Docket No. 08-035-38

Committee of Consumer Services Witness:

Daniel J. Lawton
Exhibits CCS 3.1 through 3.9

January 8, 2009

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of Rocky Mountain Power for Authority to Increase Its Retail Electric Utility Services Rates In Utah and for Approval of its Proposed Electric Service Schedules and Electric Service Regulations	**§**	**Docket No. 08-035-38**
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	§	**Direct Rate of Return Testimony of Daniel J. Lawton For the Committee of Consumer Services**
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	§	

January 8, 2009

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DIRECT TESTIMONY OF
DANIEL J. LAWTON

SECTION I: INTRODUCTION/BACKGROUND/SUMMARY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Daniel J. Lawton. My business address is 701 Brazos, Suite 500, Austin, Texas 78701.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A. I have been working in the utility consulting business as an economist since 1983. Consulting engagements have included electric utility load and revenue forecasting, cost of capital analyses, revenue requirements/cost of service reviews, and rate design analyses in litigated rate proceedings before federal, state and local regulatory authorities. I have worked with municipal utilities developing electric rate cost of service studies for reviewing and setting rates. In addition, I have a law practice based in Austin, Texas. My main areas of legal practice include administrative law representing municipalities in electric and gas rate proceedings and other litigation and contract matters. I have included a brief description of my relevant educational background and professional work experience in Exhibit CCS 3.1.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN RATE PROCEEDINGS?

A. Yes. A list of cases where I have previously filed testimony is included in my Exhibit CCS 3.1.

Q. ON WHOSE BEHALF ARE YOU FILING TESTIMONY IN THIS PROCEEDING?

A. I have been retained to review Rocky Mountain Power's ("Company" or "RMP") cost of capital request on behalf of the Committee of Consumer Services ("Committee").

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony in this proceeding is to address the Company's requested overall cost of capital. I will address the Company's requested rate of return, capital

structure, and cost rates for equity, debt and preferred stock, which is presented in the direct testimony and second supplemental direct testimony of its cost of capital witnesses, Dr. Samuel Hadaway and the direct and second supplemental testimony of Mr. Bruce Williams.

In addition, I will address the second supplemental direct testimony of RMP witness Walje regarding the rate increase and the business risk impacts of cutting specific costs and services to Utah customers.

Q. WHAT MATERIALS DID YOU REVIEW AND RELY ON FOR THIS TESTIMONY?

A. I have reviewed the Company's testimony (both direct and supplemental), Company responses to interrogatories, Value Line Investment Survey ("Value Line"), financial reports of the Company, and various other financial information available in the public domain. When relying on other sources, I have referenced such sources in my testimony and on attached schedules and included copies or summaries in my attached schedules or workpapers.

Q. PLEASE SUMMARIZE YOUR FINDINGS AND CONCLUSIONS IN THIS CASE.

A. My analyses of the Company's 8.69% overall cost of capital and 11.0% return on equity indicate that the Company's request is overstated given current costs of debt and equity capital. I have calculated an alternative cost of long-term debt and common equity for this case which would result in an overall cost of capital of 8.10%, to be earned on RMP's rate base investment.

Based on my analyses (which are fully explained in the following pages), I make the following conclusions and recommendations:

(i) The Company's proposed 8.69% overall return on investment is overstated and should not be adopted as representative of the Company's cost of capital requirements;

(ii) RMP's proposed 11.0% return for equity shareholders is an overstatement of the required return on equity to hold and attract equity capital;

(iii) The Company's required return on equity is 10.0%;

(iv) The Company's estimated interest cost of an $800 million pro forma long-term debt issue of 8.47% is excessive;

(v) The Company's interest cost for new long-term debt issues should be 6.07%, resulting in an overall long-term debt cost for the test year of 6.08%; and

(vi) The Company's overall cost of capital to be earned on rate base investment should be set at 8.10% for setting just and reasonable rates for Utah customers in this proceeding.

SECTION II: REGULATORY ISSUES AND COST OF CAPITAL

Q. PLEASE EXPLAIN THE COST OF CAPITAL CONCEPT AS IT RELATES TO THE REGULATORY PROCESS.

A. The overall rate of return to be earned on rate base investment is an essential element in the regulatory and rate setting process. The overall return to be earned on rate base investment is typically a major part of overall revenue requirements. For example, in this case the Company's requested overall return is 8.69%[1] and the Company's requested rate base is $4,549,640,747.[2] Thus, the Company's requested overall return is $395,363,781 (8.69% x $4,549,640,747). Return on rate base investment represents approximately 26% of total requested annual revenue requirements of $1,546,937,908. In other words, 26 cents of every dollar collected from customers goes to satisfy after tax return requirements of the Company.

A small change in return requirements can have a large impact on revenue requirements. For example, I am recommending an overall return of 8.10% in this case. The before tax impact of this return change is about a $26.8 million reduction to the Company's costs. The impact is larger when the associated federal income tax impact is included.

Q. PLEASE EXPLAIN HOW THE VARIOUS COMPONENTS OF COST OF CAPITAL ARE DETERMINED.

A. The overall rate of return in the regulatory process is best explained in two parts. First,

[1] Second Supplemental Direct Testimony Bruce Williams at 7:142-149.
[2] See Exhibit RMP__ (SRM-1SS) p.2, line 61.

return to senior securities, such as debt and preferred stock, which is contractually set at issuance. The reasonableness of the cost of this contractual obligation between the utility and its investors is examined by regulatory agencies as part of the utility's overall cost of service.

The second part of a company's overall return requirement is the appropriate cost rate to assign the equity portion of capital costs. The return to equity should be established at a level that will permit the firm an opportunity to earn a fair rate of return. By fair rate of return, I mean a return to equity holders, which is sufficient to hold and attract capital, sufficient to maintain financial integrity, and a return to equity comparable to other investments of similar risks.

Two U.S. Supreme Court decisions are often cited as the legal standards for rate of return determination. The first is *Bluefield Water Works and Improvement Company v. Public Service Commission of West Virginia*, 262. U.S. 679 (1923). The *Bluefield* case established the following general standards for a rate of return: The return should be sufficient for maintaining financial integrity and capital attraction and a public utility is entitled to a return equal to that of investments of comparable risks.

The second U.S. Supreme Court decision is the *Federal Power Commission v. Hope Natural Gas Company*, 320 U.S. 591 (1942). In the *Hope* decision, the Court affirmed its earlier *Bluefield* standards and found that methods for determining return are not the test of reasonableness rather the result and impact of the result are controlling.

The cost of capital is defined as the annual percentage that a utility must receive to maintain its financial integrity, to pay a return to security owners and to insure the continued attraction of capital at a reasonable cost and in an amount adequate to meet future needs. Mathematically, the cost of capital is the composite of the cost of several classes of capital used by the utility – debt, preferred stock, and common stock, weighted on the basis of an appropriate capital structure.

The ratemaking process requires the regulator to determine the utility’s cost of capital for debt, preferred stock and equity costs. These calculations of cost rates, when combined with the proportions of each type of capital in the capital structure, result in a

percentage figure that is then multiplied by the value of assets (investment) used and useful in the production of the utility service to ultimately arrive at a rate charged to customers. Rates should not be excessive (exceed actual costs) or burdensome to the customer and at the same time should be just and reasonable to the utility.

In summary, the objective of overall rate of return determination in the regulatory process is to compute the return such that the embedded (contractually required) cost of senior securities is recovered. In addition, a regulated utility should be provided an opportunity to generate additional earnings that are sufficient to compensate equity investors at a level that will hold existing investors, attract new investors, and maintain the financial integrity of the utility.

Q. PLEASE EXPLAIN THE COST OF EQUITY CONCEPT.

A. The cost of equity, or return on equity capital, is the return expected by investors over some prospective time period. The cost of equity one seeks to estimate in this proceeding is the return investors expect prospectively when the rates from this case will be in effect.

The cost of common equity is not set by contract, and there are no hard and fast mathematical formulae with which to measure investor expectations with regard to equity requirements and perceptions of risk. As a result, any valid cost of equity recommendation must reflect investors' expectations of the risks facing a utility.

