RECEIVED

2010 OCT 14 AM 11: 36

BEFORE THE

UTILITIES COMMISSION **IDAHO PUBLIC UTILITIES COMMISSION**

IN THE MATTER OF THE **APPLICATION OF ROCKY MOUNTAIN POWER FOR APPROVAL OF CHANGES TO ITS ELECTRIC SERVICE SCHEDULES AND A PRICE INCREASE OF \$27.7 MILLION, OR APPROXIMATELY 13.7 PERCENT**

CASE NO. PAC-E-10-07

Direct Testimony and Exhibits of

Michael P. Gorman

On behalf of

Monsanto Company

Project 9210 October 14, 2010



CHESTERFIELD, MO 63017

PACIFICORP dba ROCKY MOUNTAIN POWER

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

CASE NO. PAC-E-10-07

Table of Contents to the <u>Direct Testimony of Michael P. Gorman</u>

	<u>Page</u>
Summary	
Rate of Return	3
	et Outlook4
RMP Investment Risk	9
RMP's Proposed Capital St	ructure12
Return on Common Equity.	16
Discounted Cash Flow N	Model18
Sustainable Growth DC	F23
	F Model25
	28
	odel ("CAPM")32
	ary37
Financial Integrity	38
Response to RMP Witness Dr.	Samuel Hadaway42
Qualifications of Michael P. Go	rmanAppendix A
Exhibits:	
Exhibit No. 202 (MPG-1):	Rate of Return
Exhibit No. 203 (MPG-2):	Proxy Group
Exhibit No. 204 (MPG-3):	Growth Rates
Exhibit No. 205 (MPG-4):	Constant Growth DCF Model
Exhibit No. 206 (MPG-5):	Electricity Sales Are Linked to U.S. Economic Growth
Exhibit No. 207 (MPG-6):	Proxy Group Payout Ratios
Exhibit No. 208 (MPG-7):	Sustainable Growth Rates
Exhibit No. 209 (MPG-8):	Sustainable Constant Growth DCF Model
Exhibit No. 210 (MPG-9):	Multi-Stage Growth DCF Model
Exhibit No. 211 (MPG-10):	Electric Utility Market/Book Ratio
Exhibit No. 212 (MPG-11):	Electric Equity Risk Premium - Treasury Bond
Exhibit No. 213 (MPG-12):	Electric Equity Risk Premium - Utility Bond
Exhibit No. 214 (MPG-13):	Utility Bond Yield Spreads
Exhibit No. 215 (MPG-14):	Utility and Treasury Bond Yields
Exhibit No. 216 (MPG-15):	Value Line Beta
Exhibit No. 217 (MPG-16):	CAPM Return
Exhibit No. 218 (MPG-17):	Standard & Poor's Credit Metrics
Exhibit No. 219 (MPG-18):	Adjusted Hadaway DCF
Exhibit No. 220 (MPG-19):	Accuracy of Interest Rate Forecasts

PACIFICORP dba ROCKY MOUNTAIN POWER

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

CASE NO. PAC-E-10-07

Direct Testimony of Michael P. Gorman

1	Q	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2	A	Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140,
3		Chesterfield, MO 63017.
4	Q	WHAT IS YOUR OCCUPATION?
5	Α	I am a consultant in the field of public utility regulation and a managing principal of
6		Brubaker & Associates, Inc., energy, economic and regulatory consultants.
7	Q	PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.
8	Α	This information is included in Appendix A to my testimony.
9	Q	ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?
10	A -	I am appearing on behalf of Monsanto Company, a special contract customer of
11		RMP.
12	Q	WHAT IS THE SUBJECT OF YOUR TESTIMONY?
13	Α	I will recommend a fair return on common equity and overall rate of return for Rocky
14		Mountain Power ("RMP" or "Company").

1	\sim	ADE	VOL	SPONSORING	ANIV	EVHIDITE	INI	CONNECTION	\A/ITLI	VALID
1	u	ARE	TUU	SPUNSURING	ANY	EXHIBITO	IIV	CONNECTION	WILL	YUUR

2 TESTIMONY?

- 3 A Yes. I am sponsoring Exhibit No. 202 (MPG-1) through Exhibit No. 220 (MPG-19).
- 4 These exhibits were prepared either by me or under my supervision and direction.

Summary

5

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

Α

Α

6 Q PLEASE SUMMARIZE YOUR RETURN ON EQUITY RECOMMENDATIONS.

I recommend the Idaho Public Utilities Commission ("Commission") award RMP a return on common equity of 9.5%, which is the midpoint of my estimated range of 9.1% to 9.9%. I propose adjustments to the Company's proposed capital structure to exclude common equity supporting assets not devoted to utility operations. Based on my recommended return on equity and capital structure, I recommend an overall rate of return of 7.70% for RMP, as shown on Exhibit No. 202 (MPG-1), page 1 of 2. As set forth in this testimony, my recommended return on equity and capital structure will support RMP's financial integrity, and provide fair compensation for the risk of utility operations.

I will also respond to RMP witness Dr. Samuel Hadaway's proposed return on equity of 10.6%. For the reasons discussed below, Dr. Hadaway's recommended return on equity for RMP is excessive and should be rejected.

Q HOW DID YOU ESTIMATE RMP'S CURRENT MARKET COST OF EQUITY?

I did this by development of a comparable proxy investment group of publicly traded utility companies that have investment risk similar to RMP. I then performed three versions of the Discounted Cash Flow ("DCF") model, Risk Premium ("RP") study, and Capital Asset Pricing Model ("CAPM") analysis. Based on these assessments,

- and as discussed in more detail below, I estimate RMP's current market cost of equity
 to be 9.5%.
- 3 Q HOW DID YOU ADJUST RMP'S PROPOSED CAPITAL STRUCTURE?
- 4 Α RMP's balance sheet includes short-term assets which are not included in utility plant 5 in-service or utility rate base. These short-term cash assets are primarily attributable 6 to PacifiCorp's decision to retain all earnings in the utility and build up its common 7 equity balance. I recommend that the common equity supporting these short-term 8 assets be excluded from the capital structure used to estimate the rate of return on 9 RMP's utility rate base. As such, I adjusted RMP's capital structure to remove 10 common equity not supporting utility rate base investments, and thereby estimating 11 the capital structure relative weights that are currently supporting utility rate base.
- 12 Q WHAT IS THE REVENUE REQUIREMENT IMPACT OF YOUR RETURN ON
- 13 EQUITY AND CAPITAL STRUCTURE ADJUSTMENTS?
- The revenue impact from reducing RMP's return on equity from 10.6% down to 9.5% and reducing the common equity ratio of the forecasted test year capital structure from 52.1% to 49.7% lowers its claimed Idaho jurisdictional revenue deficiency by \$7.7 million.

18 Rate of Return

- 19 Q PLEASE SUMMARIZE THIS SECTION OF YOUR TESTIMONY.
- 20 A In this section of my testimony:
- 21 1. I will review the current electric utility industry market outlook.
- 22 2. I will review the investment risk of RMP.

1		3. I will propose a capital structure that will maintain RMP's financial integrity.
2		4. I will estimate a fair return on equity for RMP.
3 4		I will show that my recommended rate of return will support RMP's financial integrity and investment grade bond rating.
5 6		Finally, I will respond to RMP witness Dr. Hadaway's recommended return on equity of 10.6% and explain why it is excessive and unreasonable.
7	Elec	tric Utility Industry Market Outlook
8	Q	PLEASE DESCRIBE THIS SECTION OF YOUR TESTIMONY.
9	Α	I review the credit rating and investment return performance of the electric utility
10		industry. Based on the assessments below, I find the credit rating outlook of the
11		industry to be strong and supportive of the industry's financial integrity. Further,
12		electric utilities' stocks have exhibited strong return performance and are again
13		characterized as a safe investment.
14	Q	PLEASE DESCRIBE THE ELECTRIC UTILITIES' CREDIT RATING OUTLOOK.
15	Α	Electric utilities' credit rating outlook is improving over the recent past. Standard &
16		Poor's ("S&P") recently provided an assessment of the credit rating of U.S. electric
17		utilities for the second quarter of 2010. S&P's commentary included the following:
18 19 20 21 22		The past three months witnessed several outlook changes, most of which were positive or revisions to stable from negative. The principal drivers for the positive outlooks were constructive rate decisions, overall improving business risk profiles, and stronger measures of bondholder protection.
23		* * *
24 25 26 27 28 29 30 31		The universe of U.S. electric utilities is relatively highly rated, certainly compared with the average 'B' category for U.S. industrial companies. This is due to the large percentage of firms carrying 'excellent' (84%) and 'strong' (13%) business risk profiles What typically distinguishes one utility's business profile score from another is the quality of the regulatory climate and management's commitment to credit quality and financial policies. We consider the financial risk profile for most electric companies to be 'aggressive'

1 The ratings distribution for electric utilities in the U.S. remains solidly 2 entrenched in investment grade. Approximately 67% of the industry 3 carries a 'BBB' category corporate credit rating ('BBB+', 'BBB', and 4 'BBB-'), nearly 29% 'A-'and above, and about 4% below investment 5 grade ('BB+' and below). Some 86% of all domestic electric utility 6 companies carry a stable outlook, so the number of rating changes is 7 expected to remain moderate in the near to intermediate term. Ratings 8 stability for the electric sector continues to be based in large part on 9 the following expectations: 10 Generally responsive rate orders, including mechanisms or 11 automatic provisions that allow that for the timely recovery of 12 commodity prices, environmental compliance costs, and other 13 14 Receptive capital markets, access to liquidity, and manageable 15 debt maturity schedules; 16 Moderation in growth and expansion capital expenditures; and 17 Credit-supportive actions by utility management.¹ 18 From an economic standpoint, S&P stated the following: 19 Effects On Ratings 20 Regulated electric utilities have been, and are expected to continue, 21 weathering the difficult economy with little lasting effect on the 22 collective financial risk profile of the industry, and we assess ratings 23 and outlooks based on our stable view of industry and company-24 specific factors. Outlooks and ratings should remain predominantly 25 unchanged, even if industry conditions worsen in the near term, as 26 described in our pessimistic scenario (see table 1). However, if lack of 27 economic growth persists for an extended period, regulatory risk could 28 rise if concerns about the plight of ratepayers leads to resistance to 29 rate increases. 30 31 Solid Industry Fundamentals Support Stable Outlook 32 Throughout 2009, U.S. electric utilities performed well with continued 33 favorable access to capital compared to most corporate issuers. 34 Despite difficult market conditions last year, external financing activity 35 for the U.S. regulated electric utility industry was about \$49.8 billion, 36 roughly matching 2008 activity. Many companies have proactively pre-37 financed issuance well in advance of their debt maturities, taking 38 advantage of investor appetite and favorable spreads. 39 appetite for first-mortgage bonds remained healthy, and deals

markets and credit.

remained oversubscribed. Credit fundamentals indicate that most, if

not all, electric utilities should continue to have ample access to capital

Banking syndicates are also expressing

40

41

42

¹Standard & Poor's RatingsDirect on the Global Credit Portal: "Ratings Roundup: Strongly Positive Rating Changes In U.S. Electric Utility Sector In Second-Quarter 2010; No Downgrades," July 15, 2010, emphasis added.

1 2	willingness to renegotiate credit facilities, although at more demanding terms than in the previous years. ²
3	Moody's also acknowledges the following for the electric utility industry in its report:
4	Overview
5	The fundamental credit outlook for the U.S. investor-owned electric
6	utility sector remains stable, thanks to a supportive regulatory
7	framework that provides good transparency into operating cost and
8	capital investment recovery; adequate liquidity profiles; relatively
9	unfettered access to the capital markets; and reasonably stable
10	financial credit metrics. The investor-owned utility business model
11	remains well positioned within its investment-grade rating category for
12	2010 and at least the first half of 2011.3
13	Similarly, Fitch states:
14	Overview
15	The U.S. Utilities, Power, and Gas (UPG) sector 2010 outlook is
16	framed in the context of Fitch Ratings' outlook for a slow U.S.
17	economic recovery in 2010, with stable outlooks for most of the
18	business segments within the UPG universe except for negative 2010
19	credit outlook for competitive generators and retail propane
20	distributors.
21	* * * * * * * * * * * * * * * * * * *
22	Resilient Performance in 2009
23	Companies in the UPG sector weathered the recession and financial
24	crisis of 2008–2009 with considerably less pain than sectors such as
25	financial institutions, cyclical industrials, and retailers. The absence of
26	significant defaults in the sector is in stark contrast to the upswing in
27	defaults and bankruptcy filings across the rest of the U.S. economy,
28	consistent with the defensive reputation of the sector.
29	In general, companies in the UPG sector entered 2009 in reasonably
30	sound financial condition; some drew down their bank credit facilities
31	during the banking crisis in late 2008 and repaid the loans as the bank
32	and financial markets stabilized during 2009. ⁴
33	As noted by S&P, Moody's and Fitch above, the regulated electric utility
34	industry is maintaining strong investment grade credit and is well positioned to

²Standard & Poor's RatingsDirect on the Global Credit Portal: "Industry Economic And Ratings Outlook: Slightly Positive Outlook For U.S. Regulated Electric Utilities Supports Rating Stability," February 2, 2010, emphasis added.

³Moody's Investors Service Industry Outlook: "U.S. Electric Utilities Face Challenges Beyond

Near-Term," January 2010, emphasis added.

⁴Fitch Ratings: "U.S. Utilities, Power and Gas 2010 Outlook," December 4, 2009.

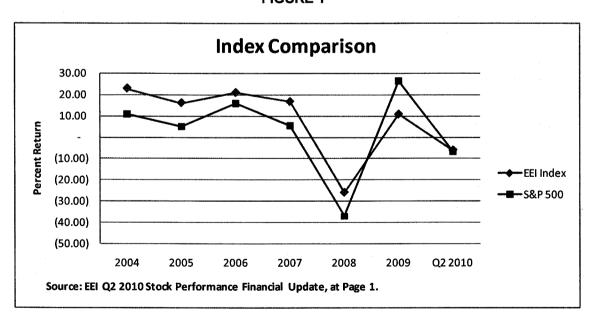
weather the recent economic downturn. Therefore, reasonable and rational adjustments to RMP's rates would be appropriate to provide fair compensation, but not excessive compensation, in an effort to improve RMP's competitive position and support its credit quality.

Q PLEASE DESCRIBE ELECTRIC UTILITY STOCK PRICE PERFORMANCE OVER THE LAST FIVE YEARS.

Α

As shown in Figure 1 below, the Edison Electric Institute ("EEI") has recorded electric utility stock price performance compared to the market. The EEI data shows that its Electric Utility Index has outperformed the market over the last five years (2004-2008). Again, this strong stock performance indicates commission-authorized returns on equity over the last several years have been positively received by the market.

FIGURE 1



During 2009 and the first half of 2010, the EEI Index underperformed the market, which is not unusual for stocks that are considered "safe havens" during periods of market turbulence. The EEI states the following:

Given the explosive market rally that began in March, the EEI Index's underperformance of the major averages is not surprising. Defensive stocks typically lag early in market rebounds coming out of recessions, and the EEI Index surpassed broad market returns in each year from 2004 through 2008. Five years is a long stretch of outperformance for any industry but especially so for the traditionally staid and conservative utilities, who spent much of the middle years of the past decade rebuilding balance sheets and refocusing business strategies on basic regulated distribution and generation after the turbulence and missteps into non-core businesses that followed deregulation in the late 1990s.

Utilities a Winner for the Decade

Indeed, the industry's return to its roots in the traditional power business proved a winning strategy for long-term growth of shareholder value during the decade that just ended. From January 1. 2000 through December 31, 2009, the EEI Index returned 134%, substantially outperforming the Dow Jones Industrials 14% return, the S&P 500's -9% return, and the Nasdag's 44% decline. tech-heavy Nasdag never fully retraced the ground lost after the tech bubble collapsed in 2001, and the S&P 500 was also heavily weighted with technology at the decade's start, which accounts in part for its negative showing. The financial crisis and "Great Recession" (the popular label for our current economic malaise) capped the ten-vear stretch, producing severe losses in financial stocks and a new round of weakness for the Nasdag. All in all, conservative, plodding utilities were the tortoise that outran the hare, demonstrating that sound regulation, financial stability, operational and service excellence and good investment returns can all coexist, and in fact be mutually reinforcina.

Fundamentals Remain Solid

While the changed economic landscape since mid-2008 has diminished the industry's near-term earnings prospects, industry analysts continue to believe that many companies offer potential for a return to reasonably strong earnings growth — supported by rate base growth and rate relief from cases decided in recent months — as the economy recovers from recession and enters a new expansion phase.

In fact, the industry's generally strong balance sheets and credit ratings, and its strategic focus on predictable regulatory treatment

1	(such as pre-approval of major projects and construction work-in-
2	progress rate treatment in several states) were key factors that enable
3	companies to access capital throughout the credit crisis of late
4	2008/early 2009. The industry's positive long-term fundamental outlook
5	and attractive dividend yields will likely continue to appeal to investors
6	looking for stable investments in today's difficult economic
7	environment. As the year came to an end, a number of analysts
8	remarked on the relative undervaluation of regulated utility stocks
9	relative to the broad market, and suggested that the underperformance
10	in 2009 was unlikely to be sustained. ⁵

RMP Investment Risk

11

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31 32

33

34

12	Q	PLEASE	PROVIDE	Α	BRIEF	OVERVIEW	OF	RMP	AND	ITS	INVESTMENT

13 CHARACTERISTICS.

14 A RMP is a subsidiary of PacifiCorp, which is owned by MidAmerican Energy Holdings

15 Company ("MEHC"). PacifiCorp issues debt and equity on behalf of RMP.

PacifiCorp's current senior secured bond ratings from S&P and Moody's are "A" and

"A2," respectively. 6 PacifiCorp's corporate credit ratings from S&P and Moody's are

"A-" and "Baa1," respectively.

Specifically, S&P states the following:

Rationale

The 'A-' corporate credit rating (CCR) on PacifiCorp reflects its "excellent" business risk profile, evidenced by a diverse and growing service territory, and "aggressive" financial risk profile that reflects a large capital program and the need to shore up its cash flow metrics. While the ring-fenced utility's credit metrics are more consistent on a stand-alone basis with a 'BBB' category rating, Standard & Poor's Ratings Services expects that management will achieve cash flow metrics more consistent with an 'A' category rating over the next several years. PacifiCorp is owned by MidAmerican Energy Holdings Co. (MEHC; BBB+/Stable/--).

Outlook

The stable outlook on the PacifiCorp ratings incorporates our expectation that MEHC will continue to support the utility by

⁵EEI Q4 2009 Financial Update, emphasis added.

⁶Williams Direct at 6.

⁷PacifiCorp, FERC Form 3-Q as of June 30, 2010 at 109.10.

contributing equity sufficient to ensure that our fully adjusted debt to total capitalization is managed over the next few years to an adjusted level of closer to 50% and that FFO to total debt and FFO interest coverage will be 20% or better and in the range of 4.0x-4.5x, respectively. Given that PacifiCorp's financial risk profile is weak for the current ratings, we do not expect near-term upward ratings momentum for the utility. PacifiCorp's regulatory and structural insulation shields the utility from some MEHC credit deterioration, to an extent. Specifically, our criteria provide that the PacifiCorp CCR can be no more than three notches above the MEHC consolidated credit rating. The company is comfortably within this range, so we do not see significant prospects for the utility rating to fall as a result of adverse rating changes on MEHC, which also enjoys a stable outlook.8

Similarly, Moody's confirms PacifiCorp's supportive regulatory treatment:

Rating Rationale

PacifiCorp's Baa1 rating for its senior unsecured obligations is driven by the stability of its regulated cash flows, the geographically diverse and relatively constructive regulatory environments in which it operates, the diversification of its generation portfolio, financial credit metrics that are within the ranges demonstrated by U.S. integrated electric utilities rated Baa, and its position as the largest subsidiary of MEHC. The rating also considers PacifiCorp's plans for significant capital investment in generation and transmission and for environmental compliance. The stable outlook incorporates Moody's expectation that PacifiCorp will continue to receive generally supportive regulatory treatment to recover its increased costs and that capital expenditures will be financed in a manner that is consistent with its current credit profile.

Reasonably Supportive Regulatory Environment

PacifiCorp's rating recognizes that the regulated nature of its businesses and acknowledges the relative stability and predictability of cash flows associated with these operations. The rating also considers PacifiCorp's specific regulatory relationships. In 2007, approximately 72% of PacifiCorp's retail revenues were subject to regulatory oversight in Utah and Oregon which Moody's generally ranks as average among U.S. regulatory jurisdictions in terms of framework development, consistency and predictability of decisions, and expectation of timely recovery of costs and investments. In Oregon, California and Wyoming (44% of 2007 revenues) regulators have authorized adjustment mechanisms to recover changes in the costs of fuel and purchased power. Such provisions add adjustment

⁸Standard & Poor's RatingsDirect Summary: "PacifiCorp," October 30, 2009 (emphasis added).

1 mechanisms to recover changes in the costs of fuel and purchased 2 power. Such provisions add predictability to utility returns and reduce 3 implementation lag. In an attempt to minimize regulatory lag and earn 4 its allowed ROEs, PacifiCorp is filing more frequent rate cases in all its 5 iurisdictions. 6 7 **Existence of Ring-Fencing Provisions** 8 PacifiCorp is ring-fenced via a special purpose entity structure, which 9 preserves its credit profile as an independent operating company. 10 separate from its ultimate parent company. The structure includes 11 typical ring-fencing provisions such as an independent director. 12 separate books and records, restrictions on affiliate transactions (arm's 13 length), prohibitions on collateralizing or quaranteeing affiliate debt. 14 and restrictions on dividend distributions. PacifiCorp's dividend 15 distributions are subject to compliance with certain financial tests. 16 including a minimum interest coverage ratio of 2.5 times and minimum 17 equity ratio in the range of 44-48.25%. 18 **Financial Metrics** 19 PacifiCorp's cash flow metrics are expected to remain fairly stable over 20 the near-to-medium term as the company continues with its significant 21 capital expenditure program. Moody's anticipates the company will 22 proactively seek additional rate recovery for increased costs and 23 investments, and that dividend policy will continue to be established in 24 a manner that is supportive of the company's current credit profile. 25 Over the next few years, Moody's anticipates PacifiCorp's ratio of CFO 26 pre-W/C to Debt will remain in the range of 17-19% and that its interest 27 coverage ratio will be in a range of 4.0-5.0 times.9 28 Q WHAT DO YOU RECOMMEND THE COMMISSION TAKE FROM THIS CREDIT 29 REPORT REVIEW OF THE REGULATORY TREATMENT RMP IS RECEIVING? 30 Α Credit analysts consider the regulatory treatment for RMP to be constructive and 31 supportive of RMP's excellent business risk profile and stable investment grade credit

32

standing.

