

Rocky Mountain Power
Docket No. 07-035-93
Witness: Samuel C. Hadaway

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

Rebuttal Testimony of Samuel C. Hadaway

Rate of Return Phase – Return on Equity

April 2008

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

2 A. My name is Samuel C. Hadaway. I previously filed Direct Testimony in this
3 proceeding on behalf of Rocky Mountain Power (hereinafter RMP or the
4 Company).

5 **Purpose of Testimony**

6 **Q. What is the purpose of your rebuttal testimony?**

7 A. The purpose of my testimony is to rebut the return on equity (ROE)
8 recommendations of Division of Public Utilities (Division) witness Charles E.
9 Peterson and Committee of Consumer Services (CCS) witness Daniel J. Lawton.
10 In my analysis, I will respond to their rate of return recommendations and
11 demonstrate that their recommendations are not consistent with the much wider
12 interest rate spreads that current market turmoil has created or the much higher
13 relative capital costs that corporate borrowers like RMP are currently required to
14 pay. I will also respond to these witnesses' comments on the methodology I used
15 in my direct testimony to estimate RMP's cost of equity and I will update my
16 ROE analysis for current market costs and conditions.

17 **Q. What are the parties' ROE recommendations?**

18 A. Mr. Peterson recommends an ROE of 10.1 percent. Mr. Lawton recommends an
19 ROE of only 9.85 percent. As I demonstrated in my Direct Testimony and
20 reconfirm here, RMP's cost of equity is 10.75 percent.

21 **Q. What is your general assessment of the other parties' rate of return
22 positions?**

23 A. The other parties' recommendations are below RMP's cost of equity capital. Their

24 low ROEs appear to be based on a mistaken belief that utility capital costs have
25 declined over the past several months. This contention is simply wrong. While
26 rates for banks and rates on U.S. Treasury securities have been driven down by
27 recent governmental policy and market turbulence that has resulted in a “flight to
28 safety” in the bond market, corporate capital costs have actually increased. I will
29 show that for single-A borrowers like RMP current interest rates are higher than
30 they were in September 2007 when the Federal Reserve System began to reduce
31 the Federal Funds rate for banks in response to the subprime lending crisis, and
32 they are higher than they were in late 2007 when the Company prepared its case.
33 It may be confusing and potentially misleading for Messrs. Peterson and Lawton
34 to discuss only short-term bank and U.S. Treasury rates without acknowledging
35 that recent market turbulence has created much wider credit spreads for corporate
36 borrowers. This has resulted in higher, not lower, corporate capital costs. I will
37 demonstrate these shortcomings with specific market data that was available, but
38 apparently ignored, when the other parties prepared their recommendations.

39 With respect to Mr. Peterson's analysis, the Capital Asset Pricing Model
40 (CAPM) has been rejected by this Commission and his so-called Value Line Risk
41 Premium Model has, to my knowledge, never been used by any utility
42 commission to set ROE. Furthermore, when interpreted properly, his Discounted
43 Cash Flow (DCF) analysis supports an ROE higher than the 10.1 percent he
44 recommends. In fact, his DCF estimates based on earnings growth projections
45 support an ROE range of 10.37 percent to 10.69 percent (Peterson at 26) and,
46 after removing "outliers," his single-stage DCF models support a range of 10.0

47 percent to 10.47 percent (Peterson at 27). If the Commission should accept all of
48 Mr. Peterson's other DCF assumptions (several of which I disagree with) but
49 follow its prior DCF approach, it would clearly find an ROE significantly above
50 Mr. Peterson's recommendation.

51 Mr. Lawton's ROE recommendation is entirely unreasonable. His own
52 independent analysis is extremely limited. He performs just a single constant
53 growth DCF analysis and it contains several flaws. His comparable group
54 contains a company (Energy East) that is about to be acquired by another utility
55 and, as such, has unreliable financial data and should be removed from the
56 comparable group. Furthermore, Mr. Lawton's projected dividends are
57 understated based on the technical requirements of the DCF model and his
58 approach in a previous RMP case in Utah. When these two issues are resolved,
59 his DCF results increase from a range of 9.8 percent to 10.1 percent to a range of
60 10.2 percent to 10.4 percent.