Q. WHAT PRINCIPAL METHODOLOGY DO YOU EMPLOY IN YOUR COST OF EQUITY CAPITAL ANALYSES?

A. I employ the Discounted Cash Flow (“DCF”) methodology for estimating the cost of equity, keeping in mind the general premise that any utility's cost of equity capital is the risk free return plus the premium required by investors for accepting the risk of investing in an equity instrument. It is my opinion that the best analytical technique for measuring a utility's cost of common equity is the DCF methodology. Other return on equity modeling techniques such as the Capital Asset Pricing Model (“CAPM”) or risk premium are often used to check the reasonableness of the DCF results.

Q. PLEASE DESCRIBE THE RISKS YOU REFER TO ABOVE.

A. As I stated earlier in this testimony, equity investors require compensation above and beyond the risk free return because of the increased risk factors investors face in the equity markets. Thus, investors require the risk free return plus some risk premium above the risk free return. The basic risks faced by investors that make up the equity risk premium include business risks, financial risks, regulatory risks, and liquidity risks.

Q. PLEASE DESCRIBE ROCKY MOUNTAIN POWER.

A. The Company is one of three business units owned by PacifiCorp. The Rocky Mountain Power business unit provides electrical service to customers in Utah, Wyoming and Idaho. PacifiCorp was acquired and is now a division owned by MidAmerican Energy Holdings Company ("MEHC") in 2006. The equity investment of Rocky Mountain Power is not publicly traded.

Q. PLEASE DISCUSS YOUR UNDERSTANDING OF THE COMPANY'S UPDATED REVENUE REQUIREMENT FILING AND THE TEST YEAR ORDERED BY THE PUBLIC SERVICE COMMISSION OF UTAH ("COMMISSION") IN THIS CASE.

A. On December 8, 2008, the Company filed an updated case to reflect this Commission's determination of a December 31, 2009 ending test year. The Company's current rate increase request is approximately $116.1 million annually. The rate request includes an overall return on investment of 8.69% which includes a return to equity shareholders of 11.0 percent.

SECTION III: CURRENT CAPITAL MARKET CONDITIONS

Q. ARE CURRENT ECONOMIC CONDITIONS DECLINING AS WE END THE LAST QUARTER OF 2008?

A. Yes. The U.S. and global financial markets continue to struggle with liquidity issues following the collapse of the subprime mortgage markets. The Federal Reserve and central banks around the world have been ramping up lending in an all out effort to keep the financial markets functioning.

The Federal Reserve Chairman, Bernanke predicts that the global financial markets crisis will restrain the U. S. economic growth well into 2009. Thus, while inflation

issues have recently receded, economic conditions have worsened prospects of economic growth.

The Federal Reserve has taken numerous steps to address financial market issues including the recent cut in the federal funds rate to a target range of 0% to 0.25% as of December 16, 2008. While rates for longer-term Treasury Bonds (20 and 30 year) are lower than levels in early 2006, the shorter term rates on Treasury Bills have declined dramatically. High quality corporate bond rates Aaa level until October 2008 have been consistent with interest rate levels ranging back to early 2006. Now, again these higher quality corporate debt securities have seen yield declines of over 100 basis points in December 2008. But, lower quality BBB corporate bond rates have increased by about 200 basis points in the past two years. Again, the December 2008 levels show a yield decrease even for lower quality BBB debt securities. I have included in my Exhibit CCS 3.2 monthly bond yields for various securities showing changes by month since January 2006 through December 2008.

Q. HAVE STOCK PRICES DECLINED AS A RESULT OF THE FINANCIAL MARKET PROBLEMS?

A. Yes, the Dow Jones Industrial Average ("DJI") declined from about the 14,000 level in November 2007 to 8451 on October 10, 2008. Most of this 5600 point drop in the DJI occurred in the first 10 days of October 2008. Many investors in a flight to safety moved funds from stocks to short-term Treasuries driving 3 month Treasury rates well below 1%. Also, the Dow Jones Utility Average ("DJU") like the DJI dropped substantially during the first part of October 2008.

Q. DO YOU HAVE ANY GENERAL OBSERVATIONS CONCERNING THE RECENT TRENDS IN ECONOMIC CONDITIONS AND THE IMPACT ON CAPITAL COSTS?

A. Yes. As a general matter the U.S. economy has enjoyed general growth, prosperity and stability since the early 1990's. Over this time period there has been a general level of economic expansions accompanied by historical low levels of inflation and interest rates.

Now, the economy has slowed significantly at least initially as a result of the "sub-prime" mortgage problems and more recently as a result of the liquidity crisis in the financial markets. Moreover, the economic slow down is having global impacts as can be seen in declining energy prices (natural gas, oil) as well as general commodity prices.

The financial sector crisis has intensified in recent months with the collapse and/or bailout of such institutions as Bear Stearns, Lehman Brothers, Merrill Lynch, Freddie Mac, Fannie Mae, AIG and Citigroup, Inc. The U. S. Government and governments around the world have been and continue to employ unprecedented monetary actions to minimize the impacts of the financial crisis on economic growth. While the impacts of these government rescue efforts and other monetary policy actions have not yet resolved all the tight credit market problems – that does not mean there has been no impact or continued impact. For example, the upward trend in corporate bond yields for AAA and BBB rated debt has reversed in December 2008 as shown in my Exhibit CCS 3.2.

The one sure thing is that economic slow down has occurred and is expected to continue. For this reason economic growth will be lower than past forecast estimates have suggested. This is true across all economic sectors including the utility industry. Thus, while utility stock prices may be lower and dividend yields rise – the other side of the coin shows lower economic growth expectations by investors.

Q. WHAT CONCLUSIONS DO YOU DRAW FROM CURRENT ECONOMIC CONDITIONS IN PROVIDING GUIDANCE IN SETTING EQUITY CAPITAL COSTS IN THIS PROCEEDING?

A. As a general matter capital costs remain low in comparison to historical levels. While the bottom tier of corporate bond rates (BBB) has increased dramatically since September 2008 – such increases do not appear to be a trend, but rather the direct impact of an atypical event in the capital markets. As I stated above, BBB bond yields decreased 76 basis points between November and December 2008. Moreover, the economic slow down or recession will cause general investor expectations of growth to decline. The bottom line is that the general economic data does not support increasing capital costs. Further, it is not sound ratemaking to establish revenue requirements and rates on atypical or abnormal events – especially when such events (continuation of the

financial crisis) are not likely to continue for a long period of time.

Q. IN YOUR OPINION SHOULD THE COMMISSION SET RATE OF RETURN IN THIS CASE BASED ON THE EVENTS AND RESULTS OF THE RECENT FINANCIAL/LIQUIDITY CRISIS?

A. Only if the Commission believes that these economic factors are representative of the future when the final rates are implemented for RMP customers. In my opinion these events are not going to continue and the market will adjust.

While certainly there does appear to be significant economic slow down in the future, recent market events are not likely to be repeated in the near term future. Central banks across the world are now working together to restore and assure confidence in the financial markets. These central banks including the Federal Reserve have developed bail out plans, rescue packages, lowered interest rates, and guaranteed bank lending along with a list of other programs to address these economic/financial issues.

SECTION IV COST OF EQUITY CAPITAL DCF ANALYSIS

Q. YOU STATED ABOVE THAT YOU RELIED ON A DCF ANALYSIS. PLEASE DESCRIBE HOW YOU CONDUCTED YOUR DCF ANALYSIS.

A. For my DCF analyses I employ a comparable risk group of companies because there is no market financial data for RMP. The Company is a division of PacifiCorp which is a wholly owned subsidiary of MidAmerican Energy Holding Company. Thus, without financial data a DCF analysis cannot be computed directly on RMP or for that matter PacifiCorp. The comparable risk group of companies for which there is market data available serve as a proxy for RMP.

I applied the DCF method employing market data, as well as forecasted data of various financial parameters to a comparable group of fifteen electric utility companies. The comparable group of fifteen utility companies employed in my analysis comes from the same group of companies used by RMP's witness Dr. Hadaway in this case. Given that I am basing my analysis on the same group of comparable companies as employed by Dr. Hadaway, the equity cost calculation issue is narrowed to the methodology of estimation. I discuss in detail in Section VII the problems I have with Dr. Hadaway's

specific cost of equity analyses.