Moody's Investors Service Credit Opinion: "PacifiCorp," October 17, 2008 (emphasis added).

RMP's Proposed Capital Structure

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

1

8

9

10

11

12

13

14

15

16

- 5 A RMP's 2010 forecasted capital structure, as supported by RMP witness Mr. Bruce N.
- 6 Williams, is shown below in Table 1.

TABLE 1 RMP's Proposed Capital Structure (December 31, 2010)

Percent of Total Capital		
47.6%		
0.3%		
52.1%		
100.0 %		

Source: Williams Direct at 2.

7 Q DO YOU HAVE ANY ISSUES WITH RMP'S PROPOSED CAPITAL STRUCTURE?

Yes. RMP's proposed capital structure reflects a substantial increase in its common equity ratio over the last several years. Indeed, based on its Federal Energy Regulatory Commission financial statements, RMP has not paid dividends to its parent company over at least the last three years and has received \$990 million of equity infusions since its acquisition by MEHC. 10 As a result, RMP's common equity ratio has increased from approximately 49.4% in 2007, up to 52.2% by June 30, 2010.

The concern I have with RMP's capital structure, is that while it has retained all earnings in the Company, those earnings have not been completely invested in

¹⁰Williams Direct at 6.

utility plant and equipment in the test year, or through 2010. Indeed, the Company's books and records show that the Company has a substantial investment in special deposits, temporary cash investments, and notes receivable from affiliate companies (together short-term asset investments). The five quarter average of the short-term asset investment totals over \$200 million. RMP is using its retained earnings in part to invest in these short-term assets.

Α

I recommend the common equity supporting these short-term assets investments not be included in the capital structure used to recover RMP's cost of capital for utility operations. RMP's common equity that is not used to support investments in utility plant should not be included in its utility cost of capital. As a result, RMP's ratemaking capital structure should be adjusted to remove the common equity supporting short-term cash investments and, thus, excluded from the development of an overall rate of return applied to RMP's utility plant investment.

14 Q PLEASE DESCRIBE YOUR PROPOSED ADJUSTMENT TO RMP'S CAPITAL 15 STRUCTURE.

RMP is proposing a 2009 test year, with known and measurable adjustments through year-end 2010. However, actual data is only available for the post-test year through June 30, 2010. Therefore, I relied on RMP's most recent five quarters of data ending June 30, 2010 to develop an average capital structure ending June 30, 2010. RMP's capital structure at June 30, 2010 is 52.2%, and is very close to that projected by RMP for year-end 2010 of 52.1%.

I propose to remove the common equity capital supporting the following non-utility assets: (1) special deposits, (2) short-term investments, and (3) the difference between notes receivable from affiliate companies and notes payable to

¹¹Data for the last two quarters of 2010 were not available.

affiliate companies. This will reduce the five quarte	er average comi	mon equity amount
by approximately \$200 million, and lower the comm	mon equity ratio	from 52.1% down
to 49 7%		

Α

Α

I believe this capital structure is more reasonable for setting rates because it reflects the actual common equity capital RMP relied on to invest in utility plant. The primary difference between my capital structure and that proposed by RMP, is that the Company is proposing to reflect the cost of common equity capital that has not been used to support investments in utility plant. In contrast, my capital structure reflects the actual capital structure mix supporting its investment in utility plant. Therefore, I believe my capital structure produces a more reasonable estimate of RMP's actual cost of capital supporting its utility plant investment.

Q DOES RMP HAVE AN ACQUISITION ADJUSTMENT RECORDED ON ITS BALANCE SHEET THAT IS SUPPORTED BY COMMON EQUITY CAPITAL?

Yes. However, RMP's schedules in this case indicate that a portion of this acquisition adjustment is included in its Idaho rate base. Therefore, I did not remove the common equity supporting this acquisition asset from the capital structure supporting rate base. However, if this acquisition adjustment is removed from the Idaho rate base, then the common equity supporting the acquisition adjustment should also be removed from utility capital structure.

Q IS IT POSSIBLE THAT RMP'S DEBT CAPITAL COULD HAVE BEEN USED TO FUND INVESTMENTS IN THESE SHORT-TERM CASH ASSETS?

No. RMP's long-term embedded debt cost is 5.92%, and is more expensive than the short-term interest earnings it produces on these short-term cash investments. Therefore, it is reasonable to believe that these short-term cash investments simply

- 1 represent a placeholder for all the earnings RMP is retaining in its Company until
- 2 needed to fund utility plant investment.

3 Q WHAT IS YOUR PROPOSED CAPITAL STRUCTURE IN THIS PROCEEDING?

4 A My proposed capital structure is shown below in Table 2.

TABLE 2 <u>Adjusted Capital Structure</u> (Actual 5-Quarter average, ending June 2010)

Description	Percent of Total Capital
Long-Term Debt	50.0%
Preferred Stock	0.3%
Common Equity	49.7%
Total Capital Structure	100.0%

Source: Exhibit No. 202 (MPG-1) at 1.

- 5 Q IS YOUR PROPOSED CAPITAL STRUCTURE GENERALLY CONSISTENT WITH
- 6 RMP'S TARGET CAPITAL STRUCTURE FOR UTILITY OPERATIONS?
- 7 A Yes. In previous proceedings, Mr. Williams has stated a capital structure target for
- 8 utility operations of 50%/50% debt/equity. The capital structure outlined in Table 2
- 9 approximates this targeted utility capitalization mix.
- 10 Q WILL YOUR PROPOSED CAPITAL STRUCTURE SUPPORT RMP'S FINANCIAL
- 11 INTEGRITY AND CREDIT RATING?
- 12 A Yes. As I will discuss later in my testimony, my proposed capital structure is
- consistent with RMP's current credit rating and will support RMP's financial integrity.

1	Return	on Common Equity

- 2 Q PLEASE DESCRIBE WHAT IS MEANT BY A "UTILITY'S COST OF COMMON
- 3 EQUITY."
- 4 A A utility's cost of common equity is the return investors expect, or require, in order to
- 5 make an investment. Investors expect to achieve their return requirement from
- 6 receiving dividends and stock price appreciation.
- 7 Q PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED
- 8 UTILITY'S COST OF COMMON EQUITY.
- 9 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: Bluefield Water Works &
- 11 <u>Improvement Co. v. Public Serv. Commission of West Virginia</u>, 262 U.S. 679 (1923)
- and <u>Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944).</u>
- These decisions identify the general standards to be considered in
- 14 establishing the cost of common equity for a public utility. Those general standards
- provide 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.
- 18 Q PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE THE COST
- 19 OF COMMON EQUITY FOR RMP.
- 20 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
- 22 ("DCF") model; (2) a sustainable growth DCF model; (3) a multi-stage growth DCF
- 23 model; (4) a Risk Premium model; and (5) a Capital Asset Pricing Model ("CAPM"). I

1		have applied these models to a group of publicly traded utilities that I have
2		determined reflect investment risk similar to RMP.
3	Q	HOW DID YOU SELECT A PROXY GROUP OF UTILITIES SIMILAR IN
4		INVESTMENT RISK TO RMP TO ESTIMATE ITS CURRENT MARKET COST OF
5		EQUITY?
6	Α	I relied on the same proxy group used by RMP witness Dr. Hadaway to estimate
7		RMP's return on equity.
8	Q	HOW DOES THIS PROXY GROUP'S INVESTMENT RISK COMPARE TO THE
9		INVESTMENT RISK OF RMP?
10	Α	The proxy group is shown on Exhibit No. 203 (MPG-2). This proxy group has an
11		average senior secured credit rating from S&P of "A-," which is comparable to RMP's
12		senior secured credit rating from S&P of "A." The proxy group's senior secured credit
13		rating from Moody's is "A2," which is identical to RMP's senior secured credit rating
14		from Moody's. Therefore, my proxy group has comparable total investment risk to
15		RMP.
16		The proxy group has an average common equity ratio of 46.9% (including
17		short-term debt) from AUS and 48.1% (excluding short-term debt) from Value Line in
18		2009. This proxy group's common equity ratio is lower than my proposed common
19		equity ratio for RMP of 49.7%. A comparable common equity ratio demonstrates that
20		RMP's financial risks are comparable to or lower than my proxy group.
21		I also compared RMP's business risk to the business risk of my proxy group
22		based on S&P's ranking methodology. RMP has a business risk profile of "Excellent,"
23		which is identical to the risk profile of my proxy group. S&P's profile score
24		methodology is discussed later in my testimony.

Discounted Cash Flow Model

1

- 2 Q PLEASE DESCRIBE THE DCF MODEL.
- 3 A The DCF model posits that a stock price is valued by summing the present value of
- 4 expected future cash flows discounted at the investor's required rate of return or cost
- of capital. This model is expressed mathematically as follows:

6
$$P_0 = \frac{D_1}{D_2} + \frac{D_2}{D_2} + \frac{D_2}{D_2}$$
 where (Equation 1)

7 $(1+K)^1 (1+K)^2 (1+K)^{\circ}$

- 8 P_0 = Current stock price
- 9 D = Dividends in periods 1 ∞
- 10 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:

14
$$K = D_1/P_0 + G$$
 (Equation 2)

- 15 K = Investor's required return
- 16 D_1 = Dividend in first year
- 17 P_0 = Current stock price
- 18 G = Expected constant dividend growth rate
- 19 Equation 2 is referred to as the annual "constant growth" DCF model.
- 20 Q PLEASE DESCRIBE THE INPUTS TO YOUR CONSTANT GROWTH DCF MODEL.
- 21 A As shown under Equation 2 above, the DCF model requires a current stock price,
- 22 expected dividend, and expected growth rate in dividends.

1	Q	WHAT STOCK PRICE AND DIVIDEND HAVE YOU RELIED ON IN YOUR
2		CONSTANT GROWTH DCF MODEL?
3	Α	I relied on the average of the weekly high and low stock prices over a 13-week period
4		ended September 10, 2010. An average stock price is less susceptible to market
5		price variations than a spot price. Therefore, an average stock price is less
6		susceptible to aberrant market price movements, which may not be reflective of the
7		stock's long-term value.
8		A 13-week average stock price is still short enough to contain data that
9		reasonably reflect current market expectations, but is not so short a period as to be
10		susceptible to market price variations that may not be reflective of the security's
11		long-term value. In my judgment, a 13-week average stock price is a reasonable
12		balance between the need to reflect current market expectations and the need to
13		capture sufficient data to smooth out aberrant market movements.
14		I used the most recently paid quarterly dividend, as reported in The Value Line
15		Investment Survey. This dividend was annualized (multiplied by 4) and adjusted for
16		next year's growth to produce the D₁ factor for use in Equation 2 above.
17	Q	WHAT DIVIDEND GROWTH RATES HAVE YOU USED IN YOUR CONSTANT
18		GROWTH DCF MODEL?
19	Α	There are several methods one can use in order to estimate the expected growth in
20		dividends. However, for purposes of determining the market required return on
21		common equity, one must attempt to estimate investors' consensus about what the
22		dividend or earnings growth rate will be, and not what an individual investor or analyst
23		may use to form individual investment decisions.
24		Security analysts' growth estimates have been shown to be more accurate

predictors of future returns than growth rates derived from historical data because

25

they are more reliable estimates. 12 Assuming the market generally makes rational									
investment decisions, analysts' growth projections are more likely the growth									
estimates considered by the market that influence observable stock prices than are									
growth rates derived from only historical data.									

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 analysts' growth rate estimates: Zacks, SNL Financial and Reuters. All consensus analysts' projections used were available on September 15, 2010, as reported online.

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 more representative of general market expectations. Therefore, a simple average, or arithmetic mean, of analyst forecasts is a good proxy for market consensus expectations.

18 Q WHAT IS THE GROWTH RATE YOU USED IN YOUR CONSTANT GROWTH DCF 19 MODEL?

20 A The growth rates I used in my DCF analysis are shown in Exhibit No. 204 (MPG-3).

21 The average and median growth rates for my proxy group are 5.67% and 5.45%,

22 respectively.

¹²See, e.g., David Gordon, Myron Gordon, and Lawrence Gould, "Choice Among Methods of Estimating Share Yield," *The Journal of Portfolio Management*, Spring 1989.

•	Q	WHAT ARE THE RESULTS OF TOUR CONSTAINT GROWTH DCF MODEL?
2	Å	As shown in Exhibit No. 205 (MPG-4), the average and median constant growth DCF
3		returns for the proxy group are 10.45% and 10.50%, respectively.
4	Q	DO YOU HAVE ANY COMMENTS CONCERNING THE RESULTS OF YOUR
5		CONSTANT GROWTH DCF ANALYSIS?
6	Α	Yes. The three- to five-year growth rate exceeds a long-term sustainable growth rate
7		as required by the constant growth DCF model.
8	Q	WHY DO YOU BELIEVE THE PROXY GROUP'S THREE- TO FIVE-YEAR
9		GROWTH RATE IS IN EXCESS OF A LONG-TERM SUSTAINABLE GROWTH?
10	Α	The three- to five-year growth rate of the proxy group exceeds the growth rate of the
11		overall U.S. economy. As developed below, the consensus of published economists'
12		projects is that the U.S. Gross Domestic Product ("GDP") will grow at a rate of no
13		more than 5.1% and 4.9% over the next 5 and 10 years, respectively. A company
14		cannot grow, indefinitely, at a faster rate than the market in which it sells its products.
15		The U.S. economy, or GDP, growth projection represents a ceiling, or high-end,
16		sustainable growth rate for a utility over an indefinite period of time.
17	Q	WHY IS THE GDP GROWTH PROJECTION CONSIDERED A CEILING GROWTH
18		RATE FOR A UTILITY?
19	Α	Utilities cannot indefinitely sustain a growth rate that exceeds the growth rate of the
20		overall economy. Utilities' earnings/dividend growth is created by increased utility
21		investment or rate base. Utility plant investment, in turn, is driven by service area
22		economic growth and demand for utility service. In other words, utilities invest in
23		plant to meet sales demand growth, and sales growth in turn is tied to economic

growth in their service areas. The Energy Information Administration ("EIA") has
observed that utility sales growth is less than U.S. GDP growth, as shown in Exhibit
No. 206 (MPG-5). Utility sales growth has lagged behind GDP growth. Hence,
nominal GDP growth is a very conservative, albeit overstated, proxy for electric utility
sales growth, rate base growth, and earnings growth. Therefore, GDP growth is a
reasonable proxy for the highest sustainable long-term growth rate of a utility.

Α

7 Q IS THERE RESEARCH THAT SUPPORTS YOUR POSITION THAT, OVER THE
8 LONG TERM, A COMPANY'S EARNINGS AND DIVIDENDS CANNOT GROW AT
9 A RATE GREATER THAN THE GROWTH OF THE U.S. GDP?

Yes. This concept is supported in both published analyst literature and academic work. Specifically, in a textbook entitled "Fundamentals of Financial Management," published by Eugene Brigham and Joel F. Houston, the authors state as follows:

The constant growth model is most appropriate for mature companies with a stable history of growth and stable future expectations. Expected growth rates vary somewhat among companies, but dividends for mature firms are often expected to grow in the future at about the same rate as nominal gross domestic product (real GDP plus inflation). ¹³

Also, Morningstar's *Stocks, Bonds, Bills and Inflation 2009 Yearbook Valuation Edition* tracked dividends of the stock market in comparison to GDP growth over the period 1926 through the end of 2008. ¹⁴ Based on that study, the authors found that earnings and dividends for the market have historically grown in tandem with the overall economy. It is important to note that the growth of companies included in the overall market will normally be higher than that of utility companies. These non-utility companies achieve a higher level of growth because they retain a

¹³"Fundamentals of Financial Management," Eugene F. Brigham and Joel F. Houston, Eleventh Edition 2007, Thomson South-Western, a Division of Thomson Corporation at 298.

¹⁴Stocks, Bonds, Bills and Inflation 2009 Yearbook Valuation Edition (Morningstar, Inc.) at 67.

larger percentage of their earnings and pay out a much smaller percentage of their
earnings as dividends. Retaining higher percentages of total earnings fuels stronger
growth for these non-utility companies. Since the market in general grows at the
overall GDP growth rate, it is very conservative to assume that utility companies could
achieve this same level of sustained growth without a material reduction in their
dividend payout ratios. As such, using the GDP as a maximum sustainable growth
rate is a very conservative and high-end estimate for utility companies.

8 Q HAVE ANALYSTS RECOGNIZED THAT SHORT-TERM GROWTH OUTLOOKS

9 WILL SLOW OVER TIME?

10 A Yes. Value Line recognized that dividend growth will likely slow from short-term
11 growth patterns. Value Line stated as follows:

Dividends have been increasing at a rapid pace since 2002, reflecting relatively healthy balance sheets throughout the industry. In fact, last year 61% of electric utilities raised their dividend, 33% reported no change, 2% reinstated theirs, 2% lowered them, and only 2% are not paying them at all. In any industry these statistics would be viewed as quite favorable. But, 2008 actually marked the slowing of a trend for the electric utility industry, in which the percentage of dividend increases declined. The reversal is attributable to deteriorating economic conditions, elevated capital spending, and higher debt-to-capitalization ratios. Despite this, many utilities are still sporting attractive yields. 15

Sustainable Growth DCF

- 24 Q PLEASE DESCRIBE HOW YOU ESTIMATE A SUSTAINABLE LONG-TERM
- 25 GROWTH RATE FOR YOUR SUSTAINABLE GROWTH DCF MODEL.
- A sustainable growth rate is based on the percentage of the utility's earnings that are retained and reinvested in utility plant and equipment. These reinvested earnings

¹⁵Value Line Investment Survey, May 29, 2009, emphasis added.

increase the earnings base (rate base) and will grow earnings when the reinvested
earnings investment is put into service, and the Company is allowed to earn its
authorized return on the additional rate base investment

Α

The internal growth methodology is tied to the percentage of earnings retained in the company and not paid out as dividends. The earnings retention ratio is 1 minus the dividend payout ratio. As the payout ratio declines, the earnings retention ratio increases. An increased earnings retention ratio will fuel stronger growth because the business funds more investments with retained earnings. As shown in Exhibit No. 207 (MPG-6), Value Line projects the proxy group to have a declining dividend payout ratio over the next three to five years. These dividend payout ratios and earnings retention ratios can then be used to develop a sustainable long-term earnings retention growth rate to help gauge whether analysts' current three- to five-year growth rate projections can be sustained over an indefinite period of time.

The data used to estimate the long-term sustainable growth rate is based on the Company's current market to book ratio, and *Value Line's* three- to-five year projections per earnings, dividends, earned return on book equity, and projected stock issuances.

As shown in Exhibit No. 208 (MPG-7), page 1 of 2, the average and median sustainable growth rates for the proxy group using this internal growth rate model are 5.16% and 5.03%, respectively.

Q WHAT IS THE CONSTANT GROWTH DCF ESTIMATE USING THIS SUSTAINABLE LONG-TERM GROWTH RATE?

A DCF estimate based on this sustainable growth rate is developed in Exhibit No. 209 (MPG-8). As shown there, a sustainable growth DCF analysis produces a group average and median DCF result of 9.92% and 9.14%, respectively.

The average result is skewed due to a significant outlier – DPL Inc., which produces a return on equity of 19.14%. Excluding DPL Inc., the proxy group's average DCF would be 9.48%. Therefore, I conclude that the median result of 9.14% better represents the central tendency of my proxy group. Hence, I will rely on the median DCF result.

The sustainable growth DCF result is based on the dividend and price data used in my constant growth DCF study (using analyst growth rates) and the sustainable growth rate discussed above and developed in Exhibit No. 208 (MPG-7).

Multi-Stage Growth DCF Model

Α

Α

10 Q HAVE YOU CONDUCTED ANY OTHER DCF STUDIES?

Yes. My first 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 performed a multi-stage growth DCF analysis to reflect this outlook of changing growth expectations.

Q PLEASE DESCRIBE YOUR MULTI-STAGE GROWTH DCF MODEL.

The multi-stage growth DCF model reflects the possibility of non-constant growth for a company over time. The multi-stage growth DCF model reflects three growth periods: (1) a short-term growth period, which consists of the first five years; (2) a transition period, which consists of the next five years (6 through 10); and (3) a long-term growth period, starting in year 11 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 transition period, the growth rates were reduced or increased by an equal factor,
which reflects the difference between the analysts' growth rates and the GDP growth
rate. For the long-term growth period, I assumed each company's growth would
converge to the maximum sustainable growth rate for a utility company as proxied by
the consensus analysts' projected growth for the U.S. GDP of 4.9%.

Α

Q WHAT DO YOU BELIEVE IS A REASONABLE SUSTAINABLE LONG-TERM GROWTH RATE?

A reasonable growth rate that can be sustained in the long run should be based on consensus analysts' projections. *Blue Chip Financial Forecasts* publishes consensus GDP growth projections twice a year. Based on its latest issue, the consensus economists' published 5- to 10-year GDP growth rate outlook is 5.1% to 4.9%, respectively.¹⁶

Therefore, I propose to use the consensus economists' projected 10-year GDP consensus growth rate of 4.9%, as published by *Blue Chip Financial Forecasts*, as an estimate of sustainable long-term growth. This consensus GDP growth forecast represents the most likely views of market participants because it is based on published economist projections.

20 Q WHAT STOCK PRICE, DIVIDEND AND GROWTH RATES DID YOU USE IN YOUR 21 MULTI-STAGE GROWTH DCF ANALYSIS?

22 A I relied on the same 13-week stock price and the most recent quarterly dividend 23 payment discussed above. For stage one growth, I used the consensus analysts'

¹⁶Blue Chip Financial Forecasts, June 1, 2010 at 14.

growth rate projections discussed above in my constant growth DCF model. The transition period begins in year 6 and ends in year 10. For the long-term sustainable growth rate starting in year 11, I used 4.9%, the consensus economists' 10-year projected nominal GDP growth rate.

