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**BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS**

DIRECT TESTIMONY OF

SAMUEL C. HADAWAY

**ON BEHALF OF
KANSAS CITY POWER & LIGHT COMPANY**

**IN THE MATTER OF THE APPLICATION OF
KANSAS CITY POWER & LIGHT COMPANY
TO MODIFY ITS TARIFFS TO CONTINUE THE
IMPLEMENTATION OF ITS REGULATORY PLAN**

DOCKET NO. 10-KCPE-415-RTS

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, Suite 124, 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

1 University of Texas at Austin ("UT Austin"). For the past 26 years, I have been an
2 owner and full-time employee of FINANCO, Inc. FINANCO provides financial
3 research concerning the cost of capital and financial condition for regulated
4 companies as well as financial modeling and other economic studies in litigation
5 support. In addition to my work at FINANCO, I have served as an adjunct professor
6 in the McCombs School of Business at UT Austin and in what is now the McCoy
7 College of Business at Texas State University. In my prior academic work, I taught
8 economics and finance courses and I conducted research and directed graduate
9 students in the areas of investments and capital market research. I was previously
10 Director of the Economic Research Division at the Public Utility Commission of
11 Texas ("Texas Commission") where I supervised the Texas Commission's finance,
12 economics, and accounting staff, and served as the Texas Commission's chief
13 financial witness in electric and telephone rate cases. I have taught courses at various
14 utility conferences on cost of capital, capital structure, utility financial condition, and
15 cost allocation and rate design issues. I have made presentations before the New
16 York Society of Security Analysts, the National Rate of Return Analysts Forum, and
17 various other professional and legislative groups. I have served as a vice president
18 and on the board of directors of the Financial Management Association.

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

22 **Q. Have you previously testified before the State Corporation Commission of the**
23 **State of Kansas (“KCC” or “Commission”) or other utility regulatory agencies?**

1 A. Yes, I have. I have filed testimony before the KCC and I have testified before
2 numerous other state commissions on cost of capital and related financial issues.

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

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

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

8 A. My testimony is divided into four additional sections. Following this introduction, in
9 Section II, I present and explain the Company's requested capital structure and overall
10 cost of capital. In Section III, I review various methods for estimating the cost of
11 equity. In this section, I discuss the discounted cash flow ("DCF") model, as well as
12 risk premium methods and other approaches that are often used to estimate the cost of
13 capital. In Section IV, I review general capital market costs and conditions, and
14 discuss recent developments in the electric utility industry that affect the cost of
15 capital. In Section V, I discuss the details of my cost of equity studies and provide a
16 summary table of my ROE results.

17 **Q. Please describe the general approach you use in your cost of equity studies.**

18 A. First, my recommendation is premised upon the fair rate of return principles
19 established by the U.S. Supreme Court in *Federal Power Comm'n v. Hope Natural*
20 *Gas Co.*, 320 US 591, 603 (1944) ("*Hope*") and *Bluefield Water Works &*
21 *Improvements Co. v. Public Service Commission*, 262 US 679, 693 (1923)
22 ("*Bluefield*"). That is to say, a utility's return authorized by a regulatory body, such as
23 the KCC, should be commensurate with returns on investments in other enterprises

1 having corresponding risks. The return should also be sufficient to assure confidence
2 in the financial integrity of the utility so as to maintain its credit, and to attract capital
3 so that it is able to properly discharge its public duties. Given these legal principles, I
4 have reviewed several methods to determine an appropriate ROE and overall rate of
5 return for KCP&L. These methods and the underlying economic models are applied
6 to an investment grade company reference group of other electric utilities generally
7 similar to KCP&L.

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

9 A. My ROE estimate is based on alternative versions of the constant growth and
10 multistage growth DCF model. I also provide a bond-yield-plus-equity risk premium
11 analysis and I review economic conditions and interest rates that are expected to
12 prevail during the coming year. Because KCP&L is a wholly-owned subsidiary of
13 Great Plains Energy Incorporated ("GPE") and does not have publicly traded
14 common stock or other independent market data, its cost of equity cannot be
15 estimated directly. For this reason, I apply the DCF model to a large reference group
16 of investment grade electric utilities selected from the *Value Line Investment Survey*
17 ("*Value Line*"). *Value Line* is a widely-followed, reputable source of financial data
18 often used by professional economists to estimate ROE. To be included in my group,
19 the reference companies must have at least a triple-B (investment grade) bond rating;
20 they must derive at least 70 percent of revenues from regulated utility sales; they
21 must have consistent financial records not affected by recent mergers or restructuring;
22 and they must have a consistent dividend record with no dividend cuts within the past

1 two years. The fundamental characteristics of the companies in my comparable
2 group are summarized in Schedule SCH2010-1.

3 I also conducted a risk premium analysis based on ROEs allowed by state
4 regulators relative to Moody's average utility debt costs. In this analysis, I considered
5 both current utility bond yields and the higher interest rates that Standard and Poor's
6 ("S&P") is forecasting for the coming year. S&P forecasts that long-term
7 government and corporate interest rates will increase from current levels by 30 basis
8 points (0.30%) by 2010. Under current market conditions, I place most emphasis on
9 the DCF model results because the risk premium estimates appear to be artificially
10 depressed by the lower interest rates that have resulted from the government's recent
11 monetary policy. The data sources and the details of my cost of equity studies are
12 contained in my Schedules SCH2010-1 through SCH2010-6.

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

14 A. My reference group DCF analysis indicates an ROE range of 11.1 percent to
15 11.6 percent. The risk premium analysis indicates a range of 10.62 percent to
16 10.76 percent. As I will discuss later in this testimony, recent sharp declines in
17 interest rates and the government's continuing intervention in the credit markets have
18 caused risk premium estimates of ROE to become inconsistent with the estimates
19 from the DCF model. This divergence between the two models is caused by
20 continuing volatility in the equity markets for utility shares and lower utility stock
21 prices, which are directly reflected in the dividend yields of the DCF model. Low
22 stock prices and high dividend yields indicate that the cost of equity has not declined
23 even as interest rates have dropped.

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

2 A. Based on the combination of my DCF model results and my review of current
3 economic, market, and electric utility industry conditions, I estimate KCP&L's cost of
4 equity to be 11.25 percent. This estimate is strongly supported by my DCF model
5 and is consistent with recent capital market trends and conditions.

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

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

9 A. The requested capital structure components and the resulting overall rate of return are
10 presented in Table 1 below:

11 **Table 1**
12 **Requested Capital Structure**

<u>Capital Components</u>	<u>Ratio</u>	<u>Cost</u>	<u>Weighted Cost</u>
Debt	48.68%	6.84%	3.33%
Equity-linked convertible debt	4.53%	13.59%	0.62%
Preferred stock	0.62%	4.29%	0.03%
<u>Common equity</u>	<u>46.17%</u>	<u>11.25%</u>	<u>5.19%</u>
TOTAL	100.00%		<u>9.17%</u>

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

21 A. The requested capital structure, as well as the costs for debt and preferred stock, are
22 consistent with GPE's projected capital structure at August 31, 2010. These data are
23 presented in more detail in Schedule SCH2010-2, with the August 31, 2010 summary
24 shown on page 6 of that schedule. Using the parent company's consolidated capital
25 structure is consistent with KCP&L's approach in its prior rate cases.

1 Q. What are the key differences between GPE's actual capital structure as of
2 September 30, 2009 and the requested capital structure, projected as of
3 August 31, 2010?

4 A. The actual GPE capital structure as of September 30, 2009, is shown on page 2 of
5 Schedule SCH2010-2. The key differences between the actual capital structure and
6 the requested capital structure, projected as of August 31, 2010, are as follows:

7 Long-Term Debt

8 Net Long-Term Debt is projected to increase by ****[REDACTED]**** million, the largest
9 components of which consist of the following:

10 a) Additional long-term debt of ****[REDACTED]**** million is expected to be issued by the
11 end of August 2010 to refinance maturing GMO long-term debt and finance
12 construction expenditures.

13 Offset by:

14 b) GMO long-term debt maturities of \$70 million.

15 Equity

16 Equity is projected to increase by ****[REDACTED]**** million, which is driven primarily by a
17 projected increase in retained earnings and a small amount of equity issued by GPE
18 through the dividend reinvestment and direct stock purchase plan and company
19 benefit plans.

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

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

22 A. The purpose of this section of my testimony is to present a general definition of the
23 cost of equity and to compare the strengths and weaknesses of several of the most

1 widely used methods for estimating the cost of equity. Estimating the cost of equity
2 is fundamentally a matter of informed judgment. The various models provide a
3 concrete link to actual capital market data and assist with defining the various
4 relationships that underlie the ROE estimation process.

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

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

16 An example helps to illustrate the cost of equity concept. Assume that an
17 investor buys a share of common stock for \$20 per share. If the stock's expected
18 dividend is \$1.00, the expected dividend yield is 5.0 percent ($\$1.00 / \$20 =$
19 5.0 percent). If the stock price is also expected to increase to \$21.20 after one year,
20 this \$1.20 expected gain adds an additional 6.0 percent to the expected total rate of
21 return ($\$1.20 / \$20 = 6.0$ percent). Therefore, when buying the stock at \$20 per share,
22 the investor expects a total return of 11.0 percent: 5.0 percent dividend yield, plus 6.0
23 percent price appreciation. In this example, the total expected rate of return at 11.0

1 percent is the appropriate measure of the cost of equity capital, because it is this rate
2 of return that caused the investor to commit the \$20 of equity capital in the first place.
3 If the stock were riskier, or if expected returns from other investments were higher,
4 investors would require a higher rate of return from the stock, which would result in a
5 lower initial purchase price in market trading.

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

17 **Q. How does the market account for risk differences among the various**
18 **investments?**

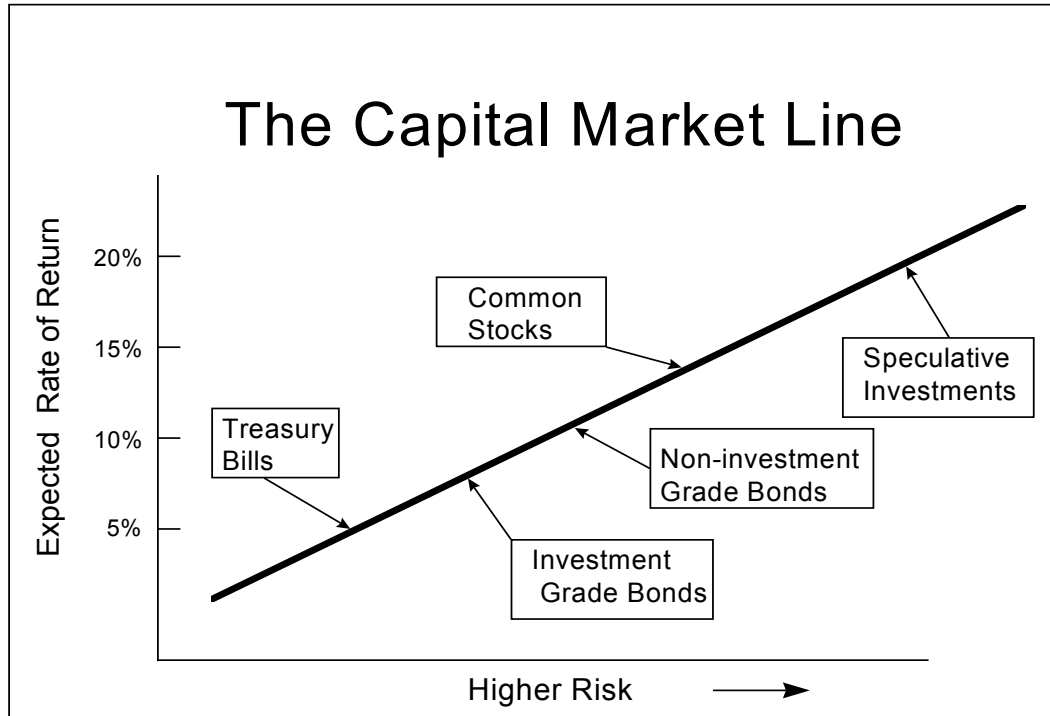
19 A. Risk-return tradeoffs among capital market investments have been the subject of
20 extensive financial research. Literally dozens of textbooks and hundreds of academic
21 articles have addressed the issue. Generally, such research confirms the common
22 sense conclusion that investors will take additional risks only if they expect to receive
23 a higher rate of return. Empirical tests consistently show that returns from low risk

1 securities, such as U.S. Treasury bills, are the lowest; that returns from longer-term
2 Treasury bonds and corporate bonds are increasingly higher as risks increase; and,
3 generally, returns from common stocks and other more risky investments are even
4 higher. These observations provide a sound theoretical foundation for both the DCF
5 and risk premium methods for estimating the cost of equity capital. These methods
6 attempt to capture the well founded risk-return principle and explicitly measure
7 investors' rate of return requirements.

