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Witness: Samuel C. Hadaway  
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Sponsoring Party: Kansas City Power & Light Company  
Case No.: ER-2010-\_\_\_\_  
Date Testimony Prepared: June 4, 2010

**MISSOURI PUBLIC SERVICE COMMISSION**

**CASE NO.: ER-2010-\_\_\_\_**

**DIRECT TESTIMONY**

**OF**

**SAMUEL C. HADAWAY**

**ON BEHALF OF**

**KANSAS CITY POWER & LIGHT COMPANY**

**June 2010**

**\*\*\* [REDACTED] \*\*\* Designates "Highly Confidential" Information  
Has Been Removed.  
Certain Schedules Attached To This Testimony Designated "(HC)"  
Have Been Removed  
Pursuant To 4 CSR 240-2.135.**

**DIRECT TESTIMONY**

**OF**

**SAMUEL C. HADAWAY**

**Case No. ER-2010-\_\_\_\_\_**

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  
12           University of Texas at Austin ("UT Austin"). I am an owner and full-time employee  
13           of FINANCO, Inc. FINANCO provides financial research concerning the cost of  
14           capital and financial condition for regulated companies as well as financial modeling  
15           and other economic studies in litigation support. In addition to my work at  
16           FINANCO, I have served as an adjunct professor in the McCombs School of  
17           Business at UT Austin and in what is now the McCoy College of Business at Texas  
18           State University. In my prior academic work, I taught economics and finance courses  
19           and I conducted research and directed graduate students in the areas of investments

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

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

14 **Q. Have you previously testified before the Missouri Public Service Commission**  
15 **("MPSC" or "Commission") or other utility regulatory agencies?**

16 A. Yes. I have testified before the MPSC and numerous other regulatory commissions  
17 on cost of capital and related financial issues.

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

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

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

2 A. My testimony is divided into five additional sections. Following this introduction, in  
3 Section II, I discuss the impact on ROE if KCP&L were to propose an interim energy  
4 charge rate adjustment mechanism ("IEC RAM"). In Section III, I present and  
5 explain the Company's requested capital structure and overall cost of capital. In  
6 Section IV, I review various methods for estimating the cost of equity. In this  
7 section, I discuss the discounted cash flow ("DCF") model, as well as risk premium  
8 methods and other approaches that are often used to estimate the cost of capital. In  
9 Section V, I review general capital market costs and conditions, and discuss recent  
10 developments in the electric utility industry that affect the cost of capital. In Section  
11 VI, I discuss the details of my cost of equity studies and provide a summary table of  
12 my ROE results.

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

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

1 return for KCP&L. These methods and the underlying economic models are applied  
2 to an investment grade company reference group of other electric utilities generally  
3 similar to KCP&L.

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

5 A. My ROE estimate is based on alternative versions of the constant growth and  
6 multistage growth DCF model. I also provide a bond-yield-plus-equity risk premium  
7 analysis and I review economic conditions and interest rates that are expected to  
8 prevail during the coming year. Because KCP&L is a wholly-owned subsidiary of  
9 Great Plains Energy Incorporated ("GPE") and does not have publicly traded  
10 common stock or other independent market data, its cost of equity cannot be  
11 estimated directly. For this reason, I apply the DCF model to a large reference group  
12 of investment grade electric utilities selected from the *Value Line Investment Survey*  
13 (*"Value Line"*). *Value Line* is a widely-followed, reputable source of financial data  
14 often used by professional economists to estimate ROE. To be included in my group,  
15 the reference companies must have at least a triple-B (investment grade) bond rating;  
16 they must derive at least 70 percent of revenues from regulated utility sales; they  
17 must have consistent financial records not affected by recent mergers or restructuring;  
18 and they must have a consistent dividend record with no dividend cuts within the past  
19 two years. The fundamental characteristics of the companies in my comparable  
20 group are summarized in Schedule SCH2010-1, page 1.

21 I also conducted a risk premium analysis based on ROEs allowed by state  
22 regulators relative to Moody's average utility debt costs. In this analysis, I considered  
23 both current utility bond yields and the higher interest rates that Standard and Poor's

1 ("S&P") is forecasting for the coming year. S&P forecasts that long-term  
2 government and corporate interest rates will increase from current levels by 30 basis  
3 points (0.30%) during 2010. The data sources and the details of my cost of equity  
4 studies are contained in my Schedules SCH2010-1 through SCH2010-6.

5 **Q. Please state your ROE recommendation and summarize the results of your cost**  
6 **of equity studies.**

7 A. I estimate the midpoint cost of equity for my comparable group to be 10.75 percent.  
8 My DCF analysis indicates that an ROE range of 10.5 percent to 11.0 percent is  
9 appropriate. My risk premium analysis indicates an ROE range of 10.61 percent to  
10 10.82 percent. Based on these quantitative results and my further review of other  
11 economic data, the reasonable comparable group midpoint ROE is 10.75 percent. As  
12 discussed in the testimony of Company witness Curtis Blanc, the Company is  
13 requesting an ROE of 11.0 percent commensurate with the top of my DCF range to  
14 reflect the Company's reliability and customer satisfaction achievements.

15 **II. IMPACT OF KCP&L'S INTERIM ENERGY CHARGE RATE**  
16 **ADJUSTMENT MECHANISM ON ROE**

17 **Q. Have you considered the effect of an IEC RAM on the Company's business risk**  
18 **profile and its required ROE?**

19 A. Yes. I have considered the effect of an IEC RAM discussed by KCP&L witness Tim  
20 Rush in his Direct Testimony from several perspectives, and I have concluded from  
21 my analysis that no adjustment to ROE should be made if the Company were to  
22 request one. Most important, implementation of the IEC RAM would not materially  
23 reduce KCP&L's business risk because the Company would remain at risk for any

1 under-recovery of energy costs and would, in fact, refund to customers any over-  
2 recovery that might occur. While the Company would include in base rates its  
3 projected energy costs, it would not have an opportunity to adjust its energy cost  
4 recovery until the next rate case, and then only on a forward-looking basis. As I will  
5 explain below, the level of KCP&L's business risk, with respect to the proposed IEC  
6 RAM would be higher, not lower than the typical situation for the comparable  
7 companies I use to estimate ROE. For this reason, no downward adjustment to ROE  
8 would be necessary if the Company were to propose an IEC RAM.

9 All of the companies in my 31-company comparable group have rate  
10 adjustment mechanisms that reduce the risk of their recovering their energy costs.  
11 Schedule SCH2010-1, pages 2-3 lists the companies and shows their cost recovery  
12 mechanism at the operating company level. In this regard, if KCP&L were to  
13 propose an IEC RAM, it would put the company at least into the category of  
14 companies with energy cost adjustment mechanisms. However, it clearly would not  
15 have the same risk-mitigating effect that the adjustment mechanisms have on the  
16 comparable companies. This is because of the asymmetrical risk posed by the IEC  
17 RAM described above and discussed further in Mr. Rush's testimony. Therefore, no  
18 adjustment to the base ROE obtained from the comparable company group would be  
19 applied to KCP&L if the Company were to request an IEC RAM.

20 **III. KCP&L CAPITAL STRUCTURE AND OVERALL RATE OF RETURN**

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

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

3 **Table 1**  
4 **Requested Capital Structure**

| 5 Capital Components             | Ratio   | Cost   | Weighted Cost |
|----------------------------------|---------|--------|---------------|
| 6 Debt                           | 48.69%  | 6.82%  | 3.32%         |
| 7 Equity-linked convertible debt | 4.53%   | 13.59% | 0.62%         |
| 8 Preferred stock                | 0.62%   | 4.29%  | 0.03%         |
| 9 <u>Common equity</u>           | 46.16%  | 11.00% | 5.07%         |
| 10 TOTAL                         | 100.00% |        | <u>9.04%</u>  |

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

13 A. The requested capital structure, as well as the costs for debt and preferred stock, are  
14 consistent with GPE's projected capital structure at December 31, 2010. These data  
15 are presented in more detail in Schedule SCH2010-2, with the December 31, 2010  
16 summary shown on page 8 of that schedule. Using the parent company's consolidated  
17 capital structure is consistent with KCP&L's approach in its prior rate cases.

18 **Q. What are the key differences between GPE's actual capital structure as of  
19 December 31, 2009 and the requested capital structure, projected as of  
20 December 31, 2010?**

21 A. The actual GPE capital structure as of December 31, 2009, is shown on page 2 of  
22 Schedule SCH2010-2. The key differences between the actual capital structure and  
23 the requested capital structure, projected as of December 31, 2010, are as follows:

24 Long-Term Debt

25 Net Long-Term Debt is projected to increase by \*\* [REDACTED] \*\* million due to additional  
26 long-term debt expected to be issued by year-end 2010 to refinance maturing GMO  
27 long-term debt and finance construction expenditures.



1 Equity

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

6 **IV. ESTIMATING THE COST OF EQUITY CAPITAL**

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

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

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

16 A. The cost of equity capital is the profit or rate of return that equity investors expect to  
17 receive. In concept it is no different than the cost of debt or the cost of preferred  
18 stock. The cost of equity is the rate of return that common stockholders expect, just  
19 as interest on bonds and dividends on preferred stock are the returns that investors in  
20 those securities expect. Equity investors expect a return on their capital  
21 commensurate with the risks they take, consistent with returns that are available from  
22 other similar investments. Unlike returns from debt and preferred stocks, however,

1 the equity return is not directly observable in advance and, therefore, it must be  
2 estimated or inferred from capital market data and trading activity.

3 An example helps to illustrate the cost of equity concept. Assume that an  
4 investor buys a share of common stock for \$20 per share. If the stock's expected  
5 dividend is \$1.00, the expected dividend yield is 5.0 percent ( $\$1.00 / \$20 =$   
6  $5.0$  percent). If the stock price is also expected to increase to \$21.20 after one year,  
7 this \$1.20 expected gain adds an additional 6.0 percent to the expected total rate of  
8 return ( $\$1.20 / \$20 = 6.0$  percent). Therefore, when buying the stock at \$20 per share,  
9 the investor expects a total return of 11.0 percent: 5.0 percent dividend yield, plus 6.0  
10 percent price appreciation. In this example, the total expected rate of return at 11.0  
11 percent is the appropriate measure of the cost of equity capital, because it is this rate  
12 of return that caused the investor to commit the \$20 of equity capital in the first place.  
13 If the stock were riskier, or if expected returns from other investments were higher,  
14 investors would require a higher rate of return from the stock, which would result in a  
15 lower initial purchase price in market trading.

16 Each day market rates of return and prices change to reflect new investor  
17 expectations and requirements. For example, when interest rates on bonds and  
18 savings accounts rise, utility stock prices usually fall. This is true, at least in part,  
19 because higher interest rates on these alternative investments make utility stocks  
20 relatively less attractive, which causes utility stock prices to decline in market  
21 trading. This competitive market adjustment process is quick and continuous, so that  
22 market prices generally reflect investor expectations and the relative attractiveness of  
23 one investment versus another. In this context, to estimate the cost of equity one

1 must apply informed judgment about the relative risk of the company in question and  
2 knowledge about the risk and expected rate of return characteristics of other available  
3 investments as well.

4 **Q. How does the market account for risk differences among the various**  
5 **investments?**

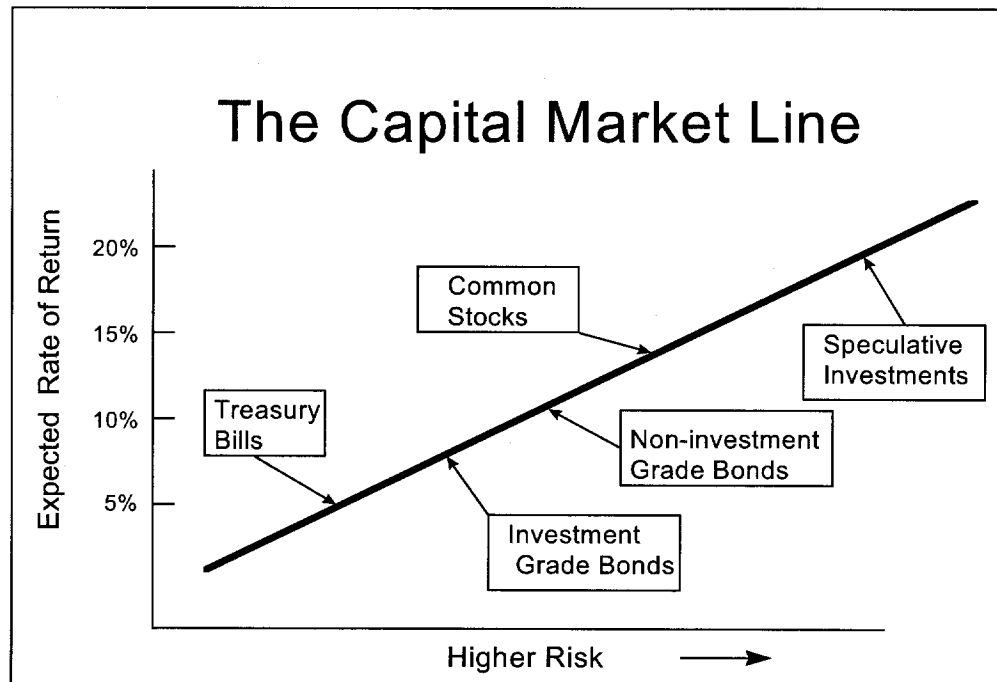
6 A. Risk-return tradeoffs among capital market investments have been the subject of  
7 extensive financial research. Literally dozens of textbooks and hundreds of academic  
8 articles have addressed the issue. Generally, such research confirms the common  
9 sense conclusion that investors will take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

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

20 A. Yes. The following graph depicts the risk-return relationship that has become widely  
21 known as the Capital Market Line ("CML"). The CML offers a graphical  
22 representation of the capital market risk-return principle. The graph is not meant to

1 illustrate the actual expected rate of return for any particular investment, but merely  
2 to illustrate in a general way the risk-return relationship.

## Risk-Return Tradeoffs



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

1           Investment risks increase as one moves up and to the right along the CML. A  
2 higher degree of uncertainty exists about the level of investment value at any point in  
3 time and about the level of income payments that may be received. Among these  
4 investments are long-term bonds and preferred stocks, which offer priority claims to  
5 assets and income payments. They are relatively low risk, but they are not risk-free.  
6 The market value of long-term bonds, even those issued by the U.S. Treasury, often  
7 fluctuates widely when government policies or other factors cause interest rates to  
8 change.

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

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

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

5                   A public utility is entitled to such rates as will permit it to earn a return  
6                   on the value of the property which it employs for the convenience of  
7                   the public equal to that generally being made at the same time and in  
8                   the same general part of the country on investments in other business  
9                   undertakings which are attended by corresponding risks and  
10                  uncertainties; but it has no constitutional right to profits such as are  
11                  realized or anticipated in highly profitable enterprises or speculative  
12                  ventures. *Bluefield Water Works & Improvement Company v. Public*  
13                  *Service Commission of West Virginia*, 262 U.S. 679, 692-693 (1923).

14                  From the investor or company point of view, it is important that there  
15                  be enough revenue not only for operating expenses, but also for the  
16                  capital costs of the business. These include service on the debt and  
17                  dividends on the stock. By that standard the return to the equity owner  
18                  should be commensurate with returns on investments in other  
19                  enterprises having corresponding risks. That return, moreover, should  
20                  be sufficient to assure confidence in the financial integrity of the  
21                  enterprise, so as to maintain its credit and to attract capital. *Federal*  
22                  *Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, 603  
23                  (1944).

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

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

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

31    **Q.    Please describe the first set of estimation techniques, the comparable earnings**  
32           **methods.**

1 A. The comparable earnings methods have evolved over time. The original comparable  
2 earnings methods were based on book accounting returns. This approach developed  
3 ROE estimates by reviewing accounting returns for unregulated companies thought to  
4 have risks similar to those of the regulated company in question. These methods have  
5 generally been rejected because they assume that the unregulated group is earning its  
6 actual cost of capital, and that its equity book value is the same as its market value.  
7 In most situations these assumptions are not valid, and, therefore, accounting-based  
8 methods do not generally provide reliable cost of equity estimates.

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

16 **Q. Please describe the second set of estimation techniques, the risk premium**  
17 **methods.**

18 A The risk premium methods begin with currently observable market returns, such as  
19 yields on government or corporate bonds, and add an increment to account for the  
20 additional equity risk. The capital asset pricing model ("CAPM") and arbitrage  
21 pricing theory ("APT") model are more sophisticated risk premium approaches. The  
22 CAPM and APT methods estimate the cost of equity directly by combining the "risk-  
23 free" government bond rate with explicit risk measures to determine the risk premium

1 required by the market. Although these methods are widely used in academic cost of  
2 capital research, their additional data requirements and their potentially questionable  
3 underlying assumptions have detracted from their use in most regulatory  
4 jurisdictions. The basic risk premium methods provide a useful parallel approach  
5 with the DCF model and assure consistency with other capital market data  
6 consistency in the cost of equity cost estimation process.

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

8 A. The DCF model is the most widely used regulatory cost of equity estimation method.  
9 Like the risk premium approach, the DCF model has a sound basis in theory, and  
10 many argue that it has the additional advantage of simplicity. I will describe the DCF  
11 model in detail below, but in essence its estimate of ROE is simply the sum of the  
12 expected dividend yield and the expected long-term dividend (or price) growth rate.  
13 While dividend yields are easy to obtain, estimating long-term growth is more  
14 difficult. Because the constant growth DCF model also requires very long-term  
15 growth estimates (technically to infinity), some argue that its application is too  
16 speculative to provide reliable results, resulting in the preference for the multistage  
17 growth DCF analysis.

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

20 A. From my experience, a combination of DCF and risk premium methods provides the  
21 most reliable approach. While the caveat about estimating long-term growth must be  
22 observed, the DCF model's other inputs are readily obtainable, and the model's results  
23 typically are consistent with capital market behavior. The risk premium methods



1 provide a good parallel approach to the DCF model and further ensure that current  
2 market conditions are accurately reflected in the cost of equity estimate.

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

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

$$7 \quad P_0 = D_1/(1+k) + D_2/(1+k)^2 + \dots + D_\infty/(1+k)^\infty \quad (1)$$

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

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

$$15 \quad k = D_1/P_0 + g \quad (2)$$

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

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

21 A. Yes. Under circumstances when growth rates are expected to fluctuate or when  
22 future growth rates are highly uncertain, the constant growth model may not give  
23 reliable results. Although the DCF model itself is still valid, i.e., equation (1) is

1 mathematically correct, under such circumstances the simplified form of the model  
2 must be modified to capture market expectations accurately.

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

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

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

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

22           
$$P_0 = D_1/(1+k) + D_2/(1+k)^2 + \dots + P_T/(1+k)^T \quad (3)$$

1 where the variables are the same as in equation (1) except that  $P_T$  is the estimated  
2 stock price at the end of the transition period  $T$ . Under the assumption that normal  
3 growth resumes after the transition period, the price  $P_T$  is then expected to be based  
4 on constant growth assumptions. With the terminal price approach, the estimated  
5 cost of equity,  $k$ , is just the rate of return that investors would expect to earn if they  
6 bought the stock at today's market price, held it and received dividends through the  
7 transition period (until period  $T$ ), and then sold it for price  $P_T$ . In this approach, the  
8 analyst's task is to estimate the rate of return that investors expect to receive given the  
9 current level of market prices they are willing to pay.