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

- As shown in Exhibit No. 210 (MPG-9), the average and median multi-stage growth

 DCF return on equity for the proxy group are 9.87% and 9.90%, respectively.
- 8 Q PLEASE SUMMARIZE THE RESULTS FROM YOUR DCF ANALYSES.
- 9 A The results from my DCF analyses are summarized in Table 3:

1

2

3

4

10

11

12

13

14

15

16

17

TABLE 3								
Summary of DCF Results								
Description	Proxy Group							
Constant Growth DCF Model (Analysts' Growth)	10.50%							
Constant Growth DCF Model (Sustainable Growth)	9.14%							
Multi-Stage Growth DCF Model	<u>9.90%</u>							
Average DCF Return	9.85%							

For reasons set forth above, I believe my constant growth DCF model based on analysts' growth is inflated because short-term analyst growth rate projections are not reasonable estimates of long-term sustainable growth. Therefore, the DCF model based on analysts' growth rate estimates should not be used on a stand-alone basis. I recommend it be averaged with my other DCF estimates to produce a reasonable DCF point estimate that can be used to derive RMP's return on equity. The constant growth DCF model based on the sustainable growth approach is based on a growth rate that is sustainable in the long term in comparison to GDP growth, but may not

reflect analysts' short-term growth outlooks. The multi-stage growth DCF model return reflects the expectation of changing growth rates over time. Even though I have strong concerns about the accuracy of the constant growth DCF at this time, I included all estimates in my DCF return of approximately 9.85%.

Risk Premium Model

Α

6 Q PLEASE DESCRIBE YOUR BOND YIELD PLUS RISK PREMIUM MODEL.

This model is based on the principle that investors require a higher return 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 2010. 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 2010, public utility stocks have consistently traded at a premium
to book value. This is illustrated in Exhibit No. 211 (MPG-10), where the market to
book ratio since 1986 for the electric utility industry was consistently above 1.0. 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. It further demonstrates that utilities were able
to access equity markets without a detrimental impact on current shareholders

Q

Α

Based on this analysis, as shown in Exhibit No. 212 (MPG-11), the average indicated equity risk premium over U.S. Treasury bond yields has been 5.19%. Of the 25 observations, 19 indicated risk premiums fall in the range of 4.40% to 6.08%. 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 in Exhibit No. 213 (MPG-12), the average indicated equity risk premium over contemporary Moody's utility bond yields was 3.75% over the period 1986 through June 2010. The indicated equity risk premium estimates based on this analysis primarily fall in the range of 3.03% to 4.59% over this time period.

DO YOU BELIEVE THAT THIS RISK PREMIUM IS BASED ON A TIME PERIOD

THAT IS TOO LONG OR TOO SHORT TO DRAW ACCURATE RESULTS

CONCERNING CONTEMPORARY MARKET CONDITIONS?

No. Contemporary market conditions can change dramatically during the period that rates determined in this proceeding will be in effect. Therefore, relying on a relatively long period of time where stock valuations reflect premiums to book value is an

indication that the authorized returns on equity and the corresponding equity risk premiums were supportive of investors' return expectations and provided utilities access to the equity markets under reasonable terms and conditions. Further, this time period is long enough to smooth abnormal market movement that might distort equity risk premiums. While market conditions and risk premiums do vary over time, this historical time period is a reasonable period to estimate contemporary risk premiums.

Α

The time period I use in this risk premium is a generally accepted period to develop a risk premium study using "expectational" data. Conversely, studies have recommended that use of "actual achieved return data" should be based on very long historical time periods. The studies find that achieved returns over short time periods may not reflect investors' expected returns due to unexpected and abnormal stock price performance. However, these short-term abnormal actual returns would be smoothed over time and the achieved actual returns over long time periods would approximate investors' expected returns. Therefore, it is reasonable to assume that averages of annual achieved returns over long time periods will generally converge on the investors' expected returns.

My risk premium study is based on expectational data, not actual returns, and, thus, need not encompass very long time periods.

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

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 in Exhibit No. 214 (MPG-13). On that exhibit, I show the yield spread between utility bonds and Treasury bonds over the last 30 years. As shown in this exhibit, the 2008 utility bond

yield spreads over Treasury bonds for "A" rated and "Baa" rated utility bonds are 2.25% and 2.97%, respectively. The utility bond spreads over Treasury bonds for "A" and "Baa" rated utility bonds for 2009 are 1.96% and 2.98%, respectively. These utility bond yield spreads over Treasury bond yields are much higher than the 30-year average spreads of 1.60% and 2.00%, respectively.

Q

Α

While the yield spreads for 2008 and 2009 reflect unusually large spreads, the market has started to improve and these spreads have started to decline. For example, the 13-week average "A" rated utility bond yield has subsided relative to the end of 2008 and 2009, down to around 5.17%. This utility bond yield when compared to the current Treasury bond yield of 3.92% as shown on Exhibit No. 215 (MPG-14), page 1 of 3, implies a yield spread of around 1.25%, which is lower than the 30-year average spread for "A" utility bonds of 1.60%. The same is true for the "Baa" utility yields and spreads.

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

I added a projected long-term Treasury bond yield to my estimated equity risk premium over Treasury yields. The 13-week average 30-year Treasury bond yield, ending September 10, 2010 was 3.92%, as shown on Exhibit No. 215 (MPG-14). Blue Chip Financial Forecasts projects the 30-year Treasury bond yield to be 4.7%, and a 10-year Treasury bond yield to be 3.8%. ¹⁷ Using the projected 30-year bond yield of 4.70%, and a Treasury bond risk premium of 4.40% to 6.08%, as developed above, produces an estimated common equity return in the range of 9.10% (4.70% + 4.40%) to 10.78% (4.70% + 6.08%), with a midpoint of 9.94%.

¹⁷Blue Chip Financial Forecasts, September 1, 2010 at 2.

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 10, 2010 of 5.17%. Exhibit No. 215 (MPG-14), page 1 of 3. Adding the utility equity risk premium of 3.03% to 4.59%, as developed above, to an "A" rated bond yield of 5.40%, produces a cost of equity in the range of 8.20% to 9.76%, with a midpoint of 8.98%.

My risk premium analyses produce a return estimate in the range of 8.98% to 9.94%, with a midpoint estimate of 9.46%.

9 Capital Asset Pricing Model ("CAPM")

10 Q PLEASE DESCRIBE THE CAPM.

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

 $R_i = R_f + B_i \times (R_m - R_f)$ where:

 R_i = Required return for stock i

 $R_f = Risk-free rate$

 R_m = Expected return for the market portfolio

B_i = 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 non-systematic risks. In a broad sense, systematic risks are market risks, and non-systematic 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 non-diversifiable risks. The beta is a measure of the systematic or non-diversifiable risks.

10 Q PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.

1

2

3

4

5

6

7

8

9

18

19

20

21

22

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

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

As previously noted, *Blue Chip Financial Forecasts*' projected 30-year Treasury bond yield is 4.7%. ¹⁸ The current 30-year bond yield is 4.4%. I used *Blue Chip Financial Forecasts*' projected 30-year Treasury bond yield of 4.7% for my CAPM analysis.

17 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

¹⁸Blue Chip Financial Forecasts, September 1, 2010 at 2.

reflected	in	both	common	stock	required	returns	and	long-term	bond	yields.
Therefore	e, th	e nom	inal risk-fr	ee rate	(or expec	ted inflat	ion ra	ite and real	risk-fre	ee rate)
included	in a	long-	term bond	yield i	s a reaso	nable es	timate	of the no	minal r	isk-free
rate inclu	ded	in cor	nmon stoc	k returi	าร					

Treasury bond yields, however, do include risk premiums related to unanticipated future inflation and interest rates. 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.

WHAT BETA DID YOU USE IN YOUR ANALYSIS?

Q

Q

Α

12 A As shown in Exhibit No. 216 (MPG-15), the proxy group average *Value Line* beta estimate is 0.69.

HOW DID YOU DERIVE YOUR MARKET RISK PREMIUM ESTIMATE?

I derived two market risk 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 (as represented by the 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.

Morningstar's Stocks, Bonds, Bills and Inflation 2010 Yearbook publication estimates the historical arithmetic average real market return over the period 1926 to

2009 as 8.6%. 19 A current consensus analysts' inflation projection, as measured by the Consumer Price Index, is 1.9%.²⁰ Using these estimates, the expected market return is 10.66%. 21 The market premium then is the difference between the 10.66% expected market return, and my 4.7% risk-free rate estimate, or 5.96%.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

Q

Α

The historical estimate of the market risk premium was also estimated by Morningstar in Stocks, Bonds, Bills and Inflation 2010 Yearbook. Over the period 1926 through 2009, Morningstar's study estimated that the arithmetic average of the achieved total return on the S&P 500 was 11.80%. 22 and the total return on long-term Treasury bonds was 5.8%.²³ The indicated equity risk premium is 6.0% (11.80% -5.8% = 6.00%).

HOW DOES YOUR ESTIMATED MARKET RISK PREMIUM RANGE COMPARE TO THAT ESTIMATED BY MORNINGSTAR?

Morningstar estimates a forward-looking market risk premium based on actual achieved data from the historical period of 1926 through year-end 2009. Using this data, Morningstar estimates a market risk premium derived from the total return on large company stocks (S&P 500), less the income return on Treasury bonds. The total return includes capital appreciation, dividend or coupon reinvestment returns, and annual yields received from coupons and/or dividend payments. The income return, in contrast, only reflects the income return received from dividend payments or coupon yields. Morningstar argues that the income return is the only true risk-free rate associated with the Treasury bond and is the best approximation of a truly risk-free rate. I disagree with this assessment from Morningstar, because it does not

¹⁹Morningstar, Inc. Ibbotson SBBI 2010 Classic Yearbook at 82.

²⁰Blue Chip Financial Forecasts, July 1, 2010 at 2.

²¹{ [(1 + 0.086) * (1 + 0.019)] – 1] } * 100. ²²Morningstar, Inc. *Ibbotson SBBI 2010 Classic Yearbook at 82.* ²³ld.

reflect a true investment option available to the marketplace and therefore does not produce a legitimate estimate of the expected premium of investing in the stock market versus that of Treasury bonds. Nevertheless, I will use Morningstar's conclusion to show the reasonableness of my market risk premium estimates.

Morningstar's analysis indicates that a market risk premium falls somewhere in the range of 5.2% to 6.7%. This range is based on several methodologies. First, Morningstar estimates a market risk premium of 6.7% based on the difference between the total market return on common stocks (S&P 500) less the income return on Treasury bond investments. Second, Morningstar found that if the New York Stock Exchange (the "NYSE") was used as the market index rather than the S&P 500, that the market risk premium would be 6.4% and not 6.7%. Third, if only the two deciles of the largest companies included in the NYSE were considered, the market risk premium would be 5.9%.²⁴

Finally, Morningstar found that the 6.7% market risk premium based on the S&P 500 was impacted by an abnormal expansion of price-to-earnings ("P/E") ratios relative to earnings and dividend growth during the period 1980 through 2001. Morningstar believes this abnormal P/E expansion is not sustainable. Therefore, Morningstar adjusted this market risk premium estimate to normalize the growth in the P/E ratio to be more in line with the growth in dividends and earnings. Based on this alternative methodology, Morningstar published a long-horizon supply-side market risk premium of 5.2%. ²⁵

Thus, based on all of Morningstar's estimates, the market risk premium falls somewhere in the range of 5.2% to 6.7%.

²⁴Morningstar observes that the S&P 500 and the NYSE Decile 1-2 are both large capitalization benchmarks. Morningstar, Inc. *Ibbotson SBBI 2009 Valuation Yearbook* at 54.
²⁵Id. at 66.

Q WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?

As shown in Exhibit No. 217 (MPG-16), based on my low-end market risk premium of 5.2%, high-end market risk premium of 6.7%, a risk-free rate of 4.7%, and a beta of 0.69, my CAPM analysis produces a return in the range of 8.28% to 9.31%, with a midpoint of 8.80%.

6 Return on Equity Summary

1

11

12

13

- PASED ON THE RESULTS OF YOUR RATE OF RETURN ON COMMON EQUITY

 ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY DO

 YOU RECOMMEND FOR RMP?
- 10 A Based on my analyses, I estimate RMP's current market cost of equity to be 9.5%.

TABLE 4					
Return on Common Equity Summary					
<u>Description</u> <u>Results</u>					
DCF	9.85%				
Risk Premium	9.46%				
CAPM	8.80%				

My recommended return on equity range is 9.10% to 9.90%. My low end is based on the average of my CAPM and risk premium return estimates and my high end is based on my DCF analysis.

Financial Integrity

1

18

- 2 Q WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT AN
- 3 INVESTMENT GRADE BOND RATING FOR RMP?
- 4 A Yes. I have reached this conclusion by comparing the key credit rating financial
- 5 ratios for RMP at my proposed capital structure, and my return on equity to S&P's
- 6 benchmark financial ratios using S&P's new credit metric ranges.
- 7 Q PLEASE DESCRIBE THE MOST RECENT S&P FINANCIAL RATIO CREDIT
- 8 METRIC METHODOLOGY.
- 9 Α S&P publishes a matrix of financial ratios that correspond to its assessment of the 10 business risk of the utility company and related bond rating. S&P updated its credit 11 metric guidelines on November 30, 2007, and incorporated utility metric benchmarks 12 with the general corporate rating metrics. However, the effect of integrating the utility 13 metrics with that of general corporate bonds, resulted in a reduction to the 14 transparency in S&P's credit metric guideline for utilities. Most recently, on May 27, 15 2009 S&P expanded its matrix criteria and included an additional business and 16 financial risk category. Based on S&P's most recent credit matrix, the business risk profile categories are "Excellent," "Strong," "Satisfactory," "Fair," "Weak," and 17
- 19 "Strong." The financial risk profile categories are "Minimal," "Modest," "Intermediate,"

"Vulnerable." Most electric utilities have a business risk profile of "Excellent" or

- 20 "Significant," "Aggressive," and "Highly Leveraged." Most of the electric utilities have
- 21 a financial risk profile of "Aggressive." RMP has an "Excellent" business risk profile
- and a "Significant" financial risk profile.

1	Q	PLEASE DESCRIBE S&P'S USE OF THE FINANCIAL BENCHMARK RATIOS IN
2		ITS CREDIT RATING REVIEW.
3	Α	S&P evaluates a utility's credit rating based on an assessment of its financial and

Q

Α

Q

Α

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 RMP's total 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 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) debt to EBITDA, (2) funds from operations ("FFO") to total debt, and (3) total debt to total capital.

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

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 total consolidated financial ratios in its credit review process, my investigation in this proceeding is to judge the reasonableness of my proposed cost of capital for rate-setting in RMP's Idaho utility operations. Hence, I am attempting to determine whether the rate of return and cash flow generation opportunity reflected in my proposed utility rates for RMP in Idaho will support its investment grade bond ratings and financial integrity.

DID YOU INCLUDE ANY OFF-BALANCE SHEET DEBT?

Yes. As shown in Exhibit No. 218 (MPG-17), page 4 of 4, I estimated an Idaho allocation of PacifiCorp total off-balance sheet debt, imputed interest and amortized expenses for operating leases and purchased power agreements ("PPAs"). These

1	off-balance sheet obligations were used to estimate RMP credit metrics at my
2	proposed rate of return.

HOW DID YOU ESTIMATE RMP'S OFF-BALANCE SHEET DEBT?

Q

The off-balance sheet debt is shown on Exhibit No. 218 (MPG-17), page 4 of 4. First,

I developed an Idaho allocator, which is the ratio of RMP's Idaho rate base as of

December 2009 divided by total Company rate base at the same time.

Second, I obtained RMP's total Company lease and purchased power off-balance sheet debt and associated imputed interest and amortization expenses from the S&P report (Williams Exhibit No. 60, page 6 of 10). These factors were used to estimate the Idaho allocated portion of the total Company off-balance sheet lease and purchased power imputed debt, interest and amortization expense. The off-balance sheet impact on RMP's total capital structure weights was used to develop the RMP debt ratio for Idaho operations including total Company off-balance sheet PPA and operating lease debt equivalents.

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

A The S&P financial metric calculations for RMP are developed on Exhibit No. 218 (MPG-17), page 1 of 4.

As shown on Exhibit No. 218 (MPG-17), page 1 of 4, column 1, based on an equity return of 9.50%, RMP will be provided an opportunity to produce a debt to EBITDA ratio of 3.3x. This is within the S&P's "Significant" financial risk guideline

range of 3.0x to 4.0x and above (stronger) than the "Aggressive" risk profile. ²⁶	This
ratio supports an investment grade credit rating.	

Q

Α

RMP's retail operations FFO to total debt coverage at a 9.50% equity return would be 26%, which is within the "Significant" metric guideline range of 20% to 30% and above the "Aggressive" profile range. The FFO/total debt ratio will support an investment grade bond rating.

Finally, RMP's total debt ratio to total capital is 52%. This is within the "Aggressive" profile guidance range of 50% to 60%. This total debt ratio will support PacifiCorp's investment grade bond rating.

At my recommended return on equity and my proposed capital structure, the Company's financial credit metrics are supportive of its current "A" utility bond rating.

DO YOU BELIEVE THIS CREDIT METRIC EVALUATION OF RMP AT YOUR PROPOSED RETURN ON EQUITY PROVIDES MEANINGFUL INFORMATION TO HELP THE COMMISSION DETERMINE THE APPROPRIATENESS OF YOUR RECOMMENDATION?

Yes. While S&P calculates these credit metrics based on total Company operations, and not the retail operations of RMP as I have performed in this study, it still provides meaningful information on the proposed rate of return for RMP in this case and how it will contribute and help support consolidated operations credit standing. Further, while credit rating agencies also consider other financial metrics and qualitative considerations, these metrics are largely driven by the cost of service items of depreciation expense and return on equity. Hence, to the extent these important aspects of cost of service impact RMP's internal cash flows, the relative impact on

²⁶Standard & Poor's RatingsDirect: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009.

1		RMP will be measured by these credit metrics. As illustrated above, an authorized
2		return on equity of 9.50% will support internal cash flows that will be adequate to
3		maintain RMP's current investment grade bond rating.
4	Resp	oonse to RMP Witness Dr. Samuel Hadaway
5	Q	WHAT RETURN ON COMMON EQUITY IS RMP PROPOSING FOR THIS
6		PROCEEDING?
7	A	RMP is proposing to set rates based on a return on equity of 10.6%. RMP's return on
8		equity proposal is based on the analysis and judgment of Dr. Samuel Hadaway.
9		Dr. Hadaway's results are summarized at page 40 of his direct testimony.
10	Q	DO DR. HADAWAY'S METHODOLOGIES SUPPORT HIS 10.6% RETURN ON
11		EQUITY FOR HIS PROXY GROUP?
12	Α	No. As discussed in detail below, reflecting current market data and properly
13		applying his models, Dr. Hadaway's own analyses would support a return on equity in
14		the range of 9.1% to 9.9%.
15	Q	PLEASE DESCRIBE THE METHODOLOGY SUPPORTING DR. HADAWAY'S
16		RETURN ON COMMON EQUITY RECOMMENDATION.
17	Α	Dr. Hadaway develops his return on common equity recommendation using three
18		versions of the DCF model, and two utility risk premium analyses. I have summarized
19		Dr. Hadaway's results below in Table 5 under column 1. Under column 2, I show the
20		results of Dr. Hadaway's analyses adjusted for updated data and more reasonable
21		application of the models

2

3

TABLE 5		
Summary of Dr. Hadaway	's ROE Estimate	
Description	Hadaway Results ¹	Adjusted Hadaway Results ²
	(1)	(2)
DCF Analysis Constant Growth (Analysts' Growth) Constant Growth (GDP Growth) Multi-Stage Growth Model Reasonable DCF Range	10.3% - 10.5% 10.7% - 10.8% 10.6% 10.3% - 10.8%	9.6% - 9.7% 9.6% - 9.7%
Risk Premium Analysis Forecasted Utility Debt + Equity Risk Premium Current Utility Debt + Equity Risk Premium Risk Premium Estimate	10.59% <u>10.39%</u> 10.84%	Reject <u>8.1% - 9.75%</u> 9.56%
Recommended ROE Adjusted ROE	10.6%	9.1% - 9.9%
Sources:		
¹ Hadaway Direct at 40. ² Exhibit No. 219 (MPG-18).		

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

Dr. Hadaway's adjusted constant growth DCF analysis is shown in Exhibit No. 219

(MPG-18). As shown on that exhibit, Dr. Hadaway's constant growth DCF analysis is
based on a recent stock price, an annualized dividend and an average of three
growth rates: (1) Value Line; (2) Zacks; and (3) Thomson.

Q ARE DR. HADAWAY'S DCF ESTIMATES RELIABLE?

Α

Q

Α

Α

No, for at least two reasons. First, Dr. Hadaway's constant growth DCF based on analyst growth rates produces excessive return estimates for the same reasons discussed above concerning my DCF studies. That is, Dr. Hadaway's analyst growth DCF study is based on an abnormally high dividend yield in the range of 4.78% to 4.86% and growth rate of 5.50%. The growth rate used in this DCF study is too high to be a reasonable estimate of a sustainable long-run growth rate.

Second, his DCF studies that use a GDP growth rate are overstated, because his GDP growth rate used in his constant growth and multi-stage growth models is based on an inflated GDP growth rate of 6.0%. This GDP growth is excessive and not reflective of current market expectations.

HOW DID DR. HADAWAY DEVELOP HIS GDP GROWTH RATE?

He states that the GDP growth rate is based on the achieved GDP growth over the last 10, 20, 30, 40, 50, and 60-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.

17 Q WHY IS DR. HADAWAY'S DCF ESTIMATE EXCESSIVE IN COMPARISON TO 18 THAT OF PUBLISHED MARKET ANALYSTS?

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 rate and consensus economists' projected GDP growth over the next five and ten years is shown below in Table 6. As shown in this table, Dr. Hadaway's GDP rate of 6.0% reflects real GDP of 3.1% and an inflation adjusted GDP of 2.9%. However, consensus economists' projections of nominal GDP include

GDP inflation projections over the next five and ten years of 2.1%, and 2.2%, respectively.²⁷

1

2

3

5

6

7

8

Q

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 6							
GDP Projections							
GDP Real Noming Description Inflation GDP GDP							
Dr. Hadaway	3.1%	2.9%	6.0%				
Consensus 5-Year Projection Consensus 10-Year Projection	2.1% 2.2%	2.9% 2.6%	5.1% 4.9%				
Source: Blue Chip Financial Forecasts, June 1, 2010, at 14.							

