Exhibit No.:	
Issue:	Revenue Requirement
Witness:	Michael P. Gorman
Type of Exhibit:	Direct Testimony
Sponsoring Party:	Office of Public Counsel
Case No.:	ER-2012-0175
Date Testimony Prepared:	August 9, 2012

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service	)))))	**Case No. ER-2012-0175** Tracking No. YE-2012-0405

Direct Testimony and Schedules of

Michael P. Gorman

Revenue Requirement

On behalf of

The Office of Public Counsel

August 9, 2012

BRUBAKER & ASSOCIATES, INC.

Project 9606

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service	)))))	**Case No. ER-2012-0175** Tracking No. YE-2012-0405

STATE OF MISSOURI)
) **SS**
COUNTY OF ST. LOUIS)

Affidavit of Michael P. Gorman

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

1. My name is Michael P. 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 the Office of Public Counsel in this proceeding on its 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 Missouri Public Service Commission Case No. ER-2012-0175.

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 P. Gorman

Subscribed and sworn to before me this 8th day of August, 2012.

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

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION
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Table of Contents to the Direct Testimony of Michael P. Gorman

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service	)	**Case No. ER-2012-0175** Tracking No. YE-2012-0405

Direct Testimony of Michael P. Gorman

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

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

Q WHAT IS YOUR OCCUPATION?

A I am a consultant in the field of public utility regulation and a Managing Principal of Brubaker & Associates, Inc., energy, economic and regulatory consultants.

Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A This information is included in Appendix A to this testimony.

Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

A This testimony is presented on behalf of the Office of Public Counsel ("OPC").

Q WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A I will recommend an overall rate of return and fair return on common equity for use in setting KCP&L Greater Missouri Operations Company's ("KCP&L GMO" or "Company") revenue requirement in this case.

SUMMARY

Q PLEASE SUMMARIZE YOUR RATE OF RETURN RECOMMENDATIONS.

A I recommend the Missouri Public Service Commission (the "Commission" or "MPSC") award KCP&L GMO a return on common equity in the range of 9.10% to 9.50% and an overall rate of return in the range of 7.52% to 7.70%, as shown on Schedule MPG-1.

My recommended return on equity range and the Company's actual capital structure will provide KCP&L GMO with an opportunity to realize cash flow financial coverages and balance sheet strength that support KCP&L GMO's current investment grade bond rating. Consequently, my recommended return on equity range represents fair compensation given KCP&L GMO's investment risk, and it will preserve the Company's financial integrity and credit standing.

I will also respond to KCP&L GMO witness Dr. Samuel Hadaway's proposed return on equity of 10.40%. For the reasons discussed below, Dr. Hadaway's recommended return on equity is excessive and should be rejected.

Q DOES YOUR RECOMMENDED RETURN ON EQUITY RANGE REFLECT KCP&L GMO'S EXISTING INVESTMENT RISK?

A Yes. My recommended return on equity range reflects fair compensation for KCP&L GMO's existing investment risk including its regulatory risk which is based on the

Missouri Regulatory Framework used to set rates that recover its cost of service and support its financial integrity. These factors are reflected in KCP&L GMO's existing bond rating and other risk factors used to select a comparable risk proxy group. If the Commission modified KCP&L GMO's existing regulatory mechanisms to reduce KCP&L GMO's investment risk, then any related risk reduction should be considered in determining a fair risk-adjusted return on equity for KCP&L GMO.

Q HOW DID YOU ESTIMATE KCP&L GMO'S CURRENT MARKET COST OF EQUITY?

A I performed analyses using three Discounted Cash Flow ("DCF") models, a Risk Premium study, and a Capital Asset Pricing Model ("CAPM"). These analyses used a proxy group of publicly traded companies that have investment risk similar to KCP&L GMO. Based on these assessments, I estimate KCP&L GMO's current market cost of equity to be in the range of 9.10% to 9.50%.

RATE OF RETURN

Q HOW DOES YOUR RECOMMENDED RETURN ON EQUITY RANGE COMPARE TO KCP&L GMO'S LAST AUTHORIZED RETURN ON EQUITY?

A On May 4, 2011, the Commission issued its final order in KCP&L GMO's rate case (Missouri Public Service Commission, Case No. ER-2010-0356) which included a return on equity of 10.00%.

My recommended return on equity range is lower in this case than the return on equity included in KCP&L GMO's rate case from May 2011. However, this lower return on equity is justified based on clear evidence that capital market costs today are much lower than they were in 2011 when KCP&L GMO's rates were approved.

Q WHY DO YOU BELIEVE MARKET COSTS OF CAPITAL ARE LOWER TODAY THAN THEY WERE IN KCP&L GMO'S LAST RATE CASE?

A Market costs of capital have declined since KCP&L GMO's last rate case. This is illustrated by a comparison of bond yields in this case and the last case, and is evident from cost of capital estimates in this case versus the last case. In Table 1 below, I show the change in utility bond yields.

TABLE 1

Capital Costs – KCP&L GMO Rate Cases

Description	Current Case[1]	Case No. ER-2010-0356	Yield Change
"A" Rated Utility Bond Yields	4.14%	5.60%	1.46%
"Baa" Rated Utility Bond Yields	4.95%	6.02%	1.07%
13-Week Period Ending	07/13/2012	04/29/2011	

Source:
[1]Schedule MPG-14, page 1.

As shown in Table 1 above, the current market cost of debt for "A" (by Standard & Poor's, "S&P") and "Baa" (by Moody's) rated utility bond yields has decreased in this case relative to KCP&L GMO's last rate case. The current "A" rated utility bond yield is approximately 1.50 percentage points lower now than it was in KCP&L GMO's last rate case. Also, the current "Baa" utility bond yield is approximately 1.10 percentage points lower than during KCP&L GMO's last rate case.

Utility bond yields have declined by approximately 110 to 150 basis points since KCP&L GMO's last rate case. This decline in utility bond yields suggests that KCP&L GMO's cost of capital is lower now than it was in its last rate case.

This is also evident by the Company's filing. In KCP&L GMO's last rate case, Dr. Hadaway proposed a return on equity of 10.75%, which is 35 basis points higher than his recommendation of 10.40% in the current rate proceeding. Therefore, this decline in current capital costs should be reflected in KCP&L GMO's authorized return on equity to fairly compensate investors and ratepayers.

Electric Utility Industry Market Outlook

Q PLEASE DESCRIBE THIS SECTION OF YOUR TESTIMONY.

A I begin my estimate of a fair return on equity for KCP&L GMO by reviewing the market's assessment of electric utility industry investment risk, credit standing and stock price performance in general. I used this information to get a sense of the market's perception of the risk characteristics of electric utility investments in general, which is then used to produce a refined estimate of the market's return requirement for assuming investment risk similar to KCP&L GMO's utility operations.

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, and electric utilities' stocks have exhibited strong price performance over the last several years.

Based on this review of credit outlooks and stock price performance, I conclude that the market has again embraced the electric utility industry as a safe-haven investment, and views utility equity and debt investments as low-risk securities.

Q PLEASE DESCRIBE THE ELECTRIC UTILITIES' CREDIT RATING OUTLOOK.

A Electric utilities' credit rating outlook has improved over the recent past and is now stable. S&P recently provided an assessment of the credit rating of U.S. electric utilities. S&P's commentary included the following:

> Standard & Poor's Ratings Services' believes the outlook for credit quality in the U.S. investor-owned regulated electric, gas, and water utility sectors for the remainder of 2012 and into 2013 will remain stable. These companies have weathered the challenging economic environment of the past few years with little lasting effect on their financial risk profiles. The essential service that utilities provide and the rate-regulated nature of the business enable them to generate reasonably steady and predictable cash flows through timely recovery of their costs from ratepayers, despite economic conditions and ongoing heavy investment needs. As a result, we expect their credit quality to remain stable.
>
> * * *
>
> **Industry Credit Outlook**
>
> Liquidity is adequate for most utilities. Investor appetite for utility debt remains healthy, with deals continuing to be oversubscribed. The companies' near-term debt maturities appear manageable and we think they will likely refinance these with new debt or borrowings under revolving credit facilities. Credit fundamentals indicate that most, if not all, utilities should continue to have ample access to funding sources and credit. Some have issued common stock to partly fund construction expenditures, which has helped to support capital structure balance. Additionally, many companies are accessing short-term credit markets through commercial paper programs at very low rates. Liquidity is an industry strength and has been improving, and banks are indicating a willingness to lengthen the terms of credit facilities out as far as five years in more and more cases. U.S. regulated utilities have not been significantly hurt by turbulence in the global financial markets.[1]

Similarly, Fitch states:

> **Electric Utilities: Stable**
>
> Fitch's Outlook for the electric utility sector in 2012 remains stable. The sector benefits from low interest rates, modest inflationary

[1] *Standard & Poor's RatingsDirect on the Global Credit Portal*: "Industry Economic And Ratings Outlook: U.S. Regulated Utilities Will Likely Stay On A Stable Trajectory For The Rest Of 2012 And Into 2013," July 17, 2012 at 2, 5-6.

> pressures, open capital markets, and low natural gas and power prices. Fitch expects these conditions to persist into 2013.
>
> The favorable funding environment helps to offset any stress that would otherwise result during an extended period of high projected capital investment. Capex is expected to remain elevated, increasing 5%–6% over 2011 levels.[2]

Value Line also continues to characterize utility stock investments as a safe haven, even though it notes that investors are now willing to accept more risk:

> **Conclusion**
>
> The broader market averages have significantly outperformed the Electric Utility Industry thus far in 2012. This represents quite a reversal from last year when investors flocked to utility stocks, seeking safe havens from heightened volatility in other sectors. As economic fears have subsided, the investment community has appeared to become more venturesome with its stock picks, which may be contributing to the utility underperformance.[3]

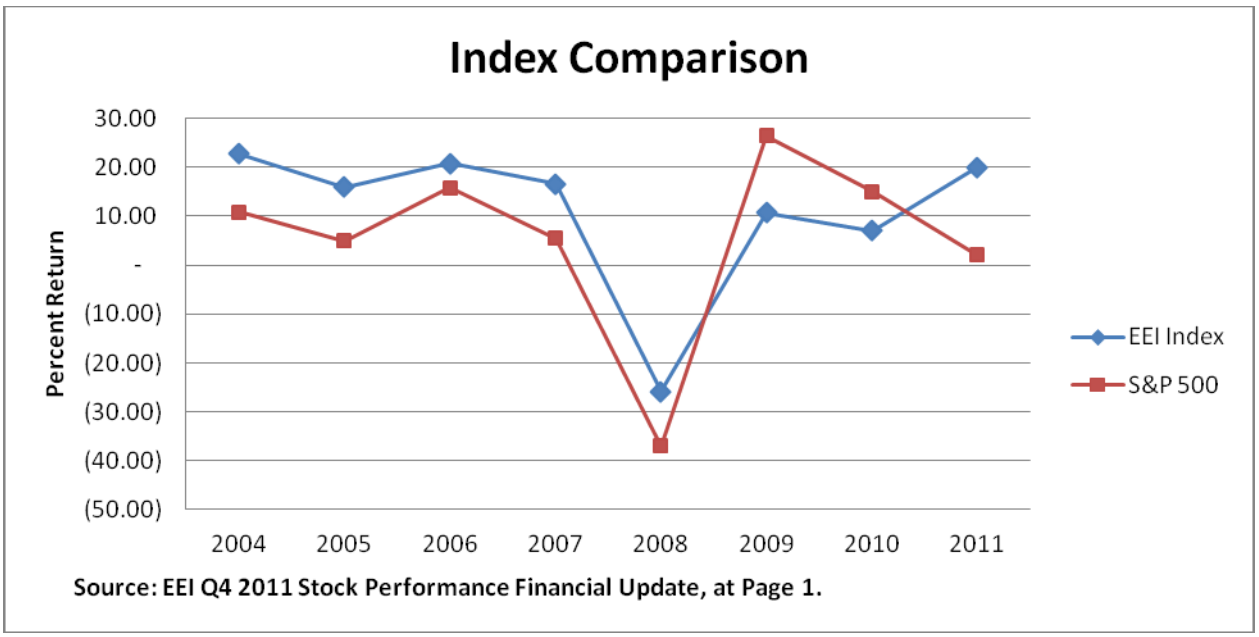
The Edison Electric Institute ("EEI") also opined as follows:

> There was little change during 2011 in the industry's long-term outlook. Many regulated utilities are engaged in capital spending programs that should, according to Wall Street analysts, help drive slow but steady earnings growth over the next several years. New EPA regulations may boost capex by 30% in the years ahead, relative to EEI's latest capex survey estimates.[4]

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

A As shown in the graph below, the 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, with a few exceptions, triggered by the recent state of the economic environment.

[2] *FitchRatings*: "2012 Outlook: Utilities, Power, and Gas," December 5, 2011 at 10.
[3] *Value Line Investment Survey*, May 25, 2012 at 137, emphasis added.
[4] *EEI Q4 2011 Stock Performance* at 1.



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

In 2011, the EEI Index outperformed the market. EEI states the following:

Commentary

> The EEI Index produced a positive 20% return during 2011, its strongest annual gain since 2006, outperforming the broad market after two consecutive years of underperformance as stocks rebounded from the lows reached during 2008 financial crisis.
>
> * * *
>
> The strength of the EEI Index in 2011 is no surprise, highlighting the industry's traditional role as a defensive investment following its reemphasis in recent years of core regulated businesses with slow but predictable earnings growth and steady dividends. In fact, the industry's average dividend yield exceeded 4% during the year, leading that of all other U.S. business sectors.[5]

[5] *EEI Q4 2011 Stock Performance* at 1 and 4-5.

KCP&L GMO Investment Risk

Q PLEASE DESCRIBE THE MARKET'S ASSESSMENT OF THE INVESTMENT RISK OF KCP&L GMO.

A The market assessment of KCP&L GMO's investment risk is best described by credit rating analysts' reports. KCP&L GMO's current senior unsecured credit ratings from S&P and Moody's are "BBB" and "Baa3," respectively.

In S&P's April 2012 report on KCP&L GMO, it reports that its current rating outlook is "Stable" and notes its credit strengths to include: the utility cash flows, regulated utility strategy, and improved management of regulatory risk. The weaknesses noted are large environmental capital spending programs which could pressure consolidated financial measures over the intermediate term, and the potential for increased scrutiny and higher costs at the Company's nuclear generating facility. Overall, S&P describes KCP&L GMO's "Stable" credit rating outlook as follows:

> **Rationale**
>
> Standard & Poor's Ratings Services bases its rating on KCP&L Greater Missouri Operations Co. (GMO) on the consolidated credit profile of holding company Great Plains Energy Inc. This includes what we consider to be an "excellent" business risk profile and "aggressive" financial risk profile under our criteria. Great Plains is an integrated electric utility holding company that owns vertically integrated electric utilities GMO and Kansas City Power & Light Co. (KCP&L).
>
> The excellent business risk profiles for Great Plains, KCP&L, and GMO reflect their status as vertically integrated, fully regulated utilities serving roughly 825,000 customers in eastern Kansas and western Missouri. The utilities operate an approximately 6,600-megawatt (MW) generation fleet that is about 80% coal-fired. In its service territory, there have been gradual signs of economic improvement, with stronger industrial sales, but mixed unemployment rates; Kansas' is lower than the national average and Missouri's is slightly higher. Management has improved cash flow by effectively increasing revenues and cost recovery through mechanisms such as a

fuel-adjustment clause and the allowance of additional accelerated depreciation.[6]

KCP&L GMO's Proposed Capital Structure

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

A KCP&L GMO's August 2012 forecasted capital structure, as supported by KCP&L GMO witness Dr. Samuel Hadaway is shown below in Table 2.

TABLE 2

KCP&L GMO's
Proposed Capital Structure

Description	Percent of Total Capital
Long-Term Debt	46.918%
Preferred Stock	0.607%
Common Equity	52.475%
Total Capital Structure	100.000%

Sources: Hadaway Direct at 6 and Schedule SCH-2, page 10 of 16.

Q DO YOU TAKE ISSUE WITH THE COMPANY'S PROPOSED CAPITAL STRUCTURE?

A Yes. KCP&L GMO's capital structure estimated at the true-up date represents a significant and material increase to its actual common equity ratio in 2011 and 2012

[6] *Standard & Poor's RatingsDirect on the Global Credit Portal*: "KCP&L Greater Missouri Operations Co.," April 27, 2012 at 2.

to date. The substantial increase in KCP&L GMO's common equity ratio materially increases its claimed revenue deficiency in this case.

This increased common equity ratio does not appear to be necessary. As noted above, the credit rating agencies currently view KCP&L GMO's credit standing to be "Stable," with adequate utility cash flows. KCP&L GMO's current financial metrics support its investment grade bond rating. Hence, an increase in common equity ratio in this case seems to accomplish nothing more than increasing KCP&L GMO's cost of service and income. Further, S&P's outlook for KCP&L GMO is "Stable" and describes its outlook as supporting an improved Funds from Operations to debt of 16%, and adjusted debt to total capital ratio of around 55%. This capital structure is generally consistent with the Company's actual capital structure at March 31, 2012. S&P stated the following:

> **Outlook**
>
> Our stable rating outlook on GMO reflects Standard & Poor's baseline forecast that Great Plains' financial measures will improve due to increased operating cash flow and a strengthened balance sheet, with adjusted FFO to debt and adjusted debt to total capital at approximately 16% and 55%, respectively, over the near to intermediate term. Fundamental to the forecast will be higher operating cash flow and the timing of the company's capital expenditures. We could raise the rating if the company can sustain cash flow measures that are consistently higher than our baseline forecast. Although less likely, we could lower the rating if the business risk profile weakens. This would most likely happen if the company is unable to effectively control its regulatory risk or if increased scrutiny at Wolf Creek materially affects its operations.[7]

[7] *Standard & Poor's RatingsDirect on the Global Credit Portal*: "KCP&L Greater Missouri Operations Co.," April 27, 2012 at 3.

Q IS THE COMPANY'S PROPOSAL TO INCREASE ITS COMMON EQUITY RATIO GENERALLY CONSISTENT WITH OTHER CLAIMS THE COMPANY MAKES IN ITS FILINGS?

A No. KCP&L GMO's President and Chief Operating Officer Terry Bassham offered testimony in this proceeding addressing the Company's claimed revenue deficiency. In that testimony, Mr. Bassham went through details explaining KCP&L GMO's efforts to reduce its costs to minimize its rate increase in this case, and outlined KCP&L GMO's recognition that its service area economy is currently experiencing difficult economic times. (Direct Testimony of Terry Bassham at 6-8).