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

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

$$15 \quad P_0 = D_0(1+g_1)/(1+k) + \dots + D_2(1+g_2)^n/(1+k)^n +$$
$$16 \quad + [D_T(1+g_T)^{(T+1)}/(k-g_T)]/(1+k)^T \quad (4)$$

17 where the variables are the same as in equation (1), but  $g_1$  represents the growth rate  
18 for the first period;  $D_2$  is the dividend at the beginning of the second period and  $g_2$  is  
19 the growth rate for the second period; and  $D_T$  is the dividend at the beginning of the  
20 third period and  $g_T$  is the growth rate for the period from year  $T$  (the end of the  
21 transition period) to infinity. The first two growth rates are simply estimates for  
22 fluctuating growth over "n" years (typically 5 or 10 years) and  $g_T$  is a constant growth

1 rate assumed to prevail forever after year T. The difficult task for analysts in the  
2 multistage approach is determining the various growth rates for each period.

3 Although less convenient for exposition purposes, the nonconstant growth  
4 models are based on the same valid capital market assumptions as the constant  
5 growth version. The nonconstant growth approach simply requires more explicit data  
6 inputs and more work to solve for the discount rate,  $k$ . Fortunately, the required data  
7 are available from investment and economic forecasting services, and computer  
8 algorithms can easily produce the required solutions. Both constant and nonconstant  
9 growth DCF analyses are presented in the following section.

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

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

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

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

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

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

19 The important point is to answer the following question: "What rate of return  
20 should equity investors reasonably expect relative to returns that are currently  
21 available from long-term bonds?" The risk premium studies and analyses I discuss  
22 later address this question. My risk premium analysis is based on an intermediate

1 position that avoids some of the problems and concerns that have been expressed  
2 about both very long and very short periods of analysis with the risk premium model.

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

4 A. Estimating the cost of equity is one of the most controversial issues in utility  
5 ratemaking. Because actual investor requirements are not directly observable, several  
6 methods have been developed to assist in the estimation process. The comparable  
7 earnings method is the oldest but perhaps least reliable. Its use of accounting rates of  
8 return, or even historical market returns, may or may not reflect current investor  
9 requirements. Differences in accounting methods among companies and issues of  
10 comparability also detract from this approach.

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

1       **V.     FUNDAMENTAL FACTORS THAT AFFECT THE COST OF EQUITY**

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

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

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

6       A.     In Schedule SCH2010-3, page 1, I provide a review of annual interest rates and rates  
7           of inflation in the U.S. economy over the past ten years. During that time inflation  
8           and fixed income market costs declined and, generally, have been lower than rates  
9           that prevailed in the previous decade. Inflation, as measured by the Consumer Price  
10          Index ("CPI"), was essentially zero percent in 2008 but increased to about a 3 percent  
11          annual rate in 2009. Over the past decade, the CPI has averaged 2.6 percent. This is  
12          lower than its long-run average of 3.5 percent to 4.0 percent.

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

1 While governmental policies and "flight to safety"<sup>1</sup> issues have driven down interest  
2 rates on higher quality debt securities, the cost of equity for utilities has not declined  
3 to the same extent over the past year.

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

6 A. Yes. At various times since late 2008, the capital markets in the U.S. have been more  
7 turbulent than at any time since the 1930s. This period has seen frequent  
8 large daily moves in the stock market and conditions in the corporate debt market  
9 that, in late 2008 and parts of early 2009, could best be characterized as -chaotic. The  
10 S&P 500 and the Dow Jones Industrial Average have fluctuated by 50 percent since  
11 November 2007. In this environment, many large financial institutions such as  
12 Countrywide Financial, Washington Mutual, the Federal Home Loan Mortgage  
13 Association, the Federal National Mortgage Association, Wachovia, Bear Sterns, and  
14 Merrill Lynch were unable to survive as independent institutions. Lehman Brothers  
15 was forced to file for bankruptcy. Other surviving institutions such as Citigroup,  
16 Goldman Sachs, American International Group, Morgan Stanley and others have  
17 required multibillion dollar capital infusions.

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<sup>1</sup> 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           Since October 2008, the Federal government has enacted emergency  
2 legislation and taken other steps to stabilize the economy. As part of that effort the  
3 government increased federal deposit insurance for banks, lent billions of dollars to  
4 financial institutions, purchased hundreds of billions of dollars in illiquid securities,  
5 guaranteed loans between financial institutions, and purchased equity in banks.  
6 There is no question that the economic and financial uncertainties generated by the  
7 credit crisis have significantly impacted the risks surrounding public utility company  
8 cost of capital.

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

11 A. Yes. In Schedule SCH2010-3, page 2, I provide data that illustrate the volatility that  
12 has occurred in the debt markets. The schedule shows that during the past 24 months  
13 triple-B spreads for utility companies were at more than twice previously existing  
14 levels. The month-by-month interest rates paid by triple-B rated utilities and the U.S.  
15 Treasury since January 2008 are presented in Schedule SCH2010-3, page 2. These  
16 interest rate data are summarized in Table 2 below.

**Table 2**  
**Long-Term Interest Rate Trends**

| <b>Month</b>     | <b>Triple-B<br/>Utility Rate</b> | <b>30-Year<br/>Treasury Rate</b> | <b>Triple-B<br/>Utility Spread</b> |
|------------------|----------------------------------|----------------------------------|------------------------------------|
| 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                               |
| Nov-09           | 6.18                             | 4.31                             | 1.87                               |
| Dec-09           | 6.26                             | 4.49                             | 1.77                               |
| Jan-10           | 6.16                             | 4.60                             | 1.56                               |
| Feb-10           | 6.25                             | 4.62                             | 1.63                               |
| Mar-10           | 6.22                             | 4.64                             | 1.58                               |
| Apr-10           | 6.19                             | 4.69                             | 1.50                               |
| <b>3-Mo Avg</b>  | <b>6.22</b>                      | <b>4.65</b>                      | <b>1.57</b>                        |
| <b>12-Mo Avg</b> | <b>6.49</b>                      | <b>4.44</b>                      | <b>2.05</b>                        |

Mergent Bond Record (Utility Rates); www.federalreserve.gov (Treasury Rates.) Three month average is February-April 2010.

Twelve month average is for May 2009- April 2010.

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The data in Table 2 vividly illustrate the market turmoil that has occurred. In fact, increased risk aversion and continuing market volatility have resulted in ongoing difficulties for many corporations. While the effects of the market turbulence may not be easily captured in financial models for estimating the rate of return, the

1 market's turbulence and continuing elevated risk aversion should be considered  
2 explicitly in estimates of the cost of equity capital.

3 **Q. Do the smaller spreads between triple-B utility bond yields and U.S. Treasury**  
4 **bonds mean that the markets have completely recovered from the economic**  
5 **turmoil that resulted from the financial crisis?**

6 A. No. While markets have stabilized relative to the near-chaotic conditions that existed  
7 in late 2008, investors remain concerned about high unemployment, the large federal  
8 government deficits that are being created, and the potential for further fallout from  
9 housing foreclosures and other remnants of the financial crisis. Although it is  
10 difficult to measure these effects directly, the data in Table 2 provide some  
11 perspective for the ongoing impacts.

| <b>Table 3</b>                            |               |                |                 |
|---|---------------|----------------|-----------------|
| <b>Utility Bond Interest Rate Spreads</b> |               |                |                 |
| Column                                    | 1             | 2              | 3               |
| Month                                     | Aa<br>Utility | Baa<br>Utility | Baa minus<br>Aa |
| Apr-07                                    | 5.83          | 6.24           | 0.41            |
| May-07                                    | 5.86          | 6.23           | 0.37            |
| Jun-07                                    | 6.18          | 6.54           | 0.36            |
| Jul-07                                    | 6.11          | 6.49           | 0.38            |
| Aug-07                                    | 6.11          | 6.51           | 0.40            |
| Sep-07                                    | 6.10          | 6.45           | 0.35            |
| Oct-07                                    | 6.04          | 6.36           | 0.32            |
| Nov-07                                    | 5.87          | 6.27           | 0.40            |
| Dec-07                                    | 6.03          | 6.51           | 0.48            |
| Jan-08                                    | 5.87          | 6.35           | 0.48            |
| Feb-08                                    | 6.04          | 6.60           | 0.56            |
| Mar-08                                    | 5.99          | 6.68           | 0.69            |
| Apr-08                                    | 5.99          | 6.81           | 0.82            |
| May-08                                    | 6.07          | 6.79           | 0.72            |
| Jun-08                                    | 6.19          | 6.93           | 0.74            |
| Jul-08                                    | 6.13          | 6.97           | 0.84            |
| Aug-08                                    | 6.09          | 6.98           | 0.89            |
| Sep-08                                    | 6.13          | 7.15           | 1.02            |
| Oct-08                                    | 6.95          | 8.58           | 1.63            |
| Nov-08                                    | 6.83          | 8.98           | 2.15            |
| Dec-08                                    | 5.92          | 8.11           | 2.19            |
| Jan-09                                    | 6.01          | 7.90           | 1.89            |
| Feb-09                                    | 6.11          | 7.74           | 1.63            |
| Mar-09                                    | 6.14          | 8.00           | 1.86            |
| Apr-09                                    | 6.19          | 8.03           | 1.84            |
| May-09                                    | 6.23          | 7.76           | 1.53            |
| Jun-09                                    | 6.13          | 7.31           | 1.18            |
| Jul-09                                    | 5.63          | 6.87           | 1.24            |
| Aug-09                                    | 5.33          | 6.36           | 1.03            |
| Sep-09                                    | 5.15          | 6.12           | 0.97            |
| Oct-09                                    | 5.23          | 6.14           | 0.91            |
| Nov-09                                    | 5.33          | 6.18           | 0.85            |
| Dec-09                                    | 5.52          | 6.26           | 0.74            |
| Jan-10                                    | 5.55          | 6.16           | 0.61            |
| Feb-10                                    | 5.69          | 6.25           | 0.56            |
| Mar-10                                    | 5.64          | 6.22           | 0.58            |
| Apr-10                                    | 5.62          | 6.19           | 0.57            |
| <b>3-Mo Avg</b>                           | <b>5.65</b>   | <b>6.22</b>    | <b>0.57</b>     |

Source: Mergent Bond Record.

Three-month average is for February through April 2010.

1 The spreads between the highest quality Aa utility bond interest rates and Baa rates  
2 remain almost twice as wide as those that existed in 2007 before the financial crisis  
3 began. Like the Treasury bond yield spreads shown in Table 1, the Baa – Aa spreads  
4 have narrowed since late 2008 and early 2009, but they have not returned to the lower  
5 levels that existed in early 2007. These continuing wider spreads between the highest  
6 quality utility Aa bonds and minimum investment grade Baa bonds are an indication  
7 of heightened investor risk aversion caused by the continuing effects of the financial  
8 turmoil.

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

10 A. Expectations are beginning to move toward higher interest rates during the coming  
11 year. On February 18, 2010, the Federal Reserve (Fed) raised the Discount Rate  
12 from 0.50 percent to 0.75 percent. All members of the 12 Federal Reserve banks  
13 supported the decision. This is the first increase in any of the government  
14 administered interest rates since the Fed began its efforts to revive the economy in  
15 2008.

16 Additional economic data and projections from S&P also point to higher rates.  
17 S&P's most recent *Trends & Projections* publication for April 2010 is presented in  
18 Schedule SCH2010-3, page 3. The S&P data reflect significant economic contraction  
19 during 2009. S&P indicates that real gross domestic product (GDP) declined by 2.4  
20 percent during that year. However, GDP growth resumed in the 3rd Quarter of 2009,  
21 and for all of 2010, S&P expects real GDP to increase by 3.0 percent.

22 S&P also forecasts that long-term government and high grade corporate  
23 interest rates will rise somewhat from recent levels. The summary interest rate data

1 are presented in Table 4 below:

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

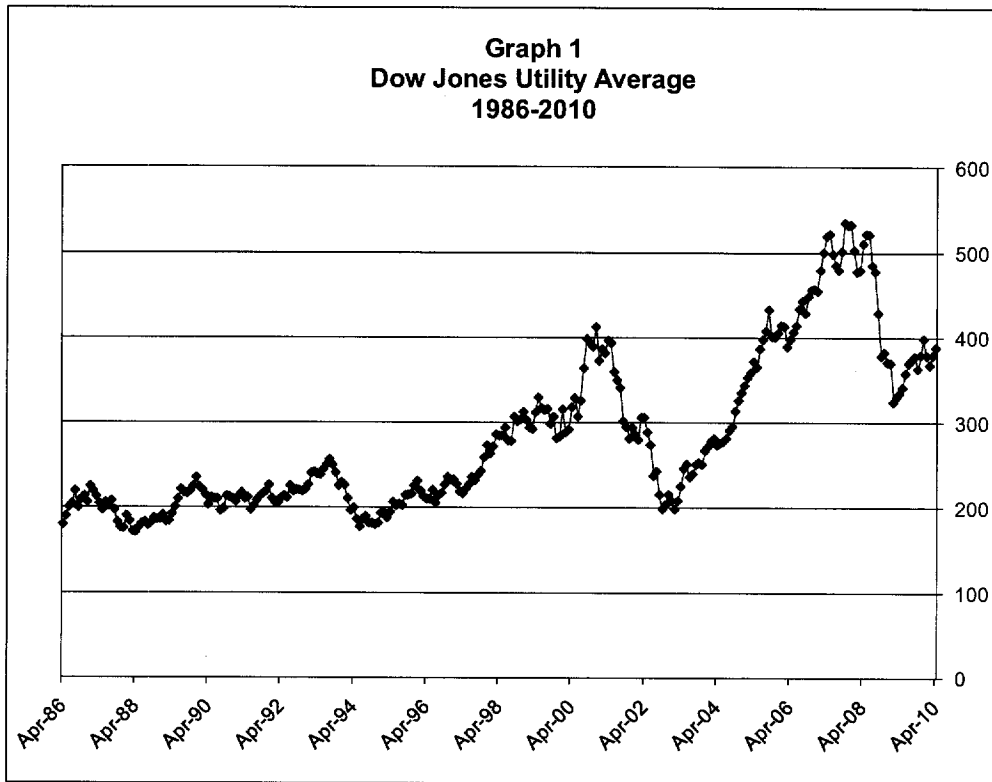
4 (a) (b) (c)  
5 Average Average Average  
6 Apr. 2010 2009 2010 Est.  
7 Treasury Bills 0.2% 0.2% 0.3%  
8 10-Yr. T-Bonds 3.9% 3.3% 4.1%  
9 30-Yr. T-Bonds 4.7% 4.1% 5.0%  
10 Aaa Corporate Bonds 5.3% 5.3% 5.7%

11 Sources: Column (a) from: [www.federalreserve.gov](http://www.federalreserve.gov), (Current Rates).  
12 Columns (b) and (c) from: *Standard & Poor's Trends & Projections*, April  
13 2010, page 8 (Projected Rates).

14 The data in Table 4 show that long-term Treasury interest rates during 2010  
15 are projected to increase by 30 basis points from the average rate for April 2010.  
16 The rate on highest grade Aaa corporate bonds is expected to increase by 40 basis  
17 points from April 2010 levels. Although in the recently turbulent market  
18 environment it has been difficult to project interest rates, these market data offer  
19 perspective for judging the cost of capital in the present case.

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

21 A. Utility stock prices have fluctuated widely. After reaching a level of over 400 in  
22 2000, the Dow Jones Utility Average ("DJUA") dropped to about 200 by October  
23 2002. From late 2002 until 2008, the DJUA trended upward. More recently, utility  
24 stock prices have dropped with the overall market decline. The current level for the  
25 DJUA is 25 percent below the record high levels attained in 2007. The wider  
26 fluctuations in more recent years are vividly illustrated in Graph 1, which depicts  
27 DJUA prices over the past 25 years.

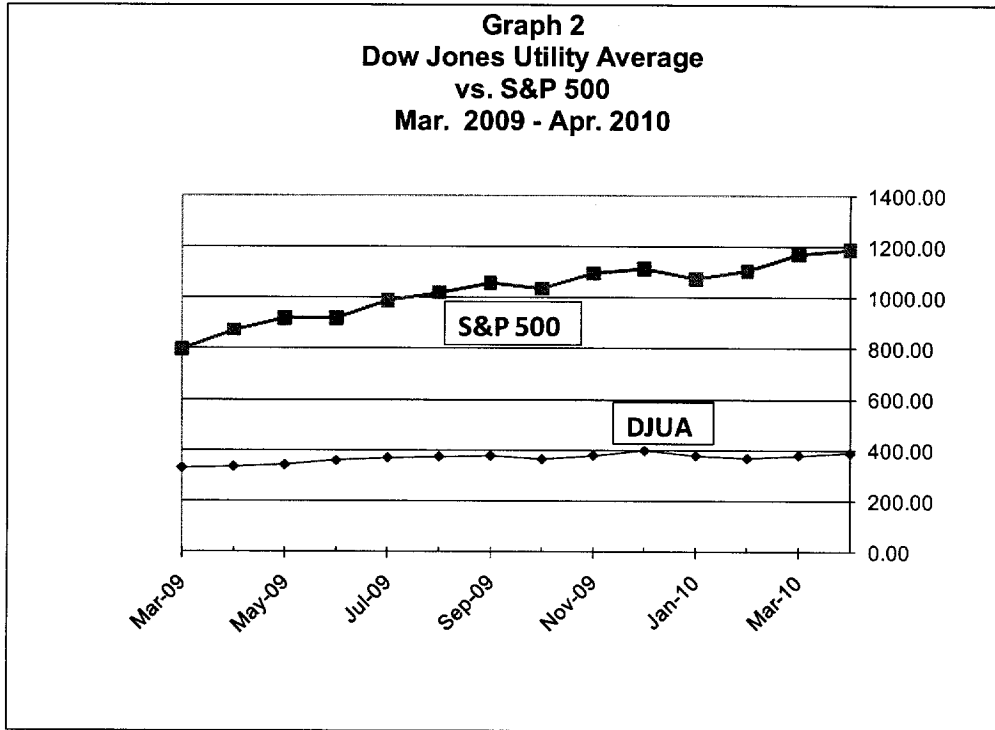


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2 In this environment, investors' return expectations and requirements for providing  
 3 capital to the utility industry remain high relative to the longer-term traditional view  
 4 of the utility industry. Increased market volatility for utility shares causes investors  
 5 to require a higher rate of return.

6 **Q. How have utility stocks performed relative to the overall market recovery**  
 7 **experienced during the past year?**

8 A. Utility stock prices have lagged significantly behind the overall market recovery.  
 9 Graph 2 shows the monthly levels for the DJUA versus the broader market S&P 500  
 10 index since the market lows that occurred in February and March of 2009.



