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Before the

Idaho Public Utilities Commission

In the Matter of the Application of PacifiCorp DBA Rocky Mountain Power for Approval of Changes to its Electric Service Schedules	)	**Case No. PAC-E-07-05**

Direct Testimony and Exhibits of

Michael Gorman

Volume 2 – Cost of Capital

On behalf of

Monsanto Company

Project 8819
September 28, 2007

BRUBAKER & ASSOCIATES, INC.
ST. LOUIS, MO 63141-2000

PUBLIC

Before the Idaho Public Utilities Commission

In the Matter of the Application of PacifiCorp DBA Rocky Mountain Power for Approval of Changes to its Electric Service Schedules	Case No. PAC-E-07-05

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Direct Testimony of Michael Gorman

Q **PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

A My name is Michael Gorman and my business address is 1215 Fern Ridge Parkway, Suite 208, St. Louis, MO 63141-2000.

Q **WHAT IS YOUR OCCUPATION?**

A I am an energy advisor and a consultant in the field of public utility regulation and a managing principal in the firm of Brubaker & Associates, Inc. (BAI).

Q **PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

A These are set forth in Appendix A to my Volume 1 direct testimony.

Q **ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

A I am appearing on behalf of Monsanto Company.

Q **WHAT IS THE SUBJECT OF YOUR TESTIMONY?**

A I will recommend a fair return on common equity and overall rate of return for Rocky Mountain Power (RMP or Company).

Q PLEASE SUMMARIZE YOUR RATE OF RETURN RECOMMENDATIONS.

A I recommend the Idaho Public Utilities Commission (IPUC or the Commission) award RMP a return on common equity of 10.0%.

My recommended return on equity for RMP is based on a constant growth Discounted Cash Flow (DCF) model, a two-stage growth DCF model, Risk Premium (RP) model and Capital Asset Pricing Model (CAPM) analyses. These analyses estimate a fair return on equity based on observable market information for a group of publicly traded electric utility companies that proxy RMP's investment risk.

I also show that my proposed return on equity provides RMP an opportunity to earn cash flows that support its credit metrics, and that will support its current bond rating. This illustration proves that a 10% return on equity will support RMP's financial integrity and access to capital.

As such, my recommended return on equity is fair compensation and will maintain RMP's financial integrity.

Electric Utility Industry Market Perspective

Q PLEASE DESCRIBE THE MARKET'S PERCEPTION OF THE ELECTRIC UTILITY INDUSTRY OVER THE LAST SEVERAL YEARS.

A Standard & Poor's (S&P) I believe captures the sentiment of the investment market toward the electric utility industry experienced over the last several years. In 2001, S&P stated it recorded 81 downgrades to utility credit ratings, with only 29 upgrades. S&P stated in 2002 that the credit rating activity in the electric utility industry was negative due to: (1) weakening financial profiles, (2) loss of investor confidence which affected the industry's liquidity and financial flexibility, (3) heightened business risk derived from more investments outside the traditional regulated utility business,

(4) corporate restructuring and mergers and acquisitions, and (5) certain regulatory difficulties.

S&P attributed most of the 2002 liquidity and credit erosion in the industry to heavy debt funded investments in higher risk non-regulated activities, and the loss of management credibility due to accounting and trading irregularities.[1]

Importantly, this negative perception of the energy industry over the last several years has been improved considerably because the industry has reverted to a "back-to-basics" business model. As part of the back-to-basics business model, utilities have been shedding non-regulated activities and using the asset sale proceeds to retire debt. Also, utilities have adopted corporate governance policies that have helped regain the confidence of the market.

In 2005, S&P revised its industry outlook by stating that the industry's leading indicators of credit rating tend to show that there are nearly twice as many stable outlooks as negative outlooks. S&P credits improved credit quality and liquidity enhancement for improving credit rating metrics resulting primarily from a reduction of high cost debt and elimination of higher risk non-utility investments, and the industry's shift to a back-to-basics business model, which concentrates on core competencies, debt reduction and risk management (Standard & Poor's: Industry Report Card: U.S. Electric/Water/Gas, January 4, 2005).

In 2006, S&P confirmed the stable credit quality of the industry, which is expected to continue in the future despite increasing capital spending. Further, the industry focus on strengthening its balance sheet by divesting non-core business operations has improved utilities' ability to withstand the pressure of substantial

[1] S&P Utilities & Perspectives, Global Utilities Rating Service, October 14, 2002.

capital expeditures. (Standard & Poor's: Industry Report Card, January 12, 2007). In the second quarter of 2007, S&P identified the principal drivers of credit upgrades to be improving financial conditions, due to significant debt reduction, stronger free cash flow, cost reductions, regulatory support and reduced business risk (Standard & Poor's Industry Survey, Electric Utilities, August 9, 2007 at 6).

RMP Risk Factors

Q WHAT IS THE RELATIONSHIP BETWEEN RMP AND PACIFICORP?

A Rocky Mountain Power is a division of PacifiCorp. PacifiCorp is a wholly owned subsidiary of MidAmerican Energy Holdings Company (MEHC). PacifiCorp operates utilities in Oregon, Washington and California as Pacific Power. PacifiCorp's utility operations in Utah, Wyoming and Idaho operate as Rocky Mountain Power (RMP).

Q PLEASE PROVIDE AN OVERVIEW OF PACIFICORP'S INVESTMENT RISK.

A PacifiCorp has a business profile score of '5' and an investment bond rating of "A-" from S&P and "A3" from Moody's. The majority of the U.S. electric utility companies have a credit rating of "BBB".[2] PacifiCorp's bond rating is two notches above the industry average. For integrated utility companies, S&P's business profile scores typically fall within the range of '4' to '6'.[3] PacifiCorp's business profile score of '5' is comparable to the risk of a typical integrated electric utility company.

[2] Standard & Poor's Ratings Direct: Pace of U.S. Utility Rating Activity Moderated in 2006. January 23, 2007.

[3] Standard & Poor's: New Business Profile Score Assigned for U.S. Utility and Power Companies; Financial Guidelines Revised, June 2, 2004, Chart 4.

Q **IS PACIFICORP'S CREDIT QUALITY IMPACTED BY ITS PARENT COMPANY?**

A PacifiCorp's affiliation with its parent and other subsidiaries impacts its credit quality because S&P determines PacifiCorp's credit rating on a consolidated basis with its parent and affiliated companies. S&P stated as follows:

> The 'A-' corporate credit rating on PacifiCorp reflects MEHC's consolidated credit profile. The rating incorporates MEHC's strong business risk position, fairly aggressive financial profile, and both explicit and implicit support from Berkshire Hathaway.
>
> MEHC owns PacifiCorp through PPW Holdings LLC, a special-purpose entity that ring-fences PacifiCorp from MEHC as required by the Oregon Public Utilities Commission. The ring-fencing includes structural protections, covenants, a pledge of stock, and an independent director. PacifiCorp also agreed to refrain from making dividends to MEHC unless it maintains a common equity ratio of 48.25% through 2008, decreasing annually to 44% by 2012. These factors serve to protect PPW Holdings LLC and PacifiCorp from an MEHC bankruptcy. Due to the ring-fencing, PacifiCorp's corporate credit rating could potentially be as high as three notches above MEHC's rating, provided its stand-alone credit quality supported such an elevation. Currently, the utility's stand-alone credit metrics are in the 'BBB' category and do not warrant a rating above MEHC's.[4]

As such, PacifiCorp's bond rating is reasonably protected from MEHC through constructive ring-fence protections. Nevertheless, MEHC's financial position and investment risk can impact PacifiCorp's corporate credit rating and financial integrity. As such, the Commission should be concerned about the impact on PacifiCorp's ability to attract capital under reasonable terms and conditions due to unsuccessful or failed investments at MEHC, including acquisitions that may create undue financial distress on the parent company. However, at this time, MEHC does not appear to be creating any negative credit rating implications on PacifiCorp.

[4] Standard & Poor's: PacifiCorp's $600 Million Bonds Rated "A-", March 14, 2007.

Projected Interest Rates and Capital Market Costs

Q SHOULD THE COMMISSION PLACE HEAVY RELIANCE ON PROJECTED INTEREST RATES AND FUTURE CAPITAL MARKET COSTS RELATIVE TO TODAY'S OBSERVABLE CAPITAL MARKET COSTS?

A No. While projected interest rates should be given some consideration, the determination of RMP's cost of capital today should be based primarily on observable and verifiable actual current market costs. This is appropriate because projected changes to interest rates are highly uncertain and their accuracy is at best problematic. Indeed, this is clearly evident by a review of projected changes to interest rates made over the last five years, in comparison to how accurate these projections turned out to be. This analysis clearly illustrates that observable interest rates today are as accurate as are economists' consensus projections of future interest rates.

An analysis supporting this conclusion is illustrated on Exhibit 221 (MPG-8). On this exhibit, under Columns 1 and 2, I show the actual market yield at the time a projection is made for Treasury bond yields two years in the future. In Column 1, I show the actual Treasury yield and, in Column 2, I show the projected yield two years out. As shown in Columns 1 and 2, over the last five years, Treasury yields were projected to increase relative to the actual Treasury yields at the time of the projection. In Column 4, I show what the Treasury yield actually turned out to be two years after the forecast. Under Column 5, I show the actual yield change at the time of the projections relative to the projected yield change.

As shown on this exhibit, over the last five years, economists have been consistently projecting increases to interest rates. However, as demonstrated under Column 5, those yield projections have turned out to be overstated in virtually every case. Indeed, actual Treasury yields have decreased or remained flat over the last five years, rather than increase as the economists' projections indicated.

This review of the experience with projected interest rates clearly illustrates that interest rate projection accuracy is highly problematic. Indeed, current observable interest rates are just as likely a reasonable projection of future interest rates as are economists' projections. Accordingly, while I will use projected interest rates to provide some sense of the market's expectations of future capital market costs, I will not use them exclusively. Rather, my analyses will be based on the combination of current observable interest rates and projected interest rates. Thus, my analyses will capture a return on equity range reflecting a broad range of potential actual capital market costs during the period rates determined in this proceeding will be in effect.

Q ARE THERE OTHER REASONS NOT TO RELY EXCLUSIVELY ON UNCERTAIN PROJECTED INCREASES TO INTEREST RATES?

A Yes. The ratemaking process itself provides utilities protection against the increasing cost of capital. Indeed, if RMP's rate of return is set based on today's market cost of capital, and capital costs increase in the future, then RMP is free to file for a rate change to reflect higher capital costs in the future when, or if, costs change. Hence, the regulatory mechanism itself provides utilities a hedge against increasing capital costs. Depriving ratepayers of today's low cost capital market environment is prejudicial and unreasonably tilts the regulatory balance in favor of investors.

RMP's Proposed Capital Structure

Q **WHAT CAPITAL STRUCTURE IS THE COMPANY REQUESTING TO USE TO DEVELOP ITS OVERALL RATE OF RETURN FOR ELECTRIC OPERATIONS IN THIS PROCEEDING?**

A RMP's proposed capital structure, as supported by Mr. Bruce N. Williams, is shown below in Table 1.

TABLE 1

RMP's Requested Capital Structure

Description	Percent of Total Capital
Long-Term Debt	49.1%
Preferred Stock	0.5%
Common Equity	50.4%
Total Regulatory Capital Structure	100.0%

Source: Williams Direct at 3.

Q **ARE YOU PROPOSING ANY ADJUSTMENTS TO MR. WILLIAMS' RECOMMENDED CAPITAL STRUCTURE TO SET RMP'S OVERALL RATE OF RETURN IN THIS PROCEEDING?**

A No. The proposed capital structure represents the Company's pro forma capital structure as of December 31, 2007, which is reasonably comparable to RMP's actual capital structure in 2006.

Q WHAT OVERALL RATE OF RETURN DO YOU RECOMMEND FOR RMP IN THIS PROCEEDING?

A As shown on Exhibit 222 (MPG-9), based on my proposed return on equity and RMP's proposed capital structure, I recommend the Commission set RMP's overall rate of return at 8.14%.

Return on Common Equity

Q PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED UTILITY'S COST OF COMMON EQUITY.

A In general, determining a fair cost of common equity for a regulated utility has been framed by two decisions of the U.S. Supreme Court, in Bluefield Water Works & Improvement Co. v. Public Serv. Comm'n of West Virginia, 26 U.S. 679 (1923) and Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944).

These decisions identify the general standards to be considered in establishing the cost of common equity for a public utility. Those general standards are that the authorized return should: (1) be sufficient to maintain financial integrity; (2) attract capital under reasonable terms; and (3) be commensurate with returns investors could earn by investing in other enterprises of comparable risk.

Q PLEASE DESCRIBE WHAT IS MEANT BY "UTILITY'S COST OF COMMON EQUITY."

A A utility's cost of common equity is the return investors expect, or require, in order to make an investment. Investors expect to achieve their return requirement from receiving dividends and stock price appreciation.

