and market risk premium. As I demonstrated in my initial testimony, the EPS growth-rate projection used for the S&P 500 and the resulting expected market return and market risk premium include totally unrealistic assumptions regarding future economic and earnings growth and stock returns.

513

514

515 **Q. HOW DID MS. BULKLEY RESPOND IN HER REBUTTAL TESTIMONY?**

516 A. She updated her CAPM analysis. She used current/near-term projected/long-term  
517 projected risk-free rates of 1.34%/1.70%/3.00%, a market risk premium of 13.95%,  
518 and betas from both Value Line and Bloomberg. Her updated CAPM results vary  
519 from 11.63% to 12.58%, and her ECAPM results are 30 to 50 basis points higher.

520 **Q. WHAT ARE THE ERRORS IN MS. BULKLEY UPDATED CAPM?**

521 A. The errors are the same as in her original CAPM and I addressed these issues in my  
522 direct testimony. They include: (1) the use of the so-called ECAPM, (2) the projected  
523 risk-free interest rate and, (3) the most significant error, is her market risk premium.  
524 The market risk premium is the primary driver of her highly overstated  
525 CAPM/ECAPM results. The calculation of Ms. Bulkley's market risk premium is  
526 shown in Table 5.

527  
528

**Table 5**  
**Bulkley CAPM Market Risk Premium**

<b>Dividend Yield</b>	<b>1.72%</b>
<b>+ Expected EPS Growth</b>	<b>12.12%</b>
<b>= Expected Market Return</b>	<b>13.95%</b>
<b>- Risk-Free Rate</b>	<b>1.34%</b>
<b>= Market Risk Premium</b>	<b>12.60%</b>

529

530 The primary issue with Ms. Bulkley's approach is using the overly optimistic,  
531 upwardly biased projected EPS growth rates of Wall Street analysts as the DCF  
532 growth component for the S&P 500. In my direct testimony, I described in detail  
533 why her risk premium approach is not appropriate for the following reasons:

534 1. Ms. Bulkley's market risk premium of 12.60% is well above market-risk  
535 premiums: (1) found in studies of the market-risk premium by leading

536 academic scholars; (2) produced by analyses of historic stock and bond returns;  
537 and (3) found in surveys of financial professionals.

538 2. Ms. Bulkley’s CAPM market-risk premium methodology is based entirely on  
539 the concept that analysts’ projections of companies’ three-to-five EPS growth  
540 rates reflect investors’ expected long-term EPS growth for those companies.  
541 Numerous studies have shown that the long-term EPS growth rate forecasts of  
542 Wall Street securities analysts are overly optimistic and upwardly biased.<sup>20</sup>  
543 Moreover, a 2011 study showed that analysts’ forecasts of EPS growth over  
544 the next three-to-five years earnings are no more accurate than their forecasts  
545 of the next single year’s EPS growth.<sup>21</sup> The overly-optimistic inaccuracy of  
546 analysts’ growth rate forecasts leads to an upward bias in equity cost estimates  
547 that has been estimated at about 300 basis points.<sup>22</sup>

548 3. Changes in regulations and reporting requirements over the past two decades  
549 have not impacted the fact that analysts’ long-term earnings forecasts continue  
550 to be excessively optimistic.

551 4. Over the long-term, there is a direct link between EPS and GDP growth rates,  
552 and historically they have grown in the 6%-7% range;

---

<sup>20</sup> Such studies include: R.D. Harris, “The Accuracy, Bias, and Efficiency of Analysts’ Long Run Earnings Growth Forecasts,” *Journal of Business Finance & Accounting*, pp. 725-55 (June/July 1999); P. DeChow, A. Hutton, and R. Sloan, “The Relation Between Analysts’ Forecasts of Long-Term Earnings Growth and Stock Price Performance Following Equity Offerings,” *Contemporary Accounting Research* (2000); K. Chan, L., Karceski, J., & Lakonishok, J., “The Level and Persistence of Growth Rates,” *Journal of Finance*, pp. 643–684, (2003); M. Lacina, B. Lee, and Z. Xu, *Advances in Business and Management Forecasting (Vol. 8)*, Kenneth D. Lawrence, Ronald K. Klimberg (ed.), Emerald Group Publishing Limited, pp.77-101.

<sup>21</sup> M. Lacina, B. Lee, & Z. Xu, *Advances in Business and Management Forecasting*, Vol. 8, Kenneth D. Lawrence, Ronald K. Klimberg (ed.), Emerald Group Publishing Limited, pp.77-101.

<sup>22</sup> Peter D. Easton & Gregory A. Sommers, “Effect of Analysts’ Optimism on Estimates of the Expected Rate of Return Implied by Earnings Forecasts,” 45, *Journal of Accounting Research*, pp. 983–1015 (2007).