Q. WHY HAVE YOU EXAMINED COMPARABLE ELECTRIC COMPANIES?

A. There are several reasons why the estimate of a cost of capital requires an analysis of a group of comparable risk companies rather than the single firm subject of the analysis:

(1) A comparable risk group analysis is consistent with the requirements of a fair and reasonable return addressed in the *Hope* and *Bluefield* cases. The return on investment should be commensurate with returns earned by firms with comparable risk. Thus, there is a need to examine firms of comparable risk to identify the fair and reasonable comparable returns being earned. In addition, the equity returns of comparable firms are viewed as opportunity costs of forgone investments in the market which, like other investment opportunities, will directly impact the cost of equity of the Company.

(2) The reliability of the cost of equity estimate is enhanced when the calculation is based on equity capital estimates from a variety of risk equivalent companies. A group of comparable companies can be employed as a check on a single company analysis. Further, the comparable group analysis, whether employed as a check or the primary analysis, mitigates any distortions resulting from measurement errors in dividend yield and expected growth measures and estimates. For example, the average growth rate estimate based on forecasts of several comparable firms is less likely to deviate from investor expectations of growth than an estimate for a single firm. Moreover, the general assumptions underlying the DCF model are more likely to be met for a group of companies than for a single firm.

(3) An analysis of a comparable group also avoids circularity problems. In the analysis of investor-owned utilities, the stock price (that is, the cost of capital) is a direct function of an investor's growth rate expectations, which is also a function of an investor's perception of the regulatory environment. The bottom line is that the cost of equity depends in part on the anticipated regulatory environment and actions. Thus, both the components of the DCF model – dividend yield and growth expectations – are influenced by the regulatory process.

(4) Extending the sample size of comparable companies beyond a single regulatory influence will mitigate the regulatory circularity problem. Specific conditions concerning a subject utility often requires that a comparable company analysis be employed. One of the most common conditions is the lack of market data necessary to perform a DCF analysis. In times of utility consolidation and merger, many electric utilities are owned and controlled by a single parent holding company, which is the case with RMP.

Q. HAVE YOU PROVIDED A LISTING OF THE COMPANIES IN THE COMPARABLE GROUP?

A. Yes. Contained in my Exhibit CCS 3.3 is a list of the fifteen companies in the comparable group along with additional data of Company Beta and equity ratio projected for 2008, 2009 and 2012.

Q. PLEASE EXPLAIN THE DCF METHODOLOGY YOU HAVE EMPLOYED IN YOUR ANALYSIS.

A. The foundation of the DCF model is in the theory of security valuation. The price that an investor is willing to pay for a share of common stock today is determined by what income stream the investor expects to receive from the investment. The return the investor expects to receive over the investment time horizon is composed of: (i) dividend payments, and (ii) the appreciated sale value of the investment. A proper analysis adds dividends to the gain on the final sale value, and discounts these expected future earnings to a percent value.

To determine or estimate investor requirements using the DCF model, one computes a cost of capital requirement, or discount rate from the current market data and the expected dividend stream. The DCF model stated as a formula is as follows:

$K = D/P + G$

where:

K = required return on equity,

D = dividend rate,

P = stock price,

D/P = dividend yield, and

G = growth in dividends.

Q. PLEASE EXPLAIN HOW YOU CALCULATED THE DIVIDEND YIELD FOR THE COMPARABLE COMPANIES.

A. The dividend yield is the ratio of the dividend rate to the stock price. When calculating the dividend yield, one must be cautious and not rely on spot stock prices. One must be equally cautious not to rely on long periods of time as the data becomes unrepresentative of market conditions. The objective is to use a period of time such that the resulting dividend yield is representative of the prospective period when rates will be in effect.

While there is no fixed period for selecting the denominator of the dividend yield (i.e., stock price), the key guideline is that the yield not be distorted due to fluctuations in stock market prices. On the other hand, dividends, the numerator of the yield calculation, are relatively stable, as opposed to the stock prices, which are subject to daily and cyclical market fluctuations. The selection of a representative time period will dampen the effect of stock market changes.

The price and dividend data used for each of the companies in the comparable group is contained in my Exhibit CCS 3.4.

As I discussed in Section III of this testimony there has been substantial volatility in the market during the first part of October 2008 due to impacts associated with the current financial market crisis. For these reasons I have employed an average 52-week high and low price for the twelve month period ending December 15, 2008. For this period I employ the average of the high and low stock prices to calculate a representative price for the dividend yield calculation.

To calculate dividends, I employed the current Value Line estimate for next year's 2009 dividend to estimate dividend payment expected by investors. The resulting dividend yield is shown on my Exhibit CCS 3.4 for the comparable group.

Q. HOW DOES YOUR DIVIDEND YIELD CALCULATION COMPARE TO DR. HADAWAY'S ESTIMATES?

A. As shown on my Exhibit CCS 3.4 the comparable group average dividend yield is between 4.62% and 4.66%. Dr. Hadaway's analysis shown in his Exhibit RMP __(SCH-3SS) page 2 of 5, shows a dividend yield range for the comparable group of

4.56% to 4.65%. The average of his range is 4.60% which is consistent with my 4.60% estimate for the comparable group.

Q. PLEASE EXPLAIN HOW YOU HAVE CALCULATED THE EXPECTED GROWTH RATE IN YOUR DCF ANALYSIS FOR THE COMPANIES IN THE COMPARABLE GROUP.

A. Like dividend yields, there exists no single or simple method to calculate growth rates. The calculation of investor growth expectations is the most difficult part of the DCF analysis. To estimate investor expectations of growth, I have examined historical growth and forecasted growth rates, and other financial data for each of the companies in the comparable group.

Implementation of the DCF model requires the exercise of considerable judgment with regards to estimating investor expectations of growth and it is a difficult task, but such difficulties are not insurmountable. Many factors affect capital markets in general and individual stocks specifically, investors are aware and informed of current economic conditions and expectations. Such economic variables entail the current state of the economy, the trade deficit, federal budget uncertainty, fiscal policy, inflation and Federal Reserve Board policies on interest rates.

Investors generally have good information on the economic and financial variables outlined above. All of this information is available quickly, especially in recent decades with easy access to the worldwide web. This information influences return expectations and, as a result, the maximum price an investor will pay for various securities.

Like the information available on the general economy, investors also have access to a wealth of information about particular types of securities, industries and specific company investments. This information is also factored into investor expectations and therefore the stock price individuals are willing to pay.

Common earnings growth rate forecasts and historical growth rate data may be found in the Value Line Investment survey ("Value Line") publication. These Value Line earnings estimates are five year projections in annual earnings. Again, Value Line is widely available to the public, and is a good source of earnings projections. Other earnings estimates are forecasted by Zacks as well as First Call projections, widely

available on the internet at Zacks.com and Yahoo Finance respectively. Those earnings projections along with other stock specific financial data provide a range of estimates of earnings and are readily available at no cost.

Another growth estimate is referred to as the sustainable growth or retention ratio growth estimate. To project future growth in earnings under the sustainable growth method, one multiplies the fraction of a firm's earnings expected to be retained (not paid out as dividends) by the expected return on book equity. As a formula:

(growth = b x r)

Where:

b =1-(dividends per share/earnings per share)

r =earnings per share / net book value share

All the data necessary to calculate the elements of the sustainable growth method are available on a forecasted basis in Value Line.

Q. PLEASE EXPLAIN YOUR GROWTH RATE ANALYSIS.

A. I have included in my Exhibit CCS 3.5 the growth rates I have reviewed in my analysis. The first set of growth rates examined is the five year and ten year historical growth rates in earnings per share, dividends per share, and book value per share as reported by Value Line. The second set of growth rates is the Value Line forecasted growth rates in earnings per share, dividends per share, and book value per share for each company in the comparable group. The third set of growth rates examined is the Zacks forecasted growth rates in earnings. The fourth growth estimate considered is the First Call growth rates which are readily available to investors at Yahoo Finance.

In addition, I have examined the growth rates based on the forecasted retention ratio growth estimate discussed above. These calculations are included in my Exhibit CCS 3.5.

