1 Introduction and Summary of Rebuttal Testimony

- 2 0. Please state your name and affiliation. 3 A. My name is Samuel C. Hadaway. I previously filed direct testimony in this 4 proceeding on behalf of Rocky Mountain Power (hereinafter RMP or the 5 Company). 6 0. What is the purpose of your rebuttal testimony? 7 A. The purpose of my rebuttal testimony is to respond to the return on equity (ROE) 8 recommendations of Division of Public Utilities (Division) witness Mr. Charles E. 9 Peterson and Office of Consumer Services (OCS) witness Mr. Daniel J. Lawton. 10 In my analysis, I will evaluate their rate of return recommendations and 11 demonstrate that their recommendations are below the cost of equity for RMP. I 12 will also respond to these witnesses' comments on the methodology that I used in 13 my direct testimony to estimate RMP's cost of equity, and I will update my ROE 14 analysis for current market costs and conditions. 15 0. What are the parties' ROE recommendations? 16 A. Mr. Lawton recommends an ROE of only 10.0 percent. His ROE is more than 50 17 basis points below the ROE established in RMP's previous rate case from 2008 18 and 52 basis points lower than the most recent average ROE allowed by other 19 regulators around the country during the second quarter of 2009. (See my Table 3 20 below.) 21 Mr. Peterson recommends an ROE of 10.5 percent, but he combines that 22 ROE with a reduction to the equity percentage of capital in RMP's capital
- 23 structure. That combination reduces the overall allowed rate of return, which

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24		effectively reduces the Company's opportunity to earn the ROE he recommends.
25		RMP witness Mr. Bruce N. Williams will address Mr. Peterson's proposed
26		adjustment to the common equity ratio.
27		I continue to support an ROE of 11.0 percent. My updated discounted
28		cash flow (DCF) analysis indicates an ROE range of 11.0 percent to 11.5 percent,
29		as compared to the DCF range in my June 23, 2009 direct testimony of 11.5
30		percent to 12.0 percent. My updated risk premium analysis indicates a range of
31		10.47 percent to 11.21 percent, as compared to my initial risk premium range of
32		10.77 percent to 11.66 percent. This analysis shows that my initial ROE
33		recommendation was extremely conservative, given then existing market
34		conditions, and that 11.0 percent remains a conservative estimate of PacifiCorp's
35		cost of equity capital.
35 36	Q.	cost of equity capital. What is your general assessment of the other parties' rate of return
	Q.	
36	Q. A.	What is your general assessment of the other parties' rate of return
36 37	-	What is your general assessment of the other parties' rate of return positions?
36 37 38	-	What is your general assessment of the other parties' rate of return positions? The other parties' recommendations are below RMP's cost of equity capital. Their
36 37 38 39	-	What is your general assessment of the other parties' rate of return positions? The other parties' recommendations are below RMP's cost of equity capital. Their ROEs appear to be based on a mistaken belief that the cost of equity has declined
36 37 38 39 40	-	What is your general assessment of the other parties' rate of return positions? The other parties' recommendations are below RMP's cost of equity capital. Their ROEs appear to be based on a mistaken belief that the cost of equity has declined directly with the yields on high quality debt (Lawton at 3-4, Peterson at 9). While
 36 37 38 39 40 41 	-	What is your general assessment of the other parties' rate of return positions? The other parties' recommendations are below RMP's cost of equity capital. Their ROEs appear to be based on a mistaken belief that the cost of equity has declined directly with the yields on high quality debt (Lawton at 3-4, Peterson at 9). While it is true that utility interest rates have dropped from the high levels they reached
 36 37 38 39 40 41 42 	-	What is your general assessment of the other parties' rate of return positions? The other parties' recommendations are below RMP's cost of equity capital. Their ROEs appear to be based on a mistaken belief that the cost of equity has declined directly with the yields on high quality debt (Lawton at 3-4, Peterson at 9). While it is true that utility interest rates have dropped from the high levels they reached in late 2008, the Company's requested ROE was below my DCF estimates and
 36 37 38 39 40 41 42 43 	-	What is your general assessment of the other parties' rate of return positions? The other parties' recommendations are below RMP's cost of equity capital. Their ROEs appear to be based on a mistaken belief that the cost of equity has declined directly with the yields on high quality debt (Lawton at 3-4, Peterson at 9). While it is true that utility interest rates have dropped from the high levels they reached in late 2008, the Company's requested ROE was below my DCF estimates and was never based on those extreme data. Even though my initial DCF analysis,

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47	at 11.0 percent. Additionally, my updated analysis shows that utility stock prices
48	remain depressed, that dividend yields remain high, and that the DCF model
49	based on these factors indicates higher, not lower, ROEs than existed a year ago. 1
50	Although Mr. Lawton recommends an ROE of only 10.0 percent, his own
51	analysis supports a significantly higher result. Without any adjustments or
52	technical corrections, his DCF analysis supports an ROE range of 10.25 percent to
53	10.5 percent (See Lawton direct testimony Table 3 at 23). Additionally, his basic
54	bond-yield-plus-equity-risk- premium analysis supports an ROE of 10.39 percent
55	(Lawton at 24, line 634). Only by resorting to the geometric mean risk premium
56	in an "alternative" risk premium analysis and a so-called "empirical" capital asset
57	pricing model (ECAPM) can Mr. Lawton point to lower estimates of ROE. Even
58	with his alternative risk premium analysis, based on the arithmetic mean equity
59	risk premium in that analysis, the estimated ROE is 11.32 percent (Lawton at 25,
60	line 643). Mr. Lawton's attempt to average these results down by offering low
61	alternative risk premium and ECAPM estimates is misleading and should be
62	rejected. I will show that Mr. Lawton's midpoint ROE estimate, with no
63	adjustments or technical corrections of any kind, should have been at least 10.4
64	percent. With more reasonable growth rate assumptions in his DCF analysis, I
65	will show that his ROE estimate should have been near 11.0 percent.
66	Similarly, the reliable portions of Mr. Peterson's DCF analysis support an
67	ROE estimate higher than the 10.5 percent he recommends. His constant growth