An unnecessary increase in the Company's common equity ratio would contradict the assertions made by Mr. Bassham because it unnecessarily inflates KCP&L GMO's claimed revenue deficiency. What makes the increase in the common equity ratio more difficult to accept is that the Company has offered no Company employee who explains why KCP&L GMO needs to increase its common equity ratio. Indeed, the Company's capital structure witness in this proceeding is its outside rate of return on common equity consultant, Dr. Samuel Hadaway. No Company witness has explained why or justified in any way the need to increase KCP&L GMO's common equity ratio.

Mr. Bassham also discussed the agreements among many of the stakeholders in this proceeding to help support KCP&L GMO's credit standing during its Comprehensive Energy Plan, including regulatory plans that helped to support the development of the new Iatan 2 plant, and significant retrofits to Iatan 1 and La Cygne 1, and the development of various wind power projects. The Company's proposal for a substantial increase in its common equity ratio with little to no justification seems contrary to this more cooperative effort undertaken by all parties in

the past, including the Company, to support investments in KCP&L GMO but mitigate the rate increases necessary to support those investments.

Q WHAT IS THE COMPANY'S ACTUAL CAPITAL STRUCTURE USING CURRENT DATA?

A The Company's most recent capital structure was provided in response to Staff's Data Request No. 0168. In this response, KCP&L GMO identified its actual capital structure as of March 31, 2012, which is shown in Table 3 below.

TABLE 3

KCP&L GMO's
Actual Capital Structure
(March 31, 2012)

Description	Percent of Total Capital
Long-Term Debt	53.90%
Preferred Stock	0.60%
Common Equity	45.51%
Total Capital Structure	100.00%

Source: KCP&L GMO response to Staff's Data Request No. 0168.

As noted above, the Company's actual March 31, 2012 debt ratio of approximately 54% is generally in line with the debt to total capital structure target identified as supportive of a "Stable" credit outlook for Great Plains Energy and KCP&L GMO as noted from S&P above.

Q WHAT IS YOUR PROPOSED CAPITAL STRUCTURE?

A For the purpose of estimating KCP&L GMO's overall rate of return I will rely on its actual capital structure as of March 31, 2012 as shown in Table 3 above and in my Schedule MPG-1. I oppose any increase in the common equity ratio or any significant modifications to the capitalization mix as reflected in the Company's actual capital structure at that date. To the extent a change in capital structure weights is appropriate, the Company should justify it and describe the benefits and costs to customers through this change in capital structure. Absent support by the Company, I believe the Company's actual capital structure weight should not be modified and the component costs should simply reflect the March 2012 capital structure.

Return on Equity

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

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

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

A In general, determining a fair cost of common equity for a regulated utility has been framed by two hallmark decisions of the U.S. Supreme Court: *Bluefield Water Works & Improvement Co. v. Public Serv. Commission of West Virginia,* 262 U.S. 679 (1923) and *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944).

These decisions identify the general standards to be considered in establishing the cost of common equity for a public utility. Those general standards 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.

Q PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE THE COST OF COMMON EQUITY FOR KCP&L GMO.

A I have used several models based on financial theory to estimate KCP&L GMO's cost of common equity. These models are: (1) a constant growth Discounted Cash Flow ("DCF") model using consensus analysts' growth rate projections; (2) a constant growth DCF using sustainable growth rate estimates; (3) a multi-stage growth DCF model; (4) a Risk Premium model; and (5) a Capital Asset Pricing Model ("CAPM"). I have applied these models to a group of publicly traded utilities that I have determined share investment risk similar to KCP&L GMO's.

Q HOW DID YOU SELECT A UTILITY PROXY GROUP SIMILAR IN INVESTMENT RISK TO KCP&L GMO TO ESTIMATE ITS CURRENT MARKET COST OF EQUITY?

A I relied on the same utility proxy group used by KCP&L GMO witness Dr. Hadaway to estimate KCP&L GMO's return on equity. However, I excluded Ameren Corp. because its consensus analyst growth rate was negative, likely due to concern at the merchant generation units.

Q HOW DOES THE PROXY GROUP INVESTMENT RISK COMPARE TO KCP&L GMO'S INVESTMENT RISK?

A The proxy group is shown on Schedule MPG-2. This proxy group has an average senior credit rating from S&P of "BBB+," which is a notch higher than S&P's senior credit rating for KCP&L GMO of "BBB." The proxy group's senior credit rating from Moody's is "A3," which is higher than KCP&L GMO's senior credit rating from Moody's of "Baa3." The proxy group has comparable investment risk to KCP&L GMO.

The proxy group has an average common equity ratio of 46.6% (including short-term debt) from *AUS Utility Reports* ("AUS") and 49.6% (excluding short-term debt) from *Value Line* in 2011. The proxy group's common equity ratio is slightly higher but comparable to the Company's actual common equity ratio of 45.5% excluding short-term debt, as of March 31, 2012.

I also compared KCP&L GMO's business risk to the business risk of the proxy group based on S&P's ranking methodology. KCP&L GMO has an S&P business risk profile of "Excellent," which is identical to the S&P business risk profile of the proxy group. The S&P business risk profile score indicates that KCP&L GMO's business risk is comparable to that of the proxy group.[8]

Based on these proxy group selection criteria, I believe that my proxy group reasonably approximates the investment risk of KCP&L GMO, and can be used to estimate a fair return on equity for KCP&L GMO.

[8]S&P ranks the business risk of a utility company as part of its corporate credit rating review. S&P considers total investment risk in assigning bond ratings to issuers, including utility companies. In analyzing total investment risk, S&P considers both the business risk and the financial risk of a corporate entity, including a utility company. S&P's business risk profile score is based on a six-notch credit rating starting with "Vulnerable" (highest risk) to "Excellent" (lowest risk). The business risk of most utility companies falls within the lowest risk category, "Excellent," or the category one notch lower (more risk), "Strong." *Standard & Poor's:* "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009.

Discounted Cash Flow Model

Q PLEASE DESCRIBE THE DCF MODEL.

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

$$P_0 = \frac{D_1}{(1+K)^1} + \frac{D_2}{(1+K)^2} \ldots . \frac{D_\infty}{(1+K)^\infty} \text{ where} \qquad \text{(Equation 1)}$$

P_0 = Current stock price
D = Dividends in periods 1 - ∞
K = Investor's required return

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

$$K = D_1/P_0 + G \qquad \text{(Equation 2)}$$

K = Investor's required return
D_1 = Dividend in first year
P_0 = Current stock price
G = Expected constant dividend growth rate

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

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

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

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

A I relied on the average of the weekly high and low stock prices of the utilities in the proxy group over a 13-week period ended July 13, 2012. 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 reflects a period that is still short enough to contain data that reasonably reflect current market expectations, but the period is not so short as to be susceptible to market price variations that may not reflect the stock'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.

Q WHAT DIVIDEND DID YOU USE IN YOUR CONSTANT GROWTH DCF MODEL?

A I used the most recently paid quarterly dividend, as reported in *The Value Line Investment Survey*.[9] This dividend was annualized (multiplied by 4) and adjusted for next year's growth to produce the D_1 factor for use in Equation 2 above.

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

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

[9] *The Value Line Investment Survey*, May 4, May 25, and June 22, 2012.

As predictors of future returns, security analysts' growth estimates have been shown to be more accurate than growth rates derived from historical data.[10] That is, assuming the market generally makes rational investment decisions, analysts' growth projections are more likely to influence observable stock prices than growth rates derived only from 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 investor consensus dividend growth rate expectations. I used the average of analysts' growth rate estimates from three sources: Zacks, SNL Financial, and Reuters. All such projections were available on July 13, 2012, and all were reported online.

Each consensus growth rate projection is based on a survey of security analysts. It is problematic as to whether any particular analyst's forecast is more representative of general market expectations. 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. Therefore, a simple average, or arithmetic mean, of analyst forecasts is a good proxy for market consensus expectations.

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

A The growth rates I used in my DCF analysis are shown in Schedule MPG-3. The average growth rate for my proxy group is 5.14%.

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

Q 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 my proxy group are 9.46% and 9.54%, respectively.

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

A Yes. The three- to five-year growth rates are slightly above the long-term sustainable growth rate. Therefore, I believe my constant growth DCF analysis using analysts' three- to five-year growth rates generally reflects reasonable growth outlooks and the DCF results are also reasonable, even though they are slightly on the high end. Hence, I believe my constant growth DCF model produces conservative return on equity estimates. However, I also considered other DCF methodologies in order to enhance the information available to accurately estimate KCP&L GMO's current market return on common equity.

Sustainable Growth DCF

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

A A sustainable growth rate is based on the percentage of the utility's earnings that is retained and reinvested in utility plant and equipment. These reinvested earnings increase the earnings base (rate base). Earnings grow when plant funded by reinvested earnings is put into service, and the utility is allowed to earn its authorized return on such additional rate base investment.

The internal growth methodology is tied to the percentage of earnings retained in the company and not paid out as dividends. The earnings retention ratio is 1 minus

the dividend payout ratio. As the payout ratio declines, the earnings retention ratio increases. An increased earnings retention ratio will fuel stronger growth because the business funds more investments with retained earnings. The payout ratios of the proxy group are shown on my Schedule MPG-5. These dividend payout ratios and earnings retention ratios then can be used to develop a sustainable long-term earnings retention growth rate. A sustainable long-term earnings retention ratio will help gauge whether analysts' current three- to five-year growth rate projections can be sustained over an indefinite period of time.

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

As shown in Schedule MPG-6, page 1, the average sustainable growth rate for the proxy group using this internal growth rate model is 4.85%.

Q WHAT IS THE DCF ESTIMATE USING THESE SUSTAINABLE LONG-TERM GROWTH RATES?

A A DCF estimate based on these sustainable growth rates is developed in Schedule MPG-7. As shown there, a sustainable growth DCF analysis produces proxy group average and median DCF results of 9.15% and 8.57%, respectively.

Multi-Stage Growth DCF Model

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.

Q WHEN DO YOU BELIEVE SHORT-TERM GROWTH RATES CHANGE OVER TIME?

A Analyst projected growth rates over the next three to five years will change as utility earnings growth outlooks change. Utility companies typically go through cycles in making investments in their systems. When utility companies are making large investments, their rate base grows rapidly, which accelerates their earnings growth. Once a major construction cycle is completed or levels off, growth in the utility rate base slows, and its earnings slow from an abnormally high three- to five-year growth rate period to a lower sustainable growth rate.

As major construction cycles extend over longer periods of time, even with an accelerated construction program, the growth rate of the utility will slow simply because it is adding to a larger rate base, and the utility has limited human and capital resources available to expand its construction program. Hence, the three- to five-year growth rate projection should be used as a long-term sustainable growth rate but not without making a reasonable informed judgment to determine whether it considers the current market environment, the industry, and whether the three- to five-year growth outlook is sustainable.

Q CAN A UTILITY'S ELEVATED THREE- TO FIVE-YEAR GROWTH RATE CONTINUE INDEFINITELY IF ITS CAPITAL PROGRAM CONTINUES OVER AN INDEFINITE PERIOD OF TIME?

A No. Because the growth rate will slow over time, even if the utility's capital program remains at an elevated level. This is illustrated in Table 4 below. Consider a hypothetical company with a beginning plant-in-service of $1 million and an elevated capital expenditure program of $100,000 (10% of total capital). Capital expenditures stay elevated but also grow at the rate of inflation of 2% over the next 10 years. This company has depreciation expense based on a rate of gross plant of 3.0%.

In this example, the first year, the capital expenditures less depreciation expense will grow plant-in-service from $1 million up to $1,070,000 – a 7% plant growth. In this example, earnings in the year would begin at an assumed 10% rate of return on investment, or $103,500. This represents a 10% return on average plant investment for the year. Now assume that the capital improvement program continues, and plant-in-service increases from the initial $1 million up to $1,139,900 by the end of year 2. In this second year, earnings would increase to $110,495, a 6.8% growth in earnings relative to year 1. Each year, the embedded plant-in-service increases by capital improvements less depreciation expense. As a result, the growth in earnings slows because a percent change in plant-in-service starts to slow as the beginning of the year plant-in-service number increases. That is, the denominator in the growth equation increases with a relatively flat but elevated level of capital improvements resulting in a decreasing growth in earnings. With this continued level of elevated capital improvement offset by depreciation expense, the growth rate of earnings starts at around 6.8% in the beginning of the growth period, declines to around 5.3% after five years of growth, and further declines to around 4.2% after

10 years of elevated capital investment spending. Hence, while the company maintains an elevated level of capital spending throughout the forecast period, the earnings growth rate nevertheless declines from 6.8% at the beginning of the spending period, down to 4.2% after 10 years of elevated capital spending. Again, this occurs because the denominator in the growth equation increases as plant investment is made and plant-in-service increases. As a result, elevated capital expenditures have a lower growth impact on a larger capital base after years of elevated capital spending relative to the beginning of the capital spending program.

TABLE 4

Growth in Plant In-Service and Earnings

Year	Beginning of Year Plant-in-Service (1)	Capital Improvement (2)	Depreciation Expense (3)	End of Year Plant-in-Service (4)	Avg Year Plant (5)	ROE (6)	Earnings (7)	Annual Earnings Growth Rate (8)
0	$1,000,000	$100,000	$30,000	$1,070,000	$1,035,000	10.0%	$103,500	
1	$1,070,000	$102,000	$32,100	$1,139,900	$1,104,950	10.0%	$110,495	6.8%
2	$1,139,900	$104,040	$34,197	$1,209,743	$1,174,822	10.0%	$117,482	6.3%
3	$1,209,743	$106,121	$36,292	$1,279,572	$1,244,657	10.0%	$124,466	5.9%
4	$1,279,572	$108,243	$38,387	$1,349,428	$1,314,500	10.0%	$131,450	5.6%
5	$1,349,428	$110,408	$40,483	$1,419,353	$1,384,390	10.0%	$138,439	5.3%
6	$1,419,353	$112,616	$42,581	$1,489,388	$1,454,371	10.0%	$145,437	5.1%
7	$1,489,388	$114,869	$44,682	$1,559,575	$1,524,482	10.0%	$152,448	4.8%
8	$1,559,575	$117,166	$46,787	$1,629,954	$1,594,765	10.0%	$159,476	4.6%
9	$1,629,954	$119,509	$48,899	$1,700,565	$1,665,259	10.0%	$166,526	4.4%
10	$1,700,565	$121,899	$51,017	$1,771,447	$1,736,006	10.0%	$173,601	4.2%

Notes:
Column 2: Escalation Rate 2.00%.
Column 3: Depr Rate 3.00%.
Column 4 = Column 1 plus Column 2 less Column 3.
Column 5 = (Column 1 + Column 4)/2.
Column 7 = Column 5 * Column 6.
Column 8 = Column 7 N ÷ Column 7 N-1 (N is the Year) less 1.

Q IS THE USE OF A MULTI-STAGE DCF MODEL SUPPORTED IN ACADEMIC AND INDUSTRY LITERATURE?

A Yes. In his book *New Regulatory Finance*, Dr. Roger Morin states the following:

> Dividends need not be, and probably are not, constant from period to period. Moreover, there are circumstances where the standard DCF model cannot be used to assess investor return requirements. For example, if a utility company is in the process of altering its dividend payout policy and dividends are not expected to grow at the same rate as earnings during the transition period, the standard DCF model is inapplicable. This is because the expected growth in stock price has to be different from that of dividends, earnings, and book value if the market price is to converge toward book value.
>
> * * *
>
> A Non-Constant Growth DCF model is appropriate whenever the growth rate is expected to change, and the only way to produce a change in the forecast payout ratio is by introducing an intermediate growth rate that is different from the long-term growth rate, as in the previous example.[11]

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.

For the short-term growth period, I relied on the consensus analysts' growth projections described above in relationship to my constant growth DCF model. For the transition period, the growth rates were reduced or increased by an equal factor, which reflects the difference between the analysts' growth rates and the United States Gross Domestic Product ("U.S. GDP") growth rate. For the long-term growth

[11] *New Regulatory Finance*, Roger A. Morin, PhD, 2006 Public Utilities Reports, Inc., Vienna, Virginia, pp. 264 and 267.

period, I assumed each company's growth would converge to the maximum sustainable growth rate for a utility company as proxied by the consensus analysts' projected growth for the U.S. GDP of 4.9%.

Q WHY IS THE GDP GROWTH PROJECTION A REASONABLE PROXY FOR THE MAXIMUM SUSTAINABLE GROWTH RATE FOR A UTILITY?

A Utilities cannot indefinitely sustain a growth rate that exceeds the growth rate of the overall economy. Utilities' earnings/dividend growth is created by increased utility investment or rate base. Such investment, in turn, is driven by service area 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-8. Utility sales growth has lagged behind GDP growth for more than a decade. As a result, 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 conservative proxy for the highest sustainable long-term growth rate of a utility.

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

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

> The constant growth model is most appropriate for mature companies with a stable history of growth and stable future

expectations. Expected growth rates vary somewhat among companies, but dividends for mature firms are often expected to grow in the future at about the same rate as nominal gross domestic product (real GDP plus inflation).[12]

Q HOW DID YOU DETERMINE A SUSTAINABLE LONG-TERM GROWTH RATE THAT REFLECTS THE CONSENSUS OF THE MARKET?

A I relied on the consensus analysts' projections of long-term GDP growth. *The Blue Chip Financial Forecasts* publishes consensus economists' GDP growth projections twice a year. These consensus analysts' GDP growth outlooks are the best available measure of the market's assessment of long-term GDP growth. These analyst projections reflect all current outlooks for GDP, as reflected in analyst projections, and are likely the most influential on investors' expectations of future growth outlooks. The consensus economists' published GDP growth rate outlook is 5.1% to 4.7% over the next 10 years.[13]

Therefore, I propose to use the consensus economists' projected 5- and 10-year average GDP consensus growth rate of 4.9%, as published by *Blue Chip Financial Forecasts,* as an estimate of long-term sustainable growth. *Blue Chip Financial Forecasts'* projections provide real GDP growth projections of 2.8% and 2.5%, and GDP inflation of 2.2% and 2.1%[14] over the 5-year and 10-year projection periods, respectively. This consensus GDP growth forecast represents the most likely views of market participants because it is based on published consensus economist projections.

[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.
[13]*Blue Chip Financial Forecasts*, June 1, 2012 at 14.
[14]GDP growth is the product of real and inflation GDP growth.

Q DO YOU CONSIDER OTHER SOURCES OF PROJECTED LONG-TERM GDP GROWTH?