The growth rates described above provide a range of estimates for each of the comparable companies. The resulting range of average growth rates for the group is from 4.0% to 6.0% when looking at internal growth forecasts and earnings per share

("EPS") forecast estimates for the comparable group. Relying on the combined forecasted earnings per share estimates and internal growth rate estimates, the growth rate average range can be narrowed to 5.0% to 5.2% as shown in Exhibit CCS 3.5.

Q. HOW DO THESE GROWTH RATES COMPARE TO GROWTH ESTIMATES EMPLOYED BY DR. HADAWAY?

A. Reviewing Dr. Hadaway's Exhibit RMP__(SCH-3SS) page 2 of 5, it appears Dr. Hadaway has relied upon a 6.12% growth average for the comparable group. This estimate is limited to Value Line, Zacks and Yahoo Finance estimates that are both outdated and overstated. The end result is Dr. Hadaway's estimates should not be relied on in this case.

Q. PLEASE SUMMARIZE YOUR CONSTANT GROWTH DCF ANALYSIS.

A. I have summarized these results in my Exhibit CCS 3.6. For the comparable group based on an average yield of 4.6% to 4.7% and a growth rate range of 5.0%[3] to 5.2%[4] the ROE estimate based on the comparable group is 9.8% to 10.0%. Employing the midpoint of the range for these estimates results in an ROE estimate of 9.9%.

Q. HAVE YOU CALCULATED ADDITIONAL DCF ANALYSES FOR THE COMPARABLE GROUP COMPANIES?

A. Yes. I have calculated a two stage non-constant growth DCF analysis for the comparable group companies.

Q. PLEASE DESCRIBE YOUR TWO-STAGE NON-CONSTANT GROWTH DCF.

This analysis calculates equity cost using a non-constant growth Two Stage DCF Model. The constant growth DCF model is often adjusted to reflect multiple growth assumptions because the constant growth rate assumption is often not consistent with investor expectations. As an example, it is often the case where short-term growth estimates are not consistent with long-term sustainable growth projections. In those instances, where more than one growth rate estimate is appropriate, a multi-stage non-constant growth model can be employed to derive a cost of capital estimate. In other

[3] Forecasted average EPS for Value Line, Zacks and Yahoo Finance and Internal Growth.
[4] Forecasted EPS Value Line, Zacks and Yahoo Finance.

words, the constant growth model is adjusted to incorporate multiple growth rate periods, assuring a constant growth (long-term) rate is estimated for a longer period.

For the first growth stage (years 1-4) of the model, the Value Line growth in dividends is employed and an annual dividend is calculated. The second stage (years 5 and beyond)[5] an earnings growth estimate based on the comparable group average of 5.5% is employed. This long-run earnings estimate is based on the Value Line, Zacks, and First Call earnings forecasts along with the internal growth estimate. I employed a 5.5% midpoint of the 5% to 6% range.

In the two-stage model the dividend cash flows are discounted equal to the price[6] paid for the stock. The calculated discount rate or internal rate of return is the cost of equity capital estimate.

Q. WHAT ARE THE RESULTS OF THE TWO-STAGE NON-CONSTANT GROWTH DCF ANALYSIS?

A. The results of the two-stage non-constant growth DCF analysis are shown in Exhibit CCS 3.7. The comparable group average indicates a cost of equity of 10.0% and 10.2%.

Q. PLEASE SUMMARIZE YOUR DCF ESTIMATES.

A. The table below is a summary of the DCF results:

TABLE 1
SUMMARY OF COMPARABLE GROUP DCF ANALYSES

Description		COMPARABLE GROUP
Constant Growth DCF		9.8% to 10.0%
Non-Constant Growth Two Stage DCF		10.0% to 10.2%

This range of estimates of 9.8% to 10.2% indicates a cost of equity of about 10% for the group.

SECTION V: <u>RISK PREMIUM/CAPM COST OF EQUITY ESTIMATE</u>

Q. PLEASE DESCRIBE THE RISK PREMIUM ANALYSIS.

A. Debt instruments such as bonds (long-term debt) are less risky than common equity

[5] The model is ended at year 150.
[6] Price is based on the 52 week average of the high and low price discussed earlier.

when both classes of capital are issued by the same entity. Bondholders have a prior contractual claim to the earnings of the corporation and returns on bonds are less variable and more predictable than stocks. The bottom line is that debt is less risky than equity. There are numerous return studies of capital market investments, all of which show lower returns with lower risks and higher returns with higher risk investments. These financial truisms provide a sound theoretical basis and foundation for the risk premium method for estimating equity costs. The risk premium approach is useful in that the analysis is based on current market interest rates, that is, the current observable cost of debt capital. But, the risk premium approach is not without its problems and drawbacks. In practice, there is considerable debate as to the time period to analyze in the determination of the bond/equity return risk spread. Historical debt/equity risk spreads measured over many decades may not be relevant to current capital market requirements. Others argue that a long-term analysis is necessary, since the goal is to measure investors' long-term expectations.

Another version of the risk premium method is the capital asset pricing model ("CAPM"). Generally, the CAPM begins with a theoretically risk-free interest rate such as a three-month Treasury bill rate. The risk premium, or equity spread above and beyond the risk free rate is adjusted by the stock beta.[7] The risk free return measure is combined with the equity risk premium adjusted for the measure of beta to arrive at a CAPM result.

Like the risk premium discussed above, the CAPM is subject to measurement uncertainties. First, the general problem of how to measure the equity risk premium and the time period for which the premium is analyzed is subject to considerable debate. This problem and associated criticisms is generic to all variants of the risk premium model. Second, measures of beta are often unstable from period to period and may not reflect the equity risk spread measure.

For all of the above reasons, risk premium methods should be viewed with considerable caution. The risk premium analysis and CAPM described below consists of analyses of

[7] Beta is a measure of the volatility of the specific stock movement relative to that of a market measure such as the S&P 500. A beta below 1.0 means that a specific stock is less volatile than the market measure, while a beta above 1.0 indicates a specific stock is more volatile than the market measure.

shorter time horizons and are employed as a check on the DCF results described earlier.

Q. HOW DID YOU CALCULATE YOUR RISK PREMIUM ANALYSIS?

A. For the calculation of risk premium I employed the basic analysis presented in Dr. Hadaway's Direct Testimony at Exhibit RMP__(SCH-5) page 1 of 2. This analysis is updated and corrected for a more reasoned estimate of expected single-A bond yield. I outline the calculations in my Exhibit CCS 3.8. Employing a single-A debt rate of 6.07% and a 4.46% risk premium, results in a risk premium estimate of 10.5%.

Q. DID YOU CALCULATE AN ALTERNATIVE RISK PREMIUM?

A. Yes. An alternative analysis entailed calculating a risk premium based on the difference between returns on stocks (10.4%) and the returns on long-term corporate bonds (5.9%) for the period covering 1926 – 2007 as reported in the 2008 Stocks, Bonds and Inflation Classic Yearbook published by Morningstar, Inc. The resulting risk premium is 4.5% (10.4% - 5.9%=4.5%) employing the geometric mean average returns. Combining a 4.5% risk premium and a 6.07% single-A debt rate results in a 10.6% ROE based on a risk premium approach.

<u>CAPITAL ASSET PRICING MODEL ANALYSIS</u>

Q. PLEASE DESCRIBE THE CAPITAL ASSET PRICING MODEL.

A. The Capital Asset Pricing Model ("CAPM") is a version of the risk premium approach described above. The CAPM measures the relationship between a specific security's investment risk and its return. The general mathematical form of the CAPM can be described as follows:

$$K=RF+B(RM-RF)$$

Where: K = cost of equity
Rf=risk free return
Rm=return on market
B=Beta
Rm-Rf= market risk premium

Q. HOW HAVE YOU CALCULATED YOUR CAPM ESTIMATES?

A. I have applied the CAPM to each company in the comparable risk group as is show in my Exhibit CCS 3.9. For the risk free rate I have employed a three month average yield (October 2008 – December 2008) for 20 year U.S. Treasury Bonds. Over the 3 month period 20 year Treasury Bonds had an average yield of 4.03%.