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

10 A. Yes. The following graph depicts the risk-return relationship that has become widely
11 known as the Capital Market Line ("CML"). The CML offers a graphical
12 representation of the capital market risk-return principle. The graph is not meant to
13 illustrate the actual expected rate of return for any particular investment, but merely
14 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 DCF and risk premium methods provides the
15 most reliable approach. While the caveat about estimating long-term growth must be
16 observed, the DCF model's other inputs are readily obtainable, and the model's results
17 typically are consistent with capital market behavior. The risk premium methods
18 provide a good parallel approach to the DCF model and further ensure that current
19 market conditions are accurately reflected in the cost of equity estimate.

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

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

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

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

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

9
$$k = D_1/P_0 + g \quad (2)$$

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

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

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

20 Recent events and current market conditions in the electric utility industry as
21 discussed later appear to challenge the constant growth assumption of the traditional
22 DCF model. Since the mid-1980s, dividend growth expectations for many electric
23 utilities have fluctuated widely. In fact, over one-third of the electric utilities in the

1 U.S. have reduced or eliminated their common dividends over this time period. Some
2 of these companies have re-established their dividends, producing exceptionally high
3 growth rates. Under these circumstances, long-term growth rate estimates may be
4 highly uncertain, and estimating a reliable "constant" growth rate for many
5 companies is often difficult.

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

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

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

$$16 \quad P_0 = D_1/(1+k) + D_2/(1+k)^2 + \dots + P_T/(1+k)^T \quad (3)$$

17 where the variables are the same as in equation (1) except that P_T is the estimated
18 stock price at the end of the transition period T . Under the assumption that normal
19 growth resumes after the transition period, the price P_T is then expected to be based
20 on constant growth assumptions. With the terminal price approach, the estimated
21 cost of equity, k , is just the rate of return that investors would expect to earn if they
22 bought the stock at today's market price, held it and received dividends through the
23 transition period (until period T), and then sold it for price P_T . In this approach, the

1 analyst's task is to estimate the rate of return that investors expect to receive given the
2 current level of market prices they are willing to pay.

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

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

$$8 \quad P_0 = D_0(1+g_1)/(1+k) + \dots + D_2(1+g_2)^n/(1+k)^n +$$
$$9 \quad \dots + [D_T(1+g_T)^{(T+1)}/(k-g_T)]/(1+k)^T \quad (4)$$

10 where the variables are the same as in equation (1), but g_1 represents the growth rate
11 for the first period; D_2 is the dividend at the beginning of the second period and g_2 is
12 the growth rate for the second period; and D_T is the dividend at the beginning of the
13 third period and g_T is the growth rate for the period from year T (the end of the
14 transition period) to infinity. The first two growth rates are simply estimates for
15 fluctuating growth over "n" years (typically 5 or 10 years) and g_T is a constant growth
16 rate assumed to prevail forever after year T. The difficult task for analysts in the
17 multistage approach is determining the various growth rates for each period.

18 Although less convenient for exposition purposes, the nonconstant growth
19 models are based on the same valid capital market assumptions as the constant
20 growth version. The nonconstant growth approach simply requires more explicit data
21 inputs and more work to solve for the discount rate, k . Fortunately, the required data
22 are available from investment and economic forecasting services, and computer

1 algorithms can easily produce the required solutions. Both constant and nonconstant
2 growth DCF analyses are presented in the following section.

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

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

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

18 A. Generally so, but as noted previously, the recent sharp decline in interest rates and
19 continuing government intervention in the credit markets raise questions about the
20 accuracy of current risk premium estimates of ROE. The risk premium approach is
21 generally useful because it is founded on current market interest rates, which are
22 directly observable.

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

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

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

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

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

1 requirements. Differences in accounting methods among companies and issues of
2 comparability also detract from this approach.

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

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

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

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

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

15 A. In Schedule SCH2010-3, page 1, I provide a review of annual interest rates and rates
16 of inflation in the U.S. economy over the past ten years. During that time inflation
17 and fixed income market costs declined and, generally, have been lower than rates
18 that prevailed in the previous decade. Inflation, as measured by the Consumer Price
19 Index ("CPI"), until 2003 had remained at historically low levels not seen
20 consistently since the early 1960s. Since 2003, however, inflation rates have
21 fluctuated, with the average for 2004 though 2006 similar to the longer-term
22 historical average above 3 percent. The inflation rate for 2007 was even higher at 4.1

1 percent. As a result of the current economic slowdown, the CPI was essentially
2 unchanged in 2008.

3 Having reduced the Federal Funds overnight bank interest rate to virtually
4 zero, the Federal Reserve System's current monetary policy options are limited.
5 During the period from mid-2004 until mid-2006, the Federal Reserve System
6 increased the short-term Federal Funds interest rate 17 times, raising it from 1 percent
7 to 5.25 percent. In late 2007, in response to the early turbulence in the sub-prime
8 credit markets, the Federal Reserve Open Market Committee began aggressively
9 reducing the Federal Funds rate. Since September 2007, the rate has been lowered
10 eleven times to its current target level of between zero and one-quarter percent.

11 While governmental policies and "flight to safety"¹ issues have driven down interest
12 rates on higher quality debt securities, the cost of equity for utilities has not declined
13 over the past year.

14 **Q. Has the recent extreme turbulence in the capital markets increased the cost of**
15 **capital for utilities?**

16 A. Yes. At various times over the past 15 months, the capital markets in the U.S. have
17 been more turbulent than at any time since the 1930s. This period has seen frequent

¹ The term "flight to safety" refers to the tendency for investors, during periods of market turbulence, to remove money from more risky investments, such as corporate bonds and stocks, and to put the money into government securities such as Treasury bills and bonds. The effect causes a reduction in the supply of funds to corporations and an increase in funds invested in government securities. The result is wider "spreads" between corporate bond and government bond interest rates and higher capital costs for corporations.

1 large daily moves in the stock market and conditions in the corporate debt market
2 that, in late 2008 and parts of early 2009, could best be characterized as near-chaos.
3 The S&P 500 and the Dow Jones Industrial Average have fluctuated by 50 percent
4 since November 2007. In this environment, many large financial institutions such as
5 Countrywide Financial, Washington Mutual, the Federal Home Loan Mortgage
6 Association, the Federal National Mortgage Association, Wachovia, Bear Sterns, and
7 Merrill Lynch were unable to survive as independent institutions. Lehman Brothers
8 was forced to file for bankruptcy. Other surviving institutions such as Citigroup,
9 Goldman Sachs, American International Group, Morgan Stanley and others have
10 required multibillion dollar capital infusions.

11 The Federal government enacted emergency legislation (the \$700 billion
12 Troubled Asset Relief Program) in October 2008 in an attempt to stabilize the
13 economy. As part of that effort the government has increased federal deposit
14 insurance, lent billions of dollars to financial institutions, purchased hundreds of
15 billions of dollars in illiquid securities, guaranteed loans between financial
16 institutions, and purchased equity in banks. In November 2008, the Federal Reserve
17 pledged to pump another \$800 billion into ailing credit markets - \$600 billion to
18 purchase federal government agency mortgage securities and, with support from the
19 U.S. Treasury, the Federal Reserve will provide up to \$200 billion in financing to
20 investors buying securities tied to student loans, car loans, credit card debt and small
21 business loans. In addition, President Obama signed an additional \$789 billion
22 economic package in hopes of providing further economic stimulus for the economy.
23 There is no question that the economic and financial uncertainties generated by the

1 credit crisis have significantly impacted the risks surrounding public utility company
2 cost of capital.

3 **Q. Can you be more specific regarding the impact of the credit crisis on the cost of**
4 **capital of public utilities?**

5 A. Yes. In Schedule SCH2010-3, page 2, I provide data that illustrate the dramatic
6 increase in the spread between the yields on utility debt and U.S. Treasury securities.
7 The schedule shows that during the past several months triple-B spreads for utility
8 companies have been approximately 200 basis points. This level is 50 percent higher
9 than the spreads that existed in early 2007. The month-by-month interest rates paid
10 by triple-B rated utilities and the U.S. Treasury since January 2007 are presented in
11 Schedule SCH2010-3, page 2. These interest rate data are summarized in Table 2
12 below.

Table 2
Long-Term Interest Rate Trends

Month	Triple-B Utility Rate	30-Year Treasury Rate	Triple-B Utility Spread
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
Sep-08	7.15	4.27	2.88
Oct-08	8.58	4.17	4.41
Nov-08	8.98	4.00	4.98
Dec-08	8.11	2.87	5.24
Jan-09	7.90	3.13	4.77
Feb-09	7.74	3.59	4.15
Mar-09	8.00	3.64	4.36
Apr-09	8.03	3.76	4.27
May-09	7.76	4.23	3.53
Jun-09	7.31	4.52	2.79
Jul-09	6.87	4.41	2.46
Aug-09	6.36	4.37	1.99
Sep-09	6.12	4.19	1.93
Oct-09	6.14	4.19	1.95
3-Mo Avg	6.21	4.25	1.96
12-Mo Avg	7.44	3.91	3.54

Mergent Bond Record (Utility Rates); www.federalreserve.gov (Treasury Rates.) Three month average is for August 2009 through October 2009.

1 The data in Table 2 vividly illustrate the market turmoil that has occurred. The
2 Federal Reserve's efforts to reduce short-term borrowing cost for banks (the Fed
3 Funds rate) and lower rates on U.S. Treasury bonds have a lesser effect for corporate
4 borrowers. In fact, increased risk aversion and continuing market volatility have
5 resulted in ongoing difficulties for many corporations. While the effects of market
6 turbulence may not be easily captured in financial models for estimating the rate of
7 return, the market's turbulence and continuing elevated risk aversion should be
8 considered explicitly in estimates of the cost of equity capital.

9 **Q. What do forecasts for the economy and interest rates show for the coming year?**

10 A. Schedule SCH2010-3, page 3, provides S&P's most recent economic forecast from its
11 *Trends & Projections* publication for October 2009. The S&P data show that there
12 was significant economic contraction through the first two quarters of 2009. For all
13 of 2009, S&P forecasts that real gross domestic product ("GDP") will decline by
14 2.7 percent. S&P expects real GDP growth to become positive during the 3rd Quarter
15 of 2009 and for GDP to increase in real terms (before inflation) during 2010 by
16 1.8 percent.