As such, Dr. Hadaway's 6.0% nominal GDP growth rate is not reflective of consensus market expectations and should be rejected.

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?

As shown in Exhibit No. 219 (MPG-18), I updated Dr. Hadaway's DCF analyses using more recent market data and a GDP growth rate of 4.9%. This GDP growth rate is the consensus economists' 10-year projected growth rate of the GDP as published in the Blue Chip Financial Forecasts on June 1, 2010. As shown in Exhibit No. 219

²⁷Blue Chip Financial Forecasts, June 1, 2010, at 14.

- 1 (MPG-18), using this consensus economists' projected GDP growth rate, reduces 2 Dr. Hadaway's DCF results from 10.6% to 9.9%.
- 3 Q PLEASE SUMMARIZE YOUR UPDATE AND ADJUSTMENTS TO
 4 DR. HADAWAY'S DCF STUDIES.
- Updating the price and dividend yield information and growth rates in Dr. Hadaway's study, and modifying them for a more reasonable GDP growth rate, reduces the average DCF result produced by Dr. Hadaway's studies from 10.6% down to 9.9%.

 Dr. Hadaway's original estimates, and these updated and adjusted results are shown below in Table 7.

TABLE 7					
Adjusted Hadaway DCF					
Range Average					
Description	Hadaway DCF	Adjusted DCF			
Constant Growth (Analysts' Growth)	10.4%	10.4%			
Constant Growth (GDP Growth)	10.8%	9.7%			
Multi-Stage Growth Model	<u>10.6%</u>	9.7%			
Average	10.6%	9.9%			

As shown above in Table 7, using a consensus economists' GDP forecast, rather than the GDP forecast derived by Dr. Hadaway, would support a return on equity for RMP of 9.9%.

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

10

11

12

14

15

16

Α

Dr. Hadaway's utility bond yield versus authorized return on common equity risk premium is shown in his Exhibit No. 14. As shown in this exhibit, Dr. Hadaway estimated an annual equity risk premium by subtracting Moody's average bond yield

from the electric utility regulatory commission authorized return on common equity over the period 1980 through 2009. Based on this analysis, Dr. Hadaway estimates an average indicated equity risk premium over current utility bond yields of 3.23%.

Α

Q

Α

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 3.23%, up to 4.40% and 4.55% relative to projected and current "A" bond yield of 6.19% and 5.84%, respectively. He then adds these inflated equity risk premiums to a projected and the current "A" rated utility bond yield of 6.19% and 5.84% to produce a return on equity of 10.59% and 10.39%, respectively.

ARE DR. HADAWAY'S UTILITY RISK PREMIUM ANALYSES REASONABLE?

No. Dr. Hadaway develops a forward-looking risk premium model, relying on forecasted interest rates and volatile utility spreads, which are highly uncertain and produce inaccurate results. Further, Dr. Hadaway adjusts his equity risk premium of 3.23% to reflect the inverse relationship between interest rates and utility risk premiums. This adjustment is inappropriate and not consistent with academic literature that finds that this relationship should change with risk changes and not simply changes to nominal interest rates.

20 Q DOES DR. HADAWAY'S RISK PREMIUM ANALYSIS SUPPORT A RETURN ON

EQUITY IN THE RANGE OF 10.59% TO 10.39%?

No. His equity risk premium estimates of 4.40% and 4.55% are overstated. The common equity risk premium over the period 1986 to 2010 is approximately 3.75% as shown in Exhibit No. 213 (MPG-12).

1	Q	DO	YOU	HAVE	ANY	COMMENTS	CONCERNING	DR.	HADAWAY'S
2		EOD	ECAST	EDITH	ITV VIE	ID OF 6 400/2			

Yes. Dr. Hadaway develops his forecasted utility yield based on the 3-month historical spread of "A" rated utility bond yields and 30-year Treasury yields of 1.19% added to his projected long-term Treasury yield of 5.0%. This approach is unreasonable because Dr. Hadaway relies on projected interest rates. The accuracy of his projections are highly problematic. Indeed, while interest rates have been projected to increase over the last several years, those increased interest rate projections have turned out to be wrong.

10 Q WHY DO YOU BELIEVE THAT THE ACCURACY OF FORECASTED INTEREST 11 RATES IS HIGHLY PROBLEMATIC?

This is clearly evident by a review of projected changes to interest rates made over the last several 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 in Exhibit No. 220 (MPG-19). 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 several 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 in this exhibit, over the last several 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 vields have decreased or remained flat over the last five years, rather than increase as the economists' projections indicated.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

Q

Α

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.

WHY IS DR. HADAWAY'S USE OF A SIMPLE INVERSE RELATIONSHIP BETWEEN INTEREST RATES AND **EQUITY** RISK PREMIUMS NOT **REASONABLE?**

Dr. Hadaway's belief that there is a simplistic inverse relationship between equity risk premiums and interest rates is not supported by academic research. While academic studies have shown that, in the past, there has been an inverse relationship with these variables, researchers have found that the relationship changes over time and is influenced by changes in perception of the risk of bond investments relative to equity investments, and not simply changes to interest rates.²⁸

In the 1980s, equity risk premiums were inversely related to interest rates, but that was likely attributable to the interest rate volatility that existed at that time. Interest rate volatility currently is much lower than it was in the 1980s.²⁹ As such. when interest rates were more volatile, the relative perception of bond investment risk

²⁸ The Market Risk Premium: Expectational Estimates Using Analysts' Forecasts," Robert S. Harris and Felicia C. Marston, Journal of Applied Finance, Volume 11, No. 1, 2001 and "The Risk Premium Approach to Measuring a Utility's Cost of Equity," Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, *Financial Management*, Spring 1985.

²⁹Morningstar SBBI, 2009 Yearbook at 95-96.

increased relative to the investment risk of equities.	This changing investment	risk
perception caused changes in equity risk premiums.		

Q

Α

In today's marketplace, interest rate variability is not as extreme as it was during the 1980s. Nevertheless, changes in the perceived risk of bond investments relative to equity investments still drive changes in equity premiums. However, a relative investment risk differential cannot be measured simply by observing nominal interest rates. Changes in nominal interest rates are highly influenced by changes to inflation outlooks, which also change equity return expectations. As such, the relevant factor needed to explain changes in equity risk premiums is the relative changes to the risk of equity versus debt securities investments, not simply changes to interest rates.

Importantly, Dr. Hadaway's analysis simply ignores investment risk differentials. He bases his adjustment to the equity risk premium exclusively on changes in nominal interest rates. This is a flawed methodology and does not produce accurate or reliable risk premium estimates. His results should be rejected by the Commission.

CAN DR. HADAWAY'S RISK PREMIUM ANALYSES BASED ON CURRENT AND PROJECTED YIELDS BE MODIFIED TO PRODUCE MORE REASONABLE RESULTS?

Yes. Eliminating the inverse relationship adjustment to the equity risk premium of 3.23% and relying on Dr. Hadaway's current "A" rated utility yield of 5.84% will result in a return on equity risk premium of 9.07%. Using Dr. Hadaway's 2009 equity risk premium of 4.20% as shown in his Exhibit No. 14 and his current "A" rated utility yield of 5.84% will result in a return of 10.04%. Therefore, Dr. Hadaway's risk premium will be in the range of 9.07% to 10.04%, with a midpoint of 9.56%.

- 1 Q DOES THE "A" RATED BOND YIELD USED BY DR. HADAWAY REFLECT
- 2 CURRENT "A" RATED UTILITY BOND YIELDS?
- 3 Α No. The "A" rated utility bond yield of 5.84% used by Dr. Hadaway represents a 4 three-month average time period ending April 10, 2010 (Direct at 21). As shown on 5 my Exhibit No. 215 (MPG-14), the current "A" rated utility bond yield is approximately 6 5.17%, rounded to 5.2%. Using the current "A" rated utility bond yield, and a risk 7 premium in the range of 3.2% to 4.55%, would suggest a return on equity in the range 8 of 8.4% to 9.75%, with a midpoint of 9.1%. Again, more current interest rates clearly 9 show a very significant decline in capital market costs relative to RMP's last rate case 10 and even the time Dr. Hadaway performed his return on equity study.
- 11 Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
- 12 A Yes, it does.

Qualifications of Michael P. Gorman

1	Q	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2	Α	Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140,
3		Chesterfield, MO 63017.
4	Q	PLEASE STATE YOUR OCCUPATION.
5	Α	I am a consultant in the field of public utility regulation and a Managing Principal with
6		Brubaker & Associates, Inc., energy, economic and regulatory consultants.
7	Q	PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK
8		EXPERIENCE.
9	Α	In 1983 I received a Bachelors of Science Degree in Electrical Engineering from
10		Southern Illinois University, and in 1986, I received a Masters Degree in Business
11		Administration with a concentration in Finance from the University of Illinois at
12		Springfield. I have also completed several graduate level economics courses.
13		In August of 1983, I accepted an analyst position with the Illinois Commerce
14		Commission ("ICC"). In this position, I performed a variety of analyses for both formal
15		and informal investigations before the ICC, including: marginal cost of energy, central
16		dispatch, avoided cost of energy, annual system production costs, and working
17		capital. In October of 1986, I was promoted to the position of Senior Analyst. In this
18		position, I assumed the additional responsibilities of technical leader on projects, and
19		my areas of responsibility were expanded to include utility financial modeling and
20		financial analyses.
21		In 1987, I was promoted to Director of the Financial Analysis Department. In
22		this position, I was responsible for all financial analyses conducted by the staff.

Among other things, I conducted analyses and sponsored testimony before the ICC on rate of return, financial integrity, financial modeling and related issues. I also supervised the development of all Staff analyses and testimony on these same issues. In addition, I supervised the Staff's review and recommendations to the Commission concerning utility plans to issue debt and equity securities.

In August of 1989, I accepted a position with Merrill-Lynch as a financial consultant. After receiving all required securities licenses, I worked with individual investors and small businesses in evaluating and selecting investments suitable to their requirements.

In September of 1990, I accepted a position with Drazen-Brubaker & Associates, Inc. In April 1995, the firm of Brubaker & Associates, Inc. ("BAI") was formed. It includes most of the former DBA principals and Staff. Since 1990, I have performed various analyses and sponsored testimony on cost of capital, cost/benefits of utility mergers and acquisitions, utility reorganizations, level of operating expenses and rate base, cost of service studies, and analyses relating industrial jobs and economic development. I also participated in a study used to revise the financial policy for the municipal utility in Kansas City, Kansas.

At BAI, I also have extensive experience working with large energy users to distribute and critically evaluate responses to requests for proposals ("RFPs") for electric, steam, and gas energy supply from competitive energy suppliers. These analyses include the evaluation of gas supply and delivery charges, cogeneration and/or combined cycle unit feasibility studies, and the evaluation of third-party asset/supply management agreements. I have also analyzed commodity pricing indices and forward pricing methods for third party supply agreements, and have also conducted regional electric market price forecasts.

In addition to our main office in St. Louis, the firm also has branch offices in 2 Phoenix, Arizona and Corpus Christi, Texas.

3 HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY? Q

1

4

5

6

7

8

9

10

11

12

13

14

15

16

19

20

21

22

23

Yes. I have sponsored testimony on cost of capital, revenue requirements, cost of service and other issues before the Federal Energy Regulatory Commission and numerous state regulatory commissions including: Arkansas, Arizona, California, Colorado, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Michigan, Missouri, Montana, New Jersey, New Mexico, New York, North Carolina, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming, and before the provincial regulatory boards in Alberta and Nova Scotia, Canada. I have also sponsored testimony before the Board of Public Utilities in Kansas City, Kansas; presented rate setting position reports to the regulatory board of the municipal utility in Austin, Texas, and Salt River Project, Arizona, on behalf of industrial customers; and negotiated rate disputes for industrial customers of the Municipal Electric Authority of Georgia in the LaGrange, Georgia district.

17 Q **PLEASE OR** DESCRIBE ANY PROFESSIONAL REGISTRATIONS 18 ORGANIZATIONS TO WHICH YOU BELONG.

I earned the designation of Chartered Financial Analyst ("CFA") from the CFA Institute. The CFA charter was awarded after successfully completing three examinations which covered the subject areas of financial accounting, economics, fixed income and equity valuation and professional and ethical conduct. I am a member of the CFA Institute's Financial Analyst Society.

\\Huey\Shares\PLDocs\SDW\9210\Testimony - BAI\184614.doc

Rate of Return

<u>Line</u>	<u>Description</u>	Amount ¹ (1)	Weight (2)	Cost ² (3)	Weighted Cost (4)
1	Long-Term Debt	\$ 6,402,725	50.0%	5.92%	2.96%
2	Preferred Stock	41,317	0.3%	5.41%	0.02%
3	Common Equity	 6,372,409	<u>49.7%</u>	9.50%	<u>4.72%</u>
4	Total	\$ 12,816,450	100.0%		7.70%

Sources:

¹ Exhibit No. 202 (MPG-1), Page 2 of 2.

² Williams Direct at 2.

Rate of Return (Development of Capital Structure)

<u>Average</u> (6)	\$ 6,402,725 41,317 6,573,132		\$ 954 195,777 3,992 - - \$ 200,723	\$ 6,402,725 41,317 6,372,409 \$ 12,816,450	50.0% 0.3% 49.7% 100.0%
<u>06/30/2010</u> (5)	6,372,343 40,733 6,996,616	47.5% 0.3% 10.0%	763 75,195	6,372,343 40,733 6,920,658 13,333,734	47.8% 0.3% <u>51.9%</u> 100.0%
<u>03/31/2010</u> (4)	6,372,343 \$ 41,463 6,748,249		770 \$ 216,088 -	6,372,343 \$ 41,463 6,531,391 12,945,197 \$	49.2% 0.3% <u>50.5%</u> 100.0%
Actual 12/31/2009 (3)	6,372,343 \$ 41,463 6,606,934		610 \$ 81,770 4,748 - - 87,128 \$	6,372,343 \$ 41,463 6,519,806 12,933,612 \$	49.3% 0.3% <u>50.4%</u> 100.0%
<u>09/30/2009</u> (2)	6,385,797 \$ 41,463 6,336,410		760 \$ 98,815 7,677	6,385,797 \$ 41,463 6,229,158 12,656,418 \$	50.5% 0.3% <u>49.2%</u> 100.0%
<u>06/30/2009</u> (1)	6,510,797 \$ 41,463 6,177,451		1,869 \$ 507,018 7,534 - 516,421 \$	6,510,797 \$ 41,463 5,661,030 12,213,290 \$	53.3% 0.3% 46.4% 100.0%
ļ	<i>⊌</i>	•	<i>↔</i> <i>↔</i>	<i>•</i> • • • • • • • • • • • • • • • • • •	
Description	Recorded Amount Long-Term Debt Preferred Stock Common Equity	Unadiusted Weight Long-Term Debt Preferred Stock Common Equity	Common Equity Adjustments Special Deposits Temporary Cash Investment Notes Receivables From Assoc. Companies Less: Notes Payable From Assoc. Companies Total Cash Investments	Adjusted Amount Long-Term Debt Preferred Stock Common Equity	Adjusted Weight Long-Term Debt Preferred Stock Common Equity
Line	- 00 7	w√o∿	9 0 1 1 2 5	4 t t t t	18 20 21

Source: FeRC Form 1, various dates.

Proxy Group

		Credit	Ratings ¹	Common	Equity Ratios	S&P Business
<u>Line</u>	Company	S&P	Moody's	AUS ¹	Value Line 2	Risk Score ³
		(1)	(2)	(3)	(4)	(5)
1	ALLETE	A-	A2	57.0%	57.2%	Strong
2	Alliant Energy Co.	A-	A 2	51.0%	51.2%	Excellent
3	Black Hills Corp	BBB	A3	52.0%	51.6%	Strong
4	Con. Edison	A-	A3	49.0%	51.0%	Excellent
5	DPL Inc.	Α	Aa3	46.0%	46.9%	Excellent
6	DTE Energy Co.	A-	A2	46.0%	46.0%	Strong
7	Duke Energy	A-	A2	57.0%	57.4%	Excellent
8	Edison Internat.	N/R	A 1	46.0%	46.5%	Strong
9	Entergy Corp.	A-	Baa1	42.0%	43.1%	Strong
10	NextEra Energy	Α	Aa3	39.0%	44.3%	Strong
11	IDACORP	A-	A2	50.0%	49.8%	Excellent
12	Northeast Utilities	BBB+	A3	43.0%	41.5%	Excellent
13	NSTAR	AA-	A1	39.0%	48.2%	Excellent
14	PG&E Corp.	BBB+	A 3	49.0%	47.4%	Excellent
15	Portland General	A-	A3	46.0%	49.7%	Strong
16	Progress Energy	A -	A1	43.0%	43.3%	Excellent
17	SCANA Corp.	A	A3	42.0%	43.2%	Excellent
18	Sempra Energy	A+	Aa3	54.0%	54.1%	Excellent
19	Southern Co.	Α	A2	45.0%	43.6%	Excellent
20	Vectren Corp.	Α	A2	44.0%	47.5%	Excellent
21	Wisconsin Energy	Α-	A1	45.0%	47.7%	Excellent
22	Xcel Energy Inc.	A-	A2	46.0%	47.7%	Excellent
23	Average	A-	A 2	46.9%	48.1%	Excellent
24	Rocky Mountain Power	A ⁴	A2 ⁴		49.7% ⁵	Excellent

Sources:

¹ AUS Utility Reports , August 2010.

² The Value Line Investment Survey, June 25, August 6 and August 27, 2010.

³ S&P RatingsDirect: "U.S. Regulated Electric Utilities, Strongest to Weakest," August 4, 2010.

⁴ Williams Direct at 6.

⁵ Exhibit No. 202 (MPG-1), Page 1 of 2.

Growth Rates

		Zacks	iks	SNI	7	Reu	Reuters	Average of
Line	Company	Estimated Growth % ¹ (1)	Number of Estimates (2)	Estimated Growth % ² (3)	Number of Estimates (4)	Estimated Growth % ³ (5)	Number of Estimates (6)	Growth Rates (7)
-	ALLETE	4.00%	7	6.50%	2	5.33%	က	5.28%
7	Alliant Energy Co.	2.00%	7	800'9	ო	7.94%	S.	6.31%
ო	Black Hills Corp	8.00%	-	%00'9	-	6.00%	-	%00'9
4	Con. Edison	4.48%	က	4.40%	ო	4.46%	S.	4.45%
2	DPL Inc.	N/A	ΑN	2.90%	2	11.80%	_	8.85%
9	DTE Energy Co.	2.00%	~	2.00%	-	4.60%	က	4.87%
7	Duke Energy	1.50%	9	4.00%	9	5.40%	œ	3.63%
œ	Edison Internat.	2.00%	7	5.00%	4	3.98%	9	4.66%
6	Entergy Corp.	3.00%	4	2.00%	5	4.87%	က	3.29%
9	NextEra Energy	6.40%	s,	6.30%	9	6.61%	œ	6.44%
Ξ	IDACORP	4.00%	ო	4.00%	ო	4.00%	က	4.00%
12	Northeast Utilities	7.80%	ო	8.00%	S	7.17%	7	7.66%
6	NSTAR	5.98%	4	2.60%	4	5.28%	4	5.62%
4	PG&E Corp.	7.00%	ß	6.90%	5	6.63%	7	6.84%
5	Portland General	9.60%	ß	6.00%	5	5.40%	2	7.00%
16	Progress Energy	4.00%	4	4.00%	9	3.83%	7	3.94%
17	SCANA Corp.	4.27%	ဖ	5.30%	4	4.92%	S)	4.83%
18	Sempra Energy	7.00%	-	3.50%	7	6.50%	7	2.67%
19	Southern Co.	2.06%	ις	5.40%	7	5.07%	∞	5.18%
8	Vectren Corp.	2.00%	8	4.90%	8	4.85%	7	4.92%
24	Wisconsin Energy	8.67%	ო	9.50%	4	8.82%	ις.	%00.6
23	Xcel Energy Inc.	2.70%	ۍ ا	6.80%	∞	6.34%	တ	6.28%
23	Average	5.45%	m	5.50%	4	2.90%	ĸ	2.67%
24	Median							5.45%

Sources:

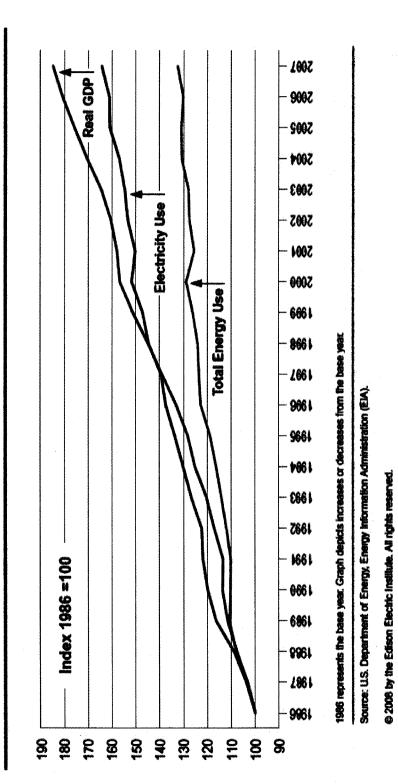
¹ Zacks Elite, http://www.zackselite.com/, downloaded on September 15, 2010.
² SNL Interactive, http://www.snl.com/, downloaded on September 15, 2010.
³ Reuters, http://www.reuters.com/, downloaded on September 15, 2010.