The market risk premium component (Rm-Rf) represents the investor expected risk premium over the risk free return. For this calculation I have relied on the 2008 Morningstar yearbook which provides long-term (1926-2007) market and government bond returns. The market return over this time horizon is 10.4%[8] while the long-term government bond return is 5.5%[9] resulting in a risk premium of 4.9% based on the geometric average return calculation. I also ran the calculation employing arithmetic average returns which show a market return (1926 – 2007) of 12.3%[10] and a long-term government bond return of 5.8%[11] resulting in a risk premium of 6.5%.

Q. PLEASE DESCRIBE THE BETA YOU EMPLOYED IN YOUR CAPM ANALYSIS.

A. Beta is a measure of specific stock volatility relative to a market index. Betas less than 1.0 move less that the market while Betas greater than 1.0 have more movement or volatility relative to a market index. For this case I employed the Value Line Betas for each company in the comparable group.

Q. WHAT ARE THE RESULTS OF YOUR CAPM ROE ESTIMATES?

A. My analysis for CAPM is contained in my Exhibit CCS 3.8. The CAPM result is 8.91%.

Q. PLEASE SUMMARIZE YOUR DCF, RISK PREMIUM AND CAPM ANALYSES?

A. The following table 2 summarized the cost of equity results for each analysis:

[8] Morningstar at 31.
[9] *Id.*
[10] *Id.*
[11] *Id.*

TABLE 2
COST OF EQUITY CAPITAL SUMMARY

Model	Range	Midpoint
Constant Growth DCF	9.8% - 10.0%	9.9%
Two-Stage DCF	10.0% - 10.2%	10.1%
CAPM	8.91%	
Risk Premium	10.5% - 10.6%	

The DCF results range from 9.8% to 10.2% with a midpoint of 10.0%. The high end of the CAPM 8.91% and Risk Premium results of 10.5% - 10.6% indicate an average of 9.8%. Thus, an equity return of 10% is consistent with the results of the DCF models and it is supported by the CAPM and Risk Premium check.

Q. IS YOUR RECOMMENDATION CONSISTENT WITH THIS COMMISSION'S RECENT DECISION IN THIS COMPANY'S LAST RATE CASE – DOCKET NO. 07-035-93?

A. Yes, it is. This Commission recently (August 11, 2008) issued a final order addressing all issues in RMP's 2007 rate case. One of the issues decided in Docket No. 07-035-93 was cost of equity capital and overall cost of capital. With regard to the cost of equity the Commission stated the following:

> Through our consideration of the financial models as we deem appropriate, with the inputs or components and weighting we believe reasonable, and weighing all of the expert financial testimony and other witness testimony received, we find and conclude that a rate of return on common equity of 10.25 percent is reasonable.[12]

The commission pointed out that the DCF-based range of estimates considered was from 6.82% to 11.3% and the risk premium/CAPM evidence ranged from 6.48% to 11.43% in the last case.[13] From that the Commission considered the parties range of estimates at 9.85% to 10.75%.[14]

The evidence in this case, just 6 months later suggest about the same range of estimates is before the Commission. The Company's original ROE estimate was 10.75% before

[12] Docket No. 07-035-93 Final Order at 18 (August 11, 2008).
[13] *Id.* at 16.
[14] *Id.* at 17.

the recent update to 11.0%. Moreover, my recommendation of 9.85% in the last case is within the range of DCF results and CAPM/Risk Premium results discussed above.

Given all of the above, it would appear that my recommendations are consistent with recent decisions of this Commission and Dr. Hadaway's proposals are simply overstated.

SECTION VI: CAPITAL STRUCTURE

Q. WHAT CAPITAL STRUCTURE IS THE COMPANY PROPOSING IN THIS PROCEEDING?

A. Based on the Second Supplemental Direct Testimony of Company witness Bruce Williams, RMP is proposing the following capital structure, cost rates and overall cost of capital to be earned on rate base investment as follows:

TABLE 3[15]
ROCKY MOUNTAIN POWER
OVERALL COST OF CAPITAL

Description	Percent	Cost	Weighted Cost
Long-Term Debt	48.2%	6.23%	3.00%
Preferred Stock	0.3%	5.41%	0.02%
Common Equity	51.5%	11.00%	5.67%
Total	100.00%	-	8.69%

Thus, the Company requests an overall cost of capital to be earned on rate base investment of 8.69% in this case.

Q. HAS THE COMPANY'S CAPITAL STRUCTURE AND CLAIMED COST RATES CHANGED SINCE THE FILING OF DIRECT TESTIMONY?

A. Yes. When the Company filed its direct case the following capital structure, cost rates and overall cost of capital were requested:

[15] Second Supplemental Direct Testimony Bruce Williams at 7:142.

TABLE 4[16]
ROCKY MOUNTAIN POWER
OVERALL COST OF CAPITAL

Description	Ratio	Cost	Weighted Cost
Long-Term Debt	47.7%	6.24%	2.98%
Preferred Stock	0.4%	5.41%	0.02%
Common Equity	51.9%	10.75%	5.58%
Total	100.0%	-	8.58%

The Company's new capital structure (Table 3 above) shows that the equity level and preferred stock ratio have fallen slightly while the debt capitalization has increased slightly. These slight capitalization ratio changes are the result of updating for the December 31, 2009 Commission ordered test year for this case. In addition, the Company now proposes an 11% return to equity shareholders rather than the original request of 10.75%. Lastly, long-term debt cost changed slightly between the Company's original and current proposals.

Q. WHAT IS THE SIGNIFICANCE OF CAPITAL STRUCTURE?

A. The overall cost of capital is the sum of the weighted average cost rates of various sources of capital. The quantity or portion of each type of capital, combined with the cost rate of capital determines the overall rate of return that the Company should be allowed to earn in this proceeding. The most significant relationship in any capital structure is the debt to equity ratio.

Q. DOES THERE EXIST SOME SET RELATIONSHIP OR IDEAL MIX OF DEBT AND EQUITY CAPITAL?

A. There exists no set debt/equity relationship for all firms or all industries in terms of leveraging. However, the ideal capital structure is one that minimizes the overall cost of capital to the firm, while still maintaining financial integrity so as to maintain the ability to attract capital at reasonable costs to meet future needs. Because the cost of debt is generally lower than the cost of equity, and also because the cost of debt represents a tax deductible expense, any increase in the quantity of debt capital tends to decrease the

[16] Direct Testimony Bruce Williams at 3:48-55.

overall cost of capital relative to equity financing. One must keep in mind that increases in the quantity of debt financing can cause the financial risk of the Company to increase. In other words, there is a cost for the savings associated with increased debt leveraging. That cost is increased financial risk to the firm.

In summary, it is not possible to determine with precision the exact proportion of debt and equity that minimizes the overall cost of capital without imposing undue financial risk upon the Company. There does exist some range of capital structure that generally, meets the goal of minimizing the overall cost of capital while maintaining the firm's financial integrity.

Q. WHAT CRITERIA SHOULD REGULATORS EMPLOY IN DETERMINING THE APPROPRIATE CAPITAL STRUCTURE TO BE USED FOR RATEMAKING?

A. In my opinion, rate regulation should focus on two criteria to determine the appropriate capital structure. Those factors as outlined below should be economy and safety.

The advantage of debt in the capital structure is that debt costs less than equity. Moreover, interest charges are deductible for income tax purposes and act to reduce taxes. Thus, the more debt in the capital structure the lower the cost of capital will be. The question of economy is addressed by examining whether increases in the debt ratio act to increase the cost rates of both debt and equity so as to over balance the benefits of the larger proportion of debt.

In addition, there is always the overriding question of safety. In other words, financial risk is increased if the proportion of debt is increased by such a magnitude that interest obligations cannot be covered during periods of depressed earnings.

Q. HOW DOES THE COMPANY'S PROPOSED CAPITAL STRUCTURE WHICH INCLUDES A 51.5% EQUITY RATIO COMPARE WITH THE CAPITAL STRUCTURE RATIOS OF THE COMPARABLE RISK COMPANIES?

