Exhibit No.: Issue: Witness: Type of Exhibit: Sponsoring Parties:

Revenue Requirement Michael Gorman Direct Testimony Ag Processing, Inc., SIEUA, and Federal Executive Agencies ER-2010-0356 Date Testimony Prepared: November 17, 2010

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

Case No.:

In the Matter of the Application of **KCP&L** Greater Missouri Operations **Company for Approval to Make** Certain Changes in its Charges for **Electric Service**

Case No. ER-2010-0356

Direct Testimony and Schedules of

Michael Gorman

On behalf of

Ag Processing, Inc. Sedalia Industrial Energy Users Association **Federal Executive Agencies**

November 17, 2010



Project 9384

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Application of KCP&L Greater Missouri Operations Company for Approval to Make Certain Changes in its Charges for Electric Service

Case No. ER-2010-0356

STATE OF MISSOURI COUNTY OF ST. LOUIS

SS

Affidavit of Michael Gorman

Michael Gorman, being first duly sworn, on his oath states:

1. My name is Michael Gorman. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by Ag Processing, Inc., Sedalia Industrial Energy Users Association and Federal Executive Agencies in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes are my direct testimony and schedules which were prepared in written form for introduction into evidence in the Missouri Public Service Commission's Case No. ER-2010-0356.

3. I hereby swear and affirm that the testimony and schedules are true and correct and that they show the matters and things that they purport to show.

Michael Gorman

Subscribed and sworn to before me this 16th day of November, 2010.

MARIA E. DECKER Notary Public - Notary Seal STATE OF MISSOURI St. Louis City My Commission Expires: May 5, 2013 Commission # 09706793

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

)

)

)

)

In the Matter of the Application of KCP&L Greater Missouri Operations Company for Approval to Make Certain Changes in its Charges for Electric Service

Case No. ER-2010-0356

Table of Contents to the Direct Testimony of Michael Gorman

Page

I.	SUMMARY2		
II.	ELECTRIC UTILITY INDUSTRY MARKET OUTLOOK5		
III.	KCPL-GMO'S INVESTMENT RISK		
IV.	KCPL-GMO'S PROPOSED CAPITAL STRUCTURE	11	
V.	RETURN ON COMMON EQUITY	12	
	 A. Discounted Cash Flow Model. B. Sustainable Growth DCF. C. Multi-Stage Growth DCF Model D. Risk Premium Model E. Capital Asset Pricing Model F. Return on Equity Summary G. Financial Integrity 	25 26 29 34 39	
QU	ALIFICATIONS OF MICHAEL GORMAN	Appendix A	

Schedule MPG-1 through Schedule MPG-17

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

)

In the Matter of the Application of KCP&L Greater Missouri Operations Company for Approval to Make Certain Changes in its Charges for Electric Service

Case No. ER-2010-0356

Direct Testimony of Michael Gorman

1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

- 2 A Michael Gorman. My business address is 16690 Swingley Ridge Road, Suite 140,
- 3 Chesterfield, MO 63017.

4 Q WHAT IS YOUR OCCUPATION?

- 5 A I am a consultant in the field of public utility regulation and a managing principal with
- 6 the firm of Brubaker & Associates, Inc. ("BAI"), energy, economic, and regulatory 7 consultants.

8 Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

9 A This information is included in Appendix A to my testimony.

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

A I am appearing on behalf of Ag Processing, Inc., Sedalia Industrial Energy Users
 Association and the Federal Executive Agencies ("FEA") (collectively "Industrials").
 These customers purchase substantial amounts of electricity from KCP&L Greater

Missouri Operations Company ("KCPL-GMO") and the outcome of this proceeding will
 have an impact on their cost of electricity.

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

- A The purpose of my testimony is to recommend an overall rate of return, and a fair
 return on common equity for KCPL-GMO in this proceeding.
- 6

<u>I. SUMMARY</u>

7 Q PLEASE SUMMARIZE YOUR RATE OF RETURN RECOMMENDATIONS.

- 8 A I recommend the Missouri Public Service Commission ("Commission") award
 9 KCPL-GMO a return on common equity of 9.50%.
- 10 My recommended return on equity for KCPL-GMO is based on a constant 11 growth Discounted Cash Flow ("DCF") model, a sustainable growth DCF model, a 12 multi-stage growth DCF model, a Risk Premium ("RP") analysis, and a Capital Asset 13 Pricing Model ("CAPM") analysis. These analyses estimate a fair return on equity 14 based on observable market information for a group of publicly traded electric utility 15 companies that approximate KCPL-GMO's investment risk.
- I also show that my proposed return on equity provides KCPL-GMO an
 opportunity to achieve cash flow credit metrics that will support an investment grade
 bond rating and KCPL-GMO's financial integrity.
- As set forth on Schedule MPG-1, I recommend an overall rate of return of
 8.30% be used to set KCPL-GMO's rates in this proceeding.

1 Q IS YOUR RECOMMENDED RETURN ON EQUITY FOR KCPL-GMO THE SAME AS

2 YOUR RETURN ON EQUITY FOR KCPL THAT YOU FILED A WEEK AGO?

3 А My return on equity recommendation for KCPL-GMO reflects updated No. 4 information. The updated information reflects a continued decline in capital market 5 costs. Hence, while KCPL and KCPL-GMO have comparable risk, largely because 6 KCPL-GMO has credit support from its parent company, the return on equity 7 estimates for KCPL-GMO are slightly lower than previously estimated for KCPL. 8 Specifically, DCF return estimates have declined, and projected Treasury bond yields 9 are about 20 basis points lower. For these reasons, the updated study for 10 KCPL-GMO is approximately 15 basis points lower, at 9.50%, relative to the 9.65% 11 I previously estimated for KCPL.

12 Q WHY DO YOU BELIEVE THAT GREAT PLAINS ENERGY HAS PROVIDED

13 CREDIT SUPPORT FOR KCPL-GMO?

- 14 A This is specifically noted by Moody's in its credit review of Great Plains Energy.
- 15 Moody's states as follows:

16 Rating Rationale

- 17 As a holding company, Great Plains' Baa3 senior unsecured rating is based on the cash flows derived from its two main electric utility 18 19 operating subsidiaries. Previously, a modest amount of debt at Great 20 Plains was supported by a solid level of cash flows derived from its 21 regulated utility operations at KCPL; however, with the Aquilla [sic] 22 acquisition in 2008. Great Plains extended a financial guarantee to the 23 surviving obligations at GMO (now approximately \$1.3 billion) resulting 24 in a material increase in overall leverage from previous historical 25 levels.
- 26On a consolidated basis, Moody's believes that Great Plains' regulated27utility operations in Missouri and Kansas should continue to provide a28solid platform for cash flows despite the more leveraged stand-alone29capital structure at GMO versus KCPL on a stand-alone basis. The30rating also reflects the reduced financial flexibility owing to the current

- 1large capital program at KCPL and GMO to construct the latan 22generating facility, now nearing completion.1
- As noted, KCPL-GMO's credit is tied to the credit standing of Great Plains Energy and its affiliate companies including KCPL. Hence, I generally review KCPL-GMO's investment risk as comparable to that of its parent company, and its sister affiliate utility KCPL.
- Q DOES YOUR RECOMMENDED RETURN ON EQUITY FAIRLY COMPENSATE
 KCPL-GMO'S INVESTORS AND MAINTAIN ITS FINANCIAL INTEGRITY BASED
 ON CURRENT CAPITAL MARKET COSTS?
- 10 А Yes. While my return on equity represents a reduction to previous authorized returns 11 on equity for KCPL-GMO, it reflects the current very low cost capital market 12 environment for low-risk regulated utility companies. Further, my recommended 13 return on equity and KCPL-GMO's current proposed capital structure will produce 14 credit metrics that will support its investment grade bond rating. Therefore, this return 15 on equity represents fair compensation, will maintain KCPL-GMO's financial integrity, and recognizes the very low capital market costs that exist for utility companies in this 16 17 marketplace.

18 Q HOW IS YOUR TESTIMONY ORGANIZED?

- 19 A My testimony is organized as follows:
- 20 1. I will review the current electric utility industry market outlook;
- 2. I will review KCPL-GMO's current investment risk and credit standing;
- 3. I will review KCPL-GMO's proposed capital structure used to set rates in this proceeding;

¹Moody's Investors Service *Global Credit Research*: "Credit Opinion: Great Plains Energy Incorporated," March 17, 2010.

- 1 4. I will estimate a fair return on equity for KCPL-GMO; and
 - I will verify that my proposed rate of return will support KCPL-GMO's financial integrity and credit rating.
- 4

2

3

II. ELECTRIC UTILITY INDUSTRY MARKET OUTLOOK

5 Q PLEASE DESCRIBE THIS SECTION OF YOUR TESTIMONY.

A I review the credit rating and investment return performance of the electric utility
industry. Based on the assessments described below, I find the credit rating outlook
of the industry to be strong and supportive of the industry's financial integrity.
Further, electric utilities' stocks have exhibited strong return performance and are
characterized as a safe investment.

11 Q PLEASE DESCRIBE THE ELECTRIC UTILITIES' CREDIT RATING OUTLOOK.

12 A Electric utilities' credit rating outlook is improving over the recent past. Standard &

13 Poor's ("S&P") recently provided an assessment of the credit rating of U.S. electric

- 14 utilities for the second quarter of 2010. S&P's commentary included the following:
- 15The past three months witnessed several outlook changes, most of16which were positive or revisions to stable from negative. The principal17drivers for the positive outlooks were constructive rate decisions,18overall improving business risk profiles, and stronger measures of19bondholder protection.
- 20 * * *
- 21 The universe of U.S. electric utilities is relatively highly rated, certainly compared with the average 'B' category for U.S. industrial companies. 22 23 This is due to the large percentage of firms carrying 'excellent' (84%) 24 and 'strong' (13%) business risk profiles. ... What typically distinguishes one utility's business profile score from another is the quality of the 25 26 regulatory climate and management's commitment to credit quality and 27 financial policies. We consider the financial risk profile for most electric 28 companies to be 'aggressive' ...
- 29The ratings distribution for electric utilities in the U.S. remains solidly30entrenched in investment grade. Approximately 67% of the industry

1 2 3 4 5 6 7	carries a 'BBB' category corporate credit rating ('BBB+', 'BBB', and 'BBB-'), nearly 29% 'A-'and above, and about 4% below investment grade ('BB+' and below). Some 86% of all domestic electric utility companies carry a stable outlook, so the number of rating changes is expected to remain moderate in the near to intermediate term. <u>Ratings stability for the electric sector continues to be based in large part on the following expectations:</u>
8 9 10 11 12 13 14 15	 <u>Generally responsive rate orders, including mechanisms or automatic provisions that allow that for the timely recovery of commodity prices, environmental compliance costs, and other expenses;</u> <u>Receptive capital markets, access to liquidity, and manageable debt maturity schedules;</u> <u>Moderation in growth and expansion capital expenditures; and</u> <u>Credit-supportive actions by utility management</u>.²
16	From an economic standpoint, S&P stated the following:
17	Effects On Ratings
18 19 20 21 22 23 24 25 26 27	<u>Regulated electric utilities have been, and are expected to continue, weathering the difficult economy with little lasting effect on the collective financial risk profile of the industry, and we assess ratings and outlooks based on our stable view of industry and company-specific factors</u> . Outlooks and ratings should remain predominantly unchanged, even if industry conditions worsen in the near term, as described in our pessimistic scenario (see table 1). However, if lack of economic growth persists for an extended period, regulatory risk could rise if concerns about the plight of ratepayers leads to resistance to rate increases.
28	* * *
29	Solid Industry Fundamentals Support Stable Outlook
30 31 32 33 34 35 36 37 38 39	Throughout 2009, U.S. electric utilities performed well with continued favorable access to capital compared to most corporate issuers. Despite difficult market conditions last year, external financing activity for the U.S. regulated electric utility industry was about \$49.8 billion, roughly matching 2008 activity. Many companies have proactively re-financed issuance well in advance of their debt maturities, taking advantage of investor appetite and favorable spreads. Investor appetite for first-mortgage bonds remained healthy, and deals remained oversubscribed. Credit fundamentals indicate that most, if not all, electric utilities should continue to have ample access to capital

²Standard & 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 markets and credit. Banking syndicates are also expressing 2 willingness to renegotiate credit facilities, although at more demanding 3 terms than in the previous years.³
- 4 Moody's also acknowledges the following for the electric utility industry in its report:

5 Overview

- 6 The fundamental credit outlook for the U.S. investor-owned electric 7 utility sector remains stable, thanks to a supportive regulatory 8 framework that provides good transparency into operating cost and capital investment recovery; adequate liquidity profiles; relatively 9 10 unfettered access to the capital markets; and reasonably stable 11 financial credit metrics. The investor-owned utility business model 12 remains well positioned within its investment-grade rating category for 2010 and at least the first half of 2011.⁴ 13
- 14 Similarly, Fitch states:

- 16 The U.S. Utilities, Power, and Gas (UPG) sector 2010 outlook is 17 framed in the context of Fitch Ratings' outlook for a slow U.S. 18 economic recovery in 2010, with stable outlooks for most of the 19 business segments within the UPG universe except for negative 2010 20 credit outlook for competitive generators and retail propane 21 distributors.
- 22 * * *
- 23 Resilient Performance in 2009
- Companies in the UPG sector weathered the recession and financial crisis of 2008–2009 with considerably less pain than sectors such as financial institutions, cyclical industrials, and retailers. The absence of significant defaults in the sector is in stark contrast to the upswing in defaults and bankruptcy filings across the rest of the U.S. economy, consistent with the defensive reputation of the sector.
- 30In general, companies in the UPG sector entered 2009 in reasonably31sound financial condition; some drew down their bank credit facilities32during the banking crisis in late 2008 and repaid the loans as the bank33and financial markets stabilized during 2009.5

¹⁵ Overview

³Standard & 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).

⁴Moody's Investors Service Industry Outlook: "U.S. Electric Utilities Face Challenges Beyond Near-Term," January 2010 (emphasis added).

⁵Fitch Ratings: "U.S. Utilities, Power and Gas 2010 Outlook," December 4, 2009.

As noted in the commentary by S&P, Moody's and Fitch above, the regulated electric utility industry is maintaining strong investment grade credit and is well positioned to weather the recent economic downturn. Therefore, reasonable and rational adjustments to KCPL-GMO's rates would be appropriate to provide fair compensation, but not excessive compensation. Designing rates to achieve this objective will support KCPL-GMO's competitive position and investment grade credit quality.

