

Exhibit No.:  
Issue: Cost of Capital  
Witness: Samuel C. Hadaway  
Type of Exhibit: Direct Testimony  
Sponsoring Party: Kansas City Power & Light Company  
Case No.: ER-2009-\_\_\_\_  
Date Testimony Prepared: September 5, 2008

**MISSOURI PUBLIC SERVICE COMMISSION**

**CASE NO.: ER-2009-\_\_\_\_**

**DIRECT TESTIMONY**

**OF**

**SAMUEL C. HADAWAY**

**ON BEHALF OF**

**KANSAS CITY POWER & LIGHT COMPANY**

**September 2008**

**\*\* [REDACTED] \*\*\* Designates "Highly Confidential" Information.  
Certain Schedules Attached To This Testimony Designated "(HC)"  
Also Contain Highly Confidential Information.  
All Such Information Should Be Treated Confidentially  
Pursuant To 4 CSR 240-2.135.**

**DIRECT TESTIMONY**  
**OF**  
**SAMUEL C. HADAWAY**

1       **I.     INTRODUCTION AND SUMMARY OF RECOMMENDATIONS**

2       **Q.     Please state your name and business address.**

3       A.     My name is Samuel C. Hadaway and my business address is FINANCO, Inc., 3520  
4       Executive Center Drive, Austin, Texas 78731.

5       **Q.     On whose behalf are you testifying?**

6       A.     I am testifying on behalf of Kansas City Power & Light Company ("KCP&L" or the  
7       "Company").

8       **Q.     Please state your educational background and describe your professional**  
9       **training and experience.**

10      A.     I have a bachelor's degree in economics from Southern Methodist University, as well  
11      as M.B.A. and Ph.D. degrees with concentrations in finance and economics from the  
12      University of Texas at Austin ("UT Austin"). For the past 25 years, I have been an  
13      owner and full-time employee of FINANCO, Inc. FINANCO provides financial  
14      research concerning the cost of capital and financial condition for regulated  
15      companies as well as financial modeling and other economic studies in litigation  
16      support. In addition to my work at FINANCO, I have served as an adjunct professor  
17      in the McCombs School of Business at UT Austin and in what is now the McCoy  
18      College of Business at Texas State University. In my prior academic work, I taught  
19      economics and finance courses and I conducted research and directed graduate  
20      students in the areas of investments and capital market research. I was previously

1 Director of the Economic Research Division at the Public Utility Commission of  
2 Texas where I supervised the Commission's finance, economics, and accounting staff,  
3 and served as the Commission's chief financial witness in electric and telephone rate  
4 cases. I have taught courses at various utility conferences on cost of capital, capital  
5 structure, utility financial condition, and cost allocation and rate design issues. I have  
6 made presentations before the New York Society of Security Analysts, the National  
7 Rate of Return Analysts Forum, and various other professional and legislative groups.  
8 I have served as a vice president and on the board of directors of the Financial  
9 Management Association.

10 A list of my publications and testimony I have given before various regulatory  
11 bodies and in state and federal courts is contained in my resume, which is included as  
12 Appendix A.

13 **Q. Have you previously testified in a proceeding at the Missouri Public Service**  
14 **Commission or before any other utility regulatory agency?**

15 A. Yes, I have. I have testified before the Missouri Public Service Commission and  
16 numerous other state commissions on ROE and related financial issues.

17 **Q. What is the purpose of your testimony?**

18 A. The purpose of my testimony is to estimate KCP&L's required rate of return on  
19 equity ("ROE") and to support the Company's requested capital structure and overall  
20 rate of return.

21 **Q. Please outline and describe the testimony you will present.**

22 A. My testimony is divided into four additional sections. Following this introduction, in  
23 Section II, I present and explain the Company's requested capital structure and overall

1 cost of capital. In Section III, I review various methods for estimating the cost of  
2 equity. In this section, I discuss the discounted cash flow ("DCF") model, as well as  
3 risk premium methods and other approaches often used to estimate the cost of capital.  
4 In Section IV, I review general capital market costs and conditions, and discuss  
5 recent developments in the electric utility industry that affect the cost of capital. In  
6 Section V, I discuss the details of my cost of equity studies and provide a summary  
7 table of my ROE results.

8 **Q. Please describe the general approach in your cost of equity studies.**

9 A. First, my recommendation is premised upon the fair rate of return principles  
10 established by the U.S. Supreme Court in *Federal Power Comm'n v. Hope Natural*  
11 *Gas Co.*, 320 US 591, 603 (1944) ("*Hope*") and *Bluefield Water Works &*  
12 *Improvements Co. v. Public Service Commission*, 262 US 679, 693 (1923)  
13 ("*Bluefield*"). That is to say, a utility's return authorized by a regulatory body, such as  
14 the Missouri Public Service Commission, should be commensurate with returns on  
15 investments in other enterprises having corresponding risks. The return should also  
16 be sufficient to assure confidence in the financial integrity of the utility so as to  
17 maintain its credit, and to attract capital so that it is able to properly discharge its  
18 public duties. Given these legal principles, I have used several methods to determine  
19 an appropriate ROE and overall rate of return for KCP&L. These methods and the  
20 underlying economic models are applied to an investment grade company reference  
21 group of other electric utilities generally similar to KCP&L.

22 **Q. Please explain your analysis in arriving at a recommended ROE for KCP&L.**

1 A. My ROE estimate is based on alternative versions of the constant growth and  
2 multistage growth DCF model. It is confirmed by my risk premium analysis and my  
3 review of economic conditions and interest rates expected to prevail during the  
4 coming year. Because KCP&L is a wholly-owned subsidiary of Great Plains Energy  
5 Incorporated ("GPE") and does not have publicly traded common stock or other  
6 independent market data, its cost of equity cannot be estimated directly. For this  
7 reason, I apply the DCF model to a large reference group of investment grade electric  
8 utilities selected from the *Value Line Investment Survey*. To be included in my group,  
9 the reference companies must have at least a triple-B (investment grade) bond rating;  
10 they must derive at least 70 percent of revenues from regulated utility sales; they  
11 must have consistent financial records not affected by recent mergers or restructuring;  
12 and they must have a consistent dividend record with no dividend cuts within the past  
13 two years. The companies in my comparable group are summarized in Schedule  
14 SCH-1.

15 To test my DCF results, I conducted a risk-premium analysis based on ROEs  
16 allowed by state regulators relative to Moody's average utility debt costs. In this  
17 analysis, I also included the forecasted higher interest rates of Standard and Poor's  
18 ("S&P") for the coming year. S&P forecasts that long-term Government and  
19 corporate interest rates will increase from current levels by 40 to 50 basis points  
20 during 2009. Under current market and economic conditions, the combination of  
21 DCF and risk premium models, tempered by consensus forecasts about future interest  
22 rates, provides the best approach for estimating KCP&L's fair cost of equity capital.

23 **Q. What ROE range is indicated by your DCF and risk premium analyses?**

1 A. My reference group analysis indicates that a DCF range of 10.8 percent to 11.2  
2 percent is appropriate. My risk premium analysis, which serves as a check of  
3 reasonableness for the DCF results, indicates that an ROE of 11.10 percent is  
4 appropriate, with other risk premium approaches indicating an ROE of 11.49 percent.

5 **Q. What are your overall conclusions from your ROE analysis?**

6 A. Based on the combination of quantitative model results and my review of current  
7 economic, market, and electric utility industry conditions, I estimate KCP&L's cost of  
8 equity at 10.75 percent. This estimate is consistent with capital market trends and  
9 projections and is a reasonable estimate of capital costs that will prevail during the  
10 period that the rates from this case are in effect.

11 **II. KCP&L CAPITAL STRUCTURE AND OVERALL RATE OF RETURN**

12 **Q. Please summarize the Company's requested capital structure and overall rate of**  
13 **return.**

14 A. The following table identifies the requested capital structure components and the  
15 resulting overall rate of return:

16

	<b>Requested Capital Structure</b>		
<u>Capital Components</u>	<u>Ratio</u>	<u>Cost</u>	<u>Weighted Cost</u>
18 Debt	45.47%	6.32%	2.87%
19 Preferred stock	0.71%	4.29%	0.03%
20 <u>Common Equity</u>	<u>53.82%</u>	<u>10.75%</u>	<u>5.79%</u>
21 TOTAL	100.00%		<u>8.69%</u>

22 **Q. What is the basis for the Company's requested capital structure and overall rate**  
23 **of return?**

24 A. The requested capital structure is consistent with Great Plains Energy's projected  
25 capital structure at March 31, 2009. These data are presented in more detail in  
26 Schedule SCH-2, with the March 31, 2009 summary shown on page 6 of that

1 schedule. Using the parent company's consolidated capital structure is consistent  
2 with KCP&L's approach in its 2006 and 2007 rate cases.

3 **Q. What are the key differences between Great Plains Energy's actual capital**  
4 **structure as of December 31, 2007 and the requested capital structure, projected**  
5 **as of March 31, 2009?**

6 A. The actual Great Plains Energy capital structure as of December 31, 2007, is shown  
7 on page 2 of Schedule SCH-2. The key differences between the actual capital  
8 structure and the requested capital structure, projected as of March 31, 2009, are as  
9 follows:

10 Long-Term Debt

11 Net Long-Term Debt is projected to increase by \$1,397 million, the largest  
12 components of which consist of the following:

- 13 (a) KCP&L issued \$350 million of 10-year senior unsecured notes in March 2008  
14 to finance construction expenditures.
- 15 (b) KCP&L issued \$23.4 million of EIRR bonds in May 2008 to finance a portion  
16 of the Company's qualifying environmental equipment at Iatan 1 and 2.
- 17 (c) Great Plains acquired Aquila in July 2008 which will have a projected  
18 outstanding debt balance of \$1,023 million as of March 2009.

19 Equity

20 Equity is projected to increase by \*\* [REDACTED] \*\* million, the largest components of  
21 which are as follows:

- 22 (a) \*\* [REDACTED] \*\* million in additional equity issued through public offerings by  
23 Great Plains Energy.

1 (b) Approximately \$1,026 million of equity issued by Great Plains Energy related  
2 to the Aquila acquisition.

3 **III. ESTIMATING THE COST OF EQUITY CAPITAL**

4 **Q. What is the purpose of this section of your testimony?**

5 A. The purpose of this section of my testimony is to present a general definition of the  
6 cost of equity and to compare the strengths and weaknesses of several of the most  
7 widely used methods for estimating the cost of equity. Estimating the cost of equity  
8 is fundamentally a matter of informed judgment. The various models provide a  
9 concrete link to actual capital market data and assist with defining the various  
10 relationships that underlie the ROE estimation process.

11 **Q. Please define the term "cost of equity capital" and provide an overview of the  
12 cost estimation process.**

13 A. The cost of equity capital is the profit or rate of return that equity investors expect to  
14 receive. In concept it is no different than the cost of debt or the cost of preferred  
15 stock. The cost of equity is the rate of return that common stockholders expect, just  
16 as interest on bonds and dividends on preferred stock are the returns that investors in  
17 those securities expect. Equity investors expect a return on their capital  
18 commensurate with the risks they take, consistent with returns that are available from  
19 other similar investments. Unlike returns from debt and preferred stocks, however,  
20 the equity return is not directly observable in advance and, therefore, it must be  
21 estimated or inferred from capital market data and trading activity.

22 An example helps to illustrate the cost of equity concept. Assume that an  
23 investor buys a share of common stock for \$20 per share. If the stock's expected



1 dividend is \$1.00, the expected dividend yield is 5.00 percent ( $\$1.00 / \$20 = 5.0$   
2 percent). If the stock price is also expected to increase to \$21.20 after one year, this  
3 \$1.20 expected gain adds an additional 6.0 percent to the expected total rate of return  
4 ( $\$1.20 / \$20 = 6.0$  percent). Therefore, when buying the stock at \$20 per share, the  
5 investor expects a total return of 11.00 percent: 5.0 percent dividend yield, plus 6.0  
6 percent price appreciation. In this example, the total expected rate of return at 11.00  
7 percent is the appropriate measure of the cost of equity capital, because it is this rate  
8 of return that caused the investor to commit the \$20 of equity capital in the first place.  
9 If the stock were riskier, or if expected returns from other investments were higher,  
10 investors would require a higher rate of return from the stock, which would result in a  
11 lower initial purchase price in market trading.

12 Each day market rates of return and prices change to reflect new investor  
13 expectations and requirements. For example, when interest rates on bonds and  
14 savings accounts rise, utility stock prices usually fall. This is true, at least in part,  
15 because higher interest rates on these alternative investments make utility stocks  
16 relatively less attractive, which causes utility stock prices to decline in market  
17 trading. This competitive market adjustment process is quick and continuous, so that  
18 market prices generally reflect investor expectations and the relative attractiveness of  
19 one investment versus another. In this context, to estimate the cost of equity one  
20 must apply informed judgment about the relative risk of the company in question and  
21 knowledge about the risk and expected rate of return characteristics of other available  
22 investments as well.

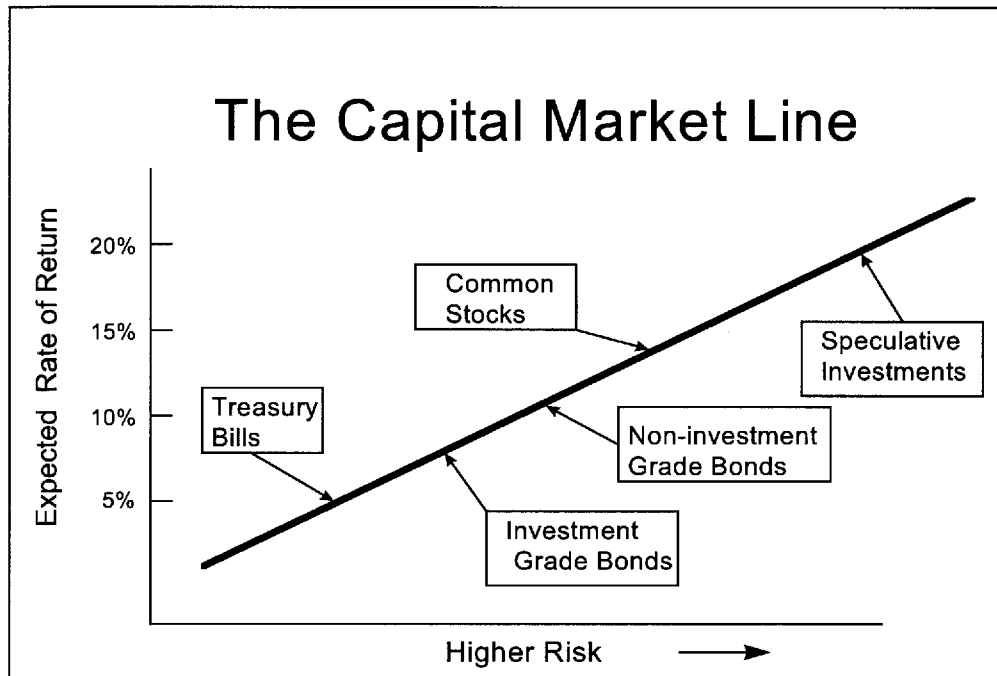
1 **Q. How does the market account for risk differences among the various**  
2 **investments?**

3 A. Risk-return tradeoffs among capital market investments have been the subject of  
4 extensive financial research. Literally dozens of textbooks and hundreds of academic  
5 articles have addressed the issue. Generally, such research confirms the common  
6 sense conclusion that investors will take additional risks only if they expect to receive  
7 a higher rate of return. Empirical tests consistently show that returns from low risk  
8 securities, such as U.S. Treasury bills, are the lowest; that returns from longer-term  
9 Treasury bonds and corporate bonds are increasingly higher as risks increase; and,  
10 generally, returns from common stocks and other more risky investments are even  
11 higher. These observations provide a sound theoretical foundation for both the DCF  
12 and risk premium methods for estimating the cost of equity capital. These methods  
13 attempt to capture the well founded risk-return principle and explicitly measure  
14 investors' rate of return requirements.

15 **Q. Can you illustrate the capital market risk-return principle that you just**  
16 **described?**

17 A. Yes. The following graph depicts the risk-return relationship that has become widely  
18 known as the Capital Market Line ("CML"). The CML offers a graphical  
19 representation of the capital market risk-return principle. The graph is not meant to  
20 illustrate the actual expected rate of return for any particular investment, but merely  
21 to illustrate in a general way the risk-return relationship.

# Risk-Return Tradeoffs



1 As a continuum, the CML can be viewed as an available opportunity set for investors.  
2 Those investors with low risk tolerance or investment objectives that mandate a low  
3 risk profile should invest in assets depicted in the lower left-hand portion of the  
4 graph. Investments in this area, such as Treasury bills and short-maturity, high  
5 quality corporate commercial paper, offer a high degree of investor certainty. In  
6 nominal terms (before considering the potential effects of inflation), such assets are  
7 virtually risk-free.

8 Investment risks increase as one moves up and to the right along the CML. A  
9 higher degree of uncertainty exists about the level of investment value at any point in  
10 time and about the level of income payments that may be received. Among these

1 investments are long-term bonds and preferred stocks, which offer priority claims to  
2 assets and income payments. They are relatively low risk, but they are not risk-free.  
3 The market value of long-term bonds, even those issued by the U.S. Treasury, often  
4 fluctuates widely when government policies or other factors cause interest rates to  
5 change.

6 Farther up the CML continuum, common stocks are exposed to even more  
7 risk, depending on the nature of the underlying business and the financial strength of  
8 the issuing corporation. Common stock risks include market-wide factors, such as  
9 general changes in capital costs, as well as industry and company specific elements  
10 that may add further to the volatility of a given company's performance. As I will  
11 illustrate in my risk premium analysis, common stocks typically are more volatile and  
12 have higher risk than high quality bond investments and, therefore, they reside above  
13 and to the right of bonds on the CML graph. Other more speculative investments,  
14 such as stock options and commodity futures contracts, offer even higher risks (and  
15 higher potential returns). The CML's depiction of the risk-return tradeoffs available  
16 in the capital markets provides a useful perspective for estimating investors' required  
17 rates of return.