A. The Company's proposed capital structure compares quite favorably to the equity ratios in the comparable risk group. As can be seen from Exhibit CCS 3.3 the comparable group equity ratio averages 49 percent for 2009, while RMP has an equity ratio of 51.5% for the test year ending 2009. Thus, RMP has less financial risk than the

comparable group companies.

Q. DO YOU HAVE ANY COMMENTS ON THE COMPANY'S PROPOSED CAPITAL STRUCTURE?

A. Yes. It must also be remembered that the Company is being afforded the opportunity to employ a forecasted test period and capital structure. While the Commission has determined the forecast test period is calendar year 2009 and not the 12 months ending June 30, 2009, the test year is even more forward looking than originally requested by RMP. A forecasted test year provides the Company benefits by reducing risks associated with regulatory lag. In other words, future investment and cost changes that are reasonably expected to occur in the rate effective period are reflected in the Company's revenue requirement and capital structure. For example, the capital structure proposed by RMP reflects expected 2009 financings.

Q. HOW DID THE COMPANY CALCULATE THE COST FOR LONG-TERM DEBT FOR THE TEST YEAR ENDING DECEMBER 31, 2009?

A. The Company calculated the cost of long-term debt of 6.23% based on averaging the weighted average cost of long-term debt at December 31, 2008 and projected December 31, 2009.[17]

Q. DID THE COMPANY ADJUST THE OUTSTANDING BOOK VALUES OF LONG-TERM DEBT FOR DEBT ISSUES DURING JULY 2008?

A. Yes. The Company reflected two long-term debt issues made in July 2008 in the total amount of $800 million.[18] The weighted interest cost of these two debt issues is approximately 6.0%.

Q. IN THE COMPANY'S LAST CASE, DOCKET NO. 07-035-93 DID RMP INCLUDE AN ADJUSTMENT FOR A PRO FORMA LONG-TERM DEBT ISSUANCE.

A. Yes. In RMP's last case the Company included a projected or pro forma debt issue of $700 million of additional long-term debt issues in the end of 2008. The Company through the testimony of witness Bruce Williams estimated the cost of this pro forma

[17] Second Supplemental Direct Testimony Bruce Williams at 2:43-46. Also see Exhibit RMP__(BNW-155).
[18] *Id*. at 3:52-57.

issuance to be 6.52%.[19] In that previous case, I pointed out the problems with Mr. Williams' estimate and I recommended that the pro forma debt cost should be estimated at 6.07%.

In July 2008, the Company issued $800 million of long-term debt in two separate issuances.[20] The weighted average debt cost of these two long-term debt issues for July 2008 was about 6.0% - well below Mr. William's estimate of 6.52%, but quite close to the 6.07% I estimated in the last case.

Q. DOES THE COMPANY INCLUDE IN THE LONG-TERM DEBT COST ESTIMATE AN ADDITIONAL PRO FORMA ESTIMATE FOR ADDITIONAL LONG-TERM DEBT TO BE ISSUED IN 2009?

A. Yes. The Company has included an additional or pro forma estimate of $800 million of long-term debt to be issued in 2009 at an interest rate estimated to be 8.47%.

Q. HOW DOES THE COMPANY ESTIMATE THE INTEREST RATE FOR THE $800 MILLION PRO FORMA LONG-TERM DEBT ISSUE?

A. The Company employs the same erroneous estimation methodology that led to the overstatement of debt costs in the last RMP case. The Company's debt cost estimation methodology is as follows:

(i) The Company "estimates" the credit spread between corporate debt and long-term treasury rates to be 3.87% at December 31, 2009;[21]

(ii) The Company employs a 4.51% "estimate" for the December 31, 2009 30 year Treasury Bond; [22] and

(iii) The Company assumed an additional .09 percent for issuance costs.[23]

When the three components above; credit spread (3.87%), estimated December 2009 long-term Treasury rate (4.51%) and issuance cost (.09%) are added together, the Company estimates a pro forma interest cost of 8.47% for the $800 million of forecasted

[19] Docket No. 07-035-93, Direct Testimony of Bruce Williams at 10:224-229.
[20] Williams Second Supplemental Direct Testimony at 3:52-59.
[21] Williams Second Supplemental Direct Testimony at 4:71 – 75.
[22] *Id*.
[23] *Id*.

699 debt issues.[24]

700 **Q. DO YOU AGREE WITH THE COMPANY'S PRO FORMA LONG-TERM DEBT**
701 **INTEREST COST ESTIMATE?**

702 A. No. Just like the previous case the Company's future estimates of interest cost on long-
703 term debt are overstated. Moreover, as discussed earlier, the results of RMP's last case
704 demonstrates the interest cost overstatement. Allowing RMP to charge an 8.47% long-
705 term debt cost will lead to an overstatement of revenue requirement and unreasonable
706 customer rates.

707 It is also important to note that when Mr. Williams filed his direct testimony, his
708 estimate for pro forma debt was 6.58%.[25]

709 Now, a few short months later, Mr. Williams claims the interest rate should be 8.47% or
710 1.89% higher than originally projected. On an $800 million dollar debt issue such an
711 increase amounts to $15,120,000 in increased annual revenue requirements. (1.89% x
712 $800,000,000 = $15,120.000).

713 **Q. HAVE YOU QUANTIFIED AN ALTERNATIVE PRO FORMA LONG-TERM**
714 **DEBT INTEREST COST?**
715
716 A. Yes. Employing a four month credit spread (July 08 – October 08) presented in Dr.
717 Hadaway's second supplemental direct testimony results in a credit spread of 2.30%.[26]
718 Rather than rely on historical high credit spreads a four month average tends to
719 normalize the credit spreads. The current 30 year Treasury Bond yield is about 3.68%
720 based on a three month average (October 2008 – December 2008). Accepting the
721 Company's claimed issuance expense of 0.09% combined with historical (not estimated)
722 credit spreads and 30 year Treasury Bond yields results in a pro forma long-term debt
723 interest estimate of 6.07% (2.30% + 3.68% + 0.09% = 6.07%). This 6.07% long-term
724 debt interest rate is consistent with my 6.07% estimate provided in my testimony just a
725 few months ago in the last docket.

726 **Q. WHAT IS THE ANNUAL IMPACT ON REVENUE REQUIREMENTS OF**

[24] *Id.*
[25] Direct Testimony of Bruce N. Williams at 11:232.
[26] Second Supplemental Direct Testimony of S. Hadaway at 5:91-92.

EMPLOYING A 6.07% RATHER THAN THE COMPANY PROPOSED 8.47% INTEREST RATE FOR THE $800 MILLION PRO FORMA DEBT ISSUE?

A. The difference in interest rates (prior to considering income tax impacts) is about $19,200,000 per year in lower interest costs. Employing a more realistic interest rate assumption of 6.07% for the $800 million pro-forma debt issue results in lowering the long-term debt interest cost in capital structure from 6.23% to 6.08%. I recommend a long-term debt rate of 6.08% in capital structure for this case.

Q. WHAT CAPITAL STRUCTURE AND COST RATES ARE YOU RECOMMENDING THAT THE COMMISSION ADOPT IN THIS CASE?

A. I am recommending that the Commission approve the Company's proposed capitalization levels for the test period ending December 31, 2009, but I also recommend that the long-term debt cost rate and common equity cost rate be reduced to the levels I recommended earlier in this testimony.

Based on the analyses and results discussed above, I am recommending the following capital structure, cost rates and overall cost of capital for this case:

TABLE 5
RECOMMENDED OVERALL COST OF CAPITAL
FOR ROCKY MOUNTAIN POWER
TEST YEAR ENDING DECEMBER 31, 2009

Description	Ratio	Cost	Weighted Cost
Long-term Debt	48.2%	6.08%	2.93%
Preferred Stock	0.3%	5.41%	0.02%
Common Equity	51.5%	10.00%	5.15%
Total	100.0%	__	8.10%

As can be seen from the above table when the long-term debt cost rates and common equity cost rates reflect current market conditions, the Company's overall cost of capital is 8.10%.

Q. PLEASE SUMMARIZE YOUR OVERALL COST OF CAPITAL

RECOMMENDATION IN THIS CASE.