8 Q PLEASE DESCRIBE ELECTRIC UTILITY STOCK PRICE PERFORMANCE OVER 9 THE LAST FIVE YEARS.

A 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
 (2004-3rd Quarter 2010).

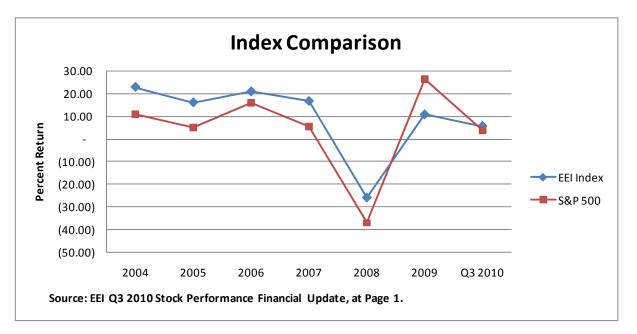


FIGURE 1

Michael Gorman Page 8

- 1 During 2009, the EEI Index trailed the market, but has outperformed the market
- 2 during the first nine months of 2010. The EEI states the following:

3 Given the explosive market rally that began in March, the EEI Index's 4 underperformance of the major averages is not surprising. Defensive 5 stocks typically lag early in market rebounds coming out of recessions, 6 and the EEI Index surpassed broad market returns in each year from 7 2004 through 2008. Five years is a long stretch of outperformance for 8 any industry but especially so for the traditionally staid and 9 conservative utilities, who spent much of the middle years of the past 10 decade rebuilding balance sheets and refocusing business strategies 11 on basic regulated distribution and generation after the turbulence and missteps into non-core businesses that followed deregulation in the 12 13 late 1990s.

14 Utilities a Winner for the Decade

15 Indeed, the industry's return to its roots in the traditional power business proved a winning strategy for long-term growth of 16 17 shareholder value during the decade that just ended. From January 1, 2000 through December 31, 2009, the EEI Index returned 134%, 18 19 substantially outperforming the Dow Jones Industrials 14% return, the 20 S&P 500's -9% return, and the Nasdaq's 44% decline. The tech-heavy Nasdaq never fully retraced the ground lost after the tech 21 22 bubble collapsed in 2001, and the S&P 500 was also heavily weighted 23 with technology at the decade's start, which accounts in part for its 24 negative showing. The financial crisis and "Great Recession" (the 25 popular label for our current economic malaise) capped the ten-year 26 stretch, producing severe losses in financial stocks and a new round of 27 weakness for the Nasdaq. All in all, conservative, plodding utilities were the tortoise that outran the hare, demonstrating that sound 28 29 regulation, financial stability, operational and service excellence and 30 good investment returns can all coexist, and in fact be mutually 31 reinforcing.

32

34

35

36 37

38

39 40

33 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.⁶

⁶EEI Q4 2009 Financial Update (emphasis added).

1		III. KCPL-GMO'S INVESTMENT RISK			
2	Q	PLEASE PROVIDE A BRIEF OVERVIEW OF KCPL-GMO AND ITS INVESTMENT			
3		CHARACTERISTICS.			
4	А	KCPL-GMO's current corporate credit rating from S&P is "BBB."			
5		Concerning KCPL-GMO, S&P states the following:			
6 7 8 9 10 11		The rating on KCP&L Greater Missouri Operations Co. (GMO) reflects Great Plains Energy Inc.'s consolidated credit profile. The ratings also reflect the company's excellent business risk profile and aggressive financial risk profile. Great Plains' subsidiaries include Kansas City Power and Light Co. (KCP&L) and GMO. ⁷			
12		Moody's states the following:			
13 14 15 16 17 18 19 20 21 22		Moody's Investors Service today downgraded the senior unsecured rating of Kansas City Power and Light (KCPL) one notch to Baa2 from Baa1, and affirmed KCPL's A3 senior secured rating, and Prime -2 short-term commercial paper rating. At the same time Moody's affirmed KCPL's parent, Great Plains Energy Incorporated (Great Plains) at Baa3 senior unsecured, and its operating subsidiary, KCPL Greater Missouri Operations (GMO) at Baa3 senior unsecured. The rating outlooks at Great Plains, KCPL, and GMO were all changed to stable from negative.			
23 24 25 26 27 28 29 30 31 32		KCPL's operating results in 2009 were challenged by weakness in the Missouri economy as well as atypically cool summer weather. Although there was modest improvement in credit metrics during the year we believe the credit profile of KCPL looking prospectively is more reflective of the Baa2 rating category given the challenges the company has faced in executing its two latan construction programs. The key issues in stabilizing the outlook for the ratings in our view, are related; successfully transition of latan 2 to rate base, and continued improvement in the credit metrics. ⁸			

⁷Standard & Poor's RatingsDirect on the Global Credit Portal: "Summary: KCP&L Greater Missouri Operations Co.," October 27, 2010. ⁸Moody's Investors Service *Global Credit Research*: "Rating Action: Moody's Downgrades KCPL; Affirms Ratings of Great Plains Energy and GMO; Outlook Stable," March 12, 2010.

1 IV. KCPL-GMO'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?

5 A KCPL-GMO's proposed capital structure, as supported by KCPL-GMO witness

TABLE 1 KCPL-GMO's Proposed Capital Structure (March 31, 2010)		
Description	Percent of Total Capita	
Long-Term Debt	48.69%	
Convertible Debt	4.53%	
Preferred Equity	0.62%	
	46.16%	
Common Equity	40.1070	

6 Dr. Samuel Hadaway, is shown below in Table 1.

7 Q DO YOU TAKE ANY ISSUES WITH KCPL-GMO'S PROPOSED CAPITAL 8 STRUCTURE?

- 9 A Not as proposed in KCPL-GMO's direct filing. However, I may propose adjustments
- 10 to KCPL-GMO's proposed true-up capital structure if the component weights and/or
- 11 costs differ from those currently proposed.

V. RETURN ON COMMON EQUITY

2 Q PLEASE DESCRIBE WHAT IS MEANT BY A "UTILITY'S COST OF COMMON 3 EQUITY."

A A utility's cost of common equity is the return investors expect, or require, in order to
make an investment in the utility. Investors expect to achieve their return requirement
from 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
 10 framed by two decisions of the U.S. Supreme Court: <u>Bluefield Water Works &</u>
 11 <u>Improvement Co. v. Public Serv. Commission of West Virginia</u>, 262 U.S. 679 (1923)
 12 and <u>Federal Power Commission v. Hope Natural Gas Co.</u>, 320 U.S. 591 (1944).
- These decisions identify the general standards to be considered in establishing the cost of common equity for a public utility. Those general standards 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

19

Q

1

OF COMMON EQUITY FOR KCPL-GMO.

A I have used several models based on financial theory to estimate KCPL-GMO's cost
of common equity. These models are: (1) a constant growth Discounted Cash Flow
("DCF") model; (2) a sustainable growth DCF model; (3) a multi-stage growth DCF
model; (4) a Risk Premium ("RP") analysis; and (5) a Capital Asset Pricing Model

PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE THE COST

("CAPM"). I have applied these models to a group of publicly traded utilities that I
 have determined reflect investment risk similar to KCPL-GMO.

3 Q HOW DID YOU SELECT A PROXY GROUP OF UTILITIES SIMILAR IN 4 INVESTMENT RISK TO KCPL-GMO TO ESTIMATE ITS CURRENT MARKET 5 COST OF EQUITY?

A I relied on the same proxy group used by KCPL-GMO witness Dr. Hadaway to
7 estimate KCPL-GMO's return on equity.

8 Q HOW DOES THIS PROXY GROUP'S INVESTMENT RISK COMPARE TO THE 9 INVESTMENT RISK OF KCPL-GMO?

10 A The proxy group is shown in Schedule MPG-2. This proxy group has an average 11 corporate credit rating from S&P of "BBB+," which is comparable to KCPL-GMO's 12 corporate credit rating from S&P of "BBB." The proxy group's corporate credit rating 13 from Moody's is "Baa2." Therefore, these ratings confirm that my proxy group has 14 comparable total investment risk to KCPL-GMO.

The proxy group has an average common equity ratio of 46.5% (including short-term debt) from AUS and 47.8% (excluding short-term debt) from *Value Line* in 2009. This proxy group's common equity ratio is comparable to KCPL-GMO's proposed common equity ratio of 46.2%. A comparable common equity ratio demonstrates that KCPL-GMO's financial risks are comparable to my proxy group. I also compared KCPL-GMO's business risk to the business risk of my proxy
 group based on S&P's ranking methodology. KCPL-GMO has a business risk profile
 of "Excellent," which is identical to the risk profile of my proxy group.⁹

4 Q IN YOUR PROXY GROUP, THE GROUP AVERAGE S&P BOND RATING IS ONE 5 NOTCH STRONGER THAN KCPL-GMO'S. WOULD THIS CREDIT RATING 6 DIFFERENTIAL REQUIRE A HIGHER RETURN ON EQUITY FOR KCPL-GMO 7 THAN THE PROXY GROUP?

No. This one notch credit rating by itself would suggest KCPL-GMO was slightly 8 А 9 higher risk than the proxy group. However, all other factors suggest the proxy group 10 is a reasonable risk proxy. For the S&P bond rating, there are many companies 11 included in the proxy group that have the same or lower credit rating than that of 12 KCPL-GMO from S&P. Again, since the proxy group average is nearly identical to 13 that of KCPL-GMO (only a one notch differential), I believe these bond ratings are 14 reasonably comparable, and would not justify an increase in the authorized return on 15 equity for KCPL-GMO based on S&P's bond rating alone. Further, the common 16 equity ratio of the proxy group is nearly identical to that of KCPL-GMO. While the 17 proxy group's common equity ratio is slightly higher, Great Plains Energy's 18 consolidated capital structure common equity ratio does not reflect its issuance of 19 \$280 million of equity convertible debt securities. These convertible debt securities 20 can be executed in calendar year 2012 and at that point would eliminate the debt-like 21 characteristics of these debt securities. As such, KCPL-GMO's capital structure is

⁹Standard & Poor's business risk methodology ranks a corporate entity's operating risk based on a scale of "Excellent" (lowest risk) to "Vulnerable" (highest risk). S&P has a six-tiered scale with "Excellent" the highest, "Vulnerable" the weakest, and most utilities falling into the highest business risk profile score (indicating lowest business risk) of "Excellent" and "Strong." (Standard & Poor's RatingsDirect Credit Criteria Methodology: "Business Risk/Financial Risk Matrix Expanded," May 27, 2009).

1 already structured in order to allow for an increase in common equity ratio within the 2 next couple of years. Further, KCPL-GMO has an "Excellent" business profile score, 3 which suggests that its operating risk is lower than that of all the other proxy group 4 companies that have a business risk position ranking of "Strong." Approximately 7 of the 31 companies have greater business risk than that of KCPL-GMO. For all these 5 6 reasons, taking all the risk factors as a whole, I believe clearly proves that KCPL-7 GMO's investment risk is reasonably comparable to that of the proxy group, and no 8 return on equity adjustment to that estimated for the proxy group would be necessary 9 in order to provide fair compensation for KCPL-GMO's investment risk.

10 A. Discounted Cash Flow Model

11 Q PLEASE DESCRIBE THE DCF MODEL.

12 A The DCF model posits that a stock price is valued by summing the present value of 13 expected future cash flows discounted at the investor's required rate of return or cost 14 of capital. This model is expressed mathematically as follows:

- 15 $P_0 = \frac{D_1}{(1+K)^1} + \frac{D_2}{(1+K)^\infty}$ where (Equation 1) 16 $(1+K)^1 + (1+K)^2 + (1+K)^\infty$
- 17 P_0 = Current stock price
- 18 D = Dividends in periods 1∞
- 19 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:

1	$K = D_1/P_0 + G$	(Equation 2)
2		
3	K = Investor's required return	
4	D ₁ = Dividend in first year	
5	P_0 = Current stock price	
6	G = Expected constant dividend growth rate	

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

8 Q WILL YOU INCLUDE A QUARTERLY COMPOUNDING ADJUSTMENT TO YOUR

9 DCF RETURN ESTIMATE?

10 A No. Including the quarterly compounding adjustment to KCPL-GMO's authorized 11 return on equity is inappropriate. If a quarterly compounding adjustment is added to a 12 DCF return estimate, shareholders will be permitted to earn the dividend reinvestment 13 return twice: (1) through the higher authorized return on equity, and (2) through 14 actual receipt of dividends and the reinvestment of those dividends throughout the 15 year. This double counting of the dividend reinvestment return is not reasonable, and 16 will unjustly inflate KCPL-GMO's rates.

17 Q PLEASE EXPLAIN WHY THE QUARTERLY COMPOUNDING RETURN SHOULD

18 NOT BE INCLUDED IN KCPL-GMO'S AUTHORIZED RETURN ON EQUITY.

- A Simply put, the quarterly compounding component of the return is not a cost to the
 utility. Only the utility's cost of common equity capital should be included in the
 authorized return on equity.
- This issue surrounds whether or not the DCF return estimate should include the expectations by investors that they will receive cash flows within the year, that can be reinvested in other investments of comparable risk, and thus the cash flows will produce compounded returns throughout the year. The relevant issue for setting rates is whether or not that reinvestment return is a cost to the utility. It is not!

1 The reinvestment return is not a cost to the utility and therefore should not be 2 included in the authorized return on equity. While it is reasonable for investors to 3 expect to have the opportunity to earn the compounded return produced by cash 4 flows received within the year, the compound return is not paid to investors by the 5 utility.

Q CAN YOU PROVIDE AN EXAMPLE OF WHY THE COMPOUNDING RETURN 7 ESTIMATE IS NOT A COST TO THE UTILITY?

8 А Yes. I will provide two examples to help illustrate this point. First, consider the cost 9 to the utility of an outstanding utility bond. Most utility bonds pay a coupon every six 10 months. The utility annual cost paid to the bond investor is the sum of the two 11 semi-annual coupon payments. A bond investor expects to receive the semi-annual 12 coupon payments from the utility, but also has an opportunity to reinvest the first 13 coupon payment for the remaining six months of the year to enhance his end-of-year This compound return component is, however, not a cost to the utility 14 return. 15 because the utility does not pay the extra return.