18 **Q. How is the fair rate of return in the regulatory process related to the estimated**  
19 **cost of equity capital?**

20 A. The regulatory process is guided by fair rate of return principles established in the  
21 U.S. Supreme Court cases, *Bluefield* and *Hope*:

22 A public utility is entitled to such rates as will permit it to earn a return  
23 on the value of the property which it employs for the convenience of  
24 the public equal to that generally being made at the same time and in  
25 the same general part of the country on investments in other business

1           undertakings which are attended by corresponding risks and  
2           uncertainties; but it has no constitutional right to profits such as are  
3           realized or anticipated in highly profitable enterprises or speculative  
4           ventures. *Bluefield Water Works & Improvement Company v. Public*  
5           *Service Commission of West Virginia*, 262 U.S. 679, 692-693 (1923).

6           From the investor or company point of view, it is important that there  
7           be enough revenue not only for operating expenses, but also for the  
8           capital costs of the business. These include service on the debt and  
9           dividends on the stock. By that standard the return to the equity owner  
10          should be commensurate with returns on investments in other  
11          enterprises having corresponding risks. That return, moreover, should  
12          be sufficient to assure confidence in the financial integrity of the  
13          enterprise, so as to maintain its credit and to attract capital. *Federal*  
14          *Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, 603  
15          (1944).

16          Based on these principles, the fair rate of return should closely parallel investor  
17          opportunity costs as discussed above. If a utility earns its market cost of equity,  
18          neither its stockholders nor its customers should be disadvantaged.

19      **Q.    What specific methods and capital market data are used to evaluate the cost of**  
20      **equity?**

21      A.    Techniques for estimating the cost of equity normally fall into three groups:  
22          comparable earnings methods, risk premium methods, and DCF methods.

23      **Q.    Please describe the first set of estimation techniques, the comparable earnings**  
24      **methods.**

25      A.    The comparable earnings methods have evolved over time. The original comparable  
26          earnings methods were based on book accounting returns. This approach developed  
27          ROE estimates by reviewing accounting returns for unregulated companies thought to  
28          have risks similar to those of the regulated company in question. These methods have  
29          generally been rejected because they assume that the unregulated group is earning its  
30          actual cost of capital, and that its equity book value is the same as its market value.

1 In most situations these assumptions are not valid, and, therefore, accounting-based  
2 methods do not generally provide reliable cost of equity estimates.

3 More recent comparable earnings methods are based on historical stock  
4 market returns rather than book accounting returns. While this approach has some  
5 merit, it too has been criticized because there can be no assurance that historical  
6 returns actually reflect current or future market requirements. Also, in practical  
7 application, earned market returns tend to fluctuate widely from year to year. For  
8 these reasons, a current cost of equity estimate (based on the DCF model or a risk  
9 premium analysis) is usually required.

10 **Q. Please describe the second set of estimation techniques, the risk premium**  
11 **methods.**

12 A The risk premium methods begin with currently observable market returns, such as  
13 yields on government or corporate bonds, and add an increment to account for the  
14 additional equity risk. The capital asset pricing model ("CAPM") and arbitrage  
15 pricing theory ("APT") model are more sophisticated risk premium approaches. The  
16 CAPM and APT methods estimate the cost of equity directly by combining the "risk-  
17 free" government bond rate with explicit risk measures to determine the risk premium  
18 required by the market. Although these methods are widely used in academic cost of  
19 capital research, their additional data requirements and their potentially questionable  
20 underlying assumptions have detracted from their use in most regulatory  
21 jurisdictions. The basic risk premium methods provide a useful parallel approach  
22 with the DCF model and assure consistency with other capital market data  
23 consistency in the cost of equity cost estimation process.

1 **Q. Please describe the third set of estimation techniques, based on the DCF model.**

2 A. The DCF model is the most widely used regulatory cost of equity estimation method.

3 Like the risk premium approach, the DCF model has a sound basis in theory, and

4 many argue that it has the additional advantage of simplicity. I will describe the DCF

5 model in detail below, but in essence its estimate of ROE is simply the sum of the

6 expected dividend yield and the expected long-term dividend (or price) growth rate.

7 While dividend yields are easy to obtain, estimating long-term growth is more

8 difficult. Because the constant growth DCF model also requires very long-term

9 growth estimates (technically to infinity), some argue that its application is too

10 speculative to provide reliable results, resulting in the preference for the multistage

11 growth DCF analysis.

12 **Q. Of the three estimation methods, which do you believe provides the most reliable**  
13 **results?**

14 A. From my experience, a combination of discounted cash flow and risk premium

15 methods provides the most reliable approach. While the caveat about estimating

16 long-term growth must be observed, the DCF model's other inputs are readily

17 obtainable, and the model's results typically are consistent with capital market

18 behavior. The risk premium methods provide a good parallel approach to the DCF

19 model and further ensure that current market conditions are accurately reflected in the

20 cost of equity estimate.

1 **Q. Please explain the DCF model.**

2 A. The DCF model is predicated on the concept that stock prices represent the present  
3 value or discounted value of all future dividends that investors expect to receive. In  
4 the most general form, the DCF model is expressed in the following formula:

$$5 \quad P_0 = D_1/(1+k) + D_2/(1+k)^2 + \dots + D_\infty/(1+k)^\infty \quad (1)$$

6 where  $P_0$  is today's stock price;  $D_1$ ,  $D_2$ , etc. are all future dividends and  $k$  is the  
7 discount rate, or the investor's required rate of return on equity. Equation (1) is a  
8 routine present value calculation based on the assumption that the stock's price is the  
9 present value of all dividends expected to be paid in the future.

10 Under the additional assumption that dividends are expected to grow at a  
11 constant rate "g" and that  $k$  is strictly greater than  $g$ , equation (1) can be solved for  $k$   
12 and rearranged into the simple form:

$$13 \quad k = D_1/P_0 + g \quad (2)$$

14 Equation (2) is the familiar constant growth DCF model for cost of equity estimation,  
15 where  $D_1/P_0$  is the expected dividend yield and  $g$  is the long-term expected dividend  
16 growth rate.

17 **Q. Are there circumstances where the constant growth model may not give reliable**  
18 **results?**

19 A. Yes. Under circumstances when growth rates are expected to fluctuate or when  
20 future growth rates are highly uncertain, the constant growth model may not give  
21 reliable results. Although the DCF model itself is still valid, i.e., equation (1) is  
22 mathematically correct, under such circumstances the simplified form of the model  
23 must be modified to capture market expectations accurately.



1           Recent events and current market conditions in the electric utility industry as  
2 discussed later appear to challenge the constant growth assumption of the traditional  
3 DCF model. Since the mid-1980s, dividend growth expectations for many electric  
4 utilities have fluctuated widely. In fact, over one-third of the electric utilities in the  
5 U.S. have reduced or eliminated their common dividends over this time period. Some  
6 of these companies have re-established their dividends, producing exceptionally high  
7 growth rates. Under these circumstances, long-term growth rate estimates may be  
8 highly uncertain, and estimating a reliable "constant" growth rate for many  
9 companies is often difficult.

10 **Q. Can the DCF model be applied when the constant growth assumption is**  
11 **violated?**

12 A. Yes. When growth expectations are uncertain, the more general version of the model  
13 represented in equation (1) should be solved explicitly over a finite "transition"  
14 period while uncertainty prevails. The constant growth version of the model can then  
15 be applied after the transition period, under the assumption that more stable  
16 conditions will prevail in the future. There are two alternatives for dealing with the  
17 nonconstant growth transition period.

18           Under the "terminal price" nonconstant growth approach, equation (1) is  
19 written in a slightly different form:

$$20 \quad P_0 = D_1/(1+k) + D_2/(1+k)^2 + \dots + P_T/(1+k)^T \quad (3)$$

21 where the variables are the same as in equation (1) except that  $P_T$  is the estimated  
22 stock price at the end of the transition period T. Under the assumption that normal  
23 growth resumes after the transition period, the price  $P_T$  is then expected to be based

1 on constant growth assumptions. With the terminal price approach, the estimated  
2 cost of equity,  $k$ , is just the rate of return that investors would expect to earn if they  
3 bought the stock at today's market price, held it and received dividends through the  
4 transition period (until period  $T$ ), and then sold it for price  $P_T$ . In this approach, the  
5 analyst's task is to estimate the rate of return that investors expect to receive given the  
6 current level of market prices they are willing to pay.

7 **Q. What is the other alternative for dealing with the nonconstant growth transition**  
8 **period?**

9 A. Under the "multistage" nonconstant growth approach, equation (1) is simply  
10 expanded to incorporate two or more growth rate periods, with the assumption that a  
11 permanent constant growth rate can be estimated for some point in the future:

$$12 \quad P_0 = D_0(1+g_1)/(1+k) + \dots + D_0(1+g_2)^n/(1+k)^n +$$
$$13 \quad \dots + (D_0(1+g_T)^{(T+1)}/(k-g_T))/(1+k)^T \quad (4)$$

14 where the variables are the same as in equation (1), but  $g_1$  represents the growth rate  
15 for the first period,  $g_2$  for a second period, and  $g_T$  for the period from year  $T$  (the end  
16 of the transition period) to infinity. The first two growth rates are simply estimates  
17 for fluctuating growth over " $n$ " years (typically 5 or 10 years) and  $g_T$  is a constant  
18 growth rate assumed to prevail forever after year  $T$ . The difficult task for analysts in  
19 the multistage approach is determining the various growth rates for each period.

20 Although less convenient for exposition purposes, the nonconstant growth  
21 models are based on the same valid capital market assumptions as the constant  
22 growth version. The nonconstant growth approach simply requires more explicit data  
23 inputs and more work to solve for the discount rate,  $k$ . Fortunately, the required data

1 are available from investment and economic forecasting services, and computer  
2 algorithms can easily produce the required solutions. Both constant and nonconstant  
3 growth DCF analyses are presented in the following section.

4 **Q. Please explain the risk premium methodology.**

5 A. Risk premium methods are based on the assumption that equity securities are riskier  
6 than debt and, therefore, that equity investors require a higher rate of return. This  
7 basic premise is well supported by legal and economic distinctions between debt and  
8 equity securities, and it is widely accepted as a fundamental capital market principle.  
9 For example, debt holders' claims to the earnings and assets of the borrower have  
10 priority over all claims of equity investors. The contractual interest on mortgage debt  
11 must be paid in full before any dividends can be paid to shareholders, and secured  
12 mortgage claims must be fully satisfied before any assets can be distributed to  
13 shareholders in bankruptcy. Also, the guaranteed, fixed-income nature of interest  
14 payments makes year-to-year returns from bonds typically more stable than capital  
15 gains and dividend payments on stocks. All these factors demonstrate the more risky  
16 position of stockholders and support the equity risk premium concept.

17 **Q. Are risk premium estimates of the cost of equity consistent with other current**  
18 **capital market costs?**

19 A. Yes. The risk premium approach is especially useful because it is founded on current  
20 market interest rates, which are directly observable. This feature assures that risk  
21 premium estimates of the cost of equity begin with a sound basis, which is tied  
22 directly to current capital market costs.

1 **Q. Is there similar consensus about how risk premium data should be employed?**

2 A. No. In regulatory practice, there is often considerable debate about how risk  
3 premium data should be interpreted and used. Since the analyst's basic task is to  
4 gauge investors' required returns on long-term investments, some argue that the  
5 estimated equity spread should be based on the longest possible time period. Others  
6 argue that market relationships between debt and equity from several decades ago are  
7 irrelevant and that only recent debt-equity observations should be given any weight in  
8 estimating investor requirements. There is no consensus on this issue. Since analysts  
9 cannot observe or measure investors' expectations directly, it is not possible to know  
10 exactly how such expectations are formed or, therefore, to know exactly what time  
11 period is most appropriate in a risk premium analysis.

12 The important point is to answer the following question: "What rate of return  
13 should equity investors reasonably expect relative to returns that are currently  
14 available from long-term bonds?" The risk premium studies and analyses I discuss  
15 later address this question. My risk premium recommendation is based on an  
16 intermediate position that avoids some of the problems and concerns that have been  
17 expressed about both very long and very short periods of analysis with the risk  
18 premium model.

19 **Q. Please summarize your discussion of cost of equity estimation techniques.**

20 A. Estimating the cost of equity is one of the most controversial issues in utility  
21 ratemaking. Because actual investor requirements are not directly observable, several  
22 methods have been developed to assist in the estimation process. The comparable  
23 earnings method is the oldest but perhaps least reliable. Its use of accounting rates of

1 return, or even historical market returns, may or may not reflect current investor  
2 requirements. Differences in accounting methods among companies and issues of  
3 comparability also detract from this approach.

4 The DCF and risk premium methods have become the most widely accepted  
5 in regulatory practice. A combination of the DCF model and a review of risk  
6 premium data provides the most reliable cost of equity estimate. While the DCF  
7 model does require judgment about future growth rates, the dividend yield is  
8 straightforward, and the model's results are generally consistent with actual capital  
9 market behavior. For these reasons, I will rely on a combination of the DCF model  
10 and a risk premium analysis in the cost of equity studies that follow.

11 **IV. FUNDAMENTAL FACTORS THAT AFFECT THE COST OF EQUITY**

12 **Q. What is the purpose of this section of your testimony?**

13 A. In this section, I review recent capital market conditions and industry and company-  
14 specific factors that should be reflected in the cost of capital estimate.

15 **Q. What has been the recent experience in the U.S. capital markets?**

16 A. Schedule SCH-3, page 1, provides a review of annual interest rates and rates of  
17 inflation in the U.S. economy over the past ten years. During that time inflation and  
18 fixed income market costs declined and, generally, have been lower than rates that  
19 prevailed in the previous decade. Inflation, as measured by the Consumer Price Index  
20 ("CPI"), until 2003 had remained at historically low levels not seen consistently since  
21 the early 1960s. Since 2003, however, inflation rates have increased with the average  
22 for 2004 though 2006 similar to the longer-term historical average, which is above 3  
23 percent. The inflation rate for 2007 was even higher at 4.1 percent and, with the large

1 recent increases in energy and food prices, for the twelve months ended July 2008,  
2 the CPI increased 5.6 percent. These inflationary pressures exert a direct influence  
3 on capital market expectations and result in a higher cost of capital.

4 The Federal Reserve System's monetary policy options are currently limited  
5 by rising inflation and simultaneously weak economic conditions. During the period  
6 from mid-2004 until mid-2006, the Federal Reserve System increased the short-term  
7 Federal Funds interest rate 17 times, raising it from 1 percent to 5.25 percent. In late  
8 2007, in response to the extreme turbulence in the sub-prime credit markets, the  
9 Federal Reserve Open Market Committee began aggressively reducing the Federal  
10 Funds rate. Since September 2007, the rate has been lowered seven times to its  
11 current level of 2.0 percent. With rising inflation expectations, however, and low  
12 market tolerance for additional risk, long-term corporate interest rates have not  
13 declined over the past two years. Furthermore, estimates for the coming year are for  
14 additional interest rate increases.

15 **Q. How have long-term interest rates changed over the past two years?**

16 A. The following table, which also appears on page 2 of Schedule SCH-3, provides the  
17 month-by-month interest rates paid by utilities and the U.S. Treasury:

**Table 1**  
**Long-Term Interest Rate Trends**

<b>Month</b>	<b>Triple-B Utility Rate</b>	<b>30-Year Treasury Rate</b>	<b>Triple-B Utility Spread</b>
Jan-06	6.06	ND	ND
Feb-06	6.11	4.54	1.57
Mar-06	6.26	4.73	1.53
Apr-06	6.54	5.06	1.48
May-06	6.59	5.20	1.39
Jun-06	6.63	5.15	1.48
Jul-06	6.63	5.13	1.50
Aug-06	6.43	5.00	1.43
Sep-06	6.26	4.85	1.41
Oct-06	6.24	4.85	1.39
Nov-06	6.04	4.69	1.35
Dec-06	6.05	4.68	1.37
Jan-07	6.16	4.85	1.31
Feb-07	6.10	4.82	1.28
Mar-07	6.10	4.72	1.38
Apr-07	6.24	4.87	1.37
May-07	6.23	4.90	1.33
Jun-07	6.54	5.20	1.34
Jul-07	6.49	5.11	1.38
Aug-07	6.51	4.93	1.58
Sep-07	6.45	4.79	1.66
Oct-07	6.36	4.77	1.59
Nov-07	6.27	4.52	1.75
Dec-07	6.51	4.53	1.98
Jan-08	6.35	4.33	2.02
Feb-08	6.60	4.52	2.08
Mar-08	6.68	4.39	2.29
Apr-08	6.81	4.44	2.37
May-08	6.79	4.60	2.19
Jun-08	6.93	4.69	2.24
Jul-08	6.97	4.57	2.40
Aug-08	6.98	4.50	2.48

Sources: Mergent Bond Record (Utility Rates);  
www.federalreserve.gov (Treasury Rates).

1 The data in Table 1 show that in August 2008 long-term triple-B utility interest rates  
2 were higher than at any time in the past two years. More important, recent market  
3 turbulence from the sub-prime lending crisis and recent bank failures, as well as  
4 concerns about renewed inflation have increased interest rates spreads (the  
5 differences between utility borrowing costs and U.S. Treasury interest rates)  
6 dramatically. While the Federal Reserve System has reduced short-term borrowing  
7 rates for banks (the Fed Funds rate) and the "flight to safety" experience has driven  
8 down some U.S. Treasury rates, corporate borrows have seen just the opposite trend.  
9 Increased risk aversion has caused significantly higher borrowing costs for  
10 corporations such as KCP&L. While the effects of market turbulence are not always  
11 well captured in financial models for estimating the rate of return, the evolving long-  
12 term borrowing cost relationships for corporate entities should be considered  
13 explicitly in estimates of the going cost of equity capital.