A Yes, and these sources corroborate my consensus analysts' projections. The U.S. EIA in its Annual Energy Outlook projects real GDP out until 2035. In its 2011 Annual Report, the EIA projects real GDP through 2035 to be in the range of 2.1% to 3.2%, with a midpoint or reference case of 2.7%.[15]

Also, the Congressional Budget Office ("CBO") makes long-term economic projections. The CBO is projecting real GDP growth of 3.3% to 2.4% during the next 5 and 10 years, respectively, with GDP price inflation of 1.9% to 2.0%.[16] The CBO's real GDP projections are higher than the consensus but its GDP inflation is lower than the consensus economists.

The real GDP and nominal GDP growth projections made by the U.S. EIA and those made by the CBO support the use of the consensus analyst 5-year and 10-year projected GDP growth outlooks as a reasonable market assessment of long-term prospective GDP growth.

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 data 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 4.9%, the average of the consensus economists' 5-year and 10-year projected nominal GDP growth rates.

[15] *DOE/EIA Annual Energy Outlook 2011 With Projections to 2035*, April 2011 at 58.
[16] *CBO: The Budget and Economic Outlook: Fiscal Years 2012 to 2022*, January 2012.

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

A As shown in Schedule MPG-9, the average and median DCF returns on equity for my proxy group are 9.30% and 9.47%, respectively.

Q PLEASE SUMMARIZE THE RESULTS FROM YOUR DCF ANALYSES.

A The results from my DCF analyses are summarized in Table 5 below:

TABLE 5

Summary of DCF Results

Description	Estimates
Constant Growth DCF Model (Analysts' Growth)	9.46%
Constant Growth DCF Model (Sustainable Growth)	9.15%
Multi-Stage Growth DCF Model	9.30%

I conservatively conclude that a DCF return for KCP&L GMO in this case is 9.50%, which is heavily weighted at my constant growth analysts' growth DCF results.

Risk Premium Model

Q PLEASE DESCRIBE YOUR BOND YIELD PLUS RISK PREMIUM MODEL.

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

This risk premium model is based on two estimates of an equity risk premium. First, I estimated the difference between the required return on utility common equity investments and U.S. Treasury bonds. The difference between the required return on common equity and the Treasury bond yield is the risk premium. I estimated the risk premium on an annual basis for each year over the period 1986 through 2011. The common equity required returns were based on regulatory commission-authorized returns for electric utility companies. Authorized returns are typically based on expert witnesses' estimates of the contemporary investor-required return.

The second equity risk premium estimate is based on the difference between regulatory commission-authorized returns on common equity and contemporary "A" rated utility bond yields. I selected the period 1986 through 2011 because public utility stocks consistently traded at a premium to book value during that period. This is illustrated in Schedule MPG-10, which shows that the market to book ratio since 1986 for the electric utility industry was consistently above 1.0. Over this period, regulatory authorized returns were sufficient to support market prices that at least exceeded book value. This is an indication that regulatory authorized returns on common equity supported a utility's ability to issue additional common stock without diluting existing shares. It further demonstrates that utilities were able to access equity markets without a detrimental impact on current shareholders.

Based on this analysis, as shown in Schedule MPG-11, the average indicated equity risk premium over U.S. Treasury bond yields has been 5.23%. Of the 26 observations, 20 indicated risk premiums fall in the range of 4.41% to 6.13%. Since the risk premium can vary depending upon market conditions and changing investor risk perceptions, I believe using an estimated range of risk premiums provides the

best method to measure the current return on common equity using this methodology.

As shown in Schedule MPG-12, the average indicated equity risk premium over contemporary Moody's utility bond yields was 3.81% over the period 1986 through 2011. The indicated equity risk premium estimates based on this analysis primarily fall in the range of 3.03% to 4.62% over this time period.

Q DO YOU BELIEVE THAT THESE EQUITY RISK PREMIUM ESTIMATES ARE BASED ON A TIME PERIOD THAT IS TOO LONG OR TOO SHORT TO DRAW ACCURATE RESULTS CONCERNING CONTEMPORARY MARKET CONDITIONS?

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

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 recommended that use of "actual achieved return data" should be based on very long historical time periods. The studies find that achieved returns over short time periods may not reflect investors' expected returns due to unexpected and abnormal stock

price performance. However, these short-term abnormal actual returns would be smoothed over time and the achieved actual returns over long time periods would approximate investors' expected returns. Therefore, it is reasonable to assume that averages of annual achieved returns over long time periods will generally converge on the investors' expected returns.

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

Q BASED ON HISTORICAL DATA, WHAT RISK PREMIUM HAVE YOU USED TO ESTIMATE KCP&L GMO'S COST OF COMMON EQUITY IN THIS PROCEEDING?

A The equity risk premium should reflect the relative market perception of risk in the utility industry today. I have gauged investor perceptions in utility risk today in Schedule MPG-13. On that schedule, I show the yield spread between utility bonds and Treasury bonds over the last 32 years and the first six months of 2012. As shown in this schedule, the 2011 utility bond yield spreads over Treasury bonds for "A" rated and "Baa" rated utility bonds are 1.13% and 1.65%, respectively. The utility bond yield spreads over Treasury bonds for "A" and "Baa" rated utility bonds for the first six months of 2012 are 1.27% and 2.00%, respectively. The current "A" rated utility bond yield spread over Treasury bond yields is now lower than the 32-year average spreads of 1.57%. However, the "Baa" rated utility spread of 2.00% is slightly higher, even though comparable to the 32-year average spread of 1.98%.

A current 13-week average "A" rated utility bond yield of 4.14%, when compared to the current Treasury bond yield of 2.83% as shown in Schedule MPG-14, page 1 implies a yield spread of around 1.31%. This current utility bond yield spread is lower than the 32-year average spread for "A" utility bonds of 1.57%.

The current spread for the "Baa" utility yields of 2.12% is slightly higher than, although comparable to, the 32-year average spread of 1.98%.

These utility bond yield spreads are clear evidence that the market considers the utility industry to be a relatively low risk investment and demonstrates that utilities continue to have strong access to capital.

Q HOW DID YOU ESTIMATE KCP&L GMO'S COST OF COMMON EQUITY WITH THIS RISK PREMIUM MODEL?

A I added a projected long-term Treasury bond yield to my estimated equity risk premium over Treasury yields. The 13-week average 30-year Treasury bond yield, ending July 13, 2012 was 2.83%, as shown in Schedule MPG-14, page 1. *Blue Chip Financial Forecasts* projects the 30-year Treasury bond yield to be 3.60%, and a 10-year Treasury bond yield to be 2.60%.[17] Using the projected 30-year bond yield of 3.60%, and a Treasury bond risk premium of 4.41% to 6.13%, as developed above, produces an estimated common equity return in the range of 8.01% (3.60% + 4.41%) to 9.73% (3.60% + 6.13%). I recommend an equity risk premium of 9.16%, rounded to 9.20%. This estimate is based on giving two-thirds weight to my high-end risk premium estimate of 9.73%, and one-third weight to my low-end risk premium estimate of 8.01%. I believe this weighting is appropriate given the unusually large yield spreads between Treasury bond and utility bond yields.

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 July 13, 2012 of 4.95%. Adding the utility equity risk premium of 3.03% to 4.62%, as developed above, to a "Baa" rated bond yield of 4.95%, produces a cost of equity in the range of

[17] *Blue Chip Financial Forecasts*, July 1, 2012 at 2.

7.98% (4.95% + 3.03%) to 9.57% (4.95% + 4.62%). Again, recognizing the unusually wide Treasury to utility bond yield spreads, I recommend a risk premium of 9.04%,[18] rounded to 9.00%.

My risk premium analyses produce a return estimate in the range of 9.00% to 9.20%, with a midpoint estimate of 9.10%.

Capital Asset Pricing Model ("CAPM")

Q PLEASE DESCRIBE THE CAPM.

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

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

R_i = Required return for stock i
R_f = Risk-free rate
R_m = Expected return for the market portfolio
B_i = Beta - Measure of the risk for stock

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

The risks that cannot be eliminated when held in a diversified portfolio are non-diversifiable risks. Non-diversifiable risks are related to the market in general

[18] 2/3 (9.57%) + 1/3 (7.98%).

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.

Q PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.

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

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

A As previously noted, *Blue Chip Financial Forecasts*' projected 30-year Treasury bond yield is 3.60%.[19] The current 30-year Treasury bond yield is 2.83%. I used *Blue Chip Financial Forecasts*' projected 30-year Treasury bond yield of 3.60% for my CAPM analysis.

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

A Treasury securities are backed by the full faith and credit of the United States government, so long-term Treasury bonds are considered to have negligible credit risk. Also, long-term Treasury bonds have an investment horizon similar to that of common stock. As a result, investor-anticipated long-run inflation expectations are

[19] *Blue Chip Financial Forecasts*, July 1, 2012 at 2.

reflected in both common-stock required returns and long-term bond yields. Therefore, the nominal risk-free rate (or expected inflation rate and real risk-free rate) included in a long-term bond yield is a reasonable estimate of the nominal risk-free rate included in common stock returns.

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

Q WHAT BETA DID YOU USE IN YOUR ANALYSIS?

A As shown in Schedule MPG-15, the proxy group average *Value Line* beta estimate is 0.72.

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.

Morningstar's *Stocks, Bonds, Bills and Inflation 2012 Classic Yearbook* publication estimates the historical arithmetic average real market return over the period 1926 to 2011 as 8.6%.[20] A current consensus analysts' inflation projection, as measured by the Consumer Price Index, is 2.2%.[21] Using these estimates, the expected market return is 10.99%.[22] The market risk premium then is the difference between the 10.99% expected market return, and my 3.60% risk-free rate estimate, or approximately 7.40%.

The historical estimate of the market risk premium was also estimated by Morningstar in *Stocks, Bonds, Bills and Inflation 2012 Classic Yearbook*. Over the period 1926 through 2011, Morningstar's study estimated that the arithmetic average of the achieved total return on the S&P 500 was 11.8%,[23] and the total return on long-term Treasury bonds was 6.1%.[24] The indicated market risk premium is 5.7% (11.8% - 6.1% = 5.7%). The average of my market risk premium estimates is 6.55%, rounded to 6.60% (5.70% to 7.40%).

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

A Morningstar's analysis indicates that a market risk premium falls somewhere in the range of 5.9% to 6.6%. My market risk premium falls in the range of 5.7% to 7.4%. My average market risk premium of 6.6% is at the high end of Morningstar's range.

Morningstar estimates a forward-looking market risk premium based on actual achieved data from the historical period of 1926 through 2011. Using this data,

[20] *Morningstar, Inc. Ibbotson SBBI 2012 Classic Yearbook* at 84.
[21] *Blue Chip Financial Forecasts*, July 1, 2012 at 2.
[22] { [(1 + 0.086) ∗ (1 + 0.022)] – 1 } ∗ 100.
[23] *Morningstar, Inc. Ibbotson SBBI 2012 Classic Yearbook* at 83.
[24] *Id.*

Morningstar estimates a market risk premium derived from the total return on large company stocks (S&P 500), less the income return on Treasury bonds. The total return includes capital appreciation, dividend or coupon reinvestment returns, and annual yields received from coupons and/or dividend payments. The income return, in contrast, only reflects the income return received from dividend payments or coupon yields. Morningstar argues that the income return is the only true risk-free rate associated with Treasury bonds and is the best approximation of a truly 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.

Morningstar's range is based on several methodologies. First, Morningstar estimates a market risk premium of 6.6% based on the difference between the total market return on common stocks (S&P 500) less the income return on Treasury bond investments. Second, Morningstar found that if the New York Stock Exchange (the "NYSE") was used as the market index rather than the S&P 500, that the market risk premium would be 6.4%, not 6.6%. Third, if only the two deciles of the largest companies included in the NYSE were considered, the market risk premium would be 5.9%.[25]

Finally, Morningstar found that the 6.6% market risk premium based on the S&P 500 was influenced by an abnormal expansion of price-to-earnings ("P/E") ratios relative to earnings and dividend growth during the period 1980 through 2001. Morningstar believes this abnormal P/E expansion is not sustainable. Therefore,

[25]Morningstar observes that the S&P 500 and the NYSE Decile 1-2 are both large capitalization benchmarks. *Morningstar, Inc. Ibbotson SBBI 2012 Valuation Yearbook* at 54.

Morningstar adjusted this market risk premium estimate to normalize the growth in the P/E ratio to be more in line with the growth in dividends and earnings. Based on this alternative methodology, Morningstar published a long-horizon supply-side market risk premium of 6.1%.[26]

Q WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?

A As shown in Schedule MPG-16, based on my and Morningstar's high-end market risk premium of 6.6%, a risk-free rate of 3.60%, and a beta of 0.72, my CAPM analysis produces a return of 8.35% (rounded to 8.40%).

Return on Equity Summary

Q BASED ON THE RESULTS OF YOUR RETURN ON COMMON EQUITY ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY DO YOU RECOMMEND FOR KCP&L GMO?

A Based on my analyses, I estimate KCP&L GMO's current market cost of equity to be in the range of 9.10% to 9.50%.

TABLE 6

Return on Common Equity Summary

Description	Results
DCF	9.50%
Risk Premium	9.10%
CAPM	8.40%

My recommended range is based on my DCF and Risk Premium results.

[26] *Id*. at 66.

Financial Integrity

Q WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT AN INVESTMENT GRADE BOND RATING FOR KCP&L GMO?

A Yes. I have reached this conclusion by comparing the key credit rating financial ratios for KCP&L GMO's retail cost of service in this case, adjusted for my proposed return on equity and the Company's actual capital structure, to S&P's benchmark financial ratios using S&P's new credit metric ranges.

Q PLEASE DESCRIBE THE MOST RECENT S&P FINANCIAL RATIO CREDIT METRIC METHODOLOGY.

A S&P publishes a matrix of financial ratios that correspond to its assessment of the business risk of the utility company and related bond rating. On May 27, 2009, S&P expanded its matrix criteria[27] by including additional business and financial risk categories. Based on S&P's most recent credit matrix, the business risk profile categories are "Excellent," "Strong," "Satisfactory," "Fair," "Weak," and "Vulnerable." Most electric utilities have a business risk profile of "Excellent" or "Strong." The financial risk profile categories are "Minimal," "Modest," "Intermediate," "Significant," "Aggressive," and "Highly Leveraged." Most of the electric utilities have a financial risk profile of "Aggressive." KCP&L GMO has an "Excellent" business risk profile and an "Aggressive" financial risk profile.

[27] S&P updated its original 2007 credit metric guidelines in 2009, and incorporated utility metric benchmarks with the general corporate rating metrics. *Standard & Poor's*: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009.

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

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

S&P publishes ranges for three primary financial ratios that it uses as guidance in its credit review for utility companies. The three primary financial ratio benchmarks it relies on in its credit rating process include: (1) Total Debt to Total Capital; (2) Debt to Earnings Before Interest, Taxes, Depreciation and Amortization ("EBITDA"); and (3) Funds From Operations ("FFO") to Total Debt.

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

A I calculated each of S&P's financial ratios based on KCP&L GMO's cost of service for its Missouri jurisdictional electric operations. While S&P would normally look at total consolidated KCP&L GMO financial ratios in its credit review process, my investigation in this proceeding is not the same as S&P's. I am attempting to judge the reasonableness of my proposed cost of capital for rate-setting in KCP&L GMO's regulated utility operations. Hence, I am attempting to determine whether my proposed rate of return will in turn support cash flow metrics, balance sheet strength, and earnings that will support an investment grade bond rating and KCP&L GMO's financial integrity.

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

A No, I did not. In its most recent credit report, S&P did not account for any off-balance sheet debt equivalents related to KCP&L GMO specifically.

Q PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS FOR KCP&L GMO (MPS[28]) AT A 9.10% RETURN ON EQUITY.

A The S&P financial metric calculations for KCP&L GMO (MPS) at a 9.10% return are developed on Schedule MPG-17, page 1.

KCP&L GMO (MPS)'s total debt ratio is approximately 54%. This is within the "Aggressive" utility guideline range of 50% to 60%. This total debt ratio will support an investment grade bond rating.

As shown on Schedule MPG-17, page 1, column 1, based on an equity return of 9.10%, KCP&L GMO (MPS) will be provided an opportunity to produce a debt to EBITDA ratio of 3.6x. This is within S&P's "Significant" range of 3.0x to 4.0x. This ratio also supports an investment grade credit rating.

Finally, KCP&L GMO (MPS)'s retail operations FFO to total debt coverage at a 9.10% equity return would be 19%, which is within the "Aggressive" metric guideline range of 12% to 20%. The FFO/total debt ratio will support an investment grade bond rating.

At my low-end recommended return on equity of 9.10% and the Company's actual capital structure, KCP&L GMO's financial credit metrics are supportive of an investment grade bond rating.

[28]Missouri Public Service.

Q PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS FOR KCP&L GMO (L&P[29]) AT A 9.10% RETURN ON EQUITY.

A The S&P financial metric calculations for KCP&L GMO (L&P) at a 9.10% return are developed on Schedule MPG-17, page 2.

KCP&L GMO (L&P)'s adjusted total debt ratio is approximately 54%. This is within the "Aggressive" utility guideline range of 50% to 60%. This total debt ratio will support an investment grade bond rating.

As shown on Schedule MPG-17, page 2, column 1, based on an equity return of 9.10%, KCP&L GMO (L&P) will be provided an opportunity to produce a debt to EBITDA ratio of 3.8x. This is within S&P's "Significant" range of 3.0x to 4.0x. This ratio also supports an investment grade credit rating.

Finally, KCP&L GMO (L&P)'s retail operations FFO to total debt coverage at a 9.10% equity return would be 19%, which is within the "Aggressive" metric guideline range of 12% to 20%. The FFO/total debt ratio will support an investment grade bond rating.

At my low-end recommended return on equity of 9.10% and the Company's actual capital structure, KCP&L GMO's financial credit metrics are supportive of an investment grade bond rating.

Q PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS FOR KCP&L GMO (MPS) AT A 9.50% RETURN ON EQUITY.

A The S&P financial metric calculations for KCP&L GMO (MPS) at a 9.50% return are developed on Schedule MPG-18, page 1.

[29]St. Joseph Light & Power.

KCP&L GMO (MPS)'s adjusted total debt ratio is approximately 54%. This is within the "Aggressive" utility guideline range of 50% to 60%. This total debt ratio will support an investment grade bond rating.

As shown on Schedule MPG-18, page 1, column 1, based on an equity return of 9.50%, KCP&L GMO (MPS) will be provided an opportunity to produce a debt to EBITDA ratio of 3.6x. This is within S&P's "Significant" range of 3.0x to 4.0x. This ratio also supports an investment grade credit rating.

Finally, KCP&L GMO (MPS)'s retail operations FFO to total debt coverage at a 9.50% equity return would be 19%, which is within the "Aggressive" metric guideline range of 12% to 20%. The FFO/total debt ratio will support an investment grade bond rating.

