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IDAHO PUBLIC
UTILITIES COMMISSION

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE)
APPLICATION OF ROCKY) CASE NO. PAC-E-10-07
MOUNTAIN POWER FOR)
APPROVAL OF CHANGES TO ITS) Rebuttal Testimony of Samuel C. Hadaway
ELECTRIC SERVICE SCHEDULES)
AND A PRICE INCREASE OF \$27.7)
MILLION, OR APPROXIMATELY)
13.7 PERCENT)

ROCKY MOUNTAIN POWER

CASE NO. PAC-E-10-07

November 2010

1 **Introduction and Purpose of Testimony**

2 **Q. Are you the same Samuel C. Hadaway who submitted direct testimony in this**
3 **proceeding?**

4 A. Yes.

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

6 A. The purpose of my rebuttal testimony is to respond to the rate of return on equity
7 (“ROE”) recommendations offered by Idaho Public Utilities Commission Staff
8 witness Ms. Terri Carlock and Monsanto witness Mr. Michael P. Gorman. In my
9 analysis, I will demonstrate that their rate of return recommendations are not
10 consistent with the ongoing equity market volatility or the continuing financial
11 distress that the U.S. economy is undergoing. I will also respond to the other
12 witnesses’ comments on the methodology I used in my direct testimony to
13 estimate Rocky Mountain Power’s cost of equity and I will update my ROE
14 analysis for current market costs and conditions.

15 **Review of Other Parties’ Recommendations**

16 **Q. What are the parties’ ROE recommendations?**

17 A. Ms. Carlock recommends a 10.0 percent ROE and Mr. Gorman recommends an
18 ROE of 9.5 percent. As I will explain in my updated ROE analysis, the
19 Company’s initially requested 10.6 percent ROE remains well supported by my
20 updated DCF analysis. Although my risk premium results are lower, I discount
21 those results due to the ongoing equity market turmoil and the artificially low
22 interest rates that have resulted from the government’s expansionary monetary
23 policy, which I will discuss later in this testimony.

1 **Q. What is your general assessment of the other parties' ROE**
2 **recommendations?**

3 A. Their recommendations are well below Rocky Mountain Power's cost of equity.
4 By comparison, their recommendations are much lower than recently allowed
5 ROEs for other integrated electric utilities around the country. I will show that
6 their analyses and recommendations are faulty because they use negatively biased
7 model inputs and they fail to reasonably consider the ongoing effects of the recent
8 financial crisis. Additionally, I will provide updated data and analysis, which
9 shows that Rocky Mountain Power's current cost of equity is in the range of 10.3
10 percent to 10.8 percent. These factors demonstrate the unreasonably low nature
11 of the other parties' recommendations.

12 **Q. Why are their recommendations not consistent with current capital market**
13 **costs and conditions?**

14 A. Contrary to the other parties' apparent beliefs, the cost of equity cannot be
15 measured by simply extrapolating artificially low, government policy induced
16 interest rates to ROE. A more realistic view of current market conditions and
17 more plausible input assumptions show that the other parties' recommendations
18 are well below the reasonable range. Relative to the downward trend in
19 Treasuries and high grade utility bond yields, the cost of equity has not declined
20 as much.

21 Ms. Carlock and Mr. Gorman appear to believe that the cost of equity has
22 dropped in lockstep with declining interest rates. This contention is simply
23 wrong. The most recently reported data from Regulatory Research Associates

1 shows that for the first nine months of 2010, the average allowed ROE for electric
2 utilities was 10.36 percent.¹ The most recently allowed ROE in Idaho has been
3 10.5 percent (Avista Corp., Case No. AVU-E-09-01, decided July 17, 2009 and
4 Idaho Power, Case No. IPC-E-08-10, decided January 30, 2009).

5 **Economic and Market Conditions**

6 **Q. In your direct testimony, you provided data to illustrate interest rate trends**
7 **and the spreads between U.S. Treasury bond and single-A rated utility**
8 **bonds. Have you updated that information?**

9 **A. Yes. I provide that data in Exhibit No. 57, page 1. Table 1 below summarizes the**
10 **results.**

¹ Regulatory Focus, Regulatory Research Associates, October 4, 2010.

Table 1
Long-Term Interest Rate Trends

Month	Single-A Utility Rate	30-Year Treasury Rate	Single-A Utility Spread
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
Sep-09	5.53	4.19	1.34
Oct-09	5.55	4.19	1.36
Nov-09	5.64	4.31	1.33
Dec-09	5.79	4.49	1.30
Jan-10	5.77	4.60	1.17
Feb-10	5.87	4.62	1.25
Mar-10	5.84	4.64	1.20
Apr-10	5.81	4.69	1.12
May-10	5.50	4.29	1.21
Jun-10	5.46	4.13	1.33
Jul-10	5.26	3.99	1.27
Aug-10	5.01	3.80	1.21
Sep-10	5.01	3.77	1.24
Oct-10	5.10	3.87	1.23
3-Mo Avg	5.04	3.81	1.23
12-Mo Avg	5.51	4.27	1.24

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

Three month average is for August 2010 - October 2010.

Twelve month average is for November 2009 - October 2010.

1 The data in Table 1 vividly illustrate the market turmoil that has occurred. Over
2 the past two years, interest rates have fluctuated widely. The Federal Reserve's
3 efforts to reduce borrowing costs for banks (the Fed Funds rate) and lower the
4 yields on U.S. Treasury bonds have now extended to high quality corporate
5 borrowers as well. While the effects of market turbulence may not be easily
6 captured in financial models for estimating the rate of return, equity market
7 turbulence and continuing elevated risk aversion should be considered explicitly
8 in estimates of the cost of equity capital.

9 **Q. Do the smaller spreads between yields on single-A utility bonds and U.S.**
10 **Treasury bonds mean that the markets have fully recovered from the**
11 **economic turmoil that resulted from the financial crisis?**

12 **A.** No. While markets have stabilized from the near-chaotic conditions that existed
13 in late 2008, investors remain concerned about high unemployment, large federal
14 deficits, and the potential for further fallout from foreclosures and other effects of
15 the financial crisis. Although it is difficult to measure these factors directly, they
16 should not be ignored as Ms. Carlock and Mr. Gorman have done.

17 **Q. What do economic and interest rate forecasts show for the coming year?**

18 **A.** In Exhibit No. 57, page 2, I provide Standard and Poor's (S&P) most recent
19 economic forecast from its *Trends & Projections* publication for October 2010.
20 The S&P forecast reflects the significant economic contraction that occurred in
21 2009, with a drop in real GDP of 2.6 percent. For all of 2010 and 2011, S&P
22 forecasts that real GDP will increase by 2.7 percent and 2.5 percent, respectively.
23 While this forecast does not reflect a full "double-dip" recession for the remainder

1 of 2010 and into 2011, the lack of further expansion in 2011 is a more pessimistic
2 outlook than S&P had previously provided. The S&P forecast now delays the
3 resumption of more robust growth until the 3rd and 4th Quarters of 2011.

4 Consistent with S&P's pessimistic outlook for the economy, its long-term
5 interest rate forecasts have also declined. Table 2 below summarizes the interest
6 rate forecasts:

7 Table 2
8 Standard & Poor's Interest Rate Forecast

	Oct. 2010 Average	Average 2010 Est.	Average 2011 Est.
Treasury Bills	0.1%	0.1%	0.3%
10-Yr. T-Bonds	2.5%	3.1%	2.5%
30-Yr. T-Bonds	3.9%	4.1%	3.5%
Aaa Corporate Bonds	4.7%	4.8%	4.3%

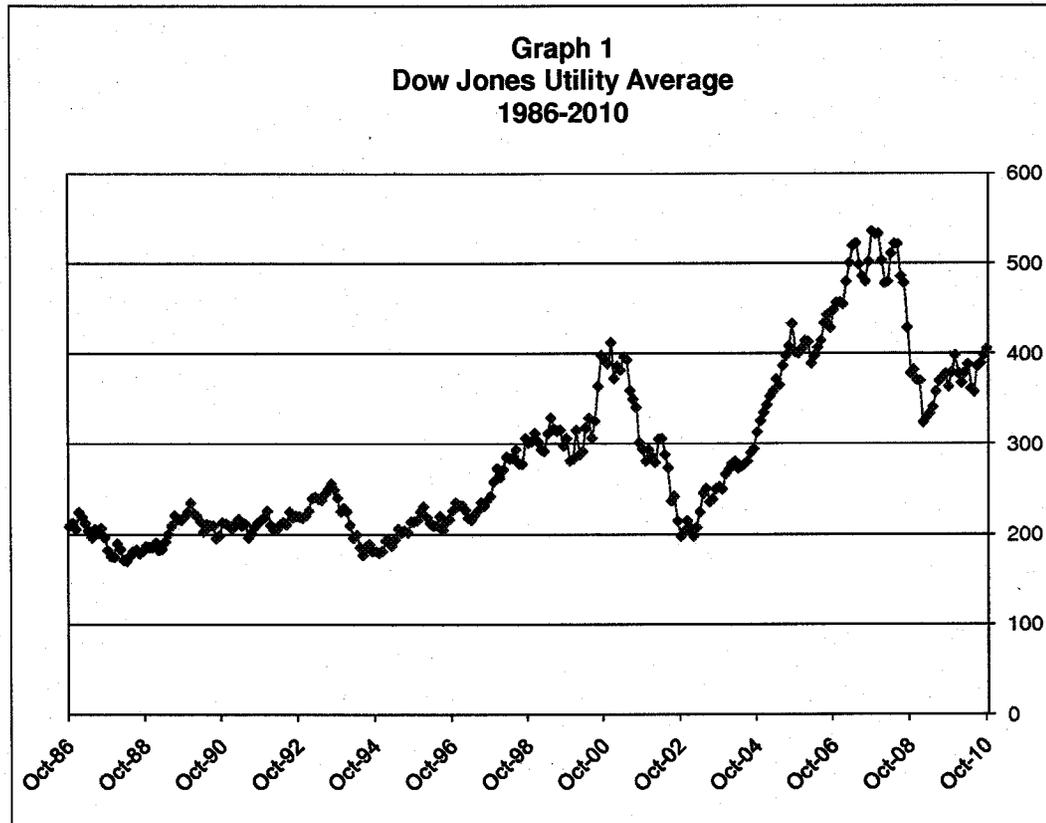
9 Sources: www.federalreserve.gov, (Current Rates). Standard & Poor's
10 Trends & Projections, October 2010, page 8 (Projected Rates).

11 The data in Table 2 shows that S&P expects, during 2011, that long-term
12 Treasury interest rates will drop an additional 40 basis points from their recent
13 (October 2010) low levels. Although in the turbulent market environment it is
14 difficult to project interest rates, a much slower economic recovery and
15 continuing government "easy money" policies are reflected in the S&P
16 projections.