Constant Growth DCF Model

<u>Line</u>	Company	13-Week AVG <u>Stock Price</u> ¹ (1)	Analysts' <u>Growth²</u> (2)	Annualized <u>Dividend³</u> (3)	Adjusted <u>Yield</u> (4)	Constant Growth DCF (5)
1	ALLETE	\$35.60	5.28%	\$1.76	5.21%	10.58%
2	Alliant Energy Co.	\$34.26	6.31%	\$1.58	4.90%	11.30%
3	Black Hills Corp	\$30.44	6.00%	\$1.44	5.01%	11.10%
4	Con. Edison	\$46.03	4.45%	\$2.38	5.40%	9.95%
5	DPL Inc.	\$25.26	8.85%	\$1.21	5.22%	14.17%
6	DTE Energy Co.	\$46.88	4.87%	\$2.12	4.74%	9.69%
7	Duke Energy	\$16.94	3.63%	\$0.98	6.00%	9.76%
8	Edison Internat.	\$33.38	4.66%	\$1.26	3.95%	8.67%
9	Entergy Corp.	\$77.17	3.29%	\$3.32	4.44%	7.81%
10	NextEra Energy	\$52.27	6.44%	\$2.00	4.07%	10.57%
11	IDACORP	\$35.04	4.00%	\$1.20	3.56%	7.61%
12	Northeast Utilities	\$27.80	7.66%	\$1.03	3.97%	11.68%
13	NSTAR	\$37.06	5.62%	\$1.60	4.56%	10.25%
14	PG&E Corp.	\$44.25	6.84%	\$1.82	4.39%	11.31%
15	Portland General	\$19.33	7.00%	\$1.04	5.76%	12.87%
16	Progress Energy	\$41.56	3.94%	\$2.48	6.20%	10.29%
17	SCANA Corp.	\$38.28	4.83%	\$1.90	5.20%	10.13%
18	Sempra Energy	\$50.24	5.67%	\$1.56	3.28%	8.99%
19	Southern Co.	\$35.27	5.18%	\$1.82	5.43%	10.71%
20	Vectren Corp.	\$24.45	4.92%	\$1.36	5.84%	10.88%
21	Wisconsin Energy	\$54.00	9.00%	\$1.60	3.23%	12.26%
22	Xcel Energy Inc.	\$21.84	6.28%	\$1.01	4.92%	11.28%
23 24	Average Median	\$37.61	5.67% 5.45%	\$1.66	4.79%	10.54% 10.57%

http://moneycentral.msn.com, downloaded on September 14, 2010.
 Exhibit No. 203 (MPG-2), Column 7.
 The Value Line Investment Survey, June 25, August 6, and August 27, 2010.

Electricity Sales Are Linked to U.S. Economic Growth



Proxy Group Payout Ratios

		Dividend	s Per Share	Earnings	s Per Share	Payor	ıt Ratio
<u>Line</u>	<u>Company</u>	2009	Projected	2009	Projected	2009	<u>Projected</u>
		(1)	(2)	(3)	(4)	(5)	(6)
1	ALLETE	\$1.76	\$1.80	\$1.89	\$2.50	93.12%	72.00%
2	Alliant Energy Co.	\$1.50	\$1.92	\$1.89	\$3.60	79.37%	53.33%
3	Black Hills Corp	\$1.42	\$1.60	\$2.32	\$2.50	61.21%	64.00%
4	Con. Edison	\$2.36	\$2.46	\$3.16	\$3.85	74.68%	63.90%
5	DPL Inc.	\$1.14	\$1.50	\$2.01	\$2.90	56.72%	51.72%
6	DTE Energy Co.	\$2.12	\$2.60	\$3.24	\$4.25	65.43%	61.18%
7	Duke Energy	\$0.94	\$1.05	\$1.13	\$1.50	83.19%	70.00%
8	Edison Internat.	\$1.25	\$1.50	\$3.24	\$3.50	38.58%	42.86%
9	Entergy Corp.	\$3.00	\$4.15	\$6.30	\$7.75	47.62%	53.55%
10	NextEra Energy	\$1.89	\$2.40	\$3.97	\$5.00	47.61%	48.00%
11	IDACORP	\$1.20	\$1.40	\$2.64	\$3.10	45.45%	45.16%
12	Northeast Utilities	\$0.95	\$1.30	\$1.91	\$2.50	49.74%	52.00%
13	NSTAR	\$1.53	\$2.05	\$2.28	\$3.25	67.11%	63.08%
14	PG&E Corp.	\$1.68	\$2.40	\$3.03	\$4.50	55.45%	53.33%
15	Portland General	\$1.01	\$1.20	\$1.31	\$2.00	77.10%	60.00%
16	Progress Energy	\$2.48	\$2.58	\$2.99	\$3.55	82.94%	72.68%
17	SCANA Corp.	\$1.88	\$2.00	\$2.85	\$3.50	65.96%	57.14%
18	Sempra Energy	\$1.56	\$2.05	\$4.78	\$5.00	32.64%	41.00%
19	Southern Co.	\$1.73	\$2.10	\$2.32	\$3.00	74.57%	70.00%
20	Vectren Corp.	\$1.35	\$1.50	\$1.79	\$2.25	75.42%	66.67%
21	Wisconsin Energy	\$1.35	\$2.40	\$3.20	\$5.00	42.19%	48.00%
22	Xcel Energy Inc.	\$0.97	\$1.15	\$1.49	\$2.00	65.10%	57.50%
23	Average	\$1.59	\$1.96	\$2.72	\$3.50	62.78%	57.60%

Source:

The Value Line Investment Survey, June 25, August 6, and August 27, 2010.

Sustainable Growth Rates

					3 to	3 to 5 Year Projections	ions				Growth
		Dividends	Earnings	Book Value		Adjustment	Adjusted	Payout	Retention	Internal	Rate Plus
Line	Company	Per Share (1)	Per Share (2)	Per Share (3)	<u>8</u>	Factor (5)	ROE (6)	Ratio (7)	Rate (8)	Growth Rate (9)	S + V ¹
-	ALLETE	\$1.80	\$2.50	\$29.25	8.55%	1.01	8.63%	72.00%	28.00%	2.42%	3.05%
7	Alliant Energy Co.	\$1.92	\$3.60	\$31.05	11.59%	1.02	11.84%	53.33%	46.67%	5.53%	5.87%
ო	Black Hills Corp	\$1.60	\$2.50	\$31.50	7.94%	1.01	8.03%	64.00%	36.00%	2.89%	2.95%
4	Con. Edison	\$2.46	\$3.85	\$41.10	9.37%	1.01	9.48%	63.90%	36.10%	3.42%	3.53%
2	DPL Inc.	\$1.50	\$2.90	\$12.00	24.17%	1.03	24.80%	51.72%	48.28%	11.97%	13.69%
ၑ	DTE Energy Co.	\$2.60	\$4.25	\$46.50	9.14%	1.02	9.33%	61.18%	38.82%	3.62%	3.97%
7	Duke Energy	\$1.05	\$1.50	\$18.00	8.33%	1.01	8.40%	70.00%	30.00%	2.52%	2.53%
œ	Edison Internat.	\$1.50	\$3.50	\$39.50	8.86%	1.03	9.10%	42.86%	57.14%	5.20%	5.20%
o	Entergy Corp.	\$4.15	\$7.75	\$59.50	13.03%	1.03	13.37%	53.55%	46.45%	6.21%	4.75%
5	NextEra Energy	\$2.40	\$5.00	\$44.75	11.17%	1.04	11.57%	48.00%	52.00%	6.02%	6.79%
Ξ	IDACORP	\$1.40	\$3.10	\$36.50	8.49%	1.02	8.68%	45.16%	54.84%	4.76%	5.10%
12	Northeast Utilities	\$1.30	\$2.50	\$26.00	9.62%	1.02	9.85%	52.00%	48.00%	4.73%	5.23%
13	NSTAR	\$2.05	\$3.25	\$22.75	14.29%	1.03	14.68%	63.08%	36.92%	5.42%	4.15%
4	PG&E Corp.	\$2.40	\$4.50	\$38.25	11.76%	1.08	12.68%	53.33%	46.67%	5.92%	8.26%
15	Portland General	\$1.20	\$2.00	\$23.25	8.60%	1.01	8.71%	%00.09	40.00%	3.48%	3.28%
16	Progress Energy	\$2.58	\$3.55	\$38.00	9.34%	1.01	9.47%	72.68%	27.32%	2.59%	2.91%
17	SCANA Corp.	\$2.00	\$3.50	\$35.25	9.93%	1.02	10.17%	57.14%	42.86%	4.36%	5.74%
18	Sempra Energy	\$2.05	\$5.00	\$49.75	10.05%	1.03	10.36%	41.00%	29.00%	6.11%	5.72%
19	Southern Co.	\$2.10	\$3.00	\$23.25	12.90%	1.02	13.22%	70.00%	30.00%	3.97%	5.53%
20	Vectren Corp.	\$1.50	\$2.25	\$22.00	10.23%	1.02	10.48%	%2999	33.33%	3.49%	3.79%
21	Wisconsin Energy	\$2.40	\$5.00	\$40.75	12.27%	1.03	12.62%	48.00%	52.00%	6.56%	6.56%
23	Xcel Energy Inc.	\$1.15	\$2.00	\$19.75	10.13%	1.02	10.34%	27.50%	42.50%	4.40%	4.96%
2 73	Average Median	\$1.96	\$3.50	\$33.12	10.90%	1.02	11.17%	57.60%	42.40%	4.80%	5.16% 5.03%

Sources:
The Value Line Investment Survey, June 25, August 6, and August 27, 2010.
Page 2, Column 9.

Sustainable Growth Rates

		13-Week	2009	Market	Common Shares	Shares				
<u>Line</u>	Company	Average Stock Price ¹ (1)	Book Value Per Share ² (2)	to Book Ratio (3)	Outstanding 2009 (4)	Outstanding (in Millions) ² 2009 3-5 Years (4) (5)	Growth (6)	S Factor ³ (7)	V Factor ⁴ (8)	S * S (9)
~	ALLETE	\$35.60	\$26.41	1.35	35.20	38.50	1.81%	2.44%	25.80%	0.63%
7	Alliant Energy Co.	\$34.26	\$25.07	1.37	110.66	116.00	0.95%	1.29%	26.81%	0.35%
က	Black Hills Corp	\$30.44	\$27.84	1.09	38.97	40.25	0.65%	0.71%	8.54%	0.06%
4	Con. Edison	\$46.03	\$36.46	1.26	281.12	287.00	0.41%	0.52%	20.79%	0.11%
S.	DPL Inc.	\$25.26	\$9.25	2.73	118.97	125.00	%66.0	2.71%	63.38%	1.72%
9	DTE Energy Co.	\$46.88	\$37.96	1.23	165.40	178.00	1.48%	1.83%	19.03%	0.35%
7	Duke Energy	\$16.94	\$16.62	1.02	1309.00	1335.00	0.39%	0.40%	1.87%	0.01%
œ	Edison Internat.	\$33.38	\$30.20	1.11	325.81	325.81	%00'0	%00'0	9.52%	0.00%
o	Entergy Corp.	\$77.17	\$45.54	1.69	189.12	170.00	-2.11%	-3.57%	40.99%	-1.46%
9	NextEra Energy	\$52.27	\$31.35	1.67	413.62	438.00	1.15%	1.92%	40.02%	0.77%
Ξ	IDACORP	\$35.04	\$29.17	1.20	47.90	52.00	1.66%	1.99%	16.76%	0.33%
7	Northeast Utilities	\$27.80	\$20.37	1.36	175.62	188.00	1.37%	1.87%	26.74%	0.50%
13	NSTAR	\$37.06	\$17.30	2.14	106.81	101.00	-1.11%	-2.38%	53.32%	-1.27%
4	PG&E Corp.	\$44.25	\$17.53	2.52	370.60	400.00	1.54%	3.88%	80.39%	2.35%
15	Portland General	\$19.33	\$20.50	0.94	75.21	90.00	3.66%	3.45%	-6.05%	-0.21%
16	Progress Energy	\$41.56	\$33.30	1.25	281.00	300.00	1.32%	1.64%	19.88%	0.33%
17	SCANA Corp.	\$38.28	\$27.71	1.38	123.00	147.00	3.63%	5.01%	27.61%	1.38%
18	Sempra Energy	\$50.24	\$36.54	1.38	246.50	234.00	-1.04%	-1.42%	27.27%	-0.39%
19	Southern Co.	\$35.27	\$18.15	1.94	819.65	890.00	1.66%	3.23%	48.54%	1.57%
20	Vectren Corp.	\$24.45	\$17.23	1.42	81.10	84.00	0.71%	1.00%	29.52%	0.30%
7	Wisconsin Energy	\$54.00	\$30.51	1.77	116.91	116.90	%00.0	0.00%	43.50%	0.00%
23	Xcel Energy Inc.	\$21.84	\$15.92	1.37	457.51	493.00	1.51%	2.07%	27.10%	0.56%
23	Average	\$37.61	\$25.95	1.51	267.71	279.52	0.94%	1.30%	28.70%	0.36%

Sources and Notes:

¹ http://moneycentral.msn.com, downloaded on September 14, 2010.

² The Value Line Investment Survey, June 25, August 6, and August 27, 2010.

³ Expected Growth in the Number of Shares, Column (3) * Column (6). ⁴ Expected Profit of Stock Investment, [1-1/Column (3)]. ⁵ Column (7) * Column (8).

Sustainable Constant Growth DCF Model

<u>Line</u>	<u>Company</u>	13-Week AVG <u>Stock Price¹</u> (1)	Sustainable <u>Growth²</u> (2)	Annualized <u>Dividend³</u> (3)	Adjusted <u>Yield</u> (4)	Constant Growth DCF (5)
1	ALLETE	\$35.60	3.05%	\$1.76	5.10%	8.14%
2	Alliant Energy Co.	\$34.26	5.87%	\$1.58	4.88%	10.76%
3	Black Hills Corp	\$30.44	2.95%	\$1.44	4.87%	7.82%
4	Con. Edison	\$46.03	3.53%	\$2.38	5.35%	8.88%
5	DPL Inc.	\$25.26	13.69%	\$1.21	5.45%	19.14%
6	DTE Energy Co.	\$46.88	3.97%	\$2.12	4.70%	8.67%
7	Duke Energy	\$16.94	2.53%	\$0.98	5.93%	8.46%
8	Edison Internat.	\$33.38	5.20%	\$1.26	3.97%	9.17%
9	Entergy Corp.	\$77.17	4.75%	\$3.32	4.51%	9.25%
10	NextEra Energy	\$52.27	6.79%	\$2.00	4.09%	10.87%
11	IDACORP	\$35.04	5.10%	\$1.20	3.60%	8.69%
12	Northeast Utilities	\$27.80	5.23%	\$1.03	3.88%	9.11%
13	NSTAR	\$37.06	4.15%	\$1.60	4.50%	8.64%
14	PG&E Corp.	\$44.25	8.26%	\$1.82	4.45%	12.72%
15	Portland General	\$19.33	3.28%	\$1.04	5.56%	8.83%
16	Progress Energy	\$41.56	2.91%	\$2.48	6.14%	9.05%
17	SCANA Corp.	\$38.28	5.74%	\$1.90	5.25%	10.99%
18	Sempra Energy	\$50.24	5.72%	\$1.56	3.28%	9.01%
19	Southern Co.	\$35.27	5.53%	\$1.82	5.45%	10.98%
20	Vectren Corp.	\$24.45	3.79%	\$1.36	5.77%	9.56%
21	Wisconsin Energy	\$54.00	6.56%	\$1.60	3.16%	9.72%
22	Xcel Energy Inc.	\$21.84	4.96%	\$1.01	4.85%	9.81%
23 24	Average Median	\$37.61	5.16%	\$1.66	4.76%	9.92% 9.14%

¹ http://moneycentral.msn.com, downloaded on September 15, 2010.

² Exhibit No. 208 (MPG-7), Page 1 of 2, Column 10.

³ The Value Line Investment Survey, June 25, August 6, and August 27, 2010.

Page 1 of 1 Case No. PAC-E-10-07 Witness: Michael P. Gorman Monsanto Company Exhibit No. 210 (MPG-9)

Rocky Mountain Power

Multi-Stage Growth DCF Model

		13-Week AVG	Annualized	First Stage		Sec	Second Stage Growth	Æ,		Third Stage	Multi-Stage
Line	Company	Stock Price ¹ (1)	Dividend ² (2)	Growth ³ (3)	<u>Year 6</u> (4)	<u>Year 7</u> (5)	Year 8 (6)	<u>Year 9</u> (7)	<u>Year 10</u> (8)	Growth ⁴ (9)	Growth DCF (10)
1.	ALLETE	\$35.60	\$1.76	5.28%	5.21%	5.15%	5.09%	5.03%	4.96%	4.90%	10.21%
7	Alliant Energy Co.	\$34.26	\$1.58	6.31%	6.08%	5.84%	5.61%	5.37%	5.14%	4.90%	10.17%
ო	Black Hills Corp	\$30.44	\$1.44	%00.9	5.82%	5.63%	5.45%	5.27%	5.08%	4.90%	10.20%
4	Con. Edison	\$46.03	\$2.38	4.45%	4.52%	4.60%	4.67%	4.75%	4.82%	4.90%	10.18%
ഹ	DPL Inc.	\$25.26	\$1.21	8.85%	8.19%	7.53%	6.88%	6.22%	5.56%	4.90%	11.25%
9	DTE Energy Co.	\$46.88	\$2.12	4.87%	4.87%	4.88%	4.88%	4.89%	4.89%	4.90%	9.63%
7	Duke Energy	\$16.94	\$0.98	3.63%	3.84%	4.06%	4.27%	4.48%	4.69%	4.90%	10.52%
œ	Edison Internat.	\$33.38	\$1.26	4.66%	4.70%	4.74%	4.78%	4.82%	4.86%	4.90%	8.80%
6	Entergy Corp.	\$77.17	\$3.32	3.29%	3.56%	3.83%	4.10%	4.36%	4.63%	4.90%	8.97%
10	NextEra Energy	\$52.27	\$2.00	6.44%	6.18%	5.92%	5.67%	5.41%	5.16%	4.90%	9.31%
7	IDACORP	\$35.04	\$1.20	4.00%	4.15%	4.30%	4.45%	4.60%	4.75%	4.90%	8.28%
12	Northeast Utilities	\$27.80	\$1.03	7.66%	7.20%	6.74%	6.28%	5.82%	5.36%	4.90%	9.48%
13	NSTAR	\$37.06	\$1.60	5.62%	5.50%	5.38%	5.26%	5.14%	5.02%	4.90%	9.63%
4	PG&E Corp.	\$44.25	\$1.82	6.84%	6.52%	6.20%	5.87%	5.55%	5.22%	4.90%	6.76%
15	Portland General	\$19.33	\$1.04	7.00%	6.65%	6.30%	5.95%	5.60%	5.25%	4.90%	11.29%
16	Progress Energy	\$41.56	\$2.48	3.94%	4.10%	4.26%	4.42%	4.58%	4.74%	4.90%	10.81%
17	SCANA Corp.	\$38.28	\$1.90	4.83%	4.84%	4.85%	4.87%	4.88%	4.89%	4.90%	10.08%
18	Sempra Energy	\$50.24	\$1.56	5.67%	5.54%	5.41%	5.28%	5.16%	5.03%	4.90%	8.32%
19	Southern Co.	\$35.27	\$1.82	5.18%	5.13%	5.08%	5.04%	4.99%	4.95%	4.90%	10.40%
20	Vectren Corp.	\$24.45	\$1.36	4.92%	4.91%	4.91%	4.91%	4.91%	4.90%	4.90%	10.74%
2	Wisconsin Energy	\$54.00	\$1.60	8.00%	8.31%	7.63%	6.95%	6.27%	5.58%	4.90%	8.91%
52	Xcel Energy Inc.	\$21.84	\$1.01	6.28%	6.05%	5.82%	5.59%	5.36%	5.13%	4.90%	10.18%
24 23	Average Median	\$37.61	\$1.66	5.67%	5.54%	5.41%	5.28%	5.16%	5.03%	4.90%	9.87% 9.90%

¹ http://moneycentral.msn.com, downloaded on September 14, 2010.

² The Value Line Investment Survey, June 25, August 6, and August 27, 2010.

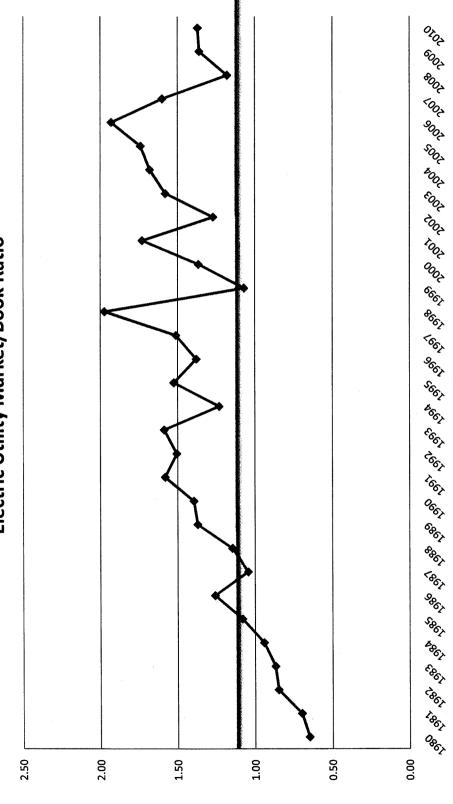
³ Exhibit No. 203 (MPG-2), Column 7.

⁴ Blue Chip Financial Forecasts, June 1, 2010 at 14.

Case No. PAC-E-10-07 Witness: Michael P. Gorman Monsanto Company Exhibit No. 211 (MPG-10) Page 1 of 1

Rocky Mountain Power





Sources:

2001 - March 2010: AUS Utility Reports. 1980 - 2000: Mergent Public Utility Manual, 2003.

Electric Equity Risk Premium - Treasury Bond

<u>Line</u>	<u>Year</u>	Authorized Electric <u>Returns¹</u> (1)	Treasury <u>Bond Yield²</u> (2)	Indicated Risk <u>Premium</u> (3)
1	1986	13.93%	7.78%	6.15%
2	1987	12.99%	8.59%	4.40%
3	1988	12.79%	8.96%	3.83%
4	1989	12.97%	8.45%	4.52%
5	1990	12.70%	8.61%	4.09%
6	1991	12.55%	8.14%	4.41%
7	1992	12.09%	7.67%	4.42%
8	1993	11.41%	6.59%	4.82%
9	1994	11.34%	7.37%	3.97%
10	1995	11.55%	6.88%	4.67%
11	1996	11.39%	6.71%	4.68%
12	1997	11.40%	6.61%	4.79%
13	1998	11.66%	5.58%	6.08%
14	1999	10.77%	5.87%	4.90%
15	2000	11.43%	5.94%	5.49%
16	2001	11.09%	5.49%	5.60%
17	2002	11.16%	5.43%	5.73%
18	2003	10.97%	4.96%	6.01%
19	2004	10.75%	5.05%	5.70%
20	2005	10.54%	4.65%	5.89%
21	2006	10.36%	4.91%	5.45%
22	2007	10.36%	4.84%	5.52%
23	2008	10.46%	4.28%	6.18%
24	2009	10.48%	4.08%	6.40%
25	Jun 2010 ³	10.41%	4.50%	5.92%
26	Average	11.50%	6.32%	5.19%

Sources:

¹ Regulatory Research Associates, Inc., *Regulatory Focus*, Jan. 85 - Dec. 06, and July 7, 2010.