At my high-end recommended return on equity of 9.50% and the Company's actual capital structure, KCP&L GMO's financial credit metrics are supportive of an investment grade bond rating.

Q PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS FOR KCP&L GMO (L&P) AT A 9.50% RETURN ON EQUITY.

A The S&P financial metric calculations for KCP&L GMO (L&P) at a 9.50% return are developed on Schedule MPG-18, page 2.

KCP&L GMO (L&P)'s adjusted total debt ratio is approximately 54%. This is within the "Aggressive" utility guideline range of 50% to 60%. This total debt ratio will support an investment grade bond rating.

As shown on Schedule MPG-18, page 2, column 1, based on an equity return of 9.50%, KCP&L GMO (L&P) will be provided an opportunity to produce a debt to

EBITDA ratio of 3.7x. This is within S&P's "Significant" range of 3.0x to 4.0x. This ratio also supports an investment grade credit rating.

Finally, KCP&L GMO (L&P)'s retail operations FFO to total debt coverage at a 9.50% equity return would be 19%, which is within the "Aggressive" metric guideline range of 12% to 20%. The FFO/total debt ratio will support an investment grade bond rating.

At my high-end recommended return on equity of 9.50% and the Company's actual capital structure, KCP&L GMO's financial credit metrics are supportive of an investment grade bond rating.

RESPONSE TO KCP&L GMO WITNESS DR. SAMUEL HADAWAY

Q WHAT RETURN ON COMMON EQUITY IS KCP&L GMO PROPOSING FOR THIS PROCEEDING?

A KCP&L GMO is proposing to set rates based on a return on equity of 10.40%. KCP&L GMO's return on equity proposal is based on the analysis and judgment of Dr. Samuel Hadaway. Dr. Hadaway's results are summarized at page 42 of his direct testimony.

Q DO DR. HADAWAY'S METHODOLOGIES SUPPORT HIS 10.40% RETURN ON EQUITY FOR HIS PROXY GROUP?

A No. As discussed in detail below, Dr. Hadaway's own analyses would support a return on equity in the range of 9.2% to 9.5% if it is adjusted to reflect current market data and his models are properly applied. These adjustments to Dr. Hadaway's return on equity estimates support my recommended return on equity range.

Q PLEASE DESCRIBE THE METHODOLOGY USED BY DR. HADAWAY TO SUPPORT HIS RETURN ON COMMON EQUITY RECOMMENDATION.

A Dr. Hadaway develops his return on common equity recommendation using three versions of the DCF model, and two utility risk premium analyses. I have summarized Dr. Hadaway's results in Table 7 under column 1. Under column 2, I show the results of Dr. Hadaway's analyses adjusted for updated data and more reasonable application of the models.

As shown in Table 7, using consensus economists' projection of GDP growth rather than Dr. Hadaway's inflated GDP growth estimates, his own DCF analyses would support a return on equity for KCP&L GMO in the range of 9.2% to 9.5%. Proper adjustments to Dr. Hadaway's utility risk premium estimates to reflect the unadjusted equity risk premium would reduce this estimate to 9.5%.

TABLE 7

Summary of Dr. Hadaway's ROE Estimate

Description	Hadaway Results[1] (1)	Adjusted Hadaway Results[2] (2)
DCF Analysis		
Constant Growth (Analysts' Growth)	10.0%	9.5%
Constant Growth (GDP Growth)	10.2% - 10.4%	9.3% - 9.5%
Multi-Stage Growth Model	10.0% - 10.1%	9.2% - 9.3%
Indicated DCF Range	10.0% - 10.4%	9.2% - 9.5%
Risk Premium Analysis		
Forecasted Utility Debt + Equity Risk Premium	10.12%	Reject
Current Utility Debt + Equity Risk Premium	9.97%	9.52%
Risk Premium Estimate	10.0%	9.5%
Recommended ROE	10.4%	
Adjusted ROE		9.4%

Sources:
[1]Hadaway Direct at 42.
[2]Schedule MPG-19.

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

A Dr. Hadaway's adjusted constant growth DCF analysis is shown on his Schedule SCH-5. As shown on that schedule, Dr. Hadaway's constant growth DCF analysis is based on a recent stock price, an annualized dividend and an average of three growth rates: (1) *Value Line*; (2) Zacks; and (3) Thomson.

Q ARE DR. HADAWAY'S DCF ESTIMATES RELIABLE?

A No. Dr. Hadaway's constant growth DCF analysis is based on a consensus analysts' average growth rate of 5.63%. This growth rate is inappropriate for two reasons. First, the growth rate exceeds a long-term sustainable growth rate as required by the

constant growth DCF model. A constant growth rate of 5.63% is substantially higher than the market's outlook for future growth of the economy of 4.9%. Hence, Dr. Hadaway's use of a consensus analysts' growth rate of over 70 basis points in excess of the growth rate in the economy in which these companies will operate is unreasonable and unsustainable.

Second, more recent projections for the growth rate of these companies in the proxy group show more moderate growth outlooks. As shown on my Schedule MPG-3, the consensus growth rate for these companies now is again more moderate at a level of about 5.14%. Updating Dr. Hadaway's analysis would produce a more reasonable estimate of the constant growth DCF outlook for this proxy group. As shown on my Schedule MPG-4, the current market cost of equity for this proxy group using more moderate growth outlooks, which are reasonably consistent with sustainable long-term growth would indicate a DCF return of 9.46%, rounded to 9.50%.

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

A He states that the GDP growth rate is based on the achieved GDP growth over the last 10, 20, 30, 40, 50, and 60-year periods. Dr. Hadaway's projected GDP growth rate is unreasonable. Historical GDP growth over the last 20 and 40-year periods was strongly influenced by the actual inflation rate experienced over that time period.

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

A The consensus economists' projected GDP growth rate is much lower than the GDP growth rate used by Dr. Hadaway in his DCF analysis. A comparison of

Dr. Hadaway's GDP growth rate and consensus economists' projected GDP growth over the next 5 and 10 years is shown in Table 8. As shown in this table, Dr. Hadaway's GDP rate of 5.8% reflects real GDP of 2.7% and an inflation adjusted GDP of 3.0%. However, consensus economists' projections of nominal GDP include GDP inflation projections over the next 5 and 10 years of 2.2% and 2.1%, respectively.[30]

As is clearly evident in Table 8, Dr. Hadaway's historical GDP growth reflects historical inflation, which is much higher than, and not representative of, consensus market expected forward-looking inflation.

TABLE 8

GDP Projections

Description	GDP Inflation	Real GDP	Nominal GDP
Dr. Hadaway	3.0%	2.7%	5.8%
Consensus 5-Year Projection	2.2%	2.8%	5.1%
Consensus 10-Year Projection	2.1%	2.5%	4.8%

Source: *Blue Chip Financial Forecasts*, June 1, 2012 at 14.

As such, Dr. Hadaway's 5.8% nominal GDP growth rate is not reflective of consensus market expectations and should be rejected. Indeed, Dr. Hadaway's 5.8% GDP growth rate outlook is inconsistent with the consensus of economists' independent projections of future long-term GDP growth, and also inconsistent with projections made by the U.S. Energy Information Administration, and Congressional Budget Office as referenced in my testimony above where I describe the parameters used in my own multi-stage growth DCF analyses. Those agencies also project real GDP in

[30] *Blue Chip Financial Forecasts*, June 1, 2012 at 14.

line with what Dr. Hadaway and his consensus projections include, however their outlook for future inflation is much lower than Dr. Hadaway, and much more consistent with the consensus independent economists' projections discussed in Table 8 above. For all these reasons, Dr. Hadaway's GDP growth outlook rate projections are simply out of line and out of touch with the consensus market outlooks.

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

A As shown in Schedule MPG-19, I updated Dr. Hadaway's DCF analyses using more recent market data and a GDP growth rate of 4.9%. This GDP growth rate is the consensus economists' 5- and 10-year projected growth rate of the GDP as published in the *Blue Chip Financial Forecasts*. As shown in Schedule MPG-19, using this consensus economists' projected GDP growth rate, reduces Dr. Hadaway's long-term GDP growth DCF result from 10.3% to 9.4% and his multi-stage DCF from 10.1% to 9.3%.

Q PLEASE SUMMARIZE YOUR ADJUSTMENTS TO DR. HADAWAY'S DCF STUDIES.

A Using a more reasonable GDP growth rate reduces the average DCF result produced by Dr. Hadaway's studies from 10.1% down to 9.4%. Dr. Hadaway's original estimates and these updated and adjusted results are shown below in Table 9.

TABLE 9

Adjusted Hadaway DCF

Description	Range Average Hadaway DCF	Range Average Adjusted DCF
Constant Growth (Analysts' Growth)	10.0%	9.5%
Constant Growth (GDP Growth)	10.3%	9.4%
Multi-Stage Growth Model	10.1%	9.3%
Average	10.1%	9.4%

As shown above in Table 9, using a consensus economists' GDP forecast, rather than the GDP forecast derived by Dr. Hadaway, would support a return on equity no higher than 9.4%.

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

A Dr. Hadaway's utility bond yield versus authorized return on common equity risk premium is shown in Schedule SCH-6. As shown in this schedule, Dr. Hadaway estimated an annual equity risk premium by subtracting Moody's average bond yield from the electric utility regulatory commission authorized return on common equity over the period 1980 through 2011. Based on this analysis, Dr. Hadaway estimates an average indicated equity risk premium over current utility bond yields of 3.33%.

Dr. Hadaway then adjusts this average equity risk premium using a regression analysis based on an expectation that there is an ongoing inverse relationship between interest rates and equity risk premiums. Based on this regression analysis, Dr. Hadaway increases his equity risk premium from 3.33%, up to 4.78% and 4.89% relative to projected and current "BBB" bond yield of 5.34% and 5.08%, respectively. He then adds these inflated equity risk premiums to the projected and current "BBB"

rated utility bond yield of 5.34% and 5.08% to produce a return on equity of 10.12% and 9.97%, respectively.

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

A No. Dr. Hadaway develops a forward-looking risk premium model, relying on forecasted interest rates and volatile utility spreads, which are highly uncertain and produce inaccurate results. Further, Dr. Hadaway's proposal to adjust the actual equity risk premium of 3.33% to reflect the inverse relationship between interest rates and utility risk premiums to 4.78% and 4.89% is unreasonable. This adjustment is inappropriate and not consistent with academic literature that finds that this relationship should change with risk changes and not simply changes to interest rates.

Q DO YOU HAVE ANY COMMENTS CONCERNING DR. HADAWAY'S FORECASTED UTILITY BOND YIELD OF 5.34%?

A Yes. Dr. Hadaway develops his forecasted utility bond yield based on the 3-month historical spread of "A" rated utility bond yields and 30-year Treasury yields of 2.04% added to his projected long-term Treasury yield of 3.3%. This approach is unreasonable because Dr. Hadaway relies on projected interest rates with historical yield spreads. The accuracy of his interest rate projections are highly problematic, and he provides no support for his assumption that yield spreads will stay flat if Treasury yields increase. This yield spread relationship is volatile and uncertain as are interest rate projections. Indeed, while interest rates have been projected to increase over the last several years, those increased interest rate projections have turned out to be wrong.

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

A Over the last several years, observable current interest rates have been a more accurate predictor of future interest rates than economists' consensus projections. Schedule MPG-20 illustrates this point. On this schedule, under Columns 1 and 2, I show the actual market yield at the time a projection is made for Treasury bond yields two years in the future. In Column 1, I show the actual Treasury yield and, in Column 2, I show the projected yield two years out.

As shown in Columns 1 and 2, over the last several years Treasury yields were projected to increase relative to the actual Treasury yields at the time of the projection. In Column 4, I show what the Treasury yield actually turned out to be two years after the forecast. Under Column 5, I show the actual yield change at the time of the projections relative to the projected yield change.

As shown in this schedule, over the last several years, economists consistently have been projecting that interest rates will increase. However, as demonstrated under Column 5, those yield projections have turned out to be overstated in virtually every case. Indeed, actual Treasury yields have decreased or remained flat over the last five years, rather than increase as the economists' projections indicated. As such, current observable interest rates are just as likely to predict future interest rates as are economists' projections.

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

A Dr. Hadaway's belief that there is a simplistic inverse relationship between equity risk premiums and interest rates is not supported by academic research. While academic studies have shown that, in the past, there has been an inverse relationship between these variables, researchers have found that the relationship changes over time and is influenced by changes in perception of the risk of bond investments relative to equity investments, and not simply changes to interest rates.[31]

In the 1980s, equity risk premiums were inversely related to interest rates, but that was likely attributable to the interest rate volatility that existed at that time. Interest rate volatility currently is much lower than it was in the 1980s.[32] As such, when interest rates were more volatile, the relative perception of bond investment risk increased relative to the investment risk of equities. This changing investment risk perception caused changes in equity risk premiums.

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

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

[32]Morningstar SBBI, 2009 Yearbook at 95-96.

changes to the risk of equity versus debt securities investments, not simply changes to interest rates.

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

Modifying Dr. Hadaway's equity risk premiums to consider yield spreads, rather than simply the inverse relationship between equity risk premiums and interest rates, would also reduce the level of equity risk premium estimated by Dr. Hadaway. Simply observing the highest equity risk premiums authorized over the last five years would indicate an average equity risk premium of 4.57%. (This is based on the last five years, excluding 2008, which had an abnormally low equity risk premium.) Relying on an equity risk premium of 4.57%, relative to current observable "BBB" utility bond yields of 4.95%, as shown on my Schedule MPG-14, would indicate a return on common equity for KCP&L GMO of 9.52%.

Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A Yes.

Qualifications of Michael P. Gorman

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

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

Q PLEASE STATE YOUR OCCUPATION.

A I am a consultant in the field of public utility regulation and a Managing Principal with Brubaker & Associates, Inc., energy, economic and regulatory consultants.

Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A In 1983 I received a Bachelors of Science Degree in Electrical Engineering from Southern Illinois University, and in 1986, I received a Masters Degree in Business Administration with a concentration in Finance from the University of Illinois at Springfield. I have also completed several graduate level economics courses.

In August of 1983, I accepted an analyst position with the Illinois Commerce Commission ("ICC"). In this position, I performed a variety of analyses for both formal and informal investigations before the ICC, including: marginal cost of energy, central dispatch, avoided cost of energy, annual system production costs, and working capital. In October of 1986, I was promoted to the position of Senior Analyst. In this position, I assumed the additional responsibilities of technical leader on projects, and my areas of responsibility were expanded to include utility financial modeling and financial analyses.

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.

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

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

At BAI, I also have extensive experience working with large energy users to distribute and critically evaluate responses to requests for proposals ("RFPs") for electric, steam, and gas energy supply from competitive energy suppliers. These analyses include the evaluation of gas supply and delivery charges, cogeneration and/or combined cycle unit feasibility studies, and the evaluation of third-party asset/supply management agreements. I have participated in rate cases on rate

design and class cost of service for electric, natural gas, water and wastewater utilities. I have also analyzed commodity pricing indices and forward pricing methods for third party supply agreements, and have also conducted regional electric market price forecasts.

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

Q HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?

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

Q PLEASE DESCRIBE ANY PROFESSIONAL REGISTRATIONS OR ORGANIZATIONS 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.

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KCP&L Greater Missouri Operations

Rate of Return

Line	Description	Amount (000) (1)	Weight (2)	Cost Range (3)	Cost Range (4)	Weighted Cost Range (5)	Weighted Cost Range (6)
1	Long-Term Debt	$ 1,373,175	53.90%	6.21%	6.21%	3.35%	3.35%
2	Preferred Stock	15,212	0.60%	4.29%	4.29%	0.03%	0.03%
3	Common Equity	1,159,445	45.51%	**9.10%**	**9.50%**	4.14%	4.32%
4	**Total**	**$ 2,547,832**	**100.00%**			**7.52%**	**7.70%**

Source:
KCP&L GMO Response to Staff's Data Request No. 0168.

KCP&L Greater Missouri Operations

Proxy Group

Line	Company	Credit Ratings[1] S&P (1)	Credit Ratings[1] Moody's (2)	Common Equity Ratios *AUS*[1] (3)	Common Equity Ratios *Value Line*[2] (4)	S&P Business Risk Score[3] (5)
1	ALLETE, Inc.	A-	Baa1	56.3%	55.7%	Strong
2	Alliant Energy Corp.	A-	A2	51.2%	50.9%	Excellent
3	American Electric Power	BBB	Baa2	44.7%	49.3%	Excellent
4	Avista Corporation	A-	Baa1	44.0%	48.6%	Excellent
5	Black Hills Corporation	BBB+	A3	44.8%	48.6%	Excellent
6	Cleco Corporation	BBB	Baa2	53.5%	51.9%	Excellent
7	DTE Energy Company	A	A2	47.1%	49.4%	Strong
8	Edison International	BBB+	A1	38.2%	40.6%	Strong
9	Great Plains Energy Inc.	BBB	Baa2	41.8%	51.6%	Excellent
10	Hawaiian Electric	BBB-	Baa2	47.7%	53.9%	Strong
11	IDACORP, Inc.	A-	A2	51.8%	54.4%	Excellent
12	Pinnacle West Capital	BBB-	Baa2	49.8%	55.9%	Excellent
13	Portland General Electric	A-	A3	49.3%	50.4%	Excellent
14	SCANA Corporation	A-	A3	42.1%	45.7%	Excellent
15	Sempra Energy	A+	Aa3	45.5%	49.2%	Strong
16	Southern Company	A	A2	46.5%	47.1%	Excellent
17	TECO Energy, Inc.	BBB+	Baa1	42.9%	45.8%	Excellent
18	Vectren Corporation	A-	A2	45.4%	48.4%	Excellent
19	Westar Energy, Inc.	BBB+	Baa1	45.9%	50.0%	Excellent
20	Wisconsin Energy Corp.	A-	A1	43.9%	46.0%	Excellent
21	Xcel Energy Inc.	A	A3	45.5%	48.9%	Excellent
22	**Average**	**BBB+**	**A3**	**46.6%**	**49.6%**	**Excellent**
23	KCP&L Greater Missouri Operations	BBB[4]	Baa3[4]		45.5% [5]	Excellent

Sources:

[1] *AUS Utility Reports*, July 1, 2012.

[2] *The Value Line Investment Survey,* May 4, May 25, and June 22, 2012.

[3] *S&P RatingsDirect:* "U.S. Regulated Electric Utilities, Strongest To Weakest," April 20, 2012.

[4] Great Plains Energy, Inc. 10-K, filed on February 28, 2012.

[5] Schedule MPG-1.