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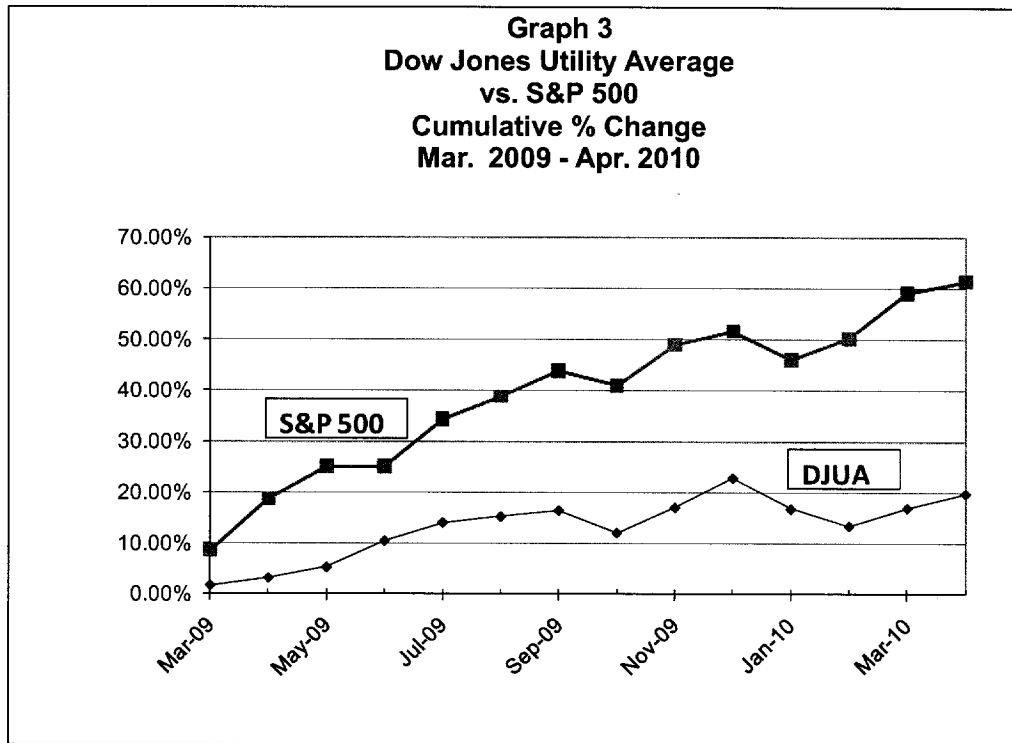
8

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While the S&P 500 has increased significantly during the past year, utility prices have remained relatively flat. This result is a further indication that the cost of equity for utility companies has not declined to the same extent that interest rates have fallen or to the same extent that the cost of equity may have come down for the broader equity market. The relatively lower prices for utility shares indicate that the cost of capital for utilities is higher.

Graph 3 further illustrates this result by showing the cumulative percentage change in the two equity indexes since the March 2009 lows.





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2 While the S&P 500 has recovered over 60 percent (61.43%) from its March 2009  
 3 lows, utility stock prices have increased by less than one-third that amount (19.75%).  
 4 This result again suggests the market difficulties that utilities face and the continuing  
 5 relatively higher cost of equity for utility companies.

6 **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, the effects of  
 10 deregulation of the wholesale power markets and continuing fuel price uncertainties  
 11 remain prominent. The economic crisis has also reduced sales volumes and increased  
 12 the difficulty of planning for future load requirements. S&P reflects this volatility in  
 13 its most recent Electric Utility Industry Survey:

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**Standard & Poor's Industry Surveys**

The S&P Electric Utilities subindex was down 0.5% in 2009, compared with a 23.5% increase for the benchmark S&P 500 Composite stock index and a 24.3% increase for the broader S&P 1500 SuperComposite. This followed a strong decline of 28.1% in 2008 for the S&P Electric Utilities subindex, versus declines of 38.5% and 38.2% for the S&P 500 and the S&P 1500, respectively. We believe the underperformance of electric utility stocks in 2009 reflected both the downturn in the economy and the weakness in power markets, as well as the impact on earnings from abnormally mild summer weather.

We expect the performance of both the electric utility sector and the individual companies within the sector to remain relatively volatile over the next several years. However, assuming that the housing, financial, and credit markets begin to stabilize, we believe the stocks will be less volatile in 2010 than they were in 2008 and 2009, or during the first few years of this decade.... \*\*\* The performance of the sector, however, will remain sensitive to the macroeconomic environment and market forces surrounding it. (Standard & Poor's Industry Surveys, Electric Utilities February 25, 2010, page 6).

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

**Value Line Investment Survey**

The Value Line Utility Average underperformed the Value Line Geometric Average by a wide margin in 2009. Things haven't changed so far in 2010. The broad-based Value Line Geometric Average is up 8%, while the Value Line Utility Average is where it was at the start of the year. (*Value Line Investment Survey*, Electric Utility (Central) Industry, March 26, 2010, page 901.)

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

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

**A.** Yes. Prior to the recent financial crisis, the greatest consideration for utility investors was the industry's continuing transition to more open market conditions and

1 competition. With the passage of the Energy Policy Act ("EPACT") in 1992 and the  
2 Federal Energy Regulatory Commission's ("FERC") Order 888 in 1996, the stage was  
3 set for vastly increased competition in the electric utility industry. EPACT's mandate  
4 for open access to the transmission grid and FERC's implementation through Order  
5 888 effectively opened the market for wholesale electricity to competition.  
6 Previously protected utility service territory and lack of transmission access in some  
7 parts of the country had limited the availability of competitive bulk power prices.  
8 EPACT and Order 888 have essentially eliminated such constraints for incremental  
9 power needs.

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

15 Concern is also beginning to develop around pending climate change  
16 legislation including the recent passage by the House of Representatives of H.R. 2454  
17 – the American Clean Energy and Security Act of 2009, also referred to as the  
18 Waxman-Markey bill. It has not been passed by the Senate and at this time I cannot  
19 predict if it will pass or if / when climate legislation in any form will pass, but it  
20 appears increasingly likely that in the foreseeable future climate change initiatives  
21 will require utilities to balance a diverse set of supply-side and demand-side resources  
22 in order to respond. In particular, utilities with significant coal-fired generation  
23 would have the added risk of addressing a reduction in greenhouse gas emissions by

1           needing to make costly changes to existing generation fleets such as retiring existing  
2           coal plants in favor of lower-emission alternatives, operating higher cost supply  
3           options, purchasing domestic and/or foreign carbon offsets, or purchasing more  
4           expensive low-or-zero emission power. In addition, climate change legislation would  
5           likely place added pressure on utilities to offer demand-side alternatives, including  
6           energy efficiency programs, that will reduce customers' demand for power.

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

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

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

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

2 A. Yes. The above-mentioned climate change initiatives create fairly significant risk for  
3 the Company going forward. Approximately 76 percent of the Company's fuel mix  
4 based on actual generation is coal. With the completion of the new Iatan Unit 2 coal  
5 plant, the Company estimates that this percentage will increase to 80 percent. The  
6 Company discussed the potential impact of climate change risk in its most recent  
7 Form 10-K:

8 The companies are subject to extensive federal, state and local  
9 environmental laws, regulations and permit requirements relating to  
10 air and water quality, waste management and disposal, natural  
11 resources and health and safety. In addition to imposing continuing  
12 compliance obligations and remediation costs for historical and pre-  
13 existing conditions, these laws and regulations authorize the  
14 imposition of substantial penalties for noncompliance, including fines,  
15 injunctive relief and other sanctions. There is also a risk that new  
16 environmental laws and regulations, new judicial interpretations of  
17 environmental laws and regulations, or the requirements in new or  
18 renewed environmental permits could adversely affect the companies'  
19 operations. In addition, there is also a risk of lawsuits brought by third  
20 parties alleging violations of environmental commitments or  
21 requirements, creation of a public nuisance or other matters, and  
22 seeking injunctions or monetary or other damages and certain federal  
23 courts have held that state and local governments and private parties  
24 have standing to bring climate change tort suits seeking company-  
25 specific emission reductions and damages.

26 In addition to the potential for new environmental laws, the  
27 Environmental Protection Agency (EPA) is considering the regulation  
28 of greenhouse gases under the existing Clean Air Act. Among other  
29 actions, the EPA has proposed rules that focus on facilities emitting  
30 over 25,000 tons of greenhouse gases per year. These proposed rules  
31 would establish new thresholds for greenhouse gas emissions, defining  
32 when Clean Air Act permits under the New Source Review and Title  
33 V operating permits programs would be required for new or existing  
34 industrial facilities. Most of Great Plains Energy's and KCP&L's  
35 generating facilities would be affected by these proposed  
36 rules. Additional federal and/or state legislation or regulation  
37 respecting greenhouse gas emissions may be proposed or enacted in  
38 the near future. Further, pursuant to the Collaboration Agreement,

1 KCP&L agreed to pursue a set of initiatives including energy  
2 efficiency, additional wind generation, lower emission permit levels at  
3 its Iatan and LaCygne stations and other initiatives designed to offset  
4 CO<sub>2</sub> emissions. Requirements to reduce greenhouse gas emissions  
5 may cause Great Plains Energy and KCP&L to incur significant costs  
6 relating to their ongoing operations (through additional environmental  
7 control equipment, retiring and replacing existing generation, or  
8 selecting more costly generation alternatives), to procure emission  
9 allowance credits, or due to the imposition of taxes, fees or other  
10 governmental charges as a result of such emissions.

11 Due to all of the above, Great Plains Energy's and KCP&L's projected  
12 capital and other expenditures for environmental compliance are  
13 subject to significant uncertainties, including the timing of  
14 implementation of any new or modified environmental requirements,  
15 the emissions limits imposed by such requirements and the types and  
16 costs of the compliance alternatives selected by Great Plains Energy  
17 and KCP&L. As a result, costs to comply with environmental  
18 requirements cannot be estimated with certainty, and actual costs  
19 could be significantly higher than projections. Other new  
20 environmental laws and regulations affecting the operations of the  
21 companies may be adopted, and new interpretations of existing laws  
22 and regulations could be adopted or become applicable to the  
23 companies or their facilities, any of which may materially adversely  
24 affect Great Plains Energy's and KCP&L's business, adversely affect  
25 the companies' ability to continue operating its power plants as  
26 currently done and substantially increase their environmental  
27 expenditures or liabilities in the future. (2009 SEC Form 10-K, pp. 13-  
28 16.)

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

31 A. As I discussed previously, equity investors respond to changing assessments of risk  
32 and financial prospects by changing the price they are willing to pay for a given  
33 security. When the risk perceptions increase or financial prospects decline, investors  
34 refuse to pay the previously existing market price for a company's securities, and  
35 market supply and demand forces then establish a new lower price. The lower market  
36 price typically translates into a higher cost of capital through a higher dividend yield

1 requirement, as well as the potential for increased capital gains if prospects improve.  
 2 In addition to market losses for prior shareholders, the higher cost of capital is  
 3 transmitted directly to the company by the need to issue more shares to raise any  
 4 given amount of capital for future investment. The additional shares also impose  
 5 additional future dividend requirements and reduce future earnings per share growth  
 6 prospects.

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

9 A. The overall average ROEs allowed for electric utilities since 2006 are summarized in  
 10 Table 5 below:

11 **Table 4**  
 12 **Authorized Electric Utility Equity Returns**

|                            | 2006   | 2007   | 2008   | 2009   | 2010   |
|----------------------------|--------|--------|--------|--------|--------|
| 13 1 <sup>st</sup> Quarter | 10.38% | 10.27% | 10.45% | 10.29% | 10.66% |
| 14 2 <sup>nd</sup> Quarter | 10.68% | 10.27% | 10.57% | 10.55% |        |
| 15 3 <sup>rd</sup> Quarter | 10.06% | 10.02% | 10.47% | 10.46% |        |
| 16 4 <sup>th</sup> Quarter | 10.39% | 10.56% | 10.33% | 10.54% |        |
| 17 Full Year Average       | 10.36% | 10.36% | 10.46% | 10.48% | 10.66% |
| 18 Average Utility         |        |        |        |        |        |
| 19 Debt Cost               | 6.08%  | 6.11%  | 6.65%  | 6.28%  | 5.88%  |
| 20 Indicated Average       |        |        |        |        |        |
| 21 Risk Premium            | 4.28%  | 4.25%  | 3.81%  | 4.20%  | 4.78%  |

22 Source: *Regulatory Focus*, Regulatory Research Associates, Inc., Major Rate Case  
 23 Decisions, April 1, 2010. Utility debt costs are the "average" public utility bond yields  
 as reported by Moody's.

24 Since 2006, equity risk premiums (the difference between allowed equity returns and  
 25 utility interest rates) have ranged from 3.81 percent to 4.78 percent.





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 1949 through  
10 2009 are summarized in my Schedule SCH2010-4 As shown at the bottom of that  
11 exhibit, 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. Based on this approach, my  
16 overall forecast for long-term GDP growth is 90 basis points lower than the long-term  
17 average, at a level of 6.0 percent.

18 **Q. The DCF model requires an estimate of investors' long-term growth rate**  
19 **expectations. Why do you believe your forecast of GDP growth based on long-**  
20 **term historical data is appropriate?**

21 A. There are at least three reasons. First, most econometric forecasts are derived from  
22 the trending of historical data or the use of weighted averages. This is the approach I  
23 have taken in Schedule SCH2010-4. The long-run historical average GDP growth  
24 rate is 6.9 percent, but my estimate of long-term expected growth is only 6.0 percent.

1 My forecast is lower because my forecasting method gives much more weight to the  
2 more recent 10- and 20-year periods.

3 Second, some currently lower GDP growth forecasts likely understate very  
4 long growth rate expectations that are required in the DCF model. Many of those  
5 forecasts are currently low because they are based on the assumption of permanently  
6 low inflation rates, in the range of 2 percent. As shown in my Schedule SCH4, the  
7 average long-term inflation rate has been over 3 percent in all but the most recent 20  
8 years.

9 Finally, the current economic turmoil makes it even more important to  
10 consider longer-term economic data in the growth rate estimate. As discussed in the  
11 previous section, current near-term forecasts for both real GDP and inflation are  
12 severely depressed. To the extent that even the longer-term outlooks of professional  
13 economists are also depressed, their forecasts may be understated. Under these  
14 circumstances, a longer-term view is even more important. For all these reasons,  
15 while I am also presenting other growth rate approaches based on analysts' estimates  
16 in this testimony, I believe it is appropriate also to consider long-term GDP growth in  
17 estimating the DCF growth rate.

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 10.5 percent to 10.7 percent. In the  
22 second column of page 1, I recalculate the constant growth results with the growth  
23 rate based on long-term forecasted growth in GDP. With the GDP growth rate, the

1 constant growth model indicates an ROE of 11.0 percent. Finally, in the third column  
2 of page 1, I present the results from the multistage DCF model. The multistage  
3 model indicates an ROE of 10.8 percent. The overall results from the DCF model  
4 indicate a reasonable ROE range of 10.5 percent to 11.0 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 SCH2010-  
7 6. These studies indicate an ROE range of 10.61 percent to 10.82 percent. The  
8 Federal Reserve System's continuing "easy money" policies have provided renewed  
9 liquidity in the credit markets that is reflected in these lower yields. These results are  
10 slightly below the average DCF results, which continues to demonstrate the equity  
11 market risk aversion that 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 to the same extent as the yields on utility debt.

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 1980-2009 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.   The midpoint estimate my for comparable group is 10.75 percent. The Company is  
4   requesting an ROE of 11.0 percent commensurate with the top of my DCF range as  
5   compensation for its reliability and customer satisfaction achievements. The recent  
6   market turmoil and the continuing effects on capital market conditions make it  
7   difficult to strictly interpret quantitative model estimates for the cost of equity. While  
8   corporate interest rates have dropped from the levels that existed in late 2008, the  
9   DCF results, based on continuing relatively low utility stock prices, show that the  
10   cost of equity has not dropped in lockstep with the decline in interest rates. Under  
11   these conditions, use of a lower DCF range or equity risk premium estimates based  
12   strictly on historical risk premium relationships likely understate the cost of equity.

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

14   A.   Yes, it does.



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**SUMMARY OF QUALIFICATIONS**

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

**EDUCATION**

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

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

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

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

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

Honors program. Departmental  
distinction.

**OTHER EXPERIENCE**

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

Corporate Financial Management,  
Investments, and Integrative Finance  
Cases.

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

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

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

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

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

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



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

**Cost of Money Testimony:**

- Washington Utilities and Transportation Commission, Docket UE-100749, May 4, 2010 (PacifiCorp).
- New Hampshire Public Utilities Commission, Docket No. DE 10-055, April 15, 2010 (Unitil Energy Systems)
- Oregon Public Utility Commission, Docket No. UE-217, March 1, 2010 (PacifiCorp).
- Texas Public Utility Commission, Docket No. 37744, December 30, 2009,(Entergy Texas, Inc.)
- Kansas Corporation Commission, Docket No. 10-KCPE-415-RTS, December 17, 2009 (Kansas City Power & Light Company).
- Texas Public Utility Commission, Docket No. 37690, December 9, 2009,(El Paso Electric Company).
- California Public Utilities Commission, Application No. 09-11-015, November 20, 2009 (PacifiCorp).
- Federal Energy Regulatory Commission, Docket No. ER10-230-000, November 6, 2009 (Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company).
- Wyoming Public Service Commission, Docket No. 20000-352-ER-09, October 2, 2009 (Rocky Mountain Power dba/PacifiCorp).
- Arkansas Public Service Commission, Docket No. 09-084-U, September 4, 2009, (Entergy-Arkansas)
- Texas Public Utility Commission, Docket No. 37364, August 28, 2009,(American Electric Power-SWEPCO)
- Utah Public Service Commission, Docket No. 09-035-23, June 23, 2009 (Rocky Mountain Power/PacifiCorp).
- New Mexico Public Regulation Commission, Case No. 09-00171-UT, May 2009, (El Paso Electric Company).
- Oregon Public Utility Commission, Docket No. UE-207, April 2, 2009 (PacifiCorp).
- Arkansas Public Service Commission, Docket No. 09-008-U, February 19, 2009 (American Electric Power-SWEPCO).
- Washington Utilities and Transportation Commission, Docket UE-090205, February 9, 2009 (PacifiCorp).
- Idaho Public Utilities Commission, Case No. PAC-E-08-07, September 19, 2008 (Rocky Mountain Power/PacifiCorp).
- Missouri Public Service Commission, Case No. ER-2009-089, September 5, 2008 (Kansas City Power & Light Company).
- Kansas Corporation Commission, Docket No. 09-KCPE-246-RTS, September 5, 2008 (Kansas City Power & Light Company).
- Missouri Public Service Commission, Case No. ER-2009-090, September 5, 2008 (Aquila, Inc. dba/KCP&L Greater Missouri Operations Company).
- Utah Public Service Commission, Docket No. 08-035-38, July 17, 2008 (Rocky Mountain Power/PacifiCorp).
- Wyoming Public Service Commission, Docket No. 20000-333-ER-08, July 2008 (Rocky Mountain Power dba/PacifiCorp).
- Texas Public Utility Commission, Docket No. 35717, June 27, 2008, (Oncor Electric Delivery Company LLC).
- Washington Utilities and Transportation Commission, Docket UG-080546, March 28, 2008 (NW Natural).
- Washington Utilities and Transportation Commission, Docket UE-080220, February 6, 2008 (PacifiCorp).
- Utah Public Service Commission, Docket No. 07-035-93, December 17, 2007 (PacifiCorp).