17 S&P also forecasts that long-term government and high grade corporate
18 interest rates will rise somewhat from recent levels. The summary interest rate data
19 are presented in Table 3 below:

Table 3
Standard & Poor's Interest Rate Forecast

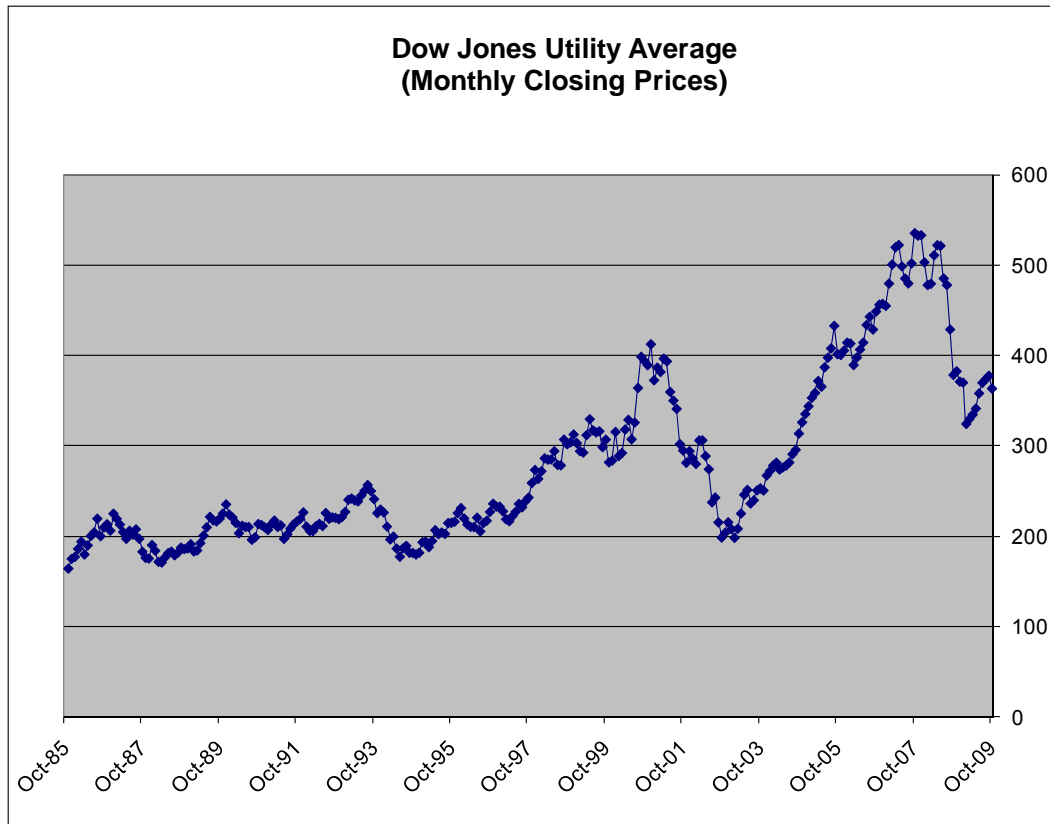
	Oct. 2009 Average	Average 2009 Est.	Average 2010 Est.
Treasury Bills	0.1%	0.2%	0.4%
10-Yr. T-Bonds	3.4%	3.2%	3.8%
30-Yr. T-Bonds	4.2%	4.0%	4.5%
Aaa Corporate Bonds	5.2%	5.3%	5.5%

Sources: www.federalreserve.gov, (Current Rates). Standard & Poor's *Trends & Projections*, October 2009, page 8 (Projected Rates).

The data in Table 3 show that long-term Treasury interest rates during 2010 are projected to increase by 30 basis points from current levels. The rate on highest grade Aaa corporate bonds is also expected to increase by 30 basis points. Although in the recently turbulent market environment it has been difficult to project interest rates, these market data offer perspective for judging the cost of capital in the present case.

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

A. Utility stock prices have fluctuated widely. After reaching a level of over 400 in 2000, the Dow Jones Utility Average ("DJUA") dropped to about 200 by October 2002. From late 2002 until 2008, the DJUA trended upward. More recently, utility stock prices have dropped with the overall market decline. The current level for the DJUA is over 30 percent below the record high levels attained in 2007. The wider fluctuations in more recent years are vividly illustrated in the following graph, which depicts DJUA prices over the past 25 years.



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

7

A. The industry has seen significant volatility both in terms of fundamental operating

8

characteristics and the effects of the economy. While many companies have

9

refocused their businesses on more traditional utility service and less on marketing,

10

the effects of deregulation of the wholesale power markets and continuing fuel price

11

uncertainties remain prominent. The economic crisis has also reduced sales volumes

12

and increased the difficulty of planning for future load requirements. S&P reflects

13

this volatility in its most recent Electric Utility Industry Survey:

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

2 We expect the performance of both the electric utility sector and the
3 individual companies within the sector to remain relatively volatile
4 over the next several years. However, assuming that the housing,
5 financial, and credit markets begin to stabilize, we believe the stocks
6 will be less volatile in 2010 than they were in 2008 and 2009, or
7 during the first few years of this decade.... *** The performance of
8 the sector, however, will remain sensitive to the macroeconomic
9 environment and market forces surrounding it. (Standard & Poor's
10 Industry Surveys, Electric Utilities August 13, 2009, page 6).

11 *Value Line* also comments on the industry's relatively poor stock price performance:

12 **Value Line Investment Survey**

13 Electric utility stocks have not participated in the partial recovery
14 that the market has made so far this year after the horrible showing
15 in 2008. To date, the Value Line Composite Average is up over
16 25%, but the Value Line Utility Average has hardly budged.
17 (*Value Line Investment Survey*, Electric Utility Industry,
18 September 25, 2009, page 687.)

19 Credit market gyrations and the volatility of utility shares demonstrate the increased
20 uncertainties that utility investors face. These uncertainties translate into a higher
21 cost of capital for utilities than has been experienced in recent years.

22 **Q. Do utilities continue to face the operating and financial risks that existed prior to
23 the recent financial crisis?**

24 A. Yes. Prior to the recent financial crisis, the greatest consideration for utility investors
25 was the industry's continuing transition to more open market conditions and
26 competition. With the passage of the Energy Policy Act ("EPACT") in 1992 and the
27 Federal Energy Regulatory Commission's ("FERC") Order 888 in 1996, the stage was
28 set for vastly increased competition in the electric utility industry. EPACT's mandate
29 for open access to the transmission grid and FERC's implementation through Order
30 888 effectively opened the market for wholesale electricity to competition.

1 Previously protected utility service territory and lack of transmission access in some
2 parts of the country had limited the availability of competitive bulk power prices.
3 EPACT and Order 888 have essentially eliminated such constraints for incremental
4 power needs.

5 In addition to wholesale issues at the federal level, many states implemented
6 retail access and opened their retail markets to competition. Prior to the Western
7 energy crisis, investors' concerns had focused principally on appropriate transition
8 mechanisms and the recovery of stranded costs. More recently, however, provisions
9 for dealing with power cost adjustments have become a larger concern.

10 Concern is also beginning to develop around pending climate change
11 legislation including the recent passage by the House of Representatives of H.R. 2454
12 – the American Clean Energy and Security Act of 2009, also referred to as the
13 Waxman-Markey bill. It has not been passed by the Senate and at this time I cannot
14 predict if it will pass or if / when climate legislation in any form will pass, but it
15 appears increasingly likely that in the foreseeable future climate change initiatives
16 will require utilities to balance a diverse set of supply-side and demand-side resources
17 in order to respond. In particular, utilities with significant coal-fired generation
18 would have the added risk of addressing a reduction in greenhouse gas emissions by
19 needing to make costly changes to existing generation fleets such as retiring existing
20 coal plants in favor of lower-emission alternatives, operating higher cost supply
21 options, purchasing domestic and/or foreign carbon offsets, or purchasing more
22 expensive low-or-zero emission power. In addition, climate change legislation would

1 likely place added pressure on utilities to offer demand-side alternatives, including
2 energy efficiency programs, that will reduce customers' demand for power.

3 As expected, the opening of previously protected utility markets to
4 competition, the uncertainty created by the removal of regulatory protection,
5 continuing fuel price volatility and concerns about the impact of climate change
6 legislation have raised the level of uncertainty about investment returns across the
7 entire industry.

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

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

20 **Q. Are there other specific risks that KCP&L must address?**

21 A. Yes. The above-mentioned climate change initiatives create fairly significant risk for
22 the Company going forward. Approximately 76 percent of the Company's fuel mix
23 based on actual generation is coal. With the completion of the new Iatan Unit 2 coal

1 plant, the Company estimates that this percentage will increase to 80%. The
2 Company discussed the potential impact of climate change risk in its most recent
3 Form 10-K:

4 Requirements to reduce greenhouse gas emissions may cause KCP&L
5 and GMO to incur significant costs relating to their ongoing operations
6 (through additional environmental control equipment, retiring and
7 replacing existing generation, or selecting more costly generation
8 alternatives), to procure emission allowance credits, or due to the
9 imposition of taxes, fees or other governmental charges as a result of
10 such emissions. Rules issued by the Environmental Protection Agency
11 (EPA) regarding emissions of mercury, nitrogen oxides and sulfur
12 dioxides are also in a state of flux. Such rules have been overturned by
13 the courts and remanded to the EPA to be revised consistent with the
14 court orders. It is unclear what standards will be imposed in the future,
15 when KCP&L and GMO may have to comply with any new standards
16 or what costs may ultimately be required to comply with such
17 standards.

18 New facilities, or modifications of existing facilities, may require new
19 environmental permits or amendments to existing permits. Delays in
20 the environmental permitting process, denials of permit applications,
21 conditions imposed in permits and the associated uncertainty may
22 materially affect the cost and timing of the environmental retrofit
23 projects included in the Comprehensive Energy Plan, among other
24 projects, and thus materially affect Great Plains Energy's and
25 KCP&L's results of operations, financial position and cash flows.

26 Due to all of the above, KCP&L's and GMO's projected capital and
27 other expenditures for environmental compliance are subject to
28 significant uncertainties, including the timing of implementation of
29 any new or modified environmental requirements, the emissions limits
30 imposed by such requirements and the types and costs of the
31 compliance alternatives selected by KCP&L and GMO. As a result,
32 costs to comply with environmental requirements cannot be estimated
33 with certainty, and actual costs could be significantly higher than
34 projections. Other new environmental laws and regulations affecting
35 the operations of KCP&L and GMO may be adopted, and new
36 interpretations of existing laws and regulations could be adopted or
37 become applicable to KCP&L and GMO or their facilities, any of
38 which may adversely affect Great Plains Energy's and KCP&L's
39 business and substantially increase their environmental expenditures
40 or liabilities in the future. (KCP&L 2008 Securities & Exchange
41 Commission Form 10-K, pages 13-14).

1 **Q. How do capital market participants respond to these financial risk perceptions**
2 **and concerns?**

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

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

17 A. The overall average ROEs allowed for electric utilities since 2005 are summarized in
18 Table 4 below:

Table 4
Authorized Electric Utility Equity Returns

	2005	2006	2007	2008	2009
1 st Quarter	10.51%	10.38%	10.27%	10.45%	10.29%
2 nd Quarter	10.05%	10.68%	10.27%	10.57%	10.55%
3 rd Quarter	10.84%	10.06%	10.02%	10.47%	10.46%
4 th Quarter	10.75%	10.39%	10.56%	10.33%	
Full Year Average	10.54%	10.36%	10.36%	10.46%	10.43%
Average Utility Debt Cost	5.67%	6.08%	6.11%	6.65%	6.46%
Indicated Average Risk Premium	4.87%	4.28%	4.25%	3.81%	3.97%

Source: *Regulatory Focus*, Regulatory Research Associates, Inc., Major Rate Case Decisions, October 2, 2009. Utility debt costs are the "average" public utility bond yields as reported by Moody's.