17 **Q. Have you updated the graph from your direct testimony that shows how**
18 **utility stocks have performed during the past several years?**

19 **A. Yes. Utility stock prices have remained volatile and have recovered less, relative**
20 **to the broader market indices, from the March 2009 low point. The wider utility**
21 **stock price fluctuations in the more recent years are vividly illustrated in the**

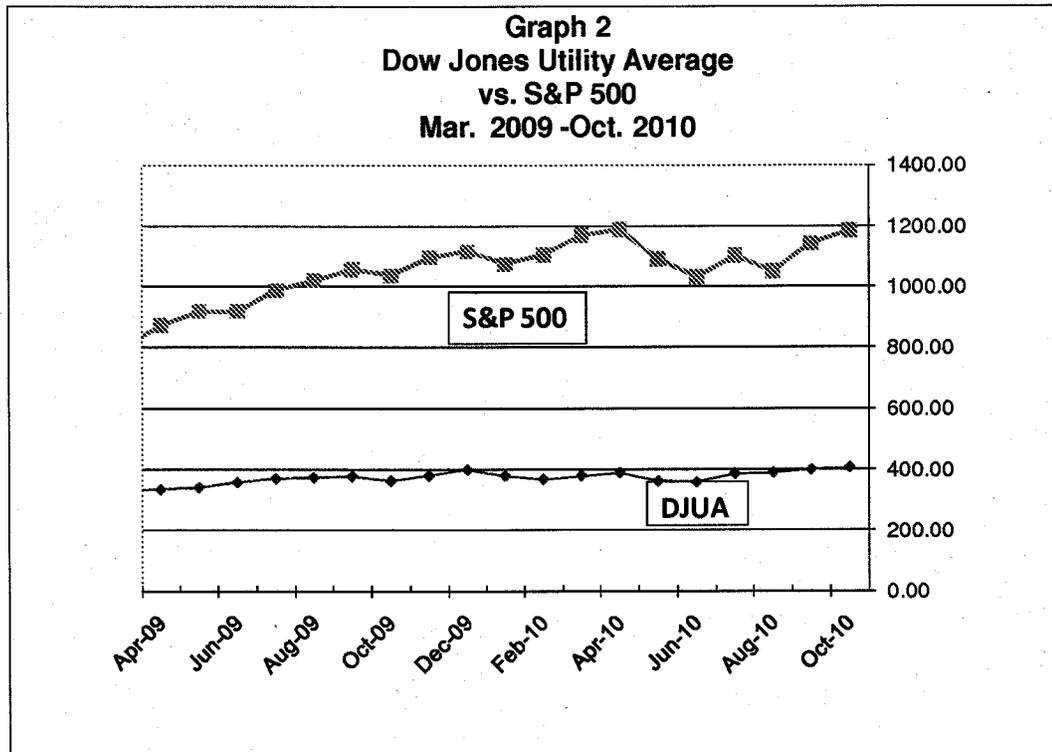
1 Graph 1 below, which depicts the Dow Jones Utility Average (DJUA) over the
2 past 25 years.



3 In this environment, investors' return expectations and requirements for providing
4 capital to the utility industry remain high relative to the longer-term, traditional
5 view of the utility industry. Increased market volatility for utility shares causes
6 investors to require a higher rate of return.

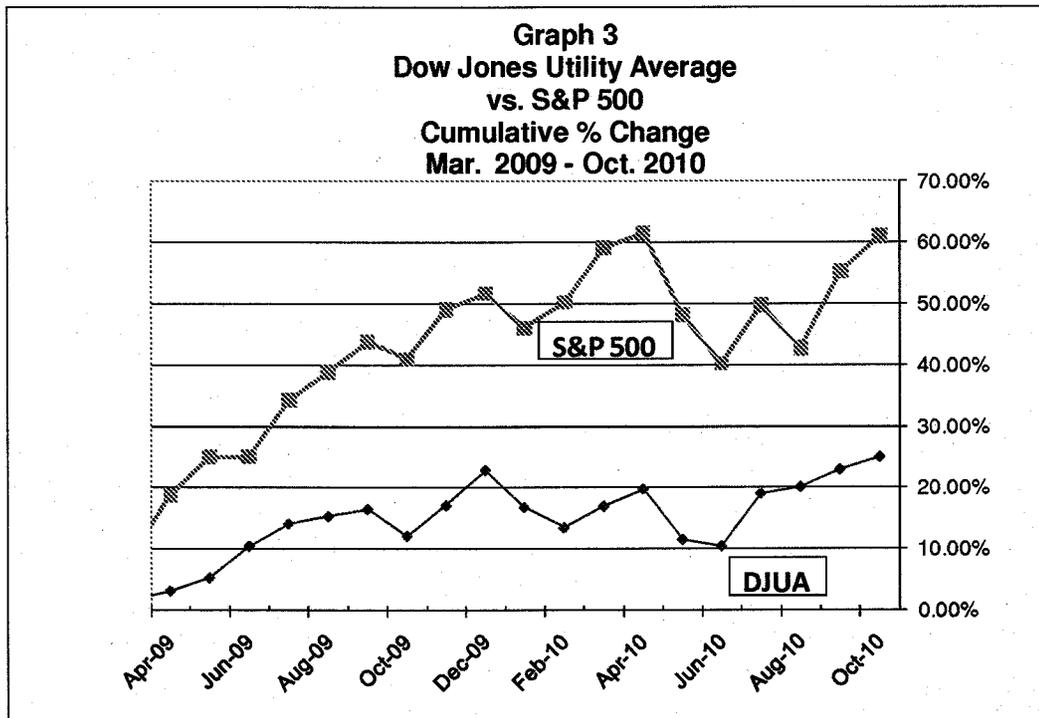
7 **Q. How have utility stocks performed relative to the overall market recovery**
8 **since March 2009?**

9 **A.** Utility stock prices have lagged behind the overall market as well. Graph 2 shows
10 the monthly levels for the DJUA versus the broader market S&P 500 index since
11 the market lows that occurred in February and March of 2009.



1 While the S&P 500 has increased significantly since its lowest level in March
 2 2009, utility prices have increased less than one-half as much. This result is a
 3 further indication that the cost of equity for utility companies has not declined to
 4 the same extent that interest rates have fallen or to the same extent that the cost of
 5 equity may have come down for the broader equity market. The relatively lower
 6 prices for utility shares indicate that the cost of capital for utilities is higher.

7 Graph 3 further illustrates this result by showing the cumulative
 8 percentage change in the two equity indexes since the March 2009 lows.



1 While the S&P 500 has recovered over 60 percent (60.97%) from its March 2009
 2 lows, utility stock prices have increased by only about 25 percent (24.97%). This
 3 result again points out the market difficulties that utilities face and the continuing
 4 relatively higher cost of equity for utility companies.

5 **Q. How do the other parties' ROE recommendations in this case compare to the**
 6 **rates of return authorized by other state utility commissions around the**
 7 **country?**

8 **A.** They are substantially lower. Over the past five years, quarterly average allowed
 9 ROEs have generally been in the 10.4 percent to 10.5 percent range. Recently
 10 allowed average rates for integrated electric utilities have been approximately

1 10.4 percent.² Table 3 below summarizes the ROE data, including both delivery
2 and fully integrated companies:

3 Table 3
4 Authorized Electric Utility Equity Returns

	2006	2007	2008	2009	2010
5					
6 1 st Quarter	10.38%	10.27%	10.45%	10.29%	10.66%
7 2 nd Quarter	10.68%	10.27%	10.57%	10.55%	10.08%
8 3 rd Quarter	10.06%	10.02%	10.47%	10.46%	10.27%
9 4 th Quarter	10.39%	10.56%	10.33%	10.54%	
10 Full Year Average	10.36%	10.36%	10.46%	10.48%	10.36%
11 Average Utility					
12 Debt Cost	6.08%	6.11%	6.65%	6.28%	5.59%
13 Indicated Average					
14 Risk Premium	4.28%	4.25%	3.81%	4.20%	4.77%

15
16 Source: Regulatory Focus, Regulatory Research Associates, Inc., Major Rate
17 Case Decisions, October 4, 2010. Utility debt costs are the “average” public
18 utility bond yields as reported by Moody’s.

19 The 10.0 percent ROE recommended by Ms. Carlock is below the national
20 averages and the 9.5 percent ROE recommended by Mr. Gorman is in stark
21 contrast to the cost of equity capital deemed appropriate by state regulators
22 around the country.

23 **Current Deficiencies of the CAPM and Other Equity Risk Premium Models**

24 **Q. Mr. Gorman uses the CAPM to estimate ROE. Can you explain why the**
25 **CAPM currently understates ROE and why CAPM estimates should not**
26 **currently be included?**

27 **A. Yes. The CAPM requires three inputs to estimate ROE:**

28 1) the risk-free interest rate (R_f);

29 2) the market risk premium for stocks relative to the risk-free rate ($R_m - R_f$); and

² See Exhibit No. 57, page 3.

1 3) a measure of market-related, or nondiversifiable, risk (β or beta).

2 The CAPM estimate of ROE is calculated from the following equation:

$$3 \quad \text{ROE} = R_f + \beta(R_m - R_f)$$

4 Under present market conditions, and as applied by the other parties in their
5 CAPM analyses, all three of the CAPM inputs tend to understate ROE. The risk-
6 free rate, R_f , is understated because, due to the government's easy money policies
7 and investors' flight to safety, the U.S. Treasury yields used for R_f are artificially
8 low. The second input, the market risk premium ($R_m - R_f$) is also understated.

9 This is the case because Mr. Gorman bases his market risk premium estimates on
10 historical data and prior academic studies that cannot possibly reflect the recent
11 market turmoil. While there is no objective source for measuring the widening
12 equity risk premium phenomenon, the volatility of utility stock prices
13 demonstrated in the graphs above are indicative of the effect. Finally, the
14 CAPM's market risk factor, β , is depressed by the relatively poor market
15 performance that utilities have provided. In this environment, CAPM and other
16 equity risk premium estimates of ROE understate the cost of equity.

17 **Q. Do many of these same issues affect traditional bond-yield plus equity-risk**
18 **premium estimates of ROE?**

19 **A.** Yes. Government and utility bond interest rates are typically the foundation for
20 traditional equity risk premium models. To the extent that such rates are
21 artificially reduced by the government's expansionary monetary policy, risk
22 premium estimates of ROE will be understated. The wide divergence between
23 DCF model results and equity risk premium results is a reflection of this

1 condition. While there is no widely accepted model to measure the wider equity
2 risk premiums required to balance this anomaly, it is clear that both the CAPM
3 and traditional equity risk premium models currently understate the cost of equity
4 capital.

5 This anomaly is similar in nature to why cost of equity analysts exclude
6 companies that are involved in a merger or acquisition from their proxy groups.
7 The stock prices of such companies will move towards the transaction price per
8 share as the likelihood of the transaction occurring increases. Thus a DCF or
9 CAPM analysis will be distorted because the stock price of the utility (and the
10 resulting beta) is responding to the terms of the merger agreement, not to the
11 fundamentals of investor expectations. In an analogous manner, when the Federal
12 Reserve manipulates interest rates, bond yields respond to the Federal Reserve's
13 actions, not investor expectations and the yields of fixed income securities are
14 distorted.

15 **Rebuttal of Staff Witness Carlock**

16 **Q. What is the basis for Ms. Carlock's 10.0 percent ROE?**

17 A Ms. Carlock uses the traditional constant growth DCF model and a comparable
18 earnings (CE) approach. She finds the reasonable ROE range to be 9.5 percent to
19 10.5 percent. She selects the midpoint of that range, 10.0 percent, as her final
20 ROE recommendation (Carlock Direct at 2, line 25 to 3, line 1). From her
21 analysis, she finds a DCF estimate of 9.3 percent (Carlock Direct at 20, lines 3-4).
22 She states that her CE approach provides a range of 8.6 percent to 9 percent for
23 western utilities and about 10.5 percent for Value Line electric utilities with

1 financial strength of "A." From these results she concludes that the CE range
2 should be 9.0 percent to 10.5 percent.

3 **Q. What is your general impression of Ms. Carlock's testimony?**

4 A. A DCF approach with a CE test of reasonableness at times may be adequate, as
5 noted above. However, Ms. Carlock should have given more consideration to
6 recent economic conditions and her ROE estimate should have been higher. The
7 10.5 percent expected earnings rate for the Value Line electrics with financial
8 strength of "A," which she notes in her CE analysis (Carlock Direct at 18, lines 5-
9 7), is more like the allowed rates of return for other utilities around the country
10 and it is more consistent with investors' expectations for integrated electric
11 utilities like RMP.