¹The DCF range from my Supplemental Exhibit RMP___(SCH-SS3), Docket No. 08-035-38, November 2008, was 10.7 percent to 11.2 percent. My updated DCF range in the present case, as shown in Exhibit RMP___(SCH-5R), is 11.0 percent to 11.5 percent.

68		DCF model, based on his earnings growth rate projections, supports an ROE
69		range of 10.71 to 10.89 percent (DPU Exhibit 1.5). His constant growth DCF
70		model based on his adjusted dividend growth forecast supports an ROE of 10.74
71		percent (DPU Exhibit 1.5). His two-stage DCF model, with growth based on
72		projected earnings and dividends, supports an ROE range of 10.58 percent to
73		10.74 percent (DPU Exhibit 1.5). Only when Mr. Peterson injects much lower
74		growth rates from less traditional growth rate sources ("PacifiCorp IRP" growth at
75		4.14 percent; his estimate of GDP growth at 4.51; and his estimate of "average
76		utility" GDP growth at 4.08 percent) into the second stage of his two-stage
77		analysis does he produce lower ROE estimates. I will explain in more detail
78		below that these near-term growth rates are currently low because they are based
79		on real growth rates that are depressed by current economic conditions and
80		inflation rates that are far below historical averages for the U.S. economy. I will
81		show that if more reasonable growth rates had been used, Mr. Peterson's midpoint
82		ROE would have been at least 10.75 percent.
83	Over	view of Current Capital Markets
84	Q.	Why do you say that the other parties' ROE recommendations are not
85		consistent with current capital market conditions?
86	A.	The other parties seem to hold a mistaken belief that equity capital costs for
87		utilities have decreased, not increased, over the past several months. This
88		contention is simply wrong. While governmental policies and "flight to safety"
89		issues have driven down short-term interest rates for banks and yields on higher
90		grade debt securities, the cost of equity for utilities has not declined over the past

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91		year. ² I will show that PacifiCorp's required ROE has increased and that the other
92		parties have not reasonably included current capital market conditions in their
93		recommendations.
94	Q.	In your direct testimony, you provided capital market data through May
95		2009, which demonstrated wider corporate interest rate spreads relative to
96		treasury bond interest rates and increased corporate borrowing costs. What
97		do the most recent data show?
98	A.	The month-by-month interest rate data updated through August 2009 are
99		presented in Exhibit RMP(SCH-1R), page 1. Those data are summarized
100		below in Table 1.

 $^{^2}$ The term "flight to safety" refers to the tendency for investors, during periods of market turbulence, to remove money from more risky investments, such as corporate bonds and stocks, and to put the money into government securities such as Treasury bills and bonds. The effect causes a reduction in the supply of funds to corporations and an increase in funds invested in government securities. The result is wider "spreads" between corporate bond and government bond interest rates and higher capital costs for corporations.

	Single-A	30-Year	Single-A
Month	Utility Rate	Treasury Rate	Utility Spread
Jan-07	5.96	4.85	1.11
Feb-07	5.90	4.82	1.08
Mar-07	5.85	4.72	1.13
Apr-07	5.97	4.87	1.10
May-07	5.99	4.90	1.09
Jun-07	6.30	5.20	1.10
Jul-07	6.25	5.11	1.14
Aug-07	6.24	4.93	1.31
Sep-07	6.18	4.79	1.39
Oct-07	6.11	4.77	1.34
Nov-07	5.97	4.52	1.45
Dec-07	6.16	4.53	1.63
Jan-08	6.02	4.33	1.69
Feb-08	6.21	4.52	1.69
Mar-08	6.21	4.39	1.82
Apr-08	6.29	4.44	1.85
May-08	6.28	4.60	1.68
Jun-08	6.38	4.69	1.69
Jul-08	6.40	4.57	1.83
Aug-08	6.37	4.50	1.87
Sep-08	6.49	4.27	2.22
Oct-08	7.56	4.17	3.39
Nov-08	7.60	4.00	3.60
Dec-08	6.52	2.87	3.65
Jan-09	6.39	3.13	3.26
Feb-09	6.30	3.59	2.71
Mar-09	6.42	3.64	2.78
Apr-09	6.48	3.76	2.72
May-09	6.49	4.23	2.26
Jun-09	6.20	4.52	1.68
Jul-09	5.97	4.41	1.56
Aug-09	5.71	4.37	1.34
3-Mo Avg	5.96	4.43	1.53
12-Mo Avg	6.51	3.91	2.60

Table 1Long-Term Interest Rate Trends

Mergent Bond Record (Utility Rates); www.federalreserve.gov (Treasury Rates). Three month average is for June 2009 through August 2009.

101

The data in Table 1 vividly illustrate the market turmoil that has occurred.