Since 2005, equity risk premiums (the difference between allowed equity returns and utility interest rates) have ranged from 3.81 percent to 4.87 percent. Employing a very simple equity risk premium relationship, at the low end of this risk premium range, based on average triple-B utility bond yields for the three months ended in October, the indicated cost of equity is above 10 percent (6.21% current 3-month average triple-B bond yield + 3.81% risk premium = 10.02%). At the upper end of the risk premium range, with an allowed equity risk premium of 4.87 percent, the indicated cost of equity is above 11 percent (6.21% current 3-month average triple-B bond yield + 4.87% risk premium = 11.08%). As I will discuss later in this testimony, the recent sharp decline in interest rates has created risk premium ROE estimates that are somewhat below ROE estimates from the DCF model. This divergence is caused by continuing volatility and relatively low prices for utility shares in the equity markets, which indicates that the cost of equity has not declined as the interest rate drop would indicate.

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

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

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

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

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

30 IBES long-term growth estimates are associated with realized growth
31 in the immediate short-term future. Over long horizons, however,
32 there is little forecastability in earnings, and analysts' estimates tend
33 to be overly optimistic. ... On the whole, the absence of predictability
34 in growth fits in with the economic intuition that competitive pressures

1 ultimately work to correct excessively high or excessively low
2 profitability growth. (Ibid, page 683)

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

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

8 A. I developed my long-term GDP growth forecast from nominal GDP data contained in
9 the St. Louis Federal Reserve Bank data base. That data for the period 1948 through
10 2008 is summarized in my Schedule SCH2010-4. As shown at the bottom of that
11 schedule, the overall average for the period was 6.9 percent. The data also show,
12 however, that in the more recent years since 1980, lower inflation has resulted in
13 lower overall GDP growth. For this reason I gave more weight to the more recent
14 years in my GDP forecast. This approach is consistent with the concept that more
15 recent data should have a greater effect on expectations and with generally lower
16 near- and intermediate-term growth rate forecasts that presently exist. Based on this
17 approach, my overall forecast for long-term GDP growth is 6.2 percent.

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

19 A. The DCF results for my comparable company group are presented in Schedule
20 SCH2010-5. As shown in the first column of page 1 of that schedule, the traditional
21 constant growth model produces an ROE range of 11.2 percent to 11.4 percent. In
22 the second column of page 1, I recalculate the constant growth results with the
23 growth rate based on long-term forecasted growth in GDP. With the GDP growth
24 rate, the constant growth model indicates an ROE range of 11.4 percent to 11.6

1 percent. Finally, in the third column of page 1, I present the results from the
2 multistage DCF model. The multistage model indicates an ROE range of 11.1
3 percent to 11.3 percent. The overall results from the DCF model indicate a
4 reasonable ROE range of 11.1 percent to 11.6 percent.

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

6 A. The details and results of my risk premium studies are shown in Schedule
7 SCH2010-6. These studies indicate an ROE range of 10.62 percent to 10.76 percent.
8 The Federal Reserve System's continuing "easy money" policies have provided
9 renewed liquidity in the credit markets that is reflected in these lower yields. These
10 results are not consistent with DCF results, which continue to reflect equity market
11 risk aversion, which is reflected in continuing volatility and relatively low stock
12 prices for utility shares. These circumstances indicate that the cost of equity capital
13 has not declined even though interest rates on utility debt have dropped.

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

15 A. My equity risk premium studies are divided into two parts. First, I compare electric
16 utility authorized ROEs for the period 1980-2008 to contemporaneous long-term
17 utility interest rates. The differences between the average authorized ROEs and the
18 average interest rate for the year is the indicated equity risk premium. I then add the
19 indicated equity risk premium to the forecasted and current 3-month average triple-B
20 utility bond interest rate to estimate ROE. Because there is a strong inverse
21 relationship between equity risk premiums and interest rates (when interest rates are
22 high, risk premiums are low and vice versa), further analysis is required to estimate
23 the current equity risk premium level.

1 **Q. How should these results be interpreted by the Commission in setting the fair**
2 **cost of equity for KCP&L?**

3 A. My estimated ROE of 11.25 percent is a reasonable estimate of KCP&L's cost of
4 equity capital. The requested ROE is approximately the midpoint of my DCF range.
5 The recent market turmoil and the continuing effects on capital market conditions
6 make it difficult to strictly interpret quantitative model estimates for the cost of
7 equity. While corporate interest rates have dropped from the high levels that existed
8 in late 2008, the DCF results, based on continuing relatively low utility stock prices,
9 show that the cost of equity remains high. Under these conditions, use of a lower
10 DCF range or equity risk premium estimates based strictly on historical risk premium
11 relationships likely understate the cost of equity. From this perspective, and with
12 consideration of the Company's on-going capital requirements, I estimate the fair and
13 reasonable cost of equity capital for KCP&L to be 11.25 percent.

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

15 A. Yes, it does.

**BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS**

In the Matter of the Application of Kansas City)
Power & Light Company to Modify Its Tariffs to) Docket No. 10-KCPE-___-RTS
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:

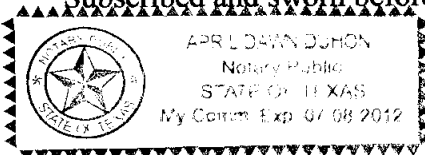
1. My name is Samuel C. Hadaway. I am employed by FINANCO, Inc. in Austin, Texas. I have been retained by Great Plains Energy, Inc., the parent company of Kansas City Power & Light Company, to serve as an expert witness to provide cost of capital testimony on behalf of Kansas City Power & Light Company.

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 forty (40) pages, all of which 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
Samuel C. Hadaway

Subscribed and sworn before me this 8th day of December, 2009.



[Signature]
Notary Public

My commission expires: 7/8/12

Kansas City Power & Light Company
Comparable Company Fundamental Characteristics

No.	Company	(1)	(2)		(3)		
		% Regulated Revenue	Credit Rating		Capital Structure (2008)		
			S&P	Moody's	Common Equity Ratio	Long-Term Debt Ratio	Preferred Stock Ratio
1	ALLETE	88.9%	A-	A2	58.4%	41.6%	0.0%
2	Alliant Energy Co.	87.6%	A-	A2	58.6%	36.3%	5.1%
3	American Elec. Pwr.	92.3%	BBB	Baa2	40.7%	59.1%	0.2%
4	Avista Corp.	93.8%	BBB+	Baa1	51.9%	48.1%	0.0%
5	Black Hills Corp	74.6%	BBB	A3	67.7%	32.3%	0.0%
6	Cleco Corporation	95.6%	BBB	Baa1	48.9%	51.1%	0.0%
7	Con. Edison	84.0%	A-	A3	51.2%	48.8%	0.0%
8	DPL Inc.	100.0%	A	Aa3	41.1%	58.0%	0.9%
9	DTE Energy Co.	75.3%	A-	A2	43.6%	56.4%	0.0%
10	Duke Energy	76.6%	A	Baa2	61.3%	38.7%	0.0%
11	Edison Internat.	79.7%	A	A1	44.5%	51.2%	4.3%
12	Entergy Corp.	78.8%	A-	Baa1	40.2%	58.2%	1.6%
13	FPL Group, Inc.	71.0%	A	Aa2	45.8%	54.2%	0.0%
14	FirstEnergy	88.5%	BBB+	Baa1	47.7%	52.4%	-0.1%
15	Hawaiian Electric	88.9%	BBB	Baa2	52.7%	46.0%	1.3%
16	IDACORP	81.7%	A-	A3	52.4%	47.6%	0.0%
17	Northeast Utilities	98.6%	BBB+	A3	38.1%	60.4%	1.5%
18	NSTAR	95.5%	AA-	A1	42.8%	56.1%	1.1%
19	PG&E Corp.	100.0%	BBB+	A3	46.5%	52.2%	1.3%
20	Pinnacle West	92.9%	BBB-	Baa2	53.2%	46.8%	0.0%
21	Portland General	100.0%	A	A3	53.8%	46.2%	0.0%
22	Progress Energy	99.9%	A-	A1	44.4%	55.1%	0.5%
23	Sempra Energy	74.1%	A+	Aa3	54.2%	44.5%	1.3%
24	Southern Co.	82.1%	A	A2	42.6%	53.9%	3.5%
25	Teco Energy, Inc.	82.3%	BBB	Baa1	38.5%	61.5%	0.0%
26	UIL Holdings Co.	99.9%	NR	Baa2	46.4%	53.6%	0.0%
27	Vectren Corp.	78.8%	A	A3	52.0%	48.0%	0.0%
28	Westar Energy	100.0%	BBB	Baa1	49.7%	49.8%	0.5%
29	Wisconsin Energy	99.9%	A-	A1	44.8%	54.8%	0.4%
30	Xcel Energy Inc.	99.3%	A	A2	47.1%	52.2%	0.7%
	Average	88.7%	A-/BBB+	A3	48.7%	50.5%	0.8%

Column Sources:

(1) Most recent company 10-Ks.

(2) AUS Utility Reports, Nov 2009.

(3) Value Line Investment Survey, Electric Utility (East), Aug 28, 2009; (Central), Sep 25, 2009; (West), Nov 6, 2009.

Kansas City Power & Light Company Comparable Company Fundamental Characteristics

No.	Company	(1)	(2)		(3)		
		% Regulated Revenue	Credit Rating		Capital Structure (2008)		
			S&P	Moody's	Common Equity Ratio	Long-Term Debt Ratio	Preferred Stock Ratio
1	ALLETE	88.9%	A-	A2	58.4%	41.6%	0.0%
2	Alliant Energy Co.	87.6%	A-	A2	58.6%	36.3%	5.1%
3	American Elec. Pwr.	92.3%	BBB	Baa2	40.7%	59.1%	0.2%
4	Avista Corp.	93.8%	BBB+	Baa1	51.9%	48.1%	0.0%
5	Black Hills Corp	74.6%	BBB	A3	67.7%	32.3%	0.0%
6	Cleco Corporation	95.6%	BBB	Baa1	48.9%	51.1%	0.0%
7	Con. Edison	84.0%	A-	A3	51.2%	48.8%	0.0%
8	DPL Inc.	100.0%	A	Aa3	41.1%	58.0%	0.9%
9	DTE Energy Co.	75.3%	A-	A2	43.6%	56.4%	0.0%
10	Duke Energy	76.6%	A	Baa2	61.3%	38.7%	0.0%
11	Edison Internat.	79.7%	A	A1	44.5%	51.2%	4.3%
12	Entergy Corp.	78.8%	A-	Baa1	40.2%	58.2%	1.6%
13	FPL Group, Inc.	71.0%	A	Aa2	45.8%	54.2%	0.0%
14	FirstEnergy	88.5%	BBB+	Baa1	47.7%	52.4%	-0.1%
15	Hawaiian Electric	88.9%	BBB	Baa2	52.7%	46.0%	1.3%
16	IDACORP	81.7%	A-	A3	52.4%	47.6%	0.0%
17	Northeast Utilities	98.6%	BBB+	A3	38.1%	60.4%	1.5%
18	NSTAR	95.5%	AA-	A1	42.8%	56.1%	1.1%
19	PG&E Corp.	100.0%	BBB+	A3	46.5%	52.2%	1.3%
20	Pinnacle West	92.9%	BBB-	Baa2	53.2%	46.8%	0.0%
21	Portland General	100.0%	A	A3	53.8%	46.2%	0.0%
22	Progress Energy	99.9%	A-	A1	44.4%	55.1%	0.5%
23	Sempra Energy	74.1%	A+	Aa3	54.2%	44.5%	1.3%
24	Southern Co.	82.1%	A	A2	42.6%	53.9%	3.5%
25	Teco Energy, Inc.	82.3%	BBB	Baa1	38.5%	61.5%	0.0%
26	UIL Holdings Co.	99.9%	NR	Baa2	46.4%	53.6%	0.0%
27	Vectren Corp.	78.8%	A	A3	52.0%	48.0%	0.0%
28	Westar Energy	100.0%	BBB	Baa1	49.7%	49.8%	0.5%
29	Wisconsin Energy	99.9%	A-	A1	44.8%	54.8%	0.4%
30	Xcel Energy Inc.	99.3%	A	A2	47.1%	52.2%	0.7%
	Average	88.7%	A-/BBB+	A3	48.7%	50.5%	0.8%

Column Sources:

(1) Most recent company 10-Ks.