Q PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE THE COST OF COMMON EQUITY FOR RMP.

A I have used several models based on financial theory to estimate RMP's cost of common equity. These models are: (1) a constant growth Discounted Cash Flow (DCF) model, (2) a two-stage growth DCF model, (3) a Risk Premium (RP) model, and (4) a Capital Asset Pricing Model (CAPM). I have applied these models to a group of publicly traded utilities that I have determined represent the investment risk of RMP.

Q PLEASE DESCRIBE THE PROXY GROUP YOU USED TO ESTIMATE RMP'S RETURN ON EQUITY IN THIS PROCEEDING.

A I relied on the same risk proxy group used by RMP witness, Dr. Samuel Hadaway.

Q HOW DOES THIS PROXY GROUP RISK COMPARE TO RMP?

A My proposed proxy group is shown on Exhibit 223 (MPG-10). My proxy group has an average bond rating from S&P and Moody's of "A-" and "A2," respectively. My proxy group average bond ratings are reasonably comparable to RMP's credit ratings from S&P and Moody's of "A-" and "A3," respectively.

My proxy group has an average common equity ratio of 51% from Value Line and 47% from AUS. In comparison, RMP's requested common equity ratio is 50%, which is approximately identical to the Company's actual common equity ratio. As such, my proxy group has reasonably comparable financial risk to RMP.

Finally, my proxy group has a S&P's business profile score of '4' compared to RMP score of '5'. This S&P business profile score indicates the proxy group has slightly lower business risk than RMP, albeit comparable. Hence, my proxy group has comparable business and financial risks to RMP. Based on this assessment, I believe my proxy group has reasonably comparable investment risk to RMP.

Discounted Cash Flow Model

Q PLEASE DESCRIBE THE DCF MODEL.

A The DCF model posits that a stock price is valued by summing the present value of expected future cash flows discounted at the investor's required rate of return (ROR) or cost of capital. This model is expressed mathematically as follows:

$$Po = \frac{D1}{(1+K)^1} + \frac{D2}{(1+K)^2} \;....\; \frac{D\infty}{(1+K)^\infty} \quad \text{where} \qquad \text{(Equation 1)}$$

Po= Current stock price
D = Dividends in periods 1 - ∞
K = Investor's required return

This model can be rearranged in order to estimate the discount rate or investor required return, "K." If it is reasonable to assume that earnings and dividends will grow at a constant rate, then Equation 1 can be rearranged as follows:

$$K = D1/Po + G \qquad \text{(Equation 2)}$$

K = Investor's required return
D1 = Dividend in first year
Po = Current stock price
G = Expected constant dividend growth rate

Equation 2 is referred to as the annual "constant growth" DCF model.

Q PLEASE DESCRIBE THE INPUTS TO YOUR CONSTANT GROWTH DCF MODEL.

A As shown under Equation 2 above, the DCF model requires a current stock price, expected dividend, and expected growth rate in dividends.

Q **WHAT STOCK PRICE AND DIVIDEND HAVE YOU RELIED ON IN YOUR CONSTANT GROWTH DCF MODEL?**

A I relied on the average of the weekly high and low stock prices over a 13-week period ended September 7, 2007. An average stock price is less susceptible to market price variations than is a spot price. Therefore, an average stock price is less susceptible to aberrant market price movements, which may not be reflective of the stock's long-term value.

A 13-week average stock price is short enough to contain data that reasonably reflects current market expectations, but is not too short a period to be susceptible to market price variations that may not be reflective of the security's long-term value. Therefore, in my judgment, a 13-week average stock price is a reasonable balance between the need to reflect current market expectations and to capture sufficient data to smooth out aberrant market movements.

I used the most recently paid quarterly dividend, as reported in the Value Line Investment Survey. This dividend was annualized (multiplied by 4) and adjusted for next year's growth to produce the D1 factor for use in Equation 2 above.

Q **WHAT DIVIDEND GROWTH RATES HAVE YOU USED IN YOUR CONSTANT GROWTH DCF MODEL?**

A There are several methods one can use in order to estimate the expected growth in dividends. However, for purposes of determining the market required return on common equity, one must attempt to estimate investors' consensus about what the dividend or earnings growth rate will be, and not what an individual investor or analyst may use to form individual investment decisions.

Security analysts' growth estimates have been shown to be more accurate predictors of future returns than growth rates derived from historical data[5] because they are more reliable estimates, and assuming the market generally makes rational investment decisions, analysts' growth projections are the most likely growth estimates considered by the market that influence observable stock prices.

For my constant growth DCF analysis, I have relied on a consensus, or mean, of professional security analysts' earnings growth estimates as a proxy for the investor consensus dividend growth rate expectations. I used the average of three sources of ratepayer growth rate estimates: Zack's, Reuters, and SNL Financial. All consensus analyst projections used were available on September 13, 2007, as reported on-line.

Each consensus growth rate projection is based on a survey of security analysts. The consensus estimate is a simple arithmetic average, or mean, of surveyed analysts' earnings growth forecasts. A simple average of the growth forecasts gives equal weight to all surveyed analysts' projections. It is problematic as to whether any particular analyst's forecast is most representative of general market expectations. Therefore, a simple average, or arithmetic mean, analyst forecast is a good proxy for market consensus expectations. The growth rates I used in my DCF analysis are shown on Exhibit 224 (MPG-11).

Q WHAT ARE THE RESULTS OF YOUR CONSTANT GROWTH DCF MODEL?

A As shown on Exhibit 225 (MPG-12), the constant growth DCF return for my comparable group is 10.0%.

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[5] *See e.g.*, David Gordon, Myron Gordon, and Lawrence Gould, "Choice Among Methods of Estimating Share Yield," The Journal of Portfolio Management, Spring 1989.

Q DO YOU HAVE ANY COMMENTS CONCERNING THE RESULTS OF YOUR CONSTANT GROWTH DCF ANALYSIS?

A Yes. The average three- to five-year growth rate for my comparable group is 5.54%. This growth rate is slightly above the rational estimate of long-term sustainable growth.

Q WHY DO YOU BELIEVE THE PROXY GROUP'S THREE- TO FIVE-YEAR GROWTH RATE IS NOT A RATIONAL ESTIMATE OF LONG-TERM SUSTAINABLE GROWTH?

A The proxy group's three- to five-year growth rate exceeds the growth rate of the overall U.S. economy. Based on consensus economic projections, as published by Blue Chip Economic Indicators, the five and ten-year GDP growth is estimated at a nominal rate of 5.1%.[6] A company cannot grow, indefinitely, at a <u>faster</u> rate than the market in which it sells its products. The U.S. economy, or GDP, growth projection represents a ceiling, or high end, sustainable growth rate for a utility over an indefinite period of time.

Utilities cannot sustain a growth rate that exceeds the growth rate of the overall economy, because utilities' earnings/dividend growth is created by increased utility investment, which in turn is driven by service area economic growth. In other words, utilities invest in plant to meet sales demand growth, and sales growth in turn is tied to economic growth in their service areas. Hence, nominal GDP growth is a proxy for sales growth, utility rate base growth, and earnings growth. Therefore, GDP growth is the highest sustainable long-term growth rate of a utility.

[6] Blue Chip Economic Indicators, March 10, 2007 at 15.

Moreover, the proxy group's projected growth rate of 5.54% is higher than the historical growth rates the proxy group has achieved over the last five to ten years, and that is projected over the next three to five years. As shown on Exhibit 226 (MPG-13), the historical growth of my proxy group's dividend is substantially lower than the nominal GDP growth, and actually less than the projected inflation growth. Importantly, this growth rate exceeds the projected growth of inflation and the projected growth of nominal GDP. Therefore, this growth rate estimate does not reflect investors' rational expectations.

Further, the current and projected payout ratios of my group are 72% and 64%, respectively. This indicates utilities are retaining a large percentage of their earnings, which will help support future growth through earnings and dividends.

Finally, the current and projected dividend-to-book ratios of my comparable utility group are both 7.2%. This indicates that the dividend is affordable in today's low-cost capital market environment, and utilities could support that dividend at an authorized return on equity well under 10% and still retain adequate earnings to fund future growth.

Q WHY DO YOU BELIEVE GROWTH RATES FOR ELECTRIC UTILITY COMPANIES ARE PROJECTED TO BE HIGHER OVER THE NEXT THREE TO FIVE YEARS?

A Electric utility companies are in the midst of major construction programs, which are significantly increasing their outstanding capital and net plant investment. In fact, in the fourth quarter 2006, the Edison Electric Institute (EEI), a utility company trade organization, published a financial update for electric utilities. A portion of the highlights identified by EEI is as follows:

■ Shareholder-owned electric utilities brought 5,857 MW of new capacity online in 2006, 42% less than in 2005. Natural gas generation has dropped from 98% of new plant construction in 2002 to 64% in 2006. In contrast, wind has increased from 1% to 32% over the same time period.

■ With reserve margins shrinking in several key regional electricity markets and nationwide power demand growing steadily, the industry is now planning a new round of plant construction. Announced new capacity additions totaled 33,998 MW in 2006, surpassing the total for each of the last four years, and over twice that of 2005.

■ EEI survey results indicate that the industry is planning to invest $31.5 billion in the transmission system from 2006-2009, a 58% increase over the amount invested from 2002-2005. Transmission investment in 2005 totaled $5.8 billion, an 18% increase over the $4.9 billion invested in 2004. (EEI, Construction, Q4 2006 Financial Update).

In the second quarter of 2007, EEI confirmed the large capital expenditure programs undertaken by U.S. utilities.

U.S. electricity demand is growing slowly but steadily and the utility industry is in the early stages of a sizeable long-term capital investment cycle that includes rising spending on emissions control equipment, transmission and distribution upgrades and, over the longer term, a new round of baseload generation. Much of this will likely be built in rate base.

EEI's recent construction survey shows that industry-wide capital spending is set to rise from $48.4 billion in 2005 to $73.1 billion in 2007, a 51.1% increase. And Wall Street analysts forecast strong investment by the industry beyond the end of the decade. The prospect of carbon regulation adds to the potential longevity of the current build cycle, should carbon capture and sequestration become the most economically viable way of complying with future carbon limits.

Thus, the projected increase in utility earnings and dividend paying ability is not a sustainable trend, but rather is the result of an abnormally high period of industry construction expenditures. Once generation reserve margins are increased to or above target levels, transmission capacity investments are made to alleviate transmission constraints and environmental upgrades are complete, it is reasonable to expect that capital expenditures by utilities will decline to a more normal and sustainable growth level. This will cause utility earnings also to drop to a sustainable growth level.

EEI's assessment supports the use of a two-stage growth DCF model in this case, because three- to five-year earnings growth projections will be unsustainably high after the current abnormally high construction expenditure period comes to an end.

Q SINCE YOU HAVE CONCLUDED THAT THE GROWTH RATES USED IN YOUR CONSTANT GROWTH DCF MODEL ARE SLIGHTLY HIGHER THAN THE LONG-TERM SUSTAINABLE GROWTH, DO YOU BELIEVE THAT THE RESULT OF YOUR CONSTANT GROWTH DCF MODEL FOR YOUR PROXY GROUP IS REASONABLE?

A Yes, the result of my constant growth DCF model is reasonable albeit high, because the growth rate used in this study is slightly higher than the maximum sustainable growth rate of 5.1%. However, my constant growth DCF is based on consensus analysts' growth rate projections, so it is a reasonable reflection of rational investment expectations over the next three to five years. The limitation on the constant growth DCF model is that it cannot reflect a rational expectation that a period of high/low short-term growth can be followed by a change in growth to a rate that is more reflective of long-term sustainable growth. Hence, I will perform a two-stage DCF analysis to reflect this outlook of changing growth expectations.

Two-Stage DCF Model

Q WHY DO YOU PROPOSE TO USE A TWO-STAGE DCF MODEL TO TEST THE RESULTS OF YOUR CONSTANT GROWTH DCF STUDY?

A I propose to use a two-stage DCF model because the growth rates used in my constant growth model are higher than a reasonable estimate of long-term sustainable growth. As noted above, utilities cannot grow faster than the economies in which they sell their services. Historically, utility sales have grown at a rate that trails the growth in the overall U.S. economy.

As such, a two-stage DCF model can capture the expectation of abnormally high growth over the next five years, followed by a decline of long-term sustainable growth.

Q PLEASE DESCRIBE YOUR TWO-STAGE DCF MODEL.

A The two-stage DCF growth model reflects the possibility of non-constant growth to a company over time. The two-stage model reflects two growth periods: (1) a short-term growth period, which consists of the first five years; and (2) a long-term growth period, which consists of each year starting in year six through perpetuity. For the short-term growth period, I relied on the consensus analysts' growth projections described above in relationship to my constant growth DCF model. For the long-term growth period, I assumed each company's growth would increase toward the maximum sustainable growth rate for a utility company as proxied by the consensus analysts' projected growth for the U.S. GDP.

