

Exhibit No.:  
Issues: Revenue Requirement  
Witness: Michael P. Gorman  
Type of Exhibit: Direct Testimony  
Sponsoring Party: Office of Public Counsel  
Case No.: ER-2012-0174  
Date Testimony Prepared: August 2, 2012

**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-2012-0174**  
Tracking No. YE-2012-0404

Direct Testimony and Schedules of

**Michael P. Gorman**

**Revenue Requirement**

On behalf of

**The Office of Public Counsel**

August 2, 2012



Project 9605

**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

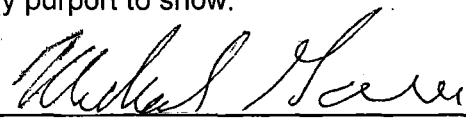
Case No. ER-2012-0174  
Tracking No. YE-2012-0404

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

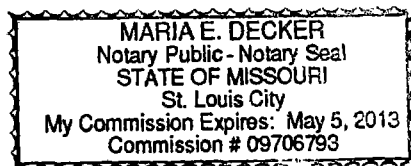
**Affidavit of Michael P. Gorman**


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-2012-0174.
  
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 1<sup>st</sup> day of August, 2012.



  
\_\_\_\_\_  
Notary Public

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

<p><b>In the Matter of Kansas City Power &amp; Light Company’s Request for Authority to Implement a General Rate Increase for Electric Service</b></p>	<p>) ) ) ) ) ) ) ) )</p>	<p><b>Case No. ER-2012-0174</b> Tracking No. YE-2012-0404</p>
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**BEFORE THE PUBLIC SERVICE COMMISSION  
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**Direct Testimony of Michael P. Gorman**

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

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

4    **Q     WHAT IS YOUR OCCUPATION?**

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

7    **Q     PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

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

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

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

1 Q **WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

2 A I will recommend an overall rate of return and fair return on common equity for use in  
3 setting Kansas City Power & Light Company's ("KCPL" or "Company") revenue  
4 requirement in this case.

5 **SUMMARY**

6 Q **PLEASE SUMMARIZE YOUR RATE OF RETURN RECOMMENDATIONS.**

7 A I recommend the Missouri Public Service Commission (the "Commission" or "MPSC")  
8 award KCPL a return on common equity in the range of 9.10% to 9.50% and an  
9 overall rate of return in the range of 7.69% to 7.87%, as shown on Schedule MPG-1.

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

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

19 Q **DOES YOUR RECOMMENDED RETURN ON EQUITY RANGE REFLECT KCPL'S  
20 EXISTING INVESTMENT RISK?**

21 A Yes. My recommended return on equity range reflects fair compensation for KCPL's  
22 existing investment risk including its regulatory risk which is based on the Missouri  
23 Regulatory Framework used to set rates that recover its cost of service and support

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1 its financial integrity. These factors are reflected in KCPL's existing bond rating and  
2 other risk factors used to select a comparable risk proxy group. If the Commission  
3 modified KCPL's existing regulatory mechanisms to reduce KCPL's investment risk,  
4 then any related risk reduction should be considered in determining a fair  
5 risk-adjusted return on equity for KCPL.

6 **Q HOW DID YOU ESTIMATE KCPL'S CURRENT MARKET COST OF EQUITY?**

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

12 **RATE OF RETURN**

13 **Q HOW DOES YOUR RECOMMENDED RETURN ON EQUITY RANGE COMPARE**  
14 **TO KCPL'S LAST AUTHORIZED RETURN ON EQUITY?**

15 A On April 12, 2011, the Commission issued its final order in KCPL's rate case  
16 (Missouri Public Service Commission, Case No. ER-2010-0355) which included a  
17 return on equity of 10.00%.

18 My recommended return on equity range is lower in this case than the return  
19 on equity included in KCPL's rate case from April 2011. However, this lower return  
20 on equity is justified based on clear evidence that capital market costs today are  
21 much lower than they were in 2011 when KCPL's rates were approved.

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1 Q WHY DO YOU BELIEVE MARKET COSTS OF CAPITAL ARE LOWER TODAY  
2 THAN THEY WERE IN KCPL'S LAST RATE CASE?

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

<u>Description</u>	<u>Current Case<sup>1</sup></u>	<u>Case No.</u> <u>ER-2010-0355</u>	<u>Yield</u> <u>Change</u>
"A" Rated Utility Bond Yields	4.14%	5.62%	1.48%
"Baa" Rated Utility Bond Yields	4.95%	6.05%	1.10%
13-Week Period Ending	07/13/2012	04/08/2011	

Source:  
<sup>1</sup>Schedule MPG-14, page 1.

7 As shown in Table 1 above, the current market cost of debt for "A" (by  
8 Standard & Poor's, "S&P") and "Baa" (by Moody's) rated utility bond yields has  
9 decreased in this case relative to KCPL's last rate case. The current "A" rated utility  
10 bond yield is approximately 1.50 percentage points lower now than it was in KCPL's  
11 last rate case. Also, the current "Baa" utility bond yield is approximately  
12 1.10 percentage points lower than during KCPL's last rate case.

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

16 This is also evident by the Company's filing. In KCPL's last rate case,  
17 Dr. Hadaway proposed a return on equity of 10.75%, which is 35 basis points higher

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1 than his recommendation of 10.40% in the current rate proceeding. Therefore, this  
2 decline in current capital costs should be reflected in KCPL's authorized return on  
3 equity to fairly compensate investors and ratepayers.

#### 4 **Electric Utility Industry Market Outlook**

5 **Q PLEASE DESCRIBE THIS SECTION OF YOUR TESTIMONY.**

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

12 Based on the assessments described below, I find the credit rating outlook of  
13 the industry to be strong and supportive of the industry's financial integrity, and  
14 electric utilities' stocks have exhibited strong price performance over the last several  
15 years.

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

20 **Q PLEASE DESCRIBE THE ELECTRIC UTILITIES' CREDIT RATING OUTLOOK.**

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

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1 Standard & Poor's Ratings Services' believes the outlook for credit  
2 quality in the U.S. investor-owned regulated electric, gas, and water  
3 utility sectors for the remainder of 2012 and into 2013 will remain  
4 stable. These companies have weathered the challenging economic  
5 environment of the past few years with little lasting effect on their  
6 financial risk profiles. The essential service that utilities provide and  
7 the rate-regulated nature of the business enable them to generate  
8 reasonably steady and predictable cash flows through timely recovery  
9 of their costs from ratepayers, despite economic conditions and  
10 ongoing heavy investment needs. As a result, we expect their credit  
11 quality to remain stable.

12 \* \* \*

### 13 **Industry Credit Outlook**

14 Liquidity is adequate for most utilities. Investor appetite for utility debt  
15 remains healthy, with deals continuing to be oversubscribed. The  
16 companies' near-term debt maturities appear manageable and we  
17 think they will likely refinance these with new debt or borrowings under  
18 revolving credit facilities. Credit fundamentals indicate that most, if not  
19 all, utilities should continue to have ample access to funding sources  
20 and credit. Some have issued common stock to partly fund  
21 construction expenditures, which has helped to support capital  
22 structure balance. Additionally, many companies are accessing short-  
23 term credit markets through commercial paper programs at very low  
24 rates. Liquidity is an industry strength and has been improving, and  
25 banks are indicating a willingness to lengthen the terms of credit  
26 facilities out as far as five years in more and more cases. U.S.  
27 regulated utilities have not been significantly hurt by turbulence in the  
28 global financial markets.<sup>1</sup>

29 Similarly, Fitch states:

### 30 **Electric Utilities: Stable**

31 Fitch's Outlook for the electric utility sector in 2012 remains stable.  
32 The sector benefits from low interest rates, modest inflationary  
33 pressures, open capital markets, and low natural gas and power  
34 prices. Fitch expects these conditions to persist into 2013.

35 The favorable funding environment helps to offset any stress that  
36 would otherwise result during an extended period of high projected

---

<sup>1</sup>*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.*

1 capital investment. Capex is expected to remain elevated, increasing  
2 5%–6% over 2011 levels.<sup>2</sup>

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

5 **Conclusion**

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

13 The Edison Electric Institute (“EEI”) also opined as follows:

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

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

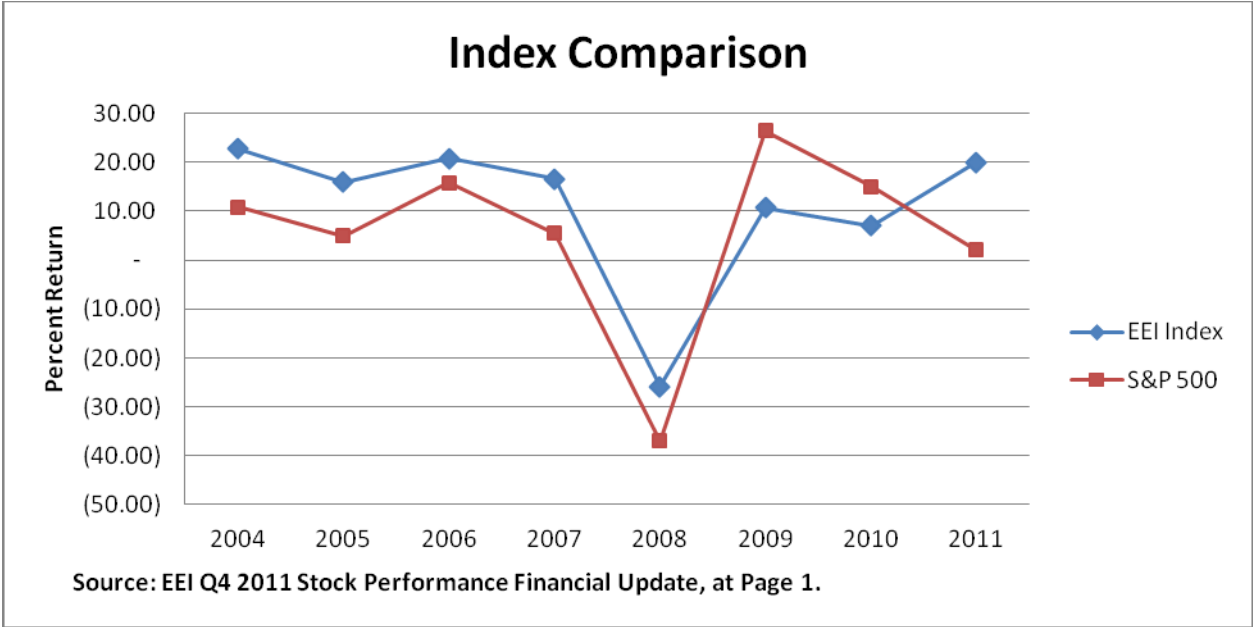
22 A As shown in the graph below, the EEI has recorded electric utility stock price  
23 performance compared to the market. The EEI data shows that its Electric Utility  
24 Index has outperformed the market, with a few exceptions, triggered by the recent  
25 state of the economic environment.

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<sup>2</sup>*FitchRatings*: “2012 Outlook: Utilities, Power, and Gas,” December 5, 2011 at 10.

<sup>3</sup>*Value Line Investment Survey*, May 25, 2012 at 137, emphasis added.

<sup>4</sup>*EEI Q4 2011 Stock Performance* at 1.



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

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

5                **Commentary**

6                The EEI Index produced a positive 20% return during 2011, its  
7                strongest annual gain since 2006, outperforming the broad market  
8                after two consecutive years of underperformance as stocks rebounded  
9                from the lows reached during 2008 financial crisis.

10                \* \* \*

11                The strength of the EEI Index in 2011 is no surprise, highlighting the  
12                industry’s traditional role as a defensive investment following its  
13                reemphasis in recent years of core regulated businesses with slow but  
14                predictable earnings growth and steady dividends. In fact, the  
15                industry’s average dividend yield exceeded 4% during the year,  
16                leading that of all other U.S. business sectors.<sup>5</sup>

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<sup>5</sup>EEI Q4 2011 Stock Performance at 1 and 4-5.