12 The much lower earned returns for her western utility group appear to be
13 anomalous. This point is made clear upon a review of Ms. Carlock's workpapers.
14 Here, it is seen that the 2009 earned return data for her western group includes
15 returns as low as 3.2 percent (PNM Resources), 5.7 percent (NV Energy), and 5.8
16 percent (Hawaiian Electric). These returns are near, and in the case of PNM
17 Resources, even below the current cost of single-A debt, making them completely
18 unsuitable for consideration in a reasonable cost of equity analysis. Finally, the
19 8.6 percent to 9.0 percent range she finds for the western group is far below any
20 allowed ROE for any integrated electric utility in the U.S.

21 Beginning on page 17, line 25, Ms. Carlock states:

22 "Authorized returns by State Commissions for electric utilities
23 during the last quarter of 2009 and 2010 to date, range from 9.4%

1 in Connecticut to 11.0% in Michigan. Many of the decisions
2 authorized a return on equity between 10% and 10.25%.”

3 These data bear further explanation. The lowest allowed ROE (9.4%) that Ms.
4 Carlock cites from Connecticut is not representative because it is for a
5 distribution-only company. Distribution-only companies are believed by the
6 rating agencies to have lower operating risks than integrated utilities and, as a
7 group, they have received lower allowed ROEs. As shown in the detailed data
8 from Regulatory Research Associates which support page 3 of Exhibit No. 57, for
9 vertically-integrated utilities, like RMP, there have been 42 rate cases during the
10 timeframe referred to by Ms. Carlock and the average allowed ROE has been
11 10.48 percent.³ Many more decisions have resulted in authorized ROEs at or
12 above 10.25 percent (31 cases), than below 10.25 percent (11 cases). While a few
13 decisions have been around 10.0 percent, the majority of decisions have been
14 above 10.25 percent rather than in the 10.0 percent to 10.25 percent range
15 mentioned by Ms. Carlock.

16 Her DCF results are also questionable. The growth rates in that analysis
17 are low because she uses only Value Line growth rate data, which indicates a
18 growth rate of only 4.4 percent. Also, for one of her two dividend yields, she uses
19 Value Line’s projected yields for 3-5 years in the future, which are lower than
20 current actual dividend yields and are not likely consistent with investors’ current
21 yield requirements given the recently depressed levels of utility stock prices.

³ See page 14 of the proprietary version of Dr. Hadaway’s rebuttal workpapers.

1 With more consideration for these factors, Ms. Carlock could have found an ROE
2 well above 10.0 percent.

3 **Q. You criticize the other parties' lack of consideration for current economic**
4 **conditions. What does Ms. Carlock say about the economy?**

5 A. On page 15, she offers a brief discussion of interest rates and stock market levels.
6 She says that interest rates have been low during 2010. She also notes that the
7 Dow Jones Industrial Average reached a peak of over 14,000 in 2007 and as of
8 October 4, 2010 was at a level of 10,751. She does not acknowledge that this
9 weak stock market performance implies a higher cost of equity. Although, due to
10 government expansionary monetary policy, interest rates have declined to their
11 lowest levels in many years, stock market investors remain highly risk averse. In
12 this environment, the equity market's required risk premium is larger, not lower.
13 Ms. Carlock might have reached a higher conclusion about RMP's cost of equity
14 if she had taken a broader view of market conditions.

15 **Q. How does Ms. Carlock determine the growth rate in her DCF model?**

16 A. For her growth, she uses Value Line's projected growth rates in cash flow,
17 earnings, dividends, and book value. Although the calculation is not shown in her
18 testimony, in her work papers she shows the average result to be 4.4 percent (see
19 the average of growth rates in column I of the DCF tab in the "PAC-E-10-
20 7_TCarlock_Workpapers.xls" workpaper file provided by Ms. Carlock).

21 **Q. Would Ms. Carlock have found a higher growth rate if she had considered**
22 **other growth rate sources?**

23 A. Yes. There are at least three areas that should be considered in evaluating Ms.

1 Carlock's DCF growth rate estimate. First, several of her growth rate
2 observations are lower than any investor would expect for long-term growth in the
3 DCF model. For example, Value Line's average projection for dividend growth
4 for her 15-company "A" group is only 3.68 percent, and for seven of her
5 companies that growth rate is less than 3 percent. Such low relatively near-term
6 growth rate projections are not consistent with the long-term, steady-state growth
7 rates required in the DCF model.

8 As a second issue, other analysts' growth rate projections, beyond those
9 provided by Value Line, are readily available on-line at no cost. In my updated
10 DCF analysis in Exhibit No. 59, page 2, I average Value Line's projected earnings
11 growth with similar estimates from Zacks and Thomson Financial. That average
12 for my comparable group of single-A rated companies is 5.52 percent. Had Ms.
13 Carlock included other analysts' growth estimates in her calculations, she would
14 have found higher average growth, which would have produced a substantially
15 higher ROE estimate.

16 Finally, many regulatory economists are now also including more broadly-
17 based growth rate sources, such as the projected growth rate in gross domestic
18 product (GDP). The FERC has used this growth rate, along with analysts' growth
19 projections, for many years in gas pipeline cases. While we disagree on the level,
20 Mr. Gorman and I have routinely used GDP growth as one of our long-term
21 growth estimates for the past several years. My estimate of the expected GDP
22 long-term growth rate (6.0%) is shown in my Direct Testimony Exhibit No. 12.

1 Ms. Carlock's DCF growth rate and her DCF ROE estimates would have been
2 higher if she had included a broader-based growth rate assessment.

3 **Q. Why do you disagree with Ms. Carlock's using a 3-5 year future dividend**
4 **yield in her analysis?**

5 A. The projected yield from Value Line's 3-5 year forecast is lower than current
6 market yields because it is based on utility stock prices that Value Line projects
7 for the 2013-2015 time period. For her group, the dividend yield based on 2009
8 data is 4.95 percent, but the 2013-2015 yield is only 4.39 percent. The 4.39
9 percent yield is not consistent with what investors are currently paying for utility
10 stocks and, therefore, it is not representative of the current cost of equity capital.
11 For my comparable group, as shown in Exhibit No. 59, the updated dividend yield
12 with stock prices through September is 4.8 percent to 4.9 percent, about the same
13 as Ms. Carlock's 2009 dividend yield.

14 **Q. What would Ms. Carlock's DCF analysis have indicated if she used only her**
15 **2009 dividend yield (4.95%) or your average 2010 dividend yield (4.77%)**
16 **with the 5.52 percent average of analysts' growth projections from your**
17 **Exhibit No. 59?**

18 A. Her DCF range would have been 10.29 percent to 10.47 percent (4.77% yield +
19 5.52% growth = 10.29% ROE and 4.95% yield + 5.52% growth = 10.47% ROE).
20 This range would have been much closer to the 10.5 percent CE check of
21 reasonableness that Ms. Carlock found for her "A" financial strength Value Line
22 electric utility group.

1 **Q. Please summarize your rebuttal of Ms. Carlock?**

2 A. Ms. Carlock's 10.0 percent ROE recommendation does not adequately consider
3 the ongoing equity market effects that have lingered from the recent financial
4 crisis. She seems to base her recommendation on a belief that much lower
5 government-induced interest rates should translate directly to a lower cost of
6 equity. While equity costs have declined somewhat from the near-chaotic
7 conditions that existed in late 2008 and early 2009, they have not dropped in
8 lockstep with interest rates. Ms. Carlock's limited DCF growth rate analysis and
9 use of one dividend yield from the 2013-2015 time period should be reconsidered
10 and her CE check of reasonableness for the "A" financial strength Value Line
11 electric utility group should be given more weight.

12 **Rebuttal of Monsanto Witness Gorman**

13 **Q. What is the basis for Mr. Gorman's 9.5 percent ROE recommendation?**

14 A. Mr. Gorman's results are summarized on page 37 of his testimony. Based on two
15 constant growth and one multi-stage growth DCF models, a risk premium
16 analysis, and the CAPM, he concludes that the reasonable ROE range is 9.1
17 percent to 9.9 percent with a midpoint of 9.5 percent.

18 **Q. What is your general assessment of Mr. Gorman's ROE testimony and**
19 **recommendation?**

20 A. Mr. Gorman's recommendation is far below RMP's cost of equity. His
21 recommendation is understated because he employs negatively biased model
22 inputs and he includes the results from one model, the CAPM, that are currently
23 unreliable. In addition, even if there were no Federal Reserve activity distorting

1 fixed income yields, his equity risk premium analysis is flawed because he rejects
2 the well-documented fact that equity risk premiums increase when interest rates
3 are low (as they are now) and decrease when interest rates are higher. I will show
4 that, but for these deficiencies, Mr. Gorman's analysis should have supported an
5 ROE of 10.21 percent.

6 **Q. What are your specific areas of disagreement with Mr. Gorman's analysis?**

7 **A.** Mr. Gorman and I disagree strongly on the principal inputs to two of his three
8 models and we disagree on the current reliability of the CAPM. In his analysis,
9 he consistently applies inputs that are negatively biased and produce the lowest
10 ROE results. In one of his constant growth DCF models, he summarizes the data
11 in a way that skews the results downward. In his multi-stage DCF model, which
12 is similar to mine, he agrees with me that GDP growth is an appropriate input, but
13 he uses short-term GDP growth rate forecasts that are significantly dominated by
14 recently low inflation rates. The inflation rates in his GDP forecast are almost a
15 full percentage point lower than the longer-term historical averages. This
16 approach is inconsistent with the long-term growth rate requirement of the DCF
17 model.

18 In his equity risk premium analysis, he selects data that are not consistent
19 with the recent risk premiums allowed by regulators and he fails to include the
20 well documented inverse relationship that exists between equity risk premiums
21 and interest rates, i.e., equity risk premiums tend to increase when interest rates
22 are low and decrease when interest rates are high. With this omission, in the

1 currently low interest rate environment, his equity risk premiums are significantly
2 understated and, therefore, his equity risk premium estimates of ROE are too low.

3 His CAPM estimates are even lower. From that analysis, his ROE
4 estimate is only 8.80 percent. This result is far below the next lowest number in
5 the summary shown in his Table 4 on page 37. This low result is simply a
6 confirmation of the CAPM's current artificially low input problems that I
7 discussed earlier. The CAPM estimate is clearly an outlier that should have been
8 discarded.

9 **Q. Can you demonstrate what Mr. Gorman's results would have been if he had**
10 **used more reasonable input assumptions?**

11 **A.** Yes. I have redone one of Mr. Gorman's constant growth DCF models with one
12 correction and I have redone his multi-stage model with a more reasonable long-
13 term GDP growth rate input. In Mr. Gorman's "sustainable growth" DCF
14 analysis, the result for DPL, Inc. is 19.14 percent, which he correctly considers to
15 be an outlier. Rather than simply eliminating DPL, Inc. from his group, however,
16 Mr. Gorman uses the group median, rather than average and median, to
17 summarize all of his results. A more logical approach would have been simply to
18 remove DPL, Inc. from the analysis. When that is done, as I show in Exhibit No.
19 58, page 2, the group average is 9.48 percent, as compared to Mr. Gorman's
20 group median (including DPL) of 9.14 percent. Although not a large effect when
21 applied to all three of Mr. Gorman's models, his reporting of only the median
22 results in his summary table produces a slightly lower overall DCF estimate.