Q WHAT STOCK PRICE AND DIVIDEND DID YOU USE IN YOUR TWO-STAGE DCF ANALYSIS?

A I relied on the same 13-week stock price, the most recent quarterly dividend payment, and consensus analysts' growth rate projections discussed above in my constant growth DCF model. For the long-term sustainable growth rate starting in year six, I used the consensus economists' five to ten-year projected nominal GDP growth rate of 5.1%.

Q WHAT ARE THE RESULTS OF YOUR TWO-STAGE GROWTH DCF MODEL?

A As shown on Exhibit 227 (MPG-14), the DCF return on equity for my proxy group is 9.6%.

Risk Premium Model

Q PLEASE DESCRIBE YOUR BOND YIELD PLUS RISK PREMIUM MODEL.

A This model is based on the principle that investors require a higher ROR to assume greater risk. Common equity investments have greater risk than bonds because bonds have more security of payment in bankruptcy proceedings than common equity and the coupon payments on bonds represent contractual obligations. In contrast, companies are not required to pay dividends on common equity, or to guarantee returns on common equity investments. Therefore, common equity securities are considered to be more risky than bond securities.

This risk premium model is based on two estimates of an equity risk premium. First, I estimated the difference between the required return on utility common equity investments and Treasury bonds. The difference between the required return on common equity and the bond yield is the risk premium. I estimated the risk premium on an annual basis for each year over the period 1986 through June 2007. The common equity required returns were based on regulatory commission-authorized returns for electric utility companies. Authorized returns are typically based on expert witnesses' estimates of the contemporary investor required return.

The second equity risk premium method is based on the difference between regulatory commission-authorized returns on common equity and contemporary A-rated utility bond yields. This time period was selected because over the period 1986 through June 2007, public utility bond yields have consistently traded at a premium to book value. This is illustrated on Exhibit 228 (MPG-15), where the market to book ratio since 1986 for the electric utility industry was consistently above 1.0. Therefore, over this time period, regulatory authorized returns were sufficient to support market prices that at least exceeded book value. This is an indication that regulatory authorized returns on common equity supported a utility's ability to issue additional common stock, without diluting existing shares. This is an indication that utilities were able to access equity markets without a detrimental impact on current shareholders.

Based on this analysis, as shown on Exhibit 229 (MPG-16), the average indicated equity risk premium of authorized electric utility common equity returns over U.S. Treasury bond yields has been 5.04%. Of the 22 observations, 18 indicated risk premiums fall in the range of 4.4% to 5.9%. Since the risk premium can vary depending upon market conditions and changing investor risk perceptions, I believe using an estimated range of risk premiums provides the best method to measure the current return on common equity using this methodology.

As shown on Exhibit 230 (MPG-17), the average indicated authorized electric utility common equity return over contemporary Moody's utility bond yields was 3.67%

over the period 1986 through June 2007. The equity risk premium estimates based on this analysis primarily fall in the range of 3.0% to 4.4% over this time period.

Q BASED ON HISTORICAL DATA, WHAT RISK PREMIUM HAVE YOU USED TO ESTIMATE RMP'S COST OF EQUITY IN THIS PROCEEDING?

A The equity risk premium should reflect the relative market perception of risk in the utility industry today. I have gauged investor perceptions in utility risk today on Exhibit 231 (MPG-18). On that exhibit, I show the yield spread between utility bonds and Treasury bonds over the last 27 years. As shown on this exhibit, the 2007 utility bond yield spreads over Treasury bonds for "A" rated and "Baa" rated utility bonds are 1.11% and 1.34%, respectively. These utility bond yield spreads over Treasury bond yields are among the lowest yield spreads in the last 27 years, and are below the 27-year average "A" and "Baa" yield spreads of 1.56% and 1.92%, respectively. Hence, this comparison of utility bond yield spreads indicates the market perception of utility risk to be below the average industry risk over this historical time period.

Recognizing the robust nature and the current market's low-risk valuation of utility investments, I believe it is appropriate to use an average market equity risk premium to estimate the current market-required return on equity. Hence, I relied on a Treasury bond risk premium of 5.2% (midpoint of the 4.4% to 5.9% range), and an equity risk premium over utility bond yields of 3.7% (midpoint of the 3.0% to 4.4% range), as described above.

Q HOW DID YOU ESTIMATE RMP'S COST OF COMMON EQUITY WITH THIS MODEL?

A I added a projected long-term Treasury bond yield to my estimated equity risk premium over Treasury yields. Blue Chip Financial Forecasts projects the 30-year Treasury bond yields to be 5.2%, and a 10-year Treasury bond to be 5.0% (Blue Chip Financial Forecast, September 1, 2007 at 2). Using the projected 30-year bond yield of 5.2%, and a Treasury bond risk premium of 4.4% to 5.9%, produces an estimated common equity return in the range of 9.6% to 11.1%, with a midpoint estimate of 10.4%.

I next added my equity risk premium over utility bond yields to a current 13-week average yield on "A" rated utility bonds for the period ending September 7, 2007 of 6.25%. This current "A" utility bond yield is developed on Exhibit 232 (MPG-19). Adding the utility equity risk premium of 3.0% to 4.4% to a "A" rated bond yield of 6.25%, produces a cost of equity in the range of 9.3% to 10.7%, with a midpoint of 10.0%.

My risk premium analyses produce a return estimate in the range of 10.0% to 10.4%, with a midpoint estimate of 10.2%.

Capital Asset Pricing Model

Q PLEASE DESCRIBE THE CAPM.

A The CAPM method of analysis is based upon the theory that the market required rate of return (ROR) for a security is equal to the risk-free ROR, plus a risk premium associated with the specific security. This relationship between risk and return can be expressed mathematically as follows:

$$Ri = Rf + Bi \times (Rm - Rf) \text{ where:}$$

Ri = Required return for stock i
Rf = Risk-free rate
Rm = Expected return for the market portfolio
Bi = Beta - Measure of the risk for stock

The stock-specific risk term in the above equation is beta. Beta represents the investment risk that cannot be diversified away when the security is held in a diversified portfolio. When stocks are held in a diversified portfolio, firm-specific risks can be eliminated by balancing the portfolio with securities that react in the opposite direction to firm-specific risk factors (e.g., business cycle, competition, product mix and production limitations).

The risks that cannot be eliminated when held in a diversified portfolio are nondiversifiable risks. Nondiversifiable risks are related to the market in general and are referred to as systematic risks. Risks that can be eliminated by diversification are regarded as nonsystematic risks. In a broad sense, systematic risks are market risks, and nonsystematic risks are business risks. The CAPM theory suggests that the market will not compensate investors for assuming risks that can be diversified away. Therefore, the only risk that investors will be compensated for are systematic or nondiversifiable risks. The beta is a measure of the systematic or nondiversifiable risks.

Q PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.

A The CAPM requires an estimate of the market risk-free rate, the company's beta, and the market risk premium.

Q WHAT DID YOU USE AS AN ESTIMATE OF THE MARKET RISK-FREE RATE?

A The Blue Chip Financial Forecasts' projected 30-year Treasury bond yield is 5.2%. The current 30-year bond yield is 5.0% (Blue Chip Financial Forecast, September 1, 2007 at 2). I used the Blue Chip Financial Forecasts' projected 30-year Treasury bond yield of 5.2% for my CAPM analysis.

Q WHY DID YOU USE LONG-TERM TREASURY BOND YIELDS AS AN ESTIMATE OF THE RISK-FREE RATE?

A Treasury securities are backed by the full faith and credit of the United States government. Therefore, long-term Treasury bonds are considered to have negligible credit risk. Also, long-term Treasury bonds have an investment horizon similar to that of common stock. As a result, investor-anticipated long-run inflation expectations are reflected in both common stock required returns and long-term bond yields. Therefore, the nominal risk-free rate (or expected inflation rate and real risk-free rate) included in a long-term bond yield is a reasonable estimate of the nominal risk-free rate included in common stock returns.

Treasury bond yields, however, do include risk premiums related to unanticipated future inflation and interest rates. Therefore, a Treasury bond yield is not a risk-free rate. Risk premiums related to unanticipated inflation and interest rates are systematic or market risks. Consequently, for companies with betas less than 1.0, using the Treasury bond yield as a proxy for the risk-free rate in the CAPM analysis can produce an overstated estimate of the CAPM return.

Q WHAT BETA DID YOU USE IN YOUR ANALYSIS?

A As shown on Exhibit 233 (MPG-20), my proxy group average and median Value Line beta estimates are 0.86 and 0.85, respectively. Based on this data, I will use a beta of 0.85 for my CAPM analysis.

Q DO YOU RECOMMEND A CAREFUL CONSIDERATION OF A UTILITY BETA FOR USE IN A CAPM STUDY?

A Yes. Utility betas have been increasing over the last five years, as shown on Exhibit 233 (MPG-20), largely because electric utility stocks have outperformed the overall market. While this increasing beta gives the impression of increasing risk, that interpretation is incorrect.

Indeed, electric utility risk factors have been decreasing as these companies revert to a back-to-basics investment strategy that lowers their operating risks, and they have been divesting non-regulated businesses to reduce debt and strengthen balance sheets, which is lowering risk. Value Line notes this in a recent review of the electric utility industry. Value Line states as follows:

> **Better Finances**
> This decade, utilities have distanced themselves from risky unregulated business forays, including commodities trading, foreign energy operations, water services and aircraft leasing. Currently, *Dominion Resources* plans to sell its oil and gas production business, *Duke* is spinning its mid-stream gas operations to shareholders, *Northeast Utilities* is divesting its merchant power generation business, and *Progress Energy* is shedding power plant and natural gas assets. Such actions have improved earnings performance and strengthened capital ratios. Companies are targeting a nearly equal weighting of debt and equity on their balance sheets, a goal that should be met by 2009-2011.
>
> Revenue-backed and tax-exempt bonds will provide economical funding for planned capital improvements.

> This will further support overall finances. (The Value Line Investment Survey, Electric Utility (East) Industry, December 1, 2006, p. 157).

Further, Value Line notes an increase in the common equity ratio and fixed charge coverage ratio over the last three to five years. These Value Line parameters indicate lower financial risk and stronger earnings and cash flow coverages of financial obligations. This reduces utilities' risk and limits the variability to market factors that can inhibit the utilities' ability to meet investors' earnings and cash flow expectations.

These risk reductions have resulted in robust stock return performance for electric utility stocks, as shown on Exhibit 234 (MPG-21). As illustrated on this exhibit, electric utility stocks have outperformed the market over the last five years. This utility stock performance has contributed to an increase in betas and given the impression that electric utility stock variability is comparable to the overall market, but other risk factors clearly show that that is a false indication.

Reliance on the group median beta, which is a beta that is stronger than the beta has been over the last five years, is more reflective of the majority of the individual company betas included in my proxy group.

Q HOW DID YOU DERIVE YOUR MARKET PREMIUM ESTIMATE?

A I derived two market premium estimates, a forward-looking estimate and one based on a long-term historical average.

The forward-looking estimate was derived by estimating the expected return on the market (S&P 500) and subtracting the risk-free rate from this estimate. I estimated the expected return on the S&P 500 by adding an expected inflation rate to the long-term historical arithmetic average real return on the market. The real return on the market represents the achieved return above the rate of inflation.

The Ibbotson and Associates' Stocks, Bonds, Bills and Inflation 2007 Year Book publication estimates the historical arithmetic average real market return over the period 1926-2006 as 9.1%. A current consensus analyst inflation projection, as measured by the Consumer Price Index, is 2.1% (Blue Chip Financial Forecasts, September 1, 2007 at 2). Using these estimates, the expected market return is 11.4%.[7] The market premium then is the difference between the 11.4% expected market return, and my 5.2% risk-free rate estimate, or 6.2%.

The historical estimate of the market risk premium was also estimated by Ibbotson and Associates in Stocks, Bonds, Bills and Inflation, 2007 Year Book. Over the period 1926 through 2006, Ibbotson's study estimated that the arithmetic average of the achieved total return on the S&P 500 was 12.3%, and the total return on long-term Treasury bonds was 5.8%. The indicated equity risk premium is 6.5% (12.3% - 5.8% = 6.5%).

Q WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?

A As shown on Exhibit 235 (MPG-22), based on the average of my prospective market risk premium of 6.2% and my historical risk premium of 6.5%, a beta of 0.85 and a risk-free rate of 5.2% produces a CAPM return of 10.6%.

[7] $\{ [(1 + 0.091) * (1 + 0.021)] - 1 \} * 100.$

Q HAVE YOU DONE ANY TEST ON THE RESULTS OF YOUR CURRENT CAPM ANALYSIS?

A Yes. As noted above, utility beta estimates are abnormally high currently due to a robust performance of utility stocks over the last five years. The current proxy group beta of 0.85 is much higher than the five-year actual beta for this group of 0.75. Hence, to test the impact on the CAPM estimate for my proxy group, I have also constructed a CAPM study using the five-year historical beta of 0.75 and the same risk-free rate and market risk premiums, as shown on Exhibit 236 (MPG-23). This alternative would produce a CAPM estimate of 10.0%. Use of this historical beta estimate produces a CAPM risk premium estimate that is reasonably comparable to my risk premium study described above.