102

During the extreme market conditions that existed in late 2008 and earlier in

103		2009, single-A utility interest rate spreads (the difference between single-A yields
104		and yields on U.S. Treasury bonds) widened to unprecedented levels. While such
105		spreads have narrowed in recent months for higher quality single-A bonds, the
106		effects of the market crisis continue for lower quality issuers and in the market for
107		utility stocks. In fact, increased risk aversion and market volatility continue to
108		increase the cost of equity. While the effects of market turbulence may not be
109		easily captured in financial models for estimating the rate of return, the market's
110		turbulence and continuing elevated risk aversion should be considered in
111		estimating the cost of equity capital.
112	Q.	What do forecasts for the economy and interest rates show for the remainder
113		of 2009 and for 2010?
114	A.	Exhibit RMP(SCH-1R), page 2, provides Standard & Poor's (S&P) most
114 115	A.	Exhibit RMP(SCH-1R), page 2, provides Standard & Poor's (S&P) most recent economic forecast from its <i>Trends & Projections</i> publication for July 2009.
	A.	
115	A.	recent economic forecast from its <i>Trends & Projections</i> publication for July 2009.
115 116	A.	recent economic forecast from its <i>Trends & Projections</i> publication for July 2009. S&P forecasts significant economic contraction through the first three quarters of
115 116 117	A.	recent economic forecast from its <i>Trends & Projections</i> publication for July 2009. S&P forecasts significant economic contraction through the first three quarters of 2009. For all of 2009, S&P forecasts that real GDP will decline by 3.0 percent.
 115 116 117 118 	A.	recent economic forecast from its <i>Trends & Projections</i> publication for July 2009. S&P forecasts significant economic contraction through the first three quarters of 2009. For all of 2009, S&P forecasts that real GDP will decline by 3.0 percent. S&P expects real GDP growth to become positive during the 4 th Quarter of 2009
 115 116 117 118 119 	A.	recent economic forecast from its <i>Trends & Projections</i> publication for July 2009. S&P forecasts significant economic contraction through the first three quarters of 2009. For all of 2009, S&P forecasts that real GDP will decline by 3.0 percent. S&P expects real GDP growth to become positive during the 4 th Quarter of 2009 and for GDP to increase in real terms (before inflation) during 2010 by 1.2
 115 116 117 118 119 120 	A.	recent economic forecast from its <i>Trends & Projections</i> publication for July 2009. S&P forecasts significant economic contraction through the first three quarters of 2009. For all of 2009, S&P forecasts that real GDP will decline by 3.0 percent. S&P expects real GDP growth to become positive during the 4 th Quarter of 2009 and for GDP to increase in real terms (before inflation) during 2010 by 1.2 percent.

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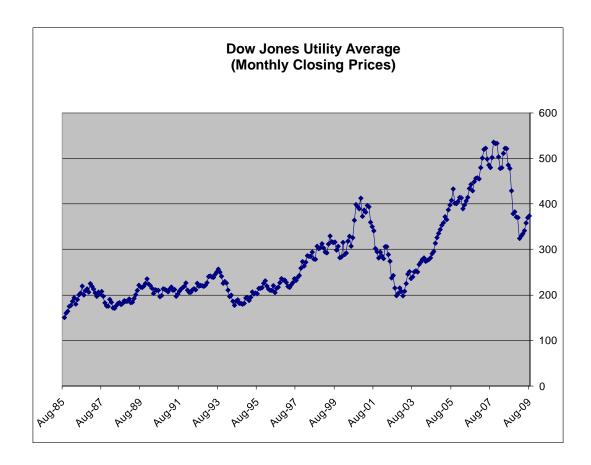
Standard & Poor's Interest Rate Forecast					
	Aug. 2009	Average	Average		
	Average	2009 Est.	2010 Est.		
Treasury Bills	0.2%	0.2%	0.6%		
10-Yr. T-Bonds	3.6%	3.5%	4.9%		
30-Yr. T-Bonds	4.4%	4.3%	5.7%		
Aaa Corporate Bonds5.3%5.7%6.7%					
Sources: <u>www.federalreserve.gov</u> , (Current Rates). Standard &					

Table	2
Standard & Poor's In	terest Rate Forecast

Poor's Trends & Projections, July 2009, page 8 (Projected Rates).

124		Table 2 updates the data found in Table 2 in my direct testimony. The data in
125		Table 2 show that long-term Treasury interest rates during 2010 are projected to
126		increase over 100 basis points from current levels. The rate on Aaa corporate
127		bonds is also expected to increase by about the same amount. Although in the
128		recently turbulent market environment it has been difficult to project rates for
129		lower rated securities, these market data offer important perspective for judging
130		the cost of capital in the present case.
131	Q.	Have utility stock prices recovered from the large declines that occurred in
132		late 2008 and early 2009?
133	A.	No. The following graph, which updates the Dow Jones Utility Average (DJUA)
134		provided in my direct testimony, shows that the recovery for utilities has been

- 135 modest. The current level of the DJUA remains over 30 percent below the levels
- 136 attained in 2007.