- Illinois Commerce Commission, Docket No. 07-0566, October 17, 2007 (Commonwealth Edison Company).
- Texas Public Utility Commission, Docket No. 34800, September 26, 2007, (Entergy Gulf States, Inc.)
- Texas Public Utility Commission, Docket No. 34040, August 28, 2007, (Oncor/TXU Electric Delivery Company)
- Massachusetts Department of Public Utilities, D.P.U. 07-71, August 17, 2007, (Fitchburg Gas and Electric Light Company d/b/a/ Unutil)
- Arizona Corporation Commission, Docket No. E-01933A-07-0402, July 2, 2007, (Tucson Electric Power Company).
- Wyoming Public Service Commission, Docket No. 20000-277-ER-07, June 29, 2007 (Rocky Mountain Power dba/PacifiCorp).
- Idaho Public Utilities Commission, Case No. PAC-E-05-1, June 8, 2007 (Rocky Mountain Power dba/PacifiCorp).
- Kansas Corporation Commission, Docket No. 07-KCPE-905-RTS, March 1, 2007 (Kansas City Power & Light Company).
- New Mexico Public Regulation Commission, Case No. 07-00077-UT, February 21, 2007, (Public Service Company of New Mexico).
- Missouri Public Service Commission, Case No. ER-2006-0291, February 1, 2007 (Kansas City Power & Light Company).
- Texas PUC Docket Nos. 33734, January 22, 2007 (Electric Transmission Texas, LLC).
- Texas PUC Docket Nos. 33309 and 33310, November 2006, (AEP Texas Central Company and AEP Texas North Company).
- Louisiana Public Service Commission, Docket No. U-23327, October 2006 and January 2005 (Southwestern Electric Power Company, American Electric Power Company)
- Missouri Public Service Commission, Case No. ER-2007-0004, July 3, 2006 (Aquila, Inc.).
- New Mexico Public Regulation Commission, Case No. 06-00258-UT, June 30, 2006 (El Paso Electric Company).
- New Mexico Public Regulation Commission, Case No. 06-00210-UT, May 30, 2006 (Public Service Company of New Mexico).
- Texas Public Utility Commission, Docket No. 32093, April 14, 2006 (CenterPoint Energy-Houston Electric, LLC).
- Utah Public Service Commission, Docket No. 06-035-21, March 7, 2006 (PacifiCorp).
- Oregon Public Utility Commission, Case No. UE-179, February 23, 2006 (PacifiCorp).
- Kansas Corporation Commission, Docket No. 06-KCPE-828-RTS, January 31, 2006 (Kansas City Power & Light Company).
- Missouri Public Service Commission, Case No. ER-2006-0314, January 27, 2006 (Kansas City Power & Light Company).
- California Public Utilities Commission, Docket No. 05-11-022, November 29, 2005 (PacifiCorp).
- Texas Public Utility Commission, Docket No. 31994, November 5, 2005 (Texas-New Mexico Power Company).
- New Hampshire Public Utilities Commission, Docket No. DE 05-178, November 4, 2005 (Unitil Energy Systems).
- Wyoming Public Service Commission, Docket No. 20000-ER-05-230, October 14, 2005 (PacifiCorp).
- Minnesota Public Utilities Commission, Docket. No. G-008/GR-05-1380, October 2005 (CenterPoint Energy Minnegasco).
- Texas Railroad Commission, Gas Utilities Division No. 9625, September 2005 (CenterPoint Energy Entex).

- Illinois Commerce Commission, Docket No. 05-0597, August 31, 2005 (Commonwealth Edison Company).
- Washington Utilities and Transportation Commission, Docket ,UE-050684/General Rate Case, May 2005 (PacifiCorp).
- Missouri Public Service Commission, Case No. ER-2005-0436, May 2005 (Aquila, Inc.).
- Idaho Public Utilities Commission, Case No. PAC-E-05-1, January 14, 2005 (PacifiCorp).
- Arkansas Public Service Commission, Docket No. 04-121-U, December 3, 2004 (CenterPoint Energy Arkla).
- Oregon Public Utility Commission, Case No. UE-170, November 12, 2004 (PacifiCorp).
- Texas Public Utility Commission, Docket No. 29206, November 8, 2004 (Texas-New Mexico Power Company).
- Texas Railroad Commission, Gas Utilities Division Nos. 9533 and 9534, October 13, 2004 (CenterPoint Energy Entex).
- Texas Public Utility Commission, Docket No. 29526, August 18 and September 2, 2004 (CenterPoint Energy Houston Electric).
- Utah Public Service Commission, Docket No. 04-2035-, August 4, 2004 (PacifiCorp).
- Oklahoma Corporation Commission, Cause No. PUD-200400187, July 2, 2004, (CenterPoint Energy Arkla).
- Minnesota Public Utilities Commission, Docket No. G-008/GR-04-901, July 2004, (CenterPoint Energy Minnegasco).
- Washington Utilities and Transportation Commission, Docket ,UE-032065/General Rate Case, December 2003 (PacifiCorp).
- Washington Utilities and Transportation Commission, Docket ,UG-031885, November 2003 (Northwest Natural Gas Company.).
- Wyoming Public Service Commission, Docket No. 20000-ER-03-198, May 2003 (PacifiCorp).
- Public Service Commission of Utah, Docket No. 03-2035-02, May 2003 (PacifiCorp).
- Public Utility Commission of Oregon, Case. UE-147, March 2003 (PacifiCorp).
- Wyoming Public Service Commission, Docket No. 20000-ER-00-162, May 2002 (PacifiCorp).
- Public Utility Commission of Oregon, UG-152, November 2002 (Northwest Natural).
- Massachusetts Department of Telecommunications and Energy, D.T.E. 02-24/24, May 2002 (Fitchburg Gas and Electric Light Company).
- New Hampshire Public Utilities Commission, Docket No. DE 01-247, January 2002 (Unitil Corporation).
- Washington Utilities and Transportation Commission, Docket UE-011569,70,UG-011571, November 2001 (Puget Sound Energy, Inc.).
- California Public Utilities Commission, Docket No. 01-03-026, September and December 2001 (PacifiCorp).
- New Mexico Public Regulation Commission, Docket No. 3643, July 2001 (Texas-New Mexico Power Company).
- Texas Natural Resources Conservation Commission, Docket No. 2001-1074/5-URC, May 2001 (AquaSource Utility, Inc.).
- Massachusetts Department of Telecommunications and Energy, Docket No. 99-118, May 2001 (Fitchburg Gas and Electric Light Company).
- Public Service Commission of Utah, Docket No. 01-035-01, January 2001 (PacifiCorp)
- Federal Energy Regulatory Commission, Docket No. ER-01-651, January 2001 (Southwestern Electric Power Company).
- Wyoming Public Service Commission, Docket No. 20000-ER-00-162, December 2000 (PacifiCorp).
- Public Utility Commission of Oregon, Case. UE-116, November 2000, (PacifiCorp)

- Public Utility Commission of Texas, Docket No. 22344, September 2000, (AEP Texas Companies, Entergy Gulf States, Inc., Reliant Energy HL&P, Texas-New Mexico Power Company, TXU Electric Company)
- Public Utility Commission of Oregon, Case UE-111, August 2000, (PacifiCorp)
- Texas Public Utility Commission, Docket Nos. 22352,3,4, March 2000 (Central Power and Light Co., Southwestern Electric Power Co., West Texas Utilities Co.).
- Texas Public Utility Commission, Docket No. 22355, March 2000 (Reliant Energy, Inc.).
- Texas Public Utility Commission, Docket No. 22349, March 2000 (Texas-New Mexico Power Co.).
- Texas Public Utility Commission, Docket No. 22350, March 2000 (TXU Electric).
- Washington Utilities and Transportation Commission, Docket UE-991831, November 1999 (PacifiCorp).
- Public Service Commission of Utah, Docket No. 99-035-10, September 1999 (PacifiCorp)
- Louisiana Public Service Commission Docket No. U-23029, August 1999 (Southwestern Electric Power Company)
- Wyoming Public Service Commission, Docket No. 2000-ER-99-145, July 1999, January 2000 (PacifiCorp, dba Pacific Power and Light Company).
- Texas PUC Docket No. 20150, March 1999 (Entergy Gulf States, Inc.)
- Federal Energy Regulatory Commission Docket No. ER-98-3177-00, May and December 1998 (Southwestern Electric Power Company).
- Public Service Commission of Utah, Docket No. 97-035-01, June 1998 (PacifiCorp, dba Utah Power and Light Company).
- Massachusetts Dept. of Telecommunications and Energy, Docket No. DTE 98-51, May 1998, (Fitchburg Gas and Electric Light Company, a subsidiary of Unitil Corp.)
- Texas PUC, Docket No. 18490, March 1998, (Texas Utilities Electric Company)
- Texas PUC Docket No. 17751, March 1998 and July 1997 (Texas-New Mexico Power Company).
- Federal Energy Regulatory Commission Docket No. RP-97, February 1998 and May 1997 (Koch Gateway Pipeline Company).
- Federal Energy Regulatory Commission Docket No. ER-97-4468-000, December 1997 (Puget Sound Power & Light).
- Oklahoma Corporation Commission, Cause No. PUD 960000214, August 1997 (Public Service Company of Oklahoma).
- Oregon Public Utility Commission Docket No. UE-94, April 1996, (PacifiCorp).
- Texas PUC Docket No. 15643, May and September 1996, (Central Power and Light and West Texas Utilities Company).
- Federal Energy Regulatory Commission Docket No. ER-96, April 1996 (Puget Sound Power & Light).
- Federal Energy Regulatory Commission Docket No. ER96, February 1996, (Central and South West Corporation).
- Washington Utilities & Transportation Commission Docket No. UE-951270, November 1995 (Puget Sound Power & Light).
- Texas PUC Docket No. 14965, November 1995, (Central Power and Light).
- Texas PUC Docket No. 13369, February 1995 (West Texas Utilities).
- Texas PUC Docket No. 12065, July and December 1994, (Houston Lighting & Power).
- Texas PUC, Docket No. 12820, July and November 1994, (Central Power and Light).
- Texas PUC Docket No. 12900, March 1994, and New Mexico PUC Case No. 2531, August 1993, (TNP Enterprises).
- Texas PUC, Docket No. 12815, March 1994, (Pedernales Electric Cooperative).
- Florida Public Service Commission, Docket No. 930987-EI, December 1993, (TECO Energy).

- Iowa Department of Commerce, Docket No. RPU-93-9, December 1993, (US West Communications).
- Texas PUC Dkt. No. 11735, May and September 1993, (Texas Utilities Electric Company)
- Oklahoma Corporation Commission, Cause No. PUD 001342, October 1992 (Public Service Company of Oklahoma).
- Texas PUC Dkt. No. 9983, November 1991, (Southwest Texas Telephone Company).
- Texas PUC Dkt. No. 9850, November 1990, Houston Lighting & Power Company).
- Texas PUC Dkt. Nos. 8480/8482, January 1989; City of Austin Dkt. No. 1, August 1988 and July 1987, (City of Austin Electric Department).
- Missouri Public Service Commission Case No. ER-90-101, July 1990 (UtiliCorp).
- Texas PUC Dkt. No. 9945, December 1990; Texas PUC Dkt. No. 9165, November 1989, (El Paso Electric Company).
- Texas PUC Dkt. No. 9427, July 1990, (Lower Colorado River Authority Association of Wholesale Customers).
- Oregon Public Utility Commission, March 1990, (Pacific Power & Light Company).
- Utah Public Service Commission, November 1989, (Utah Power & Light Company).
- Texas PUC Dkt. No. 5610, September 1988, (GTE Southwest).
- Iowa State Utilities Board, September 1988, (Northwestern Bell Telephone Company).
- Texas Water Commission, Dkt. Nos. RC-022 and RC-023, November 1986, (City of Houston Water Department).
- Pennsylvania PUC Dkt. Nos. R-842770 and R-842771, May 1985, (Bethlehem Steel).

#### **Capital Structure Testimony:**

- Federal Energy Regulatory Commission Docket No. RP-97, May 1997 (Koch Gateway Pipeline Company).
- Illinois Commerce Commission Dkt. No. 93-0252 Remand, July 1996, (Sprint).
- California PUC (Appl. No. 92-05-004) April 1993 and May 1993, (Pacific Telesis).
- Montana PSC, Dkt. No. 90.12.86, November 1991, (US West Communications).
- Massachusetts PUC Dkt. No. 86-33, June 1987, (New England Telephone Company).
- Maine PUC Dkt. No. 85-159, February 1987, (New England Telephone Company).
- New Hampshire PUC Dkt. No. 85-181, September 1986, (New England Telephone Company).
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- Texas PUC Docket No. 26194, May 2003 (El Paso Electric Company)
- Texas PUC Docket No. 22622, June 15, 2001 (TXU Electric)
- Texas PUC Docket No. 20125, November 1999 (Entergy Gulf States, Inc.)
- Texas PUC Docket No. 21112, July 1999 and New Mexico Public Regulation Commission Case No. 3103, July 1999 (Texas-New Mexico Power Company)
- Texas PUC Docket No. 20292, May 1999 (Central Power and Light Co.)
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- Texas PUC Dkt. No. 7289, May 1987, (West Texas Utilities Company).
- Texas PUC Dkt. No. 7195, January 1987, (North Star Steel Texas).
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- Texas Department of Insurance, Docket No. 2279, October 1997, (Texas Title Insurance Agents).
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- Texland Electric Cooperative, Dkt. No. 3896, February 1983
- El Paso Electric Company, Dkt. No. 4620, September 1982.
- Southwestern Bell Telephone Company, Dkt. No. 4545, August 1982.
- Central Power and Light Company, Dkt. No. 4400, May 1982.
- Texas-New Mexico Power Company, Dkt. 4240, March 1982.
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- General Telephone Company of the Southwest, Dkt. No. 3690, April 1981.
- Mid-South Electric Cooperative, Dkt. No. 3656, March 1981.

- West Texas Utilities Company, Dkt. No. 3473, December 1980.
- Houston Lighting & Power Company, Dkt. No. 3320, September 1980.

### **ECONOMIC ANALYSIS AND TESTIMONY**

#### **Antitrust Litigation:**

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

#### **Contract Litigation:**

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

#### **Lender Liability/Securities Litigation:**

- ERISA Valuation of Retail Drug Store Chain (Sommers Drug Stores Company).
- Analysis of Lost Business Opportunities in Failed Businesses where Lenders Refused to Extend or Foreclosed Loans (FirstCity Bank Texas, McAllen State Bank, General Electric Credit Corporation).
- Usury and Punitive Damages Analysis based on Property Valuation in Failed Real Estate Venture (Tomen America, Inc.).

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

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

#### **Product Warranty/Liability Litigation:**

- Analysis of Lost Profits due to Equipment Failure in Cogeneration Facility (WF Energy/Travelers Insurance Company).
- Analysis of Economic Damages due to Grain Elevator Explosion (Degesch Chemical Company).
- Analysis of Economic Damages due to failure of Plastic Pipe Water Lines (Western Plastics, Inc.)

- Analysis of Rail Car Repair and Maintenance Costs in Product Warranty Dispute (Youngstown Steel Door Company).

**Property Tax Litigation:**

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

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

**PROFESSIONAL PRESENTATIONS**

- "Fundamentals of Financial Management and Reporting for Non-Financial Managers," Austin Energy, July 2000.
- "Fundamentals of Finance and Accounting," the IC<sup>2</sup> Institute, University of Texas at Austin, December 1996 and 1997.
- "Fundamentals of Financial Analysis and Project Evaluation," Central and South West Companies, April, May, and June 1997.
- "Fundamentals of Financial Management and Valuation," West Texas Utilities Company, November 1995.
- "Financial Modeling: Testing the Reasonableness of Regulatory Results," University of Texas Center for Legal and Regulatory Studies Conference, June 1991.
- "Estimating the Cost of Equity Capital," University of Texas at Austin Utilities Conference, June 1989, June 1990.
- "Regulation: The Bottom Line," Texas Society of Certified Public Accountants, Annual Utilities Conference, Austin, Texas, April 1990.
- "Alternative Treatments of Large Plant Additions -- Modeling the Alternatives," University of Texas at Dallas Public Utilities Conference, July 1989.
- "Industrial Customer Electrical Requirements," Edison Electric Institute Financial Conference, Scottsdale, Arizona, October 1988.
- "Acquisitions and Consolidations in the Electric Power Industry," Conference on Emerging Issues of Competition in the Electric Utility Industry, University of Texas at Austin, May 1988.
- "The General Fund Transfer - Is It A Tax? Is It A Dividend Payout? Is It Fair?" The Texas Public Power Association Annual Meeting, Austin, May 1984.
- "Avoiding 'Rate Shock' - Preoperational Phase-In Through CWIP in Rate Base," Edison Electric Institute, Finance Committee Annual Meeting, May 1983.
- "A Cost-Benefit Analysis of Alternative Bond Ratings Among Electric Utility Companies in Texas," (with B.L. Heidebrecht and J.L. Nash), Texas Senate Subcommittee on Consumer Affairs, December 1982.
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- "Inflation Protection from Multi-Asset Sector Investments: A Long-Run Examination of Correlation Relationships with Inflation Rates," (with B.L. Hadaway), *Review of Business and Economic Research*, Spring 1981.
- "Converting to a Stock Company-Association Characteristics Before and After Conversion," (with B.L. Hadaway), *Federal Home Loan Bank Board Journal*, October 1980.
- "A Large-Sample Comparative Test for Seasonality in Individual Common Stocks," (with D.P. Rochester), *Journal of Economics and Business*, Fall 1980.
- "Diversification Possibilities in Agricultural Land Investments," *Appraisal Journal*, October 1978.
- "Further Evidence on Seasonality in Common Stocks," (with D.P. Rochester), *Journal of Financial and Quantitative Analysis*, March 1978.