Return on Equity Summary

Q BASED ON THE RESULTS OF YOUR RATE OF RETURN ON COMMON EQUITY ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY DO YOU RECOMMEND FOR RMP?

A Based on my analyses, I estimate RMP's current market cost of equity to be 10.0%.

TABLE 2

Return on Common Equity Summary

Description	Results
Constant Growth DCF	10.0%
Two-Stage DCF	9.6%
Risk Premium	10.2%
CAPM	10.6%

My recommended return on equity of 10.0% is at the midpoint of my estimated return on equity range for RMP of 9.6% to 10.4%. The high end of my estimated range is based on my CAPM and risk premium studies analyses. The low end of my estimated range is based on my DCF analyses.

Financial Integrity

Q WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT RMP'S CURRENT BOND RATING FROM S&P?

A Yes. I have reached this conclusion by comparing the key credit rating financial ratios for RMP at the Company's proposed capital structure and my return on equity to S&P's benchmark financial ratios for an "A" rated utility and a "BBB" rated utility with an S&P business profile score of '5', RMP's profile score.

Q PLEASE DESCRIBE S&P'S USE OF THE FINANCIAL BENCHMARK RATIOS IN ITS CREDIT RATING REVIEW.

A S&P evaluates a utility's credit rating based on an assessment of its financial and business risks. A combination of financial and business risks equates to the overall assessment of the Company's <u>total</u> credit risk exposure. S&P publishes a matrix of financial ratios that defines the level of financial risk as a function of the level of business risk.

S&P rates a utility's business risk based on a business profile score of '1', lowest risk, up to '10', highest risk. Integrated electric utilities typically have a business profile score from S&P of '4', '5' or '6', while transmission and distribution electric utilities' profile scores primarily range from '2' to '4'.

S&P publishes ranges for three primary financial ratios that it uses as guidance in its credit review for utility companies. The three primary financial ratio benchmarks it relies on in its credit rating process include: (1) funds from operations (FFO) to debt interest expense, (2) FFO to total debt, and (3) total debt to total capital.

Q HOW DID YOU APPLY S&P'S FINANCIAL RATIOS TO TEST THE REASONABLENESS OF YOUR RATE OF RETURN RECOMMENDATIONS?

A I calculated each of S&P's financial ratios based on RMP's cost of service for retail operations. While S&P would normally look at consolidated RMP corporate financial ratios in its credit review process, my investigation in this proceeding is to judge the reasonableness of my proposed cost of capital for RMP's Idaho utility regulated operations. Hence, I am attempting to determine whether the rate of return and cash flow generation opportunity reflected in my proposed cost of capital for RMP will support its investment grade bond ratings and financial integrity.

Q HAVE YOU INCLUDED ANY OFF-BALANCE SHEET (OBS) DEBT EQUIVALENTS IN CALCULATING THE FINANCIAL RATIOS FOR RMP?

A Yes. At page 8 of his direct testimony, Mr. Williams stated that S&P included $537 million of additional debt and related interest expenses when adjusting the benchmark credit metrics, to reflect PacifiCorp's purchased power agreements.

Q HOW DID YOU ADJUST THE CREDIT METRICS FOR OBS DEBT EQUIVALENTS AND SHORT-TERM DEBT?

A I developed a financial capital structure using the ratemaking capital structure but I added the OBS debt equivalents and short-term debt balances. The short-term debt and OBS balances were provided by the Company in response to Monsanto Data Request No. 2.51. This financial capital structure produced the adjusted total debt to total capitalization ratios needed to compare RMP's total debt ratio to S&P's credit metric benchmark.

The OBS imputed debt interest was calculated based on the OBS debt equivalents and the discount rate of 6.26%, or RMP's embedded debt cost. The implied OBS amortization expense was calculated based on the 2008 capacity payment for purchased power agreements less the OBS debt interest expense. This is consistent with the S&P methodology as outlined in the report attached to RMP witness William's testimony as Exhibit No. 9, page 3.

Q PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRICS ANALYSIS FOR RMP.

A The S&P financial metric calculation for RMP is developed on Confidential Exhibit 237 (MPG-24). In constructing this analysis, I reflected my recommended 10.0% return on equity and the Company's recommended capital structure.

As shown on Confidential Exhibit 237 (MPG-24), based on an equity return of 10.0%, RMP will be provided an opportunity to produce a Funds From Operations (FFO) to debt interest expense ratio of 4.4x. This FFO to interest coverage ratio falls in the high end of the range of S&P's benchmark ratio guideline of 4.5x to 3.8x for an "A" rated utility company with a business profile score of '5'.

RMP's total debt ratio to total capital is 53% at the Company's proposed capital structure. This is in the lower end of S&P's "BBB" rated utility range of 50% to 60%, which supports a strong "BBB" rating.

Finally, RMP's retail operations FFO to total debt coverage at a 10.0% equity return would be 21%, which is near the top (strong) of S&P's financial metric range of 15% to 22% for a "BBB" rated utility company.

At my proposed capital structure and return on equity, RMP's financial metrics are supportive of a weak "A" utility bond rating. Therefore, my recommended return on equity of 10.0% will support RMP's financial integrity, its current bond rating and fairly compensate investors for its financial risk.

Response to RMP Witness, Dr. Samuel Hadaway

Q WHAT RETURN ON COMMON EQUITY IS RMP PROPOSING FOR THIS PROCEEDING?

A RMP is proposing to set rates based on a return on equity of 10.75% based on Dr. Hadaway's proxy group of electric utility companies and his analyses summarized at page 33 of his direct testimony.

Q DO YOU HAVE ANY GENERAL COMMENTS CONCERNING DR. HADAWAY'S OUTLOOK AND PRINCIPLES IN ESTABLISHING A FAIR RETURN ON EQUITY FOR RMP IN THIS PROCEEDING?

A Yes. At page 4 of his direct testimony, Dr. Hadaway takes issue with the constant growth DCF model because he asserts that it depends on historically low dividend yields and pessimistic growth forecasts. He believes that these near-term circumstances do not reasonably reflect his longer-term expectations for higher capital costs. As such, he makes several adjustments to increase current capital market estimates to reflect his belief that capital costs will increase in the long term.

Q DO YOU BELIEVE IT IS REASONABLE FOR DR. HADAWAY TO INCREASE HIS RETURN ON EQUITY ESTIMATES BECAUSE OF HIS BELIEF THAT CAPITAL COSTS WILL INCREASE OVER THE LONG TERM?

A No. This is unreasonable and a biased assessment for several reasons:

1. Dr. Hadaway has not provided any corroborating evidence that any market participant shares his expectation of increases to current market capital costs.
2. The accuracy of projected changes to capital market costs are at very best problematic. Utility rates should not be set based on costs that are not known and measurable.
3. If capital costs do increase, as Dr. Hadaway believes, RMP can file to adjust rates, to reflect an increase to these costs. Rates in this regulatory proceeding should be set based on known and measurable costs.
4. Return on equity estimates should be based on an assessment of the **<u>market's</u>** capital cost requirements, not an assessment of the expected return of the individual **<u>analyst</u>**. Dr. Hadaway's return on equity estimates are based on his own belief and risk assessment. He is not attempting to measure RMP's cost of capital in the marketplace today. This is significant, because RMP will attract capital from the market, not from Dr. Hadaway. Hence, it is appropriate to develop an authorized return on equity based on the demands of the marketplace, not the individual opinion of Dr. Hadaway.

Q DO DR. HADAWAY'S METHODOLOGIES SUPPORT HIS 10.75% RETURN ON EQUITY FOR HIS PROXY GROUP?

A No. As discussed in detail below, reflecting current market data and properly applying his models, Dr. Hadaway's own analyses would support a return on equity of 10.0%.

Q PLEASE DESCRIBE DR. HADAWAY'S METHODOLOGY SUPPORTING HIS RETURN ON COMMON EQUITY RECOMMENDATION.

A Dr. Hadaway develops his return on common equity recommendation using three versions of the DCF analysis and a utility risk premium analysis. Further, he tests his results using risk premium analyses conducted by Ibbotson & Associates and a study published by Harris & Marston (H&M). The results of Dr. Hadaway's return on equity analysis are shown at page 33 of his direct testimony. I have summarized Dr. Hadaway's results below in Table 3 under Column 1. Under Column 2, I show the results of Dr. Hadaway's analyses adjusted for updated data and more reasonable application of the models.

As shown below in Table 3, using updated information and more reasonable estimates of GDP growth, Dr. Hadaway's own analyses would support a return on equity for RMP of 10.0%. The update and corrections to Dr. Hadaway's cost of equity models prove that a 10.0% equity return is reasonable. This is discussed in detail below.

TABLE 3

Summary of Hadaway's ROE Estimate

Description	**Hadaway Results (1)**	**Adjusted Hadaway Results (2)**
Constant Growth DCF (Traditional)*	9.0% - 9.4%	9.0%
Constant Growth (GDP Growth)	10.8% - 10.9%	9.3%
Two-Stage Growth DCF	10.5% - 10.6%	9.1%
Estimated DCF*	10.5% - 10.9%	9.1%
Risk Premium Utility	10.7%	10.1%
Ibbotson Risk Premium	10.8%	10.1%
Harris-Marston Risk Premium	11.4%	10.7%
Estimated ROE	10.75%	10.0%

Source: Hadaway Direct at 33.

* The constant growth DCF model was excluded from Dr. Hadaway's range.

Q **PLEASE DESCRIBE DR. HADAWAY'S CONSTANT GROWTH DCF ANALYSIS.**

A Dr. Hadaway's constant growth DCF analysis is shown on his Exhibit No. 5, page 2 of 5. As shown on that exhibit, Dr. Hadaway's constant growth DCF analysis is based on a recent price and an average of three growth rates: (1) Zacks; (2) Value Line; and (3) Dr. Hadaway's estimate of GDP growth.

Q **IN WHAT WAY DID DR. HADAWAY OVERSTATE HIS DCF ESTIMATES?**

A Dr. Hadaway used a GDP growth rate of 6.6% as one of three growth rates. This GDP growth is excessive and not reflective of current market expectations.

Q HOW DID DR. HADAWAY DEVELOP HIS GDP GROWTH RATE?

A He states that the GDP growth rate is based on the achieved GDP growth over the last 10, 20, 30, 40, 50, and 59-year periods. Dr. Hadaway's projected GDP growth rate is unreasonable. Historical GDP growth over the last 20 and 40-year periods was strongly influenced by the actual inflation rate experienced over that time period.

Q WHY IS DR. HADWAY'S DCF ESTIMATE EXCESSIVE IN COMPARISON TO THAT OF PUBLISHED MARKET ANALYSTS?

A The consensus economists' projected GDP growth rate is much lower than the GDP growth rate used by Dr. Hadaway in his DCF analysis. A comparison of Dr. Hadaway's GDP growth rates and consensus economists' projected GDP growth over the next five and ten years is shown below in Table 4. As shown in the table below, Dr. Hadaway's GDP rate of 6.6% reflects real GDP of 3.2% and an inflation GDP of 3.3%. However, consensus economists' projections of nominal GDP include real GDP and GDP inflation expectations over the next five and ten years of 3.0%, and 2.1%, respectively.

As is clearly evident in the table below, Dr. Hadaway's historical GDP growth reflects historical inflation, which is much higher than, and not representative of, consensus market expected forward-looking inflation.

TABLE 4

GDP Projections

Description	GDP Inflation	Real GDP	Nominal GDP
Dr. Hadaway	**3.3%**	**3.2%**	**6.6%**
Consensus 5-Year Projection	**2.1%**	**3.0%**	**5.1%**
Consensus 10-Year Projection	**2.1%**	**3.0%**	**5.1%**

Source: Blue Chip Economic Forecast, March 10, 2007.

As such, Dr. Hadaway's 6.6% nominal GDP growth rate is not reflective of consensus market expectations, and should be rejected.

Q HOW WOULD DR. HADAWAY'S DCF ANALYSES CHANGE IF CURRENT MARKET-BASED GDP GROWTH RATE PROJECTIONS ARE INCLUDED IN HIS ANALYSIS RATHER THAN HIS EXCESSIVE GDP GROWTH RATE?

A As shown on Exhibit 238 (MPG-25), I updated Dr. Hadaway's DCF analyses using a GDP growth rate of 5.1%. This is the consensus five-year projected growth rate of the GDP. As shown on page 1 of my Exhibit 238 (MPG-25), using this consensus projected GDP growth rate reduces his constant growth DCF result from 9.4% to 9.0%.

Using a GDP growth rate of 5.1% would reduce his long-term GDP growth rate from 10.8% to 9.3% as shown on page 2 of Exhibit 238 (MPG-25), and his two-stage growth DCF model from 10.5% to 9.1% as shown on page 3 of Exhibit 238 (MPG-25).