137	In this environment, investors' return expectations and requirements for providing
138	capital to the utility industry remain high relative to the longer-term traditional
139	view of the utility industry. Increased market volatility for utility shares causes
140	investors to require a higher rate of return.
141	Value Line notes the utility industry's relatively poor stock price
142	performance but also gives the sector credit for the resulting high dividend yields:
143	Value Line Investment Survey
144	The Value Line Composite Average is up 18% so far this year, but
145	the Value Line Utility Average is down 1%. This divergent
146	performance has made electric utility equities relatively more
147	attractive. This group's average dividend yield, at about 5%, is
148	more than twice the median of all dividend-paying stocks under
149	our coverage. There are numerous stocks in this industry that offer

150 151 152		a high, secure yield and good 3- to 5-year dividend growth potential. (Value Line Investment Survey, Electric Utility Industry, August 7, 2009, page 2232).
153		Credit market gyrations and the volatility of utility shares demonstrate the
154		increased uncertainties that utility investors face. These uncertainties translate
155		into a higher cost of capital for utilities than has been experienced in recent years.
156	Q.	How do the other parties' ROE recommendations compare to the rates of
157		return authorized by other state utility commissions around the country?
157 158	A.	return authorized by other state utility commissions around the country? Mr. Lawton's recommendation is 50 basis points lower than the most recent
	A.	
158	A.	Mr. Lawton's recommendation is 50 basis points lower than the most recent
158 159	A.	Mr. Lawton's recommendation is 50 basis points lower than the most recent average for the second quarter of 2009. Mr. Peterson's recommendation is

Au	thorized Ele	ctric Utility E	quity Return	IS	
	2005	2006	2007	2008	2009
1 st Quarter	10.51%	10.38%	10.27%	10.45%	10.29%
2 nd Quarter	10.05%	10.68%	10.27%	10.57%	10.52%
3 rd Quarter	10.84%	10.06%	10.02%	10.47%	
<u>4th Quarter</u>	10.75%	10.39%	10.56%	10.33%	
Full Year Average	10.54%	10.36%	10.36%	10.46%	10.41%
Average Utility					
Debt Cost	5.67%	6.08%	6.11%	6.65%	6.77%
Indicated Average					
Risk Premium	4.87%	4.28%	4.25%	3.81%	3.64%

Table 3
Authorized Electric Utility Equity Returns

Source: Regulatory Focus, Regulatory Research Associates, Inc., Major Rate Case Decisions, July 2, 2009. Utility debt costs are the "average" public utility bond yields as reported by Moody's.

³ The RRA averages include allowed ROEs for both integrated electric utilities and delivery-only transmission and distribution (T&D) companies. Because the allowed returns for the T&D companies have generally been lower than those for the integrated companies, the RRA averages, which include both types of utilities, represent a conservative estimate of the cost of equity for the integrated companies like RMP.

163	Rebu	ttal of OCS Witness Mr. Daniel J. Lawton
164	Q.	What specific comments do you have concerning Mr. Lawton's ROE
165		analyses?
166	А.	Mr. Lawton's analysis does not support an ROE as low as the 10.0 percent he
167		recommends. His consistent use of low-end assumptions and his introduction of
168		lower "alternative" risk premium and CAPM analyses seem related to his efforts
169		to mischaracterize RMP's risk profile. For example, in his opening summary he
170		states:
171 172 173 174 175		The Company has failed to consider the risk reduction impacts associated with fuel cost recovery and incremental capital cost recovery. When these factors are considered, the equity return consideration should reflect the lower end of the reasonable return range. (Lawton at 3, lines 62-65.)
176		My basic review of Mr. Lawton's DCF and traditional risk premium results above
177		shows that he has selected a number that is below even the lower end of his own
178		reasonable range.
179	Q.	Is Mr. Lawton correct about RMP's cost recovery mechanisms requiring the
180		lower end of the range?
181	А.	No. Most important, the comparable companies that I (and Mr. Lawton) use to
182		estimate ROE have their own cost recovery mechanisms. Therefore, to make a
183		downward adjustment to ROE, when the ROE estimate is based on these
184		companies, would double count any benefits the mechanisms may provide.
185		Exhibit RMP(SCH-2R) lists, by operating company and regulatory
186		jurisdiction, the cost recovery mechanisms that the comparable companies have.
187		This listing shows that all the companies have fuel and purchased power cost
188		recovery mechanisms, like the ECAM that RMP is requesting. In addition, Mr.

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189		Lawton's recommendation appears to assume that the ECAM has already been
190		approved and implemented. While, I am certain that RMP hopes that the
191		proposed ECAM will be approved, the docket is still ongoing and approval has
192		not yet been received. With respect to the capital cost recovery rider, it is my
193		understanding that the mechanism would not decrease RMP's risk of recovery,
194		because the Company would be required to file a capital investment rate case and
195		would remain subject to full prudence reviews of all capital expenditures. The
196		process would only change the timing of recovery slightly and perhaps reduce rate
197		case costs for all participants. Based on these facts, Mr. Lawton's low-end
198		recommendation is without merit.
199	Q.	How does Mr. Lawton develop his ROE estimate?
200	A.	He relies on two versions of the DCF model and he presents risk premium and
201		CAPM estimates as well.
202		In his DCF analysis, he provides both constant growth and multi-stage
		In his DC1 ⁻ analysis, he provides both constant growth and muti-stage
203		growth results. His constant growth model consists of an average dividend yield
203 204		
		growth results. His constant growth model consists of an average dividend yield
204		growth results. His constant growth model consists of an average dividend yield of 4.95 percent and an average growth rate of 5.66 percent, which produces an
204 205		growth results. His constant growth model consists of an average dividend yield of 4.95 percent and an average growth rate of 5.66 percent, which produces an average ROE estimate of 10.62 percent. The corresponding "median" result of his
204 205 206		growth results. His constant growth model consists of an average dividend yield of 4.95 percent and an average growth rate of 5.66 percent, which produces an average ROE estimate of 10.62 percent. The corresponding "median" result of his constant growth analysis is 10.43 percent. His two-stage DCF results are lower
204 205 206 207		growth results. His constant growth model consists of an average dividend yield of 4.95 percent and an average growth rate of 5.66 percent, which produces an average ROE estimate of 10.62 percent. The corresponding "median" result of his constant growth analysis is 10.43 percent. His two-stage DCF results are lower because he applies a lower 5.30 percent long-term growth rate. On page 22, he
204 205 206 207 208		growth results. His constant growth model consists of an average dividend yield of 4.95 percent and an average growth rate of 5.66 percent, which produces an average ROE estimate of 10.62 percent. The corresponding "median" result of his constant growth analysis is 10.43 percent. His two-stage DCF results are lower because he applies a lower 5.30 percent long-term growth rate. On page 22, he says that "the 5.3% growth estimate is the average of the EPS estimates and