(2) AUS Utility Reports, Nov 2009.

(3) Value Line Investment Survey, Electric Utility (East), Aug 28, 2009; (Central), Sep 25, 2009; (West), Nov 6, 2009.

GREAT PLAINS ENERGY INCORPORATED
Capitalization for KCP&L Ratemaking
September 30, 2009 (Actual)
(\$ in 000's)

CAPITAL COMPONENT	AMOUNT	PERCENT	REQUIRED RETURN	WEIGHTED RETURN
Long-Term Debt (Note 1 and 3)	\$2,907,443	47.81%	6.79%	3.25%
Preferred Stock	\$39,000	0.64%	4.29%	0.03%
Common Equity (Note 2)	\$2,847,032	46.82%	11.25%	5.27%
Equity-linked Convertible Debt				
Debt Related Tax Deductible Cost			10.58%	0.50%
Equity Related Non-Deductible Cost			3.01%	0.14%
Total Equity-linked Convertible Debt	\$287,500	4.73%	<u>13.59%</u>	<u>0.64%</u>
Total Return per GPE Capitalization	<u>\$6,080,975</u>	<u>100.00%</u>		<u>9.19%</u>

Note 1: Includes amounts classified as current liabilities and excludes the Fair Value Adjustment

Note 2: Excludes accumulated other comprehensive income or loss

Note 3: Blended required return on Long-Term Debt

KCP&L Long-Term Debt	47.40%	6.78%	3.22%
Proportion of GPE Parent Long-Term Debt	0.41%	7.54%	0.03%
Long-Term Debt-GPE Capital Structure (Note 4)	<u>47.81%</u>	<u>6.79%</u>	<u>3.25%</u>

Note 4: Weighted Cost of Long Term Debt

KCP&L Long-Term Debt - Proportion of total	47.40%/47.81%	99.14%	
KCP&L Long-Term Debt - Rate		<u>6.78%</u>	
Weighted Cost of KCPL Debt		<u>6.73%</u>	
GPE Parent Long-Term Debt - Proportion of total	0.41%/47.81%	0.86%	
GPE Parent Long-Term Debt - Rate		<u>7.54%</u>	
Weighted Cost of GPE Parent Debt		<u>0.06%</u>	
Total Weighted Cost of Long Term Debt		<u>6.79%</u>	

GREAT PLAINS ENERGY INCORPORATED
Capitalization
September 30, 2009 (Actual)
(\$ in 000's)

CAPITAL COMPONENT	AMOUNT	PERCENT	REQUIRED RETURN	WEIGHTED RETURN
Long-Term Debt (Note 1)	\$2,907,443	47.81%	7.88%	3.77%
Equity-linked Convertible Debt	287,500	4.73%	13.59%	0.64%
Preferred Stock	39,000	0.64%	4.29%	0.03%
Common Equity (Note 2)	2,847,032	46.82%	11.25%	5.27%
	<u>\$6,080,975</u>	<u>100.00%</u>		<u>9.71%</u>

Note 1: Includes amounts classified as current liabilities and excludes the Fair Value Adjustment

Note 2: Excludes accumulated other comprehensive income or loss

KANSAS CITY POWER & LIGHT COMPANY
Capitalization
September 30, 2009 (Actual)
(\$ in 000's)

CAPITAL COMPONENT	AMOUNT	PERCENT	REQUIRED RETURN	WEIGHTED RETURN
KCP&L Long-Term Debt (Note 1)	\$1,776,578	47.40%	6.78%	3.22%
KCP&L Common Equity (Note 2)	1,971,225	52.60%	11.25%	5.92%
Total KCP&L Capital	<u>\$3,747,803</u>	<u>100.00%</u>		<u>9.14%</u>

Note 1: Includes amounts classified as current liabilities

Note 2: Excludes accumulated other comprehensive income or loss

KANSAS CITY POWER & LIGHT COMPANY, GREAT PLAINS ENERGY and GMO

Weighted Average Cost of Long-Term Debt Capital

September 30, 2009 (Actual)

Line	Issue	(a) Initial Offering	(b) Date of Offering	(c) Date of Maturity	(d) Price to Public	(e) Discounts & Underwriters 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
KANSAS CITY POWER & LIGHT ONLY											
Pledged General Mortgage Bonds											
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 2005 Series - 4.05% Coupon	\$13,982,500	2/23/1994	3/1/2015					4.254%	\$13,982,000	\$594,794
6	EIRR La Cygne 2005 Series - 4.65% Coupon	\$21,940,000	2/23/1994	9/1/2035					4.731%	\$21,940,000	\$1,037,981
7	Mortgage Bonds Series 2009A - 7.15%	\$400,000,000	3/24/2009	3/24/2019	\$400,000,000	\$3,032,000	\$1,423,316	\$395,544,684	7.309%	\$400,000,000	\$29,235,757
Unsecured Notes											
8	Senior Notes Due 2017 - 5.85% Coupon (1)	\$250,000,000	5/30/2007	6/15/2017	\$250,000,000	\$2,045,000	\$218,906	\$247,736,094	5.972%	\$250,000,000	\$14,928,940
9	Senior Notes Due 2011 - 6.5% Coupon (2)	\$150,000,000	3/20/2001	11/15/2011	\$150,000,000	\$1,198,500	\$83,971	\$148,717,529	6.618%	\$150,000,000	\$9,927,369
10	Senior Notes Due 2035 - 6.05% Coupon (3)	\$250,000,000	11/17/2005	11/15/2035	\$250,000,000	\$3,692,500	\$255,609	\$246,051,891	6.166%	\$250,000,000	\$15,415,411
11	Senior Notes Due 2018 - 6.375% Coupon (4)	\$350,000,000	3/6/2008	3/1/2018	\$350,000,000	\$2,275,000	\$291,730	\$347,433,270	6.476%	\$350,000,000	\$22,665,182
Environmental Improvement Revenue Refunding Bonds											
12	2005 Series Due 2035 - 4.65% Coupon	\$50,000,000	9/1/05	9/1/2035					4.747%	\$50,000,000	\$2,373,500
13	2007 Series A-1 Due 2035	\$63,250,000	9/19/07	9/1/2035					5.229%	\$63,250,000	\$3,307,525
14	2007 Series A-2 Due 2035	\$10,000,000	9/19/07	9/1/2035					5.049%	\$10,000,000	\$504,914
15	2007 Series B Due 2035	\$73,250,000	9/19/07	9/1/2035					5.489%	\$73,250,000	\$4,020,631
16	2008 Series Due 2038	\$23,400,000	5/28/08	5/1/2038					4.930%	\$23,400,000	\$1,153,586
Other Long-Term Debt											
17	Unamortized Discount on Senior Notes									(2,090,251)	
18	Loss/(Gain) on Reacquired Debt										\$395,361
19	Weighted Cost of Interest Rate Management Products										\$8,535,948
20	Total KCP&L Long-Term Debt Capital									\$1,776,577,749	\$120,535,143
21	KCP&L Weighted Avg. Cost of Long-Term Debt Capital								6.785%		

GMO ONLY

Pledged General Mortgage Bonds											
1	SJLP First Mortgage Bonds - 9.44%	\$22,500,000	2/1/91	2/1/21	\$22,500,000		\$664,653	\$21,835,347	9.745%	\$13,500,000	\$1,315,638
Unsecured Notes											
2	Senior Notes Due 2021 - 8.27% Coupon	\$131,750,000	3/31/99	11/15/21	\$131,750,000		\$3,591,143	\$128,158,857	8.547%	\$80,850,000	\$6,910,156
3	Senior Notes Due 2009 - 7.625% Coupon	\$200,000,000	11/15/99	11/15/09	\$200,000,000		\$3,025,739	\$196,974,261	7.846%	\$68,489,000	\$5,373,733
4	Senior Notes Due 2011 - 7.95% Coupon	\$250,000,000	2/1/01	2/1/11	\$250,000,000		\$1,880,959	\$248,119,041	8.061%	\$137,310,000	\$11,068,590
5	Senior Notes Due 2011 - 7.75% Coupon	\$200,000,000	6/20/01	6/15/11	\$200,000,000		\$0	\$200,000,000	7.750%	\$197,000,000	\$15,267,500
6	Senior Notes Due 2011 - 11.875% Coupon	\$500,000,000	7/3/02	7/1/12	\$500,000,000		\$0	\$500,000,000	11.875%	\$500,000,000	\$59,375,000
7	Medium Term Notes Due 2013 - 7.16% Coupon	\$9,000,000	11/30/93	11/30/13	\$9,000,000		\$490,738	\$8,509,262	7.699%	\$6,000,000	\$461,921
8	Medium Term Notes Due 2023 - 7.33% Coupon	\$3,000,000	11/30/93	11/30/13	\$3,000,000		\$163,606	\$2,836,394	7.803%	\$3,000,000	\$234,095
9	Medium Term Notes Due 2023 - 7.17% Coupon	\$7,000,000	12/6/93	12/1/23	\$7,000,000		\$382,259	\$6,617,741	7.636%	\$7,000,000	\$534,536

KANSAS CITY POWER & LIGHT COMPANY, GREAT PLAINS ENERGY and GMO

Weighted Average Cost of Long-Term Debt Capital

September 30, 2009 (Actual)

Line	Issue	(a) Initial Offering	(b) Date of Offering	(c) Date of Maturity	(d) Price to Public	(e) Discounts & Underwriters 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
Environmental Improvement Revenue Refunding Bonds											
10	Wamego 1996 Series - Auction Rate	\$7,300,000	3/1/96	3/1/26	\$7,300,000		\$422,982	\$6,877,018	0.554%	\$7,300,000	\$40,418
11	SJLP EIERA Bonds - 5.85%	\$5,600,000	6/4/95	2/1/13	\$5,600,000		\$913,838	\$4,686,162	7.519%	\$5,600,000	\$421,066
12	Sibley 1993 Series - Auction Rate	\$5,000,000	5/26/93	5/1/28	\$5,000,000		\$111,563	\$4,888,437	2.225%	\$5,000,000	\$111,241
Other Long-Term Debt											
13	Sanwa Bus CC	\$8,190,000	12/9/95	12/9/09	\$8,190,000		\$35,000	\$8,155,000	7.038%	\$226,519	\$15,943
14	Loss/(Gain) on Reacquired Debt										\$ 44,404
15	Total GMO Long-Term Debt Capital									\$1,031,275,519	\$101,174,241
16	GMO Weighted Avg. Cost of Long-Term Debt Capital							9.811%			

GREAT PLAINS ENERGY ONLY

Unsecured Notes											
17	Senior Notes Due 2017 - 6.875% Coupon (5)	\$100,000,000	9/20/2007	9/15/2017	\$100,000,000	\$1,166,000	\$87,098	\$98,746,902	7.052%	\$100,000,000	\$7,051,752
Other Long-Term Debt											
18	Unamortized Discount on Senior Notes									(\$410,650)	
19	Weighted Cost of Interest Rate Management Products										\$453,103
20	Total GPE Only Long-Term Debt Capital									\$99,589,350	\$7,504,855
21	GPE Only Weighted Avg. Cost of Long-Term Debt Capital							7.536%			

GREAT PLAINS ENERGY, KANSAS CITY POWER & LIGHT and GMO

1	Total GPE, KCP&L and GMO Long-Term Debt Capital									\$2,907,442,618	\$229,214,239
2	GPE, KCP&L and GMO Weighted Avg. Cost of Long-Term Debt Capital							7.884%			

- (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.