16 For example, assume KCPL-GMO has an outstanding bond with a face value 17 of \$1,000, at an interest rate of 6% which is paid in two semi-annual \$30 coupon payments. KCPL-GMO's cost of this bond is 6%. This 6% cost to KCPL-GMO is 18 19 based on a \$30 coupon payment paid in month 6 and month 12 for an annual 20 payment of \$60 relative to the \$1,000 face value of the bond. However, the bond 21 investor would have an annual expected return on this bond of 6.1%. This annual 22 expected return would be realized by receiving the first \$30 semi-annual coupon 23 payment from KCPL-GMO and reinvesting it for the remaining six months of the year. This would produce \$0.89 of semi-annual compounding return ($30 \times [(1.06)^{\frac{1}{2}} - 1]$). 24

Hence, the bond investor would receive \$60 from KCPL-GMO, and \$0.89 from
 investing the first coupon for a total annual return of 6.09%, or 6.1%.

Importantly, if KCPL-GMO were to recover a 6.1% cost of this bond in its cost
of service, and paid that return out to the bond investor, then the bond investor would
receive \$60.89 from KCPL-GMO, rather than the \$60.00 actual cost, but the bond
investor could still reinvest the semi-annual coupon, now \$30.89 for the remaining
six months of the year. This would provide the investor with the reinvestment return
twice, once from utility ratepayers, and a second time after the semi-annual coupon
payment was paid and reinvested.

10 Reflecting this compounding assumption in the authorized return on equity
 11 therefore will double count the reinvestment return opportunity.

12 Q DOES THIS EXAMPLE ALSO APPLY TO UTILITY STOCK INVESTMENTS?

13 А Yes. Assume now that an investor purchased KCPL-GMO stock for \$100, and 14 expects to receive four quarterly dividends of \$1.50, or \$6.00 per year. The expected 15 cost to the utility of this dividend payment over the year would be \$6.00, or 6.0%. 16 However, the expected effective yield of the dividend to investors would be 6.13% 17 because the quarterly dividends could be reinvested for the remaining term of the 18 year. Hence, the expected end-of-year value of those four \$1.50 guarterly dividend payments to the investor would be \$6.13.¹⁰ Again, the utility pays \$6.00 of annual 19 20 dividends. The \$0.13 is not paid to investors from the utility, but is rather earned in 21 the other investments that earn the same return, which the dividends were invested in 22 throughout the year.

 $^{10}1.5 \ge (1.06)^{.75} + 1.5 \ge (1.06)^{.5} + 1.5 \ge (1.06)^{.25} + 1.5 = (1.06)^{.25} + 1.5$

1 Importantly, the reinvestment return of the dividends is not paid by the utility, 2 and therefore is not part of the utility's cost of capital. Again, if this dividend 3 reinvestment return is included in the utility's authorized return on equity, then 4 investors will receive the dividend reinvestment return twice, once through the 5 authorized return on equity, and a second time when dividends are actually received 6 by investors and reinvested.

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

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

10 Q WHAT STOCK PRICE AND DIVIDEND HAVE YOU RELIED ON IN YOUR 11 CONSTANT GROWTH DCF MODEL?

A I relied on the average of the weekly high and low stock prices over a 13-week period
 ended November 5, 2010. An average stock price is less susceptible to market price
 variations than a spot price. Therefore, an average stock price is less susceptible to
 aberrant market price movements, which may not be reflective of the stock's
 long-term value.

A 13-week average stock price is still short enough to contain data that reasonably reflect current market expectations, but is not so short a period as to be susceptible to market price variations that may not be reflective of the security's long-term value. In my judgment, a 13-week average stock price is a reasonable balance between the need to reflect current market expectations and the need to capture sufficient data to smooth out aberrant market movements. I used the most recently paid quarterly dividend, as reported in *The Value Line Investment Survey*. This dividend was annualized (multiplied by 4) and adjusted for
 next year's growth to produce the D₁ factor for use in Equation 2 above.

4 Q WHAT DIVIDEND GROWTH RATES HAVE YOU USED IN YOUR CONSTANT 5 GROWTH DCF MODEL?

6 A There are several methods one can use in order to estimate the expected growth in 7 dividends. However, for purposes of determining the market required return on 8 common equity, one must attempt to estimate investors' consensus about what the 9 dividend or earnings growth rate will be, and not what an individual investor or analyst 10 may use to form individual investment decisions.

Security analysts' growth estimates have been shown to be more accurate predictors of future returns than growth rates derived from historical data because they are more reliable estimates.¹¹ 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 November 10, 2010, as reported online.

¹¹See, e.g., David Gordon, Myron Gordon, and Lawrence Gould, "Choice Among Methods of Estimating Share Yield," *The Journal of Portfolio Management*, Spring 1989.

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.

Q ARE ANALYSTS' GROWTH RATE PROJECTIONS INTENDED TO REPRESENT 9 LONG-TERM SUSTAINABLE GROWTH FOR THE UNDERLYING SECURITY?

10 А No. Analyst growth rate projections are intended to represent a period of three to five 11 years. These growth rates reflect the analysts' assessments of the growth outlooks for these companies during this time period. This is significant, because the constant 12 13 growth DCF model requires a growth rate that can be sustained over a long-term 14 indefinite period. Since analysts' three- to five-year growth rate estimates may or 15 may not be reasonable estimates of long-term sustainable growth, I will test the 16 reasonableness of assuming these growth rate outlooks can be sustained over the 17 long-term period later in this testimony.

18 Q WHAT ARE THE GROWTH RATES YOU USED IN YOUR CONSTANT GROWTH 19 DCF MODEL?

A The growth rates I used in my DCF analysis are shown in Schedule MPG-3. The average and median growth rates for my proxy group are 5.63% and 5.41%, respectively. 1

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

A As shown in Schedule MPG-4, the average and median constant growth DCF returns
for the proxy group are 10.40% and 10.33%, respectively.

DO YOU HAVE ANY COMMENTS CONCERNING THE RESULTS OF YOUR

4

5

Q

-

CONSTANT GROWTH DCF ANALYSIS?

A Yes. The three- to five-year growth rate exceeds a sustainable long-term growth rate,
which is a required input for 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 A The three- to five-year growth rate of the proxy group (5.63%) exceeds the growth 11 rate of the overall U.S. economy. As developed below, the consensus of published 12 economists projects that the U.S. Gross Domestic Product ("GDP") will grow at a rate 13 of no more than 4.8% and 4.7% over the next 5 and 10 years, respectively. A 14 company cannot grow, indefinitely, at a faster rate than the market in which it sells its 15 products. The U.S. economy, or GDP, growth projection represents a ceiling, or 16 high-end, 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 A 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 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 Schedule 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.

8 Q IS THERE RESEARCH THAT SUPPORTS YOUR POSITION THAT, OVER THE

9 LONG TERM, A COMPANY'S EARNINGS AND DIVIDENDS CANNOT GROW AT

10 A RATE GREATER THAN THE GROWTH OF THE U.S. GDP?

- 11 A Yes. This position is supported in both published analyst literature and academic
- 12 work. Specifically, in a textbook entitled "Fundamentals of Financial Management,"
- 13 published by Eugene Brigham and Joel F. Houston, the authors state as follows:
- 14The constant growth model is most appropriate for mature companies15with a stable history of growth and stable future expectations.16Expected growth rates vary somewhat among companies, but17dividends for mature firms are often expected to grow in the future at18about the same rate as nominal gross domestic product (real GDP19plus inflation).12
- 20 Also, Morningstar's Stocks, Bonds, Bills and Inflation 2009 Yearbook
- 21 Valuation Edition tracked dividends of the stock market in comparison to GDP growth
- 22 over the period 1926 through the end of 2008.¹³ Based on that study, the authors
- 23 found that earnings and dividends for the market have historically grown in tandem
- 24 with the overall economy. It is important to note that the growth of companies
- 25 included in the overall market will normally be higher than that of utility companies.

¹²"Fundamentals of Financial Management," Eugene F. Brigham and Joel F. Houston, Eleventh Edition 2007, Thomson South-Western, a Division of Thomson Corporation at 298.

¹³Stocks, Bonds, Bills and Inflation 2009 Yearbook Valuation Edition (Morningstar, Inc.) at 67.

1 These non-utility companies achieve a higher level of growth because they retain a 2 larger percentage of their earnings and pay out a much smaller percentage of their 3 earnings as dividends. Retaining higher percentages of total earnings fuels stronger 4 growth for these non-utility companies. Since the market in general grows at the 5 overall GDP growth rate, it is very conservative to assume that utility companies could 6 achieve this same level of sustained growth without a material reduction in their 7 dividend payout ratios. As such, using the GDP as a maximum sustainable growth 8 rate is a very conservative and high-end estimate for utility companies.

9 Q HAVE ANALYSTS RECOGNIZED THAT SHORT-TERM GROWTH OUTLOOKS

10 WILL SLOW OVER TIME?

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

13 Dividends have been increasing at a rapid pace since 2002, reflecting 14 relatively healthy balance sheets throughout the industry. In fact, last 15 year 61% of electric utilities raised their dividend, 33% reported no change, 2% reinstated theirs, 2% lowered them, and only 2% are not 16 17 paying them at all. In any industry these statistics would be viewed as 18 quite favorable. But, 2008 actually marked the slowing of a trend for the electric utility industry, in which the percentage of dividend 19 20 increases declined. The reversal is attributable to deteriorating 21 economic conditions, elevated capital spending, and higher debt-to-22 capitalization ratios. Despite this, many utilities are still sporting 23 attractive yields.¹⁴

¹⁴*Value Line Investment Survey*, May 29, 2009 (emphasis added).

1 B. Sustainable Growth DCF

2 Q PLEASE DESCRIBE HOW YOU ESTIMATE A SUSTAINABLE LONG-TERM 3 GROWTH RATE FOR YOUR SUSTAINABLE GROWTH DCF MODEL.

A 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
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.

9 The internal growth methodology is tied to the percentage of earnings retained 10 in the company and not paid out as dividends. The earnings retention ratio is 1 minus 11 the dividend payout ratio. As the payout ratio declines, the earnings retention ratio 12 increases. An increased earnings retention ratio will fuel stronger growth because 13 the business funds more investments with retained earnings. As shown in Schedule 14 MPG-6, Value Line projects the proxy group to have a declining dividend payout ratio 15 over the next three to five years. These dividend payout ratios and earnings retention 16 ratios can then be used to develop a sustainable long-term earnings retention growth 17 rate to help gauge whether analysts' current three- to five-year growth rate 18 projections can be sustained over an indefinite period of time.

19 The data used to estimate the long-term sustainable growth rate is based on 20 the Company's current market to book ratio, and *Value Line's* three-to-five year 21 projections per earnings, dividends, earned return on book equity, and projected 22 stock issuances.

As shown in Schedule MPG-7, page 1 of 2, the average and median sustainable growth rates for the proxy group using this internal growth rate model are 4.89% and 4.61%, respectively.

1QWHAT IS THE CONSTANT GROWTH DCF ESTIMATE USING THIS2SUSTAINABLE LONG-TERM GROWTH RATE?

A DCF estimate based on this sustainable growth rate is developed in Schedule
 MPG-8. As shown there, a sustainable growth DCF analysis produces group average
 and median DCF results of 9.68% and 9.33%, respectively.

6 The average result is skewed due to a significant outlier – DPL, Inc., which 7 produces a return on equity of 19.96%. Excluding DPL, Inc., the proxy group's 8 average DCF would be 9.34%. Therefore, I conclude that the median result of 9.33% 9 better represents the central tendency of my proxy group. Hence, I will rely on the 10 median DCF result.

11 The sustainable growth DCF result is based on the dividend and price data 12 used in my constant growth DCF study (using analyst growth rates) and the 13 sustainable growth rate discussed above and developed in Schedule MPG-7.

14

C. Multi-Stage Growth DCF Model

15 Q HAVE YOU CONDUCTED ANY OTHER DCF STUDIES?

A 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.

1 Q PLEASE DESCRIBE YOUR MULTI-STAGE GROWTH DCF MODEL.

A 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.

7 For the short-term growth period, I relied on the consensus analysts' growth 8 projections described above in relationship to my constant growth DCF model. For 9 the transition period, the growth rates were reduced or increased by an equal annual 10 factor, that transitioned the analysts' growth rates up/down to a long-term sustainable 11 growth (GDP growth) rate by the start of the sustainable growth period (year 11). For 12 the long-term growth period, I assumed each company's growth would converge to 13 the maximum sustainable growth rate for a utility company as proxied by the 14 consensus analysts' projected growth for the U.S. GDP of 4.75%.

15 Q WHAT DO YOU BELIEVE IS A REASONABLE SUSTAINABLE LONG-TERM 16 GROWTH RATE?

A reasonable growth rate that can be sustained in the long run should be based on
 consensus analysts' projections. *Blue Chip Economic Indicators* publishes
 consensus GDP growth projections twice a year. Based on its latest issue, the
 consensus economists' published GDP growth rate outlook is 4.8% over the next
 5 years, and 4.7% over the next 6-10 years.¹⁵

I propose to use 4.75%, the average of the consensus economists' projected 5-year and 10-year GDP consensus growth rates of 4.7% and 4.8%, respectively, as

¹⁵Blue Chip Economic Indicators, October 10, 2010 at 15.

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.

4

5

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

A I relied on the same 13-week stock price and the most recent quarterly dividend
payment discussed above. For stage one growth, I used the consensus analysts'
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 4.75%, the average of the consensus
economists' 5-year and 10-year projected nominal GDP growth rates.

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

A As shown in Schedule MPG-9, the average and median multi-stage growth DCF
returns on equity for the proxy group are 9.73% and 9.80%, respectively.

15 Q PLEASE SUMMARIZE THE RESULTS FROM YOUR DCF ANALYSES.

16 A The results from my DCF analyses are summarized in Table 2:

TABLE 2 Summary of DCF Results			
Description	Proxy Group		
Constant Growth DCF Model (Analysts' Growth) Constant Growth DCF Model (Sustainable Growth) Multi-Stage Growth DCF Model Average DCF Return	10.33% 9.33% <u>9.80%</u> 9.82%		

1 For reasons set forth above, I believe my constant growth DCF model based 2 on analysts' growth is inflated because short-term analyst growth rate projections are 3 not reasonable estimates of long-term sustainable growth. Therefore, the DCF model 4 based on analysts' growth rate estimates should not be used on a stand-alone basis. 5 I recommend it be averaged with my other DCF estimates to produce a very 6 conservative (i.e., favorable to KCPL-GMO), but reasonable, DCF point estimate that 7 can be used to derive KCPL-GMO's return on equity. The constant growth DCF 8 model based on the sustainable growth approach is based on a growth rate that is 9 sustainable in the long term in comparison to GDP growth, but may not reflect 10 analysts' short-term growth outlooks. The multi-stage growth DCF model return 11 reflects the expectation of changing growth rates over time. Even though I have 12 strong concerns about the accuracy of the constant growth DCF at this time, I 13 included all estimates in my DCF return of approximately 9.82%.