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

| No. | Company             | (1)                 | (2)           |         | (3)                      |                      |                       |
|-----|---------------------|---------------------|---------------|---------|--------------------------|----------------------|-----------------------|
|     |                     | % Regulated Revenue | Credit Rating |         | Capital Structure (2009) |                      |                       |
|     |                     |                     | S&P           | Moody's | Common Equity Ratio      | Long-Term Debt Ratio | Preferred Stock Ratio |
| 1   | ALLETE              | 89.8%               | A-            | A2      | 57.2%                    | 42.8%                | 0.0%                  |
| 2   | Alliant Energy Co.  | 90.2%               | A-            | A2      | 51.2%                    | 44.3%                | 4.5%                  |
| 3   | American Elec. Pwr. | 94.4%               | BBB           | Baa2    | 45.4%                    | 54.4%                | 0.2%                  |
| 4   | Avista Corp.        | 92.2%               | BBB+          | Baa1    | 49.1%                    | 50.9%                | 0.0%                  |
| 5   | Black Hills Corp    | 88.3%               | BBB           | A3      | 51.6%                    | 48.4%                | 0.0%                  |
| 6   | Cleco Corporation   | 94.7%               | BBB           | Baa2    | 45.8%                    | 54.2%                | 0.0%                  |
| 7   | Con. Edison         | 83.8%               | A-            | A3      | 50.4%                    | 48.5%                | 1.0%                  |
| 8   | DPL Inc.            | 100.0%              | A             | Aa3     | 46.9%                    | 52.1%                | 1.0%                  |
| 9   | DTE Energy Co.      | 81.1%               | A-            | A2      | 46.1%                    | 53.9%                | 0.0%                  |
| 10  | Duke Energy         | 83.9%               | BBB+          | A2      | 57.6%                    | 42.4%                | 0.0%                  |
| 11  | Edison Internat.    | 80.6%               | A             | A1      | 46.5%                    | 49.3%                | 4.2%                  |
| 12  | Empire District     | 99.0%               | BBB+          | Baa1    | 48.4%                    | 51.6%                | 0.0%                  |
| 13  | Entergy Corp.       | 74.9%               | A-            | Baa3    | 43.1%                    | 55.3%                | 1.6%                  |
| 14  | FPL Group, Inc.     | 73.5%               | A             | Aa2     | 44.3%                    | 55.7%                | 0.0%                  |
| 15  | Hawaiian Electric   | 88.1%               | BBB           | Baa2    | 50.7%                    | 48.0%                | 1.3%                  |
| 16  | IDACORP             | 84.2%               | A-            | NR      | 49.8%                    | 50.2%                | 0.0%                  |
| 17  | Northeast Utilities | 99.0%               | BBB+          | A3      | 43.7%                    | 54.9%                | 1.4%                  |
| 18  | NSTAR               | 99.5%               | AA-           | A1      | 48.2%                    | 50.7%                | 1.1%                  |
| 19  | PG&E Corp.          | 100.0%              | BBB+          | A3      | 47.4%                    | 51.4%                | 1.2%                  |
| 20  | Pinnacle West       | 95.5%               | BBB-          | Baa2    | 49.6%                    | 50.4%                | 0.0%                  |
| 21  | Portland General    | 100.0%              | A-            | A3      | 49.7%                    | 50.3%                | 0.0%                  |
| 22  | Progress Energy     | 99.9%               | A-            | A1      | 43.8%                    | 55.8%                | 0.4%                  |
| 23  | SCANA Corp.         | 73.1%               | A-            | A3      | 43.2%                    | 56.8%                | 0.0%                  |
| 24  | Sempra Energy       | 76.7%               | A+            | Aa3     | 54.1%                    | 44.8%                | 1.1%                  |
| 25  | Southern Co.        | 84.5%               | A             | A2      | 45.7%                    | 53.2%                | 1.1%                  |
| 26  | Teco Energy, Inc.   | 80.0%               | BBB           | Baa1    | 39.4%                    | 60.6%                | 0.0%                  |
| 27  | UIL Holdings Co.    | 99.9%               | NR            | Baa2    | 46.0%                    | 54.0%                | 0.0%                  |
| 28  | Vectren Corp.       | 76.3%               | A             | A2      | 47.5%                    | 52.5%                | 0.0%                  |
| 29  | Westar Energy       | 100.0%              | BBB           | Baa1    | 47.4%                    | 52.1%                | 0.5%                  |
| 30  | Wisconsin Energy    | 99.8%               | A-            | A1      | 47.7%                    | 51.9%                | 0.4%                  |
| 31  | Xcel Energy Inc.    | 99.2%               | A             | A2      | 47.7%                    | 51.6%                | 0.7%                  |
|     | Average             | 89.8%               | A-/BBB+       | A2/A3   | 47.9%                    | 51.4%                | 0.7%                  |

Column Sources:

(1) Most recent company 10-Ks.

(2) AUS Utility Reports, May 2010.

(3) Value Line Investment Survey, Electric Utility (East), Feb 26, 2010; (Central), Mar 26, 2010; (West), May 7, 2010 and most recent company 10-Ks (where actual 2009 data not available from Value Line).

**Kansas City Power & Light Company**  
**Comparable Company Recovery Mechanisms**  
 April 2010

| No. | Comparable Company  | Operating Company             | Jurisdiction | Utility Type | Elec | Gas | RECOVERY MECHANISM FOR THE FOLLOWING COSTS: |              |               |              |                     |  |       |
|-----|---------------------|-------------------------------|--------------|--------------|------|-----|---|--------------|---------------|--------------|---------------------|--|-------|
|     |                     |                               |              |              |      |     | Fuel/Purch Power/Gas                        | Conservation | Environmental | Transmission | Renewable Resources | Decoupling   | Other |
| 1   | ALLETE              | Minnesota Power               | MN           | VI           | X    |     | X   | X            | X             | X            |                     |  |       |
| 2   | Alliant Energy Co.  | Interstate Power & Light      | IA           | VI           | X    | X   | X   |              |               |              |                     |  |       |
|     |                     | Wisconsin Power & Light       | WI           | VI           | X    | X   | X   |              |               |              |                     |  |       |
| 3   | American Elec. Pwr. | Columbus Southern, Ohio Power | OH           | Del          | X    |     | X   |              |               | X            |                     | Smart meters   |       |
|     |                     | Public Svc. Co. of Oklahoma   | OK           | VI           | X    |     | X   |              |               |              |                     | Reliability, Incremental Capital                               |       |
|     |                     | AEP Texas Central, North      | TX           | Del          | X    |     |   |              |               |              |                     | Smart meters   |       |
|     |                     | SWEPSCO                       | TX           | VI           | X    |     | X   |              |               |              |                     |  |       |
|     |                     | Indiana Michigan Pwr Co.      | IN           | VI           | X    |     | X   |              |               |              |                     |  |       |
|     |                     | Appalachian Pwr Co.           | VA           | VI           | X    |     | X   |              |               | X            |                     |  |       |
| 4   | Avista Corp.        | Avista Utilities              | WA           | VI           | X    | X   | X   |              |               |              | X                   |  |       |
| 5   | Black Hills Corp.   | Black Hills Power             | SD,MT        | VI           | X    |     | X   |              |               | X            | X                   |  |       |
|     |                     | Cheyenne Light                | WY           | VI           | X    | X   | X   |              |               |              |                     |  |       |
|     |                     | Colorado Electric             | CO           | VI           | X    |     | X   | X            |               | X            |                     |  |       |
|     |                     | Gas Utilities                 | KS,NE        | Del          | X    |     | X   |              |               |              |                     | Bad debts, weather, other taxes                                |       |
| 6   | Cleco Corporation   | Cleco Power                   | LA           | VI           | X    |     | X   |              | X             |              |                     | Certain transmission & other investment                        |       |
| 7   | Con. Edison Co.     | Con. Ed., Orange & Rockland   | NY           | Del          | X    | X   | X   |              |               |              | X                   | Weather  |       |
| 8   | DPL Inc.            | Dayton Power & Light          | OH           | Del          | X    |     | X   | X            | X             | X            |                     | Smart meters   |       |
| 9   | DTE Energy Co.      | Detroit Edison                | MI           | VI           | X    | X   | X   |              | X             |              | X                   | Bad debts, storm/line clearing                                 |       |
| 10  | Duke Energy         | Duke Energy Carolinas         | NC           | VI           | X    |     | X   | X            |               | X            |                     | Nuclear investment   |       |
|     |                     | Duke Energy Carolinas         | SC           | VI           | X    |     | X   | X            |               |              |                     | Storm/line clearing, nuclear investment                        |       |
|     |                     | Duke Energy Ohio              | OH           | Del          | X    | X   | X   | X            |               | X            |                     | Bad debts, smart meters, reliability, gas mains                |       |
|     |                     | Duke Energy Indiana           | IN           | VI           | X    | X   | X   |              | X             |              |                     |  |       |
| 11  | Edison Internat.    | Southern California Edison    | CA           | VI           | X    |     | X   | X            | X             |              | X                   | Nuclear decommissioning, cost of capital                       |       |
| 12  | Empire District     | Empire District               | MO           | VI           | X    | X   | X   |              |               |              |                     |  |       |
| 13  | Entergy Corp.       | Entergy Arkansas              | AR           | VI           | X    |     | X   |              |               |              |                     | Certain power plant investment                                 |       |
|     |                     | Entergy Gulf States Louisiana | LA           | VI           | X    | X   | X   |              |               |              |                     | Certain power plant investment, formula rate plan              |       |
|     |                     | Entergy Texas                 | TX           | VI           | X    |     | X   |              |               | X            |                     |  |       |
|     |                     | Entergy Louisiana             | LA           | VI           | X    |     | X   |              |               |              |                     | Formula rate plan  |       |
|     |                     | Entergy Mississippi           | MS           | VI           | X    |     | X   |              |               |              |                     | Certain power plant investment, formula rate plan              |       |
|     |                     | Entergy New Orleans           | LA           | VI           | X    | X   | X   | X            |               |              |                     | Storm/line clearing  |       |
| 14  | FPL Group, Inc.     | Florida Power & Light         | FL           | VI           | X    |     | X   | X            | X             |              |                     | Storm/line clearing, other taxes, pension, nuclear & solar inv |       |
| 15  | Hawaiian Electric   | Hawaiian Electric             | HI           | VI           | X    |     | X   | X            |               | X            | X                   |  |       |
| 16  | IDACORP             | Idaho Power Co.               | ID           | VI           | X    |     | X   | X            |               | X            | X                   | Weather, smart meters  |       |
| 17  | Northeast Utilities | Connecticut Light & Power     | CT           | Del          | X    |     | X   | X            |               | X            |                     | Other taxes  |       |
|     |                     | Western Mass. Electric Co.    | MA           | Del          | X    |     | X   | X            |               | X            |                     | Pension  |       |
|     |                     | Public Service Co. of NH      | NH           | VI           | X    |     | X   | X            | X             | X            |                     | Clean Air Project investment                                   |       |
|     |                     | Yankee Gas                    | CT           | Del          |      | X   | X   |              | X             |              |                     |  |       |
| 18  | NSTAR               | NSTAR                         | MA           | Del          | X    | X   | X   | X            |               | X            | X                   | Bad debts, pension   |       |
| 19  | PG&E Corp.          | Pacific Gas & Electric        | CA           | VI           | X    | X   | X   | X            |               | X            | X                   | Approved resource plan investment, cost of capital             |       |
| 20  | Pinnacle West       | APS                           | AZ           | VI           | X    |     | X   | X            |               | X            | X                   |  |       |
| 21  | Portland General    | Portland General              | OR           | VI           | X    |     | X   | X            |               |              | X                   |  |       |
| 22  | Progress Energy     | Progress Energy Florida       | FL           | VI           | X    |     | X   | X            | X             |              |                     | Storm/line clearing, nuclear investment                        |       |
|     |                     | Progress Energy Carolina      | NC           | VI           | X    |     | X   | X            | X             |              | X                   |  |       |
|     |                     | Progress Energy Carolina      | SC           | VI           | X    |     | X   | X            | X             |              |                     | Nuclear investment   |       |
| 23  | SCANA Corp.         | South Carolina E&G            | SC,NC        | VI           | X    | X   | X   |              |               |              | X                   | Bad debts, weather   |       |
| 24  | Sempra Energy       | San Diego Gas & Electric      | CA           | VI           | X    | X   | X   | X            | X             |              | X                   | Cost of capital  |       |

**Kansas City Power & Light Company**  
**Comparable Company Recovery Mechanisms**  
 April 2010

| No.                       | Comparable Company | Operating Company                    | Jurisdiction | Utility Type | Elec | Gas | RECOVERY MECHANISM FOR THE FOLLOWING COSTS: |              |               |              |                     |  | Other                      |
|---------------------------|--------------------|--------------------------------------|--------------|--------------|------|-----|---|--------------|---------------|--------------|---------------------|--|----------------------------|
|                           |                    |                                      |              |              |      |     | Fuel/Purch Power/Gas                        | Conservation | Environmental | Transmission | Renewable Resources | Decoupling   |                            |
| 25                        | Southern Co.       | Alabama Power                        | AL           | VI           | X    |     | X   |              | X             |              |                     |  | Storm/line clearing        |
|                           |                    | Georgia Power, Sav Pwr               | GA           | VI           | X    |     | X   |              |               |              |                     |  | Nuclear investment         |
|                           |                    | Gulf Power                           | FL           | VI           | X    |     | X   | X            | X             |              |                     |  |                            |
|                           |                    | Mississippi Power                    | MS           | VI           | X    |     | X   |              | X             |              |                     |  | Baseload investment        |
| 26                        | TECO Energy, Inc.  | Tampa Electric Co.                   | FL           | VI           | X    | X   | X   |              | X             |              |                     |  |                            |
| 27                        | UIL Holdings Co.   | United Illuminating Co.              | CT           | Del          | X    |     | X   |              | X             | X            | X                   | Congestion reduction investment                      |                            |
| 28                        | Vectren Corp.      | Southern Indiana G&E                 | IN           | VI           | X    | X   | X   | X            |               |              | X                   | Bad debts, weather, nuclear decomm, transmission inv |                            |
| 29                        | Westar Energy      | Westar Energy                        | KS           | VI           | X    |     | X   |              | X             |              |                     |  |                            |
| 30                        | Wisconsin Energy   | Wisconsin Electric                   | WI           | VI           | X    | X   | X   |              |               |              |                     |  |                            |
| 31                        | Xcel Energy Inc.   | NSP-Minnesota                        | MN           | VI           | X    | X   | X   | X            | X             | X            |                     |  | Coal conversion investment |
|                           |                    | NSP-Wisconsin                        | WI           | VI           | X    | X   | X   |              |               |              |                     |  |                            |
|                           |                    | PSC Colorado                         | CO           | VI           | X    | X   | X   | X            | X             | X            | X                   |  |                            |
|                           |                    | Southwestern Public Service          | TX           | VI           | X    |     | X   | X            |               |              |                     |  |                            |
| <b>Summary of Results</b> |                    | <b>Cos with Recovery Mechanisms:</b> |              |              |      |     | 31  | 21           | 16            | 13           | 12                  | 12   | 21                         |
|                           |                    | <b>Total Companies</b>               | <b>31</b>    |              |      |     |   |              |               |              |                     |  |                            |

Source: Company 10-K's; select information for AEP, Black Hills, and Hawaiian Electric provided by Regulatory Research Associates (RRA).

Note: VI=Vertically Integrated; Del=Delivery

GREAT PLAINS ENERGY INCORPORATED  
Capitalization  
December 31, 2009 (Actual)  
(\$ in 000's)

| CAPITAL COMPONENT              | GPE Consolidated   |                |                 |                 | GPE Capitalization for<br>KCPL Ratemaking |                |                 |                 | GPE Capitalization for<br>GMO Ratemaking |                |                 |                 | Other          |                |                 |                 |
|--------------------------------|--------------------|----------------|-----------------|-----------------|---|----------------|-----------------|-----------------|--|----------------|-----------------|-----------------|----------------|----------------|-----------------|-----------------|
|                                | AMOUNT             | PERCENT        | REQUIRED RETURN | WEIGHTED RETURN | AMOUNT                                    | PERCENT        | REQUIRED RETURN | WEIGHTED RETURN | AMOUNT                                   | PERCENT        | REQUIRED RETURN | WEIGHTED RETURN | AMOUNT         | PERCENT        | REQUIRED RETURN | WEIGHTED RETURN |
| KCPL Long-term Debt            | \$1,776,617        | 29.60%         | 6.80%           |                 | 1,770,808                                 | 47.29%         | 6.80%           |                 | 3,862                                    | 0.17%          | 6.80%           |                 | 1,947          | 47.29%         | 6.80%           |                 |
| GMO Long-term Debt             | \$962,560          | 16.04%         | 7.03%           |                 | -   | 0.00%          | 7.03%           |                 | 962,560                                  | 42.70%         | 7.03%           |                 | -              | 0.00%          | 7.03%           |                 |
| GPE Long-term Debt             | \$99,602           | 1.66%          | 7.53%           |                 | -   | 0.00%          | 7.53%           |                 | 99,602                                   | 4.42%          | 7.53%           |                 | -              | 0.00%          | 7.53%           |                 |
| Long-Term Debt (Note 1)        | \$2,838,779        | 47.29%         | 6.90%           | 3.2649%         | 1,770,808                                 | 47.29%         | 6.80%           | 3.2151%         | 1,066,025                                | 47.29%         | 7.08%           | 3.3477%         | 1,947          | 47.29%         | 6.80%           | 3.2151%         |
| Equity-linked Convertible Debt | 287,500            | 4.79%          | 13.59%          | 0.6508%         | 179,340                                   | 4.79%          | 13.59%          | 0.6508%         | 107,963                                  | 4.79%          | 13.59%          | 0.6508%         | 197            | 4.79%          | 13.59%          | 0.6508%         |
| Preferred Stock                | 39,000             | 0.65%          | 4.29%           | 0.0279%         | 24,328                                    | 0.65%          | 4.29%           | 0.0279%         | 14,645                                   | 0.65%          | 4.29%           | 0.0279%         | 27             | 0.65%          | 4.29%           | 0.0279%         |
| Common Equity (Note 2)         | 2,837,400          | 47.27%         | 11.00%          | 5.1996%         | 1,769,948                                 | 47.27%         | 11.00%          | 5.1996%         | 1,065,507                                | 47.27%         | 11.00%          | 5.1996%         | 1,946          | 47.27%         | 11.00%          | 5.1996%         |
|                                | <u>\$6,002,679</u> | <u>100.00%</u> |                 | <u>9.1432%</u>  | <u>\$3,744,424</u>                        | <u>100.00%</u> |                 | <u>9.0934%</u>  | <u>\$2,254,139</u>                       | <u>100.00%</u> |                 | <u>9.2260%</u>  | <u>\$4,116</u> | <u>100.00%</u> |                 | <u>9.0934%</u>  |

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

Note 2: Excludes accumulated other comprehensive income or loss

GREAT PLAINS ENERGY INCORPORATED  
Capitalization  
December 31, 2009 (Actual)  
(\$ in 000's)

| CAPITAL COMPONENT              | AMOUNT             | PERCENT        | REQUIRED RETURN | WEIGHTED RETURN |
|--------------------------------|--------------------|----------------|-----------------|-----------------|
| Long-Term Debt (Note 1)        | \$2,838,779        | 47.29%         | 6.90%           | 3.2649%         |
| Equity-linked Convertible Debt | 287,500            | 4.79%          | 13.59%          | 0.6508%         |
| Preferred Stock                | 39,000             | 0.65%          | 4.29%           | 0.0279%         |
| Common Equity (Note 2)         | 2,837,400          | 47.27%         | 11.00%          | 5.1996%         |
|                                | <u>\$6,002,679</u> | <u>100.00%</u> |                 | <u>9.1432%</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  
December 31, 2009 (Actual)  
(\$ in 000's)

| CAPITAL COMPONENT             | AMOUNT             | PERCENT        |
|-------------------------------|--------------------|----------------|
| KCP&L Long-Term Debt (Note 1) | \$1,776,617        | 47.45%         |
| KCP&L Common Equity (Note 2)  | 1,967,807          | 52.55%         |
| Total KCP&L Capital           | <u>\$3,744,424</u> | <u>100.00%</u> |

Note 1: Includes amounts classified as current liabilities

Note 2: Excludes accumulated other comprehensive income or loss

GREATER MISSOURI OPERATIONS  
Capitalization  
December 31, 2009 (Actual)  
(\$ in 000's)

| CAPITAL COMPONENT           | AMOUNT             | PERCENT        |
|-----------------------------|--------------------|----------------|
| GMO Long-Term Debt (Note 1) | \$962,560          | 42.70%         |
| GMO Common Equity (Note 2)  | 1,291,579          | 57.30%         |
| Total GMO Capital           | <u>\$2,254,139</u> | <u>100.00%</u> |