1 **KCPL Investment Risk**

2 **Q PLEASE DESCRIBE THE MARKET’S ASSESSMENT OF THE INVESTMENT RISK**  
3 **OF KCPL.**

4 **A** The market assessment of KCPL’s investment risk is best described by credit rating  
5 analysts’ reports. KCPL’s current senior secured credit ratings from S&P and  
6 Moody’s are “BBB+” and “A3,” respectively.

7 In S&P’s April 2012 report on KCPL, it reports that its current bond rating is  
8 “Stable” and notes its credit strengths to include: the utility cash flows, regulated  
9 utility strategy, and improved management of regulatory risk. The weaknesses noted  
10 are large environmental capital spending programs which could pressure  
11 consolidated financial measures over the intermediate term, no fuel adjustment  
12 mechanisms, and the potential for increased scrutiny and higher costs at the  
13 Company’s nuclear generating facility. Overall, S&P describes KCPL’s “Stable” credit  
14 rating outlook as follows:

15 **Rationale**

16 Standard & Poor’s Ratings Services bases its rating on Kansas City  
17 Power & Light Co. (KCP&L) on the consolidated credit profile of  
18 holding company Great Plains Energy Inc. This includes what we  
19 consider to be an "excellent" business risk profile and "aggressive"  
20 financial risk profile under our criteria. Great Plains is an integrated  
21 electric utility holding company that owns vertically integrated electric  
22 utilities KCP&L and KCP&L Greater Missouri Operations Co. (GMO).

23 The excellent business risk profiles for Great Plains, KCP&L, and  
24 GMO reflect their status as vertically integrated, fully regulated utilities  
25 servicing roughly 825,000 customers in eastern Kansas and western  
26 Missouri. The utilities operate an approximately 6,600-megawatt (MW)  
27 generation fleet that is about 80% coal-fired. In its service territory,  
28 there have been gradual signs of economic improvement, with  
29 stronger industrial sales, but mixed unemployment rates; Kansas’ is  
30 lower than the national average and Missouri’s is slightly higher.  
31 Management has improved cash flow by effectively increasing  
32 revenues and cost recovery through mechanisms such as a fuel-

1 adjustment clause and the allowance of additional accelerated  
2 depreciation.<sup>6</sup>

3 **KCPL's Proposed Capital Structure**

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

7 A KCPL's August 2012 forecasted capital structure, as supported by KCPL witness  
8 Dr. Samuel Hadaway is shown below in Table 2.

<b><u>Description</u></b>	<b><u>Percent of</u></b> <b><u>Total Capital</u></b>
Long-Term Debt	46.918%
Preferred Stock	0.607%
Common Equity	<u>52.475%</u>
Total Capital Structure	100.000%

Sources: Hadaway Direct at 5 and  
Schedule SCH-2, page 10 of 16.

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

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

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<sup>6</sup>Standard & Poor's RatingsDirect on the Global Credit Portal: "Kansas City Power & Light Co.," April 27, 2012 at 2, emphasis added.

1 The substantial increase in KCPL's common equity ratio materially increases its  
2 claimed revenue deficiency in this case.

3 This increased common equity ratio does not appear to be necessary. As  
4 noted above, the credit rating agencies currently view KCPL's credit standing to be  
5 "Stable," with adequate utility cash flows. KCPL's current financial metrics, including  
6 its debt/equity ratio of approximately 54%, supports its investment grade bond rating.  
7 Hence, an increase in common equity ratio in this case seems to accomplish nothing  
8 more than increasing KCPL's cost of service and income.

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

12 **A** No. KCPL's President and Chief Operating Officer Terry Bassham offered testimony  
13 in this proceeding addressing the Company's claimed revenue deficiency. In that  
14 testimony, Mr. Bassham went through details explaining KCPL's efforts to reduce its  
15 costs to minimize its rate increase in this case, and outlined KCPL's recognition that  
16 its service area economy is currently experiencing difficult economic times. (Direct  
17 Testimony of Terry Bassham at 8-10).

18 An unnecessary increase in the Company's common equity ratio would  
19 contradict the assertions made by Mr. Bassham because it unnecessarily inflates  
20 KCPL's claimed revenue deficiency. What makes the increase in the common equity  
21 ratio more difficult to accept is that the Company has offered no Company employee  
22 who explains why KCPL needs to increase its common equity ratio. Indeed, the  
23 Company's capital structure witness in this proceeding is its outside rate of return on  
24 common equity consultant, Dr. Samuel Hadaway. No Company witness has

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1 explained why or justified in any way the need to increase KCPL's common equity  
2 ratio.

3 Mr. Bassham also discussed the agreements among many of the  
4 stakeholders in this proceeding to help support KCPL's credit standing during its  
5 Comprehensive Energy Plan, including regulatory plans that helped to support the  
6 development of the new Iatan 2 plant, and significant retrofits to Iatan 1 and  
7 La Cygne 1, and the development of various wind power projects. The Company's  
8 proposal for a substantial increase in its common equity ratio with little to no  
9 justification seems contrary to this more cooperative effort undertaken by all parties in  
10 the past, including the Company, to support investments in KCPL but mitigate the  
11 rate increases necessary to support those investments.

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

14 **A** The Company's most recent capital structure was provided in response to Staff's  
15 Data Request No. 0251. In this response, KCPL identified its actual capital structure  
16 as of March 31, 2012, which is shown in Table 3 below.

**TABLE 3**

**KCPL's**  
**Actual Capital Structure**  
**(March 31, 2012)**

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

Source: KCPL response to Staff's Data Request No. 0251.

1           The capital structure as of March 31, 2012 has been fairly consistent over  
2           several years as reported by S&P.<sup>7</sup>

3   **Q    WHAT IS YOUR PROPOSED CAPITAL STRUCTURE?**

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

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<sup>7</sup>S&P RatingsDirect on the Global Credit Portal: "Kansas City Power and Light," April 27, 2012 at 5.



1 **Return on Equity**

2 **Q PLEASE DESCRIBE WHAT IS MEANT BY A “UTILITY’S COST OF COMMON**  
3 **EQUITY.”**

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

7 **Q PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED**  
8 **UTILITY’S COST OF COMMON EQUITY.**

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

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

18 **Q PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE THE COST**  
19 **OF COMMON EQUITY FOR KCPL.**

20 A I have used several models based on financial theory to estimate KCPL’s cost of  
21 common equity. These models are: (1) a constant growth Discounted Cash Flow  
22 (“DCF”) model using consensus analysts’ growth rate projections; (2) a constant  
23 growth DCF using sustainable growth rate estimates; (3) a multi-stage growth DCF

1 model; (4) a Risk Premium model; and (5) a Capital Asset Pricing Model (“CAPM”). I  
2 have applied these models to a group of publicly traded utilities that I have  
3 determined share investment risk similar to KCPL’s.

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

6 A I relied on the same utility proxy group used by KCPL witness Dr. Hadaway to  
7 estimate KCPL’s return on equity. However, I excluded Ameren Corp. because its  
8 consensus analyst growth rate was negative, likely due to concern at the merchant  
9 generation units.

10 **Q HOW DOES THE PROXY GROUP INVESTMENT RISK COMPARE TO KCPL’S**  
11 **INVESTMENT RISK?**

12 A The proxy group is shown on Schedule MPG-2. This proxy group has an average  
13 senior credit rating from S&P of “BBB+,” which is identical to S&P’s senior secured  
14 credit rating for KCPL. The proxy group’s senior credit rating from Moody’s is “A3,”  
15 which is also identical to KCPL’s senior secured credit rating from Moody’s of “A3.”  
16 The proxy group has comparable investment risk to KCPL.

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

22 I also compared KCPL’s business risk to the business risk of the proxy group  
23 based on S&P’s ranking methodology. KCPL has an S&P business risk profile of

1 "Excellent," which is identical to the S&P business risk profile of the proxy group. The  
2 S&P business risk profile score indicates that KCPL's business risk is comparable to  
3 that of the proxy group.<sup>8</sup>

4 Based on these proxy group selection criteria, I believe that my proxy group  
5 reasonably approximates the investment risk of KCPL, and can be used to estimate a  
6 fair return on equity for KCPL.

## 7 **Discounted Cash Flow Model**

8 **Q PLEASE DESCRIBE THE DCF MODEL.**

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

$$12 \quad P_0 = \frac{D_1}{(1+K)^1} + \frac{D_2}{(1+K)^2} \dots \frac{D_\infty}{(1+K)^\infty} \text{ where} \quad \text{(Equation 1)}$$

13

14  $P_0$  = Current stock price  
15  $D$  = Dividends in periods 1 -  $\infty$   
16  $K$  = Investor's required return

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

---

<sup>8</sup>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.

1 
$$K = D_1/P_0 + G$$
 (Equation 2)

2 K = Investor's required return

3  $D_1$  = Dividend in first year

4  $P_0$  = Current stock price

5 G = Expected constant dividend growth rate

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

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

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

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

12 A I relied on the average of the weekly high and low stock prices of the utilities in the  
13 proxy group over a 13-week period ended July 13, 2012. An average stock price is  
14 less susceptible to market price variations than a spot price. Therefore, an average  
15 stock price is less susceptible to aberrant market price movements, which may not be  
16 reflective of the stock's long-term value.

17 A 13-week average stock price reflects a period that is still short enough to  
18 contain data that reasonably reflect current market expectations, but the period is not  
19 so short as to be susceptible to market price variations that may not reflect the stock's  
20 long-term value. In my judgment, a 13-week average stock price is a reasonable  
21 balance between the need to reflect current market expectations and the need to  
22 capture sufficient data to smooth out aberrant market movements.

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

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

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

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

12 As predictors of future returns, security analysts' growth estimates have been  
13 shown to be more accurate than growth rates derived from historical data.<sup>10</sup> That is,  
14 assuming the market generally makes rational investment decisions, analysts' growth  
15 projections are more likely to influence observable stock prices than growth rates  
16 derived only from historical data.

17 For my constant growth DCF analysis, I have relied on a consensus, or mean,  
18 of professional security analysts' earnings growth estimates as a proxy for investor  
19 consensus dividend growth rate expectations. I used the average of analysts' growth  
20 rate estimates from three sources: Zacks, SNL Financial, and Reuters. All such  
21 projections were available on July 13, 2012, and all were reported online.

---

<sup>9</sup>*The Value Line Investment Survey*, May 4, May 25, and June 22, 2012.

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

1           Each consensus growth rate projection is based on a survey of security  
2 analysts. It is problematic as to whether any particular analyst's forecast is more  
3 representative of general market expectations. The consensus estimate is a simple  
4 arithmetic average, or mean, of surveyed analysts' earnings growth forecasts. A  
5 simple average of the growth forecasts gives equal weight to all surveyed analysts'  
6 projections. Therefore, a simple average, or arithmetic mean, of analyst forecasts is  
7 a good proxy for market consensus expectations.

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

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

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

13  A    As shown in Schedule MPG-4, the average and median constant growth DCF returns  
14    for my proxy group are 9.46% and 9.54%, respectively.

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

17  A    Yes. The three- to five-year growth rates are slightly above the long-term sustainable  
18    growth rate. Therefore, I believe my constant growth DCF analysis using analysts'  
19    three- to five-year growth rates generally reflects reasonable growth outlooks and the  
20    DCF results are also reasonable, even though they are slightly on the high end.  
21    Hence, I believe my constant growth DCF model produces conservative return on  
22    equity estimates. However, I also considered other DCF methodologies in order to

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1 enhance the information available to accurately estimate KCPL's current market  
2 return on common equity.

### 3 **Sustainable Growth DCF**

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

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

11 The internal growth methodology is tied to the percentage of earnings retained  
12 in the company and not paid out as dividends. The earnings retention ratio is 1 minus  
13 the dividend payout ratio. As the payout ratio declines, the earnings retention ratio  
14 increases. An increased earnings retention ratio will fuel stronger growth because  
15 the business funds more investments with retained earnings. The payout ratios of the  
16 proxy group are shown on my Schedule MPG-5. These dividend payout ratios and  
17 earnings retention ratios then can be used to develop a sustainable long-term  
18 earnings retention growth rate. A sustainable long-term retention ratio will help gauge  
19 whether analysts' current three- to five-year growth rate projections can be sustained  
20 over an indefinite period of time.