14 **Q. What levels of interest rates are forecast for the coming year?**

15 A. Both corporate and government interest rates are expected to rise further from present  
16 levels. Schedule SCH-3, page 3, provides Standard & Poor's most recent economic  
17 forecast from its *Trends & Projections* publication for August 2008. S&P forecasts  
18 resumed economic growth after the first quarter of 2009. For 2008, growth in real  
19 Gross Domestic Product (GDP) is projected at only 1.7 percent with nominal GDP  
20 (real GDP plus inflation) at 4.0 percent. For 2009, nominal GDP growth is projected  
21 at 3.1 percent. These projected growth rates compare to a real rate for 2007 of 2.0  
22 percent and a nominal rate of 4.8 percent. S&P also forecasts that interest rates will



1 rise from current levels. The summary interest rate data are presented in the  
2 following table:

3 **Table 2**  
4 **Standard & Poor's Interest Rate Forecast**

	August 2008	Average	Average
	Average	2008 Est.	2009 Est.
7 Treasury Bills	1.7%	1.8%	2.4%
8 10-Yr. T-Bonds	3.9%	3.9%	4.5%
9 30-Yr. T-Bonds	4.5%	4.5%	4.9%
10 <u>Aaa Corporate Bonds</u>	<u>5.6%</u>	<u>5.6%</u>	<u>6.1%</u>

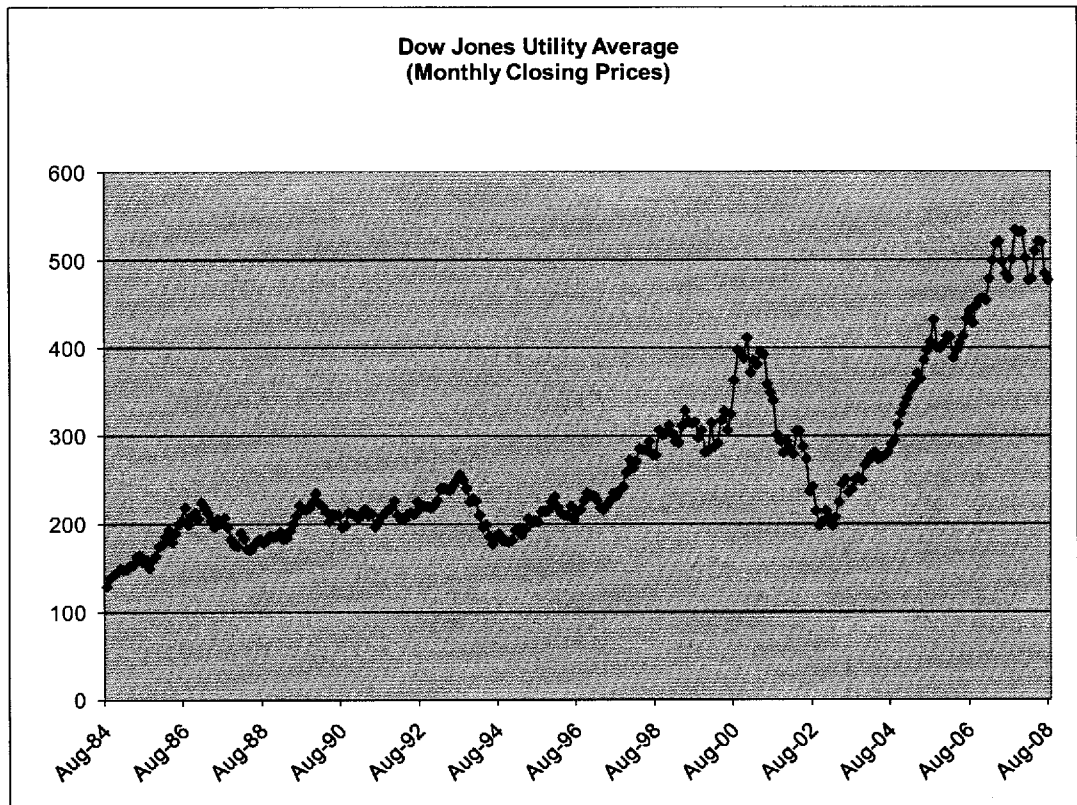
11 Sources: www.federalreserve.gov, (August 2008 Averages);  
12 Standard & Poor's *Trends & Projections*, August 2008, page 8  
13 (Projected Rates).

14 The data in Table 2 show that interest rates in 2009 are projected to increase from  
15 current levels. The average 30-year-term Treasury bond rate for 2009 is projected by  
16 S&P to reach 4.9 percent in this period, relative to the current level of 4.5. Similarly,  
17 the rate on corporate bonds is expected to increase from 5.6 percent to 6.1 percent, a  
18 rise of 50 basis points. These increasing interest rate trends offer important  
19 perspective for judging the cost of capital in the present case and illustrate why the  
20 return on equity must be set at a level sufficient to reflect these rising costs.

21 **Q. How have utility stocks performed during the past several years?**

22 A. Utility stock prices have fluctuated widely. The Dow Jones Utility Average (DJUA)  
23 has ranged between about 200 and 500 during the past six years. The wider  
24 fluctuations in more recent years are vividly illustrated in the following graph of  
25 DJUA prices over the past 25 years.

1



2

3

4

5

6

7

8

9

10 **Q. What is the industry's current fundamental position?**

11 A. Many electric utilities are attempting to return to their core businesses and hope to  
12 see more stable results over the next several years. S&P reflects this sentiment in its  
13 most recent *Electric Utility Industry Survey*:

1                   **Standard & Poor's Industry Surveys**

2                   We expect the performance of both the electric utility sector and  
3                   the individual companies within the sector to remain volatile over  
4                   the next several years. However, we believe the stocks will be less  
5                   volatile than they were in the first few years of the decade.... The  
6                   performance of the sector, however, will remain sensitive to the  
7                   macroeconomic environment and market forces surrounding it.  
8                   (Standard & Poor's *Industry Surveys*, Electric Utilities, August 14,  
9                   2008, p. 4)

10                  *Value Line* notes electric utilities' relatively poor performance this year:

11                   **Value Line Investors' Survey**

12                   As a group, utility stocks have held up better than the overall  
13                   market in recent weeks, but have performed just as poorly since  
14                   the start of 2008. Many of these equities appear to be fully valued  
15                   or even overvalued. (*Value Line Investment Survey*, Electric Utility  
16                   (West) Industry, August 8, 2008, p. 1781.

17                  Price volatility for utility shares and credit market gyrations make it all the more  
18                  difficult to estimate the fair, on-going cost of capital.

19                   Over the past several years, the greatest consideration for utility investors has  
20                   been the industry's transition to competition. With the passage by Congress of the  
21                   Energy Policy Act in 1992 and the Federal Energy Regulatory Commission's (FERC)  
22                   Order 888 in 1996, the stage was set for vastly increased competition in the electric  
23                   utility industry. The 1992 Act's mandate for open access to the transmission grid and  
24                   FERC's implementation through Order 888, including subsequent orders such as  
25                   Order 2000 and Order 890, effectively opened the market for wholesale electricity to  
26                   competition. Previously protected utility service territory and lack of transmission  
27                   access in some parts of the country had limited the availability of competitive bulk  
28                   power prices. The Energy Policy Act and Order 888 have essentially eliminated such  
29                   constraints for incremental power needs.

1           In addition to wholesale issues at the federal level, many states implemented  
2 retail access and have opened their retail markets to competition. Prior to the  
3 Western energy crisis of 2000-2001, investors' concerns had focused principally on  
4 appropriate transition mechanisms and the recovery of stranded costs. More recently,  
5 however, provisions for dealing with power cost adjustments have become a larger  
6 concern. The Western energy crisis refocused market concerns and contributed  
7 significantly to increased market risk perceptions for companies without power cost  
8 recovery provisions. As expected, the opening of previously protected utility markets  
9 to competition, and the uncertainty created by the removal of regulatory protection,  
10 has raised the level of uncertainty about investment returns across the entire industry.

11 **Q. Is KCP&L affected by these same market uncertainties and increasing utility  
12 capital costs?**

13 A. Yes. To some extent all electric utilities are being affected by the industry's transition  
14 to competition. KCP&L's power costs and other operating activities have been  
15 significantly affected by transition and restructuring events around the country. In  
16 fact, the uncertainty associated with the changes that are transforming the utility  
17 industry as a whole, as viewed from the perspective of the investor, remain a factor in  
18 assessing any utility's required ROE, including the ROE from KCP&L's operations in  
19 Missouri. For KCP&L specifically, its large construction program, its historical lack  
20 of a fuel adjustment clause, and its heavy dependence on wholesale transactions to  
21 avoid retail rate increases all increase the Company's risk profile. This is true even  
22 though Missouri has not adopted retail choice or other major forms of restructuring.

1 **Q. What has been the effect on KCP&L of the acquisition of Aquila, Inc. by**  
2 **KCP&L's parent company Great Plains Energy Incorporated?**

3 A. I have not been able to discern any negative effect. On July 14, 2008 Standard &  
4 Poor's Ratings Services affirmed the long-term ratings of KCP&L, including the BBB  
5 corporate credit rating, and raised its commercial paper credit rating from A-2 to A-3.  
6 On July 15, 2008 Moody's Investors Service affirmed the ratings of KCP&L.

7 **Q. How do capital market concerns and financial risk perceptions affect the cost of**  
8 **equity capital?**

9 A. As I discussed previously, equity investors respond to changing assessments of risk  
10 and financial prospects by changing the price they are willing to pay for a given  
11 security. When the risk perceptions increase or financial prospects decline, investors  
12 refuse to pay the previously existing market price for a company's securities and  
13 market supply and demand forces then establish a new lower price. The lower market  
14 price typically translates into a higher cost of capital through a higher dividend yield  
15 requirement, as well as the potential for increased capital gains if prospects improve.  
16 In addition to market losses for prior shareholders, the higher cost of capital is  
17 transmitted directly to the company by the need to issue more shares to raise any  
18 given amount of capital for future investment. The additional shares also impose  
19 additional future dividend requirements and reduce future earnings per share growth  
20 prospects.

21 **Q. How have regulatory commissions responded to these changing market and**  
22 **industry conditions?**

1 A. Over the past five years, allowed equity returns have generally followed the interest  
 2 rate changes. The following table summarizes the overall average ROEs allowed for  
 3 electric utilities since 2004:

	<b>Authorized Electric Utility Equity Returns</b>				
	2004	2005	2006	2007	2008
4 1 <sup>st</sup> Quarter	11.00%	10.51%	10.38%	10.27%	10.50%
5 2 <sup>nd</sup> Quarter	10.54%	10.05%	10.68%	10.27%	10.57%
6 3 <sup>rd</sup> Quarter	10.33%	10.84%	10.06%	10.02%	
7 4 <sup>th</sup> Quarter	10.91%	10.75%	10.39%	10.56%	
8 Full Year Average	10.75%	10.54%	10.36%	10.36%	10.53%
9 Average Utility					
10 Debt Cost	6.20%	5.67%	6.08%	6.11%	6.32%
11 Indicated Average					
12 Risk Premium	4.55%	4.87%	4.28%	4.25%	4.21%

13 Source: *Regulatory Focus*, Regulatory Research Associates, Inc., Major Rate Case  
 14 Decisions, July 2, 2008.

15 The data above show that since 2004 equity risk premiums (the difference between  
 16 allowed equity returns and utility interest rates) have ranged from 4.21 percent to  
 17 4.87 percent. At the low end of this risk premium range, with an allowed equity risk  
 18 premium of 4.21 percent, the indicated cost of equity is 11.20 percent (6.99%  
 19 projected triple-B interest rate + 4.21% risk premium = 11.20%)<sup>1</sup>. At the upper end  
 20 of this risk premium range, with an allowed equity risk premium of 4.87 percent, the  
 21 indicated cost of equity is 11.86 percent (6.99% projected triple-B interest rate +  
 22 4.87% risk premium = 11.86%). As I will demonstrate in the following section, my  
 23  
 24  
 25

---

<sup>1</sup> The triple-B utility interest rate of 6.99% is equal to the forecasted 30-year Treasury bond rate of 4.9% from Schedule SCH-3, page 3, plus the average triple-B utility spread over long-term Treasuries of 2.09% for the 12 months ended August 2008, as shown in Schedule SCH-3, page 2.

1 longer-term risk premium study, upon which I rely to test my DCF results, produces a  
2 slightly more conservative estimate of the required rate of return.

3 **V. COST OF EQUITY CAPITAL FOR KCP&L**

4 **Q. What is the purpose of this section of your testimony?**

5 A. Here I present my quantitative studies of the cost of equity capital for KCP&L and  
6 discuss the details and results of my analysis.

7 **Q. How are your studies organized?**

8 A. In the first part of my analysis, I apply three versions of the DCF model to a 30-  
9 company group of electric utilities based on the selection criteria discussed  
10 previously. In the second part of my analysis, I present my risk premium study and I  
11 review risk premium results from the longer-term Ibbotson Stocks, Bonds, Bills, and  
12 Inflation market data (Ibbotson data) now published by Morningstar, Inc.

13 My DCF analysis is based on three versions of the DCF model. In the first  
14 version of the DCF model, I use the constant growth format with long-term expected  
15 growth based on analysts' estimates of five-year utility earnings growth. While I  
16 continue to endorse a longer-term growth estimation approach based on growth in  
17 overall gross domestic product, I show the traditional DCF results because this is the  
18 approach that has traditionally been used by many regulators. In the second version  
19 of the DCF model, for the estimated growth rate, I use the estimated long-term GDP  
20 growth rate. In the third version of the DCF model, I use a two-stage growth  
21 approach, with stage one based on *Value Line's* three-to-five-year dividend  
22 projections and stage two based on long-term projected growth in GDP. The  
23 dividend yields in all three of the annual models are from *Value Line's* projections of

1 dividends for the coming year and stock prices are from the three-month average for  
2 the months that correspond to the *Value Line* editions from which the underlying  
3 financial data are taken.

4 **Q. Why do you believe the long-term GDP growth rate should be used to estimate**  
5 **long-term growth expectations in the DCF model?**

6 A. Growth in nominal GDP (real GDP plus inflation) is the most general measure of  
7 economic growth in the U.S. economy. For long time periods, such as those used in  
8 the Ibbotson Associates rate of return data, GDP growth has averaged between 5  
9 percent and 8 percent per year. From this observation, Professors Brigham and  
10 Houston offer the following observation concerning the appropriate long-term growth  
11 rate in the DCF Model:

12 Expected growth rates vary somewhat among companies, but  
13 dividends for mature firms are often expected to grow in the future at  
14 about the same rate as nominal gross domestic product (real GDP plus  
15 inflation). On this basis, one might expect the dividend of an average,  
16 or "normal," company to grow at a rate of 5 to 8 percent a year.  
17 (Eugene F. Brigham and Joel F. Houston, *Fundamentals of Financial*  
18 *Management*, 11th Ed. 2007, page 298.)

19 Other academic research on corporate growth rates offers similar conclusions about  
20 GDP growth, as well as concerns about the long-term adequacy of analysts' forecasts:

21 Our estimated median growth rate is reasonable when compared to the  
22 overall economy's growth rate. On average over the sample period,  
23 the median growth rate over 10 years for income before extraordinary  
24 items is about 10 percent for all firms. ... After deducting the dividend  
25 yield (the median yield is 2.5 percent per year), as well as inflation  
26 (which averages 4 percent per year over the sample period), the  
27 growth in real income before extraordinary items is roughly 3.5  
28 percent per year. This is consistent with the historical growth rate in  
29 real gross domestic product, which has averaged about 3.4 percent per  
30 year over the period 1950-1998. (Louis K. C. Chan, Jason Karceski,  
31 and Josef Lakonishok, "The Level and Persistence of Growth Rates,"  
32 *The Journal of Finance*, April 2003, p. 649)



1 IBES long-term growth estimates are associated with realized growth  
2 in the immediate short-term future. Over long horizons, however,  
3 there is little forecastability in earnings, and analysts' estimates tend  
4 to be overly optimistic. ... On the whole, the absence of predictability  
5 in growth fits in with the economic intuition that competitive pressures  
6 ultimately work to correct excessively high or excessively low  
7 profitability growth. (Ibid, page 683)

8 These findings support the notion that long-term growth expectations are more  
9 closely predicted by broader measures of economic growth than by near-term  
10 analysts' estimates. Especially for the very long-term growth rate requirements of the  
11 DCF model, the growth in nominal GDP should be considered an important input.

12 **Q. How did you estimate the expected long-term GDP growth rate?**

13 A. I developed my long-term GDP growth forecast from nominal GDP data contained in  
14 the St. Louis Federal Reserve Bank data base. That data for the period 1947 through  
15 2007 is summarized in my Schedule SCH-4. As shown at the bottom of that  
16 schedule, the overall average for the period was 7.0 percent. The data also show,  
17 however, that in the more recent years since 1980, lower inflation has resulted in  
18 lower overall GDP growth. For this reason I gave more weight to the more recent  
19 years in my GDP forecast. This approach is consistent with the concept that more  
20 recent data should have a greater effect on expectations and with generally lower  
21 near- and intermediate-term growth rate forecasts that presently exist. Based on this  
22 approach, my overall forecast for long-term GDP growth is 50 basis points lower than  
23 the long-term average, at a level of 6.5 percent.

24 **Q. Please summarize the results of your electric utility DCF analyses.**

25 A. The DCF results for my comparable company group are presented in Schedule SCH-  
26 5. The traditional constant growth DCF model results, with the projected growth rate

1 based on analysts' forecasts, are shown in the first column on page 1 of that exhibit.  
2 That analysis indicates an ROE range of 11.1 percent to 11.2 percent. In the second  
3 column of page 1, I recalculate the constant growth results with long-term forecasted  
4 growth in GDP as the projected growth rate. That analysis indicates an ROE estimate  
5 of 11.0 percent. Finally, in the third column of page 1, I present the multistage DCF  
6 results. The multistage model indicates an ROE of 10.8 percent. Based on all three  
7 versions of the DCF model, my analysis supports a reasonable ROE range of 10.8  
8 percent to 11.2 percent.

9 **Q. What are the results of your risk premium studies?**

10 A. The details and results of my risk premium studies are shown in my Schedule SCH-6.  
11 These studies and other risk premium data indicate an ROE range of 11.10 percent to  
12 11.49 percent.