Q WITH THESE ADJUSTMENTS, WHAT RETURN ON EQUITY WOULD DR. HADAWAY'S DCF MODELS SUGGEST IS A FAIR RETURN ON EQUITY FOR RMP IN THIS PROCEEDING?

A Reflecting a consensus economists' GDP growth forecast would produce an average DCF result using Dr. Hadaway's models of 9.2% similar to, but lower than my estimated DCF return on equity of 9.6%.

Q PLEASE DESCRIBE DR. HADAWAY'S UTILITY RISK PREMIUM ANALYSIS.

A Dr. Hadaway's utility bond yield versus authorized return on common equity risk premium is shown on his Exhibit No. 6, page 1. As shown on this exhibit, Dr. Hadaway compares the contemporary Moody's average bond yield for utility companies and the authorized regulatory commission return on common equity over the period 1980 through 2006. Based on this analysis, Dr. Hadaway estimates an average indicated equity risk premium over contemporary utility bond yields of 3.13%.

Dr. Hadaway then adjusts this average equity risk premium using a regression analysis based on an expectation that there is an ongoing inverse relationship between interest rates and equity risk premiums. Based on this regression analysis, Dr. Hadaway increases his equity risk premium from 3.13%, as reflected in his analysis, up to 4.42%. He then adds this inflated equity risk premium to a projected "A" bond yield of 6.30% to produce a return on equity of 10.72% for RMP.

Q IS DR. HADAWAY'S UTILITY RISK PREMIUM ANALYSIS REASONABLE?

A No. Dr. Hadaway has unreasonably attempted to create a forward-looking specific risk premium point estimate using this historical data. This is not reasonable because the data and model are not that precise. For example, interest rate volatility and inflation uncertainty in the 1980s and early 1990s are not reasonably representative of interest rate volatility and inflation outlooks currently and going forward. Inflation volatility or uncertainty over this historical time period had an impact on utility bond yields, valuations and equity risk premiums. This inflation volatility, however, is not characteristic of the current capital markets.

Q IS IT APPROPRIATE TO USE ONLY FORECASTED INTEREST RATES IN A RISK PREMIUM ANALYSIS AS DR. HADAWAY HAS DONE?

A No. As indicated above, the accuracy of projected interest rates is highly problematic. Indeed, while interest rates have been projected to increase over the last five years, those increased interest rate projections have turned out to be wrong and significantly inflated. Despite economists' continued pessimistic projections of increases to interest rates over the last five years, interest rates have actually either stayed flat or have declined. Accordingly, Dr. Hadaway's analysis should be performed based on current interest rates, with some consideration given to forecasted interest rates.

Q DOES DR. HADAWAY'S RISK PREMIUM ANALYSIS SUPPORT A RETURN ON EQUITY OF 10.75% IN THIS PROCEEDING?

A No. His equity risk premium estimate of 4.42% is overstated. As discussed in my direct testimony, since the spread between utility bond yields and Treasury bond yields is currently relatively low, an average equity risk premium of 3.1% based on Dr. Hadaway's study applied to a current "A" bond yield of 6.25% would indicate a fair return on equity for RMP of 9.4%. In any case, the reasonable application of Dr. Hadaway's model, and observation of current real capital market costs for utility companies, indicate a risk premium in the range of 3.1% to 4.5%, excluding the two highest estimates and all estimates below the midpoint. This risk premium range would indicate a fair return on equity for RMP in the range of 9.4% to 10.8%, with a midpoint of 10.1%. This range supports my recommended return on equity of 10.0% for RMP in this proceeding.

Q DID DR. HADAWAY PERFORM ANY TESTS OF HIS RISK PREMIUM ANALYSIS RESULTS?

A Yes. Dr. Hadaway compared his utility risk premium analysis to studies performed by Ibbotson & Associates and H&M. Dr. Hadaway states that Ibbotson & Associates studied the return on common stocks versus corporate bonds for the period 1926 through 2005. The Ibbotson study found that the arithmetic mean risk premium was 6.1%, and the geometric mean return was 4.5%. He states that using the geometric mean return and a debt cost of 4.5%, and his projected 6.3% "Baa" utility bond yield would produce an indicated equity return of 10.80% for RMP. (Hadaway Direct at 31).

According to Dr. Hadaway, the H&M study found an equity risk premium over U.S. Government bonds of 6.47%, and the equity risk premium over corporate bonds to be 5.13%. Dr. Hadaway finds that the H&M study would support an equity risk premium over an A-rated corporate debt of 11.43% (6.30% debt cost and 5.13% risk premium). (*Id.* at 32).

Q DO THE INDICATED RISK PREMIUM RESULTS FROM THE IBBOTSON & ASSOCIATES AND H&M STUDIES SUPPORT A RETURN ON COMMON EQUITY FOR RMP OF 10.80% AND 11.43%, RESPECTIVELY, AS ESTIMATED BY DR. HADAWAY?

A No. There are several flaws in this analysis. First, the Ibbotson & Associates and H&M studies are based on common equity returns and equity risk premiums for the <u>overall market</u>. Both of these studies are based on the returns for the S&P 500. Dr. Hadaway did not, and cannot, show that the S&P 500 is risk comparable to RMP as a regulated electric utility.

In fact, it is widely recognized that electric utility risk is considerably lower than that of the overall market. This is evident by a review of the beta coefficients measured by Value Line for utility companies, as illustrated on Exhibit 233 (MPG-20), discussed above. As I noted earlier with respect to my CAPM analysis, utility company stock market risk is approximately 85% of that of the overall market. Hence, while the equity risk premiums derived from these two studies may be appropriate for the overall market, they overstate significantly a reasonable equity risk premium for a low risk regulated electric utility such as RMP. Therefore, Dr. Hadaway's use of the Ibbotson and H&M studies' equity risk premiums to produce a return on common equity for RMP is unreasonable and should be rejected.

Second, as noted above, Dr. Hadaway's projected bond yields are not reflective of current market expectations. Hence, his return on equity estimate from this analysis does not reflect the current capital markets' conditions.

Q CAN THE RISK PREMIUM STUDIES PUBLISHED BY IBBOTSON AND H&M BE USED TO DEVELOP A COMMON EQUITY ESTIMATE FOR RMP?

A Only generally. By recognizing RMP's much lower risk than that of the overall market, the equity risk premiums developed by Ibbotson and H&M, of 4.5%, and 5.13%, respectively, should be adjusted by a factor of approximately 85%. This 85% represents the current estimate of a utility beta as published by the Value Line Investment Survey. Using a 85% adjustment factor to reflect RMP's lower than market risk, these studies' equity risk premiums adjusted for the lower risk would be reduced to 3.8% (4.5% x 85%) in the case of Ibbotson, and 4.4% (5.13% x 85%) in the case of H&M. Comparing a 3.8% and 4.4% equity risk premium to the current cost of an "A" rated electric utility bond of 6.3% would indicate a return on common equity of 10.1% to 10.7%.

Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A Yes.

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ROCKY MOUNTAIN POWER

Accuracy of Interest Rate Forecasts

(Long-Term Treasury Bond Yields - Projected Vs. Actual)

		Publication Data			Actual Yield in Projected Quarter	Projected Yield Higher (Lower) Than Actual Yield*	Actual Yields Differential**
Line	Date	Actual Yield (1)	Projected Yield (2)	For Quarter (3)	(4)	(5)	(6)
1	Dec-00	5.8%	5.8%	1Q, 02	5.6%	0.2%	0.2%
2	Mar-01	5.7%	5.6%	2Q, 02	5.8%	-0.2%	-0.1%
3	Jun-01	5.4%	5.8%	3Q, 02	5.2%	0.6%	0.2%
4	Sep-01	5.7%	5.9%	4Q, 02	5.1%	0.8%	0.6%
5	Dec-01	5.5%	5.7%	1Q, 03	4.9%	0.8%	0.6%
6	Mar-02	5.3%	5.9%	2Q, 03	4.7%	1.2%	0.6%
7	Jun-02	5.6%	6.2%	3Q, 03	5.2%	1.0%	0.4%
8	Sep-02	5.8%	5.9%	4Q, 03	5.2%	0.7%	0.6%
9	Dec-02	5.2%	5.7%	1Q, 04	4.9%	0.8%	0.3%
10	Mar-03	5.1%	5.7%	2Q, 04	5.4%	0.3%	-0.3%
11	Jun-03	5.0%	5.4%	3Q, 04	5.1%	0.3%	-0.1%
12	Sep-03	4.7%	5.8%	4Q, 04	4.9%	0.9%	-0.2%
13	Dec-03	5.2%	5.9%	1Q, 05	4.8%	1.1%	0.4%
14	Mar-04	5.2%	5.9%	2Q, 05	4.6%	1.3%	0.6%
15	Jun-04	4.9%	6.2%	3Q, 05	4.5%	1.7%	0.4%
16	Sep-04	5.4%	6.0%	4Q, 05	4.8%	1.2%	0.6%
17	Dec-04	5.1%	5.8%	1Q, 06	4.6%	1.2%	0.4%
18	Mar-05	4.9%	5.6%	2Q, 06	5.1%	0.5%	-0.3%
19	Jun-05	4.8%	5.5%	3Q, 06	5.0%	0.5%	-0.2%
20	Sep-05	4.6%	5.2%	4Q, 06	4.7%	0.5%	-0.2%
21	Dec-05	4.5%	5.3%	1Q, 07	4.8%	0.5%	-0.3%
22	Mar-06	4.8%	5.1%	2Q, 07	5.0%	0.1%	-0.2%
23	Apr-06	N/A	5.1%	3Q, 07			
24	May-06	4.6%	5.2%	3Q, 07			
25	Jun-06	4.6%	5.3%	3Q, 07			
26	Jul-06	5.1%	5.3%	4Q, 07			
27	Aug-06	5.1%	5.3%	4Q, 07			
28	Sep-06	5.1%	5.2%	4Q, 07			
29	Oct-06	5.0%	5.1%	1Q, 08			
30	Nov-06	5.0%	5.1%	1Q, 08			
31	Dec-06	5.0%	5.0%	1Q, 08			
32	Jan-07	4.7%	5.1%	2Q, 08			
33	Feb-07	4.7%	5.1%	2Q, 08			
34	Mar-07	4.7%	5.1%	2Q, 08			
35	Apr-07	4.8%	5.0%	3Q, 08			
36	May-07	4.8%	5.1%	3Q, 08			
37	Jun-07	4.8%	5.1%	3Q, 08			
38	Jul-07	5.0%	5.4%	4Q, 08			
39	August	5.0%	5.2%	4Q, 08			

Source:
Blue Chip Financial Forecasts, Various Dates.
* Col. 2 - Col. 4.
** Col. 1 - Col. 4.

ROCKY MOUNTAIN POWER

Proposed Rate of Return

Line	Description	Amount (1)	Weight (2)	Cost (3)	Weighted Cost (4)
1	Long-Term Debt	$ 4,523,205,000	49.1%	6.26%	3.07%
2	Preferred Stock	$ 41,463,300	0.5%	5.41%	0.02%
3	Common Equity	$ 4,645,400,280	50.4%	**10.00%**	5.04%
4	**Total**	**$ 9,210,068,580**	**100.0%**		**8.14%**

Source:
Williams Direct at 3 and Attach Monsanto 1.6. b.

ROCKY MOUNTAIN POWER

Comparable Group

Line	Electric Utility	Bond Ratings S&P[1] (1)	Bond Ratings Moody's[1] (2)	Business Profile Rating[3] (3)	2006 Common Equity Ratios AUS[1] (5)	2006 Common Equity Ratios Value Line[2] (4)
1	ALLETE	A-	Baa1	6	63%	65%
2	Alliant Energy	A-	A2	5	59%	63%
3	CH Energy	A	A2	3	55%	59%
4	Consolidated Edison	A	A1	2	47%	49%
5	DTE Energy	BBB+	A3	6	40%	44%
6	Energy East Corp.	BBB+	A3	3	44%	43%
7	IDACORP	A-	A3	5	49%	55%
8	MGE Energy	AA	Aa2	4	56%	61%
9	NSTAR	A+	A1	1	36%	40%
10	PPL Corporation	A-	A3	7	39%	42%
11	Progress Energy	BBB+	A2	5	47%	48%
12	SCANA Corp.	A-	A1	4	44%	47%
13	Southern Co.	A	A1	4	42%	46%
14	Vectren Corp.	A	A3	4	44%	49%
15	Xcel Energy Inc.	BBB+	A3	5	44%	47%
16	Average	**A-**	**A2**	**4**	**47%**	**51%**
17	Rocky Mountain Power (Idaho)	A-	A3	5	50%[4]	

Sources:
[1] AUS Utility Reports; August 2007.
[2] The Value Line Investment Survey; June 29, August 10, August 31, 2007.
[3] U.S. Utilities and Power Ranking List, May 4, 2007.
[4] Williams Direct at 3.