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

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

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

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

### 8 **Multi-Stage Growth DCF Model**

9 **Q HAVE YOU CONDUCTED ANY OTHER DCF STUDIES?**

10 A Yes. My first constant growth DCF is based on consensus analysts' growth rate  
11 projections, so it is a reasonable reflection of rational investment expectations over  
12 the next three to five years. The limitation on the constant growth DCF model is that  
13 it cannot reflect a rational expectation that a period of high/low short-term growth can  
14 be followed by a change in growth to a rate that is more reflective of long-term  
15 sustainable growth. Hence, I performed a multi-stage growth DCF analysis to reflect  
16 this outlook of changing growth expectations.

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

19 A Analyst projected growth rates over the next three to five years will change as utility  
20 earnings growth outlooks change. Utility companies typically go through cycles in  
21 making investments in their systems. When utility companies are making large  
22 investments, their rate base grows rapidly, which accelerates their earnings growth.

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1 Once a major construction cycle is completed or levels off, growth in the utility rate  
2 base slows, and its earnings slow from an abnormally high three- to five-year growth  
3 rate period to a lower sustainable growth rate.

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

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

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

21 In this example, the first year, the capital expenditures less depreciation  
22 expense will grow plant-in-service from \$1 million up to \$1,070,000 – a 7% plant  
23 growth. In this example, earnings in the year would begin at an assumed 10% rate of  
24 return on investment, or \$103,500. This represents a 10% return on average plant

1 investment for the year. Now assume that the capital improvement program  
2 continues, and plant-in-service increases from the initial \$1 million up to \$1,139,900  
3 by the end of year 2. In this second year, earnings would increase to \$110,495, a  
4 6.8% growth in earnings relative to year 1. Each year, the embedded plant-in-service  
5 increases by capital improvements less depreciation expense. As a result, the growth  
6 in earnings slows because a percent change in plant-in-service starts to slow as the  
7 beginning of the year plant-in-service number increases. That is, the denominator in  
8 the growth equation increases with a relatively flat but elevated level of capital  
9 improvements resulting in a decreasing growth in earnings. With this continued level  
10 of elevated capital improvement offset by depreciation expense, the growth rate of  
11 earnings starts at around 6.8% in the beginning of the growth period, declines to  
12 around 5.3% after five years of growth, and further declines to around 4.2% after  
13 10 years of elevated capital investment spending. Hence, while the company  
14 maintains an elevated level of capital spending throughout the forecast period, the  
15 earnings growth rate nevertheless declines from 6.8% at the beginning of the  
16 spending period, down to 4.2% after 10 years of elevated capital spending. Again,  
17 this occurs because the denominator in the growth equation increases as plant  
18 investment is made and plant-in-service increases. As a result, elevated capital  
19 expenditures have a lower growth impact on a larger capital base after years of  
20 elevated capital spending relative to the beginning of the capital spending program.

**TABLE 4**

**Growth in Plant In-Service and Earnings**

<u>Year</u>	<u>Beginning of Year Plant-in-Service</u> (1)	<u>Capital Improvement</u> (2)	<u>Depreciation Expense</u> (3)	<u>End of Year Plant-in-Service</u> (4)	<u>Avg Year Plant</u> (5)	<u>ROE</u> (6)	<u>Earnings</u> (7)	<u>Annual Earnings Growth Rate</u> (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	<u>6.8%</u>
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	<u>5.3%</u>
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	<u>4.2%</u>

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.

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

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

4            Dividends need not be, and probably are not, constant from period to  
 5            period. Moreover, there are circumstances where the standard DCF  
 6            model cannot be used to assess investor return requirements. For  
 7            example, if a utility company is in the process of altering its dividend  
 8            payout policy and dividends are not expected to grow at the same rate  
 9            as earnings during the transition period, the standard DCF model is  
 10           inapplicable. This is because the expected growth in stock price has  
 11           to be different from that of dividends, earnings, and book value if the  
 12           market price is to converge toward book value.

13

\* \* \*

1 A Non-Constant Growth DCF model is appropriate whenever the  
2 growth rate is expected to change, and the only way to produce a  
3 change in the forecast payout ratio is by introducing an intermediate  
4 growth rate that is different from the long-term growth rate, as in the  
5 previous example.<sup>11</sup>

6 **Q PLEASE DESCRIBE YOUR MULTI-STAGE GROWTH DCF MODEL.**

7 A The multi-stage growth DCF model reflects the possibility of non-constant growth for  
8 a company over time. The multi-stage growth DCF model reflects three growth  
9 periods: (1) a short-term growth period, which consists of the first five years; (2) a  
10 transition period, which consists of the next five years (6 through 10); and (3) a  
11 long-term growth period, starting in year 11 through perpetuity.

12 For the short-term growth period, I relied on the consensus analysts' growth  
13 projections described above in relationship to my constant growth DCF model. For  
14 the transition period, the growth rates were reduced or increased by an equal factor,  
15 which reflects the difference between the analysts' growth rates and the United  
16 States Gross Domestic Product ("U.S. GDP") growth rate. For the long-term growth  
17 period, I assumed each company's growth would converge to the maximum  
18 sustainable growth rate for a utility company as proxied by the consensus analysts'  
19 projected growth for the U.S. GDP of 4.9%.

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

22 A Utilities cannot indefinitely sustain a growth rate that exceeds the growth rate of the  
23 overall economy. Utilities' earnings/dividend growth is created by increased utility  
24 investment or rate base. Such investment, in turn, is driven by service area economic

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<sup>11</sup>*New Regulatory Finance*, Roger A. Morin, PhD, 2006 Public Utilities Reports, Inc., Vienna, Virginia, pp. 264 and 267.

1 growth and demand for utility service. In other words, utilities invest in plant to meet  
2 sales demand growth, and sales growth, in turn, is tied to economic growth in their  
3 service areas. The Energy Information Administration (“EIA”) has observed that utility  
4 sales growth is less than U.S. GDP growth, as shown in Schedule MPG-8. Utility  
5 sales growth has lagged behind GDP growth for more than a decade. As a result,  
6 nominal GDP growth is a very conservative, albeit overstated, proxy for electric utility  
7 sales growth, rate base growth, and earnings growth. Therefore, GDP growth is a  
8 conservative proxy for the highest sustainable long-term growth rate of a utility.

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

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

15 The constant growth model is most appropriate for mature  
16 companies with a stable history of growth and stable future  
17 expectations. Expected growth rates vary somewhat among  
18 companies, but dividends for mature firms are often expected  
19 to grow in the future at about the same rate as nominal gross  
20 domestic product (real GDP plus inflation).<sup>12</sup>

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

23 A I relied on the consensus analysts’ projections of long-term GDP growth. *The Blue*  
24 *Chip Financial Forecasts* publishes consensus economists’ GDP growth projections  
25 twice a year. These consensus analysts’ GDP growth outlooks are the best available

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<sup>12</sup>“Fundamentals of Financial Management,” Eugene F. Brigham and Joel F. Houston, Eleventh Edition 2007, Thomson South-Western, a Division of Thomson Corporation at 298.

1 measure of the market's assessment of long-term GDP growth. These analyst  
2 projections reflect all current outlooks for GDP, as reflected in analyst projections, and  
3 are likely the most influential on investors' expectations of future growth outlooks.  
4 The consensus economists' published GDP growth rate outlook is 5.1% to 4.7% over  
5 the next 10 years.<sup>13</sup>

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

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

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

20 Also, the Congressional Budget Office ("CBO") makes long-term economic  
21 projections. The CBO is projecting real GDP growth of 3.3% to 2.4% during the next

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<sup>13</sup> *Blue Chip Financial Forecasts*, June 1, 2012 at 14.

<sup>14</sup> GDP growth is the product of real and inflation GDP growth.

<sup>15</sup> *DOE/EIA Annual Energy Outlook 2011 With Projections to 2035*, April 2011 at 58.

1 5 and 10 years, respectively, with GDP price inflation of 1.9% to 2.0%.<sup>16</sup> The CBO's  
2 real GDP projections are higher than the consensus but its GDP inflation is lower  
3 than the consensus economists.

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

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

10 A I relied on the same 13-week stock price and the most recent quarterly dividend  
11 payment data discussed above. For stage one growth, I used the consensus  
12 analysts' growth rate projections discussed above in my constant growth DCF model.  
13 The transition period begins in year 6 and ends in year 10. For the long-term  
14 sustainable growth rate starting in year 11, I used 4.9%, the average of the  
15 consensus economists' 5-year and 10-year projected nominal GDP growth rates.

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

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

19 **Q PLEASE SUMMARIZE THE RESULTS FROM YOUR DCF ANALYSES.**

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

---

<sup>16</sup>CBO: *The Budget and Economic Outlook: Fiscal Years 2012 to 2022*, January 2012.

<b>TABLE 5</b>	
<b><u>Summary of DCF Results</u></b>	
<b><u>Description</u></b>	<b><u>Estimates</u></b>
Constant Growth DCF Model (Analysts' Growth)	9.46%
Constant Growth DCF Model (Sustainable Growth)	9.15%
Multi-Stage Growth DCF Model	9.30%

1           I conservatively conclude that a DCF return for KCPL in this case is 9.50%,  
2           which is heavily weighted at my constant growth analysts' growth DCF results.

3    **Risk Premium Model**

4    **Q    PLEASE DESCRIBE YOUR BOND YIELD PLUS RISK PREMIUM MODEL.**

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

12                This risk premium model is based on two estimates of an equity risk premium.  
13                First, I estimated the difference between the required return on utility common equity  
14                investments and U.S. Treasury bonds. The difference between the required return on  
15                common equity and the Treasury bond yield is the risk premium. I estimated the risk  
16                premium on an annual basis for each year over the period 1986 through 2011. The  
17                common equity required returns were based on regulatory commission-authorized



1 returns for electric utility companies. Authorized returns are typically based on expert  
2 witnesses' estimates of the contemporary investor-required return.

3 The second equity risk premium estimate is based on the difference between  
4 regulatory commission-authorized returns on common equity and contemporary  
5 "A" rated utility bond yields. I selected the period 1986 through 2011 because public  
6 utility stocks consistently traded at a premium to book value during that period. This  
7 is illustrated in Schedule MPG-10, which shows that the market to book ratio since  
8 1986 for the electric utility industry was consistently above 1.0. Over this period,  
9 regulatory authorized returns were sufficient to support market prices that at least  
10 exceeded book value. This is an indication that regulatory authorized returns on  
11 common equity supported a utility's ability to issue additional common stock without  
12 diluting existing shares. It further demonstrates that utilities were able to access  
13 equity markets without a detrimental impact on current shareholders.

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

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

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

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

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

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

1 Q **BASED ON HISTORICAL DATA, WHAT RISK PREMIUM HAVE YOU USED TO**  
2 **ESTIMATE KCPL'S COST OF COMMON EQUITY IN THIS PROCEEDING?**

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

14 A current 13-week average "A" rated utility bond yield of 4.14%, when  
15 compared to the current Treasury bond yield of 2.83% as shown in Schedule  
16 MPG-14, page 1 implies a yield spread of around 1.31%. This current utility bond  
17 yield spread is lower than the 32-year average spread for "A" utility bonds of 1.57%.  
18 The current spread for the "Baa" utility yields of 2.12% is slightly higher than, although  
19 comparable to, the 32-year average spread of 1.98%.