- 553           5.       The trends and projections indicate slower GDP growth in the future, with the  
554                   average projected GDP growth rates by such agencies as Social Security  
555                   Administration, Energy Information Administration, and the Congressional  
556                   Budget Office in the 4.0% to 4.4% range. A major reason for the projected  
557                   slower GDP growth in the future is the slowing growth of the population (and  
558                   therefore workforce) in the U.S.
- 559           6.       On a year-to-year basis, S&P 500 EPS growth rates are much more volatile  
560                   than the GDP growth rates because the EPS growth for the S&P 500 companies  
561                   can be influenced by factors like labor costs, interest rates, commodity prices,  
562                   or the recovery of different sectors. These short-term factors can make it  
563                   appear that there is a disconnect between the economy and corporate profits.  
564                   But over time S&P 500 EPS growth rates tie to GDP growth rates.
- 565           7.       Corporate profits are constrained by GDP. Milton Friedman, the noted Nobel  
566                   Laureate economist, warned investors and others not to expect corporate profit  
567                   growth to sustainably exceed GDP growth, stating, “Beware of predictions that  
568                   earnings can grow faster than the economy for long periods. When earnings  
569                   are exceptionally high, they don’t just keep booming.”<sup>23</sup> Friedman also noted  
570                   in the *Fortune* interview that profits must move back down to their traditional  
571                   share of GDP. Likewise, Warren Buffett noted the following:<sup>24</sup>
- 572                                You know, someone once told me that New York has more lawyers  
573                                than people. I think that’s the same fellow who thinks profits will  
574                                become larger than GDP. When you begin to expect the growth of

---

<sup>23</sup> Shaun Tully, “Corporate Profits Are Soaring. Here's Why It Can't Last,” *Fortune*, (Dec. 7, 2017), <http://fortune.com/2017/12/07/corporate-earnings-profit-boom-end/>.

<sup>24</sup> Carol Loomis, “Mr. Buffet on the Stock Market,” *Fortune*, (Nov. 22, 1999), [https://money.cnn.com/magazines/fortune/fortune\\_archive/1999/11/22/269071/](https://money.cnn.com/magazines/fortune/fortune_archive/1999/11/22/269071/).

575 a component factor to forever outpace that of the aggregate, you  
576 get into certain mathematical problems. In my opinion, you have to  
577 be wildly optimistic to believe that corporate profits as a percent of  
578 GDP can, for any sustained period, hold much above 6%.

579 And Mr. Buffett goes on to explain what corporate profits will remain  
580 at about 6% of GDP:

581 One thing keeping the percentage down will be competition, which is  
582 alive and well. In addition, there's a public-policy point: If corporate  
583 investors, in aggregate, are going to eat an ever-growing portion of the  
584 American economic pie, some other group will have to settle for a  
585 smaller portion. That would justifiably raise political problems – and  
586 in my view a major reslicing of the pie just isn't going to happen.

587 In summary, Ms. Bulkley's long-term S&P 500 EPS growth rate of 12.12%,  
588 which produce her market risk premium of 12.60%, is grossly overstated and is  
589 untethered from economic reality. In the end, the big question remains as to whether  
590 corporate profits can grow faster than GDP. Jeremy Siegel, the renowned finance  
591 professor at the Wharton School of the University of Pennsylvania, believes that going  
592 forward, earnings per share can grow about half a point faster than nominal GDP, or  
593 about 5.0%, due to the big gains in the technology sector. But he also believes that  
594 sustained EPS growth matching analysts' near-term projections is absurd: "The idea  
595 of 8% or 10% or 12% growth is ridiculous. It will not happen."<sup>25</sup>

596 **Q. WHAT IS THE BOTTOM LINE ON THIS GROWTH RATE AND CAPM**  
597 **ISSUE?**

598 A. The magnitude of Ms. Bulkley's CAPM results is driven by the 12.12% projected EPS  
599 growth rate used to derive her 12.60% market risk premium. Given that long-term  
600 nominal projected GDP growth is in the 4.0% to 4.4% range, she is projecting that the

---

<sup>25</sup> Shaun Tully, "Corporate Profits Are Soaring. Here's Why It Can't Last," *Fortune*, (Dec. 7, 2017), <http://fortune.com/2017/12/07/corporate-earnings-profit-boom-end/>.