13 **Q. How are your risk premium studies structured?**

14 A. My risk premium studies are divided into two parts. First, I compare electric utility  
15 authorized ROEs for the period 1980-2007 to contemporaneous long-term utility  
16 bond interest rates. The differences between the average authorized ROEs and the  
17 average interest rate for the year is the indicated equity risk premium. I then add the  
18 indicated equity risk premium to the forecasted triple-B utility bond interest rate to  
19 estimate ROE. Because there is a strong inverse relationship between risk premiums  
20 and interest rates (when interest rates are high, risk premiums are low and vice versa),  
21 further analysis is required to estimate the current risk premium level.

22 The inverse relationship between risk premiums and interest rate levels is well  
23 documented in numerous, well-respected academic studies. These studies typically

1 use regression analysis or other statistical methods to predict or measure the risk  
2 premium relationship under varying interest rate conditions. On page 2 of Schedule  
3 SCH-6, I provide regression analyses of the allowed annual equity risk premiums  
4 relative to interest rate levels. The negative and statistically significant regression  
5 coefficients confirm the inverse relationship between risk premiums and interest  
6 rates. This means that when interest rates rise by one percentage point, the cost of  
7 equity increases, but by a smaller amount. Similarly, when interest rates decline by  
8 one percentage point, the cost of equity declines by less than one percentage point. I  
9 use this negative interest rate change coefficient in conjunction with current interest  
10 rates to establish the appropriate current equity risk premium.

11 **Q. How do the results of your risk premium study compare to levels found in other  
12 published risk premium studies?**

13 A. Based on my risk premium studies, I am conservatively recommending a lower risk  
14 premium than is often found in other published risk premium data. For example, the  
15 most widely followed risk premium data are provided in the Morningstar Ibbotson  
16 data studies. These data, for the period 1926-2007, indicate an arithmetic mean risk  
17 premium of 6.1 percent for common stocks versus long-term corporate bonds. Under  
18 the assumption of geometric mean compounding, the Ibbotson risk premium for  
19 common stocks versus corporate bonds is 4.5 percent. Based on the more  
20 conservative geometric mean risk premium, the Ibbotson data indicate a cost of  
21 equity of 11.49 percent (6.99% forecasted debt cost + 4.5% risk premium = 11.49%).  
22 Based on the arithmetic risk premium, the Ibbotson data indicate a cost of equity of  
23 over 13 percent (6.99% forecasted debt cost + 6.1% risk premium = 13.09%).

1 Although I do not use the Ibbotson data in my final ROE estimates, I do review the  
2 data for their perspective on the overall market cost of equity capital.

3 **Q. Please summarize the results of your cost of equity analysis.**

4 A. The following table summarizes my results:

5 **Summary of Cost of Equity Estimates**

<u>DCF Analysis</u>	<u>Indicated Cost</u>
Constant Growth (Analysts' Growth Rates)	11.1%-11.2%
Constant Growth (GDP Growth Rate)	11.0%
Multistage Growth Model	10.8%
Reasonable DCF Range	<u>10.8%-11.2%</u>
<u>Risk Premium Analysis</u>	<u>Indicated Cost</u>
Utility Debt + Risk Premium	
Risk Premium (6.99% + 4.11%)	11.10%
Ibbotson Risk Premium Analysis	
Risk Premium (6.99% + 4.5%)	11.49%
<hr/>	
KCP&L Requested Cost of Equity Capital	<u>10.75%</u>

17  
18  
19 **Q. How should these results be interpreted by the Commission in setting the fair  
20 cost of equity for KCP&L?**

21 A. Higher analysts' growth rates and higher dividend yields have increased DCF model  
22 results along with increases in utility interest rates. The similarly higher results from  
23 the risk premium models also indicate the increasing trend reflected in the  
24 quantitative model results. These factors show that KCP&L's requested ROE is a  
25 conservative estimate of its market required rate of return. Additionally, use of a  
26 lower DCF range would fail to recognize the ongoing risks and uncertainties that  
27 exist in the electric utility industry as well as the company-specific risks and  
28 uncertainties that KCP&L is currently facing. All these factors show that the

1           Company's requested 10.75 percent ROE is a reasonable estimate of the fair cost of  
2           equity capital.

3   **Q.   Does this conclude your testimony?**

4   **A.   Yes, it does.**

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

In the Matter of the Application of Kansas City            )  
Power & Light Company to Modify Its Tariff to            ) Case No. ER-2009-\_\_\_\_  
Continue the Implementation of Its Regulatory Plan        )

**AFFIDAVIT OF SAMUEL C. HADAWAY**

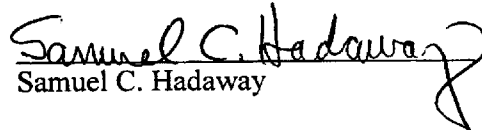
STATE OF TEXAS            )  
  ) ss  
COUNTY OF TRAVIS        )

Samuel C. Hadaway, being first duly sworn on his oath, states:

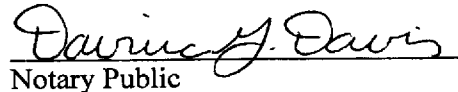
1. My name is Samuel C. Hadaway. I am employed by FINANCO, Inc. in Austin, Texas. I have been retained by Great Plains Energy, Inc., the parent company of Kansas City Power & Light Company, to serve as an expert witness to provide cost of capital testimony on behalf of Kansas City Power & Light Company.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Kansas City Power & Light Company consisting of ~~thirty-six~~ **(36)** pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

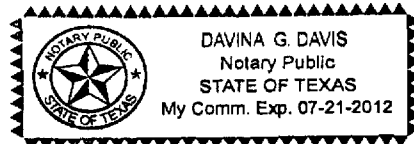
3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

  
Samuel C. Hadaway

Subscribed and sworn before me this 3<sup>rd</sup> day of September 2008.

  
Notary Public

My commission expires: 7-21-2012



**SAMUEL C. HADAWAY**

**FINANCO, Inc.  
Financial Analysis Consultants**

**3520 Executive Center Drive, Suite 124  
Austin, Texas 78731  
(512) 346-9317**

**SUMMARY OF QUALIFICATIONS**

- Principal, Financial Analysis Consultants (FINANCO, Inc.).
- Ph.D. in Finance and Econometrics.
- Extensive expert witness testimony in court and before regulatory agencies.
- Management of professional research staff in academic and regulatory organizations.
- Professional presentations before executive development groups, the National Rate of Return Analysts' Forum, and the New York Society of Security Analysts.
- Financial Management Association, Vice President for Practitioner Services.

**EDUCATION**

**The University of Texas at Austin  
Ph.D., Finance and Econometrics  
January 1975**

*Dissertation: An Evaluation of the  
Original and Recent Variants of the  
Capital Asset Pricing Model.*

**The University of Texas at Austin  
MBA, Finance  
June 1973**

*Thesis: The Pricing of Risk on the  
New York Stock Exchange.*

**Southern Methodist University  
BA, Economics  
June 1969**

Honors program. Departmental  
distinction.

**OTHER EXPERIENCE**

**University of Texas at Austin  
Adjunct Associate Professor  
1985-1988, 2004-Present**

Corporate Financial Management,  
Investments, and Integrative Finance  
Cases.

**Texas State University San Marcos  
Associate Professor of Finance  
1983-1984, 2003-2004**

Graduate and undergraduate courses  
in Financial Management, Managerial  
Economics, and Investment Analysis.

**Public Utility Commission of Texas  
Chief Economist and Director of  
Economic Research Division  
August 1980-August 1983**

Lead financial witness. Supervised  
Commission staff in research and  
testimony on rate of return, financial  
condition, and economic analysis.

**Assistant Professor of Finance  
Texas Tech University  
July 1978-July 1980  
University of Alabama  
January 1975-June 1978**

Member of graduate faculty. Conducted  
Ph.D. seminars and directed doctoral  
dissertations in capital market theory.  
Served as consultant to industry,  
church and governmental organizations.

**FINANCIAL AND ECONOMIC TESTIMONY IN REGULATORY  
PROCEEDINGS (Client in parenthesis)**

**Cost of Money Testimony:**

- Utah Public Service Commission, Docket No. 08-035-38, July 17, 2008 (Rocky Mountain Power/PacifiCorp).
- Texas Public Utility Commission, Docket No. 35717, June 27, 2008, (Oncor Electric Delivery Company LLC).
- Washington Utilities and Transportation Commission, Docket UG-080546/General Rate Case, March 28, 2008 (NW Natural).
- Washington Utilities and Transportation Commission, Docket UE-080220/General Rate Case, February 6, 2008 (PacifiCorp).
- Utah Public Service Commission, Docket No. 07-035-93, December 17, 2007 (PacifiCorp).
- Illinois Commerce Commission, Docket No. 07-0566, October 17, 2007 (Commonwealth Edison Company).
- Texas Public Utility Commission, Docket No. 34800, September 26, 2007, (Entergy Gulf States, Inc.)
- Texas Public Utility Commission, Docket No. 34040, August 28, 2007, (Oncor/TXU Electric Delivery Company)
- Massachusetts Department of Public Utilities, D.P.U. 07-71, August 17, 2007, (Fitchburg Gas and Electric Light Company d/b/a/ Unitil)
- Arizona Corporation Commission, Docket No. E-01933A-07-0402, July 2, 2007, (Tucson Electric Power Company).
- Wyoming Public Service Commission, Docket No. 20000-277-ER-07, June 29, 2007 (Rocky Mountain Power dba/PacifiCorp).
- Idaho Public Utilities Commission, Case No. PAC-E-05-1, June 8, 2007 (Rocky Mountain Power dba/PacifiCorp).
- Kansas Corporation Commission, Docket No. 07-KCPE-905-RTS, March 1, 2007 (Kansas City Power & Light Company).
- New Mexico Public Regulation Commission, Case No. 07-00077-UT, February 21, 2007, (Public Service Company of New Mexico).
- Missouri Public Service Commission, Case No. ER-2006-0291, February 1, 2007 (Kansas City Power & Light Company).
- Texas PUC Docket Nos. 33734, January 22, 2007 (Electric Transmission Texas, LLC).
- Texas PUC Docket Nos. 33309 and 33310, November 2006, (AEP Texas Central Company and AEP Texas North Company).
- Louisiana Public Service Commission, Docket No. U-23327, October 2006 and January 2005 (Southwestern Electric Power Company, American Electric Power Company)
- Missouri Public Service Commission, Case No. ER-2007-0004, July 3, 2006 (Aquila, Inc.).
- New Mexico Public Regulation Commission, Case No. 06-00258-UT, June 30, 2006 (El Paso Electric Company).
- New Mexico Public Regulation Commission, Case No. 06-00210-UT, May 30, 2006 (Public Service Company of New Mexico).
- Texas Public Utility Commission, Docket No. 32093, April 14, 2006 (CenterPoint Energy-Houston Electric, LLC).
- Utah Public Service Commission, Docket No. 06-035-21, March 7, 2006 (PacifiCorp).
- Oregon Public Utility Commission, Case No. UE-179, February 23, 2006 (PacifiCorp).
- Kansas Corporation Commission, Docket No. 06-KCPE-828-RTS, January 31, 2006 (Kansas City Power & Light Company).



- Missouri Public Service Commission, Case No. ER-2006-0314, January 27, 2006 (Kansas City Power & Light Company).
- California Public Utilities Commission, Docket No. 05-11-022, November 29, 2005 (PacifiCorp).
- Texas Public Utility Commission, Docket No. 31994, November 5, 2005 (Texas-New Mexico Power Company).
- New Hampshire Public Utilities Commission, Docket No. DE 05-178, November 4, 2005 (Unitil Energy Systems).
- Wyoming Public Service Commission, Docket No. 20000-ER-05-230, October 14, 2005 (PacifiCorp).
- Minnesota Public Utilities Commission, Docket. No. G-008/GR-05-1380, October 2005 (CenterPoint Energy Minnegasco).
- Texas Railroad Commission, Gas Utilities Division No. 9625, September 2005 (CenterPoint Energy Entex).
- Illinois Commerce Commission, Docket No. 05-0597, August 31, 2005 (Commonwealth Edison Company).
- Washington Utilities and Transportation Commission, Docket ,UE-050684/General Rate Case, May 2005 (PacifiCorp).
- Missouri Public Service Commission, Case No. ER-2005-0436, May 2005 (Aquila, Inc.).
- Idaho Public Utilities Commission, Case No. PAC-E-05-1, January 14, 2005 (PacifiCorp).
- Arkansas Public Service Commission, Docket No. 04-121-U, December 3, 2004 (CenterPoint Energy Arkla).
- Oregon Public Utility Commission, Case No. UE-170, November 12, 2004 (PacifiCorp).
- Texas Public Utility Commission, Docket No. 29206, November 8, 2004 (Texas-New Mexico Power Company).
- Texas Railroad Commission, Gas Utilities Division Nos. 9533 and 9534, October 13, 2004 (CenterPoint Energy Entex).
- Texas Public Utility Commission, Docket No. 29526, August 18 and September 2, 2004 (CenterPoint Energy Houston Electric).
- Utah Public Service Commission, Docket No. 04-2035-, August 4, 2004 (PacifiCorp).
- Oklahoma Corporation Commission, Cause No. PUD-200400187, July 2, 2004, (CenterPoint Energy Arkla).
- Minnesota Public Utilities Commission, Docket No. G-008/GR-04-901, July 2004, (CenterPoint Energy Minnegasco).
- Washington Utilities and Transportation Commission, Docket ,UE-032065/General Rate Case, December 2003 (PacifiCorp).
- Washington Utilities and Transportation Commission, Docket ,UG-031885, November 2003 (Northwest Natural Gas Company.).
- Wyoming Public Service Commission, Docket No. 20000-ER-03-198, May 2003 (PacifiCorp).
- Public Service Commission of Utah, Docket No. 03-2035-02, May 2003 (PacifiCorp).
- Public Utility Commission of Oregon, Case. UE-147, March 2003 (PacifiCorp).
- Wyoming Public Service Commission, Docket No. 20000-ER-00-162, May 2002 (PacifiCorp).
- Public Utility Commission of Oregon, UG-152, November 2002 (Northwest Natural).
- Massachusetts Department of Telecommunications and Energy, D.T.E. 02-24/24, May 2002 (Fitchburg Gas and Electric Light Company).
- New Hampshire Public Utilities Commission, Docket No. DE 01-247, January 2002 (Unitil Corporation).
- Washington Utilities and Transportation Commission, Docket UE-011569,70,UG-011571, November 2001 (Puget Sound Energy, Inc.).

- California Public Utilities Commission, Docket No. 01-03-026, September and December 2001 (PacifiCorp).
- New Mexico Public Regulation Commission, Docket No. 3643, July 2001 (Texas-New Mexico Power Company).
- Texas Natural Resources Conservation Commission, Docket No. 2001-1074/5-URC, May 2001 (AquaSource Utility, Inc.).
- Massachusetts Department of Telecommunications and Energy, Docket No. 99-118, May 2001 (Fitchburg Gas and Electric Light Company).
- Public Service Commission of Utah, Docket No. 01-035-01, January 2001 (PacifiCorp)
- Federal Energy Regulatory Commission, Docket No. ER-01-651, January 2001 (Southwestern Electric Power Company).
- Wyoming Public Service Commission, Docket No. 20000-ER-00-162, December 2000 (PacifiCorp).
- Public Utility Commission of Oregon, Case. UE-116, November 2000, (PacifiCorp)
- Public Utility Commission of Texas, Docket No. 22344, September 2000, (AEP Texas Companies, Entergy Gulf States, Inc., Reliant Energy HL&P, Texas-New Mexico Power Company, TXU Electric Company)
- Public Utility Commission of Oregon, Case UE-111, August 2000, (PacifiCorp)
- Texas Public Utility Commission, Docket Nos. 22352,3,4, March 2000 (Central Power and Light Co., Southwestern Electric Power Co., West Texas Utilities Co.).
- Texas Public Utility Commission, Docket No. 22355, March 2000 (Reliant Energy, Inc.).
- Texas Public Utility Commission, Docket No. 22349, March 2000 (Texas-New Mexico Power Co.).
- Texas Public Utility Commission, Docket No. 22350, March 2000 (TXU Electric).
- Washington Utilities and Transportation Commission, Docket UE-991831, November 1999 (PacifiCorp).
- Public Service Commission of Utah, Docket No. 99-035-10, September 1999 (PacifiCorp)
- Louisiana Public Service Commission Docket No. U-23029, August 1999 (Southwestern Electric Power Company)
- Wyoming Public Service Commission, Docket No. 2000-ER-99-145, July 1999, January 2000 (PacifiCorp, dba Pacific Power and Light Company).
- Texas PUC Docket No. 20150, March 1999 (Entergy Gulf States, Inc.)
- Federal Energy Regulatory Commission Docket No. ER-98-3177-00, May and December 1998 (Southwestern Electric Power Company).
- Public Service Commission of Utah, Docket No. 97-035-01, June 1998 (PacifiCorp, dba Utah Power and Light Company).
- Massachusetts Dept. of Telecommunications and Energy, Docket No. DTE 98-51, May 1998, (Fitchburg Gas and Electric Light Company, a subsidiary of Unital Corp.)
- Texas PUC, Docket No. 18490, March 1998, (Texas Utilities Electric Company)
- Texas PUC Docket No. 17751, March 1998 and July 1997 (Texas-New Mexico Power Company).
- Federal Energy Regulatory Commission Docket No. RP-97, February 1998 and May 1997 (Koch Gateway Pipeline Company).
- Federal Energy Regulatory Commission Docket No. ER-97-4468-000, December 1997 (Puget Sound Power & Light).
- Oklahoma Corporation Commission, Cause No. PUD 960000214, August 1997 (Public Service Company of Oklahoma).
- Oregon Public Utility Commission Docket No. UE-94, April 1996, (PacifiCorp).
- Texas PUC Docket No. 15643, May and September 1996, (Central Power and Light and West Texas Utilities Company).