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

1 Q HOW DID YOU ESTIMATE KCPL'S COST OF COMMON EQUITY WITH THIS RISK  
2 PREMIUM MODEL?

3 A I added a projected long-term Treasury bond yield to my estimated equity risk  
4 premium over Treasury yields. The 13-week average 30-year Treasury bond yield,  
5 ending July 13, 2012 was 2.83%, as shown in Schedule MPG-14, page 1. *Blue Chip*  
6 *Financial Forecasts* projects the 30-year Treasury bond yield to be 3.60%, and a  
7 10-year Treasury bond yield to be 2.60%.<sup>17</sup> Using the projected 30-year bond yield of  
8 3.60%, and a Treasury bond risk premium of 4.41% to 6.13%, as developed above,  
9 produces an estimated common equity return in the range of 8.01% (3.60% + 4.41%)  
10 to 9.73% (3.60% + 6.13%). I recommend an equity risk premium of 9.16%, rounded  
11 to 9.20%. This estimate is based on giving two-thirds weight to my high-end risk  
12 premium estimate of 9.73%, and one-third weight to my low-end risk premium  
13 estimate of 8.01%. I believe this weighting is appropriate given the unusually large  
14 yield spreads between Treasury bond and utility bond yields.

15 I next added my equity risk premium over utility bond yields to a current  
16 13-week average yield on "Baa" rated utility bonds for the period ending July 13, 2012  
17 of 4.95%. Adding the utility equity risk premium of 3.03% to 4.62%, as developed  
18 above, to a "Baa" rated bond yield of 4.95%, produces a cost of equity in the range of  
19 7.98% (4.95% + 3.03%) to 9.57% (4.95% + 4.62%). Again, recognizing the unusually  
20 wide Treasury to utility bond yield spreads, I recommend a risk premium of 9.04%,<sup>18</sup>  
21 rounded to 9.00%.

22 My risk premium analyses produce a return estimate in the range of 9.00% to  
23 9.20%, with a midpoint estimate of 9.10%.

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<sup>17</sup> *Blue Chip Financial Forecasts*, July 1, 2012 at 2.

<sup>18</sup>  $\frac{2}{3}$  (9.57%) +  $\frac{1}{3}$  (7.98%).

1 **Capital Asset Pricing Model (“CAPM”)**

2 **Q PLEASE DESCRIBE THE CAPM.**

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

7 
$$R_i = R_f + B_i \times (R_m - R_f) \text{ where:}$$

8  $R_i$  = Required return for stock i

9  $R_f$  = Risk-free rate

10  $R_m$  = Expected return for the market portfolio

11  $B_i$  = Beta - Measure of the risk for stock

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

18 The risks that cannot be eliminated when held in a diversified portfolio are  
19 non-diversifiable risks. Non-diversifiable risks are related to the market in general  
20 and are referred to as systematic risks. Risks that can be eliminated by diversification  
21 are regarded as non-systematic risks. In a broad sense, systematic risks are market  
22 risks, and non-systematic risks are business risks. The CAPM theory suggests that  
23 the market will not compensate investors for assuming risks that can be diversified  
24 away. Therefore, the only risk that investors will be compensated for are systematic  
25 or non-diversifiable risks. The beta is a measure of the systematic or  
26 non-diversifiable risks.

1 **Q PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.**

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

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

5 A As previously noted, *Blue Chip Financial Forecasts'* projected 30-year Treasury bond  
6 yield is 3.60%.<sup>19</sup> The current 30-year Treasury bond yield is 2.83%. I used *Blue Chip*  
7 *Financial Forecasts'* projected 30-year Treasury bond yield of 3.60% for my CAPM  
8 analysis.

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

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

19 Treasury bond yields, however, do include risk premiums related to  
20 unanticipated future inflation and interest rates. A Treasury bond yield is not a  
21 risk-free rate. Risk premiums related to unanticipated inflation and interest rates are  
22 systematic or market risks. Consequently, for companies with betas less than 1.0,

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<sup>19</sup>*Blue Chip Financial Forecasts*, July 1, 2012 at 2.

1 using the Treasury bond yield as a proxy for the risk-free rate in the CAPM analysis  
2 can produce an overstated estimate of the CAPM return.

3 **Q WHAT BETA DID YOU USE IN YOUR ANALYSIS?**

4 A As shown in Schedule MPG-15, the proxy group average *Value Line* beta estimate is  
5 0.72.

6 **Q HOW DID YOU DERIVE YOUR MARKET RISK PREMIUM ESTIMATE?**

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

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

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

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<sup>20</sup> *Morningstar, Inc. Ibbotson SBBI 2012 Classic Yearbook* at 84.

<sup>21</sup> *Blue Chip Financial Forecasts*, July 1, 2012 at 2.

<sup>22</sup>  $\{ [(1 + 0.086) * (1 + 0.022)] - 1 \} * 100$ .

1           The historical estimate of the market risk premium was also estimated by  
2 Morningstar in *Stocks, Bonds, Bills and Inflation 2012 Classic Yearbook*. Over the  
3 period 1926 through 2011, Morningstar's study estimated that the arithmetic average  
4 of the achieved total return on the S&P 500 was 11.8%,<sup>23</sup> and the total return on  
5 long-term Treasury bonds was 6.1%.<sup>24</sup> The indicated market risk premium is 5.7%  
6 (11.8% - 6.1% = 5.7%). The average of my market risk premium estimates is 6.60%  
7 (7.50% to 5.70%).

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

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

13           Morningstar estimates a forward-looking market risk premium based on actual  
14 achieved data from the historical period of 1926 through 2011. Using this data,  
15 Morningstar estimates a market risk premium derived from the total return on large  
16 company stocks (S&P 500), less the income return on Treasury bonds. The total  
17 return includes capital appreciation, dividend or coupon reinvestment returns, and  
18 annual yields received from coupons and/or dividend payments. The income return,  
19 in contrast, only reflects the income return received from dividend payments or  
20 coupon yields. Morningstar argues that the income return is the only true risk-free  
21 rate associated with Treasury bonds and is the best approximation of a truly risk-free  
22 rate. I disagree with this assessment from Morningstar, because it does not reflect a  
23 true investment option available to the marketplace and therefore does not produce a

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<sup>23</sup> *Morningstar, Inc. Ibbotson SBBI 2012 Classic Yearbook* at 83.

<sup>24</sup> *Id.*



1 legitimate estimate of the expected premium of investing in the stock market versus  
2 that of Treasury bonds. Nevertheless, I will use Morningstar's conclusion to show the  
3 reasonableness of my market risk premium estimates.

4 Morningstar's range is based on several methodologies. First, Morningstar  
5 estimates a market risk premium of 6.6% based on the difference between the total  
6 market return on common stocks (S&P 500) less the income return on Treasury bond  
7 investments. Second, Morningstar found that if the New York Stock Exchange (the  
8 "NYSE") was used as the market index rather than the S&P 500, that the market risk  
9 premium would be 6.4%, not 6.6%. Third, if only the two deciles of the largest  
10 companies included in the NYSE were considered, the market risk premium would be  
11 5.9%.<sup>25</sup>

12 Finally, Morningstar found that the 6.6% market risk premium based on the  
13 S&P 500 was influenced by an abnormal expansion of price-to-earnings ("P/E") ratios  
14 relative to earnings and dividend growth during the period 1980 through 2001.  
15 Morningstar believes this abnormal P/E expansion is not sustainable. Therefore,  
16 Morningstar adjusted this market risk premium estimate to normalize the growth in the  
17 P/E ratio to be more in line with the growth in dividends and earnings. Based on this  
18 alternative methodology, Morningstar published a long-horizon supply-side market  
19 risk premium of 6.1%.<sup>26</sup>

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<sup>25</sup>Morningstar observes that the S&P 500 and the NYSE Decile 1-2 are both large capitalization benchmarks. *Morningstar, Inc. Ibbotson SBI 2012 Valuation Yearbook* at 54.

<sup>26</sup>*Id.* at 66.

1 Q WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?

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

5 **Return on Equity Summary**

6 Q BASED ON THE RESULTS OF YOUR RETURN ON COMMON EQUITY  
7 ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY DO  
8 YOU RECOMMEND FOR KCPL?

9 A Based on my analyses, I estimate KCPL's current market cost of equity to be in the  
10 range of 9.10% to 9.50%.

<b><u>Description</u></b>	<b><u>Results</u></b>
DCF	9.50%
Risk Premium	9.10%
CAPM	8.40%

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

12 **Financial Integrity**

13 Q WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT AN  
14 INVESTMENT GRADE BOND RATING FOR KCPL?

15 A Yes. I have reached this conclusion by comparing the key credit rating financial  
16 ratios for KCPL's retail cost of service in this case, adjusted for my proposed return

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1 on equity and the Company's actual capital structure, to S&P's benchmark financial  
2 ratios using S&P's new credit metric ranges.

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

5 A S&P publishes a matrix of financial ratios that correspond to its assessment of the  
6 business risk of the utility company and related bond rating. On May 27, 2009, S&P  
7 expanded its matrix criteria<sup>27</sup> by including additional business and financial risk  
8 categories. Based on S&P's most recent credit matrix, the business risk profile  
9 categories are "Excellent," "Strong," "Satisfactory," "Fair," "Weak," and "Vulnerable."  
10 Most electric utilities have a business risk profile of "Excellent" or "Strong." The  
11 financial risk profile categories are "Minimal," "Modest," "Intermediate," "Significant,"  
12 "Aggressive," and "Highly Leveraged." Most of the electric utilities have a financial  
13 risk profile of "Aggressive." KCPL has an "Excellent" business risk profile and an  
14 "Aggressive" financial risk profile.

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

17 A S&P evaluates a utility's credit rating based on an assessment of its financial and  
18 business risks. A combination of financial and business risks equates to the overall  
19 assessment of KCPL's total credit risk exposure. S&P publishes a matrix of financial  
20 ratios that defines the level of financial risk as a function of the level of business risk.

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<sup>27</sup>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.

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

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

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

16 **Q DID YOU INCLUDE ANY OFF-BALANCE SHEET DEBT (“OBSD”)?**

17 A Yes. As shown in Schedule MPG-17, S&P estimated off-balance sheet debt  
18 equivalents of \$121.9 million attributed to KCPL’s operating leases. S&P includes  
19 other off-balance sheet debt adjustments which I did not include in my analysis.  
20 Accrued interest not reported on the Company’s debt was not included in my  
21 analysis. This factor is either reflected in KCPL’s cost of service, or I could not find  
22 evidence that it relates to regulated utility operations. As such, I did not include it in

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1 the metrics to judge the reasonableness of my rate of return for retail operations in  
2 Missouri in this proceeding.

3 **Q PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS FOR**  
4 **KCPL AT A 9.10% RETURN ON EQUITY.**

5 A The S&P financial metric calculations for KCPL at a 9.10% return are developed on  
6 Schedule MPG-17, page 1.

7 KCPL's adjusted total debt ratio is approximately 55%. This is within the  
8 "Aggressive" utility guideline range of 50% to 60%. This total debt ratio will support  
9 an investment grade bond rating.

10 As shown on Schedule MPG-17, page 1, column 1, based on an equity return  
11 of 9.10%, KCPL will be provided an opportunity to produce a debt to EBITDA ratio of  
12 3.4x. This is within S&P's "Significant" range of 3.0x to 4.0x. This ratio also supports  
13 an investment grade credit rating.

14 Finally, KCPL's retail operations FFO to total debt coverage at a 9.10% equity  
15 return would be 19%, which is within the "Aggressive" metric guideline range of 12%  
16 to 20%. The FFO/total debt ratio will support an investment grade bond rating.

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

20 **Q PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS FOR**  
21 **KCPL AT A 9.50% RETURN ON EQUITY.**

22 A The S&P financial metric calculations for KCPL at a 9.50% return are developed on  
23 Schedule MPG-18, page 1.

1 KCPL's adjusted total debt ratio is approximately 55%. This is within the  
2 "Aggressive" utility guideline range of 50% to 60%. This total debt ratio will support  
3 an investment grade bond rating.

4 As shown on Schedule MPG-18, page 1, column 1, based on an equity return  
5 of 9.50%, KCPL will be provided an opportunity to produce a debt to EBITDA ratio of  
6 3.3x. This is within S&P's "Significant" range of 3.0x to 4.0x. This ratio also supports  
7 an investment grade credit rating.