A. The Company's requested 11.0% return on equity is overstated. A more reasoned cost of equity analysis results in a required return on shareholder equity of 10%. The Company's claimed cost of long-term debt of 6.23% should be reduced to 6.08% to correct for a significant overstatement of future financing costs. The combination of these recommended adjustments results in an overall cost of capital of 8.10% in this case.

Q. WILL YOUR RECOMMENDED RETURN PROVIDE THE COMPANY SUFFICIENT INTEREST COVERAGE TO MAINTAIN ITS FINANCIAL INTEGRITY?

A. Yes. Based on the capital structure above, my recommended 8.10% overall cost of capital provides coverage ratios of 3.71x and 2.76x for pretax and after-tax interest coverage respectively. In my opinion, these coverage ratios are sufficient for the Company to maintain financial integrity.

SECTION VII: COMMENTS ON DR. SAMUEL C. HADAWAY TESTIMONY

Q. DO YOU HAVE ANY GENERAL COMMENTS ON DR. HADAWAY'S ANALYSES?

A. Yes. First, Dr. Hadaway's recommendation in this case of an 11.0% to 11.5% return on equity is an overstatement of the cost of equity. Such a return if adopted would lead to excessive, unjust and unreasonable rates for customers.

As I discuss below, Dr. Hadaway's results are overstated for the following reasons:

1. The growth rates employed for the constant growth DCF averaging 6.12% are overstated, outdated and fail to take into account declining expectations of growth during an economic slow down or recession. When Dr. Hadaway's growth rates are updated and corrected his DCF results are consistent with the 9.8% to 10.0% DCF results I calculated and discussed above.

2. The growth rate employed for the long-term GDP growth DCF of 6.5% fails to reflect investor expectations and should be in the range of 5.2% - 5.5%. When this analysis is corrected his DCF results are consistent with my 9.8% to 10% results

discussed earlier.

3. The long-term growth rates employed in Dr. Hadaway's two-stage DCF suffer from the same infirmities as discussed in (2) above. When these long-term growth rates are corrected even to the 5.5%, level his two-stage DCF results match my 10.0% - 10.2% estimates discussed earlier for the two-stage DCF analysis.

4. Dr. Hadaway's updated risk premium analyses ranging from 10.83% to 12.44% are significantly overstated. When corrected for a realistic risk premium level and/or corrected for a more reasonable estimate of single-A rated debt yield – these risk premium results like the DCF analyses are dramatically reduced.

Overall, despite Dr. Hadaway's attempts to support an ROE estimate of 11.0% to 11.5% the facts just do not support his analysis.

Q. PLEASE COMMENT ON DR. HADAWAY'S UPDATED EQUITY RETURN RECOMMENDATION CONTAINED IN HIS SECOND SUPPLEMENTAL DIRECT TESTIMONY.

A. Dr. Hadaway is now recommending an equity return of 11.0% to 11.5% - which is higher than his direct testimony point estimate for equity return of 10.75%. The problem with his updated analysis is that Dr. Hadaway has allowed abnormal or atypical events to cloud his view of fundamental ratemaking and establishing reasonable estimates.

For example, at page 3 of his updated testimony Dr. Hadaway describes the events as follows:

- "…more turbulent than at any time since the 1930's", Second Supplemental at 3:49
- "Extremely large daily swings in the stock market…", *id.* at 3:49-50
- "…unprecedented corporate interest rate spreads in the debt markets have resulted in near chaos." *Id.* at 3:50-51
- "The financial markets have been reeling from a credit crisis." *Id.* at 3:57
- "The Federal government enacted emergency legislation …to stabilize the economy." *Id.* at 3:65-67

- "…the Federal Reserve pledged to pump another $800 billion into ailing credit markets…", *id.* at 4:70 – 71

- "…investment grade spreads are at or near 5-year highs with utility company spreads in excess of 500 basis points." *Id.* at 4:85 – 86

- "These virtually unprecedented spreads reflect the market conditions…". *Id.* at 6:134-135

Dr. Hadaway's description of recent capital market events are accurate and I agree with his use of such adjectives as "turbulent", "unprecedented", "chaos", "financial markets reeling", "unprecedented [credit] spread" as descriptive of financial events. But, rates and rate of return should be established not based on markets "reeling" or in "chaos" or "unprecedented [credit] spreads" – unless this Commission believes such events will continue into the future when rates from this case will be implemented.

In my opinion, instead of relying on extreme results that are "unprecedented", "chaotic", or the result of "reeling" financial markets – one needs to look to how the U.S. and world governments have responded and continue to address the situation. In light of government action such as economic stimulus packages, rescue plans for major financial institutions and other industries and overall efforts to increase credit market liquidity – the recent or post July 2008 events are not likely to continue or be repeated anytime soon.

While economic growth continues to be dampened and recession has impacted growth expectations, turbulent times in the credit markets are more likely to improve than get worse or stay the same. Dr. Hadaway's own forecast source "Trends & Projects"/October 2008 shows declining credit spreads from the beginning to the end of 2009. Further, his forecasting source also shows declining interest rates on new issue corporate debt.

Bottom line – unless it can be shown that chaos will continue to rule the financial markets for the foreseeable future – Dr. Hadaway's data and analyses do not reflect a realistic assessment of future capital costs.

Q. EARLIER YOU STATED THAT DR. HADAWAY'S UPDATED CONSTANT GROWTH DCF ANALYSIS INCLUDES OVERSTATED GROWTH ESTIMATES. PLEASE EXPLAIN.

A. Dr. Hadaway has relied on earnings per share forecasts of growth from Value Line, Zacks and Yahoo Finance/Thomson to arrive at his 6.12% average growth estimate. At this time, the Zacks and Thomson forecast estimates are overstated from about 15-30 basis points. Given the economic slowdown one would expect growth forecasts to decline. I expect these growth estimates will continue to decline over the next few months.

Q. YOU STATED THAT DR. HADAWAY'S USE OF A 6.5% GDP GROWTH RATE OVERSTATES THAT COST OF CAPITAL. PLEASE EXPLAIN.

A. As a long-term growth measure of the future, relying on the GDP historical growth measure as one of the measures to predict future earnings growth is not unreasonable. So long as future growth in GDP approaches the historical GDP measure, then the GDP growth rate proxy could be a reasonable estimate. However, caution should be taken in relying on historical GDP growth as the sole measure of expected growth in earnings.

I also differ with Dr. Hadaway in his change in methodology in calculating the GDP measure. In previous testimony such as the PacifiCorp rate case, Docket No. 03-2035-02, filed in May 2003, Dr. Hadaway employed a simple 20-year historical average of GDP growth for his long-term earnings growth proxy, which would produce a 5.5% GDP growth estimate. Since the 2003 case, Dr. Hadaway changed his methodology for calculating the historical GDP long-term growth rate. Rather than using the 20-year GDP average of 5.5%, Dr. Hadaway now takes an average of six different GDP growth period averages as illustrated in Table 3 below:

TABLE 6[27]
SUMMARY GDP GROWTH AVERAGES

10-year GDP average	5.2%
20-year GDP average	5.5%
30-year GDP average	6.6%
40-year GDP average	7.3%
50-year GDP average	7.1%
60-year GDP average	7.0%
Average of periods	**6.5%**

[27] Dr. Hadaway Direct Testimony Exhibit RMP_ (SCH-3).

In other words, Dr. Hadaway's new methodology averages the historical averages. Dr. Hadaway provides no explanation or basis for his changed methodology, the net impact of which is to increase the long-term growth estimate from the 20-year average of 5.5% to 6.5%.

Q. DO YOU RECOMMEND THE COMMISSION ACCEPT DR. HADAWAY'S NEW METHODOLOGY FOR COMPUTING LONG TERM GROWTH?

A. No. A 20-year period is certainly a sufficiently long time period to smooth aberrations and/or outliers to project into the future. I find no theoretical (economic or mathematical) reason to employ an average of the 10, 20, 30, 40, 50 and 60 year averages. It could be argued that more recent GDP growth data is more important, and the 10-year GDP average of 5.2% would be the best GDP proxy of growth. This may be especially true given recent Federal Reserve projections of a much lower and declining GDP growth. In my opinion, if the GDP average is to be used as one of the growth rate estimates, then the 10-year or 20-year average of 5.2% to 5.5% is a reasonable compromise for consideration in this case. The mid-point of 5.35% as a GDP growth rate proxy is consistent with analyst estimates for earnings and reflects current expectations of declining GDP growth. For example, a 5.4% growth estimate is consistent with analyst's estimates at this time.