61 The remainder of his testimony is focused on "corrections" he proposes to
62 my analyses. He claims that my "corrected" analyses support an average ROE of
63 9.7 percent. I completely disagree with any of the alterations that he has made to
64 my analyses. In fact, as I will show later in this testimony, my updated analyses
65 continue to support an ROE of 10.75 percent.

66 **Q. Do Messrs. Peterson and Lawton recognize that corporate borrowing costs**
67 **have actually increased, rather than decreased, as U.S. Treasury rates have**
68 **declined?**

69 A. No. They focus their discussions on declining Fed Funds and government interest

70 rates. In so doing, their analyses and recommendations ignore the effects that
71 recent market turbulence has had on capital costs for corporate borrowers. While
72 both provide discussion of economic conditions (Peterson at 10-11 and Lawton at
73 5-7), neither directly acknowledges the extreme market turbulence and the
74 resulting wider interest rate spreads that corporate borrowers, like RMP, are
75 having to pay. This approach for estimating the cost of equity is simply wrong.
76 Corporate borrowing costs have increased and any reasonable analysis of the cost
77 of equity must consider these market conditions.

78 **Q. Can you demonstrate that their conclusions about lower capital costs are**
79 **inconsistent with actual capital market costs for utilities?**

80 A. Yes. Recent government efforts to stabilize the economy have had their major
81 impact on borrowing costs for banks, not corporate borrowers such as RMP.
82 Providers of long-term capital for corporations now require higher, not lower,
83 capital costs. Corporate interest rate "spreads" (the difference between corporate
84 borrowing costs and rates on U.S. Treasury bonds of approximately equal
85 maturity) are currently at the highest levels seen in many years. Wider spreads
86 are signaling a clear increase in the price of risk, a cost that affects equity holders
87 even more than debt holders. Messrs. Peterson and Lawton both ignore this
88 important capital market message in their cost of equity analyses.

89 **Q. If Messrs. Peterson and Lawton had more reasonably considered long-term**
90 **corporate borrowing costs, what would their results have shown?**

91 A. They would have shown increasing corporate capital costs. The following table is
92 an update through March 2008 of the interest rate summary data that I provided in

Table 1
Long-Term Interest Rate Trends

Month	Single-A Utility Rates	20-Year Treasury Rates	10-Year Treasury Rates	20-Year Treasury Spreads	10-Year Treasury Spreads
Jan-05	5.78%	4.77%	4.22%	1.01%	1.56%
Feb-05	5.61%	4.61%	4.17%	1.00%	1.44%
Mar-05	5.83%	4.89%	4.50%	0.94%	1.33%
Apr-05	5.64%	4.75%	4.34%	0.89%	1.30%
May-05	5.53%	4.56%	4.14%	0.97%	1.39%
Jun-05	5.40%	4.35%	4.00%	1.05%	1.40%
Jul-05	5.51%	4.48%	4.18%	1.03%	1.33%
Aug-05	5.50%	4.53%	4.26%	0.97%	1.24%
Sep-05	5.52%	4.51%	4.20%	1.01%	1.32%
Oct-05	5.79%	4.74%	4.46%	1.05%	1.33%
Nov-05	5.88%	4.83%	4.54%	1.05%	1.34%
Dec-05	5.80%	4.73%	4.47%	1.07%	1.33%
Jan-06	5.75%	4.65%	4.42%	1.10%	1.33%
Feb-06	5.82%	4.73%	4.57%	1.09%	1.25%
Mar-06	5.98%	4.91%	4.72%	1.07%	1.26%
Apr-06	6.29%	5.22%	4.99%	1.07%	1.30%
May-06	6.42%	5.35%	5.11%	1.07%	1.31%
Jun-06	6.40%	5.29%	5.11%	1.11%	1.29%
Jul-06	6.37%	5.25%	5.09%	1.12%	1.28%
Aug-06	6.20%	5.08%	4.88%	1.12%	1.32%
Sep-06	6.00%	4.93%	4.72%	1.07%	1.28%
Oct-06	5.98%	4.94%	4.73%	1.04%	1.25%
Nov-06	5.80%	4.78%	4.60%	1.02%	1.20%
Dec-06	5.81%	4.78%	4.56%	1.03%	1.25%
Jan-07	5.96%	4.95%	4.76%	1.01%	1.20%
Feb-07	5.90%	4.93%	4.72%	0.97%	1.18%
Mar-07	5.85%	4.81%	4.56%	1.04%	1.29%
Apr-07	5.97%	4.95%	4.69%	1.02%	1.28%
May-07	5.99%	4.98%	4.75%	1.01%	1.24%
Jun-07	6.30%	5.29%	5.10%	1.01%	1.20%
Jul-07	6.25%	5.19%	5.00%	1.06%	1.25%
Aug-07	6.24%	5.00%	4.67%	1.24%	1.57%
Sep-07	6.18%	4.84%	4.52%	1.34%	1.66%
Oct-07	6.11%	4.83%	4.53%	1.28%	1.58%
Nov-07	5.97%	4.56%	4.15%	1.41%	1.82%
Dec-07	6.16%	4.57%	4.10%	1.59%	2.06%
Jan-08	6.02%	4.35%	3.74%	1.67%	2.28%
Feb-08	6.22%	4.49%	3.74%	1.73%	2.48%
Mar-08	6.21%	4.36%	3.51%	1.85%	2.70%