8 Finally, KCPL's retail operations FFO to total debt coverage at a 9.50% equity  
9 return would be 19%, which is within the "Aggressive" metric guideline range of 12%  
10 to 20%. The FFO/total debt ratio will support an investment grade bond rating.

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

#### 14 **RESPONSE TO KCPL WITNESS DR. SAMUEL HADAWAY**

15 **Q WHAT RETURN ON COMMON EQUITY IS KCPL PROPOSING FOR THIS**  
16 **PROCEEDING?**

17 **A** KCPL is proposing to set rates based on a return on equity of 10.40%. KCPL's return  
18 on equity proposal is based on the analysis and judgment of Dr. Samuel Hadaway.  
19 Dr. Hadaway's results are summarized at page 42 of his direct testimony.

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

22 **A** No. As discussed in detail below, Dr. Hadaway's own analyses would support a  
23 return on equity in the range of 9.2% to 10.0% if it is adjusted to reflect current market

1 data and his models are properly applied. These adjustments to Dr. Hadaway's  
2 return on equity estimates support my recommended return on equity range.

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

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

10 As shown in Table 7, using consensus economists' projection of GDP growth  
11 rather than Dr. Hadaway's inflated GDP growth estimates, his own DCF analyses  
12 would support a return on equity for KCPL in the range of 9.2% to 10.0%. Proper  
13 adjustments to Dr. Hadaway's utility risk premium estimates to reflect the unadjusted  
14 equity risk premium would reduce this estimate to 9.5%.

**TABLE 7**

**Summary of Dr. Hadaway's ROE Estimate**

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

Sources:

<sup>1</sup>Hadaway Direct at 42.

<sup>2</sup>Schedule MPG-19.

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

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

6 **Q ARE DR. HADAWAY'S DCF ESTIMATES RELIABLE?**

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



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

6 Second, more recent projections for the growth rate of these companies in the  
7 proxy group show more moderate growth outlooks. As shown on my Schedule  
8 MPG-3, the consensus growth rate for these companies now is again more moderate  
9 at a level of about 5.14%. Updating Dr. Hadaway's analysis would produce a more  
10 reasonable estimate of the constant growth DCF outlook for this proxy group. As  
11 shown on my Schedule MPG-4, the current market cost of equity for this proxy group  
12 using more moderate growth outlooks, which are reasonably consistent with  
13 sustainable long-term growth would indicate a DCF return of 9.46%, rounded to  
14 9.50%.

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

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

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

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

1 Dr. Hadaway's GDP growth rate and consensus economists' projected GDP growth  
2 over the next 5 and 10 years is shown in Table 8. As shown in this table,  
3 Dr. Hadaway's GDP rate of 5.8% reflects real GDP of 2.7% and an inflation adjusted  
4 GDP of 3.0%. However, consensus economists' projections of nominal GDP include  
5 GDP inflation projections over the next 5 and 10 years of 2.2% and 2.1%,  
6 respectively.<sup>28</sup>

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

<b><u>Description</u></b>	<b><u>GDP Inflation</u></b>	<b><u>Real GDP</u></b>	<b><u>Nominal GDP</u></b>
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.

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

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<sup>28</sup>*Blue Chip Financial Forecasts*, June 1, 2012 at 14.

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

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

10 A As shown in Schedule MPG-19, I updated Dr. Hadaway's DCF analyses using more  
11 recent market data and a GDP growth rate of 4.9%. This GDP growth rate is the  
12 consensus economists' 5- and 10-year projected growth rate of the GDP as published  
13 in the *Blue Chip Financial Forecasts*. As shown in Schedule MPG-19, using this  
14 consensus economists' projected GDP growth rate, reduces Dr. Hadaway's long-term  
15 GDP growth DCF result from 10.3% to 9.4% and his multi-stage DCF from 10.1% to  
16 9.3%.

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

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

<b>TABLE 9</b>		
<b><u>Adjusted Hadaway DCF</u></b>		
<b><u>Description</u></b>	<b><u>Range Average</u></b>	
	<b><u>Hadaway DCF</u></b>	<b><u>Adjusted DCF</u></b>
Constant Growth (Analysts' Growth)	10.0%	9.5%
Constant Growth (GDP Growth)	10.3%	9.4%
Multi-Stage Growth Model	<u>10.1%</u>	<u>9.3%</u>
Average	10.1%	9.4%

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

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

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

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

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

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

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

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

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

**Michael P. Gorman**  
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1 Q **WHY DO YOU BELIEVE THAT THE ACCURACY OF FORECASTED INTEREST**  
2 **RATES IS HIGHLY PROBLEMATIC?**

3 A Over the last several years, observable current interest rates have been a more  
4 accurate predictor of future interest rates than economists' consensus projections.  
5 Schedule MPG-20 illustrates this point. On this schedule, under Columns 1 and 2, I  
6 show the actual market yield at the time a projection is made for Treasury bond yields  
7 two years in the future. In Column 1, I show the actual Treasury yield and, in Column  
8 2, I show the projected yield two years out.

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

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

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

4 A Dr. Hadaway's belief that there is a simplistic inverse relationship between equity risk  
5 premiums and interest rates is not supported by academic research. While academic  
6 studies have shown that, in the past, there has been an inverse relationship between  
7 these variables, researchers have found that the relationship changes over time and  
8 is influenced by changes in perception of the risk of bond investments relative to  
9 equity investments, and not simply changes to interest rates.<sup>29</sup>

10 In the 1980s, equity risk premiums were inversely related to interest rates, but  
11 that was likely attributable to the interest rate volatility that existed at that time.  
12 Interest rate volatility currently is much lower than it was in the 1980s.<sup>30</sup> As such,  
13 when interest rates were more volatile, the relative perception of bond investment risk  
14 increased relative to the investment risk of equities. This changing investment risk  
15 perception caused changes in equity risk premiums.

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

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<sup>29</sup>"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.

<sup>30</sup>Morningstar SBBI, 2009 Yearbook at 95-96.

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

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

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

17 **Q       DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

18 **A       Yes.**



## **Qualifications of Michael P. Gorman**

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

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

4    **Q    PLEASE STATE YOUR OCCUPATION.**

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

7    **Q    PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK  
8        EXPERIENCE.**

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

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

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Appendix A  
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1           In 1987, I was promoted to Director of the Financial Analysis Department. In  
2 this position, I was responsible for all financial analyses conducted by the Staff.  
3 Among other things, I conducted analyses and sponsored testimony before the ICC  
4 on rate of return, financial integrity, financial modeling and related issues. I also  
5 supervised the development of all Staff analyses and testimony on these same  
6 issues. In addition, I supervised the Staff's review and recommendations to the  
7 Commission concerning utility plans to issue debt and equity securities.

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

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

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

**Michael P. Gorman**  
**Appendix A**  
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1 design and class cost of service for electric, natural gas, water and wastewater  
2 utilities. I have also analyzed commodity pricing indices and forward pricing methods  
3 for third party supply agreements, and have also conducted regional electric market  
4 price forecasts.

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

7 **Q HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?**

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

**Michael P. Gorman**  
**Appendix A**  
**Page 3**

1 Q PLEASE DESCRIBE ANY PROFESSIONAL REGISTRATIONS OR  
2 ORGANIZATIONS TO WHICH YOU BELONG.

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

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Michael P. Gorman  
Appendix A  
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# Kansas City Power & Light Company

## Rate of Return

<u>Line</u>	<u>Description</u>	<u>Amount (000)</u>	<u>Weight</u>	<u>Cost Range</u>		<u>Weighted Cost Range</u>	
		(1)	(2)	(3)	(4)	(5)	(6)
1	Long-Term Debt	\$ 2,129,487	53.90%	6.53%	6.53%	3.52%	3.52%
2	Preferred Stock	23,590	0.60%	4.29%	4.29%	0.03%	0.03%
3	Common Equity	<u>1,798,040</u>	<u>45.51%</u>	<b>9.10%</b>	<b>9.50%</b>	<u>4.14%</u>	<u>4.32%</u>
4	<b>Total</b>	<b>\$ 3,951,117</b>	<b>100.00%</b>			<b>7.69%</b>	<b>7.87%</b>

Source:

KCPL Response to Staff's Data Request No. 0251.

# Kansas City Power & Light Company

## Proxy Group

<u>Line</u>	<u>Company</u>	<u>Credit Ratings<sup>1</sup></u>		<u>Common Equity Ratios</u>		<u>S&amp;P Business Risk Score<sup>3</sup></u>
		<u>S&amp;P</u> (1)	<u>Moody's</u> (2)	<u>AUS<sup>1</sup></u> (3)	<u>Value Line<sup>2</sup></u> (4)	
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	<b>Average</b>	<b>BBB+</b>	<b>A3</b>	<b>46.6%</b>	<b>49.6%</b>	<b>Excellent</b>
23	Kansas City Power & Light Company	BBB+ <sup>4</sup>	A3 <sup>4</sup>		45.5% <sup>5</sup>	Excellent

Sources:

<sup>1</sup> *AUS Utility Reports*, July 1, 2012.

<sup>2</sup> *The Value Line Investment Survey*, May 4, May 25, and June 22, 2012.

<sup>3</sup> *S&P RatingsDirect*: "U.S. Regulated Electric Utilities, Strongest To Weakest," April 20, 2012.

<sup>4</sup> Great Plains Energy, Inc. 10-K, filed on February 28, 2012.

<sup>5</sup> Schedule MPG-1.

# Kansas City Power & Light Company

## Consensus Analysts' Growth Rates

<u>Line</u>	<u>Company</u>	<u>Zacks</u>		<u>SNL</u>		<u>Reuters</u>		<u>Average of Growth Rates</u>
		<u>Estimated Growth %<sup>1</sup></u>	<u>Number of Estimates</u>	<u>Estimated Growth %<sup>2</sup></u>	<u>Number of Estimates</u>	<u>Estimated Growth %<sup>3</sup></u>	<u>Number of Estimates</u>	
		(1)	(2)	(3)	(4)	(5)	(6)	
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	<b>Average</b>	<b>5.14%</b>	<b>N/A</b>	<b>5.16%</b>	<b>4</b>	<b>5.19%</b>	<b>5</b>	<b>5.14%</b>

Sources:

<sup>1</sup> Zacks Elite, <http://www.zackselite.com/>, downloaded on July 13, 2012.

<sup>2</sup> SNL Interactive, <http://www.snl.com/>, downloaded on July 13, 2012.

<sup>3</sup> Reuters, <http://www.reuters.com/>, downloaded on July 13, 2012.

# Kansas City Power & Light Company

## Constant Growth DCF Model (Consensus Analysts' Growth Rates)

<u>Line</u>	<u>Company</u>	<u>13-Week AVG Stock Price<sup>1</sup></u> (1)	<u>Analysts' Growth<sup>2</sup></u> (2)	<u>Annualized Dividend<sup>3</sup></u> (3)	<u>Adjusted Yield</u> (4)	<u>Constant Growth DCF</u> (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	<b>Average</b>	<b>\$37.57</b>	<b>5.14%</b>	<b>\$1.52</b>	<b>4.32%</b>	<b>9.46%</b>
23	<b>Median</b>					<b>9.54%</b>

Sources:

<sup>1</sup> SNL Financial, downloaded on July 16, 2012.

<sup>2</sup> Exhibit MPG-3.

<sup>3</sup> *The Value Line Investment Survey*, May 4, May 25, and June 22, 2012.