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

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**

December 31, 2009 (Actual)

| Line   | Issue   | (a)<br>Initial<br>Offering | (b)<br>Date of<br>Offering | (c)<br>Date of<br>Maturity | (d)<br>Price to<br>Public | (e)<br>Discounts &<br>Underwriters<br>Commissions | (f)<br>Issuance<br>Expense | (g)<br>Net Proceeds<br>to Company | (h)<br>Cost to<br>Company | (i)<br>Long-term<br>Debt Capital<br>Outstanding | (j)<br>Annual Cost<br>of Long-term<br>Debt Capital |
|--|---|----------------------------|----------------------------|----------------------------|---------------------------|---|----------------------------|-----------------------------------|---------------------------|---|--|
| <b>KANSAS CITY POWER &amp; LIGHT ONLY</b>                |   |                            |                            |                            |                           |   |                            |                                   |                           |   |  |
| <b>Pledged General Mortgage Bonds</b>                    |   |                            |                            |                            |                           |   |                            |                                   |                           |   |  |
| 1  | EIRR 1992 Series  | \$31,000,000               | 9/15/1992                  | 7/1/2017                   |                           |   |                            |                                   | 5.686%                    | \$31,000,000                                    | \$1,762,660  |
| 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                  |                           |   |                            |                                   | 5.468%                    | \$40,000,000                                    | \$2,187,200  |
| 4  | MATES Series 1993-B   | \$39,480,000               | 12/7/1993                  | 12/1/2023                  |                           |   |                            |                                   | 5.243%                    | \$39,480,000                                    | \$2,069,936  |
| 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                                       |
| <b>Unsecured Notes</b>                                   |   |                            |                            |                            |                           |   |                            |                                   |                           |   |  |
| 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                                       |
| <b>Environmental Improvement Revenue Refunding Bonds</b> |   |                            |                            |                            |                           |   |                            |                                   |                           |   |  |
| 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                   |                           |   |                            |                                   | 5.337%                    | \$63,250,000                                    | \$3,375,340  |
| 14   | 2007 Series A-2 Due 2035                                      | \$10,000,000               | 9/19/07                    | 9/1/2035                   |                           |   |                            |                                   | 5.210%                    | \$10,000,000                                    | \$520,997  |
| 15   | 2007 Series B Due 2035  | \$73,250,000               | 9/19/07                    | 9/1/2035                   |                           |   |                            |                                   | 5.572%                    | \$73,250,000                                    | \$4,081,219  |
| 16   | 2008 Series Due 2038  | \$23,400,000               | 5/28/08                    | 5/1/2038                   |                           |   |                            |                                   | 4.930%                    | \$23,400,000                                    | \$1,153,586  |
| <b>Other Long-Term Debt</b>                              |   |                            |                            |                            |                           |   |                            |                                   |                           |   |  |
| 17   | Unamortized Discount on Senior Notes                          |                            |                            |                            |                           |   |                            |                                   |                           | (2,050,854)                                     |  |
| 18   | Loss/(Gain) on Reacquired Debt                                |                            |                            |                            |                           |   |                            |                                   |                           |   | \$395,361  |
| 19   | Weighted Cost of Interest Rate Management Products            |                            |                            |                            |                           |   |                            |                                   |                           |   | \$8,535,948  |
| 20   | <b>Total KCP&amp;L Long-Term Debt Capital</b>                 |                            |                            |                            |                           |   |                            |                                   |                           | <b>\$1,776,617,146</b>                          | <b>\$120,780,803</b>                               |
| 21   | <b>KCP&amp;L Weighted Avg. Cost of Long-Term Debt Capital</b> |                            |                            |                            |                           |   |                            |                                   | <b>6.798%</b>             |   |  |

**KANSAS CITY POWER & LIGHT COMPANY, GREAT PLAINS ENERGY and GMO**  
**Weighted Average Cost of Long-Term Debt Capital**

December 31, 2009 (Actual)

|   | (a)   | (b)              | (c)              | (d)             | (e)                                  | (f)              | (g)                     | (h)             | (i)                                | (j)                                   |
|---|---|------------------|------------------|-----------------|--------------------------------------|------------------|-------------------------|-----------------|------------------------------------|---------------------------------------|
| Line  | Initial Offering  | Date of Offering | Date of Maturity | Price to Public | Discounts & Underwriters Commissions | Issuance Expense | Net Proceeds to Company | Cost to Company | Long-term Debt Capital Outstanding | Annual Cost of Long-term Debt Capital |
| <b>GMO ONLY</b>   |   |                  |                  |                 |                                      |                  |                         |                 |                                    |                                       |
| <u><b>Pledged General Mortgage Bonds</b></u>                    |   |                  |                  |                 |                                      |                  |                         |                 |                                    |                                       |
| 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                           |
| <u><b>Unsecured Notes</b></u>                                   |   |                  |                  |                 |                                      |                  |                         |                 |                                    |                                       |
| 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%          |                                    | \$0                                   |
| 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           | 6.258%          | \$500,000,000                      | \$31,292,205                          |
| 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                             |
| <u><b>Environmental Improvement Revenue Refunding Bonds</b></u> |   |                  |                  |                 |                                      |                  |                         |                 |                                    |                                       |
| 10  | Wamego 1996 Series - Auction Rate                       | \$7,300,000      | 3/1/96           | 3/1/26          | \$7,300,000                          | \$422,982        | \$6,877,018             | 0.493%          | \$7,300,000                        | \$35,975                              |
| 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             | 2.168%          | \$5,000,000                        | \$108,401                             |
| <u><b>Other Long-Term Debt</b></u>                              |   |                  |                  |                 |                                      |                  |                         |                 |                                    |                                       |
| 13  | Sanwa Bus CC  | \$8,190,000      | 12/9/95          | 12/9/09         | \$8,190,000                          | \$35,000         | \$8,155,000             | 7.038%          |                                    | \$0                                   |
| 14  | Loss/(Gain) on Reacquired Debt                          |                  |                  |                 |                                      |                  |                         |                 |                                    | \$ 44,404                             |
| 15  | <b>Total GMO Long-Term Debt Capital</b>                 |                  |                  |                 |                                      |                  |                         |                 | <b>\$962,560,000</b>               | <b>\$67,694,487</b>                   |
| 16  | <b>GMO Weighted Avg. Cost of Long-Term Debt Capital</b> |                  |                  |                 |                                      |                  | <b>7.033%</b>           |                 |                                    |                                       |

KANSAS CITY POWER & LIGHT COMPANY, GREAT PLAINS ENERGY and GMO  
Weighted Average Cost of Long-Term Debt Capital

December 31, 2009 (Actual)

| Line  | Issue  | (a)<br>Initial<br>Offering | (b)<br>Date of<br>Offering | (c)<br>Date of<br>Maturity | (d)<br>Price to<br>Public | (e)<br>Discounts &<br>Underwriters<br>Commissions | (f)<br>Issuance<br>Expense | (g)<br>Net Proceeds<br>to Company | (h)<br>Cost to<br>Company | (i)<br>Long-term<br>Debt Capital<br>Outstanding | (j)<br>Annual Cost<br>of Long-term<br>Debt Capital |
|---|--|----------------------------|----------------------------|----------------------------|---------------------------|---|----------------------------|-----------------------------------|---------------------------|---|--|
| <b>GREAT PLAINS ENERGY ONLY</b>                                   |  |                            |                            |                            |                           |   |                            |                                   |                           |   |  |
| <u>Unsecured Notes</u>  |  |                            |                            |                            |                           |   |                            |                                   |                           |   |  |
| 1   | Senior Notes Due 2017 - 6.875% Coupon (5)                                  | \$100,000,000              | 9/20/2007                  | 9/15/2017                  | \$100,000,000             | \$1,166,000                                       | \$87,098                   | \$98,746,902                      | 7.052%                    | \$100,000,000                                   | \$7,051,752  |
| <u>Other Long-Term Debt</u>                                       |  |                            |                            |                            |                           |   |                            |                                   |                           |   |  |
| 2   | Unamortized Discount on Senior Notes                                       |                            |                            |                            |                           |   |                            |                                   |                           | (\$397,750)                                     |  |
| 3   | Weighted Cost of Interest Rate Management Products                         |                            |                            |                            |                           |   |                            |                                   |                           |   | \$453,103  |
| 4   | <b>Total GPE Only Long-Term Debt Capital</b>                               |                            |                            |                            |                           |   |                            |                                   |                           | <u><b>\$99,602,250</b></u>                      | <u><b>\$7,504,855</b></u>                          |
| 5   | <b>GPE Only Weighted Avg. Cost of Long-Term Debt Capital</b>               |                            |                            |                            |                           |   |                            | <u><b>7.535%</b></u>              |                           |   |  |
| <hr/>   |  |                            |                            |                            |                           |   |                            |                                   |                           |   |  |
| <b>GREAT PLAINS ENERGY, KANSAS CITY POWER &amp; LIGHT and GMO</b> |  |                            |                            |                            |                           |   |                            |                                   |                           |   |  |
| 6   | <b>Total GPE, KCP&amp;L and GMO Long-Term Debt Capital</b>                 |                            |                            |                            |                           |   |                            |                                   |                           | <u><b>\$2,838,779,396</b></u>                   | <u><b>\$195,980,146</b></u>                        |
| 7   | <b>GPE, KCP&amp;L and GMO Weighted Avg. Cost of Long-Term Debt Capital</b> |                            |                            |                            |                           |   |                            | <u><b>6.904%</b></u>              |                           |   |  |

- (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.

**SCHEDULE SCH2010-2  
PAGES 8-14**

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

**GREAT PLAINS ENERGY**  
**Cost of Equity-linked Convertible Debt**  
**December 31, 2009 (Actual) and December 31, 2010 (Projected)**

| Line                       | Issue                                    | (a)<br>Initial<br>Offering | (b)<br>Date of<br>Offering | (c)<br>Date of<br>Conversion | (d)<br>Price to<br>Public | (e)<br>Underwriters<br>Discounts &<br>Commissions | (f)<br>Issuance<br>Expense | (g)<br>Net Proceeds<br>to Company | (h)<br>Cost to<br>Company | (i)<br>Convertible<br>Debt Capital<br>Outstanding | (j)<br>Annual Cost<br>of Convertible<br>Debt Capital |
|----------------------------|--|----------------------------|----------------------------|------------------------------|---------------------------|---|----------------------------|-----------------------------------|---------------------------|---|--|
| <b>GREAT PLAINS ENERGY</b> |  |                            |                            |                              |                           |   |                            |                                   |                           |   |  |
| <b>Unsecured Notes</b>     |  |                            |                            |                              |                           |   |                            |                                   |                           |   |  |
| 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   |
|                            | 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   |
|                            | 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  
December 31, 2009 (Actual) and December 31, 2010 (Projected)

| Line | (a)<br>Description of Issue   | (b)<br>Date of Issuance | (c)<br>No. of Shares<br>Initial<br>Offering | (d)<br>Price to Public | (e)<br>Underwriters<br>Discounts &<br>Commissions | (f)<br>Issuance<br>Expense | (g)<br>Net Proceeds<br>to Company | (h)<br>Cost to<br>Company | (i)<br>Preferred Stock<br>Capital Outstanding | (j)<br>Annual Cost<br>of Preferred<br>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    | <b>Total Preferred Stock Capital December 31, 2009 (Actual)</b>                       |                         |   |                        |   |                            |                                   |                           | <u>\$39,000,000</u>                           | <u>\$1,673,610</u>                                  |
| 6    | Weighted Average Cost at December 31, 2009 (Actual) and December 31, 2010 (Projected) |                         |   |                        |   |                            |                                   | <u>4.291%</u>             |   |   |

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

|                                 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|---------------------------------|------|------|------|------|------|------|------|------|------|------|
| <b>Prime Rate</b>               | 9.2% | 6.9% | 4.7% | 4.1% | 4.3% | 6.2% | 8.0% | 8.1% | 5.1% | 3.3% |
| <b>Consumer Price Index</b>     | 3.4% | 1.6% | 2.5% | 2.0% | 3.3% | 3.3% | 2.5% | 4.1% | 0.0% | 2.8% |
| <b>Long-Term Treasuries</b>     | 5.9% | 5.5% | 5.4% | 5.0% | 5.1% | 4.7% | 5.0% | 4.8% | 4.3% | 4.1% |
| <b>Moody's Avg Utility Debt</b> | 8.1% | 7.7% | 7.5% | 6.6% | 6.2% | 5.7% | 6.1% | 6.1% | 6.7% | 6.3% |
| <b>Moody's Baa Utility Debt</b> | 8.4% | 8.0% | 8.0% | 6.8% | 6.4% | 5.9% | 6.3% | 6.3% | 7.2% | 7.1% |

**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 2007-2009; 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<br>Utility Rate | 30-Year<br>Treasury Rate | Triple-B<br>Utility Spread |
|------------------|--------------------------|--------------------------|----------------------------|
| 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                       |
| Nov-09           | 6.18                     | 4.31                     | 1.87                       |
| Dec-09           | 6.26                     | 4.49                     | 1.77                       |
| Jan-10           | 6.16                     | 4.60                     | 1.56                       |
| Feb-10           | 6.25                     | 4.62                     | 1.63                       |
| Mar-10           | 6.22                     | 4.64                     | 1.58                       |
| Apr-10           | 6.19                     | 4.69                     | 1.50                       |
| <b>3-Mo Avg</b>  | <b>6.22</b>              | <b>4.65</b>              | <b>1.57</b>                |
| <b>12-Mo Avg</b> | <b>6.49</b>              | <b>4.44</b>              | <b>2.05</b>                |

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

Three month average is for February 2010-April 2010.

Twelve month average is for May 2009-April 2010.



# Economic Indicators

Seasonally Adjusted Annual Rates — Dollar Figures in Billions

|                                     | Annual % Change |            | 2009   |       |       |            | 2010       |            |            |            | E2011      |            |            |
|-------------------------------------|-----------------|------------|--------|-------|-------|------------|------------|------------|------------|------------|------------|------------|------------|
|                                     | R2009           | E2010      | R2009  | E2010 | E2011 | 3Q         | R4Q        | 1Q         | 2Q         | 3Q         | 4Q         | 1Q         | 2Q         |
| <b>Gross Domestic Product</b>       |                 |            |        |       |       |            |            |            |            |            |            |            |            |
| \$14,256.3                          | \$14,945.4      | \$15,556.1 | (1.3)  | 4.1   | 4.8   | \$14,242.1 | \$14,453.8 | \$14,581.6 | \$14,774.0 | \$14,940.0 | \$15,085.9 | \$15,276.2 | \$15,451.0 |
| (1.3)                               | 4.1             | 4.8        | -      | -     | -     | 2.6        | 6.1        | 3.6        | 5.4        | 4.6        | 4.0        | 5.1        | 4.7        |
| (2.4)                               | 3.0             | 2.9        | -      | -     | -     | 2.2        | 5.6        | 2.5        | 3.5        | 2.3        | 2.6        | 2.8        | 2.9        |
| 1.2                                 | 1.1             | 1.8        | -      | -     | -     | 0.4        | 0.5        | 1.1        | 1.8        | 2.2        | 1.3        | 2.2        | 1.7        |
| <b>*Components of Real GDP</b>      |                 |            |        |       |       |            |            |            |            |            |            |            |            |
| \$9,235.1                           | \$9,449.7       | \$9,665.5  | (0.6)  | 2.3   | 2.3   | \$9,252.6  | \$9,289.5  | \$9,364.1  | \$9,415.8  | \$9,482.8  | \$9,535.9  | \$9,574.7  | \$9,624.9  |
| (0.6)                               | 2.3             | 2.3        | -      | -     | -     | 2.8        | 1.6        | 3.3        | 2.2        | 2.9        | 2.3        | 1.6        | 2.1        |
| 1,101.4                             | 1,177.0         | 1,256.0    | (3.9)  | 6.9   | 6.7   | 1,122.7    | 1,123.7    | 1,139.1    | 1,167.4    | 1,192.2    | 1,209.3    | 1,222.7    | 1,237.6    |
| 2,037.0                             | 2,088.8         | 2,116.5    | (1.0)  | 2.5   | 1.3   | 2,033.3    | 2,033.3    | 2,077.7    | 2,083.5    | 2,093.7    | 2,100.4    | 2,103.3    | 2,110.5    |
| 6,087.8                             | 6,183.6         | 6,303.3    | 0.1    | 1.6   | 1.9   | 6,090.6    | 6,105.9    | 6,142.0    | 6,163.6    | 6,198.8    | 6,230.1    | 6,254.4    | 6,284.1    |
| 1,291.0                             | 1,312.5         | 1,403.5    | (17.8) | 1.7   | 6.9   | 1,269.0    | 1,285.5    | 1,287.9    | 1,305.9    | 1,320.0    | 1,336.0    | 1,361.6    | 1,385.8    |
| (17.8)                              | 1.7             | 6.9        | -      | -     | -     | (5.9)      | 5.3        | 0.7        | 5.7        | 4.4        | 4.9        | 7.9        | 7.3        |
| 890.7                               | 975.9           | 1,097.1    | (16.6) | 9.6   | 12.4  | 879.8      | 918.9      | 930.2      | 960.5      | 991.0      | 1,021.9    | 1,055.8    | 1,085.3    |
| 349.6                               | 348.7           | 432.0      | (20.8) | (0.3) | 23.9  | 350.5      | 353.5      | 343.2      | 345.4      | 346.7      | 359.4      | 383.9      | 417.0      |
| (20.8)                              | (0.3)           | 23.9       | -      | -     | -     | 19.0       | 3.5        | (11.1)     | 2.6        | 1.5        | 15.5       | 30.2       | 39.3       |
| (108.3)                             | 27.5            | 51.0       | -      | -     | -     | (139.2)    | (19.7)     | (2.8)      | 31.4       | 38.3       | 42.9       | 48.2       | 49.2       |
| 2,564.6                             | 2,584.6         | 2,564.8    | 1.8    | 0.8   | (0.8) | 2,585.5    | 2,576.9    | 2,570.4    | 2,586.7    | 2,590.2    | 2,591.1    | 2,584.6    | 2,570.1    |
| 1,026.6                             | 1,065.2         | 1,038.2    | 5.2    | 3.8   | (2.5) | 1,043.3    | 1,043.4    | 1,052.8    | 1,069.3    | 1,070.6    | 1,068.2    | 1,058.8    | 1,044.0    |
| 1,541.0                             | 1,523.5         | 1,530.3    | (0.2)  | (1.1) | 0.4   | 1,545.5    | 1,537.0    | 1,521.5    | 1,521.6    | 1,523.9    | 1,526.9    | 1,529.6    | 1,529.8    |
| (355.6)                             | (357.2)         | (348.6)    | -      | -     | -     | (357.4)    | (348.0)    | (344.7)    | (352.0)    | (366.7)    | (365.3)    | (354.3)    | (345.9)    |
| 1,472.4                             | 1,650.1         | 1,792.5    | (9.6)  | 12.1  | 8.6   | 1,478.8    | 1,556.8    | 1,587.7    | 1,633.7    | 1,671.3    | 1,707.8    | 1,740.8    | 1,776.6    |
| 1,828.0                             | 2,007.3         | 2,141.1    | (13.9) | 9.8   | 6.7   | 1,836.2    | 1,904.8    | 1,932.3    | 1,985.7    | 2,038.0    | 2,073.0    | 2,095.1    | 2,122.5    |
| \$12,026.1                          | \$12,418.6      | \$13,007.2 | (1.7)  | 3.3   | 4.7   | \$12,005.2 | \$12,097.7 | \$12,188.2 | \$12,342.2 | \$12,505.8 | \$12,638.0 | \$12,785.5 | \$12,919.3 |
| 10,923.7                            | 11,255.6        | 11,659.4   | 1.1    | 3.0   | 3.6   | 10,934.3   | 11,028.7   | 11,059.4   | 11,191.2   | 11,340.7   | 11,431.0   | 11,469.5   | 11,582.6   |
| 4.2                                 | 3.3             | 2.8        | -      | -     | -     | 3.9        | 3.9        | 3.1        | 3.4        | 3.5        | 3.4        | 2.8        | 2.8        |
| 1,427.7                             | 1,701.4         | 1,846.3    | (2.4)  | 19.2  | 8.5   | 1,495.0    | 1,632.0    | 1,736.8    | 1,674.8    | 1,683.4    | 1,710.5    | 1,825.0    | 1,830.5    |
| 1,112.8                             | 1,309.7         | 1,308.2    | (4.9)  | 17.7  | (0.1) | 1,173.9    | 1,270.1    | 1,334.5    | 1,288.4    | 1,297.3    | 1,318.6    | 1,295.3    | 1,296.3    |
| 51.15                               | 63.89           | 71.81      | 243.8  | 24.9  | 12.4  | 12.49      | 51.15      | 59.52      | 61.65      | 63.23      | 63.89      | 66.63      | 68.97      |
| <b>†Prices &amp; Interest Rates</b> |                 |            |        |       |       |            |            |            |            |            |            |            |            |
| (0.3)                               | 2.2             | 2.0        | -      | -     | -     | 3.7        | 2.6        | 1.6        | 1.5        | 2.5        | 1.6        | 2.3        | 2.1        |
| 0.2                                 | 0.4             | 2.0        | -      | -     | -     | 0.2        | 0.1        | 0.1        | 0.2        | 0.4        | 0.8        | 1.3        | 1.8        |
| 3.3                                 | 4.1             | 5.1        | -      | -     | -     | 3.5        | 3.5        | 3.7        | 4.0        | 4.3        | 4.5        | 4.8        | 5.0        |
| 4.1                                 | 5.0             | 5.7        | -      | -     | -     | 4.3        | 4.3        | 4.6        | 4.9        | 5.1        | 5.3        | 5.6        | 5.7        |
| 5.3                                 | 5.7             | 6.6        | -      | -     | -     | 5.3        | 5.2        | 5.3        | 5.6        | 5.9        | 6.1        | 6.4        | 6.6        |
| <b>Other Key Indicators</b>         |                 |            |        |       |       |            |            |            |            |            |            |            |            |
| 553.3                               | 662.9           | 1,142.2    | (38.6) | 19.8  | 72.3  | 586.7      | 558.7      | 595.2      | 604.5      | 681.2      | 770.8      | 930.2      | 1,083.3    |
| 10.3                                | 11.7            | 13.6       | (21.6) | 13.4  | 15.6  | 11.5       | 10.8       | 11.0       | 11.6       | 12.0       | 12.4       | 12.7       | 13.2       |
| 9.3                                 | 9.6             | 9.2        | -      | -     | -     | 9.6        | 10.0       | 9.7        | 9.6        | 9.6        | 9.7        | 9.6        | 9.4        |
| 4.5                                 | (4.6)           | (6.0)      | -      | -     | -     | (18.6)     | (9.5)      | 10.7       | (1.3)      | (6.9)      | (8.2)      | (7.3)      | (4.8)      |