601 EPS for the S&P 500 will grow at three times GDP growth. This is totally unrealistic.  
602 No trained economist would agree that, over the long-term, companies can grow their  
603 earnings at three times GDP growth. In reviewing Ms. Bulkley's dubious claim, I  
604 suggest that the Commission also review the comments of Milton Friedman, Warren  
605 Buffett, and Jeremy Siegel above regarding the long-term tie between EPS and GDP  
606 growth. Ms. Bulkley's CAPM approach and results are clearly at odds with their  
607 statements.

608 **Q. IN HER REBUTTAL TESTIMONY, MS. BULKLEY TAKES ISSUE WITH A**  
609 **COUPLE OF ELEMENTS OF YOUR CAPM MARKET RISK PREMIUM OF**  
610 **6.0%. PLEASE RESPOND.**

611 A. Between pages 109-115 Ms. Bulkley takes issue with several elements of my market  
612 risk premium. As I noted in my direct testimony, there are three commonly-used  
613 procedures for estimating a market risk premium – historic returns, surveys, and  
614 expected return models. I have used a market risk premium of 6.00%, which: (1)  
615 factors in all three approaches – historic returns, surveys, and expected return models  
616 – to estimate a market premium; and (2) employs the results of many studies of the  
617 market risk premium. As I note, the 6.00% figure reflects the market risk premiums:  
618 (1) determined in recent academic studies by leading finance scholars; (2) employed  
619 by leading investment banks and management consulting firms; and (3) found in  
620 surveys of companies, financial forecasters, financial analysts, and corporate CFOs.

621 To assess the credibility of my market risk premium, I suggest that the  
622 Commission do a Google internet search of 'market risk premium' and 'equity risk  
623 premium.' If you do, you will find many of the studies and sources that I use in



624 developing my market risk premium. Those include Duff & Phelps, Damodaran,  
625 Fernandez, KPMG, among others. In addition, while I did review a number of other  
626 sources, surveys, and studies, I gave primary weight to these sources in arriving at my  
627 6.0% market risk premium. I guarantee if the Commission does an internet search, it  
628 will not find anyone recommending a market risk premium as high as 12.60%.

629

630 **3. Expected Earnings Approach**

631

632 **Q. BETWEEN PAGES 74-75 AND 123-124 OF HER REBUTTAL TESTIMONY,**  
633 **MS. BULKLEY ATTEMPTS TO DEFEND HER EXPECTED EARNINGS**  
634 **APPROACH. HOW DO YOU RESPOND?**

635 A. As I noted in my direct testimony, the Expected Earnings approach does not measure the  
636 cost of equity capital. I noted several issues with this approach in my direct testimony.  
637 These include:

- 638 1. The expected earnings approach is an accounting-based methodology that does  
639 not measure investor return requirements and therefore it does not measure the  
640 market cost of equity capital;
- 641 2. The changes in ROE ratios do not track capital market conditions and therefore  
642 are insensitive to changes in interest rates and the returns investor's require;
- 643 3. The expected earnings approach is circular in that the ROEs for the proxy  
644 companies are not determined by competitive market forces, but instead are  
645 largely the result of federal and state rate regulation; and

646 4. The ROEs for the proxy utilities reflect earnings on business activities that are  
647 not representative of RMP's rate-regulated utility activities.

648 **Q. HAVE ANY REGULATORY COMMISSIONS REJECTED THE EXPECTED**  
649 **EARNINGS APPROACH TO ESTIMATING THE COST OF EQUITY**  
650 **CAPITAL?**

651 A. Yes. For essentially the reasons outlined above, in Opinion No. 569 the Federal  
652 Energy Regulatory Commission recently rejected the use of the expected earnings  
653 model because it does not measure the cost of equity capital.<sup>26</sup>

654 **Q. DO YOU HAVE ANY FINAL THOUGHTS ON USING THE EXPECTED**  
655 **EARNINGS APPROACH TO ESTIMATE THE COST OF EQUITY**  
656 **CAPITAL?**

657 A. Yes. To defend the use of the Expected Earnings approach, at pages 74-75 Ms.  
658 Bulkley quotes a book by Roger Morin, a well-known utility company rate of return  
659 witness. I recently testified in a case in Washington involving Puget Sound Energy, a  
660 case where Dr. Morin testified. And the real irony here is that while Ms. Bulkley uses  
661 Dr. Morin's book as justification for using this approach, Dr. Morin himself does not  
662 use the expected earnings approach in estimating the cost of equity capital for a public  
663 utility.<sup>27</sup>

664 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

665 A. Yes.

666

---

<sup>26</sup> Federal Energy Regulatory Commission, *Opinion No. 569*, P. 208-212.

<sup>27</sup> See PSE-Exh-RAM-01T-6-20-19, Washington Utilities and Transportation Commission vs. Puget Sound Energy, Docket Nos UE-190529 and UG-190530, June 2019.