ROCKY MOUNTAIN POWER

Growth Rate Estimates

Line	Electric Utility	Zacks Estimated Growth %[1] (1)	Zacks Number of Estimates[1] (2)	Reuters Estimated Growth %[2] (3)	Reuters Number of Estimates[2] (4)	SNL Estimated Growth %[3] (5)	SNL Number of Estimates[3] (6)	AVG of Growth Rates (7)
1	ALLETE	5.00%	1	8.75%	2	5.00%	1	6.25%
2	Alliant Energy	6.00%	2	5.67%	3	7.00%	1	6.22%
3	CH Energy	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4	Consolidated Edison	3.50%	6	3.95%	9	3.00%	5	3.48%
5	DTE Energy	5.67%	3	6.00%	5	3.00%	2	4.89%
6	Energy East Corp.	3.50%	2	4.00%	1	4.00%	1	3.83%
7	IDACORP.	6.00%	2	5.67%	3	5.00%	3	5.56%
8	MGE Energy	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9	NSTAR	6.25%	4	5.75%	4	7.00%	5	6.33%
10	PPL Corporation	13.00%	4	11.86%	7	13.00%	3	12.62%
11	Progress Energy	4.25%	4	4.50%	7	5.00%	6	4.58%
12	SCANA Corp.	4.50%	4	4.32%	4	4.00%	3	4.27%
13	Southern Co.	4.43%	7	4.69%	9	5.00%	7	4.71%
14	Vectren Corp.	4.33%	3	4.33%	3	4.00%	1	4.22%
15	Xcel Energy, Inc.	4.83%	6	5.29%	7	5.00%	3	5.04%
16	**Average**	**5.48%**	**4**	**5.75%**	**5**	**5.38%**	**3**	**5.54%**

Sources:
[1] www.zacksadvisor.com, Detailed Research on September 13, 2007.
[2] www.investor.reuters.com, Earnings Estimates on September 13, 2007.
[3] http://www.snl.com, Long-term Growth Rate Estimates on September 13, 2007.

ROCKY MOUNTAIN POWER

Constant Growth DCF Model

Line	Electric Utility	13-Week AVG Stock Price[1] (1)	AVG (%) Growth (2)	Annual Dividend[2] (3)	Adjusted Yield (4)	Constant Growth DCF (5)
1	ALLETE	$45.09	6.25%	$1.64	3.86%	10.11%
2	Alliant Energy	$38.62	6.22%	$1.27	3.50%	9.72%
3	CH Energy	$46.23	N/A	$2.16	N/A	N/A
4	Consolidated Edison	$45.72	3.48%	$2.32	5.25%	8.73%
5	DTE Energy	$48.80	4.89%	$2.12	4.56%	9.45%
6	Energy East Corp.	$25.44	3.83%	$1.20	4.90%	8.73%
7	IDACORP	$32.18	5.56%	$1.20	3.94%	9.49%
8	MGE Energy	$32.46	N/A	$1.39	N/A	N/A
9	NSTAR	$32.57	6.33%	$1.30	4.24%	10.58%
10	PPL Corporation	$47.86	12.62%	$1.22	2.87%	15.49%
11	Progress Energy	$45.90	4.58%	$2.44	5.56%	10.14%
12	SCANA Corp.	$38.47	4.27%	$1.76	4.77%	9.04%
13	Southern Co.	$34.95	4.71%	$1.61	4.83%	9.54%
14	Vectren Corp.	$27.06	4.22%	$1.26	4.85%	9.07%
15	Xcel Energy, Inc.	$20.71	5.04%	$0.92	4.67%	9.71%
16	**Average**	**$37.47**	**5.54%**	**$1.59**	**4.45%**	**10.0%**

Sources:
[1] http://moneycentral.msn.com, downloaded on September 13, 2007.
[2] The Value Line Investment Survey; June 29, August 10, August 31, 2007.

ROCKY MOUNTAIN POWER

GDP and Dividend Growth Rates

		Dividend Growth			Inflation (CPI)*			Nominal GDP*	
Line	Electric Utility	Past 5 Years[1] (1)	Past 10 Years[1] (2)	3-5 Years Projection[1] (3)	Past 5 Years[2] (4)	Past 10 Years[2] (5)	3-5 Years Projection[2] (6)	Past 5 Years[1] (7)	Past 10 Years[1] (8)
1	ALLETE	N/A	N/A	N/A					
2	Alliant Energy	-11.5%	-6.0%	5.5%					
3	CH Energy	N/A	0.5%	1.0%					
4	Consolidated Edison	1.0%	1.0%	1.0%					
5	DTE Enrgy	N/A	N/A	2.5%					
6	Energy East Corp.	5.0%	3.5%	4.5%					
7	IDACORP	-8.5%	-4.5%	N/A					
8	MGE Energy	1.0%	1.0%	0.5%					
9	NSTAR	3.0%	2.5%	7.0%					
10	PPL Corporation	13.0%	1.5%	15.0%					
11	Progress Energy	2.5%	3.0%	1.0%					
12	SCANA Corp.	5.0%	1.0%	4.0%					
13	Southern Co.	2.0%	2.0%	4.0%					
14	Vectren Corp.	4.0%	N/A	3.0%					
15	Xcel Energy, Inc.	-10.5%	-4.5%	4.5%					
16	**Average**	**0.5%**	**0.1%**	**4.1%**	**2.6%**	**2.5%**	**2.5%**	**5.5%**	**5.4%**

Sources:
[1] The Value Line Investment Survey; June 29, August 10, August 31, 2007.
[2] Value Line Investment Survey, June 29, 2007.

ROCKY MOUNTAIN POWER

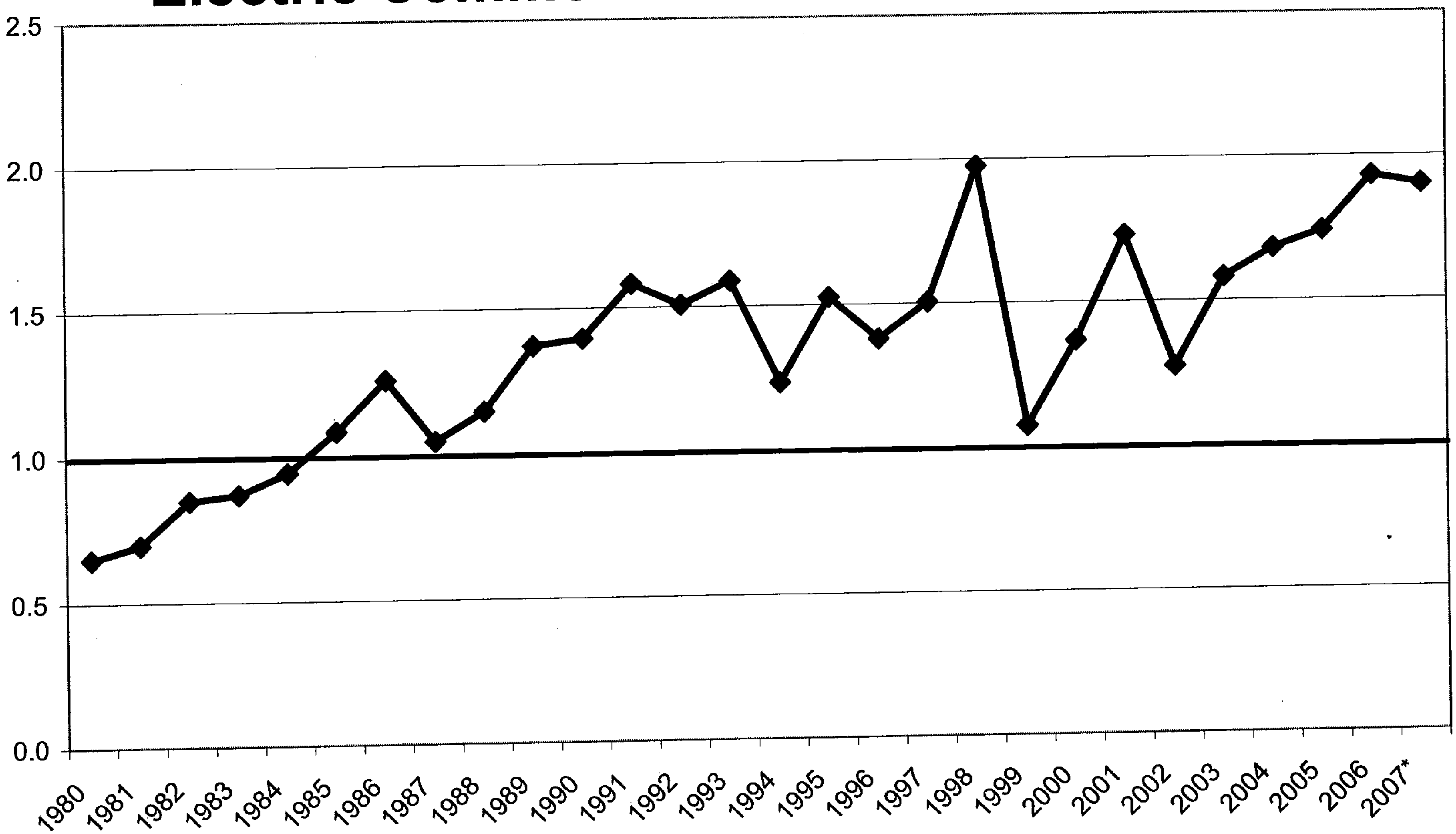
Two-Stage Growth DCF Model

Line	Electric Utility	13-Week AVG Stock Price[1] (1)	Annual Dividend[2] (2)	First Stage Growth (3)	Second Stage Growth[3] (4)	Two-Stage Growth DCF (5)
1	ALLETE	$45.09	$1.64	6.25%	5.10%	9.12%
2	Alliant Energy	$38.62	$1.27	6.22%	5.10%	8.73%
3	CH Energy	$46.23	$2.16	N/A	5.10%	N/A
4	Consolidated Edison	$45.72	$2.32	3.48%	5.10%	10.07%
5	DTE Enrgy	$48.80	$2.12	4.89%	5.10%	9.62%
6	Energy East Corp.	$25.44	$1.20	3.83%	5.10%	9.79%
7	IDACORP	$32.18	$1.20	5.56%	5.10%	9.10%
8	MGE Energy	$32.46	$1.39	N/A	5.10%	N/A
9	NSTAR	$32.57	$1.30	6.33%	5.10%	9.53%
10	PPL Corporation	$47.86	$1.22	12.62%	5.10%	8.80%
11	Progress Energy	$45.90	$2.44	4.58%	5.10%	10.56%
12	SCANA Corp.	$38.47	$1.76	4.27%	5.10%	9.74%
13	Southern Co.	$34.95	$1.61	4.71%	5.10%	9.86%
14	Vectren Corp.	$27.06	$1.26	4.22%	5.10%	9.81%
15	Xcel Energy, Inc.	$20.71	$0.92	5.04%	5.10%	9.76%
16	**Average**	**$37.47**	**$1.59**	**5.54%**	**5.10%**	**9.6%**

Sources:
[1] http://moneycentral.msn.com, downloaded on September 13, 2007.
[2] The Value Line Investment Survey; June 29, August 10, August 31, 2007.
[3] Blue Chip Economic Indicators, March 10, 2007.

ROCKY MOUNTAIN POWER

Electric Common Stock Market/Book Ratio



Sources:
2001-2006: AUS Utility Reports.
1980 - 2000: Mergent Public Utility Manual, 2003; at a15, and a17.
* The data for 2007 includes the period January - June 2007.

ROCKY MOUNTAIN POWER

Equity Risk Premium - Treasury Bond

Line	Date	Treasury Bond Yield[1] (1)	Authorized Electric Returns[2] (2)	Indicated Risk Premium (3)
1	1986	7.78%	13.93%	6.15%
2	1987	8.59%	12.99%	4.40%
3	1988	8.96%	12.79%	3.83%
4	1989	8.45%	12.97%	4.52%
5	1990	8.61%	12.70%	4.09%
6	1991	8.14%	12.55%	4.41%
7	1992	7.67%	12.09%	4.42%
8	1993	6.59%	11.41%	4.82%
9	1994	7.37%	11.34%	3.97%
10	1995	6.88%	11.55%	4.67%
11	1996	6.71%	11.39%	4.68%
12	1997	6.61%	11.40%	4.79%
13	1998	5.58%	11.66%	6.08%
14	1999	5.87%	10.77%	4.90%
15	2000	5.94%	11.43%	5.49%
16	2001	5.49%	11.09%	5.60%
17	2002	5.43%	11.16%	5.73%
18	2003	4.96%	10.97%	6.01%
19	2004	5.05%	10.75%	5.70%
20	2005	4.65%	10.54%	5.89%
21	2006	4.91%	10.36%	5.45%
22	2007[3]	4.89%	10.27%	5.38%
23	**Average**	**6.60%**	**11.64%**	**5.04%**

Sources:

[1] Economic Report of the President 2007: Table 73 at 316. The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

[2] Regulatory Research Associates, Inc., Regulatory Focus, Jan. 85 - Dec. 06.