KCP&L Greater Missouri Operations

Consensus Analysts' Growth Rates

Line	Company	Zacks Estimated Growth %[1] (1)	Zacks Number of Estimates (2)	SNL Estimated Growth %[2] (3)	SNL Number of Estimates (4)	Reuters Estimated Growth %[3] (5)	Reuters Number of Estimates (6)	Average of Growth Rates (7)
1	ALLETE, Inc.	5.00%	N/A	4.70%	2	6.50%	2	5.40%
2	Alliant Energy Corp.	6.15%	N/A	6.30%	4	5.92%	5	6.12%
3	American Electric Power	3.60%	N/A	4.00%	7	3.97%	8	3.86%
4	Avista Corporation	4.67%	N/A	5.00%	1	4.50%	2	4.72%
5	Black Hills Corporation	6.00%	N/A	6.00%	1	N/A	N/A	6.00%
6	Cleco Corporation	N/A	N/A	3.00%	1	3.00%	1	3.00%
7	DTE Energy Company	5.00%	N/A	4.30%	3	3.84%	5	4.38%
8	Edison International	1.47%	N/A	2.70%	6	2.48%	8	2.22%
9	Great Plains Energy Inc.	7.75%	N/A	9.00%	3	8.50%	3	8.42%
10	Hawaiian Electric	7.12%	N/A	8.70%	5	6.57%	4	7.46%
11	IDACORP, Inc.	5.00%	N/A	4.50%	2	4.50%	2	4.67%
12	Pinnacle West Capital	5.68%	N/A	5.30%	4	6.04%	7	5.67%
13	Portland General Electric	4.10%	N/A	4.50%	4	4.25%	8	4.28%
14	SCANA Corporation	4.75%	N/A	4.70%	3	4.62%	4	4.69%
15	Sempra Energy	6.80%	N/A	5.00%	2	6.50%	2	6.10%
16	Southern Company	5.04%	N/A	5.40%	7	5.51%	8	5.32%
17	TECO Energy, Inc.	3.87%	N/A	4.60%	5	4.64%	8	4.37%
18	Vectren Corporation	4.50%	N/A	5.00%	2	5.50%	2	5.00%
19	Westar Energy, Inc.	6.22%	N/A	5.60%	5	5.55%	4	5.79%
20	Wisconsin Energy Corp.	5.28%	N/A	5.00%	5	6.45%	6	5.58%
21	Xcel Energy Inc.	4.86%	N/A	5.00%	8	4.97%	11	4.94%
22	**Average**	**5.14%**	**N/A**	**5.16%**	**4**	**5.19%**	**5**	**5.14%**

Sources:

[1] Zacks Elite, http://www.zackselite.com/, downloaded on July 13, 2012.

[2] SNL Interactive, http://www.snl.com/, downloaded on July 13, 2012.

[3] Reuters, http://www.reuters.com/, downloaded on July 13, 2012.

KCP&L Greater Missouri Operations

Constant Growth DCF Model
(Consensus Analysts' Growth Rates)

Line	Company	13-Week AVG Stock Price[1] (1)	Analysts' Growth[2] (2)	Annualized Dividend[3] (3)	Adjusted Yield (4)	Constant Growth DCF (5)
1	ALLETE, Inc.	$40.45	5.40%	$1.84	4.79%	10.19%
2	Alliant Energy Corp.	$44.57	6.12%	$1.80	4.29%	10.41%
3	American Electric Power	$39.03	3.86%	$1.88	5.00%	8.86%
4	Avista Corporation	$26.03	4.72%	$1.16	4.67%	9.39%
5	Black Hills Corporation	$32.37	6.00%	$1.48	4.85%	10.85%
6	Cleco Corporation	$40.96	3.00%	$1.25	3.14%	6.14%
7	DTE Energy Company	$57.28	4.38%	$2.35	4.28%	8.66%
8	Edison International	$44.67	2.22%	$1.30	2.97%	5.19%
9	Great Plains Energy Inc.	$20.46	8.42%	$0.87	4.61%	13.03%
10	Hawaiian Electric	$27.34	7.46%	$1.24	4.87%	12.34%
11	IDACORP, Inc.	$40.29	4.67%	$1.32	3.43%	8.10%
12	Pinnacle West Capital	$49.65	5.67%	$2.10	4.47%	10.14%
13	Portland General Electric	$25.67	4.28%	$1.06	4.31%	8.59%
14	SCANA Corporation	$46.69	4.69%	$1.98	4.44%	9.13%
15	Sempra Energy	$65.75	6.10%	$2.40	3.87%	9.97%
16	Southern Company	$46.21	5.32%	$1.96	4.47%	9.78%
17	TECO Energy, Inc.	$17.77	4.37%	$0.88	5.17%	9.54%
18	Vectren Corporation	$29.24	5.00%	$1.40	5.03%	10.03%
19	Westar Energy, Inc.	$28.90	5.79%	$1.32	4.83%	10.62%
20	Wisconsin Energy Corp.	$37.83	5.58%	$1.20	3.35%	8.93%
21	Xcel Energy Inc.	$27.77	4.94%	$1.04	3.93%	8.87%
22	**Average**	**$37.57**	**5.14%**	**$1.52**	**4.32%**	**9.46%**
23	**Median**					**9.54%**

Sources:
[1] SNL Financial, downloaded on July 16, 2012.
[2] Exhibit MPG-3.
[3] *The Value Line Investment Survey,* May 4, May 25, and June 22, 2012.

KCP&L Greater Missouri Operations

Payout Ratios

Line	Company	Dividends Per Share 2011 (1)	Dividends Per Share Projected (2)	Earnings Per Share 2011 (3)	Earnings Per Share Projected (4)	Payout Ratio 2011 (5)	Payout Ratio Projected (6)
1	ALLETE, Inc.	$1.78	$2.00	$2.65	$3.50	67.17%	57.14%
2	Alliant Energy Corp.	$1.70	$2.20	$2.75	$3.50	61.82%	62.86%
3	American Electric Power	$1.85	$2.15	$3.13	$3.75	59.11%	57.33%
4	Avista Corporation	$1.10	$1.40	$1.72	$2.25	63.95%	62.22%
5	Black Hills Corporation	$1.46	$1.60	$1.01	$2.50	144.55%	64.00%
6	Cleco Corporation	$1.12	$1.90	$2.59	$3.25	43.24%	58.46%
7	DTE Energy Company	$2.32	$2.75	$3.67	$4.50	63.22%	61.11%
8	Edison International	$1.29	$1.50	$3.23	$3.50	39.94%	42.86%
9	Great Plains Energy Inc.	$0.84	$1.10	$1.25	$1.75	67.20%	62.86%
10	Hawaiian Electric	$1.24	$1.30	$1.44	$2.00	86.11%	65.00%
11	IDACORP, Inc.	$1.20	$1.90	$3.36	$3.55	35.71%	53.52%
12	Pinnacle West Capital	$2.10	$2.40	$2.99	$3.75	70.23%	64.00%
13	Portland General Electric	$1.06	$1.25	$1.95	$2.25	54.36%	55.56%
14	SCANA Corporation	$1.94	$2.15	$2.97	$3.75	65.32%	57.33%
15	Sempra Energy	$1.92	$2.80	$4.47	$5.75	42.95%	48.70%
16	Southern Company	$1.87	$2.25	$2.55	$3.25	73.33%	69.23%
17	TECO Energy, Inc.	$0.85	$1.10	$1.27	$1.75	66.93%	62.86%
18	Vectren Corporation	$1.39	$1.60	$1.73	$2.50	80.35%	64.00%
19	Westar Energy, Inc.	$1.28	$1.48	$1.79	$2.40	71.51%	61.67%
20	Wisconsin Energy Corp.	$1.04	$1.80	$2.18	$2.75	47.71%	65.45%
21	Xcel Energy Inc.	$1.03	$1.35	$1.72	$2.25	59.88%	60.00%
22	**Average**	**$1.45**	**$1.81**	**$2.40**	**$3.07**	**64.98%**	**59.82%**

Source:
The Value Line Investment Survey, May 4, May 25, and June 22, 2012.

KCP&L Greater Missouri Operations

Sustainable Growth Rate

Line	Company	3 to 5 Year Projections: Dividends Per Share (1)	Earnings Per Share (2)	Book Value Per Share (3)	Book Value Growth (4)	ROE (5)	Adjustment Factor (6)	Adjusted ROE (7)	Payout Ratio (8)	Retention Rate (9)	Internal Growth Rate (10)	Sustainable Growth Rate (11)
1	ALLETE, Inc.	$2.00	$3.50	$34.50	3.69%	10.14%	1.02	10.33%	57.14%	42.86%	4.43%	5.06%
2	Alliant Energy Corp.	$2.20	$3.50	$32.35	3.57%	10.82%	1.02	11.01%	62.86%	37.14%	4.09%	4.66%
3	American Electric Power	$2.15	$3.75	$37.50	4.34%	10.00%	1.02	10.21%	57.33%	42.67%	4.36%	4.55%
4	Avista Corporation	$1.40	$2.25	$24.00	3.41%	9.38%	1.02	9.53%	62.22%	37.78%	3.60%	3.94%
5	Black Hills Corporation	$1.60	$2.50	$31.00	2.40%	8.06%	1.01	8.16%	64.00%	36.00%	2.94%	3.02%
6	Cleco Corporation	$1.90	$3.25	$30.00	4.96%	10.83%	1.02	11.10%	58.46%	41.54%	4.61%	4.78%
7	DTE Energy Company	$2.75	$4.50	$49.25	3.53%	9.14%	1.02	9.30%	61.11%	38.89%	3.61%	4.13%
8	Edison International	$1.50	$3.50	$39.00	4.79%	8.97%	1.02	9.18%	42.86%	57.14%	5.25%	5.25%
9	Great Plains Energy Inc.	$1.10	$1.75	$23.75	1.78%	7.37%	1.01	7.43%	62.86%	37.14%	2.76%	2.76%
10	Hawaiian Electric	$1.30	$2.00	$21.50	6.15%	9.30%	1.03	9.58%	65.00%	35.00%	3.35%	8.95%
11	IDACORP, Inc.	$1.90	$3.55	$43.20	5.41%	8.22%	1.03	8.43%	53.52%	46.48%	3.92%	4.01%
12	Pinnacle West Capital	$2.40	$3.75	$41.25	3.35%	9.09%	1.02	9.24%	64.00%	36.00%	3.33%	4.01%
13	Portland General Electric	$1.25	$2.25	$26.50	3.73%	8.49%	1.02	8.65%	55.56%	44.44%	3.84%	3.89%
14	SCANA Corporation	$2.15	$3.75	$39.50	5.71%	9.49%	1.03	9.76%	57.33%	42.67%	4.16%	6.54%
15	Sempra Energy	$2.80	$5.75	$52.00	4.87%	11.06%	1.02	11.32%	48.70%	51.30%	5.81%	6.11%
16	Southern Company	$2.25	$3.25	$26.25	5.25%	12.38%	1.03	12.70%	69.23%	30.77%	3.91%	6.04%
17	TECO Energy, Inc.	$1.10	$1.75	$13.25	4.76%	13.21%	1.02	13.51%	62.86%	37.14%	5.02%	5.35%
18	Vectren Corporation	$1.60	$2.50	$21.00	3.26%	11.90%	1.02	12.10%	64.00%	36.00%	4.35%	5.27%
19	Westar Energy, Inc.	$1.48	$2.40	$28.15	4.86%	8.53%	1.02	8.73%	61.67%	38.33%	3.35%	3.78%
20	Wisconsin Energy Corp.	$1.80	$2.75	$20.25	3.32%	13.58%	1.02	13.80%	65.45%	34.55%	4.77%	4.77%
21	Xcel Energy Inc.	$1.35	$2.25	$21.75	4.52%	10.34%	1.02	10.57%	60.00%	40.00%	4.23%	4.91%
22	**Average**	**$1.81**	**$3.07**	**$31.24**	**4.18%**	**10.01%**	**1.02**	**10.22%**	**59.82%**	**40.18%**	**4.08%**	**4.85%**

Sources and Notes:

Cols. (1), (2) and (3): *The Value Line Investment Survey,* May 4, May 25, and June 22, 2012.

Col. (4): [Col. (3) / Page 2 Col. (2)] ^ (1/5) - 1.

Col. (5): Col. (2) / Col. (3).

Col. (6): [2 * (1 + Col. (4))] / (2 + Col. (4)).

Col. (7): Col. (6) * Col. (5).

Col. (8): Col. (1) / Col. (2).

Col. (9): 1 - Col. (8).

Col. (10): Col. (9) * Col. (7).

Col. (11): Col. (10) + Page 2 Col. (9).

KCP&L Greater Missouri Operations

Sustainable Growth Rate

Line	Company	13-Week Average Stock Price[1] (1)	2011 Book Value Per Share[2] (2)	Market to Book Ratio (3)	Common Shares Outstanding (in Millions)[2] 2011 (4)	Common Shares Outstanding (in Millions)[2] 3-5 Years (5)	Growth (6)	S Factor[3] (7)	V Factor[4] (8)	S * V[5] (9)
1	ALLETE, Inc.	$40.45	$28.78	1.41	37.50	40.50	1.55%	2.18%	28.85%	0.63%
2	Alliant Energy Corp.	$44.57	$27.14	1.64	111.02	116.00	0.88%	1.45%	39.11%	0.57%
3	American Electric Power	$39.03	$30.33	1.29	483.42	500.00	0.68%	0.87%	22.29%	0.19%
4	Avista Corporation	$26.03	$20.30	1.28	58.42	62.00	1.20%	1.53%	22.00%	0.34%
5	Black Hills Corporation	$32.37	$27.53	1.18	43.92	45.00	0.49%	0.57%	14.94%	0.09%
6	Cleco Corporation	$40.96	$23.55	1.74	60.29	61.00	0.23%	0.41%	42.50%	0.17%
7	DTE Energy Company	$57.28	$41.41	1.38	169.25	181.00	1.35%	1.87%	27.70%	0.52%
8	Edison International	$44.67	$30.86	1.45	325.81	325.81	0.00%	0.00%	30.92%	0.00%
9	Great Plains Energy Inc.	$20.46	$21.74	0.94	136.14	154.00	2.50%	2.35%	-6.28%	-0.15%
10	Hawaiian Electric	$27.34	$15.95	1.71	96.04	140.00	7.83%	13.42%	41.67%	5.59%
11	IDACORP, Inc.	$40.29	$33.19	1.21	49.95	51.00	0.42%	0.51%	17.62%	0.09%
12	Pinnacle West Capital	$49.65	$34.98	1.42	109.25	118.50	1.64%	2.33%	29.55%	0.69%
13	Portland General Electric	$25.67	$22.07	1.16	75.36	76.50	0.30%	0.35%	14.01%	0.05%
14	SCANA Corporation	$46.69	$29.92	1.56	130.00	160.00	4.24%	6.62%	35.92%	2.38%
15	Sempra Energy	$65.75	$41.00	1.60	239.93	246.00	0.50%	0.80%	37.64%	0.30%
16	Southern Company	$46.21	$20.32	2.27	865.13	940.00	1.67%	3.81%	56.03%	2.13%
17	TECO Energy, Inc.	$17.77	$10.50	1.69	215.80	221.00	0.48%	0.81%	40.92%	0.33%
18	Vectren Corporation	$29.24	$17.89	1.63	81.90	88.00	1.45%	2.37%	38.82%	0.92%
19	Westar Energy, Inc.	$28.90	$22.20	1.30	125.70	135.00	1.44%	1.87%	23.17%	0.43%
20	Wisconsin Energy Corp.	$37.83	$17.20	2.20	230.49	223.00	-0.66%	-1.45%	54.54%	-0.79%
21	Xcel Energy Inc.	$27.77	$17.44	1.59	486.49	515.00	1.15%	1.82%	37.19%	0.68%
22	**Average**	**$37.57**	**$25.44**	**1.51**	**196.75**	**209.49**	**1.50%**	**2.30%**	**32.77%**	**0.85%**

Sources and Notes:

[1] SNL Financial, downloaded on July 16, 2012.

[2] *The Value Line Investment Survey,* May 4, May 25, and June 22, 2012.

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

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

[5] Column (9) Line 12 excludes negative values.