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- growth in the second stage of his two-stage model.
- Q. Why should a long-term GDP growth estimate be used in the second stage of
 the two-stage growth DCF model?
- A. The long-term GDP growth rate should be used because it is the forecast most consistent with the requirements of the DCF model. GDP forecasts and economic forecasts in general are difficult and are often dominated by current data and very recent experience. I used the very long-term St. Louis Federal Reserve Bank data to mitigate this well-known forecasting deficiency, which I will discuss in more detail in my rebuttal of Mr. Peterson.
- 221 Q. How are Mr. Lawton's risk premium and CAPM estimates calculated?
- 222 A. He presents two versions of each model. In his Exhibit OCS 1.8, for his basic risk 223 premium model, he adopts the same approach I used in my direct testimony 224 Exhibit RMP___(SCH-5). In his analysis, however, he substitutes a lower 225 projected single-A utility interest rate, which produces an ROE estimate of 10.39 226 percent. While I disagree with his method for estimating the single-A utility 227 interest rate--he uses interest rate spreads only from 2007 and early 2008 (Lawton 228 at 25, line 649)--his result is near the lower end of the updated risk premium 229 estimates I am providing with this testimony in Exhibit RMP (SCH-6R). As I will discuss later, my updated risk premium range, based on data through August 230 231 2009, is 10.47 percent to 11.21 percent. Mr. Lawton carefully avoids mentioning 232 the upper end of his "alternative" risk premium range, which is shown in his 233 Exhibit OCS 1.8 to be 11.32 percent. Mr. Lawton's discussion of his risk 234 premium results is an extreme exercise in selectivity that should be evaluated

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accordingly.

236		Mr. Lawton's CAPM analysis is presented in Exhibit OCS 1.9. That
237		analysis produces a range of ROE estimates from 7.11 percent to 8.56 percent.
238		Regardless of the technical merits, or lack thereof, of this analysis, the results are
239		on their face unreasonable. As shown by comparison to the RRA data in my
240		Table 3, even the top end of his CAPM range is approximately 200 basis points
241		lower than the average ROE allowed by state commissions during the 2^{nd} Quarter
242		of 2009. These results should be dismissed and not averaged with other ROE
243		estimates.
244	Q.	Why should Mr. Lawton's CAPM results be dismissed?
245	A.	First of all, Mr. Lawton himself dismisses his basic CAPM results and one of his
246		ECAPM estimates as too low (Lawton at 27, line 709). He finally accepts a
247		second ECAPM estimate (8.6 percent) and later averages this result with his other
248		higher estimates. However, Mr. Lawton's alternative ECAPM is no more reliable
249		than his basic CAPM because it suffers from all the same data issues and broad
250		assumptions that the original CAPM suffers from. Since the Public Service
251		Commission of Utah has rejected the use of the CAPM previously, there is no
252		reason to now embrace a variation of that same model that incorporates further
253		assumptions without really correcting any of the problems of the original version.
254		With a balanced view of his risk premium analysis, and with the rejection of his
255		CAPM/ECAPM estimates, Mr. Lawton's analysis supports an ROE of at least
256		10.4 percent.

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- Q. What average ROE is produced by Mr. Lawton's analysis when the low and
 high ends of his risk premium estimates are included and when his ECAPM
 estimate is excluded?
- A. The following table shows that result.

261LAWTON COST OF EQUITY SUMMARY WITH HIGH AND262LOW END RISK PREMIUM SHOWN AND ECAPM EXCLUDED

Model	Range	<u>Midpoint</u>
Constant Growth DCF	10.43% - 10.62%	10.53%
Two-Stage DCF	10.20% - 10.25%	10.23%
Risk Premium	9.52% - 11.32%	10.42%
Average ROE Result		10.4%

263 Q. Does this summary mean that 10.4 percent is the correct estimate of RMP's

264 **cost of equity capital?**

A. No, not at all. This summary simply shows what Mr. Lawton's analysis produces
when the full range of his results is included and when his entirely unreliable
ECAPM estimate is excluded. We continue to disagree about the growth rates in
our DCF models, and I will show that the lower end of his "alternative" risk
premium analysis is suspect. The summary table is presented to show that Mr.
Lawton's analysis, without any corrections or any technical adjustments, supports
a significantly higher ROE than his 10.0 percent recommendation.

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Q. What is the ROE estimate from Mr. Lawton's two-stage DCF model if your
long-term GDP growth estimate is used as the growth rate in the second
stage of that model?

A. In Exhibit RMP__(SCH-3R), page 1, I have redone Mr. Lawton's two-stage
DCF analysis substituting my long-term 6.2 percent estimate of GDP growth in
place of his long-term growth estimate. This adjustment increases his two-stage
ROE estimate to 11.0 percent.