1 **Q. What is your specific disagreement with Mr. Gorman's multi-stage DCF**
2 **analysis?**

3 A. In that analysis, Mr. Gorman uses analysts' growth rate forecasts in the first five
4 years and a GDP growth rate forecast for years 11 and later. In the intermediate
5 years, years six through 10, he interpolates growth in a linear fashion between the
6 first and third stages. I disagree with his final result because it is dominated by an
7 estimate of future GDP growth that is far too low. He uses GDP growth forecast
8 from the Blue Chip Financial Forecast service, which are for five and 10-year
9 periods. The current Blue Chip GDP consensus forecasts are low because they
10 are dominated by low expected real growth in the economy and the assumed long-
11 term inflation rate is only about 2.0 percent. As shown in the GDP forecast in my
12 Direct Testimony Exhibit No. 12, these inflation rates are lower than for any 10-
13 year period in the last 60 years. The nominal 4.9 percent growth rate that Mr.
14 Gorman uses is itself lower than nominal GDP growth in any 10-year period,
15 other than the most recent 10-years, which is obviously dominated by the low
16 growth rates experienced in 2008 and 2009 and that are currently expected
17 through 2011. For Mr. Gorman to base his long-term DCF growth estimate on
18 currently depressed near-term GDP expectations is unrealistic and it creates an
19 unrealistically low estimate of ROE.

20 **Q. If Mr. Gorman had used your updated GDP growth rate, what would the**
21 **results of his multi-stage DCF analysis have been?**

22 A. In Exhibit No. 58, page 3, I have reproduced Mr. Gorman's multi-stage analysis
23 from his Exhibit No. 210 (MPG-9) with my 6.0 percent GDP growth forecast

1 substituted for his growth rates in years 11 and later. From that analysis, the
2 average ROE is 10.70 percent and the median is 10.94 percent.

3 **Q. Please comment on Mr. Gorman's equity risk premium analysis.**

4 A. In his equity risk premium analysis, Mr. Gorman fails to include the well-
5 documented tendency for equity risk premiums to increase when interest rates are
6 low and decrease when interest rates are higher. In the risk premium analysis
7 from my Direct Testimony, I provide a detailed regression of the past 30 years of
8 data to document this fact. Mr. Gorman ignores that relationship altogether.
9 When his analysis is modified to properly reflect wider equity risk premiums that
10 are appropriate in the current low interest rate environment, his equity risk
11 premium is much higher.

12 **Q. Please elaborate.**

13 A. Mr. Gorman presents his equity risk premium data in Exhibit Nos. 212-213
14 (MPG-11 through MPG-12). He discusses that analysis on pages 28-32 of his
15 testimony. The analysis consists of two parts. In one approach, he adds equity
16 risk premiums based on government bond interest rates of 4.40 percent to 6.08
17 percent to a projected Treasury bond yield of 4.70 percent. This analysis
18 produces an ROE range of 9.10 percent to 10.78. In his second approach he adds
19 equity risk premiums of 3.03 percent to 4.59 percent over utility bond yields to
20 the recent "A" utility bond yield of 5.17 percent. This analysis produces an ROE
21 range of 8.20 percent to 9.76 percent, with a midpoint estimate of 8.98 percent.
22 From these two results, he concludes that an ROE of 9.46 percent is appropriate.

1 Q. What does Mr. Gorman's equity risk premium data indicate when your
2 regression analysis approach is included?

3 A. In Exhibit No. 58, pages 4-7, I have applied the standard regression analysis to
4 calculate "interest rate adjustment" factors for his two equity risk premium
5 studies. This approach properly takes into account the inverse relationship
6 between equity risk premiums and interest rates. With this adjustment, Mr.
7 Gorman's Treasury bond equity risk premium analysis indicates an ROE of 10.57
8 percent, as shown in pages 4-5 of Exhibit No. 58. His utility bond equity risk
9 premium analysis indicates an ROE of 9.91 percent (pages 6-7). The midpoint of
10 these revised risk premium results is 10.23 percent.

11 Q. Please summarize the results of your adjustments to Mr. Gorman's ROE
12 analysis.

13 A. My adjustments are summarized in Table 4 below:

Table 4
Summary of Updated Gorman ROE Results

	Summary of Results	
	Gorman Initial ROE	Updated ROE
DCF Models		
Constant Growth DCF (Analysts' Growth)	10.50%	10.50%
Constant Growth DCF (Sustainable Growth)	9.14%	9.11%
Multi-Stage DCF	9.90%	10.94%
DCF	9.85%	10.18%
Risk Premium Average	9.46%	10.24%
CAPM	8.80%	NA
Recommended ROE	9.50%	10.21%

14 His constant growth DCF result at 10.50 percent is within the reasonable range.

15 As discussed above, removing DPL, Inc. from the analysis altogether (rather than

1 just relying on the median), changes his sustainable growth constant growth result
2 to 9.11 percent, relative to a group average of 9.48 percent. The inclusion of a
3 more realistic long-term GDP growth rate of 6.0 percent in his multi-stage DCF
4 analysis increases that result to 10.94 percent. Factoring in the observed inverse
5 relationship between interest rates and equity risk premiums, increases the equity
6 risk premium average to 10.24 percent. I also excluded his unreasonably low
7 CAPM result altogether. As shown above, the average of the adjusted DCF and
8 risk premium results is an ROE of 10.21 percent. Had Mr. Gorman considered
9 these more reasonable inputs, his ROE estimates would have been well above the
10 9.5 percent ROE he recommends.

11 **Q. On pages 42-51, Mr. Gorman criticizes various aspects of your ROE analysis.**

12 **What is your general response to his criticisms?**

13 **A.** His criticisms are not accurate. They are principally focused on my use of the
14 GDP growth rate in my DCF model and his mistaken view that the cost of equity
15 for utilities has declined as much as interest rates. His characterization of my
16 GDP growth forecast is misplaced and his contention that equity costs have
17 declined significantly is simply wrong.

18 **Q. On pages 44-45, Mr. Gorman criticizes your GDP growth forecast by saying**
19 **that it is based on historical GDP data. Is it accurate to say that your**
20 **forecast is a “historical input”?**

21 **A.** No. The GDP growth rate that I use is a forecast based on general economic
22 conditions that investors may expect for utilities in the very long run, as is
23 required in the DCF model. While I develop my forecast from the St. Louis

1 Federal Reserve Bank data base that covers the past 60 years, my forecast is not a
2 simple average or an extrapolation of the historical data. As is done in most
3 econometric forecasts, I use the long-run historical relationships to project what
4 investors may reasonably expect for the long-term future. I also give more weight
5 to more recent observations by applying weighted averages that give about five
6 times as much weight to the most recent 10 years as compared to the earliest 10
7 years. Giving more weight to the more recent data lowers the overall growth rate
8 forecast. For example, my current forecast is 6.0 percent whereas the annual
9 average of the growth rate data is 6.9 percent. In this context, Mr. Gorman's
10 criticism of my growth forecast is unwarranted and his comparison of my
11 approach to forecasted earnings growth rates is misplaced.

12 **Q. How do you respond to Mr. Gorman's criticisms of your equity risk**
13 **premium analysis?**

14 **A.** I find Mr. Gorman's comments about my equity risk premium analysis surprising
15 since he has relied on the same data in his equity risk premium analysis. He
16 adopts my commission-authorized ROEs as the basis to estimate risk premiums
17 and then he applies those risk premiums, as I do, to both projected and current
18 interest rates. The primary differences between our approaches is that my
19 historical timeframe is longer (my data goes back to 1980, Mr. Gorman's to 1986)
20 and I take into account the inverse relationship between interest rates and equity
21 risk premiums. As I demonstrated previously, had Mr. Gorman included this
22 fundamental relationship in his analysis, his equity risk premium analysis would
23 have produced an ROE above 10 percent.

1 **Update of ROE Estimates**

2 **Q. Have you updated your ROE analysis to take into account recent data and**
3 **the current conditions in the capital markets?**

4 A. Yes. Consistent with my customary practice, I have updated my ROE analysis for
5 current conditions using the same methodologies that I employed in my direct
6 testimony.

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

8 A. My updated DCF results are shown in Exhibit No. 59. The indicated DCF range
9 is 10.3 percent to 10.8 percent, with a midpoint of 10.55 percent.

10 **Q. What are the results of your updated bond yield plus equity risk premium**
11 **analysis?**

12 A. My equity risk premium studies are shown in Exhibit No. 60. These studies
13 indicate an ROE range of 9.73 percent to 9.91 percent. Under current market
14 conditions, I discount these results because current utility bond yields are
15 artificially depressed by government monetary policy and investors' continuing
16 flight to safety away from the ongoing turbulence in the equity capital market.

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

18 A. My updated DCF analysis shows that Rocky Mountain Power's current cost of
19 equity capital is in the range of 10.3 percent to 10.8 percent. These results show
20 that the Company's requested ROE of 10.6 percent is reasonable and that the
21 recommendations of Ms. Carlock and Mr. Gorman, as discussed herein, are
22 unreasonably low.

1 **Q. Are you providing a CAPM analysis in your ROE update?**

2 **A.** No. As I explained previously, government monetary policies and recent flight to
3 safety issues have pushed Treasury bond interest rates to artificially low levels. In
4 this environment, CAPM estimates understate the market cost of equity capital.
5 For this reason, I do not include CAPM estimates in my ROE analysis and any
6 results from a CAPM analysis should be disregarded.

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

8 **A.** Yes.

Case No. PAC-E-10-07
Exhibit No. 57
Witness: Samuel C. Hadaway

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Rebuttal Testimony of Samuel C. Hadaway

Economic Data

November 2010

Rocky Mountain Power Long-Term Interest Rate Trends

Month	Single-A Utility Rate	30-Year Treasury Rate	Single-A Utility Spread
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
Sep-09	5.53	4.19	1.34
Oct-09	5.55	4.19	1.36
Nov-09	5.64	4.31	1.33
Dec-09	5.79	4.49	1.30
Jan-10	5.77	4.60	1.17
Feb-10	5.87	4.62	1.25
Mar-10	5.84	4.64	1.20
Apr-10	5.81	4.69	1.12
May-10	5.50	4.29	1.21
Jun-10	5.46	4.13	1.33
Jul-10	5.26	3.99	1.27
Aug-10	5.01	3.80	1.21
Sep-10	5.01	3.77	1.24
Oct-10	5.10	3.87	1.23
3-Mo Avg	5.04	3.81	1.23
12-Mo Avg	5.51	4.27	1.24

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

Three month average is for August 2010 - October 2010.

Twelve month average is for November 2009 - October 2010.