KCP&L Greater Missouri Operations

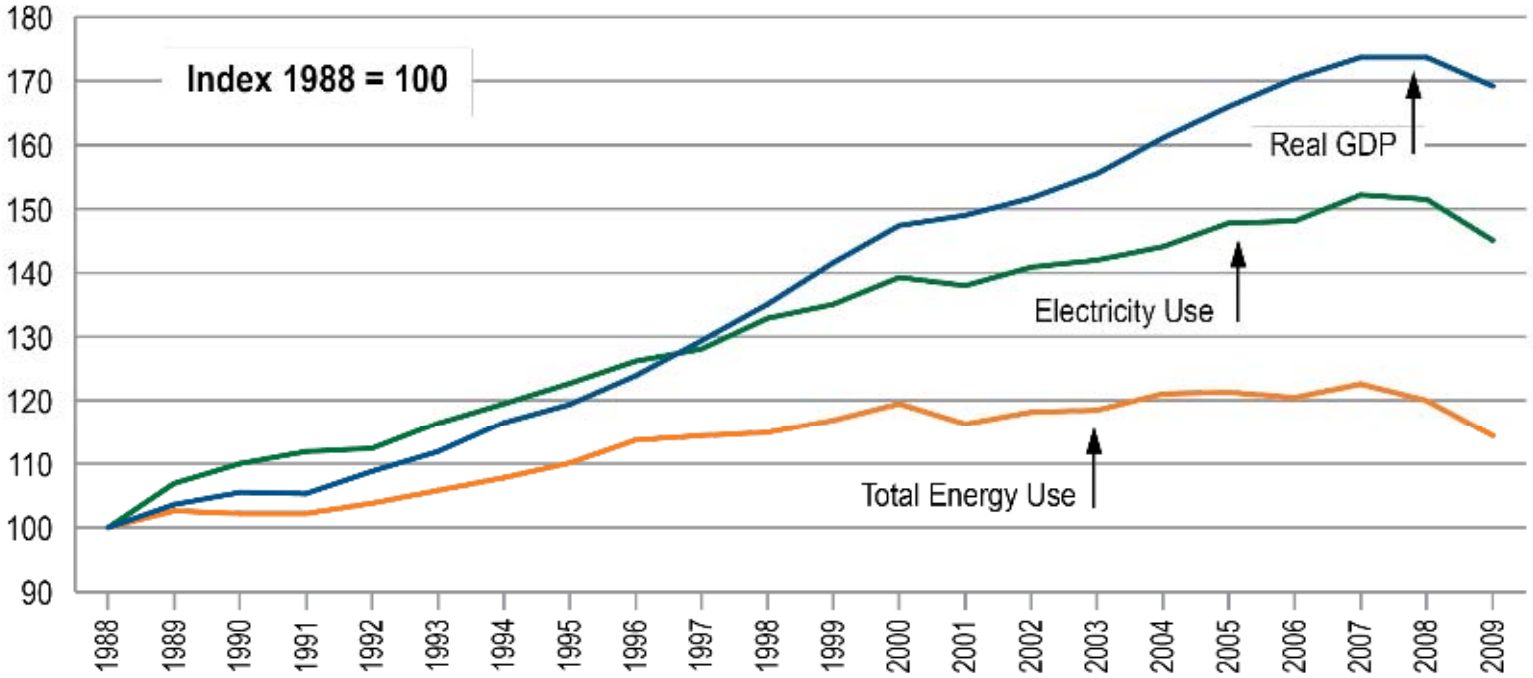
Constant Growth DCF Model
(Sustainable Growth Rate)

Line	Company	13-Week AVG Stock Price[1] (1)	Sustainable Growth[2] (2)	Annualized Dividend[3] (3)	Adjusted Yield (4)	Constant Growth DCF (5)
1	ALLETE, Inc.	$40.45	5.06%	$1.84	4.78%	9.83%
2	Alliant Energy Corp.	$44.57	4.66%	$1.80	4.23%	8.88%
3	American Electric Power	$39.03	4.55%	$1.88	5.04%	9.59%
4	Avista Corporation	$26.03	3.94%	$1.16	4.63%	8.57%
5	Black Hills Corporation	$32.37	3.02%	$1.48	4.71%	7.73%
6	Cleco Corporation	$40.96	4.78%	$1.25	3.20%	7.98%
7	DTE Energy Company	$57.28	4.13%	$2.35	4.27%	8.41%
8	Edison International	$44.67	5.25%	$1.30	3.06%	8.31%
9	Great Plains Energy Inc.	$20.46	2.76%	$0.87	4.37%	7.13%
10	Hawaiian Electric	$27.34	8.95%	$1.24	4.94%	13.89%
11	IDACORP, Inc.	$40.29	4.01%	$1.32	3.41%	7.42%
12	Pinnacle West Capital	$49.65	4.01%	$2.10	4.40%	8.41%
13	Portland General Electric	$25.67	3.89%	$1.06	4.29%	8.18%
14	SCANA Corporation	$46.69	6.54%	$1.98	4.52%	11.06%
15	Sempra Energy	$65.75	6.11%	$2.40	3.87%	9.98%
16	Southern Company	$46.21	6.04%	$1.96	4.50%	10.54%
17	TECO Energy, Inc.	$17.77	5.35%	$0.88	5.22%	10.57%
18	Vectren Corporation	$29.24	5.27%	$1.40	5.04%	10.31%
19	Westar Energy, Inc.	$28.90	3.78%	$1.32	4.74%	8.52%
20	Wisconsin Energy Corp.	$37.83	4.77%	$1.20	3.32%	8.09%
21	Xcel Energy Inc.	$27.77	4.91%	$1.04	3.93%	8.84%
22	**Average**	**$37.57**	**4.85%**	**$1.52**	**4.31%**	**9.15%**
23	**Median**					**8.57%**

Sources:
[1] SNL Financial, downloaded on July 16, 2012.
[2] Exhibit MPG-6, page 1 of 2.
[3] *The Value Line Investment Survey,* May 4, May 25, and June 22, 2012.

KCP&L Greater Missouri Operations

Electricity Sales Are Linked to U.S. Economic Growth



Note:
1988 represents the base year. Graph depicts increases or decreases from the base year.

Sources:
U.S. Department of Energy, Energy Information Administration.
Edison Electric Institute, http://www.eei.org.

KCP&L Greater Missouri Operations

Multi-Stage Growth DCF Model

Line	Company	13-Week AVG Stock Price[1] (1)	Annualized Dividend[2] (2)	First Stage Growth[3] (3)	Second Stage Growth Year 6 (4)	Year 7 (5)	Year 8 (6)	Year 9 (7)	Year 10 (8)	Third Stage Growth[4] (9)	Multi-Stage Growth DCF (10)
1	ALLETE, Inc.	$40.45	$1.84	5.40%	5.32%	5.23%	5.15%	5.07%	4.98%	4.90%	9.82%
2	Alliant Energy Corp.	$44.57	$1.80	6.12%	5.92%	5.72%	5.51%	5.31%	5.10%	4.90%	9.47%
3	American Electric Power	$39.03	$1.88	3.86%	4.03%	4.20%	4.38%	4.55%	4.73%	4.90%	9.64%
4	Avista Corporation	$26.03	$1.16	4.72%	4.75%	4.78%	4.81%	4.84%	4.87%	4.90%	9.52%
5	Black Hills Corporation	$32.37	$1.48	6.00%	5.82%	5.63%	5.45%	5.27%	5.08%	4.90%	10.03%
6	Cleco Corporation	$40.96	$1.25	3.00%	3.32%	3.63%	3.95%	4.27%	4.58%	4.90%	7.71%
7	DTE Energy Company	$57.28	$2.35	4.38%	4.47%	4.55%	4.64%	4.73%	4.81%	4.90%	9.06%
8	Edison International	$44.67	$1.30	2.22%	2.66%	3.11%	3.56%	4.01%	4.45%	4.90%	7.43%
9	Great Plains Energy Inc.	$20.46	$0.87	8.42%	7.83%	7.24%	6.66%	6.07%	5.49%	4.90%	10.41%
10	Hawaiian Electric	$27.34	$1.24	7.46%	7.04%	6.61%	6.18%	5.75%	5.33%	4.90%	10.45%
11	IDACORP, Inc.	$40.29	$1.32	4.67%	4.71%	4.74%	4.78%	4.82%	4.86%	4.90%	8.28%
12	Pinnacle West Capital	$49.65	$2.10	5.67%	5.54%	5.42%	5.29%	5.16%	5.03%	4.90%	9.55%
13	Portland General Electric	$25.67	$1.06	4.28%	4.39%	4.49%	4.59%	4.69%	4.80%	4.90%	9.07%
14	SCANA Corporation	$46.69	$1.98	4.69%	4.73%	4.76%	4.80%	4.83%	4.87%	4.90%	9.29%
15	Sempra Energy	$65.75	$2.40	6.10%	5.90%	5.70%	5.50%	5.30%	5.10%	4.90%	9.03%
16	Southern Company	$46.21	$1.96	5.32%	5.25%	5.18%	5.11%	5.04%	4.97%	4.90%	9.46%
17	TECO Energy, Inc.	$17.77	$0.88	4.37%	4.46%	4.55%	4.64%	4.72%	4.81%	4.90%	9.93%
18	Vectren Corporation	$29.24	$1.40	5.00%	4.98%	4.97%	4.95%	4.93%	4.92%	4.90%	9.95%
19	Westar Energy, Inc.	$28.90	$1.32	5.79%	5.64%	5.49%	5.35%	5.20%	5.05%	4.90%	9.96%
20	Wisconsin Energy Corp.	$37.83	$1.20	5.58%	5.46%	5.35%	5.24%	5.13%	5.01%	4.90%	8.37%
21	Xcel Energy Inc.	$27.77	$1.04	4.94%	4.94%	4.93%	4.92%	4.91%	4.91%	4.90%	8.84%
22	**Average**	**$37.57**	**$1.52**	**5.14%**	**5.10%**	**5.06%**	**5.02%**	**4.98%**	**4.94%**	**4.90%**	**9.30%**
23	**Median**										**9.47%**

Sources:

[1] SNL Financial, downloaded on July 13, 2012.

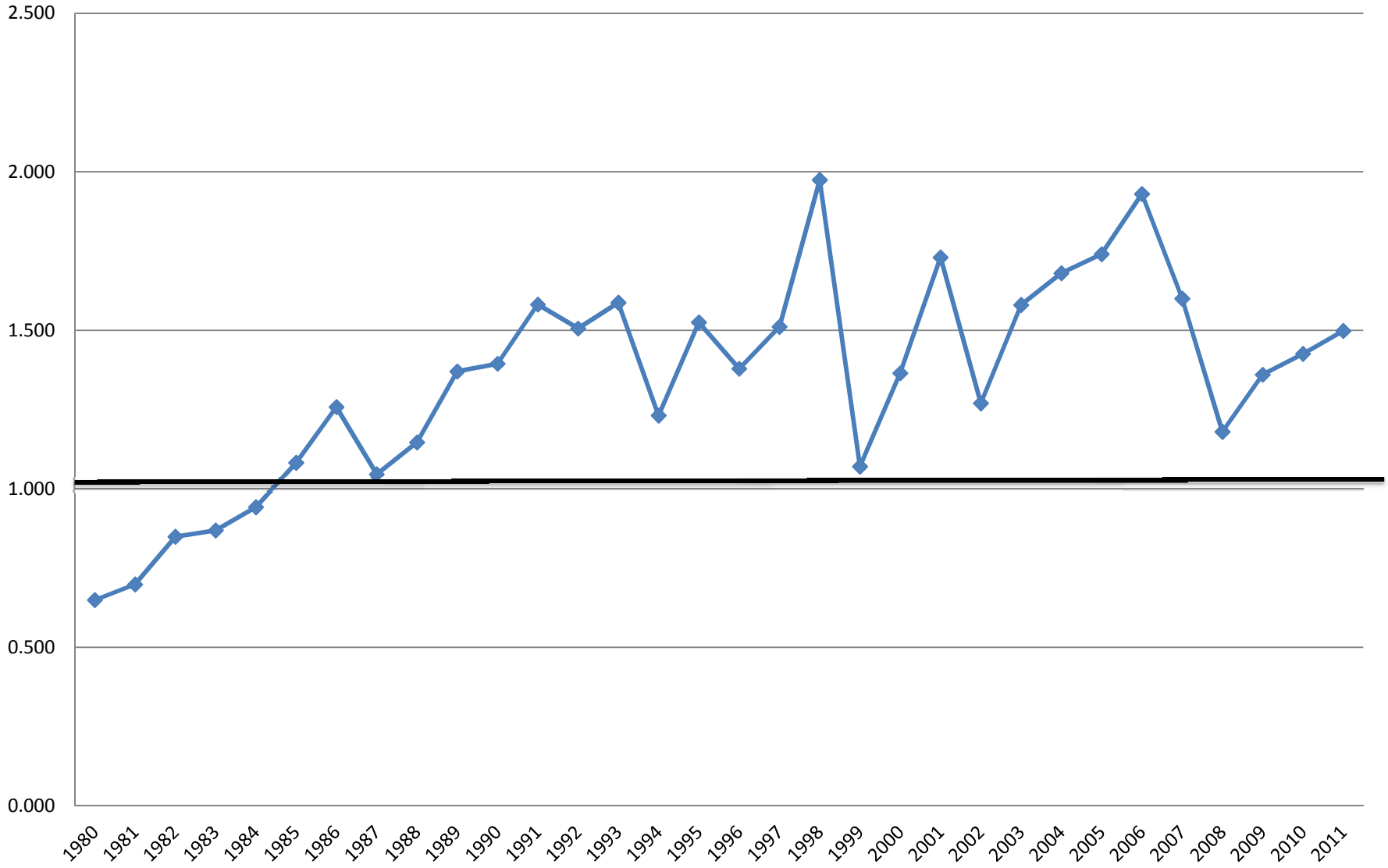
[2] *The Value Line Investment Survey,* May 4, May 25, and June 22, 2012.

[3] Exhibit MPG-3.

[4] *Blue Chip Financial Forecasts,* June 1, 2012 at 14.

KCP&L Greater Missouri Operations

Common Stock Market/Book Ratio



Schedule MPG-10

KCP&L Greater Missouri Operations

Equity Risk Premium - Treasury Bond

Line	Year	Authorized Electric Returns[1] (1)	Treasury Bond Yield[2] (2)	Indicated Risk Premium (3)
1	1986	13.93%	7.80%	6.13%
2	1987	12.99%	8.58%	4.41%
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%	6.60%	4.81%
9	1994	11.34%	7.37%	3.97%
10	1995	11.55%	6.88%	4.67%
11	1996	11.39%	6.70%	4.69%
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%	4.99%	5.37%
22	2007	10.36%	4.83%	5.53%
23	2008	10.46%	4.28%	6.18%
24	2009	10.48%	4.07%	6.41%
25	2010	10.34%	4.25%	6.09%
26	2011	10.22%	3.91%	6.31%
27	**Average**	**11.45%**	**6.22%**	**5.23%**

Sources:

[1] Regulatory Research Associates, Inc., *Regulatory Focus,* Jan. 85 - Dec. 06, and January 10, 2012.

[2] St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/. The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

KCP&L Greater Missouri Operations

Equity Risk Premium - Utility Bond

Line	Year	Authorized Electric Returns[1] (1)	Average "A" Rated Utility Bond Yield[2] (2)	Indicated Risk Premium (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	2010	10.34%	5.46%	4.88%
26	2011	10.22%	5.04%	5.18%
27	**Average**	**11.45%**	**7.64%**	**3.81%**

Sources:

[1] Regulatory Research Associates, Inc., *Regulatory Focus,* Jan. 85 - Dec. 06, and January 10, 2012.

[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 from 2010-2011 were obtained from http://credittrends.moodys.com/.

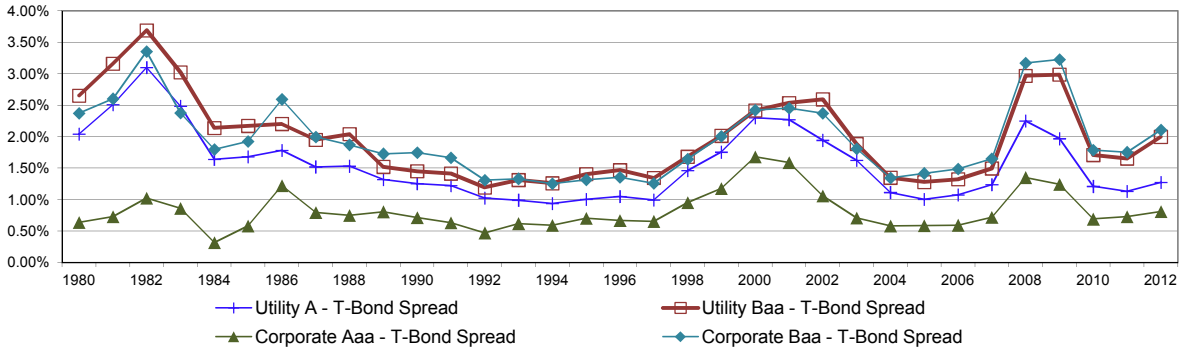
KCP&L Greater Missouri Operations

Bond Yield Spreads

			Public Utility Bond				Corporate Bond				Utility - Corp. Spread	
Line	Year	T-Bond Yield[1] (1)	A[2] (2)	Baa[2] (3)	A-T-Bond Spread (4)	Baa-T-Bond Spread (5)	Aaa[1] (6)	Baa[1] (7)	Aaa-T-Bond Spread (8)	Baa-T-Bond Spread (9)	A / Aaa (10)	Baa / Baa (11)
1	1980	11.30%	13.34%	13.95%	2.04%	2.65%	11.94%	13.67%	0.64%	2.37%	1.40%	0.28%
2	1981	13.44%	15.95%	16.60%	2.51%	3.16%	14.17%	16.04%	0.73%	2.60%	1.78%	0.56%
3	1982	12.76%	15.86%	16.45%	3.10%	3.69%	13.79%	16.11%	1.03%	3.35%	2.07%	0.34%
4	1983	11.18%	13.66%	14.20%	2.48%	3.02%	12.04%	13.55%	0.86%	2.38%	1.62%	0.65%
5	1984	12.39%	14.03%	14.53%	1.64%	2.14%	12.71%	14.19%	0.32%	1.80%	1.32%	0.34%
6	1985	10.79%	12.47%	12.96%	1.68%	2.17%	11.37%	12.72%	0.58%	1.93%	1.10%	0.24%
7	1986	7.80%	9.58%	10.00%	1.78%	2.20%	9.02%	10.39%	1.22%	2.59%	0.56%	-0.39%
8	1987	8.58%	10.10%	10.53%	1.52%	1.95%	9.38%	10.58%	0.80%	2.00%	0.72%	-0.05%
9	1988	8.96%	10.49%	11.00%	1.53%	2.04%	9.71%	10.83%	0.75%	1.87%	0.78%	0.17%
10	1989	8.45%	9.77%	9.97%	1.32%	1.52%	9.26%	10.18%	0.81%	1.73%	0.51%	-0.21%
11	1990	8.61%	9.86%	10.06%	1.25%	1.45%	9.32%	10.36%	0.71%	1.75%	0.54%	-0.29%
12	1991	8.14%	9.36%	9.55%	1.22%	1.41%	8.77%	9.80%	0.63%	1.67%	0.59%	-0.25%
13	1992	7.67%	8.69%	8.86%	1.02%	1.19%	8.14%	8.98%	0.47%	1.31%	0.55%	-0.12%
14	1993	6.60%	7.59%	7.91%	0.99%	1.31%	7.22%	7.93%	0.62%	1.33%	0.37%	-0.02%
15	1994	7.37%	8.31%	8.63%	0.94%	1.26%	7.96%	8.62%	0.59%	1.25%	0.35%	0.01%
16	1995	6.88%	7.89%	8.29%	1.01%	1.41%	7.59%	8.20%	0.71%	1.32%	0.30%	0.09%
17	1996	6.70%	7.75%	8.17%	1.05%	1.47%	7.37%	8.05%	0.67%	1.35%	0.38%	0.12%
18	1997	6.61%	7.60%	7.95%	0.99%	1.34%	7.26%	7.86%	0.66%	1.26%	0.34%	0.09%
19	1998	5.58%	7.04%	7.26%	1.46%	1.68%	6.53%	7.22%	0.95%	1.64%	0.51%	0.04%
20	1999	5.87%	7.62%	7.88%	1.75%	2.01%	7.04%	7.87%	1.18%	2.01%	0.58%	0.01%
21	2000	5.94%	8.24%	8.36%	2.30%	2.42%	7.62%	8.36%	1.68%	2.42%	0.62%	-0.01%
22	2001	5.49%	7.76%	8.03%	2.27%	2.54%	7.08%	7.95%	1.59%	2.45%	0.68%	0.08%
23	2002	5.43%	7.37%	8.02%	1.94%	2.59%	6.49%	7.80%	1.06%	2.37%	0.88%	0.22%
24	2003	4.96%	6.58%	6.84%	1.62%	1.89%	5.67%	6.77%	0.71%	1.81%	0.91%	0.08%
25	2004	5.05%	6.16%	6.40%	1.11%	1.35%	5.63%	6.39%	0.58%	1.35%	0.53%	0.00%
26	2005	4.65%	5.65%	5.93%	1.00%	1.28%	5.24%	6.06%	0.59%	1.42%	0.41%	-0.14%
27	2006	4.99%	6.07%	6.32%	1.08%	1.32%	5.59%	6.48%	0.60%	1.49%	0.48%	-0.16%
28	2007	4.83%	6.07%	6.33%	1.24%	1.50%	5.56%	6.48%	0.72%	1.65%	0.52%	-0.15%
29	2008	4.28%	6.53%	7.25%	2.25%	2.97%	5.63%	7.45%	1.35%	3.17%	0.90%	-0.20%
30	2009	4.07%	6.04%	7.06%	1.97%	2.99%	5.31%	7.30%	1.24%	3.23%	0.72%	-0.24%
31	2010	4.25%	5.46%	5.96%	1.21%	1.71%	4.94%	6.04%	0.69%	1.79%	0.52%	-0.08%
32	2011	3.91%	5.04%	5.56%	1.13%	1.65%	4.64%	5.66%	0.73%	1.75%	0.40%	-0.10%
33	2012	3.04%	4.31%	5.04%	1.27%	2.00%	3.85%	5.15%	0.81%	2.11%	0.46%	-0.11%
34	**Average**	**7.17%**	**8.73%**	**9.15%**	**1.57%**	**1.98%**	**8.00%**	**9.12%**	**0.83%**	**1.95%**	**0.74%**	**0.02%**

Yield Spreads

Treasury Vs. Corporate & Treasury Vs. Utility



Sources:

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

[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 from 2010-2011 were obtained from http://credittrends.moodys.com/.