14 D. Risk Premium Model

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

16 A This model is based on the principle that investors require a higher return to assume 17 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 to
 bonds, 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.

6 This risk premium model is based on two estimates of an equity risk premium. 7 First, I estimated the difference between the required return on utility common equity 8 investments and U.S. Treasury bonds. The difference between the required return on 9 common equity and the Treasury bond yield is the risk premium. I estimated the risk 10 premium on an annual basis for each year over the period 1986 through September 11 2010. The common equity required returns were based on regulatory commission-12 authorized returns for electric utility companies. Authorized returns are typically 13 based on expert witnesses' estimates of the contemporary investor required return.

14 The second equity risk premium method is based on the difference between 15 regulatory commission-authorized returns on common equity and contemporary 16 "A" rated utility bond yields. This time period was selected because over the period 17 1986 through September 2010, public utility stocks have consistently traded at a 18 premium to book value. This is illustrated in Schedule MPG-10, where the market to 19 book ratio since 1986 for the electric utility industry was consistently above 1.0. Over 20 this time period, regulatory authorized returns were sufficient to support market prices 21 that at least exceeded book value. This is an indication that regulatory authorized 22 returns on common equity supported a utility's ability to issue additional common 23 stock, without diluting existing shares. It further demonstrates that utilities were able 24 to access equity markets without a detrimental impact on current shareholders.

Based on this analysis, as shown in Schedule 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.

8 As shown in Schedule MPG-12, the average indicated equity risk premium 9 over contemporary Moody's utility bond yields was 3.75% over the period 1986 10 through September 2010. The indicated equity risk premium estimates based on this 11 analysis primarily fall in the range of 3.03% to 4.59% over this time period.

12QDO YOU BELIEVE THAT THESE EQUITY RISK PREMIUM ESTIMATES ARE13BASED ON A TIME PERIOD THAT IS TOO LONG OR TOO SHORT TO DRAW14ACCURATE RESULTS CONCERNING CONTEMPORARY MARKET15CONDITIONS?

16 А No. Contemporary market conditions can change dramatically during the period that 17 rates determined in this proceeding will be in effect. A relatively long period of time 18 where stock valuations reflect premiums to book value is an indication that the 19 authorized returns on equity and the corresponding equity risk premiums were 20 supportive of investors' return expectations and provided utilities access to the equity 21 markets under reasonable terms and conditions. Further, this time period is long 22 enough to smooth abnormal market movement that might distort equity risk 23 premiums. While market conditions and risk premiums do vary over time, this 24 historical time period is a reasonable period to estimate contemporary risk premiums.

1 The time period I use in this risk premium study is a generally accepted period to develop a risk premium study using "expectational" data. Conversely, studies have 2 3 recommended that use of "actual achieved return data" should be based on very long 4 historical time periods. The studies find that achieved returns over short time periods 5 may not reflect investors' expected returns due to unexpected and abnormal stock 6 price performance. However, these short-term abnormal actual returns would be 7 smoothed over time and the achieved actual returns over long time periods would 8 approximate investors' expected returns. Therefore, it is reasonable to assume that 9 averages of annual achieved returns over long time periods will generally converge 10 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.

13QBASED ON HISTORICAL DATA, WHAT RISK PREMIUM HAVE YOU USED TO14ESTIMATE KCPL-GMO'S COST OF EQUITY IN THIS PROCEEDING?

15 А The equity risk premium should reflect the relative market perception of risk in the 16 utility industry today. I have gauged investor perceptions of utility risk today in 17 Schedule MPG-13. On that exhibit, I show the yield spread between utility bonds and 18 Treasury bonds over the last 30 years. As shown in this exhibit, the 2008 utility bond 19 yield spreads over Treasury bonds for "A" rated and "Baa" rated utility bonds are 20 2.25% and 2.97%, respectively. The utility bond spreads over Treasury bonds for "A" 21 and "Baa" rated utility bonds for 2009 are 1.96% and 2.98%, respectively. These 22 utility bond yield spreads over Treasury bond yields are much higher than the 30-year 23 average spreads of 1.60% and 2.00%, respectively.

1 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 2 3 example, the 13-week average "A" rated utility bond yield has subsided relative to the 4 end of 2008 and 2009, down to around 5.08%. This utility bond yield, when 5 compared to the current Treasury bond yield of 3.82%, as shown in Schedule 6 MPG-14, page 1 of 3, implies a yield spread of around 1.26%, which is lower than the 7 30-year average spread for "A" utility bonds of 1.60%. The same is true for the 8 current "Baa" utility yield spread of 1.78% compared to the 30-year average of 2.00%. 9 This reduced utility bond yield spread is clear evidence that the market considers the 10 utility industry to be a relatively low risk investment in a turbulent market, and exhibits 11 that utilities continue to have strong access to capital.

12 Q HOW DID YOU ESTIMATE KCPL-GMO'S COST OF COMMON EQUITY WITH THIS 13 RISK PREMIUM MODEL?

I added a projected long-term Treasury bond yield to my estimated equity risk 14 А 15 premium over Treasury yields. The 13-week average 30-year Treasury bond yield, ending November 5, 2010 was 3.82%, as shown in Schedule MPG-14, page 1 of 3. 16 17 Blue Chip Financial Forecasts projects the 30-year Treasury bond yield to be 4.5%, and a 10-year Treasury bond yield to be 3.5%.¹⁶ Using the projected 30-year bond 18 19 yield of 4.5%, and a Treasury bond risk premium of 4.40% to 6.08%, as developed 20 above, produces an estimated common equity return in the range of 8.90% (4.50% + 21 4.40%) to 10.58% (4.50% + 6.08%), with a midpoint of 9.74%.

I next added my equity risk premium over utility bond yields to a current
13-week average yield on "Baa" rated utility bonds for the period ending November 5,

¹⁶Blue Chip Financial Forecasts, November 1, 2010 at 2.

2010 of 5.60%. Adding the utility equity risk premium of 3.03% to 4.59%, as
 developed above, to a "Baa" rated bond yield of 5.60%, produces a cost of equity in
 the range of 8.63% to 10.19%, with a midpoint of 9.41%.

4 My risk premium analyses produce a return estimate in the range of 9.41% to
5 9.74%, with a midpoint estimate of 9.58%.

6 E. Capital Asset Pricing Model

7 Q PLEASE DESCRIBE THE CAPM.

8 A The CAPM method of analysis is based upon the theory that the market required rate 9 of return for a security is equal to the risk-free rate, plus a risk premium associated 10 with the specific security. This relationship between risk and return can be expressed 11 mathematically as follows:

12 $R_i = R_f + B_i x (R_m - R_f)$ where:

13	R. =	Required return for stock i
10		
14	R _f =	Risk-free rate
15	R _m =	Expected return for the market portfolio
16	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.

7 Q PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.

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

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

A As previously noted, *Blue Chip Financial Forecasts*' projected 30-year Treasury bond
 yield is 4.5%.¹⁷ The current 30-year bond yield is 3.9%. I used *Blue Chip Financial Forecasts*' projected 30-year Treasury bond yield of 4.5% for my CAPM analysis.

WHY DID YOU USE LONG-TERM TREASURY BOND YIELDS AS AN ESTIMATE

14

15

Q

OF THE RISK-FREE RATE?

16 A Treasury securities are backed by the full faith and credit of the United States 17 government. Therefore, long-term Treasury bonds are considered to have negligible 18 credit risk. Also, long-term Treasury bonds have an investment horizon similar to that 19 of common stock. As a result, investor-anticipated long-run inflation expectations are 20 reflected in both common-stock required returns and long-term bond yields. 21 Therefore, the nominal risk-free rate (or expected inflation rate and real risk-free rate)

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

included in a long-term bond yield is a reasonable estimate of the nominal risk-free
 rate included in common stock returns.

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

9 Q WHAT BETA DID YOU USE IN YOUR ANALYSIS?

10 A As shown in Schedule MPG-15, the proxy group average *Value Line* beta estimate is
11 0.70.

12 Q HOW DID YOU DERIVE YOUR MARKET RISK PREMIUM ESTIMATE?

A 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.

21 Morningstar's *Stocks, Bonds, Bills and Inflation 2010 Yearbook* publication 22 estimates the historical arithmetic average real market return over the period 1926 to

2009 as 8.6%.¹⁸ A current consensus analysts' inflation projection, as measured by 1 the Consumer Price Index, is 2.0%.¹⁹ Using these estimates, the expected market 2 return is 10.77%.²⁰ The market premium then is the difference between the 10.77% 3 4 expected market return, and my 4.7% risk-free rate estimate, or 6.07%.

5 The historical estimate of the market risk premium was also estimated by 6 Morningstar in Stocks, Bonds, Bills and Inflation 2010 Yearbook. Over the period 7 1926 through 2009, Morningstar's study estimated that the arithmetic average of the achieved total return on the S&P 500 was 11.80%,²¹ and the total return on long-term 8 Treasury bonds was 5.8%.²² The indicated equity risk premium is 6.0% (11.80% -9 10 5.8% = 6.00%).

11 Q HOW DOES YOUR ESTIMATED MARKET RISK PREMIUM RANGE COMPARE TO 12 THAT ESTIMATED BY MORNINGSTAR?

13 Morningstar estimates a forward-looking market risk premium based on actual А 14 achieved data from the historical period of 1926 through year-end 2009. Using this 15 data, Morningstar estimates a market risk premium derived from the total return on 16 large company stocks (S&P 500), less the income return on Treasury bonds. The 17 total return includes capital appreciation, dividend or coupon reinvestment returns, 18 and annual yields received from coupons and/or dividend payments. The income 19 return, in contrast, only reflects the income return received from dividend payments or 20 coupon yields. Morningstar argues that the income return is the only true risk-free 21 rate associated with the Treasury bond and is the best approximation of a truly

¹⁸Morningstar, Inc. *Ibbotson SBBI 2010 Classic Yearbook at 82.*

¹⁹Blue Chip Financial Forecasts, November 1, 2010 at 2.

 $^{^{20}}$ { [(1 + 0.086) * (1 + 0.020)] - 1] } * 100. 21 Morningstar, Inc. *Ibbotson SBBI 2010 Classic Yearbook* at 82. ²² Id.

risk-free rate. I disagree with this assessment from Morningstar, because it does not
 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.

6 Morningstar's analysis indicates that a market risk premium falls somewhere 7 in the range of 5.2% to 6.7%. This range is based on several methodologies. First, 8 Morningstar estimates a market risk premium of 6.7% based on the difference 9 between the total market return on common stocks (S&P 500) less the income return 10 on Treasury bond investments. Second, Morningstar found that if the New York 11 Stock Exchange (the "NYSE") was used as the market index rather than the 12 S&P 500, that the market risk premium would be 6.4% and not 6.7%. Third, if only 13 the two deciles of the largest companies included in the NYSE were considered, the market risk premium would be 5.9%.²³ 14

15 Finally, Morningstar found that the 6.7% market risk premium based on the 16 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. 17 18 Morningstar believes this abnormal P/E expansion is not sustainable. Therefore, 19 Morningstar adjusted this market risk premium estimate to normalize the growth in the 20 P/E ratio to be more in line with the growth in dividends and earnings. Based on this 21 alternative methodology, Morningstar published a long-horizon supply-side market 22 risk premium of 5.2%.²⁴

²³Morningstar observes that the S&P 500 and the NYSE Decile 1-2 are both large capitalization benchmarks. Morningstar, Inc. *Ibbotson SBBI 2010 Valuation Yearbook* at 54.
²⁴*Id.* at 66.

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

3 Q WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?

4 A As shown in Schedule MPG-16, based on my low-end market risk premium of 5.2%,

5 high-end market risk premium of 6.7%, a risk-free rate of 4.5%, and a beta of 0.70,

6 my CAPM analysis produces a return in the range of 8.12% to 9.17%, with a midpoint

7 of 8.65%. For purposes of this case, I will rely on the high-end CAPM return of 9.17%

8 (rounded to 9.2%) to form my recommended return on equity.

9 F. Return on Equity Summary

10 Q BASED ON THE RESULTS OF YOUR RATE OF RETURN ON COMMON EQUITY

11 ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY DO

12 YOU RECOMMEND FOR KCPL-GMO?

A Based on my analyses, I estimate KCPL-GMO's current market cost of equity to be
9.50%.

TABLE 3						
Return on Common Equity Summary						
Description	<u>Results</u>					
DCF Risk Premium CAPM	9.82% 9.58% 9.20%					

15 My recommended return on equity range is 9.20% to 9.80%, with a midpoint 16 of 9.50%. My low end is based on my CAPM return estimate and my high end is 17 based on my DCF analysis. The midpoint is very close to my risk premium estimate.

1 G. Financial Integrity

2 Q WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT AN 3 INVESTMENT GRADE BOND RATING FOR KCPL-GMO?

4 A Yes. I have reached this conclusion by comparing the key credit rating financial
5 ratios for KCPL-GMO at its proposed capital structure and my return on equity to
6 S&P's 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 А 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 18 "Vulnerable." Most electric utilities have a business risk profile of "Excellent" or "Strona." The S&P financial risk profile categories are "Minimal," "Modest," 19 20 "Intermediate," "Significant," "Aggressive," and "Highly Leveraged." Most of the 21 electric utilities have a financial risk profile of "Significant" or "Aggressive."

KCPL-GMO has an "Excellent" business risk profile and an "Aggressive"
 financial risk profile.

1 Q PLEASE DESCRIBE S&P'S USE OF THE FINANCIAL BENCHMARK RATIOS IN 2 ITS CREDIT RATING REVIEW.

A S&P evaluates a utility's credit rating based on an assessment of its financial and
business risks. A combination of financial and business risks equates to the overall
assessment of KCPL-GMO'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.

8 S&P publishes ranges for three primary financial ratios that it uses as 9 guidance in its credit review for utility companies. The three primary financial ratio 10 benchmarks it relies on in its credit rating process include: (1) debt to EBITDA,²⁵ 11 (2) funds from operations ("FFO") to total debt, and (3) total debt to total capital.

12QHOWDIDYOUAPPLYS&P'SFINANCIALRATIOSTOTESTTHE13REASONABLENESS OF YOUR RATE OF RETURN RECOMMENDATIONS?