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<br>GDP | %<br>Change | GDP Price<br>Deflator | %<br>Change | CPI   | %<br>Change |
|--------------------|----------------|-------------|-----------------------|-------------|-------|-------------|
| 1949               | 265.2          |             | 14.4                  |             | 23.6  |             |
| 1950               | 313.3          | 18.1%       | 15.0                  | 4.2%        | 25.0  | 5.8%        |
| 1951               | 347.9          | 11.0%       | 15.9                  | 5.6%        | 26.5  | 6.0%        |
| 1952               | 371.4          | 6.8%        | 16.1                  | 1.5%        | 26.7  | 0.9%        |
| 1953               | 375.9          | 1.2%        | 16.2                  | 0.8%        | 26.9  | 0.6%        |
| 1954               | 389.4          | 3.6%        | 16.4                  | 0.8%        | 26.8  | -0.4%       |
| 1955               | 426.0          | 9.4%        | 16.8                  | 2.6%        | 26.9  | 0.4%        |
| 1956               | 448.1          | 5.2%        | 17.3                  | 3.3%        | 27.6  | 2.8%        |
| 1957               | 461.5          | 3.0%        | 17.8                  | 2.7%        | 28.5  | 3.0%        |
| 1958               | 485.0          | 5.1%        | 18.3                  | 2.5%        | 29.0  | 1.8%        |
| 1959               | 513.2          | 5.8%        | 18.4                  | 0.9%        | 29.4  | 1.5%        |
| 1960               | 523.7          | 2.0%        | 18.7                  | 1.4%        | 29.8  | 1.4%        |
| 1961               | 562.6          | 7.4%        | 18.9                  | 1.1%        | 30.0  | 0.7%        |
| 1962               | 593.3          | 5.5%        | 19.1                  | 1.3%        | 30.4  | 1.2%        |
| 1963               | 633.5          | 6.8%        | 19.4                  | 1.4%        | 30.9  | 1.6%        |
| 1964               | 675.6          | 6.6%        | 19.7                  | 1.5%        | 31.3  | 1.2%        |
| 1965               | 747.5          | 10.6%       | 20.1                  | 2.0%        | 31.9  | 1.9%        |
| 1966               | 806.9          | 7.9%        | 20.8                  | 3.5%        | 32.9  | 3.4%        |
| 1967               | 852.7          | 5.7%        | 21.4                  | 3.1%        | 34.0  | 3.3%        |
| 1968               | 936.2          | 9.8%        | 22.4                  | 4.6%        | 35.6  | 4.7%        |
| 1969               | 1004.5         | 7.3%        | 23.6                  | 5.2%        | 37.7  | 5.9%        |
| 1970               | 1052.7         | 4.8%        | 24.7                  | 5.0%        | 39.8  | 5.6%        |
| 1971               | 1151.4         | 9.4%        | 25.9                  | 4.7%        | 41.1  | 3.3%        |
| 1972               | 1286.6         | 11.7%       | 27.1                  | 4.5%        | 42.5  | 3.4%        |
| 1973               | 1431.8         | 11.3%       | 28.9                  | 6.8%        | 46.3  | 8.9%        |
| 1974               | 1552.8         | 8.5%        | 32.0                  | 10.7%       | 51.9  | 12.1%       |
| 1975               | 1713.9         | 10.4%       | 34.4                  | 7.6%        | 55.6  | 7.1%        |
| 1976               | 1884.5         | 10.0%       | 36.3                  | 5.4%        | 58.4  | 5.0%        |
| 1977               | 2110.8         | 12.0%       | 38.7                  | 6.7%        | 62.3  | 6.7%        |
| 1978               | 2416.0         | 14.5%       | 41.5                  | 7.3%        | 67.9  | 9.0%        |
| 1979               | 2659.4         | 10.1%       | 45.2                  | 8.7%        | 76.9  | 13.3%       |
| 1980               | 2915.3         | 9.6%        | 49.6                  | 9.7%        | 86.4  | 12.4%       |
| 1981               | 3194.7         | 9.6%        | 53.6                  | 8.3%        | 94.1  | 8.9%        |
| 1982               | 3312.5         | 3.7%        | 56.4                  | 5.2%        | 97.7  | 3.8%        |
| 1983               | 3688.1         | 11.3%       | 58.3                  | 3.3%        | 101.4 | 3.8%        |
| 1984               | 4034.0         | 9.4%        | 60.4                  | 3.6%        | 105.5 | 4.0%        |
| 1985               | 4318.7         | 7.1%        | 62.1                  | 2.8%        | 109.5 | 3.8%        |
| 1986               | 4543.3         | 5.2%        | 63.5                  | 2.3%        | 110.8 | 1.2%        |
| 1987               | 4883.1         | 7.5%        | 65.5                  | 3.1%        | 115.6 | 4.3%        |
| 1988               | 5251.0         | 7.5%        | 67.9                  | 3.7%        | 120.7 | 4.4%        |
| 1989               | 5581.7         | 6.3%        | 70.3                  | 3.5%        | 126.3 | 4.6%        |
| 1990               | 5846.0         | 4.7%        | 73.2                  | 4.2%        | 134.2 | 6.3%        |
| 1991               | 6092.5         | 4.2%        | 75.5                  | 3.2%        | 138.2 | 3.0%        |
| 1992               | 6493.6         | 6.6%        | 77.1                  | 2.2%        | 142.3 | 3.0%        |
| 1993               | 6813.8         | 4.9%        | 78.8                  | 2.2%        | 146.3 | 2.8%        |
| 1994               | 7248.2         | 6.4%        | 80.5                  | 2.1%        | 150.1 | 2.6%        |
| 1995               | 7542.5         | 4.1%        | 82.1                  | 2.0%        | 153.9 | 2.5%        |
| 1996               | 8023.0         | 6.4%        | 83.6                  | 1.8%        | 159.1 | 3.4%        |
| 1997               | 8505.7         | 6.0%        | 85.0                  | 1.6%        | 161.8 | 1.7%        |
| 1998               | 9027.5         | 6.1%        | 85.9                  | 1.1%        | 164.4 | 1.6%        |
| 1999               | 9607.7         | 6.4%        | 87.2                  | 1.5%        | 168.8 | 2.7%        |
| 2000               | 10129.8        | 5.4%        | 89.4                  | 2.5%        | 174.6 | 3.4%        |
| 2001               | 10373.1        | 2.4%        | 91.2                  | 2.0%        | 177.4 | 1.6%        |
| 2002               | 10766.9        | 3.8%        | 92.8                  | 1.8%        | 181.8 | 2.5%        |
| 2003               | 11416.5        | 6.0%        | 94.8                  | 2.1%        | 185.5 | 2.0%        |
| 2004               | 12144.9        | 6.4%        | 97.9                  | 3.2%        | 191.7 | 3.3%        |
| 2005               | 12915.6        | 6.3%        | 101.3                 | 3.5%        | 198.1 | 3.3%        |
| 2006               | 13611.5        | 5.4%        | 104.2                 | 2.9%        | 203.1 | 2.5%        |
| 2007               | 14337.9        | 5.3%        | 107.1                 | 2.7%        | 211.4 | 4.1%        |
| 2008               | 14347.3        | 0.1%        | 109.2                 | 2.0%        | 211.3 | 0.0%        |
| 2009               | 14453.8        | 0.7%        | 109.9                 | 0.7%        | 217.2 | 2.8%        |
| 10-Year Average    |                | 4.2%        |                       | 2.3%        |       | 2.6%        |
| 20-Year Average    |                | 4.9%        |                       | 2.3%        |       | 2.8%        |
| 30-Year Average    |                | 5.8%        |                       | 3.0%        |       | 3.5%        |
| 40-Year Average    |                | 6.9%        |                       | 4.0%        |       | 4.5%        |
| 50-Year Average    |                | 6.9%        |                       | 3.7%        |       | 4.1%        |
| 60-Year Average    |                | 6.9%        |                       | 3.5%        |       | 3.8%        |
| Average of Periods |                | 6.0%        |                       | 3.1%        |       | 3.6%        |

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

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

| Company                | Constant Growth<br>DCF Model<br>Analysts' Growth Rates | Constant Growth<br>DCF Model<br>Long-Term GDP Growth | Low Near-Term Growth<br>Two-Stage Growth<br>DCF Model |
|------------------------|--|--|---|
| 1 ALLETE               | 9.8%   | 11.3%  | 10.6%   |
| 2 Alliant Energy Co.   | 10.4%  | 10.9%  | 10.9%   |
| 3 American Elec. Pwr.  | 8.4%   | 10.8%  | 10.7%   |
| 4 Avista Corp.         | 11.0%  | 11.0%  | 11.2%   |
| 5 Black Hills Corp     | 11.1%  | 11.0%  | 10.6%   |
| 6 Cleco Corporation    | 11.0%  | 10.0%  | 10.5%   |
| 7 Con. Edison          | 8.7%   | 11.4%  | 10.8%   |
| 8 DPL Inc.             | 9.9%   | 10.6%  | 10.6%   |
| 9 DTE Energy Co.       | 10.5%  | 10.9%  | 10.9%   |
| 10 Duke Energy         | 10.7%  | 12.0%  | 11.7%   |
| 11 Edison Internat.    | NA   | 9.9%   | 9.7%  |
| 12 Empire District     | 13.4%  | 12.9%  | 12.2%   |
| 13 Entergy Corp.       | 9.0%   | 9.8%   | 9.8%  |
| 14 FPL Group, Inc.     | 11.1%  | 10.1%  | 10.1%   |
| 15 Hawaiian Electric   | 14.9%  | 11.7%  | 11.1%   |
| 16 IDACORP             | 8.7%   | 9.5%   | 9.4%  |
| 17 Northeast Utilities | 11.8%  | 10.0%  | 9.9%  |
| 18 NSTAR               | 10.5%  | 10.8%  | 10.9%   |
| 19 PG&E Corp.          | 11.5%  | 10.4%  | 10.7%   |
| 20 Pinnacle West       | 12.0%  | 11.6%  | 11.2%   |
| 21 Portland General    | 10.3%  | 11.5%  | 11.3%   |
| 22 Progress Energy     | 10.5%  | 12.4%  | 11.6%   |
| 23 SCANA Corp.         | 9.7%   | 11.1%  | 10.7%   |
| 24 Sempra Energy       | 8.1%   | 9.3%   | 9.4%  |
| 25 Southern Co.        | 10.3%  | 11.5%  | 11.4%   |
| 26 Teco Energy, Inc.   | 11.8%  | 11.1%  | 11.0%   |
| 27 UIL Holdings Co.    | 9.9%   | 12.2%  | 11.3%   |
| 28 Vectren Corp.       | 10.5%  | 11.8%  | 11.3%   |
| 29 Westar Energy       | 12.1%  | 11.7%  | 11.3%   |
| 30 Wisconsin Energy    | 12.2%  | 9.4%   | 10.0%   |
| 31 Xcel Energy Inc.    | 10.6%  | 10.8%  | 10.6%   |
| GROUP AVERAGE          | 10.7%  | 11.0%  | 10.8%   |
| GROUP MEDIAN           | 10.5%  | 11.0%  | 10.8%   |

Source: Value Line Investment Survey, Electric Utility (East), Feb 26, 2010; (Central), Mar 26, 2010; (West), May 7, 2010.

Constant growth result for Edison International at 6.4% is below the cost of debt plus 100 basis points and is eliminated.

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

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

| Company                | (1)              | (2)                 | (3)              | (4) (5) (6)                |                  |                  | (7)                       | (8)                        |
|------------------------|------------------|---------------------|------------------|----------------------------|------------------|------------------|---------------------------|----------------------------|
|                        | Recent Price(P0) | Next Year's 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               | 33.30            | 1.76                | 5.29%            | NA                         | 3.70%            | 5.33%            | 4.52%                     | 9.8%                       |
| 2 Alliant Energy Co.   | 32.91            | 1.62                | 4.91%            | 7.00%                      | 4.00%            | 5.60%            | 5.53%                     | 10.4%                      |
| 3 American Elec. Pwr.  | 34.11            | 1.65                | 4.84%            | 3.00%                      | 3.60%            | 4.00%            | 3.53%                     | 8.4%                       |
| 4 Avista Corp.         | 20.88            | 1.04                | 4.98%            | 8.50%                      | 4.80%            | 4.67%            | 5.99%                     | 11.0%                      |
| 5 Black Hills Corp     | 29.40            | 1.46                | 4.97%            | 6.50%                      | 6.00%            | 6.00%            | 6.17%                     | 11.1%                      |
| 6 Cleco Corporation    | 26.22            | 1.04                | 3.97%            | 8.00%                      | 9.00%            | 4.00%            | 7.00%                     | 11.0%                      |
| 7 Con. Edison          | 43.99            | 2.39                | 5.43%            | 2.50%                      | 3.00%            | 4.28%            | 3.26%                     | 8.7%                       |
| 8 DPL Inc.             | 27.25            | 1.25                | 4.57%            | 6.50%                      | 5.00%            | 4.47%            | 5.32%                     | 9.9%                       |
| 9 DTE Energy Co.       | 44.89            | 2.18                | 4.86%            | 7.00%                      | 5.00%            | 4.90%            | 5.63%                     | 10.5%                      |
| 10 Duke Energy         | 16.45            | 0.98                | 5.96%            | 5.50%                      | 4.40%            | 4.38%            | 4.76%                     | 10.7%                      |
| 11 Edison Internat.    | <del>33.68</del> | <del>1.31</del>     | <del>3.89%</del> | <del>0.50%</del>           | <del>5.00%</del> | <del>2.03%</del> | <del>2.51%</del>          | <del>6.4%</del>            |
| 12 Empire District     | 18.48            | 1.28                | 6.93%            | 7.00%                      | NA               | 6.00%            | 6.50%                     | 13.4%                      |
| 13 Entergy Corp.       | 79.58            | 3.00                | 3.77%            | 5.00%                      | 4.00%            | 6.68%            | 5.23%                     | 9.0%                       |
| 14 FPL Group, Inc.     | 48.44            | 2.00                | 4.13%            | 7.00%                      | 7.00%            | 6.89%            | 6.96%                     | 11.1%                      |
| 15 Hawaiian Electric   | 21.63            | 1.24                | 5.73%            | 11.50%                     | 8.60%            | 7.26%            | 9.12%                     | 14.9%                      |
| 16 IDACORP             | 34.06            | 1.20                | 3.52%            | 5.50%                      | 5.00%            | 5.00%            | 5.17%                     | 8.7%                       |
| 17 Northeast Utilities | 26.73            | 1.07                | 3.98%            | 7.00%                      | 8.40%            | 7.94%            | 7.78%                     | 11.8%                      |
| 18 NSTAR               | 34.95            | 1.68                | 4.81%            | 5.50%                      | 6.00%            | 5.72%            | 5.74%                     | 10.5%                      |
| 19 PG&E Corp.          | 42.60            | 1.89                | 4.44%            | 7.00%                      | 7.70%            | 6.40%            | 7.03%                     | 11.5%                      |
| 20 Pinnacle West       | 37.24            | 2.10                | 5.64%            | 6.00%                      | 7.00%            | 6.00%            | 6.33%                     | 12.0%                      |
| 21 Portland General    | 19.11            | 1.06                | 5.52%            | 3.00%                      | 5.80%            | 5.67%            | 4.82%                     | 10.3%                      |
| 22 Progress Energy     | 39.02            | 2.51                | 6.43%            | 4.50%                      | 4.00%            | 3.56%            | 4.02%                     | 10.5%                      |
| 23 SCANA Corp.         | 37.12            | 1.91                | 5.15%            | 3.50%                      | 5.10%            | 5.08%            | 4.56%                     | 9.7%                       |
| 24 Sempra Energy       | 49.64            | 1.62                | 3.26%            | 4.00%                      | 7.00%            | 3.50%            | 4.83%                     | 8.1%                       |
| 25 Southern Co.        | 32.89            | 1.82                | 5.53%            | 4.50%                      | 4.90%            | 4.94%            | 4.78%                     | 10.3%                      |
| 26 Teco Energy, Inc.   | 15.85            | 0.81                | 5.11%            | 6.00%                      | 6.20%            | 7.93%            | 6.71%                     | 11.8%                      |
| 27 UIL Holdings Co.    | 27.79            | 1.73                | 6.23%            | 3.00%                      | 4.00%            | 4.10%            | 3.70%                     | 9.9%                       |
| 28 Vectren Corp.       | 23.99            | 1.38                | 5.75%            | 4.50%                      | 4.80%            | 5.00%            | 4.77%                     | 10.5%                      |
| 29 Westar Energy       | 22.20            | 1.26                | 5.68%            | 7.50%                      | 5.00%            | 6.85%            | 6.45%                     | 12.1%                      |
| 30 Wisconsin Energy    | 49.93            | 1.70                | 3.40%            | 8.00%                      | 9.50%            | 9.00%            | 8.83%                     | 12.2%                      |
| 31 Xcel Energy Inc.    | 21.12            | 1.02                | 4.81%            | 5.50%                      | 5.70%            | 6.16%            | 5.79%                     | 10.6%                      |
| GROUP AVERAGE          | 33.06            | 1.59                | 4.99%            | 5.86%                      | 5.66%            | 5.58%            | 5.69%                     | 10.7%                      |
| GROUP MEDIAN           |                  |                     | 4.97%            |                            |                  |                  |                           | 10.5%                      |

Source: Value Line Investment Survey, Electric Utility (East), Feb 26, 2010; (Central), Mar 26, 2010; (West), May 7, 2010.