- Federal Energy Regulatory Commission Docket No. ER-96, April 1996 (Puget Sound Power & Light).
- Federal Energy Regulatory Commission Docket No. ER96, February 1996, (Central and South West Corporation).
- Washington Utilities & Transportation Commission Docket No. UE-951270, November 1995 (Puget Sound Power & Light).
- Texas PUC Docket No. 14965, November 1995, (Central Power and Light).
- Texas PUC Docket No. 13369, February 1995 (West Texas Utilities).
- Texas PUC Docket No. 12065, July and December 1994, (Houston Lighting & Power).
- Texas PUC, Docket No. 12820, July and November 1994, (Central Power and Light).
- Texas PUC Docket No. 12900, March 1994, and New Mexico PUC Case No. 2531, August 1993, (TNP Enterprises).
- Texas PUC, Docket No. 12815, March 1994, (Pedernales Electric Cooperative).
- Florida Public Service Commission, Docket No. 930987-EI, December 1993, (TECO Energy).
- Iowa Department of Commerce, Docket No. RPU-93-9, December 1993, (US West Communications).
- Texas PUC Dkt. No. 11735, May and September 1993, (Texas Utilities Electric Company)
- Oklahoma Corporation Commission, Cause No. PUD 001342, October 1992 (Public Service Company of Oklahoma).
- Texas PUC Dkt. No. 9983, November 1991, (Southwest Texas Telephone Company).
- Texas PUC Dkt. No. 9850, November 1990, (Houston Lighting & Power Company).
- Texas PUC Dkt. Nos. 8480/8482, January 1989; City of Austin Dkt. No. 1, August 1988 and July 1987, (City of Austin Electric Department).
- Missouri Public Service Commission Case No. ER-90-101, July 1990 (UtiliCorp).
- Texas PUC Dkt. No. 9945, December 1990; Texas PUC Dkt. No. 9165, November 1989, (El Paso Electric Company).
- Texas PUC Dkt. No. 9427, July 1990, (Lower Colorado River Authority Association of Wholesale Customers).
- Oregon Public Utility Commission, March 1990, (Pacific Power & Light Company).
- Utah Public Service Commission, November 1989, (Utah Power & Light Company).
- Texas PUC Dkt. No. 5610, September 1988, (GTE Southwest).
- Iowa State Utilities Board, September 1988, (Northwestern Bell Telephone Company).
- Texas Water Commission, Dkt. Nos. RC-022 and RC-023, November 1986, (City of Houston Water Department).
- Pennsylvania PUC Dkt. Nos. R-842770 and R-842771, May 1985, (Bethlehem Steel).

**Capital Structure Testimony:**

- Federal Energy Regulatory Commission Docket No. RP-97, May 1997 (Koch Gateway Pipeline Company).
- Illinois Commerce Commission Dkt. No. 93-0252 Remand, July 1996, (Sprint).
- California PUC (Appl. No. 92-05-004) April 1993 and May 1993, (Pacific Telesis).
- Montana PSC, Dkt. No. 90.12.86, November 1991, (US West Communications).
- Massachusetts PUC Dkt. No. 86-33, June 1987, (New England Telephone Company).
- Maine PUC Dkt. No. 85-159, February 1987, (New England Telephone Company).
- New Hampshire PUC Dkt. No. 85-181, September 1986, (New England Telephone Company).
- Maine PUC Dkt. No. 83-213, March 1984, (New England Telephone Company).

**Regulatory Policy and Other Regulatory Issues:**

- Texas PUC Docket No.31056, September 16, 2005, (AEP Texas Central Company).
- New Hampshire PUC Docket No. DE 03-086, May 2003, (Unitil Corporation).
- Texas PUC Docket No. 26194, May 2003 (El Paso Electric Company)
- Texas PUC Docket No. 22622, June 15, 2001 (TXU Electric)
- Texas PUC Docket No. 20125, November 1999 (Entergy Gulf States, Inc.)
- Texas PUC Docket No. 21112, July 1999 and New Mexico Public Regulation Commission Case No. 3103, July 1999 (Texas-New Mexico Power Company)
- Texas PUC Docket No. 20292, May 1999 (Central Power and Light Co.)
- Texas PUC Docket No. 20150, November 1998 (Entergy Gulf States, Inc.)
- New Mexico PUC Case No. 2769, May 1997, (Texas-New Mexico Power Company).
- Texas PUC Dkt. No. 15296, September 1996, (City of College Station, Texas).
- Texas PUC Dkt. No. 14965 Competitive Issues Phase, August 1996 (Central Power and Light Company).
- Texas PUC Dkt. No. 12456, May 1994, (Texas Utilities Electric Company).
- Texas PUC, Dkt. No. 12700/12701 and Federal Energy Regulatory Commission, Docket No. EC94-000, January 1994, (El Paso Electric Company).
- Florida Public Service Commission Generic Purchased Power Proceedings, October 1993 (TECO Energy).
- Texas PUC, Docket No. 11248, December 1992 (Barbara Faskins).
- Texas PUC Dkt. No. 10894, January and June 1992, (Gulf States Utilities Company).
- State Corporation Commission of Kansas, Dkt. No. 175,456-U, August 1991, (UtiliCorp United).
- Texas PUC Dkt. No. 9561, May 1990; Texas PUC Dkt. Nos. 6668/8646, July 1989 and February 1990, (Central Power and Light Company).
- Texas PUC Dkt. No. 9300, April 1990 and June 1990, (Texas Utilities Electric Co.).
- Texas PUC Dkt. No. 10200, August 1991, (Texas-New Mexico Power Company).
- Texas PUC Dkt. No. 7289, May 1987, (West Texas Utilities Company).
- Texas PUC Dkt. No. 7195, January 1987, (North Star Steel Texas).
- New Mexico PSC Case No. 1916, April 1986, (Public Service Company of New Mexico).
- Texas PUC Dkt. No. 6525, March 1986, (North Star Steel Texas).
- Texas PUC Dkt. No. 6375, November 1985, (Valley Industrial Council).
- Texas PUC Dkt. No. 6220, April 1985, (North Star Steel Texas).
- Texas PUC Dkt. No. 5940, March 1985, (West Texas Municipal Power Agency).
- Texas PUC Dkt. No. 5820, October 1984, (North Star Steel Texas).
- Texas PUC Dkt. No. 5779, September 1984, (Texas Industrial Energy Consumers).
- Texas PUC Dkt. No. 5560, April 1984, (North Star Steel Texas).
- Arizona PSC Dkt. No. U-1345-83-155, January 1984 and May 1984 (Arizona Public Service Company Shareholders Association).

**Insurance Rate Testimony:**

- Texas Department of Insurance, Docket No. 2673, January 2008, (Texas Land Title Association).
- Texas Department of Insurance, Docket No. 2601, December 2006, (Texas Land Title Association).
- Texas Department of Insurance, Docket No. 2394, November 1999, (Texas Title Insurance Agents).
- Senate Interim Committee on Title Insurance of the Texas Legislature, February 6, 1998

- Texas Department of Insurance, Docket No. 2279, October 1997, (Texas Title Insurance Agents).
- Texas Department of Insurance, January 1996, (Independent Metropolitan Title Insurance Agents of Texas).
- Texas Insurance Board, January 1992, (Texas Land Title Association).
- Texas Insurance Board, December 1990, (Texas Land Title Association).
- Texas Insurance Board, November 1989, (Texas Land Title Association).
- Texas Insurance Board, December 1987, (Texas Land Title Association).

**Testimony On Behalf Of Texas PUC Staff:**

- Texland Electric Cooperative, Dkt. No. 3896, February 1983
- El Paso Electric Company, Dkt. No. 4620, September 1982.
- Southwestern Bell Telephone Company, Dkt. No. 4545, August 1982.
- Central Power and Light Company, Dkt. No. 4400, May 1982.
- Texas-New Mexico Power Company, Dkt. 4240, March 1982.
- Texas Power and Light Company, Dkt. No. 3780, May 1981.
- General Telephone Company of the Southwest, Dkt. No. 3690, April 1981.
- Mid-South Electric Cooperative, Dkt. No. 3656, March 1981.
- West Texas Utilities Company, Dkt. No. 3473, December 1980.
- Houston Lighting & Power Company, Dkt. No. 3320, September 1980.

**ECONOMIC ANALYSIS AND TESTIMONY**

**Antitrust Litigation:**

- Marginal Cost Analysis of Concrete Production/Predatory Pricing (Stiles)
- Analysis of Lost Business Opportunity due to denial of Waste Disposal Site Permit (Browning-Ferris Industries, Inc.).
- Analysis of Electric Power Transmission Costs in Purchased Power Dispute (City of College Station, Texas).

**Contract Litigation:**

- Analysis of Cogeneration Contract/Economic Viability Issues(Texas-New Mexico Power Company)
- Definition of Electric Sales/Franchise Fee Contract Dispute (Reliant Energy HL&P)
- Analysis of Purchased Power Agreement/Breach of Contract (Texas-New Mexico Power Company)
- Regulatory Commission Provisions in Franchise Fee Ordinance Dispute (Central Power & Light Company)
- Analysis of Economic Damages resulting from attempted Acquisition of Highway Construction Company (Dillingham Construction Corporation).
- Analysis of Economic Damages due to Contract Interference in Acquisition of Electric Utility Cooperative (PacifiCorp).
- Analysis of Economic Damages due to Patent Infringement of Boiler Cleaning Process (Dowell-Schlumberger/The Dow Chemical Company).

**Lender Liability/Securities Litigation:**

- ERISA Valuation of Retail Drug Store Chain (Sommers Drug Stores Company).
- Analysis of Lost Business Opportunities in Failed Businesses where Lenders Refused to Extend or Foreclosed Loans (FirstCity Bank Texas, McAllen State Bank, General Electric Credit Corporation).

- Usury and Punitive Damages Analysis based on Property Valuation in Failed Real Estate Venture (Tomen America, Inc.).

**Personal Injury/Wrongful Death/Lost Earnings Capacity Litigation:**

- Analysis of Lost Earnings Capacity and Punitive Damages due to Industrial Accident (Worsham, Forsythe and Wooldridge).
- Analysis of Lost Earnings Capacity due to Improper Termination (Lloyd Gosselink, Ryan & Fowler).
- Present Value Analysis of Lost Earnings and Future Medical Costs due to Medical Malpractice (Sierra Medical Center).

**Product Warranty/Liability Litigation:**

- Analysis of Lost Profits due to Equipment Failure in Cogeneration Facility (WF Energy/Travelers Insurance Company).
- Analysis of Economic Damages due to Grain Elevator Explosion (Degesch Chemical Company).
- Analysis of Economic Damages due to failure of Plastic Pipe Water Lines (Western Plastics, Inc.).
- Analysis of Rail Car Repair and Maintenance Costs in Product Warranty Dispute (Youngstown Steel Door Company).

**Property Tax Litigation:**

- Evaluation of Electric Utility Distribution System (Jasper-Newton Electric Cooperative).
- Evaluations of Electric Utility Generating Plants (West Texas Utilities Company).

**Valuations of Closely Held Businesses in Litigation Support and Federal Estate Tax Planning.**

**PROFESSIONAL PRESENTATIONS**

- "Fundamentals of Financial Management and Reporting for Non-Financial Managers," Austin Energy, July 2000.
- "Fundamentals of Finance and Accounting," the IC<sup>2</sup> Institute, University of Texas at Austin, December 1996 and 1997.
- "Fundamentals of Financial Analysis and Project Evaluation," Central and South West Companies, April, May, and June 1997.
- "Fundamentals of Financial Management and Valuation," West Texas Utilities Company, November 1995.
- "Financial Modeling: Testing the Reasonableness of Regulatory Results," University of Texas Center for Legal and Regulatory Studies Conference, June 1991.
- "Estimating the Cost of Equity Capital," University of Texas at Austin Utilities Conference, June 1989, June 1990.
- "Regulation: The Bottom Line," Texas Society of Certified Public Accountants, Annual Utilities Conference, Austin, Texas, April 1990.
- "Alternative Treatments of Large Plant Additions -- Modeling the Alternatives," University of Texas at Dallas Public Utilities Conference, July 1989.
- "Industrial Customer Electrical Requirements," Edison Electric Institute Financial Conference, Scottsdale, Arizona, October 1988.
- "Acquisitions and Consolidations in the Electric Power Industry," Conference on Emerging Issues of Competition in the Electric Utility Industry, University of Texas at Austin, May 1988.

- "The General Fund Transfer - Is It A Tax? Is It A Dividend Payout? Is It Fair?" The Texas Public Power Association Annual Meeting, Austin, May 1984.
- "Avoiding 'Rate Shock' - Preoperational Phase-In Through CWIP in Rate Base," Edison Electric Institute, Finance Committee Annual Meeting, May 1983.
- "A Cost-Benefit Analysis of Alternative Bond Ratings Among Electric Utility Companies in Texas," (with B.L. Heidebrecht and J.L. Nash), Texas Senate Subcommittee on Consumer Affairs, December 1982.
- "Texas PUC Rate of Return and Construction Work in Progress Methods," New York Society of Security Analysts, New York, August 1982.
- "In Support of Debt Service Requirements as a Guide to Setting Rates of Return for Subsidiaries," Financial Forum, National Society of Rate of Return Analysts, Washington, D.C., May 1982.

### PUBLICATIONS

- "Institutional Constraints on Public Fund Performance," (with B.L. Hadaway) *Journal of Portfolio Management*, Winter 1989.
- "Implications of Savings and Loan Conversions in a Deregulated World," (with B.L. Hadaway) *Journal of Bank Research*, Spring 1984.
- "Regulatory Treatment of Construction Work in Progress," abstract, (with B.L. Heidebrecht and J. L. Nash), *Rate & Regulation Review*, Edison Electric Institute, December 20, 1982.
- "Financial Integrity and Market-to-Book Ratios in an Efficient Market," (with W. L. Beedles), *Gas Pricing & Ratemaking*, December 7, 1982.
- "An Analysis of the Performance Characteristics of Converted Savings and Loan Associations," (with B.L. Hadaway) *Journal of Financial Research*, Fall 1981.
- "Inflation Protection from Multi-Asset Sector Investments: A Long-Run Examination of Correlation Relationships with Inflation Rates," (with B.L. Hadaway), *Review of Business and Economic Research*, Spring 1981.
- "Converting to a Stock Company-Association Characteristics Before and After Conversion," (with B.L. Hadaway), *Federal Home Loan Bank Board Journal*, October 1980.
- "A Large-Sample Comparative Test for Seasonality in Individual Common Stocks," (with D.P. Rochester), *Journal of Economics and Business*, Fall 1980.
- "Diversification Possibilities in Agricultural Land Investments," *Appraisal Journal*, October 1978.
- "Further Evidence on Seasonality in Common Stocks," (with D.P. Rochester), *Journal of Financial and Quantitative Analysis*, March 1978.

**Kansas City Power & Light Company**  
**Comparable Company Fundamental Characteristics**

No.	Company	(1)	(2)		(3)		
		% Regulated Revenue	Credit Rating		Capital Structure (2007)		
			S&P	Moody's	Common Equity Ratio	Long-Term Debt Ratio	Preferred Stock Ratio
1	ALLETE	86.0%	A-	Baa1	64.4%	35.6%	0.0%
2	Alliant Energy Co.	90.5%	A-	A2	61.9%	32.4%	5.7%
3	Ameren	100.0%	BBB	Baa2	53.4%	45.0%	1.6%
4	American Elec. Pwr.	90.4%	BBB	Baa1	41.4%	58.3%	0.3%
5	Avista Corp.	90.9%	BBB+	Baa2	59.0%	41.0%	0.0%
6	Cent. Vermont P.S.	100.0%	BBB+	NR	60.6%	36.2%	3.2%
7	Cleco Corporation	95.9%	BBB	Baa1	56.7%	43.2%	0.1%
8	Con. Edison	77.2%	A-	A1	53.1%	45.6%	1.3%
9	DTE Energy Co.	79.6%	A-	A3	45.6%	54.4%	0.0%
10	Edison Internat.	79.9%	A	A2	46.0%	49.1%	4.9%
11	Empire District	99.3%	BBB+	Baa1	49.9%	50.1%	0.0%
12	Entergy Corp.	80.6%	A-	Baa2	43.9%	54.3%	1.8%
13	FPL Group, Inc.	76.1%	A	Aa3	48.8%	51.2%	0.0%
14	FirstEnergy	88.3%	BBB	Baa2	50.3%	49.7%	0.0%
15	Hawaiian Electric	83.0%	BBB	Baa2	51.0%	47.6%	1.4%
16	IDACORP	76.0%	A-	A3	51.1%	48.9%	0.0%
17	NiSource Inc.	73.1%	BBB-	Baa2	47.6%	52.4%	0.0%
18	Northeast Utilities	98.6%	BBB+	Baa1	48.8%	49.3%	1.9%
19	NSTAR	95.8%	AA-	A1	40.1%	58.9%	1.0%
20	PG&E Corp.	100.0%	BBB+	A3	50.4%	48.1%	1.5%
21	Pinnacle West	82.8%	BBB-	Baa2	53.0%	47.0%	0.0%
22	Portland General	100.0%	A	Baa1	50.1%	49.9%	0.0%
23	Progress Energy	99.8%	A-	A2	48.8%	50.6%	0.6%
24	Southern Co.	82.3%	A	A2	44.9%	51.2%	3.9%
25	Teco Energy, Inc.	78.8%	BBB-	Baa2	39.0%	61.0%	0.0%
26	UIL Holdings Co.	99.9%	NR	Baa2	49.2%	50.8%	0.0%
27	Vectren Corp.	77.0%	A	A3	49.8%	50.2%	0.0%
28	Westar Energy	81.3%	BBB-	Baa2	48.9%	50.6%	0.5%
29	Wisconsin Energy	99.7%	A-	Aa3	49.2%	50.3%	0.5%
30	Xcel Energy Inc.	99.3%	A-	A3	49.4%	49.7%	0.9%
Average		88.7%	A-/BBB+	A3/Baa1	50.2%	48.8%	1.0%

## Column Sources:

(1) Most recent company 10-Ks.

(2) AUS Utility Reports, August 2008.