² Economic Report of the President 2010: Table 73. The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

³ St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/, January to June 2010.

Electric Equity Risk Premium - Utility Bond

<u>Line</u>	<u>Year</u>	Authorized Electric <u>Returns¹</u> (1)	Average "A" Rated Utility Bond Yield ² (2)	Indicated Risk <u>Premium</u> (3)
1	1986	13.93%	9.58%	4.35%
2	1987	12.99%	10.10%	2.89%
3	1988	12.79%	10.49%	2.30%
4	1989	12.97%	9.77%	3.20%
5	1990	12.70%	9.86%	2.84%
6	1991	12.55%	9.36%	3.19%
7	1992	12.09%	8.69%	3.40%
8	1993	11.41%	7.59%	3.82%
9	1994	11.34%	8.31%	3.03%
10	1995	11.55%	7.89%	3.66%
11	1996	11.39%	7.75%	3.64%
12	1997	11.40%	7.60%	3.80%
13	1998	11.66%	7.04%	4.62%
14	1999	10.77%	7.62%	3.15%
15	2000	11.43%	8.24%	3.19%
16	2001	11.09%	7.76%	3.33%
17	2002	11.16%	7.37%	3.79%
18	2003	10.97%	6.58%	4.39%
19	2004	10.75%	6.16%	4.59%
20	2005	10.54%	5.65%	4.89%
21	2006	10.36%	6.07%	4.29%
22	2007	10.36%	6.07%	4.29%
23	2008	10.46%	6.53%	3.93%
24	2009	10.48%	6.04%	4.44%
25	Jun 2010 ³	10.41%	5.71%	4.70%
26	Average	11.50%	7.75%	3.75%

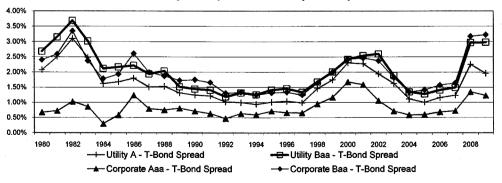
¹ Regulatory Research Associates, Inc., *Regulatory Focus,* Jan. 85 - Dec. 06, and July 7, 2010.

² Mergent Public Utility Manual, Mergent Weekly News Reports, 2003. The utility yields for the period 2001-2009 were obtained from the Mergent Bond Record. The utility yields were obtained from http://credittrends.moodys.com/. 3 www.moodys.com, Bond Yields and Key Indicators.

Utility Bond Yield Spreads

				Public Uti	ity Bond Y	ields		Corpo	rate Bond Yie	lds	
<u>Line</u>	<u>Year</u>	T-Bond Yield ¹ (1)	<u>A²</u> (2)	<u>Baa²</u> (3)	A-T-Bond Spread (4)	Baa-T-Bond Spread (5)	<u>Aaa¹</u> (6)	<u>Baa¹</u> (7)	Aaa-T-Bond <u>Spread</u> (8)	Baa-T-Bond Spread (9)	Baa Utility - Corporate (10)
1	1980	11.27%	13.34%	13.95%	2.07%	2.68%	11.94%	13.67%	0.67%	2.40%	0.28%
2	1981	13.45%	15.95%	16.60%	2.50%	3.15%	14.17%	16.04%	0.72%	2.59%	0.56%
3	1982	12.76%	15.86%	16.45%	3.10%	3.69%	13.79%	16.11%	1.03%	3.35%	0.34%
4	1983	11.18%	13.66%	14.20%	2.48%	3.02%	12.04%	13.55%	0.86%	2.37%	0.65%
5	1984	12.41%	14.03%	14.53%	1.62%	2.12%	12.71%	14.19%	0.30%	1.78%	0.34%
6	1985	10.79%	12.47%	12.96%	1.68%	2.17%	11.37%	12.72%	0.58%	1.93%	0.24%
7	1986	7.78%	9.58%	10.00%	1.80%	2.22%	9.02%	10.39%	1.24%	2.61%	-0.39%
8	1987	8.59%	10.10%	10.53%	1.51%	1.94%	9.38%	10.58%	0.79%	1.99%	-0.05%
9	1988	8.96%	10.49%	11.00%	1.53%	2.04%	9.71%	10.83%	0.75%	1.87%	0.17%
10	1989	8.45%	9.77%	9.97%	1.32%	1.52%	9.26%	10.18%	0.81%	1.73%	-0.21%
11	1990	8.61%	9.86%	10.06%	1.25%	1.45%	9.32%	10.36%	0.71%	1.75%	-0.30%
12	1991	8.14%	9.36%	9.55%	1.22%	1.41%	8.77%	9.80%	0.63%	1.66%	-0.25%
13	1992	7.67%	8.69%	8.86%	1.02%	1.19%	8.14%	8.98%	0.47%	1.31%	-0.12%
14	1993	6.59%	7.59%	7.91%	1.00%	1.32%	7.22%	7.93%	0.63%	1.34%	-0.02%
15	1994	7.37%	8.31%	8.63%	0.94%	1.26%	7.96%	8.62%	0.59%	1.25%	0.01%
16	1995	6.88%	7.89%	8.29%	1.01%	1.41%	7.59%	8.20%	0.71%	1.32%	0.09%
17	1996	6.71%	7.75%	8.17%	1.04%	1.46%	7.37%	8.05%	0.66%	1.34%	0.12%
18	1997	6.61%	7.60%	7.95%	0.99%	1.34%	7.26%	7.86%	0.65%	1.25%	0.09%
19	1998	5.58%	7.04%	7.26%	1.46%	1.68%	6.53%	7.22%	0.95%	1.64%	0.04%
20	1999	5.87%	7.62%	7.88%	1.75%	2.01%	7.04%	7.87%	1.17%	2.00%	0.01%
21	2000	5.94%	8.24%	8.36%	2.30%	2.42%	7.62%	8.36%	1.68%	2.42%	0.00%
22	2001	5.49%	7.76%	8.03%	2.27%	2.54%	7.08%	7.95%	1.59%	2.46%	0.08%
23	2002	5.43%	7.37%	8.02%	1.94%	2.59%	6.49%	7.80%	1.06%	2.37%	0.22%
24	2003	4.96%	6.58%	6.84%	1.62%	1.89%	5.67%	6.77%	0.71%	1.81%	0.07%
25	2004	5.05%	6.16%	6.40%	1.11%	1.35%	5.63%	6.39%	0.58%	1.34%	0.00%
26	2005	4.65%	5.65%	5.93%	1.00%	1.28%	5.24%	6.06%	0.59%	1.41%	-0.14%
27	2006	4.91%	6.07%	6.32%	1.16%	1.41%	5.59%	6.48%	0.68%	1.57%	-0.16%
28	2007	4.84%	6.07%	6.33%	1.23%	1.49%	5.56%	6.48%	0.72%	1.64%	-0.15%
29	2008	4.28%	6.53%	7.25%	2.25%	2.97%	5.63%	7.45%	1.35%	3.17%	-0.20%
30	2009	4.08%	6.04%	7.06%	1.96%	2.98%	5.31%	7.30%	1.23%	3.22%	-0.24%
31	Average	7.51%	9.11%	9.51%	1.60%	2.00%	8.35%	9.47%	0.84%	1.96%	0.04%

Yield Spreads Treasury Vs. Corporate & Treasury Vs. Utility



Sources:

¹ Economic Report of the President 2008: 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. Moody's Daily News Reports.

Utility and Treasury Bond Yields

<u>Line</u>	<u>Date</u>	Treasury <u>Bond Yield¹</u> (1)	"A" Rated Utility Bond Yield ² (2)	"Baa" Rated Utility Bond Yield ² (3)
1	09/10/10	3.78%	5.10%	5.64%
2	09/03/10	3.66%	5.02%	5.57%
3	08/27/10	3.61%	4.94%	5.50%
4	08/20/10	3.71%	4.85%	5.40%
5	08/13/10	3.95%	5.06%	5.60%
6	08/06/10	4.04%	5.18%	5.70%
7	07/30/10	4.05%	5.17%	5.80%
8	07/23/10	3.97%	5.28%	5.92%
9	07/16/10	4.02%	5.24%	6.00%
10	07/09/10	3.97%	5.33%	6.13%
11	07/02/10	3.94%	5.24%	6.02%
12	06/25/10	4.10%	5.38%	6.15%
13	06/18/10	4.18%	5.47%	6.23%
. 14	13-Wk Average	3.92%	5.17%	5.82%

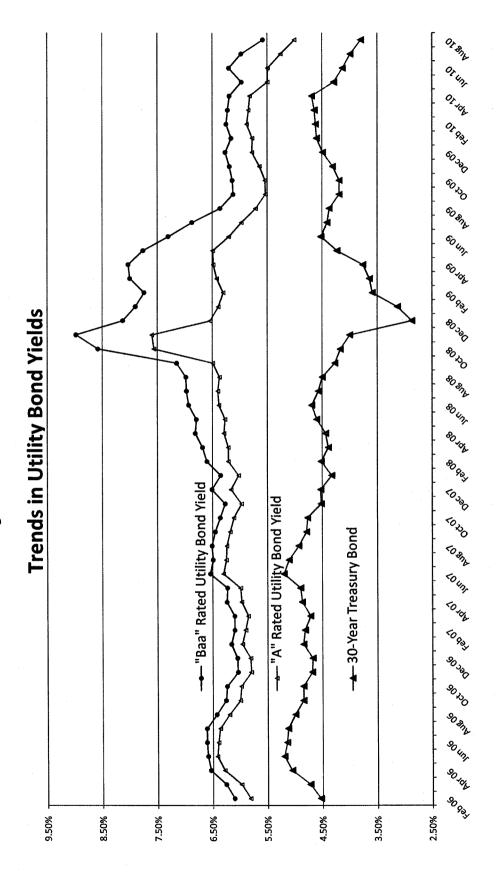
Sources:

¹ St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org.

² www.moodys.com, Bond Yields and Key Indicators.

Monsanto Company
Exhibit No. 215 (MPG-14)
Page 2 of 3
Case No. PAC-E-10-07
Witness: Michael P. Gorman

Rocky Mountain Power



Sources: Merchant Bond

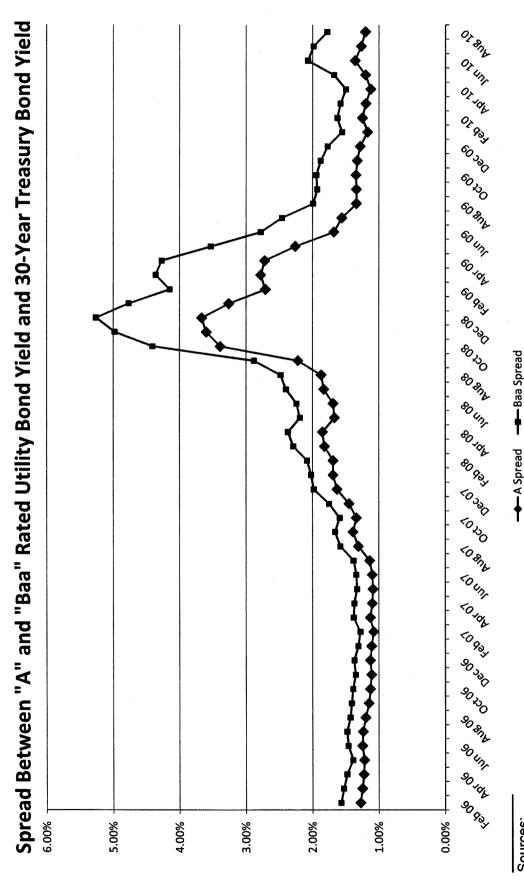
Merchant Bond Record.

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

St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/

Monsanto Company Exhibit No. 215 (MPG-14) Page 3 of 3 Case No. PAC-E-10-07 Witness: Michael P. Gorman

Rocky Mountain Power



Sources: Merchant Bond Record.

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

St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/

Value Line Beta

<u>Line</u>	<u>Company</u>	<u>Beta</u> (1)
1	ALLETE	0.70
2	Alliant Energy Co.	0.70
3	Black Hills Corp	0.80
4	Con. Edison	0.65
5	DPL Inc.	0.60
6	DTE Energy Co.	0.75
7	Duke Energy	0.65
8	Edison Internat.	0.80
9	Entergy Corp.	0.70
10	NextEra Energy	0.75
11	IDACORP	0.70
12	Northeast Utilities	0.70
13	NSTAR	0.65
14	PG&E Corp.	0.55
15	Portland General	0.75
16	Progress Energy	0.60
17	SCANA Corp.	0.70
18	Sempra Energy	0.85
19	Southern Co.	0.55
20	Vectren Corp.	0.70
21	Wisconsin Energy	0.65
22	Xcel Energy Inc.	0.65
23	Average	0.69

Source:

The Value Line Investment Survey, June 25, August 6, and August 27, 2010.

Monsanto Company Exhibit No. 217 (MPG-16) Page 1 of 1 Case No. PAC-E-10-07 Witness: Michael P. Gorman

Rocky Mountain Power

CAPM Return

		CAPM	Range
<u>Line</u>	<u>Description</u>	Low	<u>High</u>
1	Risk-Free Rate ¹	4.70%	4.70%
2	Risk Premium ²	5.20%	6.70%
3	Beta ³	0.69	0.69
4	CAPM	8.28%	9.31%
5	CAPM Average	8.8	0%

Sources:

¹ Blue Chip Financial Forecasts; September 1, 2010, at 2.

² Morningstar, Inc. *Ibbotson SBBI 2010 Valuation Yearbook*, at 54 and 66.

³ The Value Line Investment Survey, June 25, August 6, and August 27, 2010.

Monsanto Company Exhibit No. 218 (MPG-17) Page 1 of 4 Case No. PAC-E-10-07 Witness: Michael P. Gorman

Rocky Mountain Power

Standard & Poor's Credit Metrics

		_	S&P Ben	chmark ^{1/2}	
<u>Line</u>	<u>Description</u>	Amount (1)	Significant (2)	Aggressive (3)	Reference (4)
1	Rate Base	\$ 667,459,415			McDougal Direct, Exhibit No. 1, page 1 of 3.
2	Weighted Common Return	4.72%			Exhibit No. 202 (MPG-1), Page 1 of 2, Line 3, Col. 4.
3	Pre-Tax Rate of Return	10.61%			Page 2, Line 4, Col. 5.
4	Income to Common	\$ 31,527,122			Line 1 x Line 2.
5	EBIT	\$ 70,787,658			Line 1 x Line 3.
6	Depreciation & Amortization	\$ 29,577,958			McDougal Direct, Exhibit No. 1, page 1 of 3.
7	Imputed Amortization	\$ 2,076,427			Page 3, Line 15, Col. 1.
. 8	Deferred Income Taxes & ITC	\$ 25,306,719			McDougal Direct, Exhibit No. 1, page 1 of 3.
9	Funds from Operations (FFO)	\$ 88,488,227			Sum of Line 4 and Lines 6 through 8.
10	Imputed Interest Expense	\$ 1,451,433			Page 3, Line 14, Col. 1.
11	EBITDA	\$ 103,893,477			Sum of Lines 5 through 7 and Line 10.
12	Total Debt Ratio	52%	45% - 50%	50% - 60%	Page 2, Line 3.
13	Debt to EBITDA	3.3x	3.0x - 4.0x	2.0x - 3.0x	(Line 1 x Line 12) / Line 11.
14	FFO to Total Debt	26%	20% - 30%	12% - 20%	Line 9 / (Line 1 x Line 12).

Sources

Notes:

Based on the new S&P metrics, PacifiCorp has an "Excellent" business profile and a "Significant" financial profile.

¹ Standard & Poor's: "U.S. Utilities Ratings Analysis Now Portrayed in The S&P Corporate Ratings Matrix," May 27, 2009.

² S&P RatingsDirect: "U.S. Regulated Electric Utilities, Strongest to Weakest," August 4, 2010.

Monsanto Company Exhibit No. 218 (MPG-17) Page 2 of 4 Case No. PAC-E-10-07 Witness: Michael P. Gorman

Rocky Mountain Power

Standard & Poor's Credit Metrics (Pre-Tax Rate of Return)

<u>Line</u>	<u>Description</u>	Amount ¹ (1)	Weight (2)	<u>Cost²</u> (3)	Weighted Cost (4)	Pre-Tax Weighted <u>Cost</u> (5)
1	Long-Term Debt	\$ 6,402,725	50.0%	5.92%	2.96%	2.96%
2	Preferred Stock	41,317	0.3%	5.41%	0.02%	0.03%
3	Common Equity	 6,372,409	49.7%	9.50%	4.72%	7.62%
4	Total	\$ 12,816,450	100.0%		7.70%	10.61%
5	Tax Conversion Factor ³					1.613215

Sources:

¹ Exhibit No. 202 (MPG-1), Page 2 of 2.

² Williams Direct at 2.

³ McDougal Direct, Exhibit No. 1.1.

Monsanto Company Exhibit No. 218 (MPG-17) Page 3 of 4 Case No. PAC-E-10-07 Witness: Michael P. Gorman

Rocky Mountain Power

Standard & Poor's Credit Metrics (Financial Capital Structure)

<u>Line</u>	<u>Description</u>	Amount ¹ (1)	Weight (2)
1	Long-Term Debt	\$ 6,402,725	48.33%
2	Off-Balance Sheet Debt ²	 432,200	<u>3.26%</u>
3	Total Long-Term Debt	\$ 6,834,925	51.59%
4	Preferred Stock	\$ 41,317	0.31%
5	Common Equity	 6,372,409	<u>48.10%</u>
6	Total	\$ 13,248,650	100.00%

Sources:

¹ Exhibit No. 202 (MPG-1), Page 1 of 2.

² Exhibit No. 218 (MPG-17), Page 4 of 4, Line 6, Col. 1.

Standard & Poor's Credit Metrics (Off-Balance Sheet Debt Equivalents)

<u>Line</u>	<u>Description</u>		Amount (1)	Reference (2)
	RMP Idaho Allocator¹			
1 2 3	Idaho December 2009 Rate Base Total Company December 2009 Rate Base RMP Idaho Allocator	\$ \$	557,117,960 10,785,901,285 5.17%	
	Total Company ²	,,,,,,		
	Off-Balance Sheet Debt			
4	Operating Leases	\$	36,500,000	
5	Purchased Power Agreements		395,700,000	
6	Total Off-Balance Sheet Debt	\$	432,200,000	
	Imputed Interest Expense			
7	Operating Leases	\$	2,300,000	
8	Purchased Power Agreements		25,800,000	
9	Total Imputed Interest Expense	\$	28,100,000	
	Imputed Amortization Expense			
10	Operating Leases	\$	2,700,000	
11	Purchased Power Agreements		37,500,000	
12	Total Imputed Amortization Expense	\$	40,200,000	
	Idaho Allocation			
13	Off-Balance Sheet Debt	\$	22,324,178	Line 3 * Line 6
14	Imputed Interest Expense	\$	1,451,433	Line 3 * Line 9
15	Imputed Amortization	\$	2,076,427	Line 3 * Line 12

Sources:

¹ McDougal Direct, Exhibit No. 1, page 2 of 3.

² Bruce Williams Exhibit No. 6, page 6 of 10, Standard & Poor's Global Credit Portal, RatingsDirect: "PacifiCorp," April 30, 2010.

Summary of Adjusted Hadaway DCF

Hadaway <u>Adjusted*</u> (2)	10.3% 10.5%	9.6% 6.7%	%2'6 %2'6
Hadaway (1)	10.3% 10.5%	10.7%	10.6% 10.6%
Description	Constant Growth DCF Average Median	Long-Term Constant Growth DCF Average Median	Multi-Stage Growth DCF Average Median
Line	- 4	ω 4	9

Sources:

Pages 2 to 4.

^{*} The adjustment reflects changing the GDP Growth Rate to 4.9%.

Adjusted Hadaway Constant Growth DCF Model Analysts' Growth Rates

		Recent	Next Year's	Dividend	Analy	Analysts' Growth Rates	Rates	Average Growth	Constant
Line	Company	Price (1)	Dividend (2)	Yield (3)	Value Line (4)	Zacks (5)	Thomson (6)	Rate (7)	Growth DCF (8)
-	ALLETE	\$33.30	\$1.76	5.29%	N	3.70%	5.33%	4.52%	9.8%
7	Alliant Energy Co.	\$32.91	\$1.62	4.91%	7.00%	4.00%	5.60%	5.53%	10.4%
က	Black Hills Corp	\$29.40	\$1.46	4.97%	6.50%	6.00%	8.00%	6.17%	11.1%
4	Con. Edison	\$43.99	\$2.39	5.43%	2.50%	3.00%	4.28%	3.26%	8.7%
2	DPL Inc.	\$27.25	\$1.25	4.57%	6.50%	2.00%	4.47%	5.32%	8.9%
ဖ	DTE Energy Co.	\$44.89	\$2.18	4.86%	7.00%	2.00%	4.90%	5.63%	10.5%
7	Duke Energy	\$16.45	\$0.98	2.96%	5.50%	4.40%	4.38%	4.76%	10.7%
œ	Edison Internat.	\$33.68	\$1.31	3.89%	0.50%	2.00%	2.03%	2.51%	6.4%
თ	Entergy Corp.	\$79.58	\$3.00	3.77%	2.00%	4.00%	6.68%	5.23%	9.0%
9	NextEra Energy	\$48.44	\$2.00	4.13%	7.00%	7.00%	6.89%	6.96%	11.1%
7	IDACORP	\$34.06	\$1.20	3.52%	5.50%	2.00%	5.00%	5.17%	8.7%
12	Northeast Utilities	\$26.73	\$1.07	3.98%	7.00%	8.40%	7.94%	7.78%	11.8%
5	NSTAR	\$34.95	\$1.68	4.81%	5.50%	8.00.9	5.72%	5.74%	10.5%
4	PG&E Corp.	\$42.60	\$1.89	4.44%	7.00%	7.70%	6.40%	7.03%	11.5%
15	Portland General	\$19.11	\$1.06	5.52%	3.00%	5.80%	5.67%	4.82%	10.3%
16	Progress Energy	\$39.02	\$2.51	6.43%	4.50%	4.00%	3.56%	4.02%	10.5%
17	SCANA Corp.	\$37.12	\$1.91	5.15%	3.50%	5.10%	5.08%	4.56%	9.7%
18	Sempra Energy	\$49.64	\$1.62	3.26%	4.00%	7.00%	3.50%	4.83%	8.1%
19	Southern Co.	\$32.89	\$1.82	5.53%	4.50%	4.90%	4.94%	4.78%	10.3%
20	Vectren Corp.	\$23.99	\$1.38	5.75%	4.50%	4.80%	5.00%	4.77%	10.5%
72	Wisconsin Energy	\$49.93	\$1.70	3.40%	8.00%	9.50%	9.00%	8.83%	12.2%
23	Xcel Energy Inc.	\$21.12	\$1.02	4.81%	5.50%	5.70%	6.16%	5.79%	10.6%
23	Average	\$36.54	\$1.69	4.78%	5.48%	5.52%	5.55%	2.50%	10.3%
24	Median			4.86%				5.23%	10.5%

Source:

Hadaway Exhibit No. 13, Page 2 of 5.