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GREAT PLAINS ENERGY

Cost of Equity-linked Convertible Debt

September 30, 2009 (Actual) and August 31, 2010 (Projected)

Line	Issue	(a) Initial Offering	(b) Date of Offering	(c) Date of Conversion	(d) Price to Public	(e) Underwriters Discounts & Commissions	(f) Issuance Expense	(g) Net Proceeds to Company	(h) Cost to Company	(i) Convertible Debt Capital Outstanding	(j) Annual Cost of Convertible Debt Capital
GREAT PLAINS ENERGY											
Unsecured Notes											
1	Equity Units - Total Cost	\$287,500,000	5/12/2009	6/15/2012	\$287,500,000	\$10,062,500	\$1,034,053	\$276,403,447	13.588%	\$287,500,000	\$39,065,460
2	Subordinate Debt portion of Equity Units	\$287,500,000	5/12/2009	6/15/2012	\$287,500,000	\$3,593,750	\$623,797	\$283,282,453	10.577%	\$287,500,000	\$30,409,025
3	Cost of Equity Units not tax deductible					\$6,468,750	\$410,256		3.011%		\$8,656,435

GREAT PLAINS ENERGY INCORPORATED

Weighted Cost of Preferred Stock Capital Outstanding at
September 30, 2009 (Actual) and August 31, 2010 (Projected)

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
Line	Description of Issue	Date of Issuance	No. of Shares Initial Offering	Price to Public	Underwriters Discounts & Commissions	Issuance Expense	Net Proceeds to Company	Cost to Company	Preferred Stock Capital Outstanding	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%	12,000,000	534,120
5	Total Preferred Stock Capital September 30, 2009 (Actual)								<u>\$39,000,000</u>	<u>\$1,673,610</u>
6	Weighted Average Cost at September 30, 2009 (Actual)						<u>4.291%</u>			

Kansas City Power & Light Company
Historical Capital Market Costs

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Prime Rate	8.0%	9.2%	6.9%	4.7%	4.1%	4.3%	6.2%	8.0%	8.1%	5.1%
Consumer Price Index	2.7%	3.4%	1.6%	2.5%	2.0%	3.3%	3.4%	2.6%	4.1%	-0.1%
Long-Term Treasuries	5.9%	5.9%	5.5%	5.4%	5.0%	5.1%	4.7%	5.0%	4.8%	4.3%
Moody's Avg Utility Debt	7.6%	8.1%	7.7%	7.5%	6.6%	6.2%	5.7%	6.1%	6.1%	6.7%
Moody's Baa Utility Debt	7.9%	8.4%	8.0%	8.0%	6.8%	6.4%	5.9%	6.3%	6.3%	7.2%

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; 30-year Treasury bonds 1999-2001 and 2007-2008; 20-year Treasury bonds 2002-2006
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	Triple-B Utility Rate	30-Year Treasury Rate	Triple-B Utility Spread
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
Sep-08	7.15	4.27	2.88
Oct-08	8.58	4.17	4.41
Nov-08	8.98	4.00	4.98
Dec-08	8.11	2.87	5.24
Jan-09	7.90	3.13	4.77
Feb-09	7.74	3.59	4.15
Mar-09	8.00	3.64	4.36
Apr-09	8.03	3.76	4.27
May-09	7.76	4.23	3.53
Jun-09	7.31	4.52	2.79
Jul-09	6.87	4.41	2.46
Aug-09	6.36	4.37	1.99
Sep-09	6.12	4.19	1.93
Oct-09	6.14	4.19	1.95
3-Mo Avg	6.21	4.25	1.96
12-Mo Avg	7.44	3.91	3.54

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

Three month average is for Aug 2009 through Oct 2009.

Twelve month average is for Nov 2008 through Oct 2009.

Economic Indicators

Seasonally Adjusted Annual Rates — Dollar Figures in Billions

	Annual % Change				2009				E2010					
	2008	E2009	E2010	2008	E2009	E2010	1Q	R2Q	E3Q	E4Q	1Q	2Q	3Q	4Q
Gross Domestic Product														
\$14,441.0	\$14,232.4	\$14,655.8	2.6	(1.4)	3.0	\$14,178.0	\$14,151.2	\$14,257.3	\$14,343.2	\$14,461.5	\$14,584.0	\$14,715.1	\$14,862.7	
2.6	(1.4)	3.0	-	-	(4.6)	(0.8)	(0.8)	3.0	2.4	3.3	3.4	3.6	4.1	
0.4	(2.7)	1.8	-	-	(6.4)	(0.7)	(0.7)	2.2	1.7	1.7	1.9	2.3	2.8	
2.1	1.3	1.2	-	-	1.9	(0.0)	(0.0)	1.0	0.7	1.6	1.5	1.3	1.2	
*Components of Real GDP														
\$9,291.0	\$9,224.1	\$9,333.0	(0.3)	(0.7)	1.2	\$9,209.2	\$9,189.0	\$9,249.5	\$9,248.6	\$9,268.2	\$9,297.0	\$9,358.1	\$9,408.7	
(0.3)	(0.7)	1.2	-	-	0.6	(0.9)	(0.9)	2.7	(0.0)	0.9	1.2	2.7	2.2	
1,146.3	1,092.2	1,101.6	(4.5)	(4.7)	0.9	1,087.2	1,071.7	1,115.6	1,094.3	1,085.2	1,081.5	1,110.0	1,129.6	
2,057.3	2,030.8	2,052.6	(0.9)	(1.3)	1.1	2,035.5	2,025.7	2,029.6	2,032.5	2,038.2	2,047.3	2,058.3	2,066.6	
6,083.1	6,090.8	6,167.8	0.7	0.1	1.3	6,076.0	6,078.8	6,097.1	6,111.0	6,132.2	6,154.3	6,179.7	6,204.9	
1,569.7	1,273.0	1,236.0	1.6	(18.9)	(2.9)	1,321.2	1,288.4	1,246.0	1,236.4	1,224.4	1,223.7	1,231.8	1,264.1	
1.6	(18.9)	(2.9)	-	-	(39.2)	(9.6)	(9.6)	(12.5)	(3.0)	(3.8)	(0.3)	2.7	10.9	
1,068.6	870.0	912.7	(2.6)	(18.6)	4.9	887.5	876.5	851.1	865.0	873.4	896.0	921.5	959.7	
441.5	341.3	357.2	(23.2)	(22.7)	4.7	358.9	335.5	337.0	334.0	337.6	349.3	364.3	377.8	
(23.2)	(22.7)	4.7	-	-	(38.8)	(23.6)	(23.6)	1.7	(3.5)	4.5	14.5	18.3	15.6	
(25.9)	(102.0)	19.7	-	-	(113.9)	(160.2)	(112.7)	(112.7)	(21.0)	23.4	27.9	16.8	10.8	
2,518.1	2,562.5	2,591.0	3.1	1.8	1.1	2,527.2	2,568.6	2,573.8	2,580.5	2,590.3	2,599.6	2,590.6	2,583.6	
975.9	1,022.5	1,045.2	7.7	4.8	2.2	996.3	1,023.5	1,031.6	1,038.7	1,047.7	1,055.5	1,044.7	1,033.1	
1,543.7	1,542.9	1,549.2	0.5	(0.1)	0.4	1,533.3	1,548.0	1,545.3	1,545.1	1,546.1	1,547.8	1,549.4	1,553.7	
(494.3)	(353.6)	(357.8)	-	-	-	(386.5)	(330.4)	(333.4)	(364.3)	(373.8)	(365.4)	(352.6)	(339.6)	
1,629.2	1,460.0	1,580.4	5.4	(10.4)	8.2	1,434.5	1,419.5	1,483.8	1,502.3	1,532.4	1,565.3	1,594.9	1,628.9	
2,123.5	1,813.6	1,938.2	(3.2)	(14.6)	6.9	1,821.0	1,749.8	1,817.2	1,866.5	1,906.2	1,930.6	1,947.5	1,968.4	
\$12,239.0	\$11,965.9	\$12,249.9	2.9	(2.2)	2.4	\$11,952.7	\$11,971.8	\$11,947.2	\$11,992.0	\$12,087.0	\$12,195.6	\$12,311.6	\$12,405.4	
10,806.0	10,861.4	11,055.3	3.9	0.5	1.8	10,765.4	10,903.6	10,870.4	10,906.3	10,913.7	11,011.3	11,117.5	11,178.9	
2.6	3.9	3.1	-	-	-	3.8	4.9	3.4	3.4	3.1	3.4	3.2	2.9	
1,462.7	1,375.6	1,561.2	(17.6)	(6.0)	13.5	1,246.5	1,337.1	1,455.7	1,463.1	1,532.9	1,551.3	1,563.9	1,596.8	
1,170.6	1,070.2	1,196.0	(11.5)	(8.6)	11.8	976.1	1,031.2	1,130.4	1,143.0	1,170.6	1,188.5	1,200.5	1,224.6	
14.80	39.75	45.48	(78.0)	168.6	14.4	6.82	7.43	7.89	39.75	43.83	41.60	42.83	45.48	
†Prices & Interest Rates														
3.8	(0.4)	1.7	-	-	-	(2.4)	1.3	3.6	1.8	0.7	1.4	2.1	2.1	
1.4	0.2	0.4	-	-	-	0.2	0.2	0.1	0.1	0.2	0.2	0.5	0.8	
3.7	3.2	3.8	-	-	-	2.7	3.3	3.5	3.4	3.5	3.6	3.8	4.1	
4.3	4.0	4.5	-	-	-	3.5	4.2	4.3	4.1	4.3	4.4	4.5	4.8	
5.6	5.3	5.5	-	-	-	5.3	5.5	5.4	5.2	5.3	5.4	5.5	5.7	
Other Key Indicators														
900.0	572.9	834.6	(32.9)	(36.4)	45.7	527.7	540.0	579.1	644.9	750.8	792.4	851.8	943.4	
13.2	10.2	10.9	(18.0)	(22.9)	7.6	9.5	9.6	11.4	10.2	10.2	10.4	11.3	11.9	
5.8	9.3	10.3	-	-	-	8.1	9.3	9.7	10.0	10.2	10.3	10.4	10.3	
(4.4)	4.7	(7.7)	-	-	-	6.9	(14.8)	(18.6)	(6.6)	(4.6)	(3.1)	(5.5)	(8.5)	

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.
*2005 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