Sources: Mergent Bond Record (Utility Rates);
www.federalreserve.gov (Treasury Rates).

94 The most recent data available in my Direct Testimony were October 2007. Since
 95 then, although the Federal Reserve System has continued to reduce the Federal
 96 Funds rate, long-term corporate interest rates have, in fact, increased. While
 97 market turmoil and "flight to safety" issues have also pushed down Treasury rates,
 98 corporate spreads, which reflect investors' risk perceptions, have widened
 99 significantly. In addition to the data provided in Table 1, I have included in
 100 Exhibit RMP___(SCH-1R), reports from Standard & Poor's and Moody's, which
 101 further demonstrate the widening risk spreads that are currently required from
 102 corporate borrowers like RMP. These factors provide important perspective for
 103 evaluating the alternative rate of return positions.

104 **Q. What levels of interest rates are forecast for the coming year?**

105 A. Both corporate and government interest rates are expected to rise from present
 106 levels. I have reproduced as SCH-2R Standard & Poor's most recent economic
 107 forecast from its Trends & Projections publication for March 2008. The summary
 108 interest rate data from that publication are presented in the following table:

Table 2:
 Standard & Poor's Interest Rate Forecast

	Mar. 2008 Average	Average 2008 Est.	Average 2009 Est.
10-Yr. T-Bonds	3.5%	3.7%	4.8%
30-Yr. T-Bonds	4.4%	4.3%	5.0%
Aaa Corporate Bonds	5.5%	5.5%	6.1%

Sources: Federal Reserve System website (Current Rates); Standard & Poor's Trends & Projections, March 2008, page 8 (Projected Rates).

109 The data in Table 2 show that interest rates are projected to increase further
 110 during the coming year. Relative to current levels, 10-year Treasury rates for
 111 2009 are expected to increase by over 100 basis points and rates on 30-year

112 Treasury bonds are expected to increase by 60 basis points. Corporate borrowing
113 costs are also expected to increase by an additional 60 basis points.

114 These factors indicate that the other parties' ROE recommendations are
115 below the cost of equity for RMP. Their recommendations are inconsistent with
116 the wider corporate spreads that borrowers like RMP are currently required to
117 pay. Their positions are also inconsistent with projections for further interest rate
118 increases in 2009.

119 **Rebuttal of Division Witness Charles E. Peterson**

120 **Q. What is the basis for Mr. Peterson's 10.1 percent ROE recommendation?**

121 A. His final recommendation is presented as the average of the "Range (Highs and
122 Lows of Preferred Estimates, excluding 82-year estimates)" at the bottom of his
123 Exhibit 2.5. His actual DCF range appears to be 8.63 percent (based on dividend-
124 only growth forecasts) to 10.69 percent (based on forecast earnings-only growth
125 rates).¹ With the Commission's preferred 25 percent/75 percent weighting of
126 dividend and earnings growth forecasts, his "adjusted" DCF result is 10.32
127 percent.² In his CAPM analysis, he applies short-term "T-bill" and long-term
128 "20-year Treasury bond" versions of the model. This analysis produces an ROE
129 range of 7.35 percent to 9.46 percent, which is presented in his Exhibit 2.12. He

¹ In Exhibit 2.5, Mr. Peterson also shows and averages in historical dividend and earnings growth rates that result in ROE estimates in the 6 percent to 7 percent range. Mr. Peterson appears to have excluded these low results in his final recommendation.