Economic Indicators

Seasonally Adjusted Annual Rates — Dollar Figures in Billions

	Annual % Change				2010				E2011					
	2009	E2010	E2011	2009	E2010	E2011	1Q	R2Q	E3Q	E4Q	1Q	2Q	3Q	4Q
Gross Domestic Product														
GDP (current dollars)	\$14,119.0	\$14,635.3	\$15,197.6	(1.7)	3.7	3.8	\$14,446.4	\$14,578.7	\$14,723.7	\$14,792.3	\$14,957.5	\$15,095.1	\$15,263.5	\$15,474.3
Annual rate of increase (%)	(1.7)	3.7	3.8	-	-	-	4.8	3.7	4.0	1.9	4.5	3.7	4.5	5.6
Annual rate of increase—real GDP (%)	(2.6)	2.7	2.5	-	-	-	3.7	1.7	1.7	2.0	2.4	2.6	3.2	4.2
Annual rate of increase—GDP deflator (%)	0.9	0.9	1.4	-	-	-	1.0	1.9	2.3	(0.1)	2.1	1.1	1.3	1.4
*Components of Real GDP														
Personal consumption expenditures	\$9,154.0	\$9,299.8	\$9,513.2	(1.2)	1.6	2.3	\$9,225.4	\$9,275.7	\$9,322.5	\$9,375.8	\$9,435.4	\$9,477.9	\$9,535.9	\$9,603.5
% change	(1.2)	1.6	2.3	-	-	-	1.9	2.2	2.0	2.3	2.6	1.8	2.5	2.9
Durable goods	1,094.6	1,164.1	1,241.1	(3.7)	6.3	6.6	1,139.9	1,157.8	1,172.7	1,186.7	1,214.4	1,222.5	1,248.2	1,279.3
Nondurable goods	2,017.4	2,067.8	2,104.8	(1.2)	2.5	1.8	2,053.5	2,063.4	2,069.4	2,085.0	2,091.4	2,099.4	2,109.0	2,119.3
Services	6,032.7	6,067.5	6,177.0	(0.8)	0.6	1.8	6,029.6	6,053.4	6,081.0	6,106.1	6,135.8	6,162.7	6,189.2	6,220.5
Nonresidential fixed investment	1,290.8	1,354.0	1,445.4	(17.1)	4.9	6.7	1,302.6	1,355.3	1,368.1	1,390.1	1,409.3	1,434.1	1,458.2	1,479.9
% change	(17.1)	4.9	6.7	-	-	-	7.8	17.2	3.8	6.6	5.6	7.2	6.9	6.1
Producers durable equipment	916.3	1,051.4	1,173.0	(15.3)	14.7	11.6	989.7	1,046.0	1,069.2	1,100.7	1,129.2	1,161.8	1,189.1	1,211.7
Residential fixed investment	333.9	319.2	341.0	(23.2)	(4.4)	6.8	321.4	340.7	308.6	306.0	313.1	330.3	344.8	375.6
% change	(23.2)	(4.4)	6.8	-	-	-	(12.8)	26.2	(32.7)	(3.3)	9.6	23.9	18.6	40.9
Net change in business inventories	(113.1)	68.5	38.6	-	-	-	44.1	68.8	-106.3	54.6	37.9	32.2	36.9	47.3
Gov't purchases of goods & services	2,542.6	2,560.4	2,558.1	1.6	0.7	(0.1)	2,540.2	2,564.9	2,568.5	2,568.0	2,565.9	2,562.7	2,555.8	2,547.8
Federal	1,027.6	1,063.7	1,051.4	5.7	3.5	(1.2)	1,048.4	1,071.5	1,069.4	1,065.4	1,060.3	1,054.3	1,049.3	1,041.8
State & local	1,516.8	1,502.1	1,511.4	(0.9)	(1.1)	0.6	1,496.8	1,493.4	1,504.7	1,507.9	1,510.7	1,513.3	1,511.3	1,510.5
Net exports	(363.0)	(416.7)	(377.7)	-	-	-	(338.4)	(449.0)	(462.8)	(461.6)	(401.3)	(386.5)	(371.6)	(350.2)
Exports	1,490.7	1,666.5	1,809.6	(9.5)	11.8	8.6	1,616.4	1,652.1	1,680.2	1,717.2	1,748.6	1,787.3	1,831.7	1,870.7
Imports	1,853.8	2,083.2	2,187.2	(13.8)	12.4	5.0	1,954.8	2,101.1	2,143.0	2,133.8	2,149.8	2,173.9	2,203.4	2,221.8
**Income & Profits														
Personal income	\$12,175.0	\$12,516.2	\$12,934.5	(1.7)	2.8	3.3	\$12,350.3	\$12,473.8	\$12,563.5	\$12,677.4	\$12,768.1	\$12,867.3	\$12,984.8	\$13,117.7
Disposable personal income	11,035.0	11,365.9	11,681.8	0.7	3.0	2.8	11,215.6	11,336.5	11,407.8	11,503.9	11,543.9	11,629.0	11,721.0	11,833.4
Savings rate (%)	5.9	5.7	4.8	-	-	-	5.5	5.9	5.8	5.7	5.0	5.0	4.8	4.6
Corporate profits before taxes	1,316.7	1,773.8	1,835.2	(1.2)	34.7	3.5	1,772.9	1,788.2	1,775.5	1,758.6	1,782.1	1,816.7	1,852.1	1,890.0
Corporate profits after taxes	1,061.8	1,368.1	1,334.4	3.6	28.8	(2.5)	1,369.7	1,382.6	1,362.9	1,357.3	1,292.4	1,320.5	1,347.5	1,377.0
Earnings per share (S&P 500)	51.30	71.56	85.32	245.0	39.5	19.2	61.28	67.46	70.36	71.56	75.42	77.12	81.28	85.32
†Prices & Interest Rates														
Consumer price index	(0.3)	1.6	1.7	-	-	-	1.5	(0.7)	1.6	1.9	2.1	1.6	1.9	2.0
Treasury bills	0.2	0.1	0.3	-	-	-	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.4
10-yr notes	3.3	3.1	2.5	-	-	-	3.7	3.5	2.8	2.5	2.4	2.4	2.5	2.7
30-yr bonds	4.1	4.1	3.5	-	-	-	4.6	4.4	3.9	3.6	3.5	3.5	3.5	3.6
New issue rate—corporate bonds	5.3	4.8	4.3	-	-	-	5.3	5.0	4.6	4.4	4.2	4.2	4.3	4.3
Other Key Indicators														
Housing starts (1,000 units SAAR)	550.0	596.0	786.4	(38.4)	7.5	31.9	617.0	602.0	567.9	597.1	656.4	723.3	823.0	942.9
Auto & truck sales (1,000,000 units)	10.4	11.4	12.9	(21.2)	9.4	13.0	11.0	11.3	11.6	11.6	12.2	12.5	13.0	13.6
Unemployment rate (%)	9.3	9.7	9.5	-	-	-	9.7	9.7	9.6	9.8	9.7	9.6	9.5	9.5
U.S. dollar	4.3	(3.0)	(8.0)	-	-	-	11.3	15.6	(8.4)	(15.1)	(10.9)	(7.6)	(3.3)	(3.9)

Note: Annual changes are from prior year and quarterly changes are from prior quarter. Figures may not add to totals because of rounding. A—Advance data. P—Preliminary. E—Estimated. R—Revised.

*2005 Chain-weighted dollars. **Current dollars. †Trailing 4 quarters. ‡Average for period. §Quarterly % changes at quarterly rates. This forecast prepared by Standard & Poor's.

**Rocky Mountain Power
Authorized Electric Utility Equity Returns**

Average Authorized ROE	2006	No.	2007	No.	2008	No.	2009	No.	2010	No.
All Electric Utilities	10.36%	26	10.36%	39	10.46%	37	10.48%	39	10.36%	43
Vertically-Integrated Utilities	10.57%	15	10.56%	28	10.45%	25	10.63%	27	10.42%	27
Delivery-Only Utilities	9.91%	10	9.86%	11	9.78%	7	10.15%	10	9.98%	14
Power Plant Only Cases	11.90%	1	NA	0	11.44%	5	10.18%	2	12.30%	2

Data Source:
Regulatory Focus, "Major Rate Case Decisions," Regulatory Research Associates, Oct 4, 2010;
January 12, 2009; and January 30, 2007. Data for 2010 is through the 3rd Quarter.

Case No. PAC-E-10-07
Exhibit No. 58
Witness: Samuel C. Hadaway

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Rebuttal Testimony of Samuel C. Hadaway

Updated Gorman ROE Results

November 2010

Rocky Mountain Power Summary of Updated Gorman ROE Results

	(1)	(2)
	Summary of Results	
	Gorman Median ROE	Updated Median ROE
DCF Models		
Constant Growth DCF (Analysts' Growth)	10.50%	10.50%
Constant Growth DCF (Sustainable Growth)	9.14%	9.11%
Multi-Stage DCF	9.90%	10.94%
DCF	9.85%	10.18%
Risk Premium Average	9.46%	10.24%
CAPM	8.80%	NA
High/Low Midpoint (Recommended ROE)	9.50%	10.21%

Notes:

Column 1: Gorman, page 27 (DCF results) and page 37 (summary results).

Column 2: Constant Growth DCF results not changed.

DPL result at 19.14% is considered an outlier and removed from the group (see page 2 of this Exhibit).

Only change to Multi-Stage DCF result is the use of a third-stage growth rate of 6.0% (see page 3 of this Exhibit).

Risk Premium results are an average of Treasury Bond results (see from pages 4-5 of this Exhibit) and Utility Bond results (see pages 6-7 of this Exhibit).

CAPM results are not reliable and are excluded as discussed in my testimony.

ROE results are midpoint of DCF average and average of Risk Premium and CAPM results.

Rocky Mountain Power Gorman Sustainable Growth DCF Analysis (eliminating DPL)

	(1)	(2)	(3)	(4)	(5)	
No.	Company	Price P ₀	Sustainable Growth	Dividend D ₀	Adjusted Yield	Cost of Equity
1	ALLETE	\$35.60	3.05%	\$1.76	5.10%	8.14%
2	Alliant Energy Co.	\$34.26	5.87%	\$1.58	4.88%	10.76%
3	Black Hills Corp	\$30.44	2.95%	\$1.44	4.87%	7.82%
4	Con. Edison	\$46.03	3.53%	\$2.38	5.35%	8.88%
5	DPL Inc.	\$25.26	13.69%	\$1.21	5.45%	19.14%
6	DTE Energy Co.	\$46.88	3.97%	\$2.12	4.70%	8.67%
7	Duke Energy	\$16.94	2.53%	\$0.98	5.93%	8.46%
8	Edison Internat.	\$33.38	5.20%	\$1.26	3.97%	9.17%
9	Entergy Corp.	\$77.17	4.75%	\$3.32	4.51%	9.25%
10	NextEra Corp.	\$52.27	6.79%	\$2.00	4.09%	10.87%
11	IDACORP	\$35.04	5.10%	\$1.20	3.60%	8.69%
12	Northeast Utilities	\$27.80	5.23%	\$1.03	3.88%	9.11%
13	NSTAR	\$37.06	4.15%	\$1.60	4.50%	8.64%
14	PG&E Corp.	\$44.25	8.26%	\$1.82	4.45%	12.72%
15	Portland General	\$19.33	3.28%	\$1.04	5.56%	8.83%
16	Progress Energy	\$41.56	2.91%	\$2.48	6.14%	9.05%
17	SCANA Corp.	\$38.28	5.74%	\$1.90	5.25%	10.99%
18	Sempra Energy	\$50.24	5.72%	\$1.56	3.28%	9.01%
19	Southern Co.	\$35.27	5.53%	\$1.82	5.45%	10.98%
20	Vectren Corp.	\$24.45	3.79%	\$1.36	5.77%	9.56%
21	Wisconsin Energy	\$54.00	6.56%	\$1.60	3.16%	9.72%
22	Xcel Energy Inc.	\$21.84	4.96%	\$1.01	4.85%	9.81%
	Average	\$38.19	4.76%	\$1.68	4.73%	9.48%
	Median					9.11%

Notes:

Columns 1-5: Exhibit No. 209 (MPG-8).

DPL result at 19.14% is considered an outlier and removed from the group average and median calculation.