# Kansas City Power & Light Company

## Payout Ratios

<u>Line</u>	<u>Company</u>	<u>Dividends Per Share</u>		<u>Earnings Per Share</u>		<u>Payout Ratio</u>	
		<u>2011</u> (1)	<u>Projected</u> (2)	<u>2011</u> (3)	<u>Projected</u> (4)	<u>2011</u> (5)	<u>Projected</u> (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	<b>Average</b>	<b>\$1.45</b>	<b>\$1.81</b>	<b>\$2.40</b>	<b>\$3.07</b>	<b>64.98%</b>	<b>59.82%</b>

Source:

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

# Kansas City Power & Light Company

## Sustainable Growth Rate

Line	Company	3 to 5 Year Projections										Sustainable
		Dividends	Earnings	Book Value	Book Value		Adjustment	Adjusted	Payout	Retention	Internal	Growth
		Per Share	Per Share	Per Share	Growth	ROE	Factor	ROE	Ratio	Rate	Growth Rate	Rate
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(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	<b>Average</b>	<b>\$1.81</b>	<b>\$3.07</b>	<b>\$31.24</b>	<b>4.18%</b>	<b>10.01%</b>	<b>1.02</b>	<b>10.22%</b>	<b>59.82%</b>	<b>40.18%</b>	<b>4.08%</b>	<b>4.85%</b>

### 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).

# Kansas City Power & Light Company

## Sustainable Growth Rate

<u>Line</u>	<u>Company</u>	<u>13-Week</u>	<u>2011</u>	<u>Market</u>	<u>Common Shares</u>		<u>Growth</u>	<u>S Factor</u> <sup>3</sup>	<u>V Factor</u> <sup>4</sup>	<u>S * V</u> <sup>5</sup>
		<u>Average</u>	<u>Book Value</u>	<u>to Book</u>	<u>Outstanding (in Millions)</u> <sup>2</sup>					
		<u>Stock Price</u> <sup>1</sup>	<u>Per Share</u> <sup>2</sup>	<u>Ratio</u>	<u>2011</u>	<u>3-5 Years</u>	<u>(6)</u>	<u>(7)</u>	<u>(8)</u>	<u>(9)</u>
		(1)	(2)	(3)	(4)	(5)				
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	<b>Average</b>	<b>\$37.57</b>	<b>\$25.44</b>	<b>1.51</b>	<b>196.75</b>	<b>209.49</b>	<b>1.50%</b>	<b>2.30%</b>	<b>32.77%</b>	<b>0.85%</b>

Sources and Notes:

<sup>1</sup> SNL Financial, downloaded on July 16, 2012.

<sup>2</sup> *The Value Line Investment Survey, May 4, May 25, and June 22, 2012.*

<sup>3</sup> Expected Growth in the Number of Shares, Column (3) \* Column (6).

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

<sup>5</sup> Column (9) Line 12 excludes negative values.

# Kansas City Power & Light Company

## Constant Growth DCF Model (Sustainable Growth Rate)

<u>Line</u>	<u>Company</u>	<u>13-Week AVG Stock Price<sup>1</sup></u> (1)	<u>Sustainable Growth<sup>2</sup></u> (2)	<u>Annualized Dividend<sup>3</sup></u> (3)	<u>Adjusted Yield</u> (4)	<u>Constant Growth DCF</u> (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	<b>Average</b>	<b>\$37.57</b>	<b>4.85%</b>	<b>\$1.52</b>	<b>4.31%</b>	<b>9.15%</b>
23	<b>Median</b>					<b>8.57%</b>

Sources:

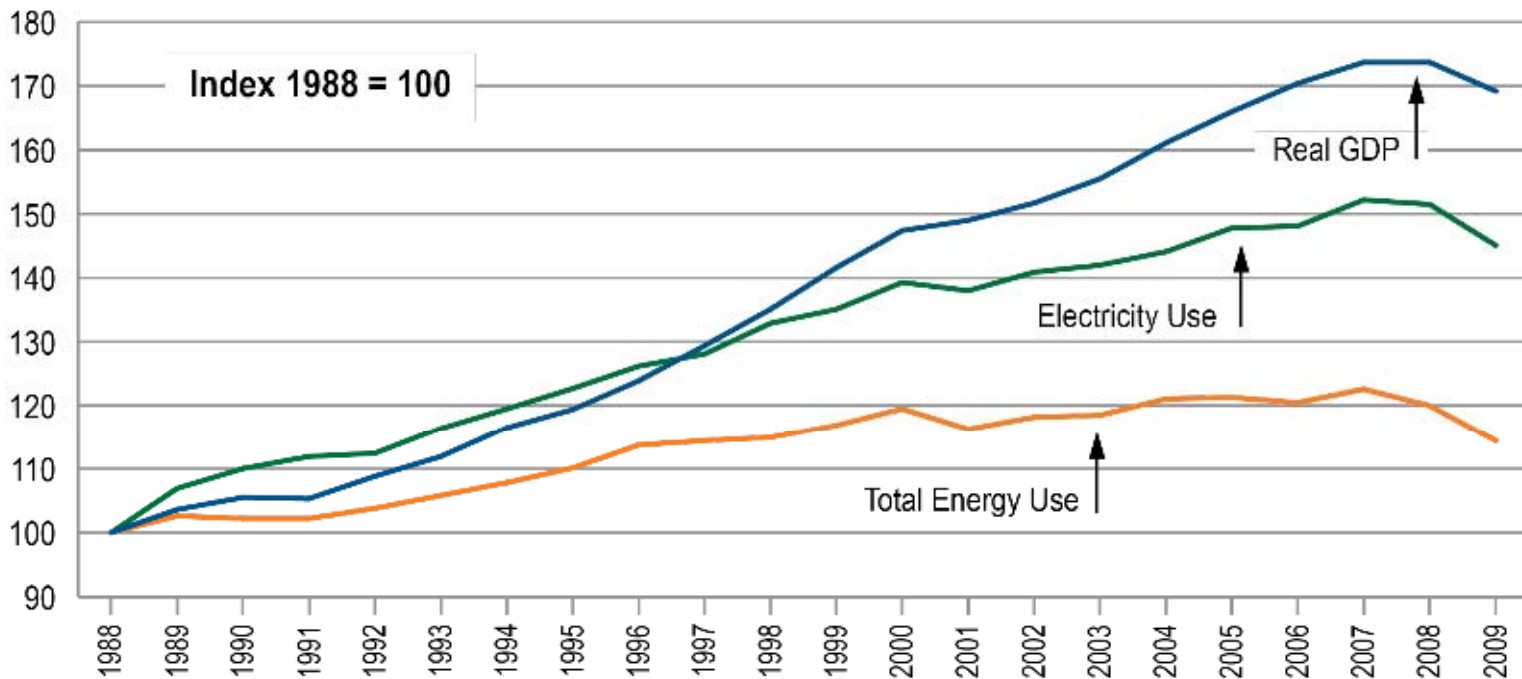
<sup>1</sup> SNL Financial, downloaded on July 16, 2012.

<sup>2</sup> Exhibit MPG-6, page 1 of 2.

<sup>3</sup> *The Value Line Investment Survey*, May 4, May 25, and June 22, 2012.

# Kansas City Power & Light Company

## 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>.

# Kansas City Power & Light Company

## Multi-Stage Growth DCF Model

Line	Company	13-Week AVG	Annualized	First Stage	Second Stage Growth					Third Stage	Multi-Stage
		Stock Price <sup>1</sup>	Dividend <sup>2</sup>	Growth <sup>3</sup>	Year 6	Year 7	Year 8	Year 9	Year 10	Growth <sup>4</sup>	Growth DCF
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(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	<b>Average</b>	<b>\$37.57</b>	<b>\$1.52</b>	<b>5.14%</b>	<b>5.10%</b>	<b>5.06%</b>	<b>5.02%</b>	<b>4.98%</b>	<b>4.94%</b>	<b>4.90%</b>	<b>9.30%</b>
23	<b>Median</b>										<b>9.47%</b>

Sources:

<sup>1</sup> SNL Financial, downloaded on July 13, 2012.

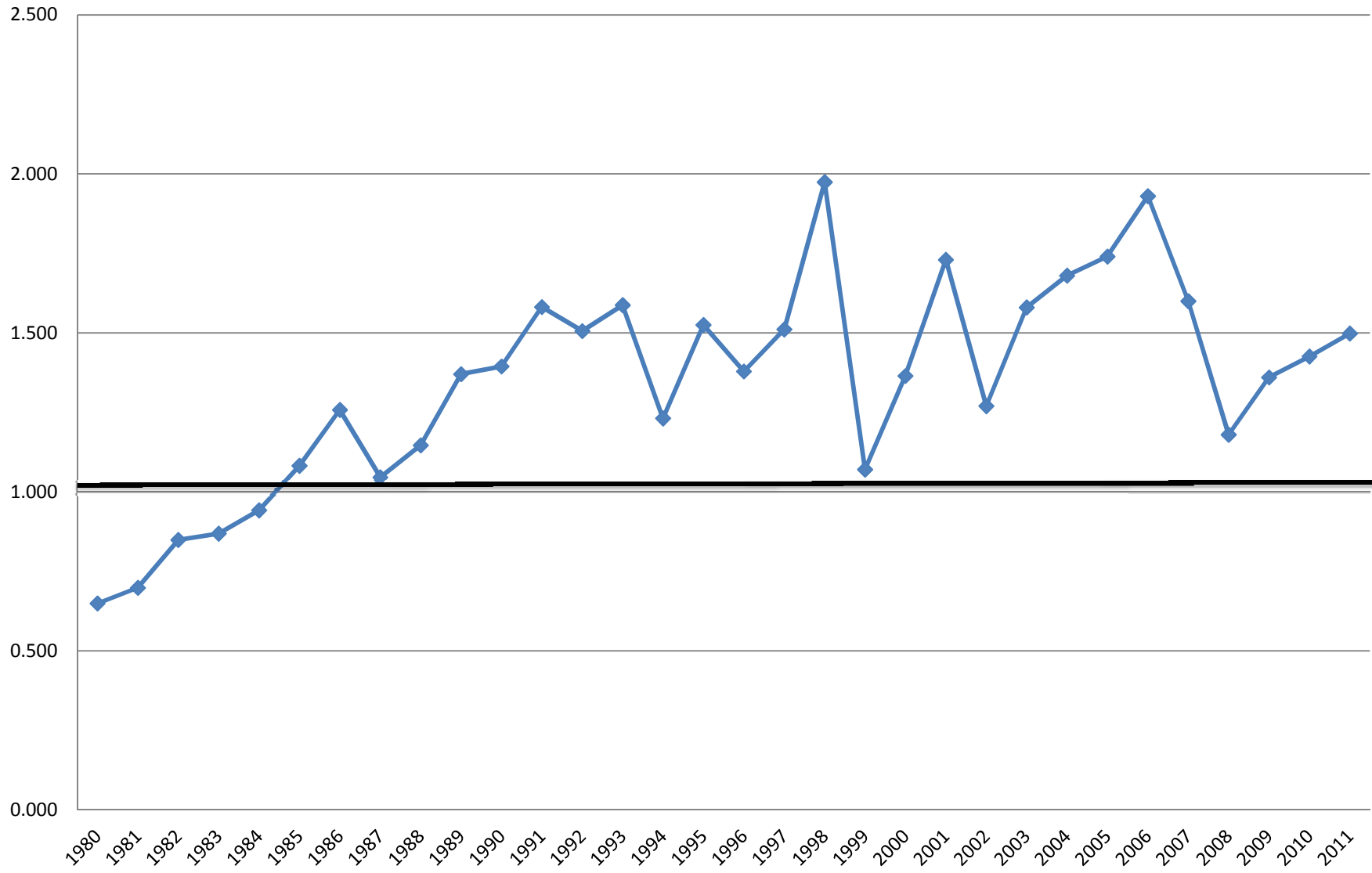
<sup>2</sup> *The Value Line Investment Survey*, May 4, May 25, and June 22, 2012.

<sup>3</sup> Exhibit MPG-3.

<sup>4</sup> *Blue Chip Financial Forecasts*, June 1, 2012 at 14.