Adjusted Hadaway Constant Growth DCF Model Long-Term GDP Growth

Line	Company	Recent Stock <u>Price</u> (1)	Next Year's <u>Dividend</u> (2)	Dividend <u>Yield</u> (3)	GDP Growth* (4)	Long-Term Constant <u>Growth DCF</u> (5)
-	ALLETE	\$33.30	\$1.76	5.29%	4.90%	10.2%
7	Alliant Energy Co.	\$32.91	\$1.62	4.91%	4.90%	9.8%
က	Black Hills Corp	\$29.40	\$1.46	4.97%	4.90%	9.9%
4	Con. Edison	\$43.99	\$2.39	5.43%	4.90%	10.3%
ß	DPt. Inc.	\$27.25	\$1.25	4.57%	4.90%	9.5%
ø	DTE Energy Co.	\$44.89	\$2.18	4.86%	4.90%	9.8%
7	Duke Energy	\$16.45	\$0.98	2.96%	4.90%	10.9%
œ	Edison Internat.	\$33.68	\$1.31	3.89%	4.90%	8.8%
တ	Entergy Corp.	\$79.58	\$3.00	3.77%	4.90%	8.7%
9	NextEra Energy	\$48.44	\$2.00	4.13%	4.90%	80.6
7	IDACORP	\$34.06	\$1.20	3.52%	4.90%	8.4%
12	Northeast Utilities	\$26.73	\$1.07	3.98%	4.90%	8.9%
13	NSTAR	\$34.95	\$1.68	4.81%	4.90%	9.7%
4	PG&E Corp.	\$42.60	\$1.89	4.44%	4.90%	9.3%
15	Portland General	\$19.11	\$1.06	5.52%	4.90%	10.4%
16	Progress Energy	\$39.02	\$2.51	6.43%	4.90%	11.3%
17	SCANA Corp.	\$37.12	\$1,91	5.15%	4.90%	10.0%
18	Sempra Energy	\$49.64	\$1.62	3.26%	4.90%	8.2%
19	Southern Co.	\$32.89	\$1.82	5.53%	4.90%	10.4%
20	Vectren Corp.	\$23.99	\$1.38	5.75%	4.90%	10.7%
21	Wisconsin Energy	\$49.93	\$1.70	3.40%	4.90%	8.3%
22	Xcel Energy Inc.	\$21.12	\$1.02	4.81%	4.90%	8.7%
23	Average	\$36.41	\$1.67	4.74%	4.90%	%9.6
54	Median			4.83%		%2.6

Sources:— Hadaway Exhibit No. 13, Page 3 of 5. * *Blue Chip Financial Forecasts,* June 1, 2010 at 14.

Adjusted Hadaway Low Near-Term Growth Two-Stage Growth DCF Model

		Recent	2009	2012	Annual			Cash Flows				
<u>Line</u>	Company	Stock (1)	Forecasted <u>Dividend</u> (2)	Forecasted <u>Dividend</u> (3)	Change to 2012 (4)	2009 <u>Dividend</u> (5)	2010 <u>Dividend</u> (6)	2011 <u>Dividend</u> (7)	2012 <u>Dividend</u> (8)	2013 <u>Dividend</u> (9)	GDP Growth* (10)	Two-Stage Growth DCF (11)
-	ALLETE	\$33.30	\$1.76	\$1.80	\$0.01	\$1.76	\$1.77	\$1.79	\$1.80	\$1.89	4.90%	%9:6
8	Alliant Energy Co.	\$32.91	\$1.62	\$1.92	\$0.10	\$1.62	\$1.72	\$1.82	\$1.92	\$2.01	4.90%	%6.6
က	Black Hills Corp	\$29.40	\$1.46	\$1.60	\$0.05	\$1.46	\$1.51	\$1.55	\$1.60	\$1.68	4.90%	%9.6
4	Con. Edison	\$43.99	\$2.39	\$2.46	\$0.02	\$2.39	\$2.41	\$2.44	\$2.46	\$2.58	4.90%	%8.6
ß	DPL Inc.	\$27.25	\$1.25	\$1.50	\$0.09	\$1.25	\$1.33	\$1.42	\$1.50	\$1.57	4.90%	%9.6
9	DTE Energy Co.	\$44.89	\$2.18	\$2.60	\$0.14	\$2.18	\$2.32	\$2.46	\$2.60	\$2.73	4.90%	%6.6
7	Duke Energy	\$16.45	\$0.98	\$1.10	\$0.04	\$0.98	\$1.02	\$1.06	\$1.10	\$1.15	4.90%	10.7%
œ	Edison Internat.	\$33.68	\$1.31	\$1.50	\$0.06	\$1.31	\$1.37	\$1.44	\$1.50	\$1.57	4.90%	8.7%
6	Entergy Corp.	\$79.58	\$3.00	\$3.60	\$0.20	\$3.00	\$3.20	\$3.40	\$3.60	\$3.78	4.90%	8.8%
10	NextEra Energy	\$48.44	\$2.00	\$2.40	\$0.13	\$2.00	\$2.13	\$2.27	\$2.40	\$2.52	4.90%	9.5%
1	IDACORP	\$34.06	\$1.20	\$1.40	\$0.07	\$1.20	\$1.27	\$1.33	\$1.40	\$1.47	4.90%	8.4%
12	Northeast Utilities	\$26.73	\$1.07	\$1.25	\$0.06	\$1.07	\$1.13	\$1.19	\$1.25	\$1.31	4.90%	8.9%
13	NSTAR	\$34.95	\$1.68	\$2.05	\$0.12	\$1.68	\$1.80	\$1.93	\$2.05	\$2.15	4.90%	10.0%
4	PG&E Corp.	\$42.60	\$1.89	\$2.40	\$0.17	\$1.89	\$2.06	\$2.23	\$2.40	\$2.52	4.90%	%2.6
15	Portland General	\$19.11	\$1.06	\$1.20	\$0.05	\$1.06	\$1.10	\$1.15	\$1.20	\$1.26	4.90%	10.3%
16	Progress Energy	\$39.02	\$2.51	\$2.58	\$0.02	\$2.51	\$2.53	\$2.56	\$2.58	\$2.71	4.90%	10.7%
17	SCANA Corp.	\$37.12	\$1.91	\$2.05	\$0.05	\$1.91	\$1.96	\$2.00	\$2.05	\$2.15	4.90%	%2.6
18	Sempra Energy	\$49.64	\$1.62	\$2.05	\$0.14	\$1.62	\$1.76	\$1.91	\$2.05	\$2.15	4.90%	8.4%
19	Southern Co.	\$32.89	\$1.82	\$2.10	\$0.09	\$1.82	\$1.91	\$2.01	\$2.10	\$2.20	4.90%	10.4%
20	Vectren Corp.	\$23.99	\$1.38	\$1.50	\$0.04	\$1.38	\$1.42	\$1.46	\$1.50	\$1.57	4.90%	10.3%
21	Wisconsin Energy	\$49.93	\$1.70	\$2.40	\$0.23	\$1.70	\$1.93	\$2.17	\$2.40	\$2.52	4.90%	%0.6
23	Xcel Energy Inc.	\$21.12	\$1.02	\$1.15	\$0.04	\$1.02	\$1.06	\$1.11	\$1.15	\$1.21	4.90%	89.6
23	Average	\$36.41	\$1.67	\$1.94	\$0.09	\$1.67	\$1.76	\$1.85	\$1.94	\$2.03	4.90%	%9.6
24	Median											%1.6

Sources:

Hadaway Exhibit No. 13, Page 4 of 5. *Blue Chip Financial Forecasts, June 1, 2010 at 14.

Accuracy of Interest Rate Forecasts (Long-Term Treasury Bond Yields - Projected Vs. Actual)

