Exhibit No.:	
Issue:	Cost of Capital
Witness:	Samuel C. Hadaway
Type of Exhibit:	Direct Testimony
Sponsoring Party:	Kansas City Power & Light Company
Case No.:	ER-2012-0174
Date Testimony Prepared:	February 27, 2012

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: ER-2012-0174

DIRECT TESTIMONY

OF

SAMUEL C. HADAWAY

ON BEHALF OF

KANSAS CITY POWER & LIGHT COMPANY

February 2012

"[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-2012-0174

I. INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

Q. Please state your name and business address.

A. My name is Samuel C. Hadaway and my business address is FINANCO, Inc., 3520 Executive Center Drive, Suite 124, Austin, Texas 78731.

Q. On whose behalf are you testifying?

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

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

A. I have a bachelor's degree in economics from Southern Methodist University, as well as M.B.A. and Ph.D. degrees with concentrations in finance and economics from the University of Texas at Austin ("UT Austin"). I am an owner and full-time employee of FINANCO, Inc. ("FINANCO"). FINANCO provides financial research concerning the cost of capital and financial condition for regulated companies as well as financial modeling and other economic studies in litigation support. In addition to my work at FINANCO, I have served as an adjunct professor in the McCombs School of Business at UT Austin and in what is now the McCoy College of Business at Texas State University. In my prior academic work, I taught economics and finance courses and I conducted research and directed graduate students in the areas of investments and capital market research. I was previously Director of the Economic Research Division at the Public Utility Commission of Texas ("Texas Commission") where I supervised the Texas Commission's finance, economics, and accounting staff, and served as the Texas Commission's chief financial witness in electric and telephone rate cases. I have taught courses at various utility conferences on cost of capital, capital structure, utility financial condition, and cost allocation and rate design issues. I have made presentations before the New York Society of Security Analysts, the National Rate of Return Analysts Forum, and various other professional and legislative groups. I have served as a vice president and on the board of directors of the Financial Management Association.

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

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

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

Q. What is the purpose of your testimony?

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

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

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

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

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

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

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

I also conducted a risk premium analysis based on ROEs allowed by state regulators relative to Moody's average utility debt costs. In this analysis, I considered both current utility bond yields and the higher interest rates that Standard and Poor's ("S&P") is forecasting for the coming year. S&P forecasts that long-term government and corporate interest rates will increase from current levels during 2012. The data sources and the details of my cost of equity studies are contained in my Schedules SCH-1 through SCH-6.

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

A. I support an ROE of 10.4 percent. I apply alternative versions of the DCF model and I provide a risk premium analysis and a review of forecasted economic conditions for the coming year. The DCF analysis indicates a reasonable range of 10.0 percent to 10.4 percent. My risk premium analysis indicates an ROE range of 9.97 percent to 10.12 percent. As I will discuss later in this testimony, the government's continuing intervention in the debt markets has created artificially low long-term interest rates and the recent sharp decline in interest rates has created risk premium ROE estimates that are not consistent with observed equity market turmoil. The continuing volatility and heightened investor risk aversion in the equity markets indicates that the cost of equity has not declined as much as interest rates. Based on these factors, a requested ROE at the top of my DCF range at 10.4 percent is reasonable.

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

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

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

Table 1
Requested Capital Structure

Capital Components	Ratio	Cost	Weighted Cost
Debt	46.918%	6.635%	3.113%
Preferred stock	0.607%	4.291%	0.026%
Common equity	52.475%	10.400%	5.457%
TOTAL	100.000%		8.596%

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

A. The requested capital structure, as well as the costs for debt and preferred stock, are consistent with GPE's projected capital structure at August 31, 2012. These data are presented in more detail in Schedule SCH-2, with the August 31, 2012 summary shown on page 10 of that schedule. Using the parent company's consolidated capital structure is consistent with KCP&L's approach in its prior rate cases.

Q. What are the key differences between GPE's actual capital structure as of September 30, 2011 and the requested capital structure, projected as of August 31, 2012?

A. The actual GPE capital structure as of September 30, 2011, is shown on page 2 of Schedule SCH-2. The key differences between the actual capital structure and the