14 A I calculated each of S&P's financial ratios based on KCPL-GMO's cost of service for 15 retail operations. While S&P would normally look at total consolidated financial ratios 16 in its credit review process, my investigation in this proceeding is to judge the 17 reasonableness of my proposed cost of capital for rate-setting in KCPL-GMO's utility 18 operations. Hence, I am attempting to determine whether the rate of return and cash 19 flow generation opportunity reflected in my proposed utility rates for KCPL-GMO will 20 support target investment grade bond ratings and financial integrity.

BRUBAKER & ASSOCIATES, INC.

²⁵Earnings Before Interest, Taxes, Depreciation and Amortization.

1 Q DID YOU INCLUDE ANY OFF-BALANCE SHEET ("OBS") DEBT?

A Yes. As shown in Schedule MPG-17, page 4 of 4, the amount of Great Plains Energy
total Company OBS debt equivalents is \$189.9 million, as reported by S&P.
I allocated a portion of this consolidated OBS debt to KCPL-GMO using a net
production plant allocator.

Q HAS THE COMMISSION USED S&P'S PUBLISHED BENCHMARKS AS PART OF 7 ITS REGULATORY DECISION-MAKING?

A Yes. Both KCPL-GMO's and Empire District Electric Company's regulatory plans used S&P's credit metrics to target cash flow in support of their major construction efforts. These regulatory programs relied on S&P's published benchmark credit metrics to estimate the amount of regulatory amortization necessary to support adequate utility cash flow during the construction period. These credit metrics can also be used to assess the strength of the designed rates to support investment grade credit standing on regulated utility operations within the test year.

15

Q HOW DID YOU ESTIMATE KCPL-GMO'S OBS DEBT?

A The OBS debt is shown in Schedule MPG-17, page 4 of 4. KCPL-GMO ratios were based on an allocation of Great Plains Energy's total OBS debt to KCPL-GMO's retail operations in Missouri. The amount of Great Plains Energy's allocated OBS imputed debt interest and amortization expense, was based on an allocation of KCPL-GMO retail net production plant as a percentage of total Great Plains Energy net production plant. These allocations were then used to measure the credit metrics for KCPL-GMO's retail operations in Missouri. 1

2

Q PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS FOR KCPL-GMO.

A The S&P financial metric calculations for KCPL-GMO are developed on Schedule
MPG-17, page 1 of 4.

5 As shown in Schedule MPG-17, page 1 of 4, column 1, based on an equity 6 return of 9.50%, KCPL-GMO will be provided an opportunity to produce a debt to 7 EBITDA ratio of 3.4x. This is within S&P's "Significant" guideline range of 3.0x to 8 4.0x.²⁶ This ratio supports an investment grade credit rating.

9 KCPL-GMO's retail operations FFO to total debt coverage at a 9.50% equity 10 return would be 18%, which is toward the high end of the "Aggressive" metric 11 guideline range of 12% to 20%. The FFO/total debt ratio will support an investment 12 grade bond rating.

Finally, KCPL-GMO's total debt ratio to total capital is 54%. This is within the
"Aggressive" guideline range of 50% to 60%. This total debt ratio will support a utility
investment grade bond rating.

16 At my recommended return on equity and KCPL-GMO's proposed capital 17 structure, the Company's financial credit metrics are supportive of its current 18 investment grade secured utility bond rating.

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

1 Q DO YOU BELIEVE THIS CREDIT METRIC EVALUATION OF KCPL-GMO AT 2 YOUR PROPOSED RETURN ON EQUITY PROVIDES MEANINGFUL INFORMATION 3 TO THE HELP COMMISSION DETERMINE THE 4 **APPROPRIATENESS OF YOUR RECOMMENDATION?**

5 Α Yes. While S&P calculates these credit metrics based on total Company operations, 6 and not the retail operations of KCPL-GMO as I have performed in this study, my 7 review of these ratios still provides meaningful information on the proposed rate of 8 return for KCPL-GMO in this case and how it will contribute and help support 9 consolidated operations credit standing. Further, while credit rating agencies also 10 consider other financial metrics and qualitative considerations, these metrics are 11 largely driven by the cost of service items of depreciation expense and return on 12 equity. Hence, to the extent these important aspects of cost of service impact KCPL-13 GMO's internal cash flows, the relative impact on KCPL-GMO will be measured by 14 these credit metrics. As illustrated above, an authorized return on equity of 9.50% 15 will support internal cash flows that will be adequate to maintain KCPL-GMO's current 16 investment grade bond rating.

17 Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

18 A Yes, it does.

Qualifications of Michael Gorman

1	Q	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2	А	Michael Gorman. My business address is 16690 Swingley Ridge Road, Suite 140,
3		Chesterfield, MO 63017.
4	Q	PLEASE STATE YOUR OCCUPATION.
5	А	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	А	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.

Appendix A Michael Gorman Page 1 In 1987, I was promoted to Director of the Financial Analysis Department. In
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.

8 In August of 1989, I accepted a position with Merrill-Lynch as a financial 9 consultant. After receiving all required securities licenses, I worked with individual 10 investors and small businesses in evaluating and selecting investments suitable to 11 their requirements.

12 In September of 1990, I accepted a position with Drazen-Brubaker & 13 Associates, Inc. In April 1995 the firm of Brubaker & Associates, Inc. ("BAI") was 14 formed. It includes most of the former DBA principals and Staff. Since 1990, I have 15 performed various analyses and sponsored testimony on cost of capital, cost/benefits 16 of utility mergers and acquisitions, utility reorganizations, level of operating expenses 17 and rate base, cost of service studies, and analyses relating industrial jobs and 18 economic development. I also participated in a study used to revise the financial 19 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

> Appendix A Michael Gorman Page 2

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
Phoenix, Arizona and Corpus Christi, Texas.

5 Q HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?

6 А Yes. I have sponsored testimony on cost of capital, revenue requirements, cost of 7 service and other issues before the Federal Energy Regulatory Commission and numerous state regulatory commissions including: Arkansas, Arizona, California, 8 9 Colorado, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, 10 Louisiana, Michigan, Missouri, Montana, New Jersey, New Mexico, New York, North 11 Carolina, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Utah, Vermont, 12 Virginia, Washington, West Virginia, Wisconsin, Wyoming, and before the provincial 13 regulatory boards in Alberta and Nova Scotia, Canada. I have also sponsored 14 testimony before the Board of Public Utilities in Kansas City, Kansas; presented rate 15 setting position reports to the regulatory board of the municipal utility in Austin, Texas, 16 and Salt River Project, Arizona, on behalf of industrial customers; and negotiated rate 17 disputes for industrial customers of the Municipal Electric Authority of Georgia in the 18 LaGrange, Georgia district.

19QPLEASEDESCRIBEANYPROFESSIONALREGISTRATIONSOR20ORGANIZATIONS TO WHICH YOU BELONG.

A 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\9384\testimony - bai\187576.doc

Appendix A Michael Gorman Page 4

BRUBAKER & ASSOCIATES, INC.

Rate of Return

<u>Line</u>	Description	<u>Weight</u> (1)	<u>Cost</u> (2)	Weighted <u>Cost</u> (3)
1	Long-Term Debt	48.69%	6.73%	3.28%
2	Convertible Debt	4.53%	13.59%	0.62%
3	Preferred Equity	0.62%	4.29%	0.03%
4	Common Equity	<u>46.16%</u>	9.50%	<u>4.38%</u>
5	Total	100.00%		8.30% *

Source: Hadaway Direct at 6.

Note: * Rounded.

Proxy Group

		Corporate C	redit Ratings ¹	Common	Equity Ratios	S&P Business
Line	Company	S&P	Moody's	AUS ²	Value Line ³	Risk Score ⁴
		(1)	(2)	(3)	(4)	(5)
1	ALLETE	BBB+	Baa1	57.0%	57.2%	Strong
2	Alliant Energy Co.	BBB+	Baa1	51.0%	51.2%	Excellent
3	American Elec. Pwr.	BBB	N/R	43.0%	45.4%	Excellent
4	Avista Corp.	BBB-	Baa3	49.0%	49.1%	Excellent
5	Black Hills Corp	BBB-	Baa3	52.0%	51.6%	Excellent
6	Cleco Corporation	BBB	N/R	51.0%	45.8%	Excellent
7	Con. Edison	A-	Baa1	49.0%	51.0%	Excellent
8	DPL Inc.	A-	N/R	47.0%	46.9%	Excellent
9	DTE Energy Co.	BBB	N/R	46.0%	46.0%	Strong
10	Duke Energy	A-	Baa2	57.0%	57.4%	Excellent
11	Edison Internat.	BBB-	Baa2	46.0%	46.5%	Strong
12	Empire District	BBB-	Baa2	47.0%	48.4%	Excellent
13	Entergy Corp.	BBB	Baa3	42.0%	43.1%	Strong
14	NextEra Energy	A-	Baa1	40.0%	44.3%	Strong
15	Hawaiian Electric	BBB	N/R	51.0%	50.7%	Strong
16	IDACORP	BBB	Baa2	50.0%	49.8%	Excellent
17	Northeast Utilities	BBB	Baa2	43.0%	41.5%	Excellent
18	NSTAR	A+	A2	39.0%	48.2%	Excellent
19	PG&E Corp.	BBB+	Baa1	49.0%	47.4%	Excellent
20	Pinnacle West	BBB-	Baa3	48.0%	49.6%	Excellent
21	Portland General	BBB	Baa2	46.0%	49.7%	Strong
22	Progress Energy	BBB+	N/R	44.0%	43.3%	Excellent
23	SCANA Corp.	BBB+	Baa2	42.0%	43.2%	Excellent
24	Sempra Energy	BBB+	Baa1	54.0%	54.1%	Excellent
25	Southern Co.	А	N/R	42.0%	43.6%	Excellent
26	Teco Energy, Inc.	BBB	N/R	31.0%	39.4%	Excellent
27	UIL Holdings Co.	BBB	Baa3	44.0%	46.0%	Excellent
28	Vectren Corp.	A-	N/R	44.0%	47.5%	Excellent
29	Westar Energy	BBB	Baa3	48.0%	47.4%	Excellent
30	Wisconsin Energy	BBB+	A3	45.0%	47.7%	Excellent
31	Xcel Energy Inc.	A-	Baa1	46.0%	47.7%	Excellent
32	Average	BBB+	Baa2	46.5%	47.8%	Excellent
33	KCP&L GMO	BBB⁵	N/R		46.2% ⁶	Excellent
34	Great Plains Energy	BBB ⁵	Baa3 ¹		46.2%	Excellent
04	Creat rians Energy	000	Dado		70.270	LYCENELI

Sources:

⁶ Schedule MPG-1.

¹ SNL Interactive, http://www.snl.com/, downloaded on November 10, 2010.

² AUS Utility Reports, October 2010.

³ The Value Line Investment Survey, August 27, September 24, and November 5, 2010.

⁴ S&P RatingsDirect: "U.S. Regulated Electric Utilities, Strongest to Weakest," October 6, 2010.

⁵ Standard & Poor's, http://www.standardandpoors.com, downloaded on November 10, 2010.

Growth Rates

		Za	cks	S	NL	Reu	iters	Average of Growth
		Estimated	Number of	Estimated	Number of	Estimated	Number of	
Line	<u>Company</u>	Growth % ¹	Estimates	Growth % ²	Estimates	Growth % ³	Estimates	Rates
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	ALLETE	4.00%	2	6.50%	2	5.33%	3	5.28%
2	Alliant Energy Co.	4.50%	2	6.00%	3	7.74%	5	6.08%
3	American Elec. Pwr.	4.00%	4	4.00%	5	4.50%	5	4.17%
4	Avista Corp.	4.67%	3	4.00%	1	4.50%	2	4.39%
5	Black Hills Corp	6.00%	1	6.00%	1	6.00%	1	6.00%
6	Cleco Corporation	7.00%	1	3.00%	1	3.00%	1	4.33%
7	Con. Edison	4.61%	3	4.00%	3	4.38%	5	4.33%
8	DPL Inc.	N/A	N/A	5.90%	2	11.80%	1	8.85%
9	DTE Energy Co.	5.00%	1	5.00%	1	4.57%	3	4.86%
10	Duke Energy	1.50%	6	4.00%	5	5.40%	8	3.63%
11	Edison Internat.	3.00%	3	5.00%	6	4.85%	6	4.28%
12	Empire District	N/A	N/A	N/A	N/A	N/A	N/A	N/A
13	Entergy Corp.	3.00%	4	2.00%	3	6.45%	2	3.82%
14	NextEra Energy	6.40%	5	6.00%	7	6.53%	8	6.31%
15	Hawaiian Electric	9.54%	2	5.00%	3	7.28%	4	7.27%
16	IDACORP	4.67%	3	5.00%	3	4.67%	3	4.78%
17	Northeast Utilities	7.93%	4	7.40%	4	7.00%	8	7.44%
18	NSTAR	5.99%	4	5.20%	3	5.42%	5	5.54%
19	PG&E Corp.	6.75%	4	6.50%	6	6.29%	7	6.51%
20	Pinnacle West	6.80%	5	6.50%	4	7.62%	7	6.97%
21	Portland General	5.60%	5	6.00%	5	5.29%	7	5.63%
22	Progress Energy	4.00%	3	4.00%	6	3.61%	8	3.87%
23	SCANA Corp.	4.25%	6	5.00%	5	4.75%	6	4.67%
24	Sempra Energy	7.00%	1	5.30%	2	5.50%	3	5.93%
25	Southern Co.	5.06%	5	5.40%	7	5.28%	8	5.25%
26	Teco Energy, Inc.	5.25%	4	5.50%	6	6.98%	7	5.91%
27	UIL Holdings Co.	3.57%	2	4.00%	3	3.78%	4	3.78%
28	Vectren Corp.	5.00%	2	6.00%	1	4.85%	2	5.28%
29	Westar Energy	8.00%	3	10.00%	2	6.93%	4	8.31%
30	Wisconsin Energy	8.67%	3	10.00%	3	8.84%	5	9.17%
31	Xcel Energy Inc.	5.70%	5	7.00%	7	6.34%	9	6.35%
32	Average	5.43%	3	5.51%	4	5.85%	5	5.63%
33	Median							5.41%

Sources:

¹ Zacks Elite, http://www.zackselite.com/, downloaded on November 10, 2010. ² SNL Interactive, http://www.snl.com/, downloaded on November 10, 2010. ³ Reuters, http://www.reuters.com/, downloaded on November 10, 2010.