Q. IF DR. HADAWAY'S GDP GROWTH RATE CALCULATION IS CORRECTED WHAT DCF RESULTS DOES HIS DATA AND MODEL PRODUCE?

A. Reducing the GDP growth estimate from 6.5% to 5.4% is a 110 basis point reduction to Dr. Hadaway's claimed 11.1% to 11.2% results. Thus, correcting Dr. Hadaway's results using a 5.5% GDP growth rate indicates a 10.0% to 10.1% constant growth DCF result.

It is important to note that the corrected ROE results above are consistent with the constant growth results of 10% I calculated earlier.

Q. DID DR. HADAWAY ESTIMATE A DCF RESULT EMPLOYING A MULTI-STAGE DCF GROWTH MODEL?

A. Yes. Dr. Hadaway's two-stage growth rate DCF model produces DCF estimates for ROE of 10.8% - 11.0%.[28] The problem with this analysis is his primary reliance on the

[28] Exhibit RMP_ (SCH-5) p.1.

faulty 6.5% GDP growth measure. When Dr. Hadaway's results are corrected for a 5.4% GDP growth rate, the results are in the 10% to 10.2% range. Thus, the corrected multi-stage DCF model produces results consistent with the previous DCF analyses discussed above.

Q. PLEASE COMMENT ON DR. HADAWAY'S RISK PREMIUM ANALYSES.

A. Dr. Hadaway presents three risk premium results at page 9 of his Second Supplemental Testimony as follows:

TABLE 7

DR. HADAWAY RISK PREMIUM MODEL RESULTS

Model	Interest Rate	Risk Premium	ROE
Forecasted Interest Rate and Risk Premium	6.55%	4.29%	10.84%
October Interest Rate and Risk Premium	7.56%	3.87%	11.43%
New Debt Interest Rate and Risk Premium	9.30%	3.14%	12.44%

First, Dr. Hadaway's third model "New Debt Interest Rate and Risk Premium" is such an outlier at 12.44% even he discards that result.

As to methods 1 and 2, Dr. Hadaway employs two estimates for single A debt. First, his 6.55% estimate is based on a three month average credit spread (August 08 – October 08) of 2.45%,[29] which is added to the 4.1% 30 year Treasury Bond forecast.[30] The 429 basis point risk premium is a direct calculation from Dr. Hadaway's risk premium analysis at (SCH-4SS) page 1 of 2.

For his second model, Dr. Hadaway's interest rate (single-A corporate debt) of 7.56% is the reported October 2008 cost rate as shown in his Exhibit RMP__ (SCH-2SS) page 1. This interest rate is employed in his updated analysis at Exhibit RMP__ (SCH-5SS) page 1 and the result is 11.43%.

The problem with these analyses is the overstatement of the single-A debt cost. In the

[29]Exhibit RMP__ (SCH-255) p.1.
[30] *Id*. at 2.

supplemental testimony the Company has presented this Commission three very different single-A debt costs. First, Mr. Williams claims single-A debt costs are 8.47% and that amount is included in the calculation of long-term debt.

Dr. Hadaway claims single-A debt costs are forecasted to be 6.55% and the October 2008 level is calculated at 7.56%. The Company is not a model of consistency with regard to estimating single-A debt costs in this case.

I provided a reasoned analysis demonstrating that the single-A debt cost is in the 6.07% range. Moreover, I also demonstrated that the Company's past single-A debt cost estimates were wrong by a wide margin. Thus, if a more reasonable cost of single-A debt were used, such as the 6.07% estimate discussed earlier, Dr. Hadaway's risk premium results would support an equity return of 10% which is consistent with correcting his DCF results.

Q. PLEASE SUMMARIZE YOUR COMMENTS REGARDING DR. HADAWAY'S EQUITY RETURN PROPOSALS.

A. Dr. Hadaway's analyses overstate the cost of equity and should not be accepted by this Commission to set rates in this case. In my opinion, when Dr. Hadaway's analyses are adjusted to reflect more realistic and normalized estimates – the results indicate a 10% return on equity is appropriate.

SECTION VIII: COMMENTS ON A RICHARD WALJE TESTIMONY

Q. DO YOU HAVE ANY COMMENTS REGARDING THE TESTIMONY OF A. RICHARD WALJE?

A. Yes, I have a number of comments. First, Mr. Walje's statement that the $116.1 million or 8.6% increase represents an 11 cent per day increase of an average residential electricity user is irrelevant as to the merits of the increase.[31] Certainly, when one measures an annual increase in days or hours of the year – one can make large changes look small. But, the issue is whether the costs included in the Company's $116.1 million annual increase are just, reasonable and necessary for the provision of electric service.

[31] Second Supplemental District Testimony of A. Richard Walje at 1:19-23.

Thus, while customer rate impacts are important – it is more important to address whether the costs being imposed on customers are reasonable and necessary.

Q. AT PAGE 3, LINES 57-60 OF HIS SUPPLEMENTAL TESTIMONY MR. WALJE STATES "THE COST OF OUR INPUTS HAVE GONE UP AND THE POPULATION IN THE STATE OF UTAH HAS GROWN: THE COMPANY AND OUR SHAREHOLDERS HAVE ABSORBED MORE THAN 20 YEARS OF INFLATION AND GROWTH. ADDITIONAL SAVINGS CAN ONLY BE ACHIEVED BY SACRIFICING QUALITY OF SERVICE." DO YOU HAVE ANY COMMENTS?

A. Yes. Until the last docket, the Company had settled a number of rate proceedings in Utah. There is no evidence that the Company subsidized customer rates to the detriment of shareholder returns as suggested by Mr. Walje. Moreover, productivity improvements combined with growth in sales keeps unit costs lower – a factor not considered when analyzing nominal price changes since 1985.[32]

Further, when comparing regulatory authority responses to rate requests the equity return granted in Utah is consistent with the level authorized the Company in other states. Thus, to suggest the Utah authorized rate revenue levels do not provide the Company the opportunity to meet its obligations[33] is not consistent with the facts.

Q. AT PAGE 6, LINES 119-137 MR. WALJE SUGGESTS THAT THE REGULATORY LAG ASSOCIATED WITH PUTTING LARGE INVESTMENTS IN RATES CAUSES A LOSS IN EARNINGS – DO YOU HAVE ANY COMMENTS?

A. Yes. First, Utah does allow for a case to include a future test period. For example, in this case the test year end is December 31, 2009. This allows the Company to address regulatory lag issues. Second, Mr. Walje's quantification of earnings erosion is one-sided and fails to consider all attendant impacts related to accumulated depreciation and revenue growth. For example, assuming annual depreciation expense is $183.3 million and overall return is 8.69%, the loss of one year of accumulated depreciation to customers is $15,929,000 ($183,300,000 *.0869). Thus, the quantification of a three month lag for a wind project of $11 million of lost return also has cost offsets from the customer side of the ledger.

[32] *Id*. at 2:27-28.
[33] *Id.* at 4:72-73.

Q. IN YOUR OPINION, IF THE COMMISSION ALLOWS THE COMPANY TO RECOVER ITS REASONABLE AND NECESSARY COSTS AND AUTHORIZES AN OVERALL RETURN CONSISTENT WITH YOUR RECOMMENDATION WILL RMP BE REQUIRED TO IMPLEMENT ADDITIONAL COST REDUCTION MEASURES LIKE THOSE ADDRESSED IN MR. WALJE'S TESTIMONY AT PAGE 13 LINES 288-298?

A. No. No regulatory authority should micro-manage a utility operation – and as such the assumption is that the Company will spend funds as outlined in its rate request. Once a rate change is granted the Company management will allocate funds to expenditures as management deems necessary. However, if management practices result in deficient service to customers in an effort to boost corporate profits or a failure to carry out prudent responsible management practices then such matters can be addressed in future proceedings as necessary. To the extent management practices cause cost and/or risk increases such costs and risk should be the Company shareholder burden not the customers.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.