[3] The data for 2007 includes the period January - June 2007.

ROCKY MOUNTAIN POWER

Equity Risk Premium - Utility Bond

Line	Date	Average "A" Rating Utility Bond Yield[1] (1)	Authorized Electric Returns[2] (2)	Indicated Risk Premium (3)
1	1986	9.58%	13.93%	4.35%
2	1987	10.10%	12.99%	2.89%
3	1988	10.49%	12.79%	2.30%
4	1989	9.77%	12.97%	3.20%
5	1990	9.86%	12.70%	2.84%
6	1991	9.36%	12.55%	3.19%
7	1992	8.69%	12.09%	3.40%
8	1993	7.59%	11.41%	3.82%
9	1994	8.31%	11.34%	3.03%
10	1995	7.89%	11.55%	3.66%
11	1996	7.75%	11.39%	3.64%
12	1997	7.60%	11.40%	3.80%
13	1998	7.04%	11.66%	4.62%
14	1999	7.62%	10.77%	3.15%
15	2000	8.24%	11.43%	3.19%
16	2001	7.76%	11.09%	3.33%
17	2002	7.37%	11.16%	3.79%
18	2003	6.58%	10.97%	4.39%
19	2004	6.16%	10.75%	4.59%
20	2005	5.65%	10.54%	4.89%
21	2006	6.07%	10.36%	4.29%
22	2007[3]	6.00%	10.27%	4.27%
23	**Average**	**7.98%**	**11.64%**	**3.67%**

Sources:
[1] Mergent Public Utility Manual, Mergent Weekly News Reports, 2003. The utility yields for the period 2001-2006 were obtained from the Mergent Bond Record.
[2] Regulatory Research Associates, Inc., Regulatory Focus, Jan. 85 - Dec. 06.
[3] The data for 2007 includes the period January - June 2007.

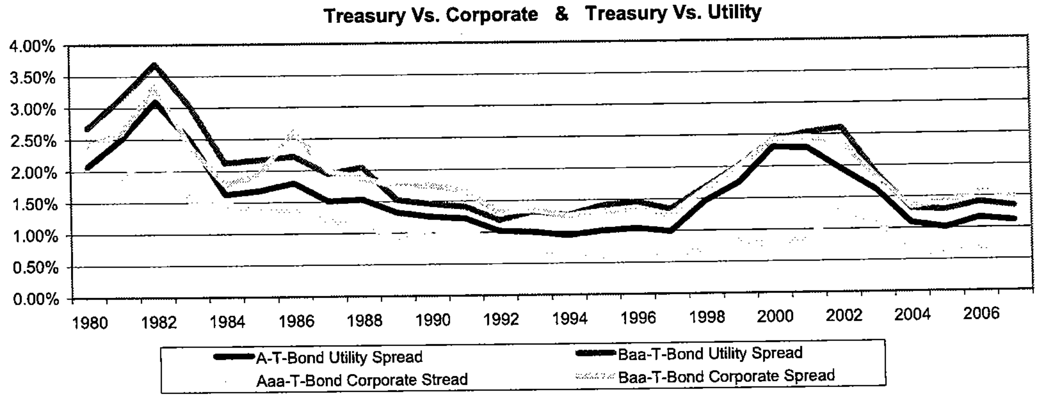
ROCKY MOUNTAIN POWER

Annual Average Yields

			Public Utility Bond Yields				Corporate Bond Yields			
Line	Year	T-Bond Yield[1]	A[2]	Baa[2]	A-T-Bond Spread	Baa-T-Bond Spread	Aaa[1]	Baa[1]	Aaa-T-Bond Spread	Baa-T-Bond Spread
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	1980	11.27%	13.34%	13.95%	2.07%	2.68%	11.94%	13.67%	1.73%	2.40%
2	1981	13.45%	15.95%	16.60%	2.50%	3.15%	14.17%	16.04%	1.87%	2.59%
3	1982	12.76%	15.86%	16.45%	3.10%	3.69%	13.79%	16.11%	2.32%	3.35%
4	1983	11.18%	13.66%	14.20%	2.48%	3.02%	12.04%	13.55%	1.51%	2.37%
5	1984	12.41%	14.03%	14.53%	1.62%	2.12%	12.71%	14.19%	1.48%	1.78%
6	1985	10.79%	12.47%	12.96%	1.68%	2.17%	11.37%	12.72%	1.35%	1.93%
7	1986	7.78%	9.58%	10.00%	1.80%	2.22%	9.02%	10.39%	1.37%	2.61%
8	1987	8.59%	10.10%	10.53%	1.51%	1.94%	9.38%	10.58%	1.20%	1.99%
9	1988	8.96%	10.49%	11.00%	1.53%	2.04%	9.71%	10.83%	1.12%	1.87%
10	1989	8.45%	9.77%	9.97%	1.32%	1.52%	9.26%	10.18%	0.92%	1.73%
11	1990	8.61%	9.86%	10.06%	1.25%	1.45%	9.32%	10.36%	1.04%	1.75%
12	1991	8.14%	9.36%	9.55%	1.22%	1.41%	8.77%	9.80%	1.03%	1.66%
13	1992	7.67%	8.69%	8.86%	1.02%	1.19%	8.14%	8.98%	0.84%	1.31%
14	1993	6.59%	7.59%	7.91%	1.00%	1.32%	7.22%	7.93%	0.71%	1.34%
15	1994	7.37%	8.31%	8.63%	0.94%	1.26%	7.96%	8.62%	0.66%	1.25%
16	1995	6.88%	7.89%	8.29%	1.01%	1.41%	7.59%	8.20%	0.61%	1.32%
17	1996	6.71%	7.75%	8.17%	1.04%	1.46%	7.37%	8.05%	0.68%	1.34%
18	1997	6.61%	7.60%	7.95%	0.99%	1.34%	7.26%	7.86%	0.60%	1.25%
19	1998	5.58%	7.04%	7.26%	1.46%	1.68%	6.53%	7.22%	0.69%	1.64%
20	1999	5.87%	7.62%	7.88%	1.75%	2.01%	7.04%	7.87%	0.83%	2.00%
21	2000	5.94%	8.24%	8.36%	2.30%	2.42%	7.62%	8.36%	0.74%	2.42%
22	2001	5.49%	7.78%	8.02%	2.29%	2.53%	7.08%	7.95%	0.87%	2.46%
23	2002	5.42%	7.36%	8.02%	1.94%	2.60%	6.49%	7.80%	1.31%	2.38%
24	2003	4.96%	6.57%	6.83%	1.61%	1.87%	5.67%	6.77%	1.10%	1.81%
25	2004	5.05%	6.14%	6.37%	1.09%	1.32%	5.63%	6.39%	0.58%	1.34%
26	2005	4.65%	5.66%	5.93%	1.01%	1.29%	5.24%	6.06%	0.59%	1.41%
27	2006	4.91%	6.07%	6.32%	1.16%	1.41%	5.59%	6.48%	0.68%	1.57%
28	2007[3]	4.89%	6.00%	6.23%	1.11%	1.34%	5.47%	6.40%	0.58%	1.51%
29	**Average**	**7.75%**	**9.31%**	**9.67%**	**1.56%**	**1.92%**	**8.55%**	**9.62%**	**1.04%**	**1.87%**

Yield Spreads

Treasury Vs. Corporate & Treasury Vs. Utility



Notes:

[1] Economic Report of the President 2007: Table 73 at 316. The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

[2] Mergent Public Utility Manual 2003. Moodys Daily News Reports.

[3] The data for 2007 includes the period January - June 2007.

ROCKY MOUNTAIN POWER

Series "A" and "Baa" Utility Bond Yields

Line	Date	"A" Rating Utility Bond Yield (1)	"Baa" Rating Utility Bond Yield (2)
1	09/07/07	6.05%	6.33%
2	08/31/07	6.17%	6.45%
3	08/24/07	6.23%	6.51%
4	08/17/07	6.36%	6.63%
5	08/10/07	6.28%	6.54%
6	08/03/07	6.11%	6.40%
7	07/27/07	6.20%	6.46%
8	07/20/07	6.19%	6.43%
9	07/13/07	6.31%	6.54%
10	07/06/07	6.39%	6.62%
11	06/29/07	6.24%	6.46%
12	06/22/07	6.36%	6.59%
13	06/15/07	6.39%	6.65%
14	**Average**	**6.25%**	**6.51%**

Source:
www.moodys.com, Bond Yields and Key Indicators.

ROCKY MOUNTAIN POWER

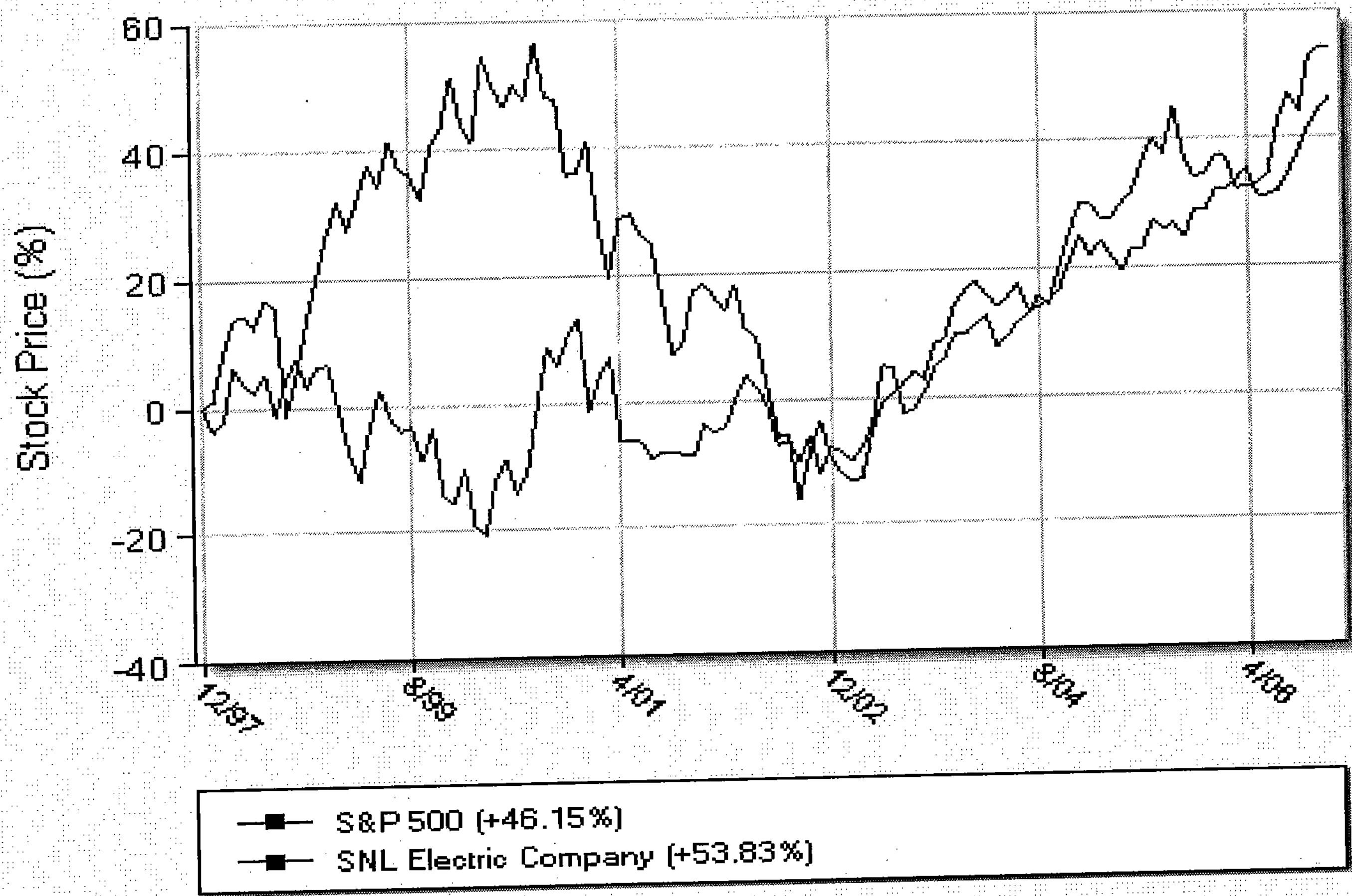
Comparable Group Beta

Line	Electric Utility	Historical 2002 (1)	2003 (2)	2004 (3)	2005 (4)	2006 (5)	5-Yr. AVG (6)	Current Beta (7)
1	ALLETE	N/A	N/A	N/A	N/A	0.90	0.90	0.90
2	Alliant Energy	0.65	0.70	0.80	0.85	0.90	0.78	0.95
3	CH Energy	0.65	0.70	0.80	0.80	0.85	0.76	0.85
4	Consolidated Edison	0.55	0.55	0.65	0.60	0.75	0.62	0.70
5	DTE Energy	0.60	0.60	0.65	0.70	0.75	0.66	0.75
6	Energy East Corp.	0.65	0.70	0.80	0.80	0.90	0.77	0.85
7	IDACORP	0.60	0.75	0.85	0.95	1.00	0.83	1.05
8	MGE Energy	0.50	0.55	0.60	0.65	0.75	0.61	0.80
9	NSTAR	0.60	0.65	0.70	0.70	0.80	0.69	0.75
10	PPL Corporation	0.75	0.85	0.95	0.95	1.00	0.90	0.95
11	Progress Energy	N/A	0.85	0.85	0.85	0.85	0.85	0.95
12	SCANA Corp.	0.55	0.60	0.70	0.75	0.80	0.68	0.80
13	Southern Co.	N/A	0.65	0.65	0.65	0.65	0.65	0.75
14	Vectren Corp.	0.70	0.75	0.75	0.80	0.85	0.77	0.95
15	Xcel Energy, Inc.	0.60	0.70	0.80	0.80	0.90	0.76	0.90
16	**Average**	**0.62**	**0.69**	**0.75**	**0.78**	**0.84**	**0.75**	**0.86**
17	**Median**	**0.60**	**0.70**	**0.78**	**0.80**	**0.85**	**0.76**	**0.85**

Source:
The Value Line Investment Survey; June 29, August 10, August 31, 2007.