Constant Growth DCF Model

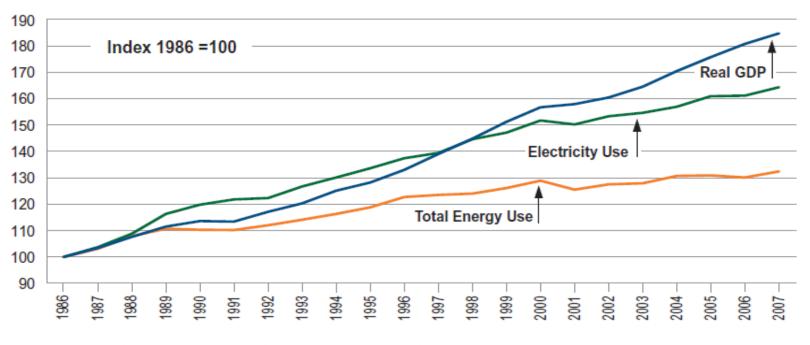
<u>Line</u>	<u>Company</u>	13-Week AVG <u>Stock Price¹</u> (1)	Analysts' <u>Growth²</u> (2)	Annualized <u>Dividend³</u> (3)	Adjusted <u>Yield</u> (4)	Constant <u>Growth DCF</u> (5)
1	ALLETE	\$36.29	5.28%	\$1.76	5.11%	10.38%
2	Alliant Energy Co.	\$35.97	6.08%	\$1.58	4.66%	10.74%
3	American Elec. Pwr.	\$36.20	4.17%	\$1.68	4.83%	9.00%
4	Avista Corp.	\$21.15	4.39%	\$1.00	4.94%	9.33%
5	Black Hills Corp	\$31.40	6.00%	\$1.44	4.86%	10.86%
6	Cleco Corporation	\$29.54	4.33%	\$1.00	3.53%	7.87%
7	Con. Edison	\$48.28	4.33%	\$2.38	5.14%	9.47%
8	DPL Inc.	\$26.06	8.85%	\$1.21	5.06%	13.91%
9	DTE Energy Co.	\$46.69	4.86%	\$2.24	5.03%	9.89%
10	Duke Energy	\$17.61	3.63%	\$0.98	5.77%	9.40%
11	Edison Internat.	\$34.83	4.28%	\$1.26	3.77%	8.06%
12	Empire District	\$20.23	N/A	\$1.28	N/A	N/A
13	Entergy Corp.	\$77.39	3.82%	\$3.32	4.45%	8.27%
14	NextEra Energy	\$54.24	6.31%	\$2.00	3.92%	10.23%
15	Hawaiian Electric	\$23.16	7.27%	\$1.24	5.74%	13.02%
16	IDACORP	\$35.88	4.78%	\$1.20	3.50%	8.28%
17	Northeast Utilities	\$29.79	7.44%	\$1.03	3.70%	11.14%
18	NSTAR	\$39.20	5.54%	\$1.60	4.31%	9.84%
19	PG&E Corp.	\$46.31	6.51%	\$1.82	4.19%	10.70%
20	Pinnacle West	\$40.84	6.97%	\$2.10	5.50%	12.47%
21	Portland General	\$20.31	5.63%	\$1.04	5.41%	11.04%
22	Progress Energy	\$43.67	3.87%	\$2.48	5.90%	9.77%
23	SCANA Corp.	\$40.13	4.67%	\$1.90	4.96%	9.62%
24	Sempra Energy	\$52.87	5.93%	\$1.56	3.13%	9.06%
25	Southern Co.	\$37.14	5.25%	\$1.82	5.16%	10.40%
26	Teco Energy, Inc.	\$17.21	5.91%	\$0.82	5.05%	10.96%
27	UIL Holdings Co.	\$27.64	3.78%	\$1.73	6.49%	10.27%
28	Vectren Corp.	\$25.68	5.28%	\$1.36	5.58%	10.86%
29	Westar Energy	\$24.34	8.31%	\$1.24	5.52%	13.83%
30	Wisconsin Energy	\$57.51	9.17%	\$1.60	3.04%	12.21%
31	Xcel Energy Inc.	\$22.97	6.35%	\$1.01	4.68%	11.02%
32	Average	\$35.50	5.63%	\$1.57	4.76%	10.40%
33	Median		5.41%			10.33%

Sources:

¹ http://moneycentral.msn.com, downloaded on November 9, 2010. ² Schedule MPG-3, Column 7.

³ The Value Line Investment Survey, August 27, September 24, and November 5, 2010.

Electricity Sales Are Linked to U.S. Economic Growth



1986 represents the base year. Graph depicts increases or decreases from the base year.

Source: U.S. Department of Energy, Energy Information Administration (EIA).

© 2008 by the Edison Electric Institute. All rights reserved.

Proxy Group Payout Ratios

		Dividend	s Per Share	Earnings	Per Share	Payou	t Ratio
Line	<u>Company</u>	2009	Projected	2009	Projected	2009	Projected
		(1)	(2)	(3)	(4)	(5)	(6)
1	ALLETE	\$1.76	\$1.85	\$1.89	\$2.75	93.12%	67.27%
2	Alliant Energy Co.	\$1.50	\$1.92	\$1.89	\$3.60	79.37%	53.33%
3	American Elec. Pwr.	\$1.64	\$1.90	\$2.97	\$3.50	55.22%	54.29%
4	Avista Corp.	\$0.81	\$1.30	\$1.58	\$2.00	51.27%	65.00%
5	Black Hills Corp	\$1.42	\$1.60	\$2.32	\$2.25	61.21%	71.11%
6	Cleco Corporation	\$0.90	\$1.45	\$1.76	\$2.75	51.14%	52.73%
7	Con. Edison	\$2.36	\$2.46	\$3.16	\$3.85	74.68%	63.90%
8	DPL Inc.	\$1.14	\$1.50	\$2.01	\$3.00	56.72%	50.00%
9	DTE Energy Co.	\$2.12	\$2.70	\$3.24	\$4.25	65.43%	63.53%
10	Duke Energy	\$0.94	\$1.05	\$1.13	\$1.50	83.19%	70.00%
11	Edison Internat.	\$1.25	\$1.50	\$3.24	\$3.25	38.58%	46.15%
12	Empire District	\$1.28	\$1.35	\$1.18	\$1.75	108.47%	77.14%
13	Entergy Corp.	\$3.00	\$4.15	\$6.30	\$7.75	47.62%	53.55%
14	NextEra Energy	\$1.89	\$2.40	\$3.97	\$5.00	47.61%	48.00%
15	Hawaiian Electric	\$1.24	\$1.30	\$0.91	\$2.00	136.26%	65.00%
16	IDACORP	\$1.20	\$1.40	\$2.64	\$3.10	45.45%	45.16%
17	Northeast Utilities	\$0.95	\$1.30	\$1.91	\$2.50	49.74%	52.00%
18	NSTAR	\$1.53	\$2.05	\$2.28	\$3.25	67.11%	63.08%
19	PG&E Corp.	\$1.68	\$2.20	\$3.03	\$4.25	55.45%	51.76%
20	Pinnacle West	\$2.10	\$2.30	\$2.26	\$3.50	92.92%	65.71%
21	Portland General	\$1.01	\$1.20	\$1.31	\$2.00	77.10%	60.00%
22	Progress Energy	\$2.48	\$2.58	\$2.99	\$3.55	82.94%	72.68%
23	SCANA Corp.	\$1.88	\$2.00	\$2.85	\$3.50	65.96%	57.14%
24	Sempra Energy	\$1.56	\$2.05	\$4.78	\$4.50	32.64%	45.56%
25	Southern Co.	\$1.73	\$2.10	\$2.32	\$3.00	74.57%	70.00%
26	Teco Energy, Inc.	\$0.80	\$0.95	\$1.00	\$1.60	80.00%	59.38%
27	UIL Holdings Co.	\$1.73	\$1.73	\$1.94	\$2.30	89.18%	75.22%
28	Vectren Corp.	\$1.35	\$1.50	\$1.79	\$2.25	75.42%	66.67%
29	Westar Energy	\$1.20	\$1.40	\$1.28	\$2.25	93.75%	62.22%
30	Wisconsin Energy	\$1.35	\$2.40	\$3.20	\$5.25	42.19%	45.71%
31	Xcel Energy Inc.	\$0.97	\$1.15	\$1.49	\$2.00	65.10%	57.50%
32	Average	\$1.51	\$1.83	\$2.41	\$3.16	69.01%	59.70%

Source:

The Value Line Investment Survey, August 27, September 24, and November 5, 2010.

Sustainable Growth Rates

		3 to 5 Year Projections							Growth		
		Dividends	Earnings	Book Value		Adjustment	Adjusted	Payout	Retention	Internal	Rate Plus
Line	Company	Per Share	Per Share	Per Share	ROE	Factor	ROE	Ratio	Rate	Growth Rate	S * V ¹
	<u> </u>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	ALLETE	\$1.85	\$2.75	\$30.00	9.17%	1.01	9.28%	67.27%	32.73%	3.04%	3.71%
2	ALLETE Alliant Energy Co.	\$1.85 \$1.92	\$2.75 \$3.60	\$30.00 \$31.05	9.17% 11.59%	1.01	9.28% 11.84%	53.33%	32.73% 46.67%	3.04% 5.53%	3.71% 5.94%
	07										
3	American Elec. Pwr.	\$1.90	\$3.50	\$34.75	10.07%	1.02	10.31%	54.29%	45.71%	4.71%	5.00%
4	Avista Corp.	\$1.30	\$2.00	\$22.50	8.89%	1.02	9.03%	65.00%	35.00%	3.16%	3.35%
5	Black Hills Corp	\$1.60	\$2.25	\$30.50	7.38%	1.01	7.44%	71.11%	28.89%	2.15%	2.48%
6	Cleco Corporation	\$1.45	\$2.75	\$26.25	10.48%	1.03	10.84%	52.73%	47.27%	5.13%	6.04%
7	Con. Edison	\$2.46	\$3.85	\$41.10	9.37%	1.01	9.48%	63.90%	36.10%	3.42%	3.56%
8	DPL Inc.	\$1.50	\$3.00	\$12.00	25.00%	1.03	25.65%	50.00%	50.00%	12.83%	14.63%
9	DTE Energy Co.	\$2.70	\$4.25	\$46.50	9.14%	1.02	9.33%	63.53%	36.47%	3.40%	3.74%
10	Duke Energy	\$1.05	\$1.50	\$18.00	8.33%	1.01	8.40%	70.00%	30.00%	2.52%	2.54%
11	Edison Internat.	\$1.50	\$3.25	\$39.50	8.23%	1.03	8.45%	46.15%	53.85%	4.55%	4.55%
12	Empire District	\$1.35	\$1.75	\$17.25	10.14%	1.01	10.24%	77.14%	22.86%	2.34%	2.97%
13	Entergy Corp.	\$4.15	\$7.75	\$60.75	12.76%	1.03	13.12%	53.55%	46.45%	6.10%	4.62%
14	NextEra Energy	\$2.40	\$5.00	\$44.75	11.17%	1.04	11.57%	48.00%	52.00%	6.02%	6.86%
15	Hawaiian Electric	\$1.30	\$2.00	\$18.00	11.11%	1.01	11.27%	65.00%	35.00%	3.95%	4.61%
16	IDACORP	\$1.40	\$3.10	\$36.50	8.49%	1.02	8.68%	45.16%	54.84%	4.76%	5.14%
17	Northeast Utilities	\$1.30	\$2.50	\$26.00	9.62%	1.02	9.85%	52.00%	48.00%	4.73%	5.36%
18	NSTAR	\$2.05	\$3.25	\$22.75	14.29%	1.03	14.66%	63.08%	36.92%	5.41%	4.04%
19	PG&E Corp.	\$2.20	\$4.25	\$36.75	11.56%	1.03	11.88%	51.76%	48.24%	5.73%	7.41%
20	Pinnacle West	\$2.30	\$3.50	\$38.50	9.09%	1.02	9.24%	65.71%	34.29%	3.17%	4.11%
21	Portland General	\$1.20	\$2.00	\$23.75	8.42%	1.01	8.54%	60.00%	40.00%	3.42%	3.38%
22	Progress Energy	\$2.58	\$3.55	\$38.00	9.34%	1.01	9.47%	72.68%	27.32%	2.59%	3.00%
23	SCANA Corp.	\$2.00	\$3.50	\$35.25	9.93%	1.02	10.17%	57.14%	42.86%	4.36%	5.98%
24	Sempra Energy	\$2.05	\$4.50	\$48.00	9.38%	1.03	9.63%	45.56%	54.44%	5.24%	4.93%
25	Southern Co.	\$2.10	\$3.00	\$23.25	12.90%	1.02	13.22%	70.00%	30.00%	3.97%	5.70%
26	Teco Energy, Inc.	\$0.95	\$1.60	\$12.50	12.80%	1.02	13.12%	59.38%	40.63%	5.33%	5.69%
27	UIL Holdings Co.	\$1.73	\$2.30	\$22.30	10.31%	1.02	10.47%	75.22%	24.78%	2.59%	2.89%
28	Vectren Corp.	\$1.50	\$2.25	\$22.00	10.23%	1.02	10.48%	66.67%	33.33%	3.49%	3.84%
29	Westar Energy	\$1.40	\$2.25	\$26.10	8.62%	1.02	8.82%	62.22%	37.78%	3.33%	3.51%
30	Wisconsin Energy	\$2.40	\$5.25	\$41.50	12.65%	1.03	13.04%	45.71%	54.29%	7.08%	7.08%
31	Xcel Energy Inc.	\$1.15	\$2.00	\$20.00	10.00%	1.02	10.23%	57.50%	42.50%	4.35%	5.05%
32 33	Average Median	\$1.83	\$3.16	\$30.52	10.66%	1.02	10.90%	59.70%	40.30%	4.46%	4.89% 4.61%

Sources:

The Value Line Investment Survey, August 27, September 24, and November 5, 2010. ¹ Page 2, Column 9.