Note: 2012 figures are the averages for the first six months.

KCP&L Greater Missouri Operations

Treasury and Utility Bond Yields

Line	Date	Treasury Bond Yield[1] (1)	"A" Rated Utility Bond Yield[2] (2)	"Baa" Rated Utility Bond Yield[2] (3)
1	07/13/12	2.58%	3.94%	4.86%
2	07/06/12	2.66%	4.02%	4.95%
3	06/29/12	2.76%	4.13%	4.99%
4	06/22/12	2.75%	4.13%	4.96%
5	06/15/12	2.70%	4.08%	4.90%
6	06/08/12	2.77%	4.16%	4.97%
7	06/01/12	2.53%	3.92%	4.75%
8	05/25/12	2.85%	4.20%	5.02%
9	05/18/12	2.80%	4.08%	4.85%
10	05/11/12	3.02%	4.22%	4.96%
11	05/04/12	3.07%	4.29%	5.03%
12	04/27/12	3.12%	4.33%	5.06%
13	04/20/12	3.12%	4.35%	5.07%
14	**Average**	**2.83%**	**4.14%**	**4.95%**
15	**Spread To Treasury**		**1.31%**	**2.12%**

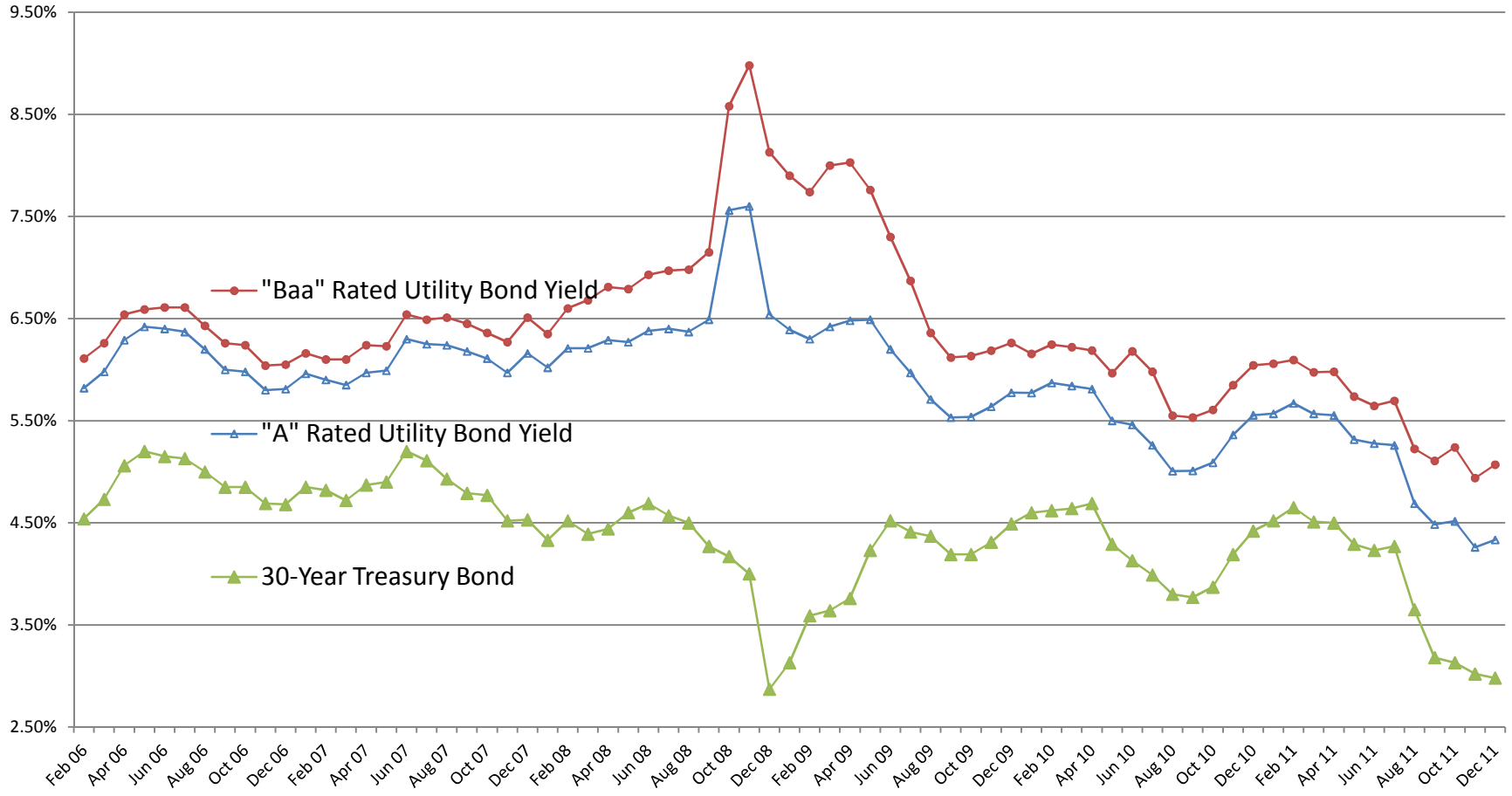
Sources:

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

[2] http://credittrends.moodys.com/.

KCP&L Greater Missouri Operations

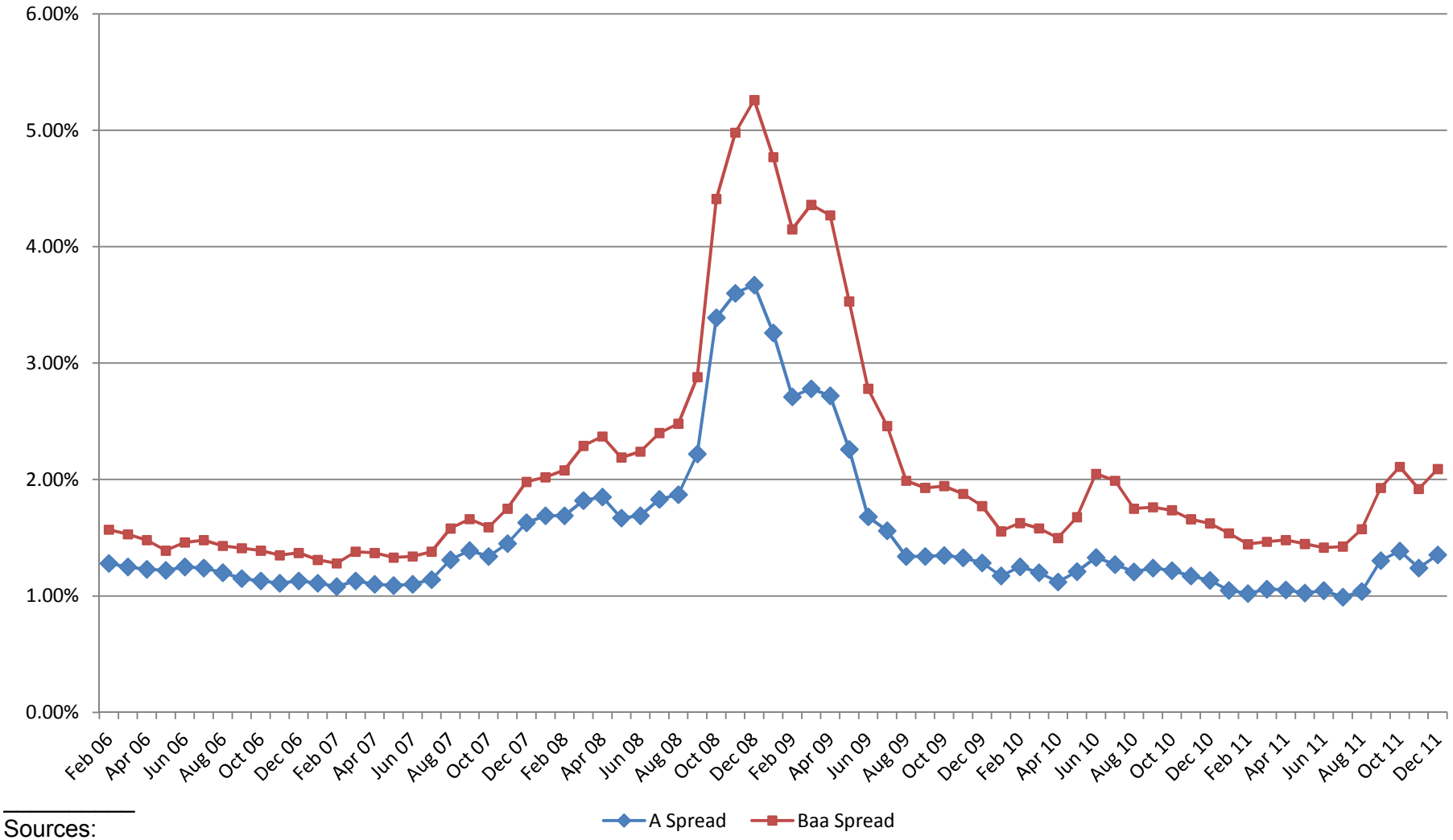
Trends in Bond Yields



Sources:
Merchant Bond Record.
www.moodys.com, Bond Yields and Key Indicators.
St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/

KCP&L Greater Missouri Operations

Yield Spread Between Utility Bonds and 30-Year Treasury Bonds



Sources:
Merchant Bond Record.
www.moodys.com, Bond Yields and Key Indicators.
St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/

KCP&L Greater Missouri Operations

Value Line Beta

Line	Company	Beta
1	ALLETE, Inc.	0.70
2	Alliant Energy Corp.	0.75
3	American Electric Power	0.70
4	Avista Corporation	0.70
5	Black Hills Corporation	0.85
6	Cleco Corporation	0.65
7	DTE Energy Company	0.75
8	Edison International	0.80
9	Great Plains Energy Inc.	0.75
10	Hawaiian Electric	0.70
11	IDACORP, Inc.	0.70
12	Pinnacle West Capital	0.70
13	Portland General Electric	0.75
14	SCANA Corporation	0.70
15	Sempra Energy	0.80
16	Southern Company	0.55
17	TECO Energy, Inc.	0.85
18	Vectren Corporation	0.75
19	Westar Energy, Inc.	0.75
20	Wisconsin Energy Corp.	0.65
21	Xcel Energy Inc.	0.65
22	**Average**	**0.72**

Source:
The Value Line Investment Survey,
May 4, May 25, and June 22, 2012.

KCP&L Greater Missouri Operations

CAPM Return

Line	Description	Market Risk Premium
1	Risk-Free Rate[1]	3.60%
2	Risk Premium[2]	6.60%
3	Beta[3]	0.72
4	**CAPM**	**8.35%**

Sources:

[1] *Blue Chip Financial Forecasts,* July 1, 2012, at 2.

[2] Morningstar, Inc. *Ibbotson SBBI 2012 Classic Yearbook* at 86, and Morningstar, Inc. *Ibbotson SBBI 2012 Valuation Yearbook* at 54 and 66.

[3] Exhibit MPG-15.

KCP&L Greater Missouri Operations

Standard & Poor's Credit Metrics
(MPS - Return on Equity of 9.10%)

Line	Description		Retail Cost of Service Amount ($000) (1)	S&P Benchmark[1/2] Significant (2)	S&P Benchmark[1/2] Aggressive (3)	Reference (4)
1	Rate Base	$	1,411,988,738			Schedule JPW-2 (MPS).
2	Weighted Common Return		4.14%			Page 3, Line 3, Col. 4.
3	Pre-Tax Rate of Return		10.10%			Page 3, Line 4, Col. 5.
4	Income to Common	$	58,472,544			Line 1 x Line 2.
5	EBIT	$	142,545,457			Line 1 x Line 3.
6	Depreciation & Amortization	$	66,294,966			Schedule JPW-3 (MPS).
7	Imputed Amortization	$	-			N/A
8	Deferred Income Taxes & ITC	$	20,606,686			Schedule JPW-3 (MPS).
9	Funds from Operations (FFO)	$	145,374,196			Sum of Line 4 and Lines 6 through 8.
10	Imputed Interest Expense	$	-			N/A
11	EBITDA	$	208,840,423			Sum of Lines 5 through 7 and Line 10.
12	Total Debt Ratio		54%	45% - 50%	50% - 60%	Page 3, Line 1, Col. 2.
13	Debt to EBITDA		3.6x	3.0x - 4.0x	4.0x - 5.0x	(Line 1 x Line 12) / Line 11.
14	FFO to Total Debt		19%	20% - 30%	12% - 20%	Line 9 / (Line 1 x Line 12).

Sources:

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

[2] *S&P RatingsDirect:* "U.S. Regulated Electric Utilities, Strongest to Weakest," April 20, 2012.

Note:

Based on the April 2012 S&P report, KCP&L GMO has an "Excellent" business profile and an "Aggressive" financial profile.

KCP&L Greater Missouri Operations

Standard & Poor's Credit Metrics
(L&P - Return on Equity of 9.10%)

Line	Description		Retail Cost of Service Amount ($000) (1)	S&P Benchmark[1/2] Significant (2)	S&P Benchmark[1/2] Aggressive (3)	Reference (4)
1	Rate Base	$	479,530,569			Schedule JPW-2 (SJLP).
2	Weighted Common Return		4.14%			Page 3, Line 3, Col. 4.
3	Pre-Tax Rate of Return		10.10%			Page 3, Line 4, Col. 5.
4	Income to Common	$	19,858,071			Line 1 x Line 2.
5	EBIT	$	48,410,375			Line 1 x Line 3.
6	Depreciation & Amortization	$	19,731,434			Schedule JPW-3 (SJLP).
7	Imputed Amortization	$	-			N/A
8	Deferred Income Taxes & ITC	$	9,332,607			Schedule JPW-3 (SJLP).
9	Funds from Operations (FFO)	$	48,922,112			Sum of Line 4 and Lines 6 through 8.
10	Imputed Interest Expense	$	-			N/A
11	EBITDA	$	68,141,809			Sum of Lines 5 through 7 and Line 10.
12	Total Debt Ratio		54%	45% - 50%	50% - 60%	Page 3, Line 1, Col. 2.
13	Debt to EBITDA		3.8x	3.0x - 4.0x	4.0x - 5.0x	(Line 1 x Line 12) / Line 11.
14	FFO to Total Debt		19%	20% - 30%	12% - 20%	Line 9 / (Line 1 x Line 12).

Sources:

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

[2] *S&P RatingsDirect:* "U.S. Regulated Electric Utilities, Strongest to Weakest," April 20, 2012.

Note:

Based on the April 2012 S&P report, KCP&L GMO has an "Excellent" business profile and an "Aggressive" financial profile.

KCP&L Greater Missouri Operations

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

Line	Description	Amount (000) (1)	Weight (2)	Cost (3)	Weighted Cost (4)	Pre-Tax Weighted Cost (5)
1	Long-Term Debt	$ 1,373,175	53.90%	6.21%	3.35%	3.35%
2	Preferred Stock	15,212	0.60%	4.29%	0.03%	0.03%
3	Common Equity	1,159,445	45.51%	**9.10%**	4.14%	6.72%
4	**Total**	**$ 2,547,832**	**100.00%**		**7.52%**	**10.10%**
5	Tax Conversion Factor*					1.6231

Sources:
KCP&L GMO Response to Staff's Data Request No. 0168.
* Schedule JPW-1 (MPS).

KCP&L Greater Missouri Operations

Standard & Poor's Credit Metrics
(MPS - Return on Equity of 9.50%)

Line	Description		Retail Cost of Service Amount ($000) (1)	S&P Benchmark[1/2] Significant (2)	S&P Benchmark[1/2] Aggressive (3)	Reference (4)
1	Rate Base	$	1,411,988,738			Schedule JPW-2 (MPS).
2	Weighted Common Return		4.32%			Page 3, Line 3, Col. 4.
3	Pre-Tax Rate of Return		10.39%			Page 3, Line 4, Col. 5.
4	Income to Common	$	61,042,766			Line 1 x Line 2.
5	EBIT	$	146,717,133			Line 1 x Line 3.
6	Depreciation & Amortization	$	66,294,966			Schedule JPW-3 (MPS).
7	Imputed Amortization	$	-			N/A
8	Deferred Income Taxes & ITC	$	20,606,686			Schedule JPW-3 (MPS).
9	Funds from Operations (FFO)	$	147,944,418			Sum of Line 4 and Lines 6 through 8.
10	Imputed Interest Expense	$	-			N/A
11	EBITDA	$	213,012,099			Sum of Lines 5 through 7 and Line 10.
12	Total Debt Ratio		54%	45% - 50%	50% - 60%	Page 3, Line 1, Col. 2.
13	Debt to EBITDA		3.6x	3.0x - 4.0x	4.0x - 5.0x	(Line 1 x Line 12) / Line 11.
14	FFO to Total Debt		19%	20% - 30%	12% - 20%	Line 9 / (Line 1 x Line 12).

Sources:

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

[2] *S&P RatingsDirect:* "U.S. Regulated Electric Utilities, Strongest to Weakest," April 20, 2012.