ROCKY MOUNTAIN POWER

S&P 500 - 12/31/1997 - 12/29/2006 Stock Price Performance



Case No. PAC-E-07-05
Exhibit 235 (MPG-22)

ROCKY MOUNTAIN POWER

CAPM Return Estimate

Line	Description	Historical Premium (1)
1	Risk-Free Rate[1]	5.2%
2	Risk Premium[2]	6.5%
3	Beta[3]	0.85
4	CAPM	10.7%

Line	Description	Prospective Premium (1)
5	Risk-Free Rate[1]	5.2%
6	Risk Premium[2]	6.2%
7	Beta[3]	0.85
8	CAPM	10.5%
9	**CAPM Average**	**10.6%**

Sources:
[1] Blue Chip Financial Forecasts; September 1, 2007 at 2.
[2] SBBI; 2007 at pp. 31 & 120.
[3] The Value Line Investment Survey; June 29, August 10, August 31, 2007.

ROCKY MOUNTAIN POWER

CAPM Return Estimate

Line	Description	Historical Premium (1)
1	Risk-Free Rate[1]	5.2%
2	Risk Premium[2]	6.5%
3	Beta[3]	0.75
4	CAPM	10.1%

Line	Description	Prospective Premium (1)
5	Risk-Free Rate[1]	5.2%
6	Risk Premium[2]	6.2%
7	Beta[3]	0.75
8	CAPM	9.8%
9	**CAPM Average**	**10.0%**

Sources:
[1] Blue Chip Financial Forecasts; September 1, 2007 at 2.
[2] SBBI; 2007 at pp. 31 & 120.
[3] The Value Line Investment Survey; June 29, August 10, August 31, 2007.

ROCKY MOUNTAIN POWER

S&P Credit Rating Financial Ratios at ROE of 10.0%

Line	Description	Ratio at 10.0% Equity Return (1)	S&P "A" Rating (BP: 5) Benchmark* (2)	S&P "BBB" Rating (BP: 5) Benchmark* (3)	Reference (4)
1	Rate Base	$ 494,597,902			McDougal, Exh. 11 Page. 2.2
2	Weighted Common Return	5.04%			Exhibit 222 (MPG-9), Line 3, Col. 4.
3	Income to Common	$ 24,946,668			Line1 x Line 2.
4	Depreciation & Amortization	$ 27,926,641			McDougal, Exh. 11 Page. 2.2
5	OBS Imputed Amortization (REDACTED)				Monsanto Data Response 2.51
6	Deferred Taxes + ITC	$ 1,750,562			McDougal, Exh. 11 Page. 2.2
7	Funds from Operations (FFO)	$ 61,027,509			Sum of Line 3 though Line 5.
8	Total Interest (REDACTED)				Monsanto Data Request 2.51
9	FFO Plus Interest	$ 78,755,544			Line 7 + Line 8.
10	FFO Interest Coverage	4.4x	4.5x - 3.8x	3.8x - 2.8x	Line 9 / Line 8
11	Total Debt Ratio	53%	42% - 50%	**50% - 60%**	Monsanto Data Request 2.51
12	FFO to Total Debt	21%	**30% - 22%**	22% - 15%	Line 7/ Monsanto Data Response 2.51

Source:
* Standard and Poor's. New Business Profile Scores Assigned to U.S. Utility and Power Companies; Financial Guidelines Revised; June 2, 2004.

ROCKY MOUNTAIN POWER

Discounted Cash Flow Analysis
Traditional Constant Growth DCF Model

Line	Utility	Stock Price (P0) (1)	Next Year's Div (D1) (2)	Dividend Yield (3)	2011 DPS (4)	2011 EPS (5)	Retention Rate (B) (6)	2011 BVPS (7)	ROE (R) (8)	BxR Growth (9)	Zacks (10)	Value Line (11)	GDP (12)	Average Growth (13)	ROE (14)
1	ALLETE	47.59	1.80	3.78%	2.20	4.00	45.00%	29.25	13.68%	6.15%	5.00%	10.50%	5.10%	6.69%	10.5%
2	Alliant Energy	42.87	1.37	3.20%	1.49	2.75	45.82%	28.20	9.75%	4.47%	4.00%	5.00%	5.10%	4.64%	7.8%
3	CH Energy	48.58	2.16	4.45%	2.20	3.00	26.67%	35.25	8.51%	2.27%	N/A	1.00%	5.10%	2.79%	7.2%
4	Consolidated Edison	50.11	2.34	4.67%	2.40	3.30	27.27%	37.00	8.92%	2.43%	3.50%	3.00%	5.10%	3.51%	8.2%
5	DTE Energy	48.09	2.20	4.57%	2.40	3.50	31.43%	38.25	9.15%	2.88%	5.70%	4.00%	5.10%	4.42%	9.0%
6	Energy East Corp.	24.74	1.26	5.09%	1.45	2.00	27.50%	21.50	9.30%	2.56%	3.50%	3.00%	5.10%	3.54%	8.6%
7	IDACORP.	34.53	1.20	3.48%	1.20	2.30	47.83%	31.20	7.37%	3.53%	5.00%	2.50%	5.10%	4.03%	7.5%
8	MGE Energy	35.05	1.43	4.08%	1.47	2.55	42.35%	19.45	13.11%	5.55%	N/A	6.00%	5.10%	5.55%	9.6%
9	NSTAR	34.91	1.43	4.10%	1.75	3.00	41.67%	19.75	15.19%	6.33%	6.30%	7.50%	5.10%	6.31%	10.4%
10	PPL Corporation	39.97	1.30	3.25%	2.00	3.75	46.67%	18.00	20.83%	9.72%	12.50%	10.50%	5.10%	9.46%	12.7%
11	Progress Energy	50.09	2.48	4.95%	2.54	3.20	20.63%	34.45	9.29%	1.92%	4.40%	N/A	5.10%	3.81%	8.8%
12	SCANA Corp.	42.79	1.82	4.25%	2.00	3.25	38.46%	30.00	10.83%	4.17%	4.70%	3.00%	5.10%	4.24%	8.5%
13	Southern Co.	36.58	1.66	4.54%	1.80	2.50	28.00%	19.50	12.82%	3.59%	4.50%	3.00%	5.10%	4.05%	8.6%
14	Vectren Corp.	28.49	1.31	4.60%	1.43	2.00	28.50%	18.25	10.96%	3.12%	4.50%	3.00%	5.10%	3.93%	8.5%
15	Xcel Energy, Inc.	24.14	0.99	4.10%	1.15	1.75	34.29%	17.00	10.29%	3.53%	5.00%	5.50%	5.10%	4.78%	8.9%
16	**Group Average**	**39.24**	**1.65**	**4.21%**	**1.83**	**2.86**	**35.47%**	**26.47**	**11.33%**	**4.15%**	**5.28%**	**4.82%**	**5.10%**	**4.78%**	**9.0%**
17	**Group Median**			**4.25%**											**8.6%**

Source:
Exhibit No. 5 page 2 of 5.

ROCKY MOUNTAIN POWER

Discounted Cash Flow Analysis
Constant Growth DCF Model
Long-Term GDP Growth

Line	Utility	Stock Price (P0) (15)	Next Year's Div (D1) (16)	Dividend Yield (17)	GDP (18)	ROE Col 17+18 (19)
1	ALLETE	47.59	1.80	3.78%	5.10%	8.88%
2	Alliant Energy	42.87	1.37	3.20%	5.10%	8.30%
3	CH Energy	48.58	2.16	4.45%	5.10%	9.55%
4	Consolidated Edison	50.11	2.34	4.67%	5.10%	9.77%
5	DTE Energy	48.09	2.20	4.57%	5.10%	9.67%
6	Energy East Corp.	24.74	1.26	5.09%	5.10%	10.19%
7	IDACORP.	34.53	1.20	3.48%	5.10%	8.58%
8	MGE Energy	35.05	1.43	4.08%	5.10%	9.18%
9	NSTAR	34.91	1.43	4.10%	5.10%	9.20%
10	PPL Corporation	39.97	1.30	3.25%	5.10%	8.35%
11	Progress Energy	50.09	2.48	4.95%	5.10%	10.05%
12	SCANA Corp.	42.79	1.82	4.25%	5.10%	9.35%
13	Southern Co.	36.58	1.66	4.54%	5.10%	9.64%
14	Vectren Corp.	28.49	1.31	4.60%	5.10%	9.70%
15	Xcel Energy, Inc.	24.14	0.99	4.10%	5.10%	9.20%
16	**Group Average**	**39.24**	**1.65**	**4.21%**	**5.10%**	**9.3%**
17	**Group Median**			**4.25%**		**9.4%**

Source:
Exhibit No. 5 page 3 of 5.

ROCKY MOUNTAIN POWER

Discounted Cash Flow Analysis
Low Near-Term Growth
Two-Stage Growth DCF Model

Line	Utility	Next Year's Div (D_1) (20)	2010 DPS (21)	Annual Change to 2008 (22)	Stock Price (P0) (23)	Year 1 Div (24)	Year 2 Div (25)	Year 3 Div (26)	Year 4 Div (27)	Year 5 Div (28)	Year 5-150 Growth (29)	ROE = IRR (30)
1	ALLETE	1.8	2.20	13.33%	-47.59	1.80	1.93	2.07	2.20	2.31	5.10%	9.1%
2	Alliant Energy	1.37	1.49	4.00%	-42.87	1.37	1.41	1.45	1.49	1.57	5.10%	8.1%
3	CH Energy	2.16	2.20	1.33%	-48.58	2.16	2.17	2.19	2.20	2.31	5.10%	9.0%
4	Consolidated Edison	2.34	2.40	2.00%	-50.11	2.34	2.36	2.38	2.40	2.52	5.10%	9.3%
5	DTE Energy	2.2	2.40	6.67%	-48.09	2.20	2.27	2.33	2.40	2.52	5.10%	9.4%
6	Energy East Corp.	1.26	1.45	6.33%	-24.74	1.26	1.32	1.39	1.45	1.52	5.10%	10.1%
7	IDACORP.	1.2	1.20	0.00%	-34.53	1.20	1.20	1.20	1.20	1.26	5.10%	8.1%
8	MGE Energy	1.43	1.47	1.33%	-35.05	1.43	1.44	1.46	1.47	1.54	5.10%	8.7%
9	NSTAR	1.43	1.75	10.67%	-34.91	1.43	1.54	1.64	1.75	1.84	5.10%	9.4%
10	PPL Corporation	1.3	2.00	23.33%	-39.97	1.30	1.53	1.77	2.00	2.10	5.10%	9.3%
11	Progress Energy	2.48	2.54	2.00%	-50.09	2.48	2.50	2.52	2.54	2.67	5.10%	9.5%
12	SCANA Corp.	1.82	2.00	6.00%	-42.79	1.82	1.88	1.94	2.00	2.10	5.10%	9.1%
13	Southern Co.	1.66	1.80	4.67%	-36.58	1.66	1.71	1.75	1.80	1.89	5.10%	9.4%
14	Vectren Corp.	1.31	1.43	4.00%	-28.49	1.31	1.35	1.39	1.43	1.50	5.10%	9.4%
15	Xcel Energy, Inc.	0.99	1.15	5.33%	-24.14	0.99	1.04	1.10	1.15	1.21	5.10%	9.2%
16	**Group Average**											**9.1%**
17	**Group Median**											**9.3%**

Source:
Exhibit No. 5 page 4 of 5.