Rocky Mountain Power
Gorman Multi-Stage Growth DCF Analysis (with Long-Term GDP Growth)

No.	Company	(1) Price P ₀	(2) Dividend D ₀	(3) First Stage Growth (EPS)	(4-7) Second Stage Growth				(8) Year 10	(9) Third Stage Growth (GDP)	(10) Updated Cost of Equity
					Year 6	Year 7	Year 8	Year 9			
1	ALLETE	\$35.60	\$1.76	5.28%	5.40%	5.52%	5.64%	5.76%	5.88%	6.00%	11.02%
2	Alliant Energy Co.	\$34.26	\$1.58	6.31%	6.26%	6.21%	6.16%	6.10%	6.05%	6.00%	10.98%
3	Black Hills Corp	\$30.44	\$1.44	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	11.01%
4	Con. Edison	\$46.03	\$2.38	4.45%	4.71%	4.96%	5.22%	5.48%	5.74%	6.00%	10.99%
5	DPL Inc.	\$25.26	\$1.21	8.85%	8.38%	7.90%	7.43%	6.95%	6.48%	6.00%	12.01%
6	DTE Energy Co.	\$46.88	\$2.12	4.87%	5.06%	5.24%	5.43%	5.62%	5.81%	6.00%	10.47%
7	Duke Energy	\$16.94	\$0.98	3.63%	4.03%	4.42%	4.82%	5.21%	5.61%	6.00%	11.32%
8	Edison Internat.	\$33.38	\$1.26	4.66%	4.88%	5.11%	5.33%	5.55%	5.78%	6.00%	9.67%
9	Entergy Corp.	\$77.17	\$3.32	3.29%	3.74%	4.19%	4.65%	5.10%	5.55%	6.00%	9.84%
10	NextEra Corp.	\$52.27	\$2.00	6.44%	6.36%	6.29%	6.22%	6.15%	6.07%	6.00%	10.17%
11	IDACORP	\$35.04	\$1.20	4.00%	4.33%	4.67%	5.00%	5.33%	5.67%	6.00%	9.18%
12	Northeast Utilities	\$27.80	\$1.03	7.66%	7.38%	7.10%	6.83%	6.55%	6.28%	6.00%	10.33%
13	NSTAR	\$37.06	\$1.60	5.62%	5.68%	5.75%	5.81%	5.87%	5.94%	6.00%	10.47%
14	PG&E Corp.	\$44.25	\$1.82	6.84%	6.70%	6.56%	6.42%	6.28%	6.14%	6.00%	10.59%
15	Portland General	\$19.33	\$1.04	7.00%	6.83%	6.67%	6.50%	6.33%	6.17%	6.00%	12.05%
16	Progress Energy	\$41.56	\$2.48	3.94%	4.29%	4.63%	4.97%	5.31%	5.66%	6.00%	11.59%
17	SCANA Corp.	\$38.28	\$1.90	4.83%	5.03%	5.22%	5.42%	5.61%	5.81%	6.00%	10.90%
18	Sempra Energy	\$50.24	\$1.56	5.67%	5.72%	5.78%	5.83%	5.89%	5.94%	6.00%	9.21%
19	Southern Co.	\$35.27	\$1.82	5.18%	5.31%	5.45%	5.59%	5.73%	5.86%	6.00%	11.20%
20	Vectren Corp.	\$24.45	\$1.36	4.92%	5.10%	5.28%	5.46%	5.64%	5.82%	6.00%	11.53%
21	Wisconsin Energy	\$54.00	\$1.60	9.00%	8.50%	8.00%	7.50%	7.00%	6.50%	6.00%	9.78%
22	Xcel Energy Inc.	\$21.84	\$1.01	6.28%	6.23%	6.19%	6.14%	6.09%	6.05%	6.00%	10.99%
	Average	\$37.61	\$1.66	5.67%	5.72%	5.78%	5.83%	5.89%	5.94%	6.00%	10.70%
	Median										10.94%

Notes:

Columns 1-3: Exhibit No. 210 (MPG-9).

Columns 4-8: Linear interpolation between columns 3 and 9.

Column 9: See RMP Exhibit No. 12.

Column 10: The internal rate of return implied by the price in column 1 and dividends for 200 periods. The initial dividend shown in column 2 is assumed to grow for the first five periods at the rate in column 3, then at the rate in columns 4-8 for years 6-10, then at the rate in column 9 for the remaining periods.

Rocky Mountain Power
 Update of Gorman Risk Premium Analysis - Treasury Bond (Projected)

	(1)	(2)	(3)
	TREASURY BOND YIELD	AUTHORIZED ELECTRIC RETURNS	INDICATED RISK PREMIUM
1986	7.78%	13.93%	6.15%
1987	8.59%	12.99%	4.40%
1988	8.96%	12.79%	3.83%
1989	8.45%	12.97%	4.52%
1990	8.61%	12.70%	4.09%
1991	8.14%	12.55%	4.41%
1992	7.67%	12.09%	4.42%
1993	6.59%	11.41%	4.82%
1994	7.37%	11.34%	3.97%
1995	6.88%	11.55%	4.67%
1996	6.71%	11.39%	4.68%
1997	6.61%	11.40%	4.79%
1998	5.58%	11.66%	6.08%
1999	5.87%	10.77%	4.90%
2000	5.94%	11.43%	5.49%
2001	5.49%	11.09%	5.60%
2002	5.43%	11.16%	5.73%
2003	4.96%	10.97%	6.01%
2004	5.05%	10.75%	5.70%
2005	4.65%	10.54%	5.89%
2006	4.91%	10.36%	5.45%
2007	4.84%	10.36%	5.52%
2008	4.28%	10.46%	6.18%
2009	4.08%	10.48%	6.40%
Jun 2010	4.50%	10.41%	5.92%
AVERAGE	6.32%	11.50%	5.19%

INDICATED COST OF EQUITY

PROJECTED TREASURY BOND YIELD*	4.70%
TREASURY BOND AVG ANNUAL YIELD DURING STUDY	<u>6.32%</u>
INTEREST RATE DIFFERENCE	<u>-1.62%</u>

INTEREST RATE CHANGE COEFFICIENT	<u>-42.14%</u>
ADJUSTMENT TO BASIC RISK PREMIUM	0.68%

BASIC RISK PREMIUM	5.19%
INTEREST RATE ADJUSTMENT	<u>0.68%</u>
EQUITY RISK PREMIUM	<u>5.87%</u>

PROJECTED TREASURY BOND YIELD*	<u>4.70%</u>
INDICATED EQUITY RETURN	<u>10.57%</u>

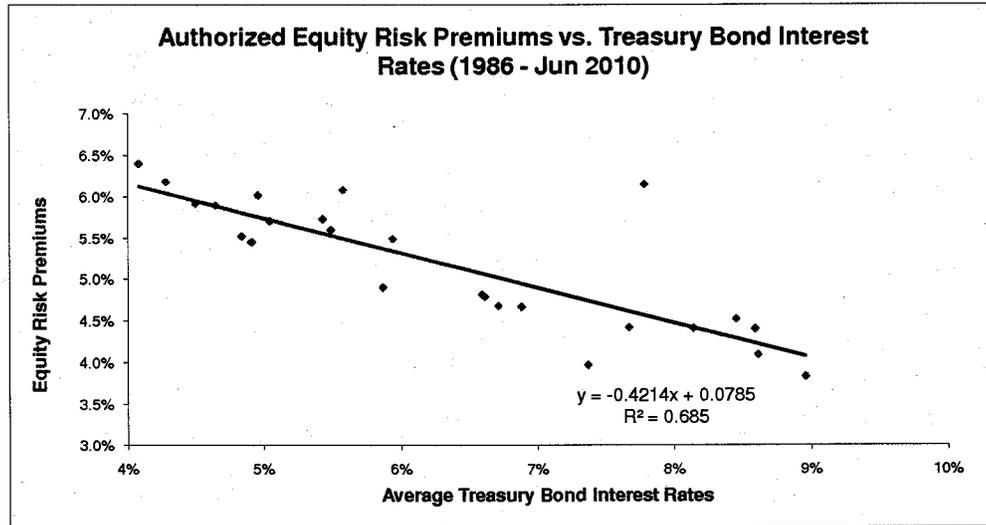
Notes:

Columns 1-3: Exhibit No. 212 (MPG-11).

*See Gorman page 31, lines 20-21 for Projected Treasury Bond Yield.

See regression data on page 5 of this Exhibit for derivation of "Interest Rate Change Coefficient."

Rocky Mountain Power
 Update of Gorman Risk Premium Analysis - Treasury Bond



SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.827654482
R Square	0.685011942
Adjusted R Square	0.671316809
Standard Error	0.004468313
Observations	25

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0.000998663	0.000998663	50.01864125	3.32057E-07
Residual	23	0.000459214	1.99658E-05		
Total	24	0.001457877			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.078469504	0.003868502	20.28420731	3.55447E-16	0.070466897	0.0864721	0.070466897	0.08647211
X Variable 1	-0.421394706	0.059583105	-7.07238582	3.32057E-07	-0.544651749	-0.298138	-0.54465175	-0.2981377

Rocky Mountain Power
 Update of Gorman Risk Premium Analysis - Utility Bond

	(1) MOODY'S "A" RATED PUBLIC UTILITY BOND YIELD	(2) AUTHORIZED ELECTRIC RETURNS	(3) INDICATED RISK PREMIUM
1986	9.58%	13.93%	4.35%
1987	10.10%	12.99%	2.89%
1988	10.49%	12.79%	2.30%
1989	9.77%	12.97%	3.20%
1990	9.86%	12.70%	2.84%
1991	9.36%	12.55%	3.19%
1992	8.69%	12.09%	3.40%
1993	7.59%	11.41%	3.82%
1994	8.31%	11.34%	3.03%
1995	7.89%	11.55%	3.66%
1996	7.75%	11.39%	3.64%
1997	7.60%	11.40%	3.80%
1998	7.04%	11.66%	4.62%
1999	7.62%	10.77%	3.15%
2000	8.24%	11.43%	3.19%
2001	7.76%	11.09%	3.33%
2002	7.37%	11.16%	3.79%
2003	6.58%	10.97%	4.39%
2004	6.16%	10.75%	4.59%
2005	5.65%	10.54%	4.89%
2006	6.07%	10.36%	4.29%
2007	6.07%	10.36%	4.29%
2008	6.53%	10.46%	3.93%
2009	6.04%	10.48%	4.44%
Jun 2010	5.71%	10.41%	4.70%
AVERAGE	7.75%	11.50%	3.75%

INDICATED COST OF EQUITY

CURRENT "A" UTILITY BOND YIELD*	5.17%
MOODY'S AVG ANNUAL YIELD DURING STUDY	7.75%
INTEREST RATE DIFFERENCE	<u>-2.58%</u>
INTEREST RATE CHANGE COEFFICIENT	<u>-38.42%</u>
ADJUSTMENT TO BASIC RISK PREMIUM	0.99%
BASIC RISK PREMIUM	3.75%
INTEREST RATE ADJUSTMENT	<u>0.99%</u>
EQUITY RISK PREMIUM	<u>4.74%</u>
CURRENT "A" UTILITY BOND YIELD*	<u>5.17%</u>
INDICATED EQUITY RETURN	<u>9.91%</u>

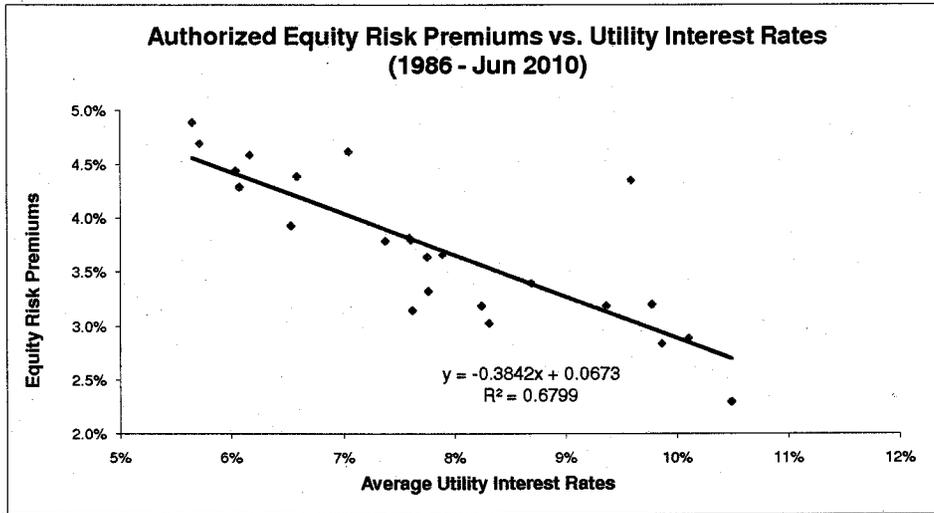
Notes:

Columns 1-3: Exhibit No. 213 (MPG-12).