² As shown in Exhibit 2.8, Mr. Peterson removed high and low extreme values, called "outliners." It appears from this analysis that his "adjusted" DCF estimate based on the 25/75 dividend-earnings growth approach is 10.26 percent.

130 also presents the results of a Value Line risk premium model, although he states
131 (at 22) that he does not expect the Commission to rely on these results.

132 **Q. What are your principal areas of disagreement with Mr. Peterson?**

133 A. My principal areas of disagreement fall into three categories. I disagree with his
134 interpretation of his quantitative results; I disagree with the growth rates he uses
135 in the DCF model; and I disagree with his CAPM analysis and his presentation of
136 the so-called Value Line risk premium model.

137 I disagree with his interpretation of the results because his input selections
138 and his inclusions and exclusions of data are so extensive that they appear to
139 dominate his final recommendation.

140 I disagree with his growth rate selections because he fails in his analysis to
141 consider the long-term growth rates that are required in the DCF model.

142 I disagree with his use of the CAPM and Value Line risk premium models
143 because, based on risk-free U.S. Treasury interest rates, those models cannot
144 measure the impact of recent market turbulence and its effect on corporate capital
145 costs.

146 **Q. Please explain why you disagree with Mr. Peterson's interpretation of his
147 results?**

148 A. Throughout his discussion, he applies adjustments and he includes and excludes
149 portions of his analysis based on personal judgment. Although he applies various
150 versions of the DCF model, the CAPM, and a risk-premium model he constructed
151 from Value Line financial strength ratings, his final choice is effectively
152 predetermined by his selections. While professional judgment is important, Mr.

153 Peterson's repeated subjective inputs are so extensive that they appear to dominate
154 his objective analysis. I will demonstrate that without this approach, his ROE
155 recommendation might have been higher.

156 **Q. What are your technical areas of disagreement with Mr. Peterson's analysis?**

157 A. I disagree with his growth rate selections in the DCF model and I disagree with
158 his use of the CAPM results, given current market conditions and the currently
159 wider corporate interest rate spreads that I discussed previously. Also, I entirely
160 disagree with his presentation of the Value Line risk premium model because
161 there is no underlying theoretical basis for using Value Line's financial strength
162 rating in the CAPM format. As with several of Mr. Peterson's other judgmental
163 inputs, the Value Line model presentation may simply confuse the issue of
164 providing a reasonable estimate of RMP's cost of equity capital.

165 **Q. Why do you disagree with Mr. Peterson's DCF growth rate approach?**

166 A. The constant growth DCF model requires the use of long-term growth rates. But,
167 the analysts' forecast growth rates used by Mr. Peterson are for at most five years
168 and may not be at all consistent with investors' expectations for the long-run
169 future.

170 Additionally, as I demonstrated in my Direct Testimony and will show
171 further below, analysts' growth rates fluctuate widely from year to year. This
172 volatility detracts further from the use of these growth rates in the *constant*
173 *growth* DCF model. While some current analysts' forecasts are now consistent
174 with longer-term overall economic growth, the ones offered by Mr. Peterson are
175 lower. Also, irrespective of the current level of analysts' forecasts, a long-term

176 growth rate based on overall economic growth should be included. The gross
177 domestic product (GDP) growth forecast I provided in my Direct Testimony and
178 update in SCH-3R of this Rebuttal Testimony represents the most general
179 measure of economic growth and it is the best overall estimate of investors' long-
180 term growth rate expectations.

181 **Q. If Mr. Peterson had included long-term GDP growth along with his analysts'**
182 **growth rate forecasts, what would his single-stage DCF estimate have been?**

183 A. That analysis is provided in Exhibit RMP___(SCH-4R). In that analysis, I
184 averaged my updated GDP growth rate forecast (6.5 percent) with Mr. Peterson's
185 growth rate based on analysts' earnings growth forecasts. The indicated ROE is
186 10.71 percent.