Line Date Actual Yield Yield (2) (3) (4) (4) (4) (1) (2) (3) (4) (4) (4) (5) (4) (4) (5) (4) (4) (5) (6) (6) (6) (6) (6) (6) (6) (6) (6) (6	ted Yield · (Lower) <u>tual Yield*</u> (5) .2% .2% .6% .8%
Line Date Actual Yield (1) Yield (2) Quarter (3) Quarter (4) Than Act (4) 1 Dec-00 5.8% 5.8% 1Q. 02 5.6% 0 2 Mar-01 5.7% 5.6% 2Q. 02 5.8% -0 3 Jun-01 5.4% 5.8% 3Q. 02 5.2% 0 4 Sep-01 5.7% 5.9% 4Q. 02 5.1% 0 5 Dec-01 5.5% 5.7% 1Q. 03 5.0% 0 6 Mar-02 5.3% 5.9% 2Q. 03 4.7% 1 7 Jun-02 5.6% 6.2% 3Q. 03 5.2% 1 8 Sep-02 5.8% 5.9% 4Q. 03 5.2% 1 9 Dec-02 5.2% 5.7% 1Q. 04 4.9% 0 10 Mar-03 5.1% 5.7% 2Q. 04 5.4% 0 11 Jun-03 5.2% 5.9% 1Q. 04	tual Yield* (5) 2% .2% 6%
(1) (2) (3) (4) 1 Dec-00 5.8% 5.8% 1Q, 02 5.6% 0 2 Mar-01 5.7% 5.6% 2Q, 02 5.8% -0 3 Jun-01 5.4% 5.8% 3Q, 02 5.2% 0 4 Sep-01 5.7% 5.9% 4Q, 02 5.1% 0 5 Dec-01 5.5% 5.7% 1Q, 03 5.0% 0 6 Mar-02 5.3% 5.9% 2Q, 03 4.7% 1 7 Jun-02 5.6% 6.2% 3Q, 03 5.2% 1 8 Sep-02 5.8% 5.9% 4Q, 03 5.2% 0 9 Dec-02 5.2% 5.7% 1Q, 04 4.9% 0 10 Mar-03 5.1% 5.7% 2Q, 04 5.4% 0 11 Jun-03 5.0% 5.4% 3Q, 04 5.1% 0 12 Sep-03 4.7% 5.8% 4Q, 04 4.9% 0 13 Dec-03 4.7% 5.8% 4Q, 04 4.9% 1 14 Mar-04 5.2% 5.9% 1Q, 05 4.8% 1 15 Jun-04 4.9% 6.2% 3Q, 05 4.6% 1 16 Sep-04 5.4% 6.0% 4Q, 05 4.8% 1 17 Dec-04 5.1% 5.8% 1Q, 06 5.1% 0 19 Jun-05 4.8% 5.5% 3Q, 06 5.1% 0 20 Sep-05 4.6% 5.2% 4Q, 06 5.1% 0 21 Dec-05 4.5% 5.3% 1Q, 07 4.8% 0 22 Mar-06 4.8% 5.5% 3Q, 07 4.9% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.1% 5.8% 1Q, 07 5.0% 0 25 Dec-06 5.0% 5.0% 5.2% 4Q, 08 4.6% 1 26 Mar-07 4.7% 5.1% 2Q, 09 4.3% 0 27 Jun-07 4.8% 5.1% 2Q, 09 4.3% 0 28 Sep-07 5.0% 5.2% 4Q, 09 4.3% 0 29 Dec-07 4.9% 4.8% 1Q, 09 3.5% 1 30 Mar-08 4.6% 5.1% 3Q, 09 4.3% 0 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.8% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10 3 35 Feb-09 3.7% 4.1% 2Q, 10	(5) .2% .2% .6%
2 Mar-01 5.7% 5.6% 2Q, 02 5.8% 0 3 Jun-01 5.4% 5.8% 3Q, 02 5.2% 0 4 Sep-01 5.7% 5.9% 4Q, 02 5.1% 0 5 Dec-01 5.5% 5.7% 1Q, 03 5.0% 0 6 Mar-02 5.3% 5.9% 2Q, 03 4.7% 1 7 Jun-02 5.6% 6.2% 3Q, 03 5.2% 1 8 Sep-02 5.8% 5.9% 4Q, 03 5.2% 0 9 Dec-02 5.2% 5.7% 1Q, 04 4.9% 0 10 Mar-03 5.1% 5.7% 2Q, 04 5.4% 0 11 Jun-03 5.0% 5.4% 3Q, 04 5.1% 0 12 Sep-03 4.7% 5.8% 4Q, 04 4.9% 0 13 Dec-03 5.2% 5.9% 1Q, 05 4.8% 1 14 Mar-04 5.2% 5.9% 2Q, 05 4.6% 1 15 Jun-04 4.9% 6.2% 3Q, 05 4.6% 1 16 Sep-04 5.4% 6.0% 4Q, 05 4.8% 1 17 Dec-04 5.1% 5.8% 1Q, 06 4.6% 1 18 Mar-05 4.9% 6.0% 4Q, 05 4.8% 1 19 Jun-05 4.8% 5.5% 3Q, 06 5.1% 0 20 Sep-05 4.6% 5.2% 4Q, 06 4.7% 0 21 Dec-05 4.8% 5.5% 3Q, 06 5.0% 0 22 Mar-06 4.8% 5.5% 3Q, 07 4.8% 0 24 Sep-06 5.0% 5.0% 1Q, 07 4.8% 0 25 Dec-06 5.0% 5.0% 1Q, 07 4.8% 0 26 Mar-07 4.7% 5.1% 2Q, 07 5.0% 0 27 Jun-07 4.8% 5.1% 2Q, 07 4.6% 0 28 Sep-07 5.0% 5.0% 1Q, 08 4.4% 0 29 Dec-07 4.9% 4.8% 1Q, 09 3.5% 1 30 Mar-08 4.6% 5.1% 3Q, 09 4.3% 0 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 5.1% 4Q, 09 4.3% 0 34 Jan-09 3.8% 4.0% 2Q, 10 3 35 Feb-09 3.7% 4.1% 2Q, 10	.2% .6%
2 Mar-01 5.7% 5.6% 2Q, 02 5.8% 0 3 Jun-01 5.4% 5.8% 3Q, 02 5.2% 0 4 Sep-01 5.7% 5.9% 4Q, 02 5.1% 0 5 Dec-01 5.5% 5.7% 1Q, 03 5.0% 0 6 Mar-02 5.3% 5.9% 2Q, 03 4.7% 1 7 Jun-02 5.6% 6.2% 3Q, 03 5.2% 1 8 Sep-02 5.8% 5.9% 4Q, 03 5.2% 0 9 Dec-02 5.2% 5.7% 1Q, 04 4.9% 0 10 Mar-03 5.1% 5.7% 2Q, 04 5.4% 0 11 Jun-03 5.0% 5.4% 3Q, 04 5.1% 0 12 Sep-03 4.7% 5.8% 4Q, 04 4.9% 0 13 Dec-03 5.2% 5.9% 1Q, 05 4.8% 1 14 Mar-04 5.2% 5.9% 2Q, 05 4.6% 1 15 Jun-04 4.9% 6.2% 3Q, 05 4.6% 1 16 Sep-04 5.4% 6.0% 4Q, 05 4.8% 1 17 Dec-04 5.1% 5.8% 1Q, 06 4.6% 1 18 Mar-05 4.9% 6.0% 4Q, 05 4.8% 1 19 Jun-05 4.8% 5.5% 3Q, 06 5.1% 0 20 Sep-05 4.6% 5.2% 4Q, 06 4.7% 0 21 Dec-05 4.5% 5.3% 1Q, 07 4.8% 0 22 Mar-06 4.8% 5.5% 3Q, 06 5.0% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.0% 5.0% 1Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.4% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 2Q, 07 5.0% 0 28 Sep-07 5.0% 5.2% 4Q, 08 3.7% 1 29 Dec-07 4.9% 4.8% 1Q, 09 3.5% 1 30 Mar-08 4.6% 5.2% 4Q, 09 4.3% 0 31 Jun-08 4.6% 5.1% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 5.1% 4Q, 09 4.3% 0 34 Jan-09 3.8% 4.0% 2Q, 10 3 35 Feb-09 3.7% 4.1% 2Q, 10	.2% .6%
3 Jun-01 5.4% 5.8% 3Q, 02 5.2% 0 4 Sep-01 5.7% 5.9% 4Q, 02 5.1% 0 5 Dec-01 5.5% 5.7% 1Q, 03 5.0% 0 6 Mar-02 5.3% 5.9% 2Q, 03 4.7% 1 7 Jun-02 5.6% 6.2% 3Q, 03 5.2% 1 8 Sep-02 5.8% 5.9% 4Q, 03 5.2% 0 9 Dec-02 5.2% 5.7% 1Q, 04 4.9% 0 10 Mar-03 5.1% 5.7% 2Q, 04 5.4% 0 11 Jun-03 5.0% 5.4% 3Q, 04 5.1% 0 12 Sep-03 4.7% 5.8% 4Q, 04 4.9% 0 13 Dec-03 5.2% 5.9% 1Q, 05 4.8% 1 14 Mar-04 5.2% 5.9% 2Q, 05 4.6% 1 15 Jun-04 4.9% 6.2% 3Q, 05 4.6% 1 16 Sep-04 5.4% 6.0% 4Q, 05 4.8% 1 17 Dec-04 5.1% 5.8% 1Q, 06 4.6% 1 18 Mar-05 4.9% 5.6% 2Q, 06 5.1% 0 19 Jun-05 4.8% 5.5% 3Q, 06 5.0% 0 20 Sep-05 4.6% 5.2% 4Q, 06 4.7% 0 21 Dec-05 4.5% 5.3% 1Q, 07 4.8% 0 22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.6% 1 29 Dec-07 4.8% 5.1% 2Q, 07 5.0% 0 20 Sep-05 5.1% 5.2% 4Q, 07 4.6% 0 21 Jun-07 4.8% 5.1% 2Q, 07 5.0% 0 22 Mar-06 4.8% 5.1% 2Q, 07 4.6% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.6% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 3Q, 08 4.5% 0 28 Sep-07 5.0% 5.2% 4Q, 08 3.7% 1 30 Mar-08 4.6% 4.8% 1Q, 09 3.5% 1 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10	.6%
4 Sep-01 5.7% 5.9% 4Q, 02 5.1% 0 5 Dec-01 5.5% 5.7% 1Q, 03 5.0% 0 6 Mar-02 5.3% 5.9% 2Q, 03 4.7% 1 7 Jun-02 5.6% 6.2% 3Q, 03 5.2% 1 8 Sep-02 5.8% 5.9% 4Q, 03 5.2% 0 9 Dec-02 5.2% 5.7% 1Q, 04 4.9% 0 10 Mar-03 5.1% 5.7% 2Q, 04 5.4% 0 11 Jun-03 5.0% 5.4% 3Q, 04 5.1% 0 12 Sep-03 4.7% 5.8% 4Q, 04 4.9% 0 13 Dec-03 5.2% 5.9% 1Q, 05 4.8% 1 14 Mar-04 5.2% 5.9% 2Q, 05 4.6% 1 15 Jun-04 4.9% 6.2% 3Q, 05 4.5% 1 16 Sep-04 5.4% 6.0% 4Q, 05 4.8% 1 17 Dec-04 5.1% 5.8% 1Q, 06 4.6% 1 18 Mar-05 4.9% 5.6% 2Q, 06 5.1% 0 19 Jun-05 4.8% 5.5% 3Q, 06 5.0% 0 20 Sep-05 4.6% 5.2% 4Q, 06 4.7% 0 21 Dec-05 4.5% 5.3% 1Q, 07 4.8% 0 22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.4% 0 26 Mar-07 4.7% 5.1% 2Q, 07 5.0% 0 27 Jun-07 4.8% 5.1% 2Q, 08 4.6% 0 28 Sep-07 5.0% 5.2% 4Q, 08 3.7% 1 29 Dec-07 4.9% 4.8% 1Q, 09 4.3% 0 31 Jun-08 4.6% 4.8% 1Q, 09 3.5% 1 30 Mar-08 4.6% 4.8% 1Q, 09 4.3% 0 31 Jun-08 4.6% 4.8% 1Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10	
5 Dec-01 5.5% 5.7% 1Q, 03 5.0% 0 6 Mar-02 5.3% 5.9% 2Q, 03 4.7% 1 7 Jun-02 5.6% 6.2% 3Q, 03 5.2% 1 8 Sep-02 5.8% 5.9% 4Q, 03 5.2% 0 9 Dec-02 5.2% 5.7% 1Q, 04 4.9% 0 10 Mar-03 5.1% 5.7% 2Q, 04 5.4% 0 11 Jun-03 5.0% 5.4% 3Q, 04 5.1% 0 12 Sep-03 4.7% 5.8% 4Q, 04 4.9% 0 13 Dec-03 5.2% 5.9% 1Q, 05 4.6% 1 14 Mar-04 5.2% 5.9% 2Q, 05 4.6% 1 15 Jun-04 4.9% 6.2% 3Q, 05 4.5% 1 16 Sep-04 5.4% 6.0% 4Q, 05 4.8% 1 17 Dec-04 5.1% 5.8% 1Q, 06 4.6% 1 18 Mar-05 4.9% 5.6% 2Q, 06 5.1% 0 19 Jun-05 4.8% 5.5% 3Q, 06 5.0% 0 20 Sep-05 4.6% 5.2% 4Q, 06 4.7% 0 21 Dec-05 4.5% 5.3% 1Q, 07 4.8% 0 22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.6% 0 26 Mar-07 4.7% 5.1% 5.2% 4Q, 08 4.4% 0 27 Jun-07 4.8% 5.1% 2Q, 07 5.0% 0 28 Sep-07 5.0% 5.0% 1Q, 08 4.6% 0 29 Dec-07 4.9% 5.6% 2Q, 08 3.7% 1 30 Mar-08 4.6% 5.1% 3Q, 08 4.5% 0 31 Jun-07 4.8% 5.1% 3Q, 08 4.5% 0 32 Sep-08 4.6% 4.8% 1Q, 09 3.5% 1 33 Dec-08 4.6% 4.8% 1Q, 09 4.3% 0 34 Jan-09 3.8% 4.0% 2Q, 10 3 35 Feb-09 3.7% 3.9% 2Q, 10 3 36 Mar-09 3.7% 4.1% 2Q, 10	
6 Mar-02 5.3% 5.9% 2Q, 03 4.7% 1 7 Jun-02 5.6% 6.2% 3Q, 03 5.2% 1 8 Sep-02 5.8% 5.9% 4Q, 03 5.2% 0 9 Dec-02 5.2% 5.7% 1Q, 04 4.9% 0 10 Mar-03 5.1% 5.7% 2Q, 04 5.4% 0 11 Jun-03 5.0% 5.4% 3Q, 04 5.1% 0 12 Sep-03 4.7% 5.8% 4Q, 04 4.9% 0 13 Dec-03 5.2% 5.9% 1Q, 05 4.8% 1 14 Mar-04 5.2% 5.9% 2Q, 05 4.6% 1 15 Jun-04 4.9% 6.2% 3Q, 05 4.5% 1 16 Sep-04 5.4% 6.0% 4Q, 05 4.8% 1 17 Dec-04 5.1% 5.8% 1Q, 06 4.6% 1 18 Mar-05 4.9% 5.6% 2Q, 06 5.1% 0 19 Jun-05 4.8% 5.5% 3Q, 06 5.0% 0 20 Sep-05 4.6% 5.2% 4Q, 06 4.7% 0 21 Dec-05 4.8% 5.1% 2Q, 07 5.0% 0 22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 23 Jun-06 4.6% 5.3% 1Q, 07 4.8% 0 24 Sep-06 5.1% 5.2% 4Q, 06 4.7% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.6% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 2Q, 08 4.6% 0 28 Sep-07 5.0% 5.2% 4Q, 08 4.5% 0 29 Dec-07 4.9% 5.1% 3Q, 08 4.5% 0 20 Sep-07 5.0% 5.2% 4Q, 08 4.5% 0 21 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 08 4.5% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.6% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 3Q, 08 4.5% 0 28 Sep-07 5.0% 5.2% 4Q, 09 4.3% 0 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10 3 35 Feb-09 3.7% 4.1% 2Q, 10	.7%
7 Jun-02 5.6% 6.2% 3Q, 03 5.2% 1 8 Sep-02 5.8% 5.9% 4Q, 03 5.2% 0 9 Dec-02 5.2% 5.7% 1Q, 04 4.9% 0 10 Mar-03 5.1% 5.7% 2Q, 04 5.4% 0 11 Jun-03 5.0% 5.4% 3Q, 04 5.1% 0 12 Sep-03 4.7% 5.8% 4Q, 04 4.9% 0 13 Dec-03 5.2% 5.9% 1Q, 05 4.8% 1 14 Mar-04 5.2% 5.9% 2Q, 05 4.6% 1 15 Jun-04 4.9% 6.2% 3Q, 05 4.5% 1 16 Sep-04 5.4% 6.0% 4Q, 05 4.5% 1 17 Dec-04 5.1% 5.8% 1Q, 06 4.6% 1 18 Mar-05 4.9% 5.6% 2Q, 06 5.1% 0 19 Jun-05 4.8% 5.5% 3Q, 06 5.0% 0 20 Sep-05 4.6% 5.2% 4Q, 06 4.7% 0 21 Dec-05 4.5% 5.3% 1Q, 07 4.8% 0 22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.6% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.4% 0 27 Jun-07 4.8% 5.1% 2Q, 08 4.4% 0 28 Sep-07 5.0% 5.2% 4Q, 08 3.7% 0 29 Dec-07 4.9% 4.8% 5.1% 2Q, 08 4.5% 0 20 Sep-05 5.0% 5.0% 1Q, 08 4.4% 0 21 Dec-05 4.5% 5.3% 3Q, 07 4.9% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.4% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 3Q, 08 4.5% 0 28 Sep-07 5.0% 5.2% 4Q, 09 4.3% 0 30 Mar-08 4.6% 4.8% 2Q, 09 4.0% 0 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10 3 36 Mar-09 3.7% 4.1% 2Q, 10	.2%
8 Sep-02 5.8% 5.9% 4Q, 03 5.2% 0 9 Dec-02 5.2% 5.7% 1Q, 04 4.9% 0 10 Mar-03 5.1% 5.7% 2Q, 04 5.4% 0 11 Jun-03 5.0% 5.4% 3Q, 04 5.1% 0 12 Sep-03 4.7% 5.8% 4Q, 04 4.9% 0 13 Dec-03 5.2% 5.9% 1Q, 05 4.8% 1 14 Mar-04 5.2% 5.9% 2Q, 05 4.6% 1 15 Jun-04 4.9% 6.2% 3Q, 05 4.5% 1 16 Sep-04 5.4% 6.0% 4Q, 05 4.8% 1 17 Dec-04 5.1% 5.8% 1Q, 06 4.6% 1 18 Mar-05 4.9% 5.6% 2Q, 06 5.1% 0 19 Jun-05 4.8% 5.5% 3Q, 06 5.0% 0 20 Sep-05 4.6% 5.2% 4Q, 06 4.7% 0 21 Dec-05 4.5% 5.3% 1Q, 07 4.8% 0 22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 07 5.0% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.4% 0 26 Mar-07 4.7% 5.1% 2Q, 07 5.0% 0 27 Jun-07 4.8% 5.1% 3Q, 08 4.4% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 3Q, 08 4.6% 0 28 Sep-07 5.0% 5.0% 1Q, 08 4.4% 0 29 Dec-07 4.9% 4.8% 5.1% 3Q, 08 3.7% 1 30 Mar-08 4.6% 4.8% 2Q, 09 4.3% 0 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.9% 3Q, 09 4.3% 0 34 Jan-09 3.8% 4.0% 2Q, 10 3 35 Feb-09 3.7% 4.1% 2Q, 10	.0%
9 Dec-02 5.2% 5.7% 1Q, 04 4.9% 0 10 Mar-03 5.1% 5.7% 2Q, 04 5.4% 0 11 Jun-03 5.0% 5.4% 3Q, 04 5.1% 0 12 Sep-03 4.7% 5.8% 4Q, 04 4.9% 0 13 Dec-03 5.2% 5.9% 1Q, 05 4.8% 1 14 Mar-04 5.2% 5.9% 2Q, 05 4.6% 1 15 Jun-04 4.9% 6.2% 3Q, 05 4.5% 1 16 Sep-04 5.4% 6.0% 4Q, 05 4.8% 1 17 Dec-04 5.1% 5.8% 1Q, 06 4.6% 1 18 Mar-05 4.9% 5.6% 2Q, 06 5.1% 0 19 Jun-05 4.8% 5.5% 3Q, 06 5.0% 0 20 Sep-05 4.6% 5.2% 4Q, 06 4.7% 0 21 Dec-05 4.5% 5.3% 1Q, 07 4.8% 0 22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.6% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 3Q, 08 4.5% 0 28 Sep-07 5.0% 5.2% 4Q, 08 4.6% 0 29 Dec-06 5.0% 5.0% 1Q, 08 4.6% 0 20 Sep-05 5.0% 5.0% 1Q, 08 4.6% 0 21 Dec-06 5.0% 5.0% 1Q, 08 4.6% 0 22 Sep-07 5.0% 5.2% 4Q, 07 4.6% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.6% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 3Q, 08 3.7% 1 30 Mar-08 4.6% 4.8% 2Q, 09 4.3% 0 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10 3 35 Feb-09 3.7% 4.1% 2Q, 10	.7%
10 Mar-03 5.1% 5.7% 2Q, 04 5.4% 0 11 Jun-03 5.0% 5.4% 3Q, 04 5.1% 0 12 Sep-03 4.7% 5.8% 4Q, 04 4.9% 0 13 Dec-03 5.2% 5.9% 1Q, 05 4.8% 1 14 Mar-04 5.2% 5.9% 2Q, 05 4.6% 1 15 Jun-04 4.9% 6.2% 3Q, 05 4.5% 1 16 Sep-04 5.4% 6.0% 4Q, 05 4.8% 1 17 Dec-04 5.1% 5.8% 1Q, 06 4.6% 1 18 Mar-05 4.9% 5.6% 2Q, 06 5.1% 0 19 Jun-05 4.8% 5.5% 3Q, 06 5.0% 0 20 Sep-05 4.6% 5.2% 4Q, 06 4.7% 0 21 Dec-05 4.5% 5.3% 1Q, 07 4.8% 0 22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.6% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 3Q, 08 4.5% 0 28 Sep-07 5.0% 5.0% 1Q, 08 4.6% 0 29 Dec-07 4.9% 5.1% 3Q, 08 4.5% 0 31 Jun-08 4.6% 5.1% 3Q, 08 4.5% 0 32 Sep-08 4.6% 4.8% 1Q, 09 3.5% 1 30 Mar-08 4.6% 4.8% 2Q, 09 4.3% 0 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10 35 Feb-09 3.7% 4.1% 2Q, 10	.8%
11 Jun-03 5.0% 5.4% 3Q, 04 5.1% 0 12 Sep-03 4.7% 5.8% 4Q, 04 4.9% 0 13 Dec-03 5.2% 5.9% 1Q, 05 4.8% 1 14 Mar-04 5.2% 5.9% 2Q, 05 4.6% 1 15 Jun-04 4.9% 6.2% 3Q, 05 4.5% 1 16 Sep-04 5.4% 6.0% 4Q, 05 4.8% 1 17 Dec-04 5.1% 5.8% 1Q, 06 4.6% 1 18 Mar-05 4.9% 5.6% 2Q, 06 5.1% 0 19 Jun-05 4.8% 5.5% 3Q, 06 5.0% 0 20 Sep-05 4.6% 5.2% 4Q, 06 4.7% 0 21 Dec-05 4.5% 5.3% 1Q, 07 4.8% 0 22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% <	.3%
12 Sep-03	.3%
13 Dec-03 5.2% 5.9% 1Q, 05 4.8% 1 14 Mar-04 5.2% 5.9% 2Q, 05 4.6% 1 15 Jun-04 4.9% 6.2% 3Q, 05 4.5% 1 16 Sep-04 5.4% 6.0% 4Q, 05 4.8% 1 17 Dec-04 5.1% 5.8% 1Q, 06 4.6% 1 18 Mar-05 4.9% 5.6% 2Q, 06 5.1% 0 19 Jun-05 4.8% 5.5% 3Q, 06 5.0% 0 20 Sep-05 4.6% 5.2% 4Q, 06 4.7% 0 21 Dec-05 4.5% 5.3% 1Q, 07 4.8% 0 22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% <	.9%
14 Mar-04 5.2% 5.9% 2Q, 05 4.6% 1 15 Jun-04 4.9% 6.2% 3Q, 05 4.5% 1 16 Sep-04 5.4% 6.0% 4Q, 05 4.8% 1 17 Dec-04 5.1% 5.8% 1Q, 06 4.6% 1 18 Mar-05 4.9% 5.6% 2Q, 06 5.1% 0 19 Jun-05 4.8% 5.5% 3Q, 06 5.0% 0 20 Sep-05 4.6% 5.2% 4Q, 06 4.7% 0 21 Dec-05 4.5% 5.3% 1Q, 07 4.8% 0 22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.4% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% <	.1%
15 Jun-04 4.9% 6.2% 3Q, 05 4.5% 1 16 Sep-04 5.4% 6.0% 4Q, 05 4.8% 1 17 Dec-04 5.1% 5.8% 1Q, 06 4.6% 1 18 Mar-05 4.9% 5.6% 2Q, 06 5.1% 0 19 Jun-05 4.8% 5.5% 3Q, 06 5.0% 0 20 Sep-05 4.6% 5.2% 4Q, 06 4.7% 0 21 Dec-05 4.5% 5.3% 1Q, 07 4.8% 0 22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.6% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 3Q, 08 4.5% 0 28 Sep-07 5.0% 5.2% 4Q, 08 3.7% 1 29 Dec-07 4.9% 4.8% 1Q, 09 3.5% 1 30 Mar-08 4.6% 4.8% 1Q, 09 3.5% 1 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10 36 Mar-09 3.7% 4.1% 2Q, 10	.4%
16 Sep-04 5.4% 6.0% 4Q, 05 4.8% 1 17 Dec-04 5.1% 5.8% 1Q, 06 4.6% 1 18 Mar-05 4.9% 5.6% 2Q, 06 5.1% 0 19 Jun-05 4.8% 5.5% 3Q, 06 5.0% 0 20 Sep-05 4.6% 5.2% 4Q, 06 4.7% 0 21 Dec-05 4.5% 5.3% 1Q, 07 4.8% 0 22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.4% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 3Q, 08 4.5% <	.7%
17 Dec-04 5.1% 5.8% 1Q, 06 4.6% 1 18 Mar-05 4.9% 5.6% 2Q, 06 5.1% 0 19 Jun-05 4.8% 5.5% 3Q, 06 5.0% 0 20 Sep-05 4.6% 5.2% 4Q, 06 4.7% 0 21 Dec-05 4.5% 5.3% 1Q, 07 4.8% 0 22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.4% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 3Q, 08 4.5% 0 28 Sep-07 5.0% 5.2% 4Q, 08 3.7% <	.2%
18 Mar-05 4.9% 5.6% 2Q, 06 5.1% 0 19 Jun-05 4.8% 5.5% 3Q, 06 5.0% 0 20 Sep-05 4.6% 5.2% 4Q, 06 4.7% 0 21 Dec-05 4.5% 5.3% 1Q, 07 4.8% 0 22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.4% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 3Q, 08 4.5% 0 28 Sep-07 5.0% 5.2% 4Q, 08 3.7% 1 29 Dec-07 4.9% 4.8% 1Q, 09 4.0% 0 30 Mar-08 4.6% 4.8% 2Q, 09 4.3% <	.2%
19 Jun-05 4.8% 5.5% 3Q, 06 5.0% 0 20 Sep-05 4.6% 5.2% 4Q, 06 4.7% 0 21 Dec-05 4.5% 5.3% 1Q, 07 4.8% 0 22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.4% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 3Q, 08 4.5% 0 28 Sep-07 5.0% 5.2% 4Q, 08 3.7% 1 29 Dec-07 4.9% 4.8% 1Q, 09 3.5% 1 30 Mar-08 4.6% 4.8% 2Q, 09 4.0% 0 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10 35 Feb-09 3.7% 3.9% 2Q, 10 36 Mar-09 3.7% 3.9% 2Q, 10	.5%
20 Sep-05 4.6% 5.2% 4Q, 06 4.7% 0 21 Dec-05 4.5% 5.3% 1Q, 07 4.8% 0 22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.4% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 3Q, 08 4.5% 0 28 Sep-07 5.0% 5.2% 4Q, 08 3.7% 1 29 Dec-07 4.9% 4.8% 1Q, 09 3.5% 1 30 Mar-08 4.6% 4.8% 2Q, 09 4.0% 0 31 Jun-08 4.6% 4.8% 2Q, 09 4.3% <	.5%
21 Dec-05 4.5% 5.3% 1Q, 07 4.8% 0 22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.4% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 3Q, 08 4.5% 0 28 Sep-07 5.0% 5.2% 4Q, 08 3.7% 1 29 Dec-07 4.9% 4.8% 1Q, 09 3.5% 1 30 Mar-08 4.6% 4.8% 2Q, 09 4.0% 0 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% <	.5%
22 Mar-06 4.8% 5.1% 2Q, 07 5.0% 0 23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.4% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 3Q, 08 4.5% 0 28 Sep-07 5.0% 5.2% 4Q, 08 3.7% 1 29 Dec-07 4.9% 4.8% 1Q, 09 3.5% 1 30 Mar-08 4.6% 4.8% 2Q, 09 4.0% 0 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10 4.6% <	.5%
23 Jun-06 4.6% 5.3% 3Q, 07 4.9% 0 24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.4% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 3Q, 08 4.5% 0 28 Sep-07 5.0% 5.2% 4Q, 08 3.7% 1 29 Dec-07 4.9% 4.8% 1Q, 09 3.5% 1 30 Mar-08 4.6% 4.8% 2Q, 09 4.0% 0 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10 35 Feb-09 3.7% 3.9% 2Q, 10 36 Mar-09 3.7%	.1%
24 Sep-06 5.1% 5.2% 4Q, 07 4.6% 0 25 Dec-06 5.0% 5.0% 1Q, 08 4.4% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 3Q, 08 4.5% 0 28 Sep-07 5.0% 5.2% 4Q, 08 3.7% 1 29 Dec-07 4.9% 4.8% 1Q, 09 3.5% 1 30 Mar-08 4.6% 4.8% 2Q, 09 4.0% 0 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10 4.6% 0 35 Feb-09 3.7% 3.9% 2Q, 10 4.6% 1 4.1% 2Q, 10 36 Mar-09 3.7% 4.1% <	.4%
25 Dec-06 5.0% 5.0% 1Q, 08 4.4% 0 26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 3Q, 08 4.5% 0 28 Sep-07 5.0% 5.2% 4Q, 08 3.7% 1 29 Dec-07 4.9% 4.8% 1Q, 09 3.5% 1 30 Mar-08 4.6% 4.8% 2Q, 09 4.0% 0 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10 35 Feb-09 3.7% 3.9% 2Q, 10 36 Mar-09 3.7% 4.1% 2Q, 10	.6%
26 Mar-07 4.7% 5.1% 2Q, 08 4.6% 0 27 Jun-07 4.8% 5.1% 3Q, 08 4.5% 0 28 Sep-07 5.0% 5.2% 4Q, 08 3.7% 1 29 Dec-07 4.9% 4.8% 1Q, 09 3.5% 1 30 Mar-08 4.6% 4.8% 2Q, 09 4.0% 0 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10 35 Feb-09 3.7% 3.9% 2Q, 10 36 Mar-09 3.7% 4.1% 2Q, 10	.6%
27 Jun-07 4.8% 5.1% 3Q, 08 4.5% 0 28 Sep-07 5.0% 5.2% 4Q, 08 3.7% 1 29 Dec-07 4.9% 4.8% 1Q, 09 3.5% 1 30 Mar-08 4.6% 4.8% 2Q, 09 4.0% 0 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10 35 Feb-09 3.7% 3.9% 2Q, 10 36 Mar-09 3.7% 4.1% 2Q, 10	.5%
28 Sep-07 5.0% 5.2% 4Q, 08 3.7% 1 29 Dec-07 4.9% 4.8% 1Q, 09 3.5% 1 30 Mar-08 4.6% 4.8% 2Q, 09 4.0% 0 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10 35 Feb-09 3.7% 3.9% 2Q, 10 36 Mar-09 3.7% 4.1% 2Q, 10	.7%
29 Dec-07 4.9% 4.8% 1Q, 09 3.5% 1 30 Mar-08 4.6% 4.8% 2Q, 09 4.0% 0 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10 35 Feb-09 3.7% 3.9% 2Q, 10 36 Mar-09 3.7% 4.1% 2Q, 10	.5%
30 Mar-08 4.6% 4.8% 2Q, 09 4.0% 0 31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10 35 Feb-09 3.7% 3.9% 2Q, 10 36 Mar-09 3.7% 4.1% 2Q, 10	.4%
31 Jun-08 4.4% 4.9% 3Q, 09 4.3% 0 32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10 35 Feb-09 3.7% 3.9% 2Q, 10 36 Mar-09 3.7% 4.1% 2Q, 10	.8%
32 Sep-08 4.6% 5.1% 4Q, 09 4.3% 0 33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10 35 Feb-09 3.7% 3.9% 2Q, 10 36 Mar-09 3.7% 4.1% 2Q, 10	.6%
33 Dec-08 4.5% 4.6% 1Q, 10 4.6% 0 34 Jan-09 3.8% 4.0% 2Q, 10 35 Feb-09 3.7% 3.9% 2Q, 10 36 Mar-09 3.7% 4.1% 2Q, 10	.8%
34 Jan-09 3.8% 4.0% 2Q, 10 35 Feb-09 3.7% 3.9% 2Q, 10 36 Mar-09 3.7% 4.1% 2Q, 10	.0%
35 Feb-09 3.7% 3.9% 2Q, 10 36 Mar-09 3.7% 4.1% 2Q, 10	
36 Mar-09 3.7% 4.1% 2Q, 10	
37 Apr-09 3.5% 4.3% 3Q, 10	
38 May-09 3.5% 4.3% 3Q, 10	
39 Jun-09 3.5% 4.6% 3Q, 10	
40 Jul-09 4.0% 5.0% 4Q, 10	
41 Aug-09 4.0% 5.0% 4Q, 10	
42 Sep-09 4.0% 5.0% 4Q, 10	
43 Oct-09 4.3% 5.1% 1Q, 11	
44 Nov-09 4.3% 5.0% 1Q, 11	
45 Dec-09 4.3% 5.0% 1Q, 11	
46 Jan-10 4.3% 5.2% 2Q, 11	
47 Feb-10 4.3% 5.2% 2Q, 11	
48 Mar-10 4.3% 5.2% 2Q, 11	
49 Apr-10 4.6% 5.3% 3Q, 11	
50 May-10 4.6% 5.3% 3Q, 11	
51 Jun-10 4.6% 5.2% 3Q, 11	
52 Jul-10 4.4% 5.1% 4Q, 11	
53 Aug-10 4.4% 4.9% 4Q, 11	

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