*See Gorman page 32, lines 1-3 for Current "A" Utility Bond Yield.

See regression data on page 7 of this Exhibit for derivation of "Interest Rate Change Coefficient."

Rocky Mountain Power
 Update of Gorman Risk Premium Analysis - Utility Bond



SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.824542838
R Square	0.679870892
Adjusted R Square	0.665952236
Standard Error	0.003971171
Observations	25

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0.0007703	0.000770311	48.84601293	4.01356E-07
Residual	23	0.0003627	1.57702E-05		
Total	24	0.001133			

	Coefficients	tandard Errc	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.067272587	0.0043354	15.51719134	1.12215E-13	0.058304215	0.07624096	0.058304215	0.07624096
X Variable 1	-0.384177701	0.054969	-6.988992269	4.01356E-07	-0.497889677	-0.27046573	-0.49788968	-0.270465725

Case No. PAC-E-10-07
Exhibit No. 59
Witness: Samuel C. Hadaway

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Rebuttal Testimony of Samuel C. Hadaway

Discounted Cash Flow Analysis

November 2010

Rocky Mountain Power
Discounted Cash Flow Analysis
Summary Of DCF Model Results

Company	Constant Growth DCF Model Analysts' Growth Rates	Constant Growth DCF Model Long-Term GDP Growth	Low Near-Term Growth Two-Stage Growth DCF Model
1 ALLETE	8.7%	10.9%	10.4%
2 Alliant Energy Co.	12.0%	10.7%	10.6%
3 Black Hills Corp	11.0%	10.8%	10.4%
4 Con. Edison	9.0%	11.1%	10.5%
5 DPL Inc.	11.5%	11.0%	10.9%
6 DTE Energy Co.	10.4%	10.9%	10.8%
7 Duke Energy	9.3%	11.8%	11.2%
8 Edison Internat.	5.9%	10.0%	9.8%
9 Empire District	13.2%	12.5%	11.8%
10 Entergy Corp.	8.8%	10.6%	10.5%
11 IDACORP	7.9%	9.4%	9.3%
12 Nextera Energy	10.0%	10.0%	9.8%
13 Northeast Utilities	11.0%	9.9%	9.8%
14 NSTAR	10.8%	10.6%	10.6%
15 PG&E Corp.	11.3%	10.4%	10.5%
16 Portland General	11.5%	11.5%	11.2%
17 Progress Energy	9.8%	12.0%	11.3%
18 SCANA Corp.	9.2%	10.9%	10.4%
19 Sempra Energy	7.5%	9.3%	9.3%
20 Southern Co.	10.1%	11.2%	10.9%
21 Vectren Corp.	10.4%	11.6%	11.1%
22 Wisconsin Energy	12.5%	9.3%	9.6%
23 Xcel Energy Inc.	10.6%	10.6%	10.4%
GROUP AVERAGE	10.3%	10.7%	10.5%
GROUP MEDIAN	10.4%	10.8%	10.5%

Source: Value Line Investment Survey, Electric Utility (East), Aug 27, 2010; (Central), Sep 24, 2010; (West), Aug 6, 2010.

Constant growth result (using analysts' growth rates) for Edison International at 5.9% is below the current cost of single-A debt (5.04%, see RMP Exhibit No. 57, p. 1) plus 100 basis points and is eliminated.

NOTE: SEE PAGE 5 OF THIS EXHIBIT FOR FURTHER EXPLANATION OF EACH COLUMN.

**Rocky Mountain Power
Constant Growth DCF Model
Analysts' Growth Rates**

Company	(1)		(2)	(3)	(4)		(5)		(6)	(7)	(8)
	Recent Price(P0)	Div(D1)	Next Year's Div(D1)	Dividend Yield	Value Line	Zacks	Thomson	Analysts' Estimated Growth	Average Growth	ROE	
											K=Div Yld+G (Cols 3+7)
1 ALLETE	35.88	1.76	1.76	4.91%	1.00%	4.00%	6.50%	6.50%	3.83%	8.7%	
2 Alliant Energy Co.	34.87	1.65	1.65	4.73%	7.00%	5.00%	9.90%	9.90%	7.30%	12.0%	
3 Black Hills Corp	30.86	1.48	1.48	4.80%	6.50%	6.00%	6.00%	6.00%	6.17%	11.0%	
4 Con. Edison	46.80	2.40	2.40	5.13%	2.50%	4.50%	4.47%	4.47%	3.82%	9.0%	
5 DPL Inc.	25.52	1.28	1.28	5.02%	7.00%	NA	5.90%	5.90%	6.45%	11.5%	
6 DTE Energy Co.	46.81	2.30	2.30	4.91%	6.50%	5.00%	5.00%	5.00%	5.50%	10.4%	
7 Duke Energy	17.19	0.99	0.99	5.76%	5.00%	1.50%	4.00%	4.00%	3.50%	9.3%	
8 Edison Internat.	33.47	1.34	1.34	4.00%	6.50%	3.00%	2.22%	2.22%	1.91%	5.9%	
9 Empire District	19.70	1.28	1.28	6.50%	7.50%	NA	6.00%	6.00%	6.75%	13.2%	
10 Entergy Corp.	77.29	3.53	3.53	4.57%	4.50%	3.00%	5.14%	5.14%	4.21%	8.8%	
11 IDACORP	35.29	1.20	1.20	3.40%	5.50%	4.00%	4.00%	4.00%	4.50%	7.9%	
12 Nextera Energy	53.06	2.10	2.10	3.96%	5.00%	6.40%	6.83%	6.83%	6.08%	10.0%	
13 Northeast Utilities	28.46	1.10	1.10	3.86%	6.00%	7.80%	7.51%	7.51%	7.10%	11.0%	
14 NSTAR	37.78	1.73	1.73	4.58%	7.00%	6.00%	5.78%	5.78%	6.26%	10.8%	
15 PG&E Corp.	44.96	1.96	1.96	4.36%	7.00%	6.80%	6.88%	6.88%	6.89%	11.3%	
16 Portland General	19.63	1.07	1.07	5.45%	3.00%	9.60%	5.40%	5.40%	6.00%	11.5%	
17 Progress Energy	41.68	2.52	2.52	6.05%	3.50%	4.00%	3.63%	3.63%	3.71%	9.8%	
18 SCANA Corp.	38.91	1.92	1.92	4.93%	3.50%	4.30%	4.90%	4.90%	4.23%	9.2%	
19 Sempra Energy	50.88	1.68	1.68	3.30%	2.00%	7.00%	3.50%	3.50%	4.17%	7.5%	
20 Southern Co.	36.04	1.88	1.88	5.22%	4.50%	5.10%	5.07%	5.07%	4.89%	10.1%	
21 Vectren Corp.	24.87	1.39	1.39	5.59%	4.50%	5.00%	4.85%	4.85%	4.78%	10.4%	
22 Wisconsin Energy	55.18	1.80	1.80	3.26%	9.50%	8.70%	9.53%	9.53%	9.24%	12.5%	
23 Xcel Energy Inc.	22.20	1.03	1.03	4.64%	5.50%	5.70%	6.64%	6.64%	5.95%	10.6%	
GROUP AVERAGE	37.45	1.73	1.73	4.77%	5.18%	5.47%	5.79%	5.79%	5.52%	10.3%	
GROUP MEDIAN				4.85%						10.4%	

Source: Value Line Investment Survey, Electric Utility (East), Aug 27, 2010; (Central), Sep 24, 2010; (West), Aug 6, 2010.

Constant growth result for Edison International at 5.9% is below the current cost of single-A debt (5.04%, see RMP Exhibit No. 57, p. 1) plus 100 basis points and is eliminated.

**Rocky Mountain Power
Constant Growth DCF Model
Long-Term GDP Growth**

Company	(9)	(10)	(11)	(12)	(13)
	Recent Price(P0)	Next Year's Div(D1)	Dividend Yield	GDP Growth	ROE K=Div Yld+G (Cols 11+12)
1 ALLETE	35.88	1.76	4.91%	6.00%	10.9%
2 Alliant Energy Co.	34.87	1.65	4.73%	6.00%	10.7%
3 Black Hills Corp	30.86	1.48	4.80%	6.00%	10.8%
4 Con. Edison	46.80	2.40	5.13%	6.00%	11.1%
5 DPL Inc.	25.52	1.28	5.02%	6.00%	11.0%
6 DTE Energy Co.	46.81	2.30	4.91%	6.00%	10.9%
7 Duke Energy	17.19	0.99	5.76%	6.00%	11.8%
8 Edison Internat.	33.47	1.34	4.00%	6.00%	10.0%
9 Empire District	19.70	1.28	6.50%	6.00%	12.5%
10 Entergy Corp.	77.29	3.53	4.57%	6.00%	10.6%
11 IDACORP	35.29	1.20	3.40%	6.00%	9.4%
12 Nextera Energy	53.06	2.10	3.96%	6.00%	10.0%
13 Northeast Utilities	28.46	1.10	3.86%	6.00%	9.9%
14 NSTAR	37.78	1.73	4.58%	6.00%	10.6%
15 PG&E Corp.	44.96	1.96	4.36%	6.00%	10.4%
16 Portland General	19.63	1.07	5.45%	6.00%	11.5%
17 Progress Energy	41.68	2.52	6.05%	6.00%	12.0%
18 SCANA Corp.	38.91	1.92	4.93%	6.00%	10.9%
19 Sempra Energy	50.88	1.68	3.30%	6.00%	9.3%
20 Southern Co.	36.04	1.88	5.22%	6.00%	11.2%
21 Vectren Corp.	24.87	1.39	5.59%	6.00%	11.6%
22 Wisconsin Energy	55.18	1.80	3.26%	6.00%	9.3%
23 Xcel Energy Inc.	22.20	1.03	4.64%	6.00%	10.6%
GROUP AVERAGE	37.27	1.71	4.74%	6.00%	10.7%
GROUP MEDIAN			4.80%		10.8%

Source: Value Line Investment Survey, Electric Utility (East), Aug 27, 2010; (Central), Sep 24, 2010; (West), Aug 6, 2010.