187 **Q. In your Direct Testimony, you provided ROE estimates based on the CAPM.**
188 **Why do you now disagree with Mr. Peterson's application of that model?**

189 A. As I explained in my Direct Testimony, restructuring of the electric utility
190 industry and shifts in dividend policy have made it more difficult to apply the
191 traditional DCF model to utility companies. DCF results, along with analysts'
192 growth rate estimates, have become extremely volatile and at times DCF results
193 based on such growth rates have been well below the reasonable cost of capital.
194 In this environment, I offered CAPM estimates of ROE, along with other risk
195 premium estimates.

196 Under present market conditions, however, key variables in the CAPM
197 (the Treasury bill or Treasury bond risk-free rate and the historical market risk
198 premium) do not reflect the current market cost of capital for corporate entities.

199 This is the case because Treasury rates have been pushed down by government
200 policy and the abnormally wide near-term corporate spreads simply cannot be
201 reflected in the long-term market risk premium data.

202 **Q. At pages 35-36, Mr. Peterson disagrees with your analysis of analysts' growth**
203 **rates and provides in Exhibit 2.14 what he purports to be a historical review**
204 **of those growth rates. How do you respond to his review and conclusions?**

205 A. Mr. Peterson's review of Value Line's earnings growth forecasts is at best
206 inadequate. His analysis includes only portions of the Value Line data; it consists
207 solely of a chart of various time periods; and again his interpretation of the data is
208 questionable. For comparison, Mr. Peterson's chart appears to indicate growth
209 rates of almost 9 percent in 2001, whereas the highest growth rate in my analysis
210 (Hadaway Direct Testimony, Exhibit RMP___(SCH-3)), which he criticizes as
211 "too high" is 6.2 percent. Mr. Peterson's analysis and comments about growth
212 rates also further demonstrate the volatility of analysts' growth rates. His chart
213 shows clearly that such growth rates alone are not an adequate basis for the
214 *constant* growth rate required in the DCF model.

215 **Q. At pages 36-37, Mr. Peterson criticizes your GDP growth rate forecast and**
216 **points to much lower growth rates in forecasts published by the**
217 **Congressional Budget Office (CBO) and the Energy Information**
218 **Administration (EIA). How do you respond these criticisms?**

219 A. Recent GDP growth forecasts from CBO and EIA are not consistent with the
220 historical growth rates in the U.S. economy. They are based on an assumption of
221 slower real growth and permanently low inflation at rates that are about 50

222 percent below actual long-term experience. Such forecasts may be useful for
223 projecting a balanced budget, protecting Social Security, and other governmental
224 purposes, but they are not consistent with capital market behavior as expressed in
225 current relatively high common stock valuations. As such, the much lower
226 growth rates discussed by Mr. Peterson are not appropriate in the DCF model.

227 **Rebuttal of CCS Witness Daniel J. Lawton**

228 **Q. What are your general comments from your review of Mr. Lawton's**
229 **testimony?**

230 A. First, as stated previously, Mr. Lawton's discussion of interest rates and the
231 direction of capital costs is wrong. His analysis of current capital costs is focused
232 only on recent changes in *government* borrowing costs, not *corporate* borrowing
233 costs. He states "[T]hese Federal Reserve actions indicate interest rates are not
234 increasing" (Lawton Direct at 6) and "[W]hile the Federal Reserve continues to
235 deal with the competing pressures of inflation, declining gross domestic product
236 ("GDP") and the prospects of a recession, the prevailing view appears to be a
237 continuation of lower interest rates" (Lawton Direct at 7). His Table 1 (at 7),
238 contains a history of only Treasury rates. It is clear Mr. Lawton is referring to
239 changes in government borrowing costs in his interest rate analysis.

240 The most important element, however, which Mr. Lawton has completely
241 omitted from his discussion, is the recent trend in *corporate* borrowing costs. As
242 Table 1 above shows, corporate borrowing costs are increasing. Mr. Lawton's
243 interest rate analysis is, at best incomplete.

244 **Q. What specific comments do you have concerning Mr. Lawton's ROE**
245 **analyses?**

246 A. Mr. Lawton's testimony is deficient and it does not support an ROE as low as the
247 9.85 percent he recommends. In fact, Mr. Lawton's only independent ROE
248 analysis is a brief presentation of the traditional constant growth DCF model (at
249 pages 15-19), which produces an ROE range of 9.82 percent to 10.08 percent.
250 The remainder of his ROE testimony is rebuttal of my analysis based on his so
251 called "corrections" to my methodology and input assumptions.