Q. Why do you say that the low end of Mr. Lawton's "alternative" risk premium range is suspect?

- A. That analysis is based on the Morningstar/Ibbotson data for the period 1926-2008.
- I have previously used this data to provide a very general perspective on the overall capital market cost of equity. While I did not provide those data in the
- 284 present case, due to criticism from Mr. Peterson (Docket No. 08-035-38 at 22)
- and others, in my review of those data in the prior RMP case in 2008, I stated the

286 following:

287 For example, the most widely followed risk premium data are provided in the Morningstar Ibbotson data studies. These data, for 288 289 the period 1926-2007, indicate an arithmetic mean risk premium of 290 6.1 percent for common stocks versus long-term corporate bonds. 291 Under the assumption of geometric mean compounding, the 292 Ibbotson risk premium for common stocks versus corporate bonds 293 is 4.5 percent. Based on the more conservative geometric mean 294 risk premium, the Ibbotson data indicate a cost of equity of 11.06 295 percent (6.56% forecasted debt cost + 4.5% risk premium = 296 11.06%). Based on the arithmetic risk premium, the Ibbotson data 297 indicate a cost of equity of over 12 percent (6.56% forecasted debt 298 cost + 6.1% risk premium = 12.66%). Although I do not use the 299 Ibbotson data in my final ROE estimates, I do review the data for 300 their perspective on the overall market cost of equity capital. 301 (Docket No. 08-035-38, Hadaway Direct Testimony at 31-32.)

302		Mr. Lawton's use of these data as a direct input to his final ROE recommendation
303		is not appropriate because the data, especially the lower geometric mean equity
304		risk premium he selects, cannot closely track current market conditions or current
305		equity costs. While some may continue to find the data useful as a general
306		indication of long-run risk-return relationships, their direct use as a current
307		estimate of the cost of equity capital as Mr. Lawton has done is suspect.
308	Q.	On page 4, lines 93-95, Mr. Lawton says that your ROE recommendation is
309		overstated because you rely on outdated data and overstated GDP growth
310		data. How do you respond to his comments?
311	A.	I disagree with both of his contentions. I will demonstrate that my updated DCF
312		and risk premium analyses fully support an 11.0 percent ROE. With respect to
313		the GDP growth rate, Mr. Lawton provides no analysis or other data to support his
314		contention. As noted above, his 5.3 percent long-term growth rate is 90 basis
315		points lower than the specific GDP growth rate forecast I provided in my direct
316		testimony. I explain in more detail in my rebuttal of Mr. Peterson why a lower
317		long-term growth rate is inconsistent with actual market data. Mr. Lawton's
318		preference for a lower growth rate based on near-term "EPS estimates and internal
319		growth estimates" (Lawton at 22, line 580- 581) is no more consistent with the
320		long-term growth rate requirement of the two-stage DCF model than it is with the
321		long-term requirement of the single-stage DCF model. Both models require
322		stable estimates of long-term expected growth. Mr. Lawton's EPS and internal
323		growth estimates understate that requirement.

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324	Q.	On page 4, lines 97-99, Mr. Lawton says that your 6.02 percent average
325		analysts' growth rate forecasts are "overstated, outdated, and fail to take
326		into account declining expectations" How do you respond to this
327		assertion?
328	A.	Mr. Lawton's comment is at best partially correct in the sense that with the
329		passage of time since I prepared my direct testimony analysts' forecasts have
330		declined slightly. As shown on page two of Exhibit RMP(SCH-5R), column
331		7, the average analysts' growth rate in my updated DCF analysis is currently 5.83
332		percent, and the indicated DCF range based on that growth rate is 11.0 percent to
333		11.4 percent. Mr. Lawton's criticism of my 11.0 percent ROE recommendation
334		based on this small decline in analysts' growth rate projections is, therefore,
335		misplaced.
336	Q.	On page 4, lines 100-102, Mr. Lawton says that your 6.2 percent long-term
337		GDP growth rate should be in the range of 5.0 percent to reflect more recent
338		history. How do you respond to this comment?
339	A.	I disagree. While again Mr. Lawton provides no analysis to support this
340		contention and he does not use a GDP growth rate in his analysis, I explain in
341		more detail in my rebuttal of Mr. Peterson, who does use a GDP growth rate, why
342		a lower long-term growth rate is inconsistent with actual market data.
343	Q.	On page 5, at lines 120-121, Mr. Lawton says that the dividend yield
344		estimates in your DCF analysis is 5.5 percent and that that yield is overstated
345		by about 50 basis points. How do you respond to this assertion?

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347	These factors generally illustrate Mr. Lawton's extreme efforts to support his
348	unsupportable ROE recommendation. First, the DCF dividend yield in my direct
349	testimony is shown in Exhibit RMP(SCH-4), page 2, column 3. The median
350	and average values are 5.52 percent and 5.57 percent, respectively. The 50 basis
351	point "overstatement" that he refers to is apparently a comparison to his own
352	dividend yield estimate of 4.95 percent to 5.11 percent (Exhibit 1.6). My updated
353	dividend yield shown in Exhibit RMP(SCH-5R), page 2, is 5.19 percent to
354	5.32 percent.