Rocky Mountain Power
Low Near-Term Growth
Two-Stage Growth DCF Model

Company	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	
	2011 Div	2014 Div	Annual Change to 2014	Recent Price	CASH FLOWS						Year 5-150 Div Growth	ROE=Internal Rate of Return (Yrs 0-150)
					Year 1 Div	Year 2 Div	Year 3 Div	Year 4 Div	Year 5 Div			
1 ALLETE	1.76	1.85	0.03	-35.88	1.76	1.79	1.82	1.85	1.96	6.00%	10.4%	
2 Alliant Energy Co.	1.65	1.92	0.09	-34.87	1.65	1.74	1.83	1.92	2.04	6.00%	10.6%	
3 Black Hills Corp	1.48	1.60	0.04	-30.86	1.48	1.52	1.56	1.60	1.70	6.00%	10.4%	
4 Con. Edison	2.40	2.46	0.02	-46.80	2.40	2.42	2.44	2.46	2.61	6.00%	10.5%	
5 DPL Inc.	1.28	1.50	0.07	-25.52	1.28	1.35	1.43	1.50	1.59	6.00%	10.9%	
6 DTE Energy Co.	2.30	2.70	0.13	-46.81	2.30	2.43	2.57	2.70	2.86	6.00%	10.8%	
7 Duke Energy	0.99	1.05	0.02	-17.19	0.99	1.01	1.03	1.05	1.11	6.00%	11.2%	
8 Edison Internat.	1.34	1.50	0.05	-33.47	1.34	1.39	1.45	1.50	1.59	6.00%	9.8%	
9 Empire District	1.28	1.35	0.02	-19.70	1.28	1.30	1.33	1.35	1.43	6.00%	11.8%	
10 Entergy Corp.	3.53	4.15	0.21	-77.29	3.53	3.74	3.94	4.15	4.40	6.00%	10.5%	
11 IDACORP	1.20	1.40	0.07	-35.29	1.20	1.27	1.33	1.40	1.48	6.00%	9.3%	
12 Nextera Energy	2.10	2.40	0.10	-53.06	2.10	2.20	2.30	2.40	2.54	6.00%	9.8%	
13 Northeast Utilities	1.10	1.30	0.07	-28.46	1.10	1.17	1.23	1.30	1.38	6.00%	9.8%	
14 NSTAR	1.73	2.05	0.11	-37.78	1.73	1.84	1.94	2.05	2.17	6.00%	10.6%	
15 PG&E Corp.	1.96	2.40	0.15	-44.96	1.96	2.11	2.25	2.40	2.54	6.00%	10.5%	
16 Portland General	1.07	1.20	0.04	-19.63	1.07	1.11	1.16	1.20	1.27	6.00%	11.2%	
17 Progress Energy	2.52	2.58	0.02	-41.68	2.52	2.54	2.56	2.58	2.73	6.00%	11.3%	
18 SCANA Corp.	1.92	2.00	0.03	-38.91	1.92	1.95	1.97	2.00	2.12	6.00%	10.4%	
19 Sempra Energy	1.68	2.05	0.12	-50.88	1.68	1.80	1.93	2.05	2.17	6.00%	9.3%	
20 Southern Co.	1.88	2.10	0.07	-36.04	1.88	1.95	2.03	2.10	2.23	6.00%	10.9%	
21 Vectren Corp.	1.39	1.50	0.04	-24.87	1.39	1.43	1.46	1.50	1.59	6.00%	11.1%	
22 Wisconsin Energy	1.80	2.40	0.20	-55.18	1.80	2.00	2.20	2.40	2.54	6.00%	9.6%	
23 Xcel Energy Inc.	1.03	1.15	0.04	-22.20	1.03	1.07	1.11	1.15	1.22	6.00%	10.4%	
GROUP AVERAGE											10.5%	
GROUP MEDIAN											10.5%	

Source: Value Line Investment Survey, Electric Utility (East), Aug 27, 2010; (Central), Sep 24, 2010; (West), Aug 6, 2010.

**Rocky Mountain Power
Discounted Cash Flow Analysis
Column Descriptions**

- Column 1: Three-month Average Price per Share (Jul 2010-Sep 2010) Column 13: Column 11 Plus Column 12
- Column 2: Estimated 2011 Div per Share from Value Line Column 14: Estimated 2011 Div per Share from Value Line
- Column 3: Column 2 Divided by Column 1 Column 15: Estimated 2014 Div per Share from Value Line
- Column 4: "Est'd '07-'09 to '13-'15" Earnings Growth Reported by Value Line Column 16: (Column 15 Minus Column 14) Divided by Three
- Column 5: "Next 5 Years" Company Growth Estimate as Reported by Zacks.com Column 17: See Column 1
- Column 6: "Next 5 Years (per annum) Growth Estimate Reported by Thomson Financial Network (at Yahoo Finance)
- Column 7: Average of Columns 4-6 Column 18: See Column 14
- Column 8: Column 3 Plus Column 7 Column 19: Column 18 Plus Column 16
- Column 9: See Column 1 Column 20: Column 19 Plus Column 19
- Column 10: See Column 2 Column 21: Column 20 Plus Column 16
- Column 11: Column 10 Divided by Column 9 Column 22: Column 21 Increased by the Growth Rate Shown in Column 23
- Column 12: Average of GDP Growth During the Last 10 year, 20 year, 30 year, 40 year, 50 year, and 60 year growth periods. See RMP Exhibit No. 12 Column 23: See Column 12
- Column 24: The Internal Rate of Return of the Cash Flows in Columns 17-22 along with the Dividends for the Years 6-150 Implied by the Growth Rates shown in Column 23

Case No. PAC-E-10-07
Exhibit No. 60
Witness: Samuel C. Hadaway

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Rebuttal Testimony of Samuel C. Hadaway

Risk Premium Analysis

November 2010

Rocky Mountain Power

Risk Premium Analysis

(Based on Projected Interest Rates)

	MOODY'S AVERAGE PUBLIC UTILITY BOND YIELD (1)	AUTHORIZED ELECTRIC RETURNS (2)	INDICATED RISK PREMIUM
1980	13.15%	14.23%	1.08%
1981	15.62%	15.22%	-0.40%
1982	15.33%	15.78%	0.45%
1983	13.31%	15.36%	2.05%
1984	14.03%	15.32%	1.29%
1985	12.29%	15.20%	2.91%
1986	9.46%	13.93%	4.47%
1987	9.98%	12.99%	3.01%
1988	10.45%	12.79%	2.34%
1989	9.66%	12.97%	3.31%
1990	9.76%	12.70%	2.94%
1991	9.21%	12.55%	3.34%
1992	8.57%	12.09%	3.52%
1993	7.56%	11.41%	3.85%
1994	8.30%	11.34%	3.04%
1995	7.91%	11.55%	3.64%
1996	7.74%	11.39%	3.65%
1997	7.63%	11.40%	3.77%
1998	7.00%	11.66%	4.66%
1999	7.55%	10.77%	3.22%
2000	8.14%	11.43%	3.29%
2001	7.72%	11.09%	3.37%
2002	7.53%	11.16%	3.63%
2003	6.61%	10.97%	4.36%
2004	6.20%	10.75%	4.55%
2005	5.67%	10.54%	4.87%
2006	6.08%	10.36%	4.28%
2007	6.11%	10.36%	4.25%
2008	6.65%	10.46%	3.81%
2009	6.28%	10.48%	4.20%
AVERAGE	9.05%	12.28%	3.23%

INDICATED COST OF EQUITY

PROJECTED SINGLE-A UTILITY BOND YIELD*	4.73%
MOODY'S AVG ANNUAL YIELD DURING STUDY	9.05%
INTEREST RATE DIFFERENCE	<u>-4.32%</u>

INTEREST RATE CHANGE COEFFICIENT	<u>-41.13%</u>
ADJUSTMENT TO AVG RISK PREMIUM	1.78%

BASIC RISK PREMIUM	3.23%
INTEREST RATE ADJUSTMENT	1.78%
EQUITY RISK PREMIUM	<u>5.00%</u>

PROJECTED SINGLE-A UTILITY BOND YIELD*	4.73%
INDICATED EQUITY RETURN	<u>9.73%</u>

(1) Moody's Investors Service

(2) Regulatory Focus, Regulatory Research Associates, Inc.

*Projected single-A bond yield is 123 basis points over projected long-term Treasury bond rate of 3.5% from RMP Exhibit No. 57, p. 2. The single-A spread is for 3 months ended October 2010 from RMP Exhibit No. 57, p. 1.

**Rocky Mountain Power
 Risk Premium Analysis**

(Based on Current Interest Rates)

	MOODY'S AVERAGE PUBLIC UTILITY BOND YIELD (1)	AUTHORIZED ELECTRIC RETURNS (2)	INDICATED RISK PREMIUM
1980	13.15%	14.23%	1.08%
1981	15.62%	15.22%	-0.40%
1982	15.33%	15.78%	0.45%
1983	13.31%	15.36%	2.05%
1984	14.03%	15.32%	1.29%
1985	12.29%	15.20%	2.91%
1986	9.46%	13.93%	4.47%
1987	9.98%	12.99%	3.01%
1988	10.45%	12.79%	2.34%
1989	9.66%	12.97%	3.31%
1990	9.76%	12.70%	2.94%
1991	9.21%	12.55%	3.34%
1992	8.57%	12.09%	3.52%
1993	7.56%	11.41%	3.85%
1994	8.30%	11.34%	3.04%
1995	7.91%	11.55%	3.64%
1996	7.74%	11.39%	3.65%
1997	7.63%	11.40%	3.77%
1998	7.00%	11.66%	4.66%
1999	7.55%	10.77%	3.22%
2000	8.14%	11.43%	3.29%
2001	7.72%	11.09%	3.37%
2002	7.53%	11.16%	3.63%
2003	6.61%	10.97%	4.36%
2004	6.20%	10.75%	4.55%
2005	5.67%	10.54%	4.87%
2006	6.08%	10.36%	4.28%
2007	6.11%	10.36%	4.25%
2008	6.65%	10.46%	3.81%
2009	6.28%	10.48%	4.20%
AVERAGE	9.05%	12.28%	3.23%

INDICATED COST OF EQUITY

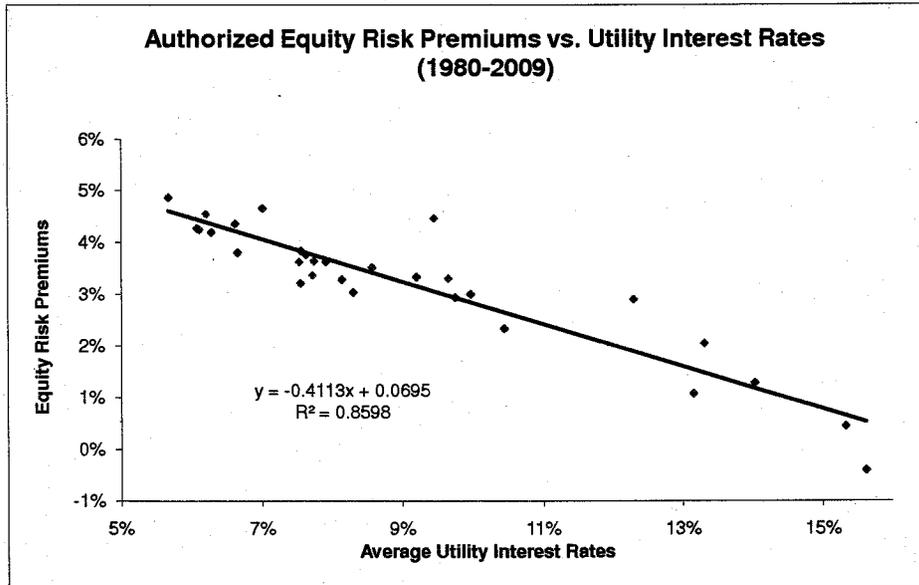
CURRENT SINGLE-A UTILITY BOND YIELD*	5.04%
MOODY'S AVG ANNUAL YIELD DURING STUDY	9.05%
INTEREST RATE DIFFERENCE	-4.01%
INTEREST RATE CHANGE COEFFICIENT	-41.13%
ADJUSTMENT TO AVG RISK PREMIUM	1.65%
BASIC RISK PREMIUM	3.23%
INTEREST RATE ADJUSTMENT	1.65%
EQUITY RISK PREMIUM	4.87%
CURRENT SINGLE-A UTILITY BOND YIELD*	5.04%
INDICATED EQUITY RETURN	9.91%

(1) Moody's Investors Service

(2) Regulatory Focus, Regulatory Research Associates, Inc.

*Current single-A utility bond yield is three month average of Moody's Single-A Public Utility Bond Yield Average through October 2010 from RMP Exhibit No. 57, p. 1.

Rocky Mountain Power
 Risk Premium Analysis
 Regression Analysis & Interest Rate Change Coefficient



SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.927242552
R Square	0.85977875
Adjusted R Square	0.854770848
Standard Error	0.0047873
Observations	30

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.003934704	0.003934704	171.6844276	1.82118E-13
Residual	28	0.000641711	2.29182E-05		
Total	29	0.004576415			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	0.069475479	0.002972433	23.373272	6.55788E-20	0.063386727	0.075564232	0.063386727	0.075564232
X Variable 1	-0.411331263	0.031392526	-13.10284044	1.82118E-13	-0.475635937	-0.347026589	-0.475635937	-0.347026589