Sustainable Growth Rates

<u>Line</u>	<u>Company</u>	13-Week Average <u>Stock Price¹</u> (1)	2009 Book Value <u>Per Share²</u> (2)	Market to Book <u>Ratio</u> (3)		n Shares g (in Millions) ² <u>3-5 Years</u> (5)	Growth (6)	<u>S Factor³</u> (7)	<u>V Factor⁴ (8)</u>	<u>S * V⁵ (9)</u>
1	ALLETE	\$36.29	\$26.41	1.37	35.20	38.50	1.81%	2.48%	27.22%	0.68%
2	Alliant Energy Co.	\$35.97	\$25.07	1.43	110.66	116.00	0.95%	1.36%	30.30%	0.41%
3	American Elec. Pwr.	\$36.20	\$27.49	1.32	478.05	500.00	0.90%	1.19%	24.06%	0.29%
4	Avista Corp.	\$21.15	\$19.17	1.10	54.84	60.00	1.81%	2.00%	9.35%	0.19%
5	Black Hills Corp	\$31.40	\$27.84	1.13	38.97	44.25	2.57%	2.90%	11.35%	0.33%
6	Cleco Corporation	\$29.54	\$18.50	1.60	60.26	65.00	1.53%	2.44%	37.37%	0.91%
7	Con. Edison	\$48.28	\$36.46	1.32	281.12	287.00	0.41%	0.55%	24.48%	0.13%
8	DPL Inc.	\$26.06	\$9.25	2.82	118.97	125.00	0.99%	2.80%	64.50%	1.81%
9	DTE Energy Co.	\$46.69	\$37.96	1.23	165.40	178.00	1.48%	1.82%	18.69%	0.34%
10	Duke Energy	\$17.61	\$16.62	1.06	1309.00	1335.00	0.39%	0.42%	5.60%	0.02%
11	Edison Internat.	\$34.83	\$30.20	1.15	325.81	325.81	0.00%	0.00%	13.29%	0.00%
12	Empire District	\$20.23	\$15.75	1.28	38.11	42.50	2.20%	2.83%	22.13%	0.63%
13	Entergy Corp.	\$77.39	\$45.54	1.70	189.12	170.00	-2.11%	-3.58%	41.15%	-1.47%
14	NextEra Energy	\$54.24	\$31.35	1.73	413.62	438.00	1.15%	1.99%	42.20%	0.84%
15	Hawaiian Electric	\$23.16	\$15.58	1.49	92.52	99.00	1.36%	2.03%	32.74%	0.66%
16	IDACORP	\$35.88	\$29.17	1.23	47.90	52.00	1.66%	2.04%	18.71%	0.38%
17	Northeast Utilities	\$29.79	\$20.37	1.46	175.62	188.00	1.37%	2.01%	31.63%	0.63%
18	NSTAR	\$39.20	\$17.53	2.24	106.81	101.00	-1.11%	-2.49%	55.27%	-1.37%
19	PG&E Corp.	\$46.31	\$27.88	1.66	370.60	420.00	2.53%	4.21%	39.79%	1.68%
20	Pinnacle West	\$40.84	\$32.69	1.25	101.43	122.00	3.76%	4.70%	19.95%	0.94%
21	Portland General	\$20.31	\$20.50	0.99	75.21	90.00	3.66%	3.62%	-0.92%	-0.03%
22	Progress Energy	\$43.67	\$33.30	1.31	281.00	300.00	1.32%	1.73%	23.75%	0.41%
23	SCANA Corp.	\$40.13	\$27.71	1.45	123.00	147.00	3.63%	5.26%	30.94%	1.63%
24	Sempra Energy	\$52.87	\$36.54	1.45	246.50	238.00	-0.70%	-1.01%	30.89%	-0.31%
25	Southern Co.	\$37.14	\$18.15	2.05	819.65	890.00	1.66%	3.40%	51.13%	1.74%
26	Teco Energy, Inc.	\$17.21	\$9.75	1.76	213.90	219.00	0.47%	0.83%	43.33%	0.36%
27	UIL Holdings Co.	\$27.64	\$19.15	1.44	29.98	31.00	0.67%	0.97%	30.71%	0.30%
28	Vectren Corp.	\$25.68	\$17.23	1.49	81.10	84.00	0.71%	1.05%	32.90%	0.35%
29	Westar Energy	\$24.34	\$20.78	1.17	109.07	115.00	1.06%	1.25%	14.64%	0.18%
30	Wisconsin Energy	\$57.51	\$30.51	1.88	116.91	116.90	0.00%	0.00%	46.95%	0.00%
31	Xcel Energy Inc.	\$22.97	\$15.92	1.44	457.51	495.00	1.59%	2.29%	30.70%	0.70%
32	Average	\$35.50	\$24.53	1.48	227.99	239.77	1.22%	1.65%	29.19%	0.43%

Sources and Notes:

⁴ Expected Profit of Stock Investment, [1 - 1 / Column (3)].

⁵ Column (7) * Column (8).

¹ http://moneycentral.msn.com, downloaded on November 9, 2010.

² The Value Line Investment Survey, August 27, September 24, and November 5, 2010.

³ Expected Growth in the Number of Shares, Column (3) * Column (6).

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 <u>Growth DCF</u> (5)
1	ALLETE	\$36.29	3.71%	\$1.76	5.03%	8.74%
2	Alliant Energy Co.	\$35.97	5.94%	\$1.58	4.65%	10.59%
3	American Elec. Pwr.	\$36.20	5.00%	\$1.68	4.87%	9.87%
4	Avista Corp.	\$21.15	3.35%	\$1.00	4.89%	8.24%
5	Black Hills Corp	\$31.40	2.48%	\$1.44	4.70%	7.18%
6	Cleco Corporation	\$29.54	6.04%	\$1.00	3.59%	9.63%
7	Con. Edison	\$48.28	3.56%	\$2.38	5.11%	8.66%
8	DPL Inc.	\$26.06	14.63%	\$1.21	5.33%	19.96%
9	DTE Energy Co.	\$46.69	3.74%	\$2.24	4.98%	8.72%
10	Duke Energy	\$17.61	2.54%	\$0.98	5.71%	8.25%
11	Edison Internat.	\$34.83	4.55%	\$1.26	3.78%	8.33%
12	Empire District	\$20.23	2.97%	\$1.28	6.52%	9.48%
13	Entergy Corp.	\$77.39	4.62%	\$3.32	4.49%	9.11%
14	NextEra Energy	\$54.24	6.86%	\$2.00	3.94%	10.80%
15	Hawaiian Electric	\$23.16	4.61%	\$1.24	5.60%	10.21%
16	IDACORP	\$35.88	5.14%	\$1.20	3.52%	8.66%
17	Northeast Utilities	\$29.79	5.36%	\$1.03	3.62%	8.99%
18	NSTAR	\$39.20	4.04%	\$1.60	4.25%	8.28%
19	PG&E Corp.	\$46.31	7.41%	\$1.82	4.22%	11.63%
20	Pinnacle West	\$40.84	4.11%	\$2.10	5.35%	9.46%
21	Portland General	\$20.31	3.38%	\$1.04	5.29%	8.68%
22	Progress Energy	\$43.67	3.00%	\$2.48	5.85%	8.85%
23	SCANA Corp.	\$40.13	5.98%	\$1.90	5.02%	11.00%
24	Sempra Energy	\$52.87	4.93%	\$1.56	3.10%	8.03%
25	Southern Co.	\$37.14	5.70%	\$1.82	5.18%	10.88%
26	Teco Energy, Inc.	\$17.21	5.69%	\$0.82	5.04%	10.73%
27	UIL Holdings Co.	\$27.64	2.89%	\$1.73	6.43%	9.33%
28	Vectren Corp.	\$25.68	3.84%	\$1.36	5.50%	9.34%
29	Westar Energy	\$24.34	3.51%	\$1.24	5.27%	8.79%
30	Wisconsin Energy	\$57.51	7.08%	\$1.60	2.98%	10.06%
31	Xcel Energy Inc.	\$22.97	5.05%	\$1.01	4.62%	9.67%
32 33	Average Median	\$35.50	4.89%	\$1.57	4.79%	9.68% 9.33%

Sources:

¹ http://moneycentral.msn.com, downloaded on November 9, 2010.

² Schedule MPG-7, Page 1 of 2, Column 10.

³ The Value Line Investment Survey, August 27, September 24, and November 5, 2010.

Multi-Stage Growth DCF Model

		13-Week AVG	Annualized	First Stage		Sec	cond Stage Gro	wth		Third Stage	Multi-Stage
Line	Company	Stock Price ¹	Dividend ²	Growth ³	Year 6	Year 7	Year 8	Year 9	Year 10	 Growth ⁴	Growth DCF
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	ALLETE	\$36.29	\$1.76	5.28%	5.19%	5.10%	5.01%	4.93%	4.84%	4.75%	10.00%
2	Alliant Energy Co.	\$35.97	\$1.58	6.08%	5.86%	5.64%	5.42%	5.19%	4.97%	4.75%	9.74%
3	American Elec. Pwr.	\$36.20	\$1.68	4.17%	4.26%	4.36%	4.46%	4.56%	4.65%	4.75%	9.44%
4	Avista Corp.	\$21.15	\$1.00	4.39%	4.45%	4.51%	4.57%	4.63%	4.69%	4.75%	9.59%
5	Black Hills Corp	\$31.40	\$1.44	6.00%	5.79%	5.58%	5.38%	5.17%	4.96%	4.75%	9.93%
6	Cleco Corporation	\$29.54	\$1.00	4.33%	4.40%	4.47%	4.54%	4.61%	4.68%	4.75%	8.20%
7	Con. Edison	\$48.28	\$2.38	4.33%	4.40%	4.47%	4.54%	4.61%	4.68%	4.75%	9.78%
8	DPL Inc.	\$26.06	\$1.21	8.85%	8.17%	7.48%	6.80%	6.12%	5.43%	4.75%	10.96%
9	DTE Energy Co.	\$46.69	\$2.24	4.86%	4.84%	4.82%	4.80%	4.79%	4.77%	4.75%	9.81%
10	Duke Energy	\$17.61	\$0.98	3.63%	3.82%	4.01%	4.19%	4.38%	4.56%	4.75%	10.20%
11	Edison Internat.	\$34.83	\$1.26	4.28%	4.36%	4.44%	4.52%	4.59%	4.67%	4.75%	8.42%
12	Empire District	\$20.23	\$1.28	N/A	N/A	N/A	N/A	N/A	N/A	4.75%	N/A
13	Entergy Corp.	\$77.39	\$3.32	3.82%	3.97%	4.13%	4.28%	4.44%	4.59%	4.75%	8.99%
14	NextEra Energy	\$54.24	\$2.00	6.31%	6.05%	5.79%	5.53%	5.27%	5.01%	4.75%	9.01%
15	Hawaiian Electric	\$23.16	\$1.24	7.27%	6.85%	6.43%	6.01%	5.59%	5.17%	4.75%	11.25%
16	IDACORP	\$35.88	\$1.20	4.78%	4.78%	4.77%	4.77%	4.76%	4.76%	4.75%	8.26%
17	Northeast Utilities	\$29.79	\$1.03	7.44%	6.99%	6.55%	6.10%	5.65%	5.20%	4.75%	9.01%
18	NSTAR	\$39.20	\$1.60	5.54%	5.41%	5.27%	5.14%	5.01%	4.88%	4.75%	9.24%
19	PG&E Corp.	\$46.31	\$1.82	6.51%	6.22%	5.93%	5.63%	5.34%	5.04%	4.75%	9.34%
20	Pinnacle West	\$40.84	\$2.10	6.97%	6.60%	6.23%	5.86%	5.49%	5.12%	4.75%	10.90%
21	Portland General	\$20.31	\$1.04	5.63%	5.48%	5.34%	5.19%	5.04%	4.90%	4.75%	10.40%
22	Progress Energy	\$43.67	\$2.48	3.87%	4.02%	4.16%	4.31%	4.46%	4.60%	4.75%	10.39%
23	SCANA Corp.	\$40.13	\$1.90	4.67%	4.68%	4.69%	4.71%	4.72%	4.74%	4.75%	9.68%
24	Sempra Energy	\$52.87	\$1.56	5.93%	5.74%	5.54%	5.34%	5.14%	4.95%	4.75%	8.08%
25	Southern Co.	\$37.14	\$1.82	5.25%	5.16%	5.08%	5.00%	4.92%	4.83%	4.75%	10.04%
26	Teco Energy, Inc.	\$17.21	\$0.82	5.91%	5.72%	5.52%	5.33%	5.14%	4.94%	4.75%	10.11%
27	UIL Holdings Co.	\$27.64	\$1.73	3.78%	3.94%	4.11%	4.27%	4.43%	4.59%	4.75%	10.93%
28	Vectren Corp.	\$25.68	\$1.36	5.28%	5.19%	5.11%	5.02%	4.93%	4.84%	4.75%	10.48%
29	Westar Energy	\$24.34	\$1.24	8.31%	7.72%	7.12%	6.53%	5.94%	5.34%	4.75%	11.32%
30	Wisconsin Energy	\$57.51	\$1.60	9.17%	8.43%	7.70%	6.96%	6.22%	5.49%	4.75%	8.60%
31	Xcel Energy Inc.	\$22.97	\$1.01	6.35%	6.08%	5.81%	5.55%	5.28%	5.02%	4.75%	9.83%
32 33	Average Median	\$35.47	\$1.56	5.65%	5.49%	5.34%	5.19%	5.04%	4.90%	4.75%	9.73% 9.80%

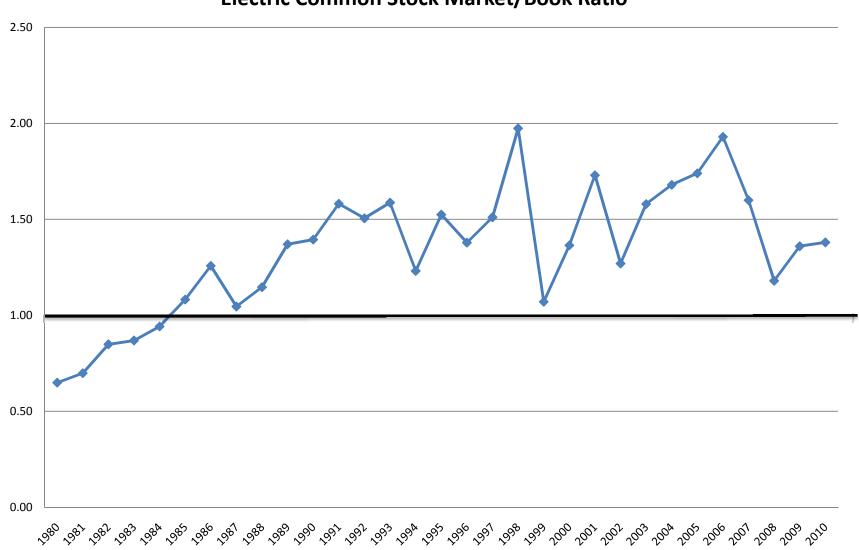
Sources:

¹ http://moneycentral.msn.com, downloaded on November 9, 2010.