355 A careful review of Mr. Lawton's exhibits helps to explain the differences. 356 While we both use the same comparable companies, our analyses were prepared at different times and we used different lengths of time to calculate the dividend 357 358 yields. My initial stock prices were a three-month average for March-May 2009. 359 My updated analysis uses stock prices for June-August 2009. His lower dividend 360 yields are based on stock prices for a 6-week period from July 27-August 31, 361 2009. However, a review for Mr. Lawton's DCF spreadsheets provides further information. It shows that in his Exhibit OCS 1.4, page 2, he also calculated, but 362 363 did not report, average stock prices for an 8-week period (column N); a 12-week 364 period (column M); a 52-week period (column R); and one-day spot price for 365 September 3, 2009 (column S). For his estimated dividend yield, he then selected 366 the highest average price of the five alternatives. This selection, in turn, reduced 367 his dividend yield to the lowest possible of his five alternatives. 368 In Exhibit RMP___(SCH-3R), page 2, I have reproduced Mr. Lawton's

constant growth DCF estimate with his 12-week stock price averaging period,

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369

370		which is similar to the 3-month period I used in my updated DCF analysis. That
371		analysis, with no other adjustments whatsoever, produces a dividend yield of 5.07
372		percent to 5.27 percent and indicates a ROE range of 10.64 percent to 10.73
373		percent. Mr. Lawton's efforts to criticize my ROE recommendation and
374		understate RMP's cost of equity are potentially misleading and should be
375		evaluated accordingly.
376	Rebu	ttal of Division Witness Mr. Charles E. Peterson
377	Q.	What is the basis for Mr. Peterson's 10.5 percent ROE recommendation?
378	A.	His 10.5 percent recommendation is stated at the bottom of DPU Exhibit 1.5. In
379		that exhibit, Mr. Peterson summarizes the results from seven constant growth
380		DCF models based on alternative growth rate assumptions and nine two-stage
381		growth DCF models (which are shown in detail in DPU Exhibit 1.5a and 1.10).
382		He concludes that these models support a reasonable range of 10.1 percent to 10.8
383		percent. He also presents the results of a Capital Asset Pricing Model analysis
384		and a Value Line risk premium model, although he appears to give little if any
385		weight to the very low ROE estimates that these models produce.
386	Q.	Is it clear from DPU Exhibit 1.5 how Mr. Peterson arrived at his 10.5 percent
387		recommendation?
388	A.	No. The printed one-page version of that exhibit may be confusing because it
389		shows a "Simple Average" and "Median" value for his estimates of 10.09 percent
390		to 10.15 percent, with his 10.5 percent recommendation shown immediately
391		below those two values. However, the electronic version of the exhibit provides
392		additional information, which shows that his 10.5 percent estimate is not as

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393		generous as it might appear. In fact, in the electronic calculations, Mr. Peterson
394		finds a weighted average of 10.45 percent for his estimates and an average of
395		10.66 percent for his models based on earnings and dividend growth rate
396		forecasts. He then averages these results to obtain a further average of 10.55
397		percent. This result, rounded down, appears to be the basis for his final 10.5
398		percent recommendation.
399	Q.	What are your principal areas of disagreement with Mr. Peterson?
400	A.	I disagree with two aspects of his analysis: 1) his use of extremely low less
401		traditional growth rates in portions of his DCF analysis and 2) his failure to
402		provide a basic bond-yield-plus-equity-risk-premium analysis as a check of
403		reasonableness for his primary DCF results.

404 0. Why do you disagree with Mr. Peterson's alternative growth rate

- 405 calculations?
- 406 A. Mr. Peterson offers the following statement about his current use of the two-stage
- 407 growth rate approach:

408 In my analyses in previous dockets I did not conclude that twostage DCF models added a lot of new information to the estimate 409 of cost of equity for the Company. 410 However, upon further reflection, especially given the continuing issue of using historical 411 412 GDP growth rates to estimate long-term future growth for electric utilities. I have changed my mind in that the use of two-stage 413 models, with proper inputs, gives better insight to the cost of 414 415 equity issue than I previously asserted. (Peterson at 24, emphasis added.) 416

- 417 The "proper inputs" that Mr. Peterson refers to are his very low estimates of long-
- 418 term growth based on PacifiCorp's load growth forecasts (2.2 percent) plus an
- inflation adjustment (1.9 percent) and his estimates of growth in GDP (4.51 419
- 420 percent) and his so-called utility adjusted GDP (4.1 percent) (Peterson at 39-40).

421		These growth rates are 150 to 200 basis points lower than the historically based
422		GDP growth rate forecast I provided in my direct testimony on Exhibit
423		RMP(SCH-3) and 80 to 130 basis points lower than his own 5.33 percent
424		mean of analysts' earnings growth forecasts (DPU Exhibit 1.6). His insertion of
425		"inflation adjusted load growth" into the DCF model as a measure of investors'
426		expected long-term growth is simply incorrect because it bears virtually no
427		relationship to the growth in earnings and dividends that is required in the model.
428		Furthermore, his use of currently depressed GDP forecasts and his further
429		downward adjustment to those forecasts are similarly misplaced. Mr. Peterson's
430		selection of such low GDP growth forecasts is not at all consistent with his
431		optimistic assessment of economic conditions (Peterson at 7-11). While
432		supporting the long-term GDP growth rate as a proper input for the second stage
433		long-term expected growth rate in his two-stage DCF model, Mr. Peterson's
434		efforts to average down his already modest first stage analysts' forecasted growth
435		rates is far off the mark and results in unreasonably low estimates of the cost of
436		equity capital.
437	Q.	If Mr. Peterson had included long-term GDP growth along with his analysts'
438		growth rate forecasts, what would his two-stage DCF models have shown?
439	A.	That analysis is provided in Exhibit RMP_(SCH-4R). In that analysis, I
440		substituted the 6.2 percent estimated long-term GDP growth rate in stage two of
441		his two-stage models. The results indicate an ROE range of 11.25 percent to

442 11.47 percent.