# Kansas City Power & Light Company

## Common Stock Market/Book Ratio



# Kansas City Power & Light Company

## Equity Risk Premium - Treasury Bond

<u>Line</u>	<u>Year</u>	<u>Authorized Electric Returns<sup>1</sup></u> (1)	<u>Treasury Bond Yield<sup>2</sup></u> (2)	<u>Indicated Risk Premium</u> (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	<b>Average</b>	<b>11.45%</b>	<b>6.22%</b>	<b>5.23%</b>

Sources:

<sup>1</sup> Regulatory Research Associates, Inc., *Regulatory Focus*, Jan. 85 - Dec. 06, and January 10, 2012.

<sup>2</sup> 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.



# Kansas City Power & Light Company

## Equity Risk Premium - Utility Bond

<u>Line</u>	<u>Year</u>	<u>Authorized Electric Returns<sup>1</sup></u> (1)	<u>Average "A" Rated Utility Bond Yield<sup>2</sup></u> (2)	<u>Indicated Risk Premium</u> (3)
1	1986	13.93%	9.58%	4.35%
2	1987	12.99%	10.10%	2.89%
3	1988	12.79%	10.49%	2.30%
4	1989	12.97%	9.77%	3.20%
5	1990	12.70%	9.86%	2.84%
6	1991	12.55%	9.36%	3.19%
7	1992	12.09%	8.69%	3.40%
8	1993	11.41%	7.59%	3.82%
9	1994	11.34%	8.31%	3.03%
10	1995	11.55%	7.89%	3.66%
11	1996	11.39%	7.75%	3.64%
12	1997	11.40%	7.60%	3.80%
13	1998	11.66%	7.04%	4.62%
14	1999	10.77%	7.62%	3.15%
15	2000	11.43%	8.24%	3.19%
16	2001	11.09%	7.76%	3.33%
17	2002	11.16%	7.37%	3.79%
18	2003	10.97%	6.58%	4.39%
19	2004	10.75%	6.16%	4.59%
20	2005	10.54%	5.65%	4.89%
21	2006	10.36%	6.07%	4.29%
22	2007	10.36%	6.07%	4.29%
23	2008	10.46%	6.53%	3.93%
24	2009	10.48%	6.04%	4.44%
25	2010	10.34%	5.46%	4.88%
26	2011	10.22%	5.04%	5.18%
27	<b>Average</b>	<b>11.45%</b>	<b>7.64%</b>	<b>3.81%</b>

Sources:

<sup>1</sup> Regulatory Research Associates, Inc., *Regulatory Focus*, Jan. 85 - Dec. 06, and January 10, 2012.

<sup>2</sup> 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/>.

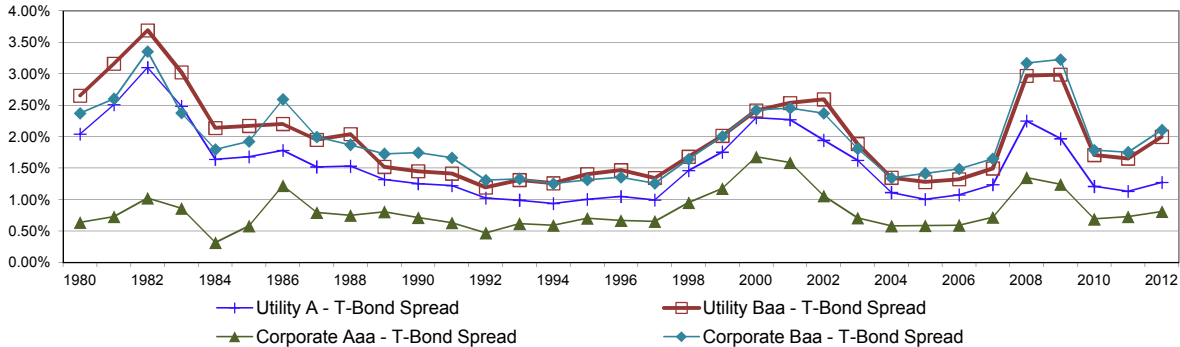
# Kansas City Power & Light Company

## Bond Yield Spreads

Line	Year	Public Utility Bond					Corporate Bond				Utility - Corp. Spread	
		T-Bond Yield <sup>1</sup> (1)	A <sup>2</sup> (2)	Baa <sup>2</sup> (3)	A-T-Bond Spread (4)	Baa-T-Bond Spread (5)	Aaa <sup>1</sup> (6)	Baa <sup>1</sup> (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	<b>Average</b>	<b>7.17%</b>	<b>8.73%</b>	<b>9.15%</b>	<b>1.57%</b>	<b>1.98%</b>	<b>8.00%</b>	<b>9.12%</b>	<b>0.83%</b>	<b>1.95%</b>	<b>0.74%</b>	<b>0.02%</b>

## Yield Spreads

### Treasury Vs. Corporate & Treasury Vs. Utility



Sources:

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

<sup>2</sup> 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.

# Kansas City Power & Light Company

## Treasury and Utility Bond Yields

<u>Line</u>	<u>Date</u>	<u>Treasury Bond Yield<sup>1</sup></u> (1)	<u>"A" Rated Utility Bond Yield<sup>2</sup></u> (2)	<u>"Baa" Rated Utility Bond Yield<sup>2</sup></u> (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	<b>Average</b>	<b>2.83%</b>	<b>4.14%</b>	<b>4.95%</b>
15	<b>Spread To Treasury</b>		<b>1.31%</b>	<b>2.12%</b>

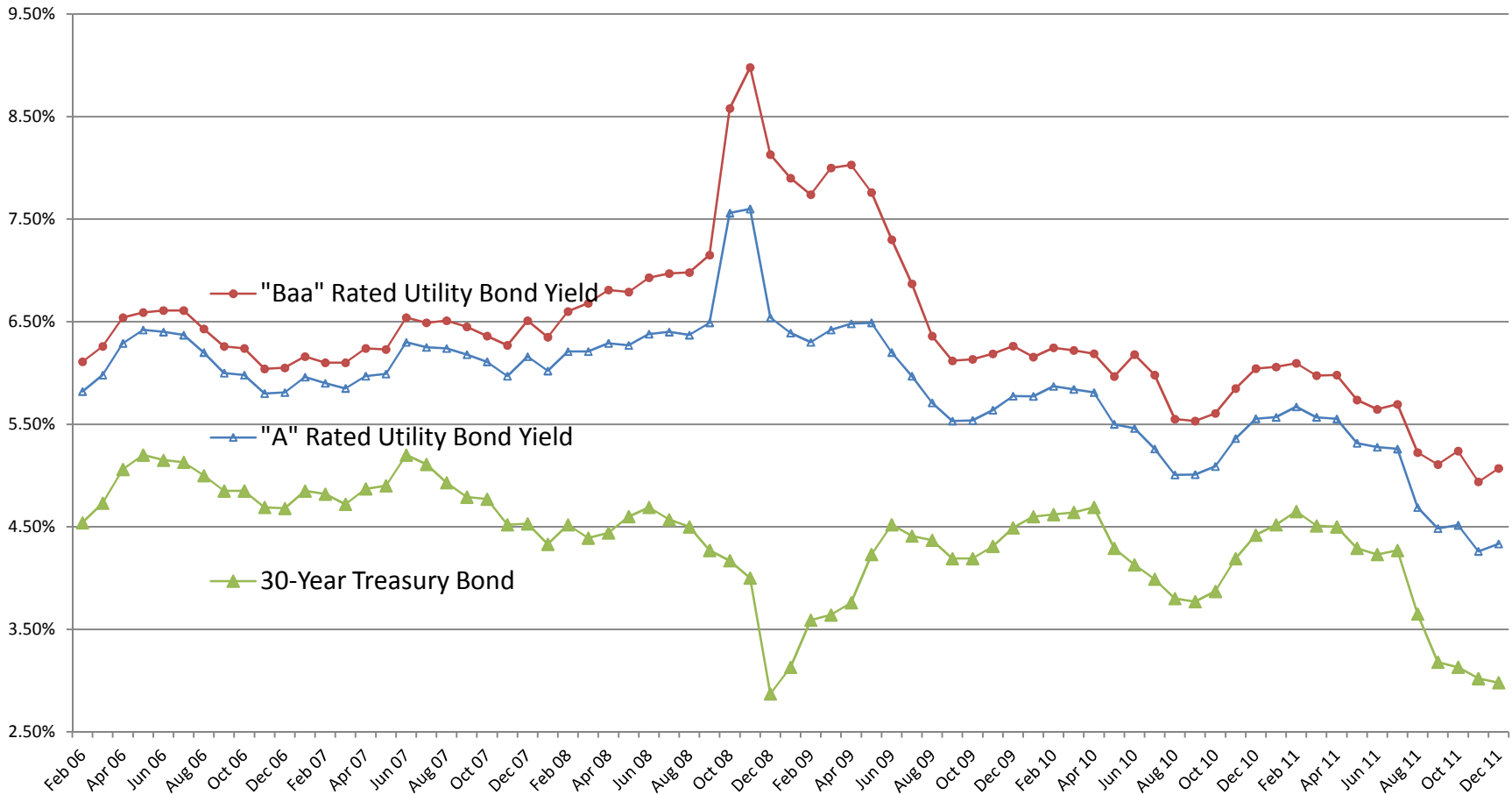
Sources:

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

<sup>2</sup> <http://credittrends.moodys.com/>.

# Kansas City Power & Light Company

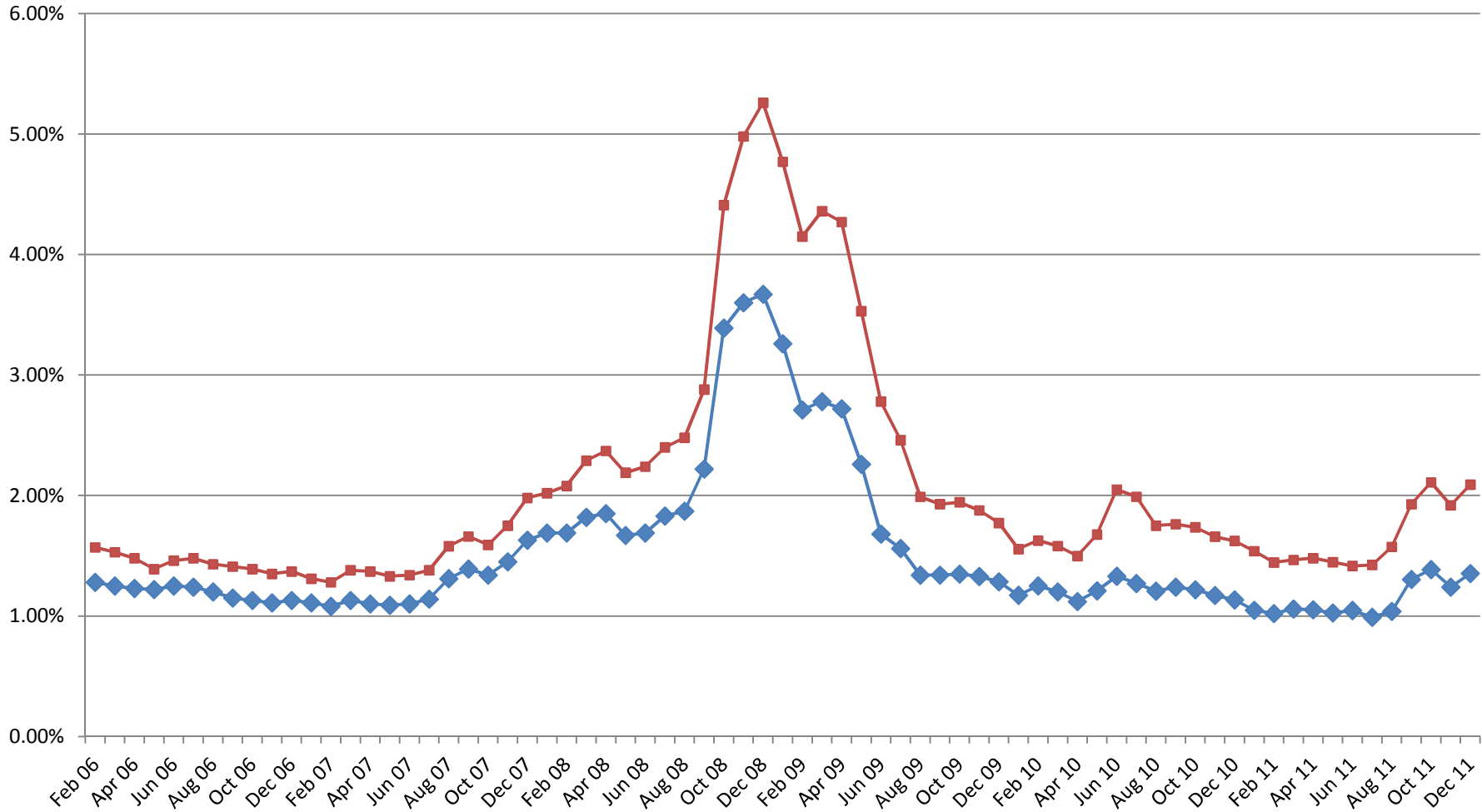
## Trends in Bond Yields



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

# Kansas City Power & Light Company

## 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/>

# Kansas City Power & Light Company

## Value Line Beta

<u>Line</u>	<u>Company</u>	<u>Beta</u>
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	<b>Average</b>	<b>0.72</b>

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Source:

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

# Kansas City Power & Light Company

## CAPM Return

<u>Line</u>	<u>Description</u>	<u>Market Risk Premium</u>
1	Risk-Free Rate <sup>1</sup>	3.60%
2	Risk Premium <sup>2</sup>	6.60%
3	Beta <sup>3</sup>	0.72
4	<b>CAPM</b>	<b>8.35%</b>

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Sources:

<sup>1</sup> *Blue Chip Financial Forecasts*, July 1, 2012, at 2.