(3) Value Line Investment Survey, Electric Utility (East), Aug 29, 2008; (Central), Jun 27, 2008; (West), May 9, 2008.



KANSAS CITY POWER & LIGHT COMPANY  
Capitalization  
At December 31, 2007

(\$ in 000's)

<u>CAPITAL COMPONENT</u>	<u>AMOUNT</u>	<u>PERCENT</u>	<u>REQUIRED RETURN</u>	<u>WEIGHTED RETURN</u>
Long-Term Debt (Note 1)	1,003,387	40.41%	5.51%	2.23%
Preferred Stock	0	0.00%	0.00%	0.00%
Common Equity before Adjustment	1,479,495			
Equity Adjustment for OCI Related to Pension	0			
Adjusted Common Equity	1,479,495	59.59%	10.75%	6.41%
Total	<u>\$2,482,882</u>	<u>100.00%</u>		<u>8.63%</u>

Note 1: Includes amounts classified as current liabilities.

GREAT PLAINS ENERGY INCORPORATED  
Capitalization  
At December 31, 2007

(\$ in 000's)

<u>CAPITAL COMPONENT</u>	<u>AMOUNT</u>	<u>PERCENT</u>	<u>REQUIRED RETURN</u>	<u>WEIGHTED RETURN</u>
Long-Term Debt (Note 1)	1,103,209	40.68%	5.66%	2.30%
Preferred Stock	39,000	1.44%	4.29%	0.06%
Common Equity before Adjustment	1,567,897			
Equity Adjustment for All OCI	(2,073)			
Adjusted Common Equity	1,569,970	57.89%	10.75%	6.22%
Total	<u>\$2,712,179</u>	<u>100.00%</u>		<u>8.59%</u>

Note 1: Includes amounts classified as current liabilities.

**KANSAS CITY POWER & LIGHT COMPANY AND GREAT PLAINS ENERGY**

**Weighted Average Cost of Long-Term Debt Capital**

**At December 31, 2007**

Line	Issue	(a) Initial Offering	(b) Date of Offering	(c) Date of Maturity	(d) Price to Public	(e) Underwriters Discounts & Commissions	(f) Issuance Expense	(g) Net Proceeds to Company	(h) Cost to Company	(i) Long-term Debt Capital Outstanding	(j) Annual Cost of Long-term Debt Capital
<b>KANSAS CITY POWER &amp; LIGHT ONLY</b>											
<b><u>Pledged General Mortgage Bonds</u></b>											
1	EIRR 1992 Series	\$31,000,000	9/15/1992	7/1/2017					4.131%	\$31,000,000	\$1,280,610
2	EIRR Hawthorn 1993 Series - 4.0% Coupon	\$12,366,000	10/14/1993	1/2/2012					4.202%	\$12,366,000	\$519,619
3	MATES Series 1993-A	\$40,000,000	12/7/1993	12/1/2023					4.154%	\$40,000,000	\$1,661,600
4	MATES Series 1993-B	\$39,480,000	12/7/1993	12/1/2023					4.082%	\$39,480,000	\$1,611,574
5	EIRR La Cygne 1994 Series - 4.05% Coupon	\$13,982,500	2/23/1994	3/1/2015					4.221%	\$13,982,000	\$590,180
6	EIRR La Cygne 1994 Series - 4.65% Coupon	\$21,940,000	2/23/1994	9/1/2035					4.801%	\$21,940,000	\$1,053,339
<b><u>Unsecured Notes</u></b>											
7	Senior Notes Due 2017 - 5.85% Coupon (1)	\$250,000,000	5/30/2007	6/15/2017	\$250,000,000	\$1,625,000	\$250,000	\$248,125,000	5.951%	\$250,000,000	\$14,876,484
8	Senior Notes Due 2011 - 6.5% Coupon (2)	\$150,000,000	3/20/2001	11/15/2011	\$150,000,000	\$1,198,500	\$50,000	\$148,751,500	6.615%	\$150,000,000	\$9,922,646
9	Senior Notes Due 2035 -6.05% Coupon (3)	\$250,000,000	11/17/2005	11/15/2035	\$250,000,000	\$2,187,500	\$150,000	\$247,662,500	6.118%	\$250,000,000	\$15,296,070
<b><u>Environmental Improvement Revenue Refunding Bonds</u></b>											
10	2005 Series Due 2035 - 4.65% Coupon	\$50,000,000	9/1/2005	9/1/2035					4.817%	\$50,000,000	\$2,408,500
11	2007 Series A Due 2035	\$73,250,000	9/19/07	9/1/2035					4.157%	\$73,250,000	\$3,045,341
12	2007 Series B Due 2035	\$73,250,000	9/19/07	9/1/2035					4.217%	\$73,250,000	\$3,089,183
<b><u>Other Long-Term Debt</u></b>											
13	Unamortized Discount on Senior Notes									(\$1,880,930)	\$0
14	Loss/(Gain) on Reacquired Debt									\$0	\$504,812
15	Weighted Cost of Interest Rate Management Products									\$0	(\$593,312)
16	<b>Total KCP&amp;L Long-Term Debt Capital</b>									<b>\$1,003,387,070</b>	<b>\$55,266,647</b>
17	<b>KCP&amp;L Weighted Avg. Cost of Long-Term Debt Capital</b>								<b>5.508%</b>		

KANSAS CITY POWER & LIGHT COMPANY AND GREAT PLAINS ENERGY

Weighted Average Cost of Long-Term Debt Capital

At December 31, 2007

Line	Issue	(a) Initial Offering	(b) Date of Offering	(c) Date of Maturity	(d) Price to Public	(e) Underwriters Discounts & Commissions	(f) Issuance Expense	(g) Net Proceeds to Company	(h) Cost to Company	(i) Long-term Debt Capital Outstanding	(j) Annual Cost of Long-term Debt Capital
<b>GREAT PLAINS ENERGY ONLY</b>											
<u>Unsecured Notes</u>											
1	Senior Notes Due 2017 - 6.875% Coupon (4)	\$100,000,000	9/20/2007	9/15/2017	\$100,000,000	\$650,000	\$500,000	\$98,850,000	7.037%	\$100,000,000	\$7,037,102
<u>Affordable Housing Notes</u>											
2	Missouri Affordable Housing Fund IX - NDH	\$3,907,767	3/30/1999	10/1/2008					7.740%	\$322,397	\$24,954
<u>Other Long-Term Debt</u>											
3	Unamortized Discount on Senior Notes									(\$500,950)	
4	Weighted Cost of Interest Rate Management Products										\$127,862
5	<b>Total GPE Only Long-Term Debt Capital</b>									<b>\$99,821,447</b>	<b>\$7,189,918</b>
6	<b>GPE Only Weighted Avg. Cost of Long-Term Debt Capital</b>								<b>7.203%</b>		
<hr/>											
<b>GREAT PLAINS ENERGY</b>											
7	<b>Total GPE Long-Term Debt Capital</b>									<b>\$1,103,208,517</b>	<b>\$62,456,565</b>
8	<b>GPE Weighted Avg. Cost of Long-Term Debt Capital</b>								<b>5.661%</b>		

- (1) Expenses associated with the Senior Notes issue are being amortized over a 10 year period.
- (2) Expenses associated with the Senior Notes issue are being amortized over a 10 year period.
- (3) Expenses associated with the Senior Notes are being amortized over a 30 year period.
- (4) Expenses associated with the Senior Notes issue are being amortized over a 10 year period.

**SCHEDULE SCH-2, PAGES 5-6**

**THESE PAGES CONTAIN  
HIGHLY CONFIDENTIAL  
INFORMATION NOT AVAILABLE  
TO THE PUBLIC**

**KANSAS CITY POWER & LIGHT COMPANY AND GREAT PLAINS ENERGY**  
**Weighted Average Cost of Long-Term Debt Capital**  
**At March 31, 2009 (Est.)**

Line	Issue	(a) Initial Offering	(b) Date of Offering	(c) Date of Maturity	(d) Price to Public	(e) Underwriters Discounts & Commissions	(f) Issuance Expense	(g) Net Proceeds to Company	(h) Cost to Company	(i) Long-term Debt Capital Outstanding	(j) Annual Cost of Long-term Debt Capital
<b>KANSAS CITY POWER &amp; LIGHT ONLY</b>											
<b>Pledged General Mortgage Bonds</b>											
1	EIRR 1992 Series	\$31,000,000	9/15/1992	7/1/2017					5.603%	\$31,000,000	\$1,736,930
2	EIRR Hawthorn 1993 Series - 4.0% Coupon	\$12,366,000	10/14/1993	1/2/2012					4.202%	\$12,366,000	\$519,619
3	MATES Series 1993-A	\$40,000,000	12/7/1993	12/1/2023					5.385%	\$40,000,000	\$2,154,000
4	MATES Series 1993-B	\$39,480,000	12/7/1993	12/1/2023					5.136%	\$39,480,000	\$2,027,693
5	EIRR La Cygne 1994 Series - 4.05% Coupon	\$13,982,500	2/23/1994	3/1/2015					4.254%	\$13,982,000	\$594,794
6	EIRR La Cygne 1994 Series - 4.65% Coupon	\$21,940,000	2/23/1994	9/1/2035					4.731%	\$21,940,000	\$1,037,981
<b>Unsecured Notes</b>											
7	Senior Notes Due 2017 - 5.85% Coupon (1)	\$250,000,000	5/30/2007	6/15/2017	\$250,000,000	\$1,625,000	\$250,000	\$248,125,000	5.951%	\$250,000,000	\$14,876,484
8	Senior Notes Due 2011 - 6.5% Coupon (2)	\$150,000,000	3/20/2001	11/15/2011	\$150,000,000	\$1,198,500	\$50,000	\$148,751,500	6.615%	\$150,000,000	\$9,922,646
9	Senior Notes Due 2035 - 6.05% Coupon (3)	\$250,000,000	11/17/2005	11/15/2035	\$250,000,000	\$2,187,500	\$150,000	\$247,662,500	6.118%	\$250,000,000	\$15,296,070
10	Senior Notes Due 2018 - 6.375% Coupon (4)	\$350,000,000	3/6/2008	3/1/2018	\$350,000,000	\$2,275,000	\$250,000	\$347,475,000	6.474%	\$350,000,000	\$22,659,422
<b>Environmental Improvement Revenue Refunding Bonds</b>											
11	2005 Series Due 2035 - 4.65% Coupon	\$50,000,000	9/1/05	9/1/2035					4.747%	\$50,000,000	\$2,373,500
12	2007 Series A-1 Due 2035	\$63,250,000	9/19/07	9/1/2035					5.229%	\$63,250,000	\$3,307,525
13	2007 Series A-2 Due 2035	\$10,000,000	9/19/07	9/1/2035					5.049%	\$10,000,000	\$504,914
14	2007 Series B Due 2035	\$73,250,000	9/19/07	9/1/2035					5.489%	\$73,250,000	\$4,020,631
15	2008 Series Due 2038	\$23,400,000	5/28/08	5/1/2038					4.930%	\$23,400,000	\$1,153,586
<b>Other Long-Term Debt</b>											
16	Unamortized Discount on Senior Notes									(\$1,737,784)	\$0
17	Loss/(Gain) on Reacquired Debt									\$0	\$388,142
18	Net Weighted Cost of Interest Rate Management Products									\$0	\$3,188,878
19	<b>Total KCP&amp;L Long-Term Debt Capital</b>									<b>\$1,376,930,216</b>	<b>\$85,762,816</b>
20	<b>KCP&amp;L Weighted Avg. Cost of Long-Term Debt Capital</b>								<b>6.229%</b>		

**KANSAS CITY POWER & LIGHT COMPANY AND GREAT PLAINS ENERGY**  
**Weighted Average Cost of Long-Term Debt Capital**  
**At March 31, 2009 (Est.)**

Line	Issue	(a) Initial Offering	(b) Date of Offering	(c) Date of Maturity	(d) Price to Public	(e) Underwriters Discounts & Commissions	(f) Issuance Expense	(g) Net Proceeds to Company	(h) Cost to Company	(i) Long-term Debt Capital Outstanding	(j) Annual Cost of Long-term Debt Capital
<b>GREAT PLAINS ENERGY ONLY</b>											
<u>Unsecured Notes</u>											
1	Senior Notes Due 2017 - 6.875% Coupon (5)	\$100,000,000	9/20/2007	9/15/2017	\$100,000,000	\$650,000	\$500,000	\$98,850,000	7.037%	\$100,000,000	\$7,037,102
<u>Other Long-Term Debt</u>											
2	Unamortized Discount on Senior Notes									(\$436,450)	
3	Weighted Cost of Interest Rate Management Products										\$453,103
4	<b>Total GPE Only Long-Term Debt Capital</b>									<b>\$99,563,550</b>	<b>\$7,490,206</b>
5	<b>GPE Only Weighted Avg. Cost of Long-Term Debt Capital</b>								<b>7.523%</b>		
<hr/>											
<b>GREAT PLAINS ENERGY and KANSAS CITY POWER &amp; LIGHT</b>											
6	<b>Total GPE and KCP&amp;L Long-Term Debt Capital</b>									<b>\$1,476,493,766</b>	<b>\$93,253,022</b>
7	<b>GPE and KCP&amp;L Weighted Avg. Cost of Long-Term Debt Capital</b>								<b>6.316%</b>		

**KANSAS CITY POWER & LIGHT COMPANY AND GREAT PLAINS ENERGY**  
**Weighted Average Cost of Long-Term Debt Capital**  
**At March 31, 2009 (Est.)**

Line	Issue	(a) Initial Offering	(b) Date of Offering	(c) Date of Maturity	(d) Price to Public	(e) Underwriters Discounts & Commissions	(f) Issuance Expense	(g) Net Proceeds to Company	(h) Cost to Company	(i) Long-term Debt Capital Outstanding	(j) Annual Cost of Long-term Debt Capital
<b>AQUILA ONLY</b>											
<b><u>Pledged General Mortgage Bonds</u></b>											
1	SJLP First Mortgage Bonds - 9.44%	\$22,500,000	2/1/91	2/1/21						\$13,500,000	
<b><u>Unsecured Notes</u></b>											
2	Senior Notes Due 2021 - 8.27% Coupon	\$131,750,000	3/31/99	11/15/21						\$80,850,000	
3	Senior Notes Due 2009 - 7.625% Coupon	\$200,000,000	11/15/99	11/15/09						\$68,489,000	
4	Senior Notes Due 2011 - 9.95% Coupon	\$250,000,000	2/1/01	2/1/11						\$137,310,000	
5	Senior Notes Due 2011 - 7.75% Coupon	\$200,000,000	6/20/01	6/15/11						\$197,000,000	
6	Senior Notes Due 2011 - 14.875% Coupon	\$500,000,000	7/3/02	7/1/12						\$500,000,000	
7	Medium Term Notes Due 2013 - 7.16% Coupon	\$9,000,000	11/30/93	11/30/13						\$6,000,000	
8	Medium Term Notes Due 2023 - 7.33% Coupon	\$3,000,000	11/30/93	11/30/13						\$3,000,000	
9	Medium Term Notes Due 2023 - 7.17% Coupon	\$7,000,000	12/6/93	12/1/23						\$7,000,000	
<b><u>Environmental Improvement Revenue Refunding Bonds</u></b>											
10	Wamego 1996 Series	\$7,300,000	3/1/96	3/1/26						\$7,300,000	
11	SJLP EIERA Bonds - 5.85%	\$5,600,000	6/4/95	2/1/13						\$5,600,000	
12	Sibley 1993 Series	\$5,000,000	5/26/93	5/1/28						\$5,000,000	
<b><u>Other Long-Term Debt</u></b>											
13	Sanwa Bus CC	\$8,190,000	12/9/95	12/9/09						\$667,952	
14	MZ Partners Nebraska	\$3,640,000	6/9/94	7/1/09						\$136,767	
15	Unamortized Discount									(\$8,546,100)	
16	<b>Total Aquila Long-Term Debt Capital</b>									<b>\$1,023,307,619</b>	
<hr/>											
<b>GREAT PLAINS ENERGY, KANSAS CITY POWER &amp; LIGHT and AQUILA</b>											
17	<b>Total GPE, KCP&amp;L and Aquila Long-Term Debt Capital</b>									<b>\$2,499,801,385</b>	

- (1) Expenses associated with the Senior Notes are being amortized over a 10 year period.
- (2) Expenses associated with the Senior Notes are being amortized over a 10 year period.
- (3) Expenses associated with the Senior Notes are being amortized over a 30 year period.
- (4) Expenses associated with the Senior Notes are being amortized over a 10 year period.
- (5) Expenses associated with the Senior Notes are being amortized over a 10 year period.



GREAT PLAINS ENERGY INCORPORATED

Weighted Cost of Preferred Stock Capital Outstanding at  
March 31, 2009 (Est.)