	Nominal GDP	% Change	GDP Price Deflator	% Change	CPI	% Change
1948	275.2		16.6		24.1	
1949	265.2	-3.6%	16.3	-2.0%	23.6	-1.8%
1950	313.4	18.2%	17.0	4.2%	25.0	5.8%
1951	348.0	11.0%	17.9	5.6%	26.5	6.0%
1952	371.4	6.7%	18.2	1.5%	26.7	0.9%
1953	375.9	1.2%	18.3	0.8%	26.9	0.6%
1954	389.5	3.6%	18.5	0.9%	26.8	-0.4%
1955	426.0	9.4%	19.0	2.7%	26.9	0.4%
1956	448.1	5.2%	19.6	3.3%	27.6	2.8%
1957	461.5	3.0%	20.1	2.7%	28.5	3.0%
1958	485.0	5.1%	20.7	2.6%	29.0	1.8%
1959	513.2	5.8%	20.8	0.9%	29.4	1.5%
1960	523.6	2.0%	21.1	1.5%	29.8	1.4%
1961	562.5	7.4%	21.4	1.1%	30.0	0.7%
1962	593.3	5.5%	21.7	1.3%	30.4	1.2%
1963	633.5	6.8%	22.0	1.4%	30.9	1.6%
1964	675.6	6.6%	22.3	1.5%	31.3	1.2%
1965	747.5	10.6%	22.7	2.0%	31.9	1.9%
1966	807.1	8.0%	23.5	3.5%	32.9	3.4%
1967	852.8	5.7%	24.2	3.1%	34.0	3.3%
1968	936.3	9.8%	25.4	4.6%	35.6	4.7%
1969	1004.6	7.3%	26.7	5.2%	37.7	5.9%
1970	1052.9	4.8%	28.0	5.0%	39.8	5.6%
1971	1151.7	9.4%	29.3	4.7%	41.1	3.3%
1972	1287.0	11.7%	30.7	4.5%	42.5	3.4%
1973	1432.3	11.3%	32.8	6.8%	46.3	8.9%
1974	1553.4	8.5%	36.2	10.6%	51.9	12.1%
1975	1714.6	10.4%	39.0	7.6%	55.6	7.1%
1976	1885.3	10.0%	41.1	5.5%	58.4	5.0%
1977	2111.6	12.0%	43.9	6.6%	62.3	6.7%
1978	2417.0	14.5%	47.0	7.3%	67.9	9.0%
1979	2660.5	10.1%	51.1	8.7%	76.9	13.3%
1980	2916.9	9.6%	56.1	9.7%	86.4	12.4%
1981	3196.4	9.6%	60.7	8.3%	94.1	8.9%
1982	3314.4	3.7%	63.9	5.2%	97.7	3.8%
1983	3690.4	11.3%	66.0	3.4%	101.4	3.8%
1984	4036.3	9.4%	68.4	3.6%	105.5	4.0%
1985	4321.8	7.1%	70.3	2.8%	109.5	3.8%
1986	4546.1	5.2%	71.9	2.3%	110.8	1.2%
1987	4886.3	7.5%	74.0	2.9%	115.6	4.3%
1988	5253.7	7.5%	76.7	3.7%	120.7	4.4%
1989	5584.3	6.3%	79.4	3.5%	126.3	4.6%
1990	5848.8	4.7%	82.6	4.1%	134.2	6.3%
1991	6095.8	4.2%	85.2	3.1%	138.2	3.0%
1992	6484.3	6.4%	87.0	2.1%	142.3	3.0%
1993	6800.2	4.9%	89.0	2.3%	146.3	2.8%
1994	7232.2	6.4%	91.0	2.1%	150.1	2.6%
1995	7522.5	4.0%	92.7	2.0%	153.9	2.5%
1996	8000.4	6.4%	94.5	1.9%	159.1	3.4%
1997	8471.2	5.9%	95.8	1.5%	161.8	1.7%
1998	8953.8	5.7%	96.9	1.1%	164.4	1.6%
1999	9519.5	6.3%	98.4	1.5%	168.8	2.7%
2000	9953.6	4.6%	100.7	2.3%	174.6	3.4%
2001	10226.3	2.7%	103.2	2.5%	177.4	1.6%
2002	10591.1	3.6%	104.9	1.7%	181.8	2.5%
2003	11219.5	5.9%	107.2	2.2%	185.5	2.0%
2004	11948.5	6.5%	110.7	3.2%	191.7	3.3%
2005	12696.4	6.3%	114.5	3.5%	198.2	3.4%
2006	13370.1	5.3%	117.7	2.8%	203.3	2.6%
2007	14031.2	4.9%	120.7	2.6%	211.7	4.1%
2008	14264.6	1.7%	123.0	1.8%	211.5	-0.1%
10-Year Average		4.8%		2.4%		2.6%
20-Year Average		5.1%		2.4%		2.9%
30-Year Average		6.1%		3.3%		3.9%
40-Year Average		7.1%		4.1%		4.6%
50-Year Average		7.0%		3.7%		4.1%
60-Year Average		6.9%		3.4%		3.7%
Average of Periods		6.2%		3.2%		3.6%

Source: St. Louis Federal Reserve Bank, 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	10.4%	11.6%	11.0%
2 Alliant Energy Co.	9.9%	12.2%	12.2%
3 American Elec. Pwr.	8.7%	11.5%	11.3%
4 Avista Corp.	11.6%	11.1%	11.3%
5 Black Hills Corp	13.7%	11.9%	11.4%
6 Cleco Corporation	14.9%	10.3%	11.5%
7 Con. Edison	9.1%	12.1%	11.3%
8 DPL Inc.	12.1%	10.9%	10.5%
9 DTE Energy Co.	11.0%	12.2%	12.1%
10 Duke Energy	10.5%	12.5%	12.1%
11 Edison Internat.	8.0%	10.1%	10.0%
12 Entergy Corp.	10.6%	10.0%	10.0%
13 FPL Group, Inc.	12.7%	9.9%	9.7%
14 FirstEnergy	10.2%	11.1%	11.1%
15 Hawaiian Electric	12.3%	13.1%	12.1%
16 IDACORP	9.0%	10.4%	10.3%
17 Northeast Utilities	12.5%	10.4%	10.3%
18 NSTAR	11.7%	11.3%	11.3%
19 PG&E Corp.	11.3%	10.6%	10.7%
20 Pinnacle West	11.9%	12.6%	11.9%
21 Portland General	11.2%	11.6%	11.3%
22 Progress Energy	11.4%	12.6%	11.8%
23 Sempra Energy	9.7%	9.6%	9.6%
24 Southern Co.	11.7%	11.9%	11.5%
25 Teco Energy, Inc.	13.8%	12.0%	11.7%
26 UIL Holdings Co.	10.5%	12.8%	11.8%
27 Vectren Corp.	12.0%	12.1%	11.6%
28 Westar Energy	10.2%	12.4%	12.0%
29 Wisconsin Energy	12.0%	9.7%	10.2%
30 Xcel Energy Inc.	11.4%	11.3%	10.9%
GROUP AVERAGE	11.2%	11.4%	11.1%
GROUP MEDIAN	11.4%	11.6%	11.3%

Source: Value Line Investment Survey, Electric Utility (East), Aug 28, 2009; (Central), Sep 25, 2009; (West), Nov 6, 2009.

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

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

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Company	Recent Price(P0)	Next Year's Div(D1)	Dividend Yield	Analysts' Estimated Growth			Average Growth (Cols 4-6)	ROE K=Div Yld+G (Cols 3+7)
				Value Line	Zacks	Thomson		
1 ALLETE	33.60	1.80	5.36%	NA	4.00%	6.00%	5.00%	10.4%
2 Alliant Energy Co.	26.86	1.60	5.96%	4.50%	4.50%	2.95%	3.98%	9.9%
3 American Elec. Pwr.	31.04	1.66	5.35%	3.00%	3.30%	3.75%	3.35%	8.7%
4 Avista Corp.	19.70	0.96	4.87%	6.50%	5.00%	8.67%	6.72%	11.6%
5 Black Hills Corp	25.46	1.44	5.66%	10.00%	NA	6.00%	8.00%	13.7%
6 Cleco Corporation	24.64	1.00	4.06%	9.50%	10.50%	12.50%	10.83%	14.9%
7 Con. Edison	40.54	2.38	5.87%	3.00%	3.30%	3.40%	3.23%	9.1%
8 DPL Inc.	25.32	1.18	4.66%	8.50%	4.50%	9.23%	7.41%	12.1%
9 DTE Energy Co.	35.41	2.12	5.99%	7.50%	NA	2.50%	5.00%	11.0%
10 Duke Energy	15.60	0.98	6.28%	5.00%	4.50%	3.20%	4.23%	10.5%
11 Edison Internat.	33.12	1.28	3.87%	4.50%	5.00%	3.00%	4.17%	8.0%
12 Entergy Corp.	79.38	3.00	3.78%	6.00%	6.00%	8.53%	6.84%	10.6%
13 FPL Group, Inc.	54.64	2.00	3.66%	9.50%	8.80%	8.72%	9.01%	12.7%
14 FirstEnergy	44.91	2.20	4.90%	4.00%	7.00%	5.00%	5.33%	10.2%
15 Hawaiian Electric	17.88	1.24	6.93%	7.00%	6.00%	3.00%	5.33%	12.3%
16 IDACORP	28.52	1.20	4.21%	4.50%	5.00%	5.00%	4.83%	9.0%
17 Northeast Utilities	23.69	1.00	4.22%	8.00%	8.50%	8.40%	8.30%	12.5%
18 NSTAR	31.81	1.63	5.12%	8.00%	6.00%	5.67%	6.56%	11.7%
19 PG&E Corp.	40.84	1.80	4.41%	6.50%	7.50%	6.75%	6.92%	11.3%
20 Pinnacle West	32.64	2.10	6.43%	3.00%	8.00%	5.50%	5.50%	11.9%
21 Portland General	19.58	1.05	5.36%	3.50%	6.70%	7.40%	5.87%	11.2%
22 Progress Energy	38.76	2.50	6.45%	6.00%	4.50%	4.40%	4.97%	11.4%
23 Sempra Energy	50.97	1.72	3.37%	5.50%	7.00%	6.33%	6.28%	9.7%
24 Southern Co.	31.75	1.80	5.67%	4.50%	8.50%	4.97%	5.99%	11.7%
25 Teco Energy, Inc.	13.75	0.80	5.82%	4.50%	11.00%	8.42%	7.97%	13.8%
26 UIL Holdings Co.	26.14	1.73	6.62%	3.00%	4.20%	4.40%	3.87%	10.5%
27 Vectren Corp.	23.41	1.39	5.94%	5.00%	6.80%	6.30%	6.03%	12.0%
28 Westar Energy	20.12	1.24	6.16%	4.50%	4.50%	3.00%	4.00%	10.2%
29 Wisconsin Energy	44.69	1.55	3.47%	8.00%	9.00%	8.72%	8.57%	12.0%
30 Xcel Energy Inc.	19.58	1.00	5.11%	6.50%	5.50%	6.88%	6.29%	11.4%
GROUP AVERAGE	31.81	1.58	5.19%	5.84%	6.25%	5.95%	6.01%	11.2%
GROUP MEDIAN			5.35%					11.4%

Source: Value Line Investment Survey, Electric Utility (East), Aug 28, 2009; (Central), Sep 25, 2009; (West), Nov 6, 2009.