252 **Q. How does Mr. Lawton develop his independent ROE estimate?**

253 A. Mr. Lawton's sole independent ROE estimate is from the traditional dividend
254 yield plus constant growth DCF model. He uses a 6-week average of prices and
255 calculates a comparable group dividend yield of 4.73 percent to 4.74 percent
256 (CCS 3.3, page 1). For his growth rate estimate, he averages earnings projections
257 from *Value Line*, Zacks, and Yahoo Finance (CCS 3.4). Combining his growth
258 rates with his dividend yields, produces an ROE range of 9.8 percent to 10.1
259 percent (CCS 3.5). Mr. Lawton then combines the midpoint of this DCF range
260 (approximately 10.0 percent) with the midpoint of his "update" to my DCF
261 analysis (approximately 9.7 percent) to arrive at his ROE recommendation of 9.85
262 percent. This result, Mr. Lawton claims, is "verified" by the updates to my risk
263 premium and CAPM analyses (Lawton Direct Testimony at 25).

264 **Q. Is Mr. Lawton's DCF analysis an adequate basis for estimating PacifiCorp's**
265 **ROE?**

266 A. No. He has understated the results in both his DCF analysis and his "updates" to

267 my analyses. When these flaws are corrected, his ROE outcome is much higher--
268 in the range of 10.6 percent.

269 **Q. Please explain the changes that should be made to Mr. Lawton's analysis.**

270 A. First, Energy East should be removed from the comparable group. Energy East is
271 being acquired, with the final regulatory approval expected in May 2008. It is
272 common to remove companies involved in mergers because such activity
273 frequently causes their financial data (stock price, dividends, etc.) to be distorted.

274 Second, the dividend yields in his analysis should be updated. The
275 dividend yields in Mr. Lawton's calculations (CCS 3.3, page 1) are based on
276 *Value Line's* 2008 dividend figure. The technical requirements of the DCF model,
277 however, call for dividends expected over the upcoming year. Since 2008 is
278 nearly one-third complete, dividends beyond 2008 should be considered. Mr.
279 Lawton acknowledged this situation in his previous Utah testimony (Docket No.
280 04-035-42), in which he increased his "base" dividend yield by one-half the
281 growth rate. In that testimony, he stated:

282 The dividend yield adjustment factor is used to reflect the future
283 payment of dividends in the next 12 months. When an investor
284 buys common shares in a company, it is the future dividends that
285 will be received, not past dividends. To account for investor
286 expectations of future dividend payments, I have increased the
287 dividend by one-half the growth rate to reflect this investor
288 expectation. This adjustment represents a reasonable
289 approximation of the expected increase in dividends during the
290 year after the stock is purchased. (Docket No. 04-035-42, Lawton
291 Direct, page 10, emphasis added)

292 **Q. What are the results of making these adjustments to Mr. Lawton's DCF**
293 **analysis?**

294 A. The results of that analysis are shown in Exhibit RMP ___ (SCH-5R), page 2.

295 Based on these adjustments, Mr. Lawton's DCF range becomes 10.2 percent to
296 10.4 percent.

297 **Q. Do you agree with Mr. Lawton's "updates" to your ROE analysis?**

298 A. No, I do not. He makes two basic changes to my analysis. In the DCF analysis,
299 he substitutes a long-term GDP growth rate of 5.5 percent. In my risk premium
300 analysis, he substitutes a single-A cost of debt of 5.5 percent. These adjustments
301 are not appropriate because his GDP growth rate is lower than actual experience
302 and the single-A interest rate he uses is far below the current level shown
303 previously in Table 1.

304 **Q. Please explain.**

305 A. His 5.5 percent growth rate is not appropriate because it is lower than historical
306 experience and reasonable expectations for the future. As I discussed in my
307 rebuttal of Mr. Peterson above, GDP forecasts and economic forecasts in general
308 are difficult and are often dominated by recent experience. I used the long-term
309 St. Louis Federal Reserve Bank data to mitigate this well-known forecasting
310 tendency.