Line	(a) Description of Issue	(b) Date of Issuance	(c) No. of Shares Initial Offering	(d) Price to Public	(e) Underwriters Discounts & Commissions	(f) Issuance Expense	(g) Net Proceeds to Company	(h) Cost to Company	(i) Preferred Stock Capital Outstanding	(j) Annual Cost of Preferred Stock Capital
1	3.80% cum \$100 par	12-01-46	100,000	\$10,270,000	\$179,000	\$58,391	\$10,032,609	3.788%	\$10,000,000	\$378,800
2	4.50% cum \$100 par	1-20-52	100,000	10,000,000	195,000	79,241	9,725,759	4.627%	10,000,000	462,700
3	4.20% cum \$100 par	1-21-54	70,000	7,070,000	122,500	41,270	6,906,230	4.257%	7,000,000	297,990
4	4.35% cum \$100 par	4-17-56	120,000	12,000,000	201,600	71,304	11,727,096	4.451%	<u>12,000,000</u>	<u>534,120</u>
5	<b>Total Preferred Stock Capital September 30, 2007 (Est.)</b>								<u>\$39,000,000</u>	<u>\$1,673,610</u>
6	Weighted Average Cost at September 30, 2007 (Est.)						<u>4.291%</u>			

**Kansas City Power & Light Company  
Historical Capital Market Costs**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<b>Prime Rate</b>	8.4%	8.0%	9.2%	6.9%	4.7%	4.1%	4.3%	6.2%	8.0%	8.1%
<b>Consumer Price Index</b>	1.6%	2.7%	3.4%	1.6%	2.4%	1.8%	3.4%	3.4%	2.6%	4.1%
<b>Long-Term Treasuries</b>	5.6%	5.9%	5.9%	5.5%	5.4%	5.0%	5.1%	4.7%	5.0%	4.9%
<b>Moody's Avg Utility Debt</b>	7.0%	7.6%	8.1%	7.7%	7.5%	6.6%	6.2%	5.7%	6.1%	6.1%
<b>Moody's Baa Utility Debt</b>	7.3%	7.9%	8.4%	8.0%	8.0%	6.8%	6.4%	5.9%	6.3%	6.3%

**SOURCES:**

Prime Interest Rate - Federal Reserve Bank of St. Louis website

Consumer Price Index For All Urban Consumers: All Items (Seasonally Adjusted, December to December) - Federal Reserve Bank of St. Louis website

Long-Term Treasuries - Federal Reserve Bank of St. Louis website

Moody's Average Utility Debt - Moody's (Mergent) Bond Record

Moody's Baa Utility Debt - Moody's (Mergent) Bond Record

## Kansas City Power & Light Company

### Long-Term Interest Rate Trends

Month	Interest Rates			Triple-B Utility Spreads	
	Triple-B Utility	30-Year Treasury Bond	10-Year Treasury Note	Triple-B Utility Minus: 30-Year Treasury	10-Year Treasury
Jan-06	6.06	ND	4.42	ND	1.64
Feb-06	6.11	4.54	4.57	1.57	1.54
Mar-06	6.26	4.73	4.72	1.53	1.54
Apr-06	6.54	5.06	4.99	1.48	1.55
May-06	6.59	5.20	5.11	1.39	1.48
Jun-06	6.63	5.15	5.11	1.48	1.52
Jul-06	6.63	5.13	5.09	1.50	1.54
Aug-06	6.43	5.00	4.88	1.43	1.55
Sep-06	6.26	4.85	4.72	1.41	1.54
Oct-06	6.24	4.85	4.73	1.39	1.51
Nov-06	6.04	4.69	4.60	1.35	1.44
Dec-06	6.05	4.68	4.56	1.37	1.49
Jan-07	6.16	4.85	4.76	1.31	1.40
Feb-07	6.10	4.82	4.72	1.28	1.38
Mar-07	6.10	4.72	4.56	1.38	1.54
Apr-07	6.24	4.87	4.69	1.37	1.55
May-07	6.23	4.90	4.75	1.33	1.48
Jun-07	6.54	5.20	5.10	1.34	1.44
Jul-07	6.49	5.11	5.00	1.38	1.49
Aug-07	6.51	4.93	4.67	1.58	1.84
Sep-07	6.45	4.79	4.52	1.66	1.93
Oct-07	6.36	4.77	4.53	1.59	1.83
Nov-07	6.27	4.52	4.15	1.75	2.12
Dec-07	6.51	4.53	4.10	1.98	2.41
Jan-08	6.35	4.33	3.74	2.02	2.61
Feb-08	6.60	4.52	3.74	2.08	2.86
Mar-08	6.68	4.39	4.45	2.29	2.23
Apr-08	6.81	4.44	3.68	2.37	3.13
May-08	6.79	4.60	3.88	2.19	2.91
Jun-08	6.93	4.69	4.10	2.24	2.83
Jul-08	6.97	4.57	4.01	2.40	2.96

Sources: Mergent Bond Record (Utility Rates);  
www.federalreserve.gov (Treasury Rates).

July 2008

### Economic Indicators

Seasonally Adjusted Annual Rates — Dollar Figures in Billions

			Annual % Change											
2007	E2008	E2009	2007	2008	E2009	2007	E2008			E2009				
						4Q	1Q	E2Q	E3Q	E4Q	1Q	2Q	3Q	
<b>Gross Domestic Product</b>														
\$13,841.0	\$14,361.3	\$14,763.9	4.9	3.8	2.8	<b>GDP (current dollars)</b>								
4.9	3.8	2.8	-	-	-	\$14,074.0	\$14,201.1	\$14,291.3	\$14,453.2	\$14,499.6	\$14,542.8	\$14,639.9	\$14,829.7	
2.2	1.6	0.7	-	-	-	<b>Annual rate of increase (%)</b>								
2.7	2.1	2.1	-	-	-	3.0	3.7	2.6	4.6	1.3	1.2	2.7	5.3	
						<b>Annual rate of increase—real GDP (%)</b>								
						<b>Annual rate of increase—GDP deflator (%)</b>								
						0.6	1.0	1.7	1.8	(1.6)	(1.1)	2.1	2.8	
						2.4	2.7	0.8	2.7	3.0	2.4	0.6	2.5	
<b>*Components of Real GDP</b>														
\$8,278.0	\$8,417.1	\$8,442.5	2.9	1.7	0.3	<b>Personal consumption expenditures</b>								
2.9	1.7	0.3	-	-	-	\$8,349.0	\$8,372.9	\$8,428.6	\$8,454.7	\$8,412.1	\$8,390.7	\$8,419.6	\$8,451.5	
1,235.4	1,214.9	1,186.0	4.7	(1.7)	(2.4)	<b>% change</b>								
2,392.8	2,418.6	2,409.9	2.4	1.1	(0.4)	2.3	1.1	2.7	1.2	(2.0)	(1.0)	1.4	1.5	
4,674.8	4,795.4	4,847.9	2.8	2.6	1.1	1,248.1	1,229.1	1,225.9	1,220.8	1,183.9	1,165.7	1,181.6	1,186.4	
1,368.4	1,415.8	1,378.3	4.7	3.5	(2.7)	2,404.2	2,403.2	2,432.0	2,429.3	2,409.9	2,396.2	2,402.1	2,412.8	
4.7	3.5	(2.7)	-	-	-	<b>Durable goods</b>								
1,064.5	1,085.3	1,082.2	1.3	2.0	(0.3)	4,722.4	4,758.9	4,785.9	4,816.7	4,820.1	4,825.5	4,836.7	4,853.2	
463.7	360.4	318.9	(17.2)	(22.3)	(11.5)	<b>Nonresidential fixed investment</b>								
(17.2)	(22.3)	(11.5)	-	-	-	1,407.8	1,409.7	1,413.5	1,413.2	1,426.9	1,388.2	1,374.9	1,371.0	
4.5	(39.4)	(24.2)	-	-	-	<b>% change</b>								
2,021.6	2,066.0	2,065.1	2.0	2.2	(0.0)	6.0	0.5	1.1	(0.1)	3.9	(10.4)	(3.8)	(1.1)	
755.1	785.1	799.1	1.7	4.0	1.8	1,081.7	1,082.3	1,073.9	1,082.9	1,102.3	1,071.1	1,072.3	1,085.6	
1,266.4	1,281.5	1,267.5	2.2	1.2	(1.1)	<b>Producers durable equipment</b>								
(555.6)	(433.4)	(316.7)	-	-	-	422.1	392.9	370.5	351.3	326.8	306.7	308.4	321.6	
1,409.9	1,528.7	1,653.5	8.1	8.4	8.2	<b>Residential fixed investment</b>								
1,965.5	1,962.1	1,970.2	1.9	(0.2)	0.4	(25.5)	(24.9)	(21.0)	(19.1)	(25.2)	(22.4)	2.3	18.2	
						<b>% change</b>								
						<b>Net change in business inventories</b>								
						<b>Gov't purchases of goods &amp; services</b>								
						<b>Federal</b>								
						<b>State &amp; local</b>								
						<b>Net exports</b>								
						<b>Exports</b>								
						<b>Imports</b>								
<b>**Income &amp; Profits</b>														
\$11,660.0	\$12,215.0	\$12,613.9	6.2	4.7	3.3	<b>Personal income</b>								
10,177.0	10,763.6	11,070.9	5.7	5.7	2.9	\$11,857.0	\$12,012.1	\$12,232.2	\$12,276.9	\$12,339.0	\$12,447.7	\$12,541.7	\$12,659.4	
0.4	0.4	(0.2)	-	-	-	<b>Disposable personal income</b>								
1,876.7	1,716.1	1,697.1	3.9	(8.6)	(1.1)	10,349.0	10,497.4	10,926.7	10,816.4	10,814.0	10,937.1	11,017.0	11,107.7	
1,410.1	1,300.1	1,271.8	4.3	(7.8)	(2.2)	<b>Savings rate (%)</b>								
66.20	72.01	67.66	(18.8)	8.8	(6.0)	0.0	0.4	2.7	(0.3)	(1.2)	(0.5)	(0.1)	(0.1)	
						<b>Corporate profits before taxes</b>								
						<b>Corporate profits after taxes</b>								
						<b>†Earnings per share (S&amp;P 500)</b>								
						1,879.9	1,735.7	1,757.3	1,761.1	1,610.2	1,698.5	1,640.5	1,701.3	
						1,425.5	1,313.8	1,333.1	1,333.1	1,220.5	1,274.2	1,232.1	1,274.7	
						66.20	60.44	55.45	59.77	72.01	74.88	74.56	71.70	
<b>†Prices &amp; Interest Rates</b>														
2.9	5.3	3.3	-	-	-	<b>Consumer price index</b>								
4.4	1.9	2.4	-	-	-	5.0	4.3	4.8	10.2	7.3	2.4	(1.7)	1.1	
4.6	3.9	4.7	-	-	-	<b>Treasury bills</b>								
4.8	4.6	5.2	-	-	-	3.4	2.2	1.6	1.8	1.9	1.9	2.0	2.5	
5.6	5.6	6.3	-	-	-	<b>10-yr notes</b>								
						<b>30-yr bonds</b>								
						<b>New issue rate—corporate bonds</b>								
						4.3	3.7	3.9	4.0	4.1	4.3	4.5	4.8	
						4.6	4.4	4.6	4.6	4.7	4.8	4.9	5.3	
						5.5	5.5	5.6	5.7	5.7	5.9	6.1	6.4	
<b>Other Key Indicators</b>														
1,340.0	928.3	969.9	(25.8)	(30.8)	4.5	<b>Housing starts (1,000 units SAAR)</b>								
16.1	14.4	14.1	(2.4)	(10.6)	(2.5)	1,150.0	1,053.0	974.6	881.3	804.3	790.7	917.2	1,029.3	
4.6	5.3	6.1	-	-	-	<b>Auto &amp; truck sales (1,000,000 units)</b>								
(5.6)	(8.9)	(1.1)	-	-	-	16.1	15.2	14.1	14.4	14.0	13.7	14.0	14.1	
						<b>Unemployment rate (%)</b>								
						<b>\$U.S. dollar</b>								
						4.8	4.9	5.3	5.4	5.7	5.9	6.1	6.2	
						(17.9)	(6.9)	(6.0)	(3.1)	0.9	(3.0)	(1.2)	3.6	

Note: Annual changes are from prior year and quarterly changes are from prior quarter. Figures may not add to totals because of rounding. A—Advance data. P—Preliminary. E—Estimated. R—Revised. \*1996 Chain-weighted dollars. \*\*Current dollars. †Trailing 4 quarters. ‡Average for period. §Quarterly % changes at quarterly rates. This forecast prepared by Standard & Poor's.

**Kansas City Power & Light Company**  
**GDP Growth Rate Forecast**

Schedule SCH-4

	Nominal GDP	% Change	GDP Price Deflator	% Change	CPI	% Change
1947	244.2		15.5		22.3	
1948	269.2	10.2%	16.4	5.6%	24.1	7.7%
1949	267.3	-0.7%	16.4	-0.2%	23.8	-1.0%
1950	293.8	9.9%	16.5	1.0%	24.1	1.1%
1951	339.3	15.5%	17.7	7.2%	26.0	7.9%
1952	358.4	5.6%	18.0	1.7%	26.6	2.3%
1953	379.4	5.9%	18.2	1.2%	26.8	0.8%
1954	380.4	0.3%	18.4	1.0%	26.9	0.3%
1955	414.8	9.0%	18.7	1.8%	26.8	-0.2%
1956	437.5	5.5%	19.4	3.5%	27.2	1.4%
1957	461.1	5.4%	20.0	3.3%	28.1	3.4%
1958	467.2	1.3%	20.5	2.3%	28.9	2.7%
1959	506.6	8.4%	20.8	1.2%	29.2	1.0%
1960	526.4	3.9%	21.0	1.4%	29.6	1.5%
1961	544.7	3.5%	21.3	1.1%	29.9	1.0%
1962	585.6	7.5%	21.6	1.4%	30.3	1.2%
1963	617.8	5.5%	21.8	1.1%	30.6	1.3%
1964	663.6	7.4%	22.1	1.5%	31.0	1.3%
1965	719.1	8.4%	22.5	1.8%	31.6	1.6%
1966	787.8	9.5%	23.2	2.8%	32.5	3.0%
1967	832.6	5.7%	23.9	3.1%	33.4	2.7%
1968	910.0	9.3%	24.9	4.3%	34.8	4.2%
1969	984.6	8.2%	26.1	5.0%	36.7	5.4%
1970	1038.5	5.5%	27.5	5.3%	38.8	5.9%
1971	1127.1	8.5%	28.9	5.0%	40.5	4.2%
1972	1238.3	9.9%	30.2	4.3%	41.8	3.3%
1973	1382.7	11.7%	31.8	5.6%	44.4	6.3%
1974	1500.0	8.5%	34.7	9.1%	49.3	11.0%
1975	1638.3	9.2%	38.0	9.4%	53.8	9.1%
1976	1825.3	11.4%	40.2	5.8%	56.9	5.8%
1977	2030.9	11.3%	42.7	6.3%	60.6	6.5%
1978	2294.7	13.0%	45.7	7.0%	65.2	7.6%
1979	2563.3	11.7%	49.5	8.3%	72.6	11.3%
1980	2789.5	8.8%	54.0	9.1%	82.4	13.5%
1981	3128.4	12.1%	59.1	9.4%	90.9	10.4%
1982	3255.0	4.0%	62.7	6.1%	96.5	6.2%
1983	3536.7	8.7%	65.2	3.9%	99.6	3.2%
1984	3933.2	11.2%	67.6	3.8%	103.9	4.4%
1985	4220.3	7.3%	69.7	3.0%	107.6	3.5%
1986	4462.8	5.7%	71.2	2.2%	109.7	1.9%
1987	4739.5	6.2%	73.2	2.7%	113.6	3.6%
1988	5103.8	7.7%	75.7	3.4%	118.3	4.1%
1989	5484.4	7.5%	78.6	3.8%	123.9	4.8%
1990	5803.1	5.8%	81.6	3.9%	130.7	5.4%
1991	5995.9	3.3%	84.4	3.5%	136.2	4.2%
1992	6337.8	5.7%	86.4	2.3%	140.3	3.0%
1993	6657.4	5.0%	88.4	2.3%	144.5	3.0%
1994	7072.2	6.2%	90.3	2.1%	148.2	2.6%
1995	7397.7	4.6%	92.1	2.0%	152.4	2.8%
1996	7816.8	5.7%	93.8	1.9%	156.9	2.9%
1997	8304.3	6.2%	95.4	1.7%	160.5	2.3%
1998	8747.0	5.3%	96.5	1.1%	163.0	1.5%
1999	9268.4	6.0%	97.9	1.4%	166.6	2.2%
2000	9817.0	5.9%	100.0	2.2%	172.2	3.4%
2001	10128.0	3.2%	102.4	2.4%	177.0	2.8%
2002	10469.6	3.4%	104.2	1.7%	179.9	1.6%
2003	10960.8	4.7%	106.4	2.1%	184.0	2.3%
2004	11685.9	6.6%	109.5	2.9%	188.9	2.7%
2005	12433.9	6.4%	113.0	3.2%	195.3	3.4%
2006	13194.7	6.1%	116.6	3.2%	201.6	3.2%
2007	13843.0	4.9%	119.7	2.7%	207.3	2.9%
10-Year Average		5.2%		2.3%		2.6%
20-Year Average		5.5%		2.5%		3.1%
30-Year Average		6.6%		3.5%		4.2%
40-Year Average		7.3%		4.1%		4.7%
50-Year Average		7.1%		3.7%		4.1%
60-Year Average		7.0%		3.5%		3.8%
Average of Periods		6.5%		3.3%		3.8%

Source: St. Louis Federal Reserve Bank, [www.research.stlouisfed.org](http://www.research.stlouisfed.org)

**Kansas City Power & Light Company**  
**Discounted Cash Flow Analysis**  
**Summary Of DCF Model Results**

Company	Constant Growth DCF Model Analysts' Growth Rates	Constant Growth DCF Model Long-Term GDP Growth	Low Near-Term Growth Two-Stage Growth DCF Model
1 ALLETE	8.8%	10.8%	10.4%
2 Alliant Energy Co.	10.3%	11.0%	11.1%
3 Ameren	10.2%	12.6%	11.6%
4 American Elec. Pwr.	11.1%	11.0%	11.4%
5 Avista Corp.	9.7%	10.1%	10.8%
6 Cent. Vermont P.S.	12.5%	10.8%	10.1%
7 Cleco Corporation	15.8%	10.2%	11.4%
8 Con. Edison	8.4%	12.5%	11.6%
9 DTE Energy Co.	10.8%	11.5%	11.0%
10 Edison Internat.	10.1%	9.2%	9.2%
11 Empire District	14.4%	12.9%	12.3%
12 Entergy Corp.	14.6%	9.7%	10.0%
13 FPL Group, Inc.	12.9%	9.5%	9.5%
14 FirstEnergy	12.4%	9.7%	9.8%
15 Hawaiian Electric	12.9%	11.4%	10.8%
16 IDACORP	8.7%	10.5%	9.9%
17 NiSource Inc.	9.0%	11.8%	11.3%
18 Northeast Utilities	13.3%	9.9%	9.8%
19 NSTAR	11.2%	11.1%	11.1%
20 PG&E Corp.	11.0%	10.8%	10.8%
21 Pinnacle West	10.7%	13.0%	12.4%
22 Portland General	11.1%	10.8%	10.7%
23 Progress Energy	11.2%	12.4%	11.6%
24 Southern Co.	10.0%	11.3%	11.1%
25 Teco Energy, Inc.	12.2%	10.7%	10.3%
26 UIL Holdings Co.	11.7%	12.0%	11.2%
27 Vectren Corp.	9.7%	11.1%	10.6%
28 Westar Energy	9.1%	11.9%	11.5%
29 Wisconsin Energy	11.7%	9.2%	9.3%
30 Xcel Energy Inc.	11.1%	11.3%	10.8%
<b>GROUP AVERAGE</b>	<b>11.2%</b>	<b>11.0%</b>	<b>10.8%</b>
<b>GROUP MEDIAN</b>	<b>11.1%</b>	<b>11.0%</b>	<b>10.8%</b>

Sources: Value Line Investment Survey, Electric Utility (East), Aug 29, 2008; (Central), Jun 27, 2008; (West), Aug 8, 2008.