Note:

Based on the April 2012 S&P report, KCP&L GMO has an "Excellent" business profile and an "Aggressive" financial profile.

KCP&L Greater Missouri Operations

Standard & Poor's Credit Metrics
(L&P - Return on Equity of 9.50%)

Line	Description		Retail Cost of Service Amount ($000) (1)	S&P Benchmark[1/2] Significant (2)	S&P Benchmark[1/2] Aggressive (3)	Reference (4)
1	Rate Base	$	479,530,569			Schedule JPW-2 (SJLP).
2	Weighted Common Return		4.32%			Page 3, Line 3, Col. 4.
3	Pre-Tax Rate of Return		10.39%			Page 3, Line 4, Col. 5.
4	Income to Common	$	20,730,953			Line 1 x Line 2.
5	EBIT	$	49,827,133			Line 1 x Line 3.
6	Depreciation & Amortization	$	19,731,434			Schedule JPW-3 (SJLP).
7	Imputed Amortization	$	-			N/A
8	Deferred Income Taxes & ITC	$	9,332,607			Schedule JPW-3 (SJLP).
9	Funds from Operations (FFO)	$	49,794,994			Sum of Line 4 and Lines 6 through 8.
10	Imputed Interest Expense	$	-			N/A
11	EBITDA	$	69,558,567			Sum of Lines 5 through 7 and Line 10.
12	Total Debt Ratio		54%	45% - 50%	50% - 60%	Page 3, Line 1, Col. 2.
13	Debt to EBITDA		3.7x	3.0x - 4.0x	4.0x - 5.0x	(Line 1 x Line 12) / Line 11.
14	FFO to Total Debt		19%	20% - 30%	12% - 20%	Line 9 / (Line 1 x Line 12).

Sources:

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

[2] *S&P RatingsDirect:* "U.S. Regulated Electric Utilities, Strongest to Weakest," April 20, 2012.

Note:

Based on the April 2012 S&P report, KCP&L GMO has an "Excellent" business profile and an "Aggressive" financial profile.

KCP&L Greater Missouri Operations

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

Line	Description	Amount (000) (1)	Weight (2)	Cost (3)	Weighted Cost (4)	Pre-Tax Weighted Cost (5)
1	Long-Term Debt	$ 1,373,175	53.90%	6.21%	3.35%	3.35%
2	Preferred Stock	15,212	0.60%	4.29%	0.03%	0.03%
3	Common Equity	1,159,445	45.51%	**9.50%**	4.32%	7.02%
4	**Total**	**$ 2,547,832**	**100.00%**		**7.70%**	**10.39%**
5	Tax Conversion Factor*					1.6231

Sources:
KCP&L GMO Response to Staff's Data Request No. 0168.
* Schedule JPW-1 (MPS).

KCP&L Greater Missouri Operations

Summary of Adjusted Hadaway DCF

Line	Description	Hadaway (1)	Hadaway Adjusted* (2)
	Constant Growth DCF		
1	Average	10.0%	10.0%
2	Median	10.0%	10.0%
	Long-Term Constant Growth DCF		
3	Average	10.2%	9.3%
4	Median	10.4%	9.5%
	Multi-Stage Growth DCF		
5	Average	10.0%	9.2%
6	Median	10.1%	9.3%

Sources:

Schedule MPG-19, pages 2-4.

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

KCP&L Greater Missouri Operations

Adjusted Hadaway Constant Growth DCF Model
(Analysts' Growth Rates)

Line	Company	13-Week Stock Price[1] (1)	Next Year's Dividend (2)	Dividend Yield (3)	EPS Analysts' Growth Rates Value Line[2] (4)	Zacks[3] (5)	Thomson[4] (6)	Average Growth Rate (7)	Constant Growth DCF (8)
1	ALLETE, Inc.	$39.13	$1.80	4.60%	6.00%	5.00%	6.50%	5.83%	10.4%
2	Alliant Energy Corp.	$41.06	$1.80	4.38%	6.50%	6.00%	4.90%	5.80%	10.2%
3	Ameren Corporation	$31.77	$1.62	5.10%	NA	4.00%	NA	4.00%	9.1%
4	American Electric Power	$38.85	$1.90	4.89%	4.50%	4.00%	3.87%	4.12%	9.0%
5	Avista Corporation	$24.90	$1.18	4.74%	4.50%	4.70%	4.50%	4.57%	9.3%
6	Black Hills Corporation	$32.25	$1.48	4.59%	8.50%	5.00%	6.00%	6.50%	11.1%
7	Cleco Corporation	$35.75	$1.25	3.50%	6.00%	7.00%	3.00%	5.33%	8.8%
8	DTE Energy Company	$51.36	$2.42	4.71%	4.50%	4.20%	3.75%	4.15%	8.9%
9	Edison International	$39.32	$1.31	3.33%	NA	5.00%	3.18%	4.09%	7.4%
10	Great Plains Energy Inc.	$20.57	$0.86	4.18%	6.00%	6.50%	4.10%	5.53%	9.7%
11	Hawaiian Electric	$25.27	$1.24	4.91%	11.00%	8.60%	13.47%	11.02%	15.9%
12	IDACORP, Inc.	$40.27	$1.20	2.98%	4.00%	4.70%	4.50%	4.40%	7.4%
13	Pinnacle West Capital	$45.61	$2.10	4.60%	6.00%	5.30%	5.58%	5.63%	10.2%
14	Portland General	$24.35	$1.08	4.44%	7.50%	5.00%	5.88%	6.13%	10.6%
15	SCANA Corporation	$42.26	$1.98	4.69%	3.00%	4.20%	4.48%	3.89%	8.6%
16	Sempra Energy	$52.63	$2.08	3.95%	3.50%	7.00%	7.33%	5.94%	9.9%
17	Southern Company	$43.58	$1.94	4.45%	6.00%	5.10%	5.92%	5.67%	10.1%
18	TECO Energy, Inc.	$18.16	$0.89	4.90%	10.50%	4.70%	5.41%	6.87%	11.8%
19	Vectren Corporation	$28.31	$1.41	4.98%	5.50%	4.30%	5.50%	5.10%	10.1%
20	Westar Energy, Inc.	$27.01	$1.32	4.89%	8.50%	6.10%	5.08%	6.56%	11.4%
21	Wisconsin Energy Corp.	$32.63	$1.20	3.68%	8.50%	6.30%	7.80%	7.53%	11.2%
22	Xcel Energy Inc.	$25.72	$1.06	4.12%	5.00%	5.10%	5.13%	5.08%	9.2%
23	**Average**	**$34.58**	**$1.51**	**4.39%**	**6.28%**	**5.35%**	**5.52%**	**5.63%**	**10.0%**
24	**Median**			**4.59%**				**5.58%**	**10.0%**

Source:
Schedule SCH-5, Page 2 of 5.

KCP&L Greater Missouri Operations

Adjusted Hadaway Constant Growth DCF Model
(Long-Term GDP Growth)

Line	Company	Recent Stock Price (1)	Next Year's Dividend (2)	Dividend Yield (3)	GDP Growth* (4)	Long-Term Constant Growth DCF (5)
1	ALLETE, Inc.	$39.13	$1.80	4.60%	4.90%	9.5%
2	Alliant Energy Corp.	$41.06	$1.80	4.38%	4.90%	9.3%
3	Ameren Corporation	$31.77	$1.62	5.10%	4.90%	10.0%
4	American Electric Power	$38.85	$1.90	4.89%	4.90%	9.8%
5	Avista Corporation	$24.90	$1.18	4.74%	4.90%	9.6%
6	Black Hills Corporation	$32.25	$1.48	4.59%	4.90%	9.5%
7	Cleco Corporation	$35.75	$1.25	3.50%	4.90%	8.4%
8	DTE Energy Company	$51.36	$2.42	4.71%	4.90%	9.6%
9	Edison International	$39.32	$1.31	3.33%	4.90%	8.2%
10	Great Plains Energy Inc.	$20.57	$0.86	4.18%	4.90%	9.1%
11	Hawaiian Electric	$25.27	$1.24	4.91%	4.90%	9.8%
12	IDACORP, Inc.	$40.27	$1.20	2.98%	4.90%	7.9%
13	Pinnacle West Capital	$45.61	$2.10	4.60%	4.90%	9.5%
14	Portland General	$24.35	$1.08	4.44%	4.90%	9.3%
15	SCANA Corporation	$42.26	$1.98	4.69%	4.90%	9.6%
16	Sempra Energy	$52.63	$2.08	3.95%	4.90%	8.9%
17	Southern Company	$43.58	$1.94	4.45%	4.90%	9.4%
18	TECO Energy, Inc.	$18.16	$0.89	4.90%	4.90%	9.8%
19	Vectren Corporation	$28.31	$1.41	4.98%	4.90%	9.9%
20	Westar Energy, Inc.	$27.01	$1.32	4.89%	4.90%	9.8%
21	Wisconsin Energy Corp.	$32.63	$1.20	3.68%	4.90%	8.6%
22	Xcel Energy Inc.	$25.72	$1.06	4.12%	4.90%	9.0%
23	**Average**	**$34.58**	**$1.51**	**4.39%**	**4.90%**	**9.3%**
24	**Median**			**4.59%**		**9.5%**

Sources:
Schedule SCH-5, Page 3 of 5.
* *Blue Chip Financial Forecasts,* June 1, 2012 at 14.

KCP&L Greater Missouri Operations

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

Line	Company	Recent Stock Price (1)	2012 Dividend (2)	2015 Dividend (3)	Annual Change 2015 (4)	Cash Flows 2012 Dividend (5)	2013 Dividend (6)	2014 Dividend (7)	2015 Dividend (8)	2016 Dividend (9)	GDP Growth* (10)	Two-Stage Growth DCF (11)
			10.00%									
1	ALLETE, Inc.	$39.13	$0.10	$1.95	$0.62	$0.10	$0.72	$1.33	$1.95	$2.05	4.90%	8.9%
2	Alliant Energy Corp.	$41.06	$1.80	$2.10	$0.10	$1.80	$1.90	$2.00	$2.10	$2.20	4.90%	9.3%
3	Ameren Corporation	$31.77	$1.62	$1.75	$0.04	$1.62	$1.66	$1.71	$1.75	$1.84	4.90%	9.7%
4	American Electric Power	$38.85	$1.90	$2.10	$0.07	$1.90	$1.97	$2.03	$2.10	$2.20	4.90%	9.6%
5	Avista Corporation	$24.90	$1.18	$1.40	$0.07	$1.18	$1.25	$1.33	$1.40	$1.47	4.90%	9.8%
6	Black Hills Corporation	$32.25	$1.48	$1.55	$0.02	$1.48	$1.50	$1.53	$1.55	$1.63	4.90%	9.1%
7	Cleco Corporation	$35.75	$1.25	$1.60	$0.12	$1.25	$1.37	$1.48	$1.60	$1.68	4.90%	8.7%
8	DTE Energy Company	$51.36	$2.42	$2.70	$0.09	$2.42	$2.51	$2.61	$2.70	$2.83	4.90%	9.5%
9	Edison International	$39.32	$1.31	$1.40	$0.03	$1.31	$1.34	$1.37	$1.40	$1.47	4.90%	8.0%
10	Great Plains Energy Inc.	$20.57	$0.86	$1.10	$0.08	$0.86	$0.94	$1.02	$1.10	$1.15	4.90%	9.5%
11	Hawaiian Electric	$25.27	$1.24	$1.30	$0.02	$1.24	$1.26	$1.28	$1.30	$1.36	4.90%	9.4%
12	IDACORP, Inc.	$40.27	$1.20	$1.50	$0.10	$1.20	$1.30	$1.40	$1.50	$1.57	4.90%	8.1%
13	Pinnacle West Capital	$45.61	$2.10	$2.30	$0.07	$2.10	$2.17	$2.23	$2.30	$2.41	4.90%	9.3%
14	Portland General	$24.35	$1.08	$1.20	$0.04	$1.08	$1.12	$1.16	$1.20	$1.26	4.90%	9.2%
15	SCANA Corporation	$42.26	$1.98	$2.10	$0.04	$1.98	$2.02	$2.06	$2.10	$2.20	4.90%	9.2%
16	Sempra Energy	$52.63	$2.08	$2.50	$0.14	$2.08	$2.22	$2.36	$2.50	$2.62	4.90%	9.0%
17	Southern Company	$43.58	$1.94	$2.20	$0.09	$1.94	$2.03	$2.11	$2.20	$2.31	4.90%	9.3%
18	TECO Energy, Inc.	$18.16	$0.89	$1.05	$0.05	$0.89	$0.94	$1.00	$1.05	$1.10	4.90%	9.9%
19	Vectren Corporation	$28.31	$1.41	$1.60	$0.06	$1.41	$1.47	$1.54	$1.60	$1.68	4.90%	9.8%
20	Westar Energy, Inc.	$27.01	$1.32	$1.44	$0.04	$1.32	$1.36	$1.40	$1.44	$1.51	4.90%	9.5%
21	Wisconsin Energy Corp.	$32.63	$1.20	$1.65	$0.15	$1.20	$1.35	$1.50	$1.65	$1.73	4.90%	9.2%
22	Xcel Energy Inc.	$25.72	$1.06	$1.15	$0.03	$1.06	$1.09	$1.12	$1.15	$1.21	4.90%	8.8%
23	**Average**	**$34.58**	**$1.43**	**$1.71**	**$0.09**	**$1.43**	**$1.52**	**$1.62**	**$1.71**	**$1.79**	**4.90%**	**9.2%**
24	**Median**											**9.3%**

Sources:

Schedule SCH-5, Page 4 of 5.

* *Blue Chip Financial Forecasts,* June 1, 2012 at 14.

KCP&L Greater Missouri Operations

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

Line	Date	Publication Data: Prior Quarter Actual Yield (1)	Publication Data: Projected Yield (2)	Publication Data: Projected Quarter (3)	Actual Yield in Projected Quarter (4)	Projected Yield Higher (Lower) Than Actual Yield* (5)
1	Dec-00	5.8%	5.8%	1Q, 02	5.6%	0.2%
2	Mar-01	5.7%	5.6%	2Q, 02	5.8%	-0.2%
3	Jun-01	5.4%	5.8%	3Q, 02	5.2%	0.6%
4	Sep-01	5.7%	5.9%	4Q, 02	5.1%	0.8%
5	Dec-01	5.5%	5.7%	1Q, 03	5.0%	0.7%
6	Mar-02	5.3%	5.9%	2Q, 03	4.7%	1.2%
7	Jun-02	5.6%	6.2%	3Q, 03	5.2%	1.0%
8	Sep-02	5.8%	5.9%	4Q, 03	5.2%	0.7%
9	Dec-02	5.2%	5.7%	1Q, 04	4.9%	0.8%
10	Mar-03	5.1%	5.7%	2Q, 04	5.4%	0.3%
11	Jun-03	5.0%	5.4%	3Q, 04	5.1%	0.3%
12	Sep-03	4.7%	5.8%	4Q, 04	4.9%	0.9%
13	Dec-03	5.2%	5.9%	1Q, 05	4.8%	1.1%
14	Mar-04	5.2%	5.9%	2Q, 05	4.6%	1.4%
15	Jun-04	4.9%	6.2%	3Q, 05	4.5%	1.7%
16	Sep-04	5.4%	6.0%	4Q, 05	4.8%	1.2%
17	Dec-04	5.1%	5.8%	1Q, 06	4.6%	1.2%
18	Mar-05	4.9%	5.6%	2Q, 06	5.1%	0.5%
19	Jun-05	4.8%	5.5%	3Q, 06	5.0%	0.5%
20	Sep-05	4.6%	5.2%	4Q, 06	4.7%	0.5%
21	Dec-05	4.5%	5.3%	1Q, 07	4.8%	0.5%
22	Mar-06	4.8%	5.1%	2Q, 07	5.0%	0.1%
23	Jun-06	4.6%	5.3%	3Q, 07	4.9%	0.4%
24	Sep-06	5.1%	5.2%	4Q, 07	4.6%	0.6%
25	Dec-06	5.0%	5.0%	1Q, 08	4.4%	0.6%
26	Mar-07	4.7%	5.1%	2Q, 08	4.6%	0.5%
27	Jun-07	4.8%	5.1%	3Q, 08	4.5%	0.7%
28	Sep-07	5.0%	5.2%	4Q, 08	3.7%	1.5%
29	Dec-07	4.9%	4.8%	1Q, 09	3.5%	1.4%
30	Mar-08	4.6%	4.8%	2Q, 09	4.0%	0.8%
31	Jun-08	4.4%	4.9%	3Q, 09	4.3%	0.6%
32	Sep-08	4.6%	5.1%	4Q, 09	4.3%	0.8%
33	Dec-08	4.5%	4.6%	1Q, 10	4.6%	0.0%
34	Mar-09	3.7%	4.1%	2Q, 10	4.4%	-0.3%
35	Jun-09	3.5%	4.6%	3Q, 10	3.9%	0.8%
36	Sep-09	4.0%	5.0%	4Q, 10	4.2%	0.8%
37	Dec-09	4.3%	5.0%	1Q, 11	4.6%	0.4%
38	Mar-10	4.3%	5.2%	2Q, 11	4.3%	0.9%
39	Jun-10	4.6%	5.2%	3Q, 11	3.7%	1.5%
40	Sep-10	4.4%	4.7%	4Q, 11	3.0%	1.7%
41	Dec-10	3.9%	4.6%	1Q, 12	3.1%	1.5%
42	Jan-11	4.2%	5.0%	2Q, 12		
43	Feb-11	4.2%	5.0%	2Q, 12		
44	Mar-11	4.2%	5.1%	2Q, 12		
45	Apr-11	4.6%	5.2%	3Q, 12		
46	May-11	4.6%	5.2%	3Q, 12		
47	Jun-11	4.6%	5.2%	3Q, 12		
48	Jul-11	4.4%	5.2%	4Q, 12		
49	Aug-11	4.3%	5.0%	4Q, 12		
50	Sep-11	4.3%	4.2%	4Q, 12		
51	Oct-11	3.7%	3.9%	1Q, 13		
52	Nov-11	3.7%	3.8%	1Q, 13		
53	Dec-11	3.7%	3.8%	1Q, 13		
54	Jan-12	3.0%	3.8%	2Q, 13		
55	Feb-12	3.0%	3.8%	2Q, 13		
56	Mar-12	3.0%	3.8%	2Q, 13		
57	Apr-12	3.1%	3.9%	3Q, 13		
58	May-12	3.1%	3.9%	3Q, 13		
59	Jun-12	3.1%	3.7%	3Q, 13		
60	Jul-12	2.9%	3.6%	4Q, 13		

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