311 While the St. Louis Federal Reserve Bank data base contains data dating
312 back to 1947, my forecast is not a simple average or extrapolation of the historical
313 data. Like most econometric forecasts, it uses the long-run historical relationships
314 to project what investors may reasonably expect for the long-run future. To
315 account for recent data having a greater influence on current expectations, I
316 applied a weighted averaging process that gives about five times as much weight
317 to the most recent 10 years as compared to the earliest 10 years. Giving more

318 weight to the more recent, low inflation years also lowers the overall forecast.
319 For example, my updated forecast is for a future growth rate of 6.5 percent, while
320 the overall long-run average of the data is a growth rate of 7 percent. In this
321 context, Mr. Lawton's criticism of my use of historical GDP data is unwarranted
322 and his "update" of my DCF analysis is not appropriate.

323 **Q. What interest rate should be used an updated risk premium analysis?**

324 A. Current and forecasted single-A utility interest rates are converging. The
325 forecasted rate is now 6.36 percent, compared to the 6.6 percent rate that I used in
326 my direct testimony. The actual single-A utility bond yield average reported by
327 Moody's as of April 21, 2008 was 6.27 percent. Both of these rates are
328 significantly higher than the 5.5 percent rate used by Mr. Lawton. My updated
329 risk premium ROE estimate using the forecasted interest rate of 6.36 percent is
330 10.73 percent; the current interest rate of 6.27 percent produces an ROE of 10.68
331 percent. Therefore, Mr. Lawton's "update" of my risk premium analysis should
332 have produced an ROE of approximately 10.7 percent.

333 **Q. Did Mr. Lawton admit that he did not update his interest rate data for the**
334 **widening spreads that have occurred?**

335 A. Yes. I have attached as Exhibit RMP___(SCH-6R), his response to RMP's
336 Second Data Request to CCS. In that response, Mr. Lawton acknowledges that he
337 did not update his data.

338 **Update of ROE Estimates**

339 **Q. What are the results of your updated DCF analyses?**

340 A. My updated DCF results are shown in SCH-7R. My comparable group now

341 consists of 14 companies (the original 15 companies from my Direct Testimony
342 less Energy East, which is being acquired). Those updates apply current versions
343 of the analysts' and GDP growth rates that I used in my direct testimony (my
344 updated GDP forecast is provided in Exhibit RMP___(SCH-3R). The indicated
345 DCF range is 10.4 percent to 11.3 percent, with a midpoint of 10.85 percent.

346 **Q. Did you also update the results of your CAPM analysis?**

347 A. No. As explained previously, government monetary policies and recent "flight to
348 safety" issues have pushed Treasury bond interest rates down, yet corporate
349 capital costs have increased. In this environment, CAPM estimates of ROE,
350 which are based entirely on Treasury bond interest rates for the model's risk-free
351 rate, are not reliable. The negatively skewed Treasury bond data result in ROE
352 estimates that are not consistent with either DCF or traditional risk premium data.
353 For this reason, I do not include current CAPM estimates of ROE in my
354 recommended range.

355 **Q. What are the results of your updated risk premium analysis?**

356 A. My updated risk premium analysis is presented in Exhibit RMP___(SCH-8R).
357 Based on currently projected single-A utility interest rates for 2009 (which are
358 approximately equal to the current single-A utility rates shown previously in
359 Table 1), the risk premium analysis indicates an ROE of 10.7 percent. The
360 updated results of the Ibbotson risk premium analysis and the Harris-Marston risk
361 premium analysis indicate ROEs of 10.8 percent ($6.3\% + 4.5\% = 10.8\%$) and 11.4
362 percent ($6.3\% + 5.13\% = 11.43\%$), respectively. As noted in my Direct
363 Testimony, the Ibbotson and Harris-Marston results are not used in my ROE

364 estimates, but are presented for general perspective on overall capital market
365 costs.

366 **Q. What do you conclude from your updated ROE analyses?**

367 A. My updated analyses show that RMP's requested ROE of 10.75 percent is
368 reasonable. My conclusions are also supported by the interest rate risk associated
369 with projections for higher rates over the coming year and the ongoing risks and
370 uncertainties that exist in the electric utility industry as well as the specific risks
371 that RMP continues to face.

372 **Q. Does this conclude your rebuttal testimony?**

373 A. Yes, it does.