NOTE: SEE PAGE 5 OF THIS SCHEDULE FOR FURTHER EXPLANATION OF EACH COLUMN.

**Kansas City Power & Light Company**  
**Constant Growth DCF Model**  
**Analysts' Growth Rates**

Company	(1)	(2)	(3)	(4) (5) (6)			(7)	(8)
	Recent Price(P0)	Next Year's Dividend		Value Line	Zacks Thomson		Average Growth (Cols 4-6)	ROE K=Div Yld+G (Cols 3+7)
		Year's Div(D1)	Dividend Yield		Zacks	Thomson		
1 ALLETE	42.10	1.80	4.28%	2.50%	5.00%	6.00%	4.50%	8.8%
2 Alliant Energy Co.	34.06	1.53	4.49%	6.00%	6.10%	5.40%	5.83%	10.3%
3 Ameren	41.94	2.54	6.06%	3.50%	5.00%	4.00%	4.17%	10.2%
4 American Elec. Pwr.	40.08	1.80	4.49%	7.50%	6.30%	5.97%	6.59%	11.1%
5 Avista Corp.	21.85	0.78	3.57%	9.00%	5.00%	4.50%	6.17%	9.7%
6 Cent. Vermont P.S.	21.25	0.92	4.33%	7.50%	NA	8.90%	8.20%	12.5%
7 Cleco Corporation	24.56	0.90	3.66%	10.50%	14.00%	12.04%	12.18%	15.8%
8 Con. Edison	39.55	2.36	5.97%	1.00%	3.20%	3.00%	2.40%	8.4%
9 DTE Energy Co.	42.34	2.12	5.01%	5.00%	6.30%	6.00%	5.77%	10.8%
10 Edison Internat.	49.22	1.34	2.72%	5.00%	8.80%	8.45%	7.42%	10.1%
11 Empire District	20.02	1.28	6.39%	10.00%	NA	6.00%	8.00%	14.4%
12 Entergy Corp.	112.15	3.60	3.21%	10.00%	12.00%	12.18%	11.39%	14.6%
13 FPL Group, Inc.	64.10	1.92	3.00%	9.50%	10.30%	9.84%	9.88%	12.9%
14 FirstEnergy	76.04	2.45	3.22%	11.00%	8.30%	8.33%	9.21%	12.4%
15 Hawaiian Electric	25.21	1.24	4.92%	7.50%	4.20%	12.20%	7.97%	12.9%
16 IDACORP	29.73	1.20	4.04%	2.00%	6.00%	6.00%	4.67%	8.7%
17 NiSource Inc.	17.28	0.92	5.32%	5.00%	3.00%	2.91%	3.64%	9.0%
18 Northeast Utilities	25.92	0.88	3.39%	11.50%	10.00%	8.22%	9.91%	13.3%
19 NSTAR	33.23	1.53	4.60%	7.50%	6.40%	6.00%	6.63%	11.2%
20 PG&E Corp.	39.10	1.68	4.30%	5.00%	7.80%	7.24%	6.68%	11.0%
21 Pinnacle West	32.83	2.12	6.46%	2.00%	6.70%	4.00%	4.23%	10.7%
22 Portland General	23.69	1.01	4.26%	7.00%	7.00%	6.65%	6.88%	11.1%
23 Progress Energy	42.33	2.49	5.88%	5.00%	4.70%	6.12%	5.27%	11.2%
24 Southern Co.	35.74	1.73	4.84%	5.50%	4.70%	5.36%	5.19%	10.0%
25 Teco Energy, Inc.	19.59	0.82	4.19%	7.00%	10.10%	6.85%	7.98%	12.2%
26 UIL Holdings Co.	31.20	1.73	5.55%	4.50%	6.00%	8.00%	6.17%	11.7%
27 Vectren Corp.	29.58	1.35	4.56%	3.50%	6.10%	5.77%	5.12%	9.7%
28 Westar Energy	22.13	1.20	5.42%	1.50%	4.80%	4.61%	3.64%	9.1%
29 Wisconsin Energy	45.53	1.24	2.72%	8.00%	9.60%	9.19%	8.93%	11.7%
30 Xcel Energy Inc.	20.29	0.97	4.78%	7.50%	5.40%	6.12%	6.34%	11.1%
GROUP AVERAGE	36.75	1.58	4.52%	6.27%	6.89%	6.86%	6.70%	11.2%
GROUP MEDIAN			4.49%					11.1%

Sources: Value Line Investment Survey, Electric Utility (East), Aug 29, 2008; (Central), Jun 27, 2008; (West), Aug 8, 2008.

NOTE: SEE PAGE 5 OF THIS SCHEDULE FOR FURTHER EXPLANATION OF EACH COLUMN.

**Kansas City Power & Light Company**  
**Constant Growth DCF Model**  
**Long-Term GDP Growth**

	(9)	(10)	(11)	(12)	(13)
Company	Next		Dividend Yield	GDP K=Div Yld+G Growth (Cols 11+12)	ROE
	Recent Price(P0)	Year's Div(D1)			
1 ALLETE	42.10	1.80	4.28%	6.50%	10.8%
2 Alliant Energy Co.	34.06	1.53	4.49%	6.50%	11.0%
3 Ameren	41.94	2.54	6.06%	6.50%	12.6%
4 American Elec. Pwr.	40.08	1.80	4.49%	6.50%	11.0%
5 Avista Corp.	21.85	0.78	3.57%	6.50%	10.1%
6 Cent. Vermont P.S.	21.25	0.92	4.33%	6.50%	10.8%
7 Cleco Corporation	24.56	0.90	3.66%	6.50%	10.2%
8 Con. Edison	39.55	2.36	5.97%	6.50%	12.5%
9 DTE Energy Co.	42.34	2.12	5.01%	6.50%	11.5%
10 Edison Internat.	49.22	1.34	2.72%	6.50%	9.2%
11 Empire District	20.02	1.28	6.39%	6.50%	12.9%
12 Entergy Corp.	112.15	3.60	3.21%	6.50%	9.7%
13 FPL Group, Inc.	64.10	1.92	3.00%	6.50%	9.5%
14 FirstEnergy	76.04	2.45	3.22%	6.50%	9.7%
15 Hawaiian Electric	25.21	1.24	4.92%	6.50%	11.4%
16 IDACORP	29.73	1.20	4.04%	6.50%	10.5%
17 NiSource Inc.	17.28	0.92	5.32%	6.50%	11.8%
18 Northeast Utilities	25.92	0.88	3.39%	6.50%	9.9%
19 NSTAR	33.23	1.53	4.60%	6.50%	11.1%
20 PG&E Corp.	39.10	1.68	4.30%	6.50%	10.8%
21 Pinnacle West	32.83	2.12	6.46%	6.50%	13.0%
22 Portland General	23.69	1.01	4.26%	6.50%	10.8%
23 Progress Energy	42.33	2.49	5.88%	6.50%	12.4%
24 Southern Co.	35.74	1.73	4.84%	6.50%	11.3%
25 Teco Energy, Inc.	19.59	0.82	4.19%	6.50%	10.7%
26 UIL Holdings Co.	31.20	1.73	5.55%	6.50%	12.0%
27 Vectren Corp.	29.58	1.35	4.56%	6.50%	11.1%
28 Westar Energy	22.13	1.20	5.42%	6.50%	11.9%
29 Wisconsin Energy	45.53	1.24	2.72%	6.50%	9.2%
30 Xcel Energy Inc.	20.29	0.97	4.78%	6.50%	11.3%
GROUP AVERAGE	36.75	1.58	4.52%	6.50%	11.0%
GROUP MEDIAN			4.49%		11.0%

Sources: Value Line Investment Survey, Electric Utility (East), Aug 29, 2008; (Central), Jun 27, 2008; (West), Aug 8, 2008.

NOTE: SEE PAGE 5 OF THIS SCHEDULE FOR FURTHER EXPLANATION OF EACH COLUMN.



**Kansas City Power & Light Company**  
**Low Near-Term Growth**  
**Two-Stage Growth DCF Model**

Company	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
	Next	Annual	Annual Change to 2012	CASH FLOWS							ROE=Internal Rate of Return (Yrs 0-150)
	Year's Div	2012 Div		Recent Price	Year 1 Div	Year 2 Div	Year 3 Div	Year 4 Div	Year 5 Div	Year 5-150 Div Growth	
1 ALLETE	1.80	2.00	0.07	-42.10	1.80	1.87	1.93	2.00	2.13	6.50%	10.4%
2 Alliant Energy Co.	1.53	1.92	0.13	-34.06	1.53	1.66	1.79	1.92	2.04	6.50%	11.1%
3 Ameren	2.54	2.54	0.00	-41.94	2.54	2.54	2.54	2.54	2.71	6.50%	11.6%
4 American Elec. Pwr.	1.80	2.40	0.20	-40.08	1.80	2.00	2.20	2.40	2.56	6.50%	11.4%
5 Avista Corp.	0.78	1.15	0.12	-21.85	0.78	0.90	1.03	1.15	1.22	6.50%	10.8%
6 Cent. Vermont P.S.	0.92	0.92	0.00	-21.25	0.92	0.92	0.92	0.92	0.98	6.50%	10.1%
7 Cleco Corporation	0.90	1.50	0.20	-24.56	0.90	1.10	1.30	1.50	1.60	6.50%	11.4%
8 Con. Edison	2.36	2.42	0.02	-39.55	2.36	2.38	2.40	2.42	2.58	6.50%	11.6%
9 DTE Energy Co.	2.12	2.30	0.06	-42.34	2.12	2.18	2.24	2.30	2.45	6.50%	11.0%
10 Edison Internat.	1.34	1.64	0.10	-49.22	1.34	1.44	1.54	1.64	1.75	6.50%	9.2%
11 Empire District	1.28	1.40	0.04	-20.02	1.28	1.32	1.36	1.40	1.49	6.50%	12.3%
12 Entergy Corp.	3.60	4.80	0.40	-112.15	3.60	4.00	4.40	4.80	5.11	6.50%	10.0%
13 FPL Group, Inc.	1.92	2.34	0.14	-64.10	1.92	2.06	2.20	2.34	2.49	6.50%	9.5%
14 FirstEnergy	2.45	3.05	0.20	-76.04	2.45	2.65	2.85	3.05	3.25	6.50%	9.8%
15 Hawaiian Electric	1.24	1.30	0.02	-25.21	1.24	1.26	1.28	1.30	1.38	6.50%	10.8%
16 IDACORP	1.20	1.20	0.00	-29.73	1.20	1.20	1.20	1.20	1.28	6.50%	9.9%
17 NiSource Inc.	0.92	1.00	0.03	-17.28	0.92	0.95	0.97	1.00	1.07	6.50%	11.3%
18 Northeast Utilities	0.88	1.03	0.05	-25.92	0.88	0.93	0.98	1.03	1.10	6.50%	9.8%
19 NSTAR	1.53	1.85	0.11	-33.23	1.53	1.64	1.74	1.85	1.97	6.50%	11.1%
20 PG&E Corp.	1.68	2.04	0.12	-39.10	1.68	1.80	1.92	2.04	2.17	6.50%	10.8%
21 Pinnacle West	2.12	2.30	0.06	-32.83	2.12	2.18	2.24	2.30	2.45	6.50%	12.4%
22 Portland General	1.01	1.20	0.06	-23.69	1.01	1.07	1.14	1.20	1.28	6.50%	10.7%
23 Progress Energy	2.49	2.55	0.02	-42.33	2.49	2.51	2.53	2.55	2.72	6.50%	11.6%
24 Southern Co.	1.73	2.00	0.09	-35.74	1.73	1.82	1.91	2.00	2.13	6.50%	11.1%
25 Teco Energy, Inc.	0.82	0.90	0.03	-19.59	0.82	0.85	0.87	0.90	0.96	6.50%	10.3%
26 UIL Holdings Co.	1.73	1.73	0.00	-31.20	1.73	1.73	1.73	1.73	1.84	6.50%	11.2%
27 Vectren Corp.	1.35	1.47	0.04	-29.58	1.35	1.39	1.43	1.47	1.57	6.50%	10.6%
28 Westar Energy	1.20	1.32	0.04	-22.13	1.20	1.24	1.28	1.32	1.41	6.50%	11.5%
29 Wisconsin Energy	1.24	1.60	0.12	-45.53	1.24	1.36	1.48	1.60	1.70	6.50%	9.3%
30 Xcel Energy Inc.	0.97	1.06	0.03	-20.29	0.97	1.00	1.03	1.06	1.13	6.50%	10.8%
GROUP AVERAGE											10.8%
GROUP MEDIAN											10.8%

Sources: Value Line Investment Survey, Electric Utility (East), Aug 29, 2008; (Central), Jun 27, 2008; (West), Aug 8, 2008.

NOTE: SEE PAGE 5 OF THIS SCHEDULE FOR FURTHER EXPLANATION OF EACH COLUMN.

**Kansas City Power & Light Company**  
**Discounted Cash Flow Analysis**  
**Column Descriptions**

Column 1: Three-month Average Price per Share (Jun 2008-Aug 2008)	Column 13: Column 11 Plus Column 12
Column 2: Estimated 2009 Dividends per Share from Value Line	Column 14: See Column 2
Column 3: Column 2 Divided by Column 1	Column 15: Estimated 2012 Dividends per Share from Value Line
Column 4: "Est'd 05-07 to 11-13" Earnings Growth Reported by Value Line	Column 16: (Column 15 Minus Column 14) Divided by Three
Column 5: "Next 5 Years" Company Growth Estimate as Reported by Zacks.com	Column 17: See Column 1
Column 6: "Next 5 Years (per annum) Growth Estimate Reported by Thomson Financial Network (at Yahoo Finance)	Column 18: See Column 14
Column 7: Average of Columns 4-6	Column 19: Column 18 Plus Column 16
Column 8: Column 3 Plus Column 7	Column 20: Column 19 Plus Column 19
Column 9: See Column 1	Column 21: Column 20 Plus Column 16
Column 10: See Column 2	Column 22: Column 21 Increased by the Growth Rate Shown in Column 23
Column 11: Column 10 Divided by Column 9	Column 23: See Column 12
Column 12: Average of GDP Growth During the Last 10 year, 20 year, 30 year, 40 year, 50 year, and 60 year growth periods. See Schedule SCH-4	Column 24: The Internal Rate of Return of the Cash Flows in Columns 17-22 along with the Dividends for the Years 6-150 Implied by the Growth Rates shown in Column 23

**Kansas City Power & Light Company**  
Risk Premium Analysis

	MOODY'S AVERAGE PUBLIC UTILITY BOND YIELD (1)	AUTHORIZED ELECTRIC RETURNS (2)	INDICATED RISK PREMIUM
1980	13.15%	14.23%	1.08%
1981	15.62%	15.22%	-0.40%
1982	15.33%	15.78%	0.45%
1983	13.31%	15.36%	2.05%
1984	14.03%	15.32%	1.29%
1985	12.29%	15.20%	2.91%
1986	9.46%	13.93%	4.47%
1987	9.98%	12.99%	3.01%
1988	10.45%	12.79%	2.34%
1989	9.66%	12.97%	3.31%
1990	9.76%	12.70%	2.94%
1991	9.21%	12.55%	3.34%
1992	8.57%	12.09%	3.52%
1993	7.56%	11.41%	3.85%
1994	8.30%	11.34%	3.04%
1995	7.91%	11.55%	3.64%
1996	7.74%	11.39%	3.65%
1997	7.63%	11.40%	3.77%
1998	7.00%	11.66%	4.66%
1999	7.55%	10.77%	3.22%
2000	8.14%	11.43%	3.29%
2001	7.72%	11.09%	3.37%
2002	7.53%	11.16%	3.63%
2003	6.61%	10.97%	4.36%
2004	6.20%	10.75%	4.55%
2005	5.67%	10.54%	4.87%
2006	6.08%	10.36%	4.28%
2007	6.11%	10.36%	4.25%
AVERAGE	9.23%	12.40%	3.17%

**INDICATED COST OF EQUITY**

PROJECTED TRIPLE-B UTILITY BOND YIELD*	6.99%
MOODY'S AVG ANNUAL YIELD DURING STUDY	9.23%
INTEREST RATE DIFFERENCE	-2.24%
INTEREST RATE CHANGE COEFFICIENT	-41.83%
ADJUSTMENT TO AVG RISK PREMIUM	0.94%
BASIC RISK PREMIUM	3.17%
INTEREST RATE ADJUSTMENT	0.94%
EQUITY RISK PREMIUM	4.11%
PROJECTED TRIPLE-B UTILITY BOND YIELD*	6.99%
<b>INDICATED EQUITY RETURN</b>	<b>11.10%</b>

(1) Moody's Investors Service

(2) Regulatory Focus, Regulatory Research Associates, Inc.

\*Projected triple-B bond yield is 209 basis points over projected long-term Treasury bond rate of 4.9% from Schedule SCH-3, p. 3. The triple-B spread is for the 12 months ended August 2008 from Schedule SCH-3, p. 2.

**Kansas City Power & Light Company**  
Risk Premium Analysis