NOTE: SEE PAGE 5 OF THIS EXHIBIT 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	Recent	Next	Dividend	GDP	ROE
	Price(P0)	Year's Div(D1)	Yield	K=Div Yld+G Growth (Cols 11+12)	
1 ALLETE	33.60	1.80	5.36%	6.20%	11.6%
2 Alliant Energy Co.	26.86	1.60	5.96%	6.20%	12.2%
3 American Elec. Pwr.	31.04	1.66	5.35%	6.20%	11.5%
4 Avista Corp.	19.70	0.96	4.87%	6.20%	11.1%
5 Black Hills Corp	25.46	1.44	5.66%	6.20%	11.9%
6 Cleco Corporation	24.64	1.00	4.06%	6.20%	10.3%
7 Con. Edison	40.54	2.38	5.87%	6.20%	12.1%
8 DPL Inc.	25.32	1.18	4.66%	6.20%	10.9%
9 DTE Energy Co.	35.41	2.12	5.99%	6.20%	12.2%
10 Duke Energy	15.60	0.98	6.28%	6.20%	12.5%
11 Edison Internat.	33.12	1.28	3.87%	6.20%	10.1%
12 Entergy Corp.	79.38	3.00	3.78%	6.20%	10.0%
13 FPL Group, Inc.	54.64	2.00	3.66%	6.20%	9.9%
14 FirstEnergy	44.91	2.20	4.90%	6.20%	11.1%
15 Hawaiian Electric	17.88	1.24	6.93%	6.20%	13.1%
16 IDACORP	28.52	1.20	4.21%	6.20%	10.4%
17 Northeast Utilities	23.69	1.00	4.22%	6.20%	10.4%
18 NSTAR	31.81	1.63	5.12%	6.20%	11.3%
19 PG&E Corp.	40.84	1.80	4.41%	6.20%	10.6%
19 Pinnacle West	32.64	2.10	6.43%	6.20%	12.6%
19 Portland General	19.58	1.05	5.36%	6.20%	11.6%
19 Progress Energy	38.76	2.50	6.45%	6.20%	12.6%
19 Sempra Energy	50.97	1.72	3.37%	6.20%	9.6%
19 Southern Co.	31.75	1.80	5.67%	6.20%	11.9%
19 Teco Energy, Inc.	13.75	0.80	5.82%	6.20%	12.0%
19 UIL Holdings Co.	26.14	1.73	6.62%	6.20%	12.8%
19 Vectren Corp.	23.41	1.39	5.94%	6.20%	12.1%
19 Westar Energy	20.12	1.24	6.16%	6.20%	12.4%
19 Wisconsin Energy	44.69	1.55	3.47%	6.20%	9.7%
19 Xcel Energy Inc.	19.58	1.00	5.11%	6.20%	11.3%
GROUP AVERAGE	31.81	1.58	5.19%	6.20%	11.4%
GROUP MEDIAN			5.35%		11.6%

Source: Value Line Investment Survey, Electric Utility (East), Aug 28, 2009; (Central), Sep 25, 2009; (West), Nov 6, 2009.

NOTE: SEE PAGE 5 OF THIS EXHIBIT 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	2013	Annual	CASH FLOWS							ROE=Internal	
	Year's	Div	Change	Recent	Year 1	Year 2	Year 3	Year 4	Year 5	Year 5-150	Rate of Return	
	Div	Div	to 2013	Price	Div	Div	Div	Div	Div	Div	Growth	(Yrs 0-150)
1 ALLETE	1.80	1.92	0.04	-33.60	1.80	1.84	1.88	1.92	2.04	6.20%	11.0%	
2 Alliant Energy Co.	1.60	1.92	0.11	-26.86	1.60	1.71	1.81	1.92	2.04	6.20%	12.2%	
3 American Elec. Pwr.	1.66	1.90	0.08	-31.04	1.66	1.74	1.82	1.90	2.02	6.20%	11.3%	
4 Avista Corp.	0.96	1.20	0.08	-19.70	0.96	1.04	1.12	1.20	1.27	6.20%	11.3%	
5 Black Hills Corp	1.44	1.56	0.04	-25.46	1.44	1.48	1.52	1.56	1.66	6.20%	11.4%	
6 Cleco Corporation	1.00	1.60	0.20	-24.64	1.00	1.20	1.40	1.60	1.70	6.20%	11.5%	
7 Con. Edison	2.38	2.44	0.02	-40.54	2.38	2.40	2.42	2.44	2.59	6.20%	11.3%	
8 DPL Inc.	1.18	1.30	0.04	-25.32	1.18	1.22	1.26	1.30	1.38	6.20%	10.5%	
9 DTE Energy Co.	2.12	2.50	0.13	-35.41	2.12	2.25	2.37	2.50	2.66	6.20%	12.1%	
10 Duke Energy	0.98	1.10	0.04	-15.60	0.98	1.02	1.06	1.10	1.17	6.20%	12.1%	
11 Edison Internat.	1.28	1.50	0.07	-33.12	1.28	1.35	1.43	1.50	1.59	6.20%	10.0%	
12 Entergy Corp.	3.00	3.60	0.20	-79.38	3.00	3.20	3.40	3.60	3.82	6.20%	10.0%	
13 FPL Group, Inc.	2.00	2.30	0.10	-54.64	2.00	2.10	2.20	2.30	2.44	6.20%	9.7%	
14 FirstEnergy	2.20	2.65	0.15	-44.91	2.20	2.35	2.50	2.65	2.81	6.20%	11.1%	
15 Hawaiian Electric	1.24	1.24	0.00	-17.88	1.24	1.24	1.24	1.24	1.32	6.20%	12.1%	
16 IDACORP	1.20	1.40	0.07	-28.52	1.20	1.27	1.33	1.40	1.49	6.20%	10.3%	
17 Northeast Utilities	1.00	1.15	0.05	-23.69	1.00	1.05	1.10	1.15	1.22	6.20%	10.3%	
18 NSTAR	1.63	1.95	0.11	-31.81	1.63	1.74	1.84	1.95	2.07	6.20%	11.3%	
19 PG&E Corp.	1.80	2.20	0.13	-40.84	1.80	1.93	2.07	2.20	2.34	6.20%	10.7%	
20 Pinnacle West	2.10	2.20	0.03	-32.64	2.10	2.13	2.17	2.20	2.34	6.20%	11.9%	
21 Portland General	1.05	1.20	0.05	-19.58	1.05	1.10	1.15	1.20	1.27	6.20%	11.3%	
22 Progress Energy	2.50	2.56	0.02	-38.76	2.50	2.52	2.54	2.56	2.72	6.20%	11.8%	
23 Sempra Energy	1.72	2.10	0.13	-50.97	1.72	1.85	1.97	2.10	2.23	6.20%	9.6%	
24 Southern Co.	1.80	2.00	0.07	-31.75	1.80	1.87	1.93	2.00	2.12	6.20%	11.5%	
25 Teco Energy, Inc.	0.80	0.90	0.03	-13.75	0.80	0.83	0.87	0.90	0.96	6.20%	11.7%	
26 UIL Holdings Co.	1.73	1.73	0.00	-26.14	1.73	1.73	1.73	1.73	1.84	6.20%	11.8%	
27 Vectren Corp.	1.39	1.51	0.04	-23.41	1.39	1.43	1.47	1.51	1.60	6.20%	11.6%	
28 Westar Energy	1.24	1.40	0.05	-20.12	1.24	1.29	1.35	1.40	1.49	6.20%	12.0%	
29 Wisconsin Energy	1.55	2.15	0.20	-44.69	1.55	1.75	1.95	2.15	2.28	6.20%	10.2%	
30 Xcel Energy Inc.	1.00	1.10	0.03	-19.58	1.00	1.03	1.07	1.10	1.17	6.20%	10.9%	
GROUP AVERAGE											11.1%	
GROUP MEDIAN											11.3%	

Source: Value Line Investment Survey, Electric Utility (East), Aug 28, 2009; (Central), Sep 25, 2009; (West), Nov 6, 2009.

NOTE: SEE PAGE 5 OF THIS EXHIBIT 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 (Aug 2009-Oct 2009)	Column 13: Column 11 Plus Column 12
Column 2: Estimated 2010 Div per Share from Value Line	Column 14: See Column 2
Column 3: Column 2 Divided by Column 1	Column 15: Estimated 2013 Dividends per Share from Value Line
Column 4: "Est'd 06-08 to 12-14" 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

(Based on Projected Interest Rates)

	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%
2008	6.65%	10.46%	3.81%
AVERAGE	9.15%	12.34%	3.19%

INDICATED COST OF EQUITY

PROJECTED TRIPLE-B UTILITY BOND YIELD*	6.46%
MOODY'S AVG ANNUAL YIELD DURING STUDY	9.15%
INTEREST RATE DIFFERENCE	<u>-2.69%</u>

INTEREST RATE CHANGE COEFFICIENT	<u>-41.34%</u>
ADJUSTMENT TO AVG RISK PREMIUM	1.11%

BASIC RISK PREMIUM	3.19%
INTEREST RATE ADJUSTMENT	<u>1.11%</u>
EQUITY RISK PREMIUM	<u>4.30%</u>

PROJECTED TRIPLE-B UTILITY BOND YIELD*	6.46%
INDICATED EQUITY RETURN	<u><u>10.76%</u></u>

(1) Moody's Investors Service

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

*Projected triple-B bond yield is 196 basis points over projected long-term Treasury bond rate of 4.5% from Schedule SCH-3, p. 3. The triple-B spread is for 3 months ended Oct 2009 from Schedule SCH-3, p. 2.

Kansas City Power & Light Company

Risk Premium Analysis

(Based on Current Interest Rates)

	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%
2008	6.65%	10.46%	3.81%
AVERAGE	9.15%	12.34%	3.19%

INDICATED COST OF EQUITY

CURRENT TRIPLE-B UTILITY BOND YIELD*	6.21%
MOODY'S AVG ANNUAL YIELD DURING STUDY	9.15%
INTEREST RATE DIFFERENCE	<u>-2.94%</u>

INTEREST RATE CHANGE COEFFICIENT	<u>-41.34%</u>
ADJUSTMENT TO AVG RISK PREMIUM	1.21%

BASIC RISK PREMIUM	3.19%
INTEREST RATE ADJUSTMENT	<u>1.21%</u>
EQUITY RISK PREMIUM	<u>4.41%</u>

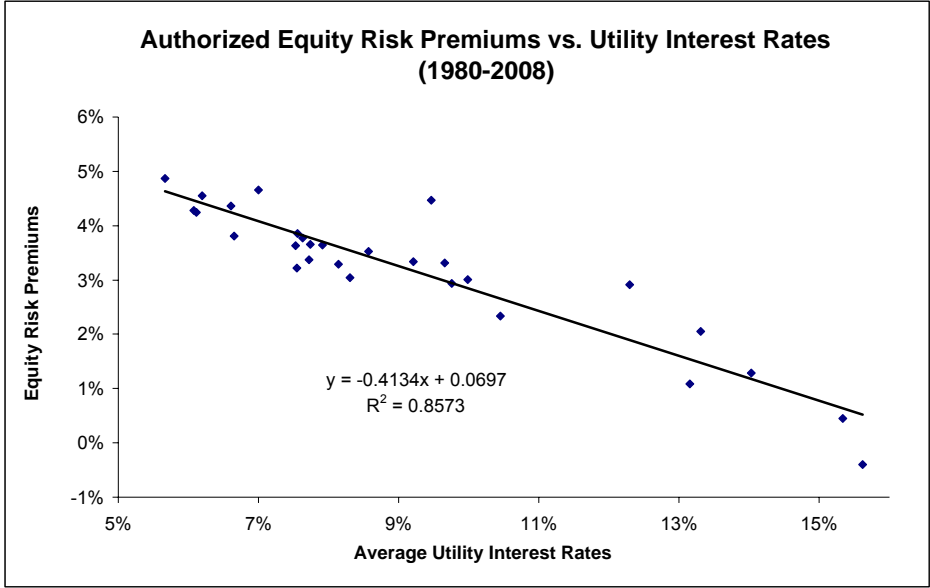
CURRENT TRIPLE-B UTILITY BOND YIELD*	6.21%
INDICATED EQUITY RETURN	<u>10.62%</u>

(1) Moody's Investors Service

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

*Current triple-B utility bond yield is three month average of Moody's Triple-B Public Utility Bond Yield Average through Oct 2009 from Schedule SCH-3, p. 2.

Kansas City Power & Light Company
Risk Premium Analysis
Regression Analysis & Interest Rate Change Coefficient



SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.925929671
R Square	0.857345755
Adjusted R Square	0.852062265
Standard Error	0.004864141
Observations	29

<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.003839258	0.003839258	162.2688162	6.25236E-13
Residual	27	0.000638816	2.36599E-05		
Total	28	0.004478074			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	0.069723958	0.003102577	22.47291965	5.19996E-19	0.063357996	0.07608992	0.063357996	0.07608992
X Variable 1	-0.413428393	0.032455086	-12.73847778	6.25236E-13	-0.480020728	-0.346836058	-0.480020728	-0.346836058