² *The Value Line Investment Survey,* August 27, September 24, and November 5, 2010.

³ Schedule MPG-3, Column 7.

⁴ Blue Chip Economic Indicators, October 10, 2010 at 15.



Electric Common Stock Market/Book Ratio

Sources:

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

Schedule MPG-10

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	Sep 2010 ³	10.36%	4.28%	6.08%
26	Average	11.50%	6.31%	5.19%

Sources:

¹ Regulatory Research Associates, Inc., *Regulatory Focus,* Jan. 85 - Dec. 06, and October 4, 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

Line	Year	Authorized Electric <u>Returns¹</u> (1)	Average "A" Rated Utility <u>Bond Yield²</u> (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	Sep 2010 ³	10.36%	5.50%	4.86%
26	Average	11.50%	7.75%	3.75%

Sources:

¹ Regulatory Research Associates, Inc., *Regulatory Focus*, Jan. 85 - Dec. 06, and October 4, 2010.

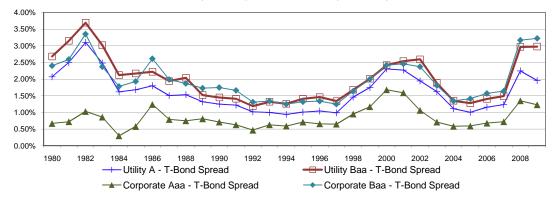
² Mergent Public Utility Manual, Mergent Weekly News Reports, 2003. The utility yields for the period 2001-2009 were obtained from the Mergent Bond Record. The utility yields were obtained from http://credittrends.moodys.com/.

³ www.moodys.com, Bond Yields and Key Indicators.

Utility Bond Yield Spreads

			F	Public Util	ity Bond Yi	elds		Corpor	ate Bond Yiel	ds	
		T-Bond			A-T-Bond	Baa-T-Bond			Aaa-T-Bond	Baa-T-Bond	Baa Utility -
Line	Year	Yield ¹	A ²	Baa ²	Spread	Spread	Aaa ¹	Baa ¹	Spread	Spread	Corporate
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(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

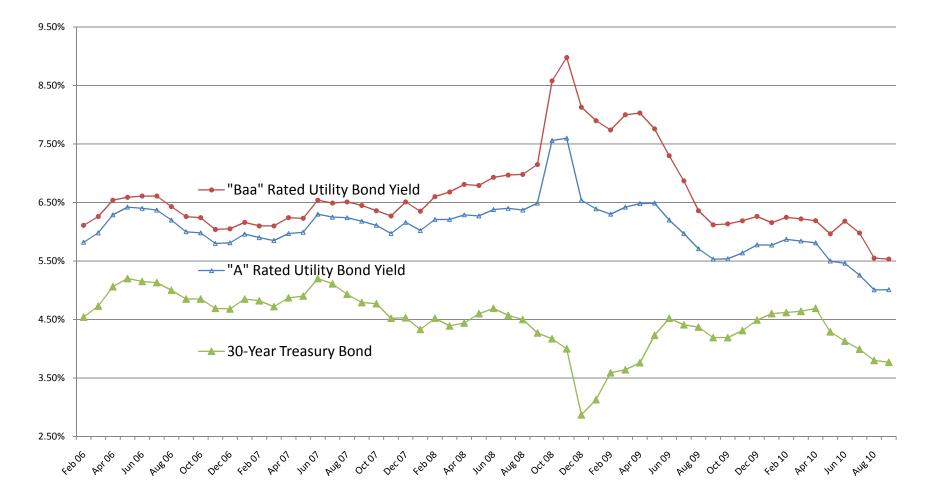
<u>Line</u>	<u>Date</u>	Treasury <u>Bond Yield¹</u> (1)	"A" Rated Utility <u>Bond Yield²</u> (2)	"Baa" Rated Utility <u>Bond Yield²</u> (3)
1	11/05/10	4.04%	5.31%	5.80%
2	10/29/10	4.00%	5.21%	5.70%
3	10/22/10	3.92%	5.17%	5.67%
4	10/15/10	3.88%	5.23%	5.77%
5	10/08/10	3.72%	4.99%	5.52%
6	10/01/10	3.69%	4.96%	5.48%
7	09/24/10	3.78%	5.03%	5.54%
8	09/17/10	3.86%	5.14%	5.65%
9	09/10/10	3.78%	5.10%	5.64%
10	09/03/10	3.66%	5.02%	5.57%
11	08/27/10	3.61%	4.94%	5.50%
12	08/20/10	3.71%	4.85%	5.40%
13	08/13/10	3.95%	5.06%	5.60%
14	13-Wk Average	3.82%	5.08%	5.60%
15	Spread		1.26%	1.78%

Sources:

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

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

Trends in Utility Bond Yields



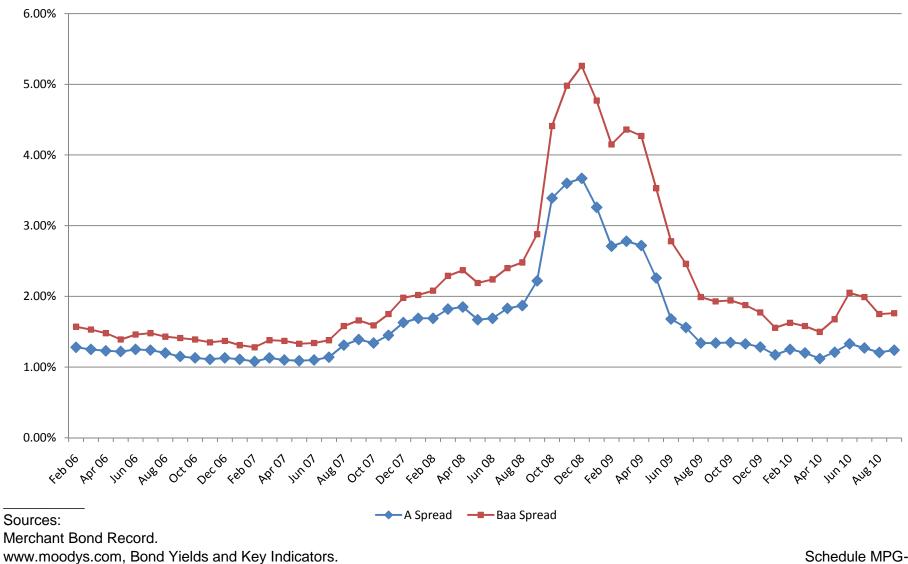
Sources:

Merchant Bond Record.

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

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

Schedule MPG-14 Page 2 of 3



Spread Between "A" and "Baa" Rated Utility Bond Yield and 30-Year Treasury Bond Yield

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

Schedule MPG-14 Page 3 of 3

Value Line Beta

<u>Line</u>	<u>Company</u>	<u>Beta</u>
1	ALLETE	0.70
2	Alliant Energy Co.	0.70
3	American Elec. Pwr.	0.70
4	Avista Corp.	0.70
5	Black Hills Corp	0.80
6	Cleco Corporation	0.65
7	Con. Edison	0.65
8	DPL Inc.	0.60
9	DTE Energy Co.	0.75
10	Duke Energy	0.65
11	Edison Internat.	0.80
12	Empire District	0.70
13	Entergy Corp.	0.70
14	NextEra Energy	0.75
15	Hawaiian Electric	0.70
16	IDACORP	0.70
17	Northeast Utilities	0.70
18	NSTAR	0.65
19	PG&E Corp.	0.55
20	Pinnacle West	0.70
21	Portland General	0.75
22	Progress Energy	0.60
23	SCANA Corp.	0.70
24	Sempra Energy	0.85
25	Southern Co.	0.55
26	Teco Energy, Inc.	0.85
27	UIL Holdings Co.	0.70
28	Vectren Corp.	0.70
29	Westar Energy	0.75
30	Wisconsin Energy	0.65
31	Xcel Energy Inc.	0.65
32	Average	0.70

Source:

The Value Line Investment Survey,

August 27, September 24, and November 5, 2010.

CAPM Return

		CAPM	Range
<u>Line</u>	Description	Low	<u>High</u>
1	Risk-Free Rate ¹	4.50%	4.50%
2	Risk Premium ²	5.20%	6.70%
3	Beta ³	0.70	0.70
4	CAPM	8.12%	9.17%
_	· ·		
5	CAPM Average	8.6	5%

Sources:

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

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

³ *The Value Line Investment Survey,* August 27, September 24, and November 5, 2010.

Standard & Poor's Credit Metrics

			Retail			
		Co	st of Service		chmark ^{1/2}	
Line	Description		Amount	Significant	Aggressive	Reference
			(1)	(2)	(3)	(4)
1	Rate Base	\$	1,890,731			Weinsensee Direct, Schedule JPW2010-2 (MPS) and (LP).
2	Weighted Common Return		4.38%			Page 2, Line 4, Col. 3.
3	Pre-Tax Rate of Return		11.04%			Page 2, Line 5, Col. 4.
4	Income to Common	\$	82,908			Line 1 x Line 2.
5	EBIT	\$	208,676			Line 1 x Line 3.
6	Depreciation & Amortization	\$	87,567			Weinsensee Direct, Schedule JPW2010-3 (MPS) and (LP).
7	Imputed Amortization	\$	3,558			Page 4, Line 30, Col. 1.
8	Deferred Income Taxes & ITC	\$	14,358			Weinsensee Direct, Schedule JPW2010-3 (MPS) and (LP).
9	Funds from Operations (FFO)	\$	188,391			Sum of Line 4 and Lines 6 through 8.
10	Imputed Interest Expense	\$	2,299			Page 4, Line 29, Col. 1.
11	EBITDA	\$	302,100			Sum of Lines 5 through 7 and Line 10.
12	Total Debt Ratio		54%	45% - 50%	50% - 60%	Page 3, Line 5, Col. 1.
13	Debt to EBITDA		3.4x	3.0x - 4.0x	2.0x - 3.0x	(Line 1 x Line 12) / Line 11.
14	FFO to Total Debt		18%	20% - 30%	12% - 20%	Line 9 / (Line 1 x Line 12).

Sources:

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," October 6, 2010.

Note:

Based on the May 2009 S&P metrics, KCP&L GMO has an "Excellent" business profile and an "Aggressive" financial profile.

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

<u>Line</u>	Description	<u>Weight</u> (1)	<u>Cost</u> (2)	Weighted <u>Cost</u> (3)	Pre-Tax Weighted <u>Cost</u> (4)
1	Long-Term Debt	48.69%	6.73%	3.28%	3.28%
2	Convertible Debt	4.53%	13.59%	0.62%	0.62%
3	Preferred Equity	0.62%	4.29%	0.03%	0.03%
4	Common Equity	<u>46.16%</u>	9.50%	<u>4.38%</u>	<u>7.12%</u>
5	Total	100.00%		8.30%	11.04%

6 Tax Conversion Factor*

1.6231

Sources:

Hadaway Direct at 6.

* Weinsensee Direct, Schedule JPW2010-1 (MPS) and (LP).

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

<u>Line</u>	Description	<u>Weight¹</u>
1	Long-Term Debt	48.03%
2	Convertible Debt	4.47%
3	Preferred Equity	0.61%
4	Off Balance Sheet Debt ²	<u>1.36</u> %
5	Total Long-Term Debt	54.47%
6	Common Equity	<u>45.53</u> %
7	Total	100.00%

Sources:

¹ Hadaway Direct at 6.

² Page 4, Line 28, Col. 1.

Standard & Poor's Credit Metrics (Operating Leases)

<u>Line</u>	Description		<u>ount (000)</u> (1)	Reference (2)
	Greater Missouri Operations Allocator			
	Total Company Net Production			
1	KCP&L Total Production Plant		4,846,435	Docket No. ER-2010-0356, Weinsensee Direct.
2	KCP&L Total Production Accumulated Depreciation		1,787,278	Docket No. ER-2010-0356, Weinsensee Direct.
3	KCP&L Net Production		3,059,158	Line 1 + Line 2.
4	KCP&L GMO Total Production Plant (MPS)		848,154	Utility Filing (MPS), Schedule 3.
5	KCP&L GMO Total Production Accumulated Depreciation (MPS)		<u>301,153</u>	Utility Filing (MPS), Schedule 5.
6	KCP&L GMO Net Production (MPS)		547,000	Line 4 + Line 5.
7	KCP&L GMO Total Production Plant (LP)		269,562	Utility Filing (LP), Schedule 3.
8	KCP&L GMO Total Production Accumulated Depreciation (LP)		<u>113,056</u>	Utility Filing (LP), Schedule 5.
9	KCP&L GMO Net Production (LP)		156,506	Line 7 + Line 8.
10	Total Company Net Production		3,762,665	Line 3 + Line 6 + Line 9.
	KCP&L GMO Retail Jurisdictional Net Production			
11	KCP&L GMO Total Production Plant (MPS)		843,794	Utility Filing (MPS), Schedule 3.
12	KCP&L GMO Total Production Accumulated Depreciation (MPS)		299,605	Utility Filing (MPS), Schedule 5.
13	KCP&L GMO Net Production (MPS)		544,189	Line 11 + Line 12.
14	KCP&L GMO Total Production Plant (LP)		242,553	Utility Filing (LP), Schedule 3.
15	KCP&L GMO Total Production Accumulated Depreciation (LP)		100,155	Utility Filing (LP), Schedule 5.
16	KCP&L GMO Net Production (LP)		142,398	Line 14 + Line 15.
17	Total KCP&L GMO Retail Jurisdictional Net Production		686,587	Line 13 + Line 16.
18	Allocation Factor		18.25%	Line 17 / Line 10.
	Total Company ¹			
19	Operating Leases	\$	139,700	
20	Imputed Interest Expense	\$	9,400	
21	Imputed Amortization Expense	\$	7,500	
22	Purchased Power	\$	50,200	
23	Imputed Interest Expense	\$	3,200	
24	Imputed Amortization Expense	\$	12,000	
25	Total Off Balance Sheet Debt	\$	189,900	
26	Imputed Interest Expense	\$	12,600	
27	Imputed Amortization Expense	\$	19,500	
	Missouri Allocation			
28	Total Off Balance Sheet Debt	\$	34,652	Line 11 * Line 25.
29	Imputed Interest Expense	\$	2,299	Line 11 * Line 26.
30	Imputed Amortization Expense	\$	3,558	Line 11 * Line 27.

Source: ¹ Standard & Poor's RatingsDirect, "KCP&L Greater Missouri Operations," April 30, 2010, at 5.