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443 0. On page 23, Mr. Peterson refers to the Commission's 2002 Ouestar Gas 444 Company decision as support for his 75 percent/25 percent weighting of 445 earnings and dividend growth in his single-stage DCF model. Did the 446 Commission's Questar decision adopt this weighting scheme as its only 447 growth rate approach? 448 No. In the Questar case, the Commission found that a 75 percent earnings/25 A. 449 percent dividends growth rate was a reasonable approach for setting the low end 450 of the range. The Commission also recognized projected earnings growth rates for 451 establishing the entire DCF growth rate range. In fact, in that case the 452 Commission used the weighted average as the bottom of the DCF range only and 453 applied a 100 percent earnings approach to set the top end of the range. (Questar 454 Gas Company, Docket No. 02-057-02 at 34-35 (Dec. 30, 2002)). From a policy 455 perspective, reliance on dividend growth instead of earnings growth is 456 problematic because, over the long-term horizon measured by the DCF model, 457 earnings growth drives dividend growth, not the opposite.

458 Q. On pages 44 and 46, Mr. Peterson points to his CAPM range of ROE

459 estimates (7.66 percent to 9.1 percent) and criticizes your lack of a CAPM

460 analysis. How do you respond to this portion of Mr. Peterson's testimony?

A. I have two responses. First, in his spreadsheet for Exhibit 1.5, cell k35, in the
weighted average of his ROE estimation methods, Mr. Peterson gives exactly zero
percent weight to his CAPM results. Second, the Commission addressed and
rejected application of the CAPM in the 2002 Questar case, which Mr. Peterson
cites in his DCF growth rate discussion, stating flatly: "[W]e cannot rely on the

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466		CAPM." Re Questar Gas Company, Docket No. 02-057-02 at 34 (Dec. 30, 2002)
467		Mr. Peterson's continuing efforts to inject the CAPM into this Commission's ROE
468		deliberations is not supported by economic facts or the Commission's prior
469		findings.
470	Q.	On page 47, lines 1021-1023, Mr. Peterson says that you gave ''little or no
471		weight" to your constant growth DCF results based on analysts' forecasts. Is
472		this statement accurate?
473	A.	In my direct testimony DCF analysis, Exhibit RMP(SCH-4), the first model
474		that I offer is a constant growth DCF model based on analysts' growth rate
475		estimates. The results from that model were 11.6 percent to 12.0 percent, which
476		formed the upper end of my DCF range. In my updated DCF results with this
477		testimony, Exhibit RMP(SCH-5R), I continue to present that version of the
478		DCF model, which now supports an ROE range of 11.0 percent to 11.4 percent.
479		It is not clear why Mr. Peterson says that I did not rely on this version of the DCF
480		model.
481	Q.	On page 48, Mr. Peterson criticizes your GDP growth rate forecast and
482		points to much lower growth rates in forecasts published by the
483		Congressional Budget Office (CBO) and the Energy Information
484		Administration (EIA). How do you respond to these criticisms?
485	A.	Recent GDP growth forecasts from CBO and EIA are not consistent with the
486		historical growth rates in the U.S. economy. They are based on an assumption of
487		slower real growth and permanently low inflation at rates that are about 50
488		percent below actual long-term experience. For example, the CBO and EIA

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489		forecasts that Mr. Peterson uses have nominal GDP growth rates of 4.17 percent
490		and 4.47 percent, respectively. Those nominal growth rates include GDP inflation
491		rates of 1.5 percent and 2.0 percent, respectively. These projected long-term
492		inflation rates compare to the actual 3.4 percent GDP inflation rate that has
493		occurred over the past 60 years in the U.S. economy. (See Exhibit
494		RMP(SCH-3). Exhibit RMP(SCH-3) also shows that there has not been
495		one 10-year period in the past 60 years (including the most recent 10-year low-
496		inflation era) with an average inflation rate lower than 2.4 percent per year.
497		While Mr. Peterson's low Government projections of nominal GDP growth may
498		be useful for projecting a balanced budget, protecting Social Security, and other
499		governmental purposes, they are not consistent with actual capital market data.
500		As such, the much lower growth rates discussed by Mr. Peterson are not
501		appropriate in the DCF model.
502	Upda	te of ROE Analysis
503	Q.	Have you updated your ROE analysis to take into account recent data and
504		the current conditions in the capital markets?
505	A.	Yes. Consistent with my customary practice, I have updated my ROE analysis for
506		current conditions using the same methodologies that I employed in my previous
507		analysis.
508	Q.	What are the results of your updated DCF analyses?
509	A.	My updated DCF results are shown in Exhibit RMP(SCH-5R). The indicated

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511	Q.	What are the results of your updated bond yield plus equity risk premium
512		analysis?
513	A.	My updated equity risk premium analysis is presented in Exhibit RMP(SCH-
514		6R). That analysis indicates and ROE range of 10.47 percent to 11.21 percent.
515	Q.	What do you conclude from your updated ROE analyses?
516	A.	My updated analyses show that RMP's current cost of equity capital is in the
517		range of 10.5 percent to 11.5 percent, with a midpoint estimate of 11.0 percent.
518		My updated analysis confirms that my original recommendation of 11.0 percent is
519		reasonable and that the other parties' recommendations, as discussed herein, are
520		low.
521	Q.	Does that conclude your rebuttal testimony?

522 A. Yes.