Constant growth result for Edison International at 6.4% is below the cost of debt plus 100 basis points and is eliminated.

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

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

|                        | (9)                 | (10)              | (11)              | (12)                                   | (13)         |
|------------------------|---------------------|-------------------|-------------------|--|--------------|
| Company                | Next                |                   |                   | GDP K=Div Yld+G<br>Growth (Cols 11+12) | ROE<br>Yld+G |
|                        | Recent<br>Price(P0) | Year's<br>Div(D1) | Dividend<br>Yield |  |              |
| 1 ALLETE               | 33.30               | 1.76              | 5.29%             | 6.00%                                  | 11.3%        |
| 2 Alliant Energy Co.   | 32.91               | 1.62              | 4.91%             | 6.00%                                  | 10.9%        |
| 3 American Elec. Pwr.  | 34.11               | 1.65              | 4.84%             | 6.00%                                  | 10.8%        |
| 4 Avista Corp.         | 20.88               | 1.04              | 4.98%             | 6.00%                                  | 11.0%        |
| 5 Black Hills Corp     | 29.40               | 1.46              | 4.97%             | 6.00%                                  | 11.0%        |
| 6 Cleco Corporation    | 26.22               | 1.04              | 3.97%             | 6.00%                                  | 10.0%        |
| 7 Con. Edison          | 43.99               | 2.39              | 5.43%             | 6.00%                                  | 11.4%        |
| 8 DPL Inc.             | 27.25               | 1.25              | 4.57%             | 6.00%                                  | 10.6%        |
| 9 DTE Energy Co.       | 44.89               | 2.18              | 4.86%             | 6.00%                                  | 10.9%        |
| 10 Duke Energy         | 16.45               | 0.98              | 5.96%             | 6.00%                                  | 12.0%        |
| 11 Edison Internat.    | 33.68               | 1.31              | 3.89%             | 6.00%                                  | 9.9%         |
| 12 Empire District     | 18.48               | 1.28              | 6.93%             | 6.00%                                  | 12.9%        |
| 13 Entergy Corp.       | 79.58               | 3.00              | 3.77%             | 6.00%                                  | 9.8%         |
| 14 FPL Group, Inc.     | 48.44               | 2.00              | 4.13%             | 6.00%                                  | 10.1%        |
| 15 Hawaiian Electric   | 21.63               | 1.24              | 5.73%             | 6.00%                                  | 11.7%        |
| 16 IDACORP             | 34.06               | 1.20              | 3.52%             | 6.00%                                  | 9.5%         |
| 17 Northeast Utilities | 26.73               | 1.07              | 3.98%             | 6.00%                                  | 10.0%        |
| 18 NSTAR               | 34.95               | 1.68              | 4.81%             | 6.00%                                  | 10.8%        |
| 19 PG&E Corp.          | 42.60               | 1.89              | 4.44%             | 6.00%                                  | 10.4%        |
| 20 Pinnacle West       | 37.24               | 2.10              | 5.64%             | 6.00%                                  | 11.6%        |
| 21 Portland General    | 19.11               | 1.06              | 5.52%             | 6.00%                                  | 11.5%        |
| 22 Progress Energy     | 39.02               | 2.51              | 6.43%             | 6.00%                                  | 12.4%        |
| 23 SCANA Corp.         | 37.12               | 1.91              | 5.15%             | 6.00%                                  | 11.1%        |
| 24 Sempra Energy       | 49.64               | 1.62              | 3.26%             | 6.00%                                  | 9.3%         |
| 25 Southern Co.        | 32.89               | 1.82              | 5.53%             | 6.00%                                  | 11.5%        |
| 26 Teco Energy, Inc.   | 15.85               | 0.81              | 5.11%             | 6.00%                                  | 11.1%        |
| 27 UIL Holdings Co.    | 27.79               | 1.73              | 6.23%             | 6.00%                                  | 12.2%        |
| 28 Vectren Corp.       | 23.99               | 1.38              | 5.75%             | 6.00%                                  | 11.8%        |
| 29 Westar Energy       | 22.20               | 1.26              | 5.68%             | 6.00%                                  | 11.7%        |
| 30 Wisconsin Energy    | 49.93               | 1.70              | 3.40%             | 6.00%                                  | 9.4%         |
| 31 Xcel Energy Inc.    | 21.12               | 1.02              | 4.81%             | 6.00%                                  | 10.8%        |
| GROUP AVERAGE          | 33.08               | 1.58              | 4.95%             | 6.00%                                  | 11.0%        |
| GROUP MEDIAN           |                     |                   | 4.97%             |  | 11.0%        |

Source: Value Line Investment Survey, Electric Utility (East), Feb 26, 2010; (Central), Mar 26, 2010; (West), May 7, 2010.

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

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

|                        | (14)     | (15)     | (16)                  | (17)         | (18)       | (19)       | (20)       | (21)       | (22)       | (23)              | (24)                                    |
|------------------------|----------|----------|-----------------------|--------------|------------|------------|------------|------------|------------|-------------------|---|
| Company                | 2011 Div | 2014 Div | Annual Change to 2014 | CASH FLOWS   |            |            |            |            |            |                   | ROE=Internal Rate of Return (Yrs 0-150) |
|                        |          |          |                       | Recent Price | Year 1 Div | Year 2 Div | Year 3 Div | Year 4 Div | Year 5 Div | Year 5-150 Growth |   |
| 1 ALLETE               | 1.76     | 1.80     | 0.01                  | -33.30       | 1.76       | 1.77       | 1.79       | 1.80       | 1.91       | 6.00%             | 10.6%                                   |
| 2 Alliant Energy Co.   | 1.65     | 1.92     | 0.09                  | -32.91       | 1.65       | 1.74       | 1.83       | 1.92       | 2.04       | 6.00%             | 10.9%                                   |
| 3 American Elec. Pwr.  | 1.66     | 1.90     | 0.08                  | -34.11       | 1.66       | 1.74       | 1.82       | 1.90       | 2.01       | 6.00%             | 10.7%                                   |
| 4 Avista Corp.         | 1.08     | 1.30     | 0.07                  | -20.88       | 1.08       | 1.15       | 1.23       | 1.30       | 1.38       | 6.00%             | 11.2%                                   |
| 5 Black Hills Corp     | 1.48     | 1.60     | 0.04                  | -29.40       | 1.48       | 1.52       | 1.56       | 1.60       | 1.70       | 6.00%             | 10.6%                                   |
| 6 Cleco Corporation    | 1.10     | 1.40     | 0.10                  | -26.22       | 1.10       | 1.20       | 1.30       | 1.40       | 1.48       | 6.00%             | 10.5%                                   |
| 7 Con. Edison          | 2.40     | 2.46     | 0.02                  | -43.99       | 2.40       | 2.42       | 2.44       | 2.46       | 2.61       | 6.00%             | 10.8%                                   |
| 8 DPL Inc.             | 1.28     | 1.50     | 0.07                  | -27.25       | 1.28       | 1.35       | 1.43       | 1.50       | 1.59       | 6.00%             | 10.6%                                   |
| 9 DTE Energy Co.       | 2.24     | 2.60     | 0.12                  | -44.89       | 2.24       | 2.36       | 2.48       | 2.60       | 2.76       | 6.00%             | 10.9%                                   |
| 10 Duke Energy         | 0.99     | 1.10     | 0.04                  | -16.45       | 0.99       | 1.03       | 1.06       | 1.10       | 1.17       | 6.00%             | 11.7%                                   |
| 11 Edison Internat.    | 1.34     | 1.50     | 0.05                  | -33.68       | 1.34       | 1.39       | 1.45       | 1.50       | 1.59       | 6.00%             | 9.7%                                    |
| 12 Empire District     | 1.28     | 1.35     | 0.02                  | -18.48       | 1.28       | 1.30       | 1.33       | 1.35       | 1.43       | 6.00%             | 12.2%                                   |
| 13 Entergy Corp.       | 3.00     | 3.60     | 0.20                  | -79.58       | 3.00       | 3.20       | 3.40       | 3.60       | 3.82       | 6.00%             | 9.8%                                    |
| 14 FPL Group, Inc.     | 2.00     | 2.40     | 0.13                  | -48.44       | 2.00       | 2.13       | 2.27       | 2.40       | 2.54       | 6.00%             | 10.1%                                   |
| 15 Hawaiian Electric   | 1.24     | 1.30     | 0.02                  | -21.63       | 1.24       | 1.26       | 1.28       | 1.30       | 1.38       | 6.00%             | 11.1%                                   |
| 16 IDACORP             | 1.20     | 1.40     | 0.07                  | -34.06       | 1.20       | 1.27       | 1.33       | 1.40       | 1.48       | 6.00%             | 9.4%                                    |
| 17 Northeast Utilities | 1.10     | 1.25     | 0.05                  | -26.73       | 1.10       | 1.15       | 1.20       | 1.25       | 1.33       | 6.00%             | 9.9%                                    |
| 18 NSTAR               | 1.73     | 2.05     | 0.11                  | -34.95       | 1.73       | 1.84       | 1.94       | 2.05       | 2.17       | 6.00%             | 10.9%                                   |
| 19 PG&E Corp.          | 1.96     | 2.40     | 0.15                  | -42.60       | 1.96       | 2.11       | 2.25       | 2.40       | 2.54       | 6.00%             | 10.7%                                   |
| 20 Pinnacle West       | 2.10     | 2.30     | 0.07                  | -37.24       | 2.10       | 2.17       | 2.23       | 2.30       | 2.44       | 6.00%             | 11.2%                                   |
| 21 Portland General    | 1.07     | 1.20     | 0.04                  | -19.11       | 1.07       | 1.11       | 1.16       | 1.20       | 1.27       | 6.00%             | 11.3%                                   |
| 22 Progress Energy     | 2.52     | 2.58     | 0.02                  | -39.02       | 2.52       | 2.54       | 2.56       | 2.58       | 2.73       | 6.00%             | 11.6%                                   |
| 23 SCANA Corp.         | 1.92     | 2.05     | 0.04                  | -37.12       | 1.92       | 1.96       | 2.01       | 2.05       | 2.17       | 6.00%             | 10.7%                                   |
| 24 Sempra Energy       | 1.68     | 2.05     | 0.12                  | -49.64       | 1.68       | 1.80       | 1.93       | 2.05       | 2.17       | 6.00%             | 9.4%                                    |
| 25 Southern Co.        | 1.85     | 2.10     | 0.08                  | -32.89       | 1.85       | 1.93       | 2.02       | 2.10       | 2.23       | 6.00%             | 11.4%                                   |
| 26 Teco Energy, Inc.   | 0.82     | 0.95     | 0.04                  | -15.85       | 0.82       | 0.86       | 0.91       | 0.95       | 1.01       | 6.00%             | 11.0%                                   |
| 27 UIL Holdings Co.    | 1.73     | 1.73     | 0.00                  | -27.79       | 1.73       | 1.73       | 1.73       | 1.73       | 1.83       | 6.00%             | 11.3%                                   |
| 28 Vectren Corp.       | 1.39     | 1.50     | 0.04                  | -23.99       | 1.39       | 1.43       | 1.46       | 1.50       | 1.59       | 6.00%             | 11.3%                                   |
| 29 Westar Energy       | 1.28     | 1.40     | 0.04                  | -22.20       | 1.28       | 1.32       | 1.36       | 1.40       | 1.48       | 6.00%             | 11.3%                                   |
| 30 Wisconsin Energy    | 1.80     | 2.40     | 0.20                  | -49.93       | 1.80       | 2.00       | 2.20       | 2.40       | 2.54       | 6.00%             | 10.0%                                   |
| 31 Xcel Energy Inc.    | 1.03     | 1.15     | 0.04                  | -21.12       | 1.03       | 1.07       | 1.11       | 1.15       | 1.22       | 6.00%             | 10.6%                                   |
| GROUP AVERAGE          |          |          |                       |              |            |            |            |            |            |                   | 10.8%                                   |
| GROUP MEDIAN           |          |          |                       |              |            |            |            |            |            |                   | 10.8%                                   |

Source: Value Line Investment Survey, Electric Utility (East), Feb 26, 2010; (Central), Mar 26, 2010; (West), May 7, 2010.

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

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

|  |   |
|--|---|
| Column 1: Three-month Average Price per Share (Feb 2010-Apr 2010)  | Column 13: Column 11 Plus Column 12   |
| Column 2: Average of Estimated 2010-2011 Div per Share from Value Line   | Column 14: Estimated 2011 Div per Share from Value Line   |
| Column 3: Column 2 Divided by Column 1   | Column 15: Estimated 2014 Div per Share from Value Line   |
| Column 4: "Est'd '07-'09 to '13-'15" 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 SCH2010-3 | 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<br>PUBLIC UTILITY<br>BOND YIELD (1) | AUTHORIZED<br>ELECTRIC<br>RETURNS (2) | INDICATED<br>RISK<br>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%                        |
| 2009    | 6.28%   | 10.48%                                | 4.20%                        |
| AVERAGE | 9.05%   | 12.28%                                | 3.23%                        |

#### **INDICATED COST OF EQUITY**

|  |               |
|--|---------------|
| PROJECTED TRIPLE-B UTILITY BOND YIELD* | 6.57%         |
| MOODY'S AVG ANNUAL YIELD DURING STUDY  | 9.05%         |
| INTEREST RATE DIFFERENCE               | <u>-2.48%</u> |

|                                  |                |
|----------------------------------|----------------|
| INTEREST RATE CHANGE COEFFICIENT | <u>-41.13%</u> |
| ADJUSTMENT TO AVG RISK PREMIUM   | 1.02%          |

|                          |              |
|--------------------------|--------------|
| BASIC RISK PREMIUM       | 3.23%        |
| INTEREST RATE ADJUSTMENT | <u>1.02%</u> |
| EQUITY RISK PREMIUM      | <u>4.25%</u> |

|  |                      |
|--|----------------------|
| PROJECTED TRIPLE-B UTILITY BOND YIELD* | <u>6.57%</u>         |
| <b>INDICATED EQUITY RETURN</b>         | <b><u>10.82%</u></b> |

(1) Moody's Investors Service

(2) Regulatory Research Associates, Inc.

\*Projected triple-B bond yield is 157 basis points over projected long-term Treasury bond rate of 5.0% from Schedule SCH2010-3, p. 3. The triple-B spread is for 3 months ended Apr 2010 from Schedule SCH2010-3, p. 2.



## Kansas City Power & Light Company

### Risk Premium Analysis

(Based on Current Interest Rates)

|         | MOODY'S AVERAGE<br>PUBLIC UTILITY<br>BOND YIELD (1) | AUTHORIZED<br>ELECTRIC<br>RETURNS (2) | INDICATED<br>RISK<br>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%                        |
| 2009    | 6.28%   | 10.48%                                | 4.20%                        |
| AVERAGE | 9.05%   | 12.28%                                | 3.23%                        |

#### **INDICATED COST OF EQUITY**

|                                       |               |
|---------------------------------------|---------------|
| CURRENT TRIPLE-B UTILITY BOND YIELD*  | 6.22%         |
| MOODY'S AVG ANNUAL YIELD DURING STUDY | 9.05%         |
| INTEREST RATE DIFFERENCE              | <u>-2.83%</u> |

|                                  |                |
|----------------------------------|----------------|
| INTEREST RATE CHANGE COEFFICIENT | <u>-41.13%</u> |
| ADJUSTMENT TO AVG RISK PREMIUM   | 1.16%          |

|                          |              |
|--------------------------|--------------|
| BASIC RISK PREMIUM       | 3.23%        |
| INTEREST RATE ADJUSTMENT | <u>1.16%</u> |
| EQUITY RISK PREMIUM      | <u>4.39%</u> |

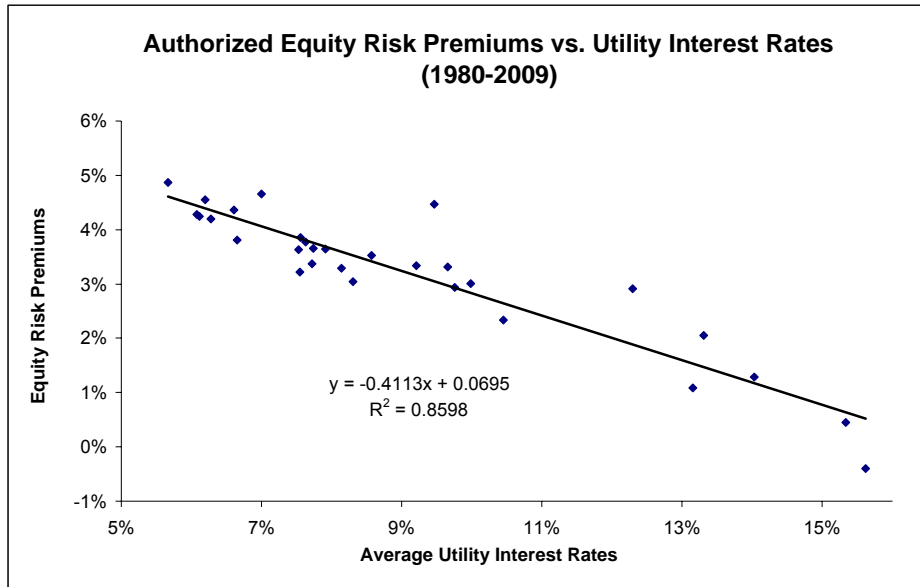
|                                      |                      |
|--------------------------------------|----------------------|
| CURRENT TRIPLE-B UTILITY BOND YIELD* | <u>6.22%</u>         |
| <b>INDICATED EQUITY RETURN</b>       | <b><u>10.61%</u></b> |

(1) Moody's Investors Service

(2) 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 Apr 2010 from Schedule SCH2010-3, p. 2.

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



SUMMARY OUTPUT

| Regression Statistics |             |
|-----------------------|-------------|
| Multiple R            | 0.927242552 |
| R Square              | 0.85977875  |
| Adjusted R Square     | 0.854770848 |
| Standard Error        | 0.0047873   |
| Observations          | 30          |

ANOVA

|            | df | SS          | MS          | F           | Significance F |
|------------|----|-------------|-------------|-------------|----------------|
| Regression | 1  | 0.003934704 | 0.003934704 | 171.6844276 | 1.82118E-13    |
| Residual   | 28 | 0.000641711 | 2.29182E-05 |             |                |
| Total      | 29 | 0.004576415 |             |             |                |

|              | Coefficients | Standard Error | t Stat       | P-value     | Lower 95%    | Upper 95%    | Lower 95.0%  | Upper 95.0%  |
|--------------|--------------|----------------|--------------|-------------|--------------|--------------|--------------|--------------|
| Intercept    | 0.069475479  | 0.002972433    | 23.373272    | 6.55788E-20 | 0.063386727  | 0.075564232  | 0.063386727  | 0.075564232  |
| X Variable 1 | -0.411331263 | 0.031392526    | -13.10284044 | 1.82118E-13 | -0.475635937 | -0.347026589 | -0.475635937 | -0.347026589 |