<sup>2</sup> Morningstar, Inc. *Ibbotson SBBI 2012 Classic Yearbook* at 86, and Morningstar, Inc. *Ibbotson SBBI 2012 Valuation Yearbook* at 54 and 66.

<sup>3</sup> Exhibit MPG-15.

# Kansas City Power & Light Company

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

<u>Line</u>	<u>Description</u>	Retail	<u>S&amp;P Benchmark<sup>1/2</sup></u>		<u>Reference</u> (4)
		<u>Cost of Service</u> <u>Amount (\$000)</u> (1)	<u>Significant</u> (2)	<u>Aggressive</u> (3)	
1	Rate Base	\$ 2,129,956,114			Schedule GSW-1 (KCPL-MO).
2	Weighted Common Return	4.14%			Page 2, Line 3, Col. 4.
3	Pre-Tax Rate of Return	10.27%			Page 2, Line 4, Col. 5.
4	Income to Common	\$ 88,204,655			Line 1 x Line 2.
5	EBIT	\$ 218,646,437			Line 1 x Line 3.
6	Depreciation & Amortization	\$ 110,010,440			Schedule GSW-1 (KCPL-MO).
7	Imputed Amortization <sup>3</sup>	\$ 9,900,000			Standard & Poor's.
8	Deferred Income Taxes & ITC	\$ 16,774,160			Schedule GSW-1 (KCPL-MO).
9	Funds from Operations (FFO)	\$ 224,889,255			Sum of Line 4 and Lines 6 through 8.
10	Imputed Interest Expense <sup>3</sup>	\$ 7,100,000			Standard & Poor's.
11	EBITDA	\$ 345,656,877			Sum of Lines 5 through 7 and Line 10.
12	Total Debt Ratio	55%	45% - 50%	50% - 60%	Page 3, Line 3, Col. 2.
13	Debt to EBITDA	3.4x	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:

<sup>1</sup> Standard & Poor's: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009

<sup>2</sup> S&P RatingsDirect: "U.S. Regulated Electric Utilities, Strongest to Weakest," April 20, 2012.

<sup>3</sup> S&P RatingsDirect: "Kansas City Power & Light Co.," April 27, 2012.

Note:

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



# Kansas City Power & Light Company

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

<u>Line</u>	<u>Description</u>	<u>Amount (000)</u> (1)	<u>Weight</u> (2)	<u>Cost</u> (3)	<u>Weighted Cost</u> (4)	<u>Pre-Tax Weighted Cost</u> (5)
1	Long-Term Debt	\$ 2,129,487	53.90%	6.53%	3.52%	3.52%
2	Preferred Stock	23,590	0.60%	4.29%	0.03%	0.03%
3	Common Equity	<u>1,798,040</u>	<u>45.51%</u>	<b>9.10%</b>	<u>4.14%</u>	<u>6.72%</u>
4	<b>Total</b>	<b>\$ 3,951,117</b>	<b>100.00%</b>		<b>7.69%</b>	<b>10.27%</b>
5	Tax Conversion Factor*					1.6231

Sources:

KCPL Response to Staff's Data Request No. 0251.

\* Schedule JPW-1 (KCPL-MO).

# Kansas City Power & Light Company

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

<u>Line</u>	<u>Description</u>	<u>Amount (000)</u> (1)	<u>Weight</u> (2)
1	Long-Term Debt	\$ 2,129,487	52.28%
2	Off Balance Sheet Debt*	<u>121,900</u>	<u>2.99%</u>
3	<b>Total Debt</b>	<b>\$ 2,251,387</b>	<b>55.28%</b>
4	Preferred Stock	\$ 23,590	0.58%
5	Common Equity	<u>1,798,040</u>	<u>44.15%</u>
6	<b>Total</b>	<b>\$ 4,073,017</b>	<b>100.00%</b>

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Sources:

KCPL Response to Staff's Data Request No. 0251.

\* Standard & Poor's Ratings Direct "Kansas City Power & Light Co.," April 27, 2012.

# Kansas City Power & Light Company

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

<u>Line</u>	<u>Description</u>	Retail	S&P Benchmark <sup>1/2</sup>		<u>Reference</u> (4)
		<u>Cost of Service</u> <u>Amount (\$000)</u> (1)	<u>Significant</u> (2)	<u>Aggressive</u> (3)	
1	Rate Base	\$ 2,129,956,114			Schedule GSW-1 (KCPL-MO).
2	Weighted Common Return	4.32%			Page 2, Line 3, Col. 4.
3	Pre-Tax Rate of Return	10.56%			Page 2, Line 4, Col. 5.
4	Income to Common	\$ 92,081,783			Line 1 x Line 2.
5	EBIT	\$ 224,939,325			Line 1 x Line 3.
6	Depreciation & Amortization	\$ 110,010,440			Schedule GSW-1 (KCPL-MO).
7	Imputed Amortization <sup>3</sup>	\$ 9,900,000			Standard & Poor's.
8	Deferred Income Taxes & ITC	\$ 16,774,160			Schedule GSW-1 (KCPL-MO).
9	Funds from Operations (FFO)	\$ 228,766,383			Sum of Line 4 and Lines 6 through 8.
10	Imputed Interest Expense <sup>3</sup>	\$ 7,100,000			Standard & Poor's.
11	EBITDA	\$ 351,949,765			Sum of Lines 5 through 7 and Line 10.
12	Total Debt Ratio	55%	45% - 50%	50% - 60%	Page 3, Line 3, Col. 2.
13	Debt to EBITDA	3.3x	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:

<sup>1</sup> Standard & Poor's: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009

<sup>2</sup> S&P RatingsDirect: "U.S. Regulated Electric Utilities, Strongest to Weakest," April 20, 2012.

<sup>3</sup> S&P RatingsDirect: "Kansas City Power & Light Co.," April 27, 2012.

Note:

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

# Kansas City Power & Light Company

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

<u>Line</u>	<u>Description</u>	<u>Amount (000)</u> (1)	<u>Weight</u> (2)	<u>Cost</u> (3)	<u>Weighted Cost</u> (4)	<u>Pre-Tax Weighted Cost</u> (5)
1	Long-Term Debt	\$ 2,129,487	53.90%	6.53%	3.52%	3.52%
2	Preferred Stock	23,590	0.60%	4.29%	0.03%	0.03%
3	Common Equity	<u>1,798,040</u>	<u>45.51%</u>	<b>9.50%</b>	<u>4.32%</u>	<u>7.02%</u>
4	<b>Total</b>	<b>\$ 3,951,117</b>	<b>100.00%</b>		<b>7.87%</b>	<b>10.56%</b>
5	Tax Conversion Factor*					1.6231

Sources:

KCPL Response to Staff's Data Request No. 0251.

\* Schedule JPW-1 (KCPL-MO).

# Kansas City Power & Light Company

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

<u>Line</u>	<u>Description</u>	<u>Amount (000)</u> <u>(1)</u>	<u>Weight</u> <u>(2)</u>
1	Long-Term Debt	\$ 2,129,487	52.28%
2	Off Balance Sheet Debt*	<u>121,900</u>	<u>2.99%</u>
3	<b>Total Debt</b>	<b>\$ 2,251,387</b>	<b>55.28%</b>
4	Preferred Stock	\$ 23,590	0.58%
5	Common Equity	<u>1,798,040</u>	<u>44.15%</u>
6	<b>Total</b>	<b>\$ 4,073,017</b>	<b>100.00%</b>

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Sources:

KCPL Response to Staff's Data Request No. 0251.

\* Standard & Poor's Ratings Direct "Kansas City Power & Light Co.," April 27, 2012.

# Kansas City Power & Light Company

## Summary of Adjusted Hadaway DCF

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

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Sources:

Schedule MPG-19, pages 2-4.

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

# Kansas City Power & Light Company

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

Line	Company	13-Week	Next	Dividend	EPS Analysts' Growth Rates			Average	Constant
		Stock	Year's		Yield	Value Line <sup>2</sup>	Zacks <sup>3</sup>	Thomson <sup>4</sup>	
		Price <sup>1</sup>	Dividend					Rate	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(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 Electric	\$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	<b>Average</b>	<b>\$34.58</b>	<b>\$1.51</b>	<b>4.39%</b>	<b>6.28%</b>	<b>5.35%</b>	<b>5.52%</b>	<b>5.63%</b>	<b>10.0%</b>
24	<b>Median</b>			<b>4.59%</b>				<b>5.58%</b>	<b>10.0%</b>

Source:

Schedule SCH-5, Page 2 of 5.

# Kansas City Power & Light Company

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

<u>Line</u>	<u>Company</u>	<u>Recent Stock Price</u> (1)	<u>Next Year's Dividend</u> (2)	<u>Dividend Yield</u> (3)	<u>GDP Growth*</u> (4)	<u>Long-Term Constant Growth DCF</u> (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 Electric	\$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	<b>Average</b>	<b>\$34.58</b>	<b>\$1.51</b>	<b>4.39%</b>	<b>4.90%</b>	<b>9.3%</b>
24	<b>Median</b>			<b>4.59%</b>		<b>9.5%</b>

Sources:

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



# Kansas City Power & Light Company

## 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					GDP Growth* (10)	Two-Stage Growth DCF (11)
						2012 Dividend (5)	2013 Dividend (6)	2014 Dividend (7)	2015 Dividend (8)	2016 Dividend (9)		
1	ALLETE, Inc.	\$39.13	\$1.80	\$1.95	\$0.05	\$1.80	\$1.85	\$1.90	\$1.95	\$2.05	4.90%	9.2%
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 Electric	\$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	<b>Average</b>	<b>\$34.58</b>	<b>\$1.51</b>	<b>\$1.71</b>	<b>\$0.07</b>	<b>\$1.51</b>	<b>\$1.57</b>	<b>\$1.64</b>	<b>\$1.71</b>	<b>\$1.79</b>	<b>4.90%</b>	<b>9.2%</b>
24	<b>Median</b>											<b>9.3%</b>

Sources:

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

# Kansas City Power & Light Company

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

Line	Date	Publication Data			Actual Yield in Projected Quarter	Projected Yield Higher (Lower) Than Actual Yield*
		Prior Quarter	Projected	Projected		
		Actual Yield (1)	Yield (2)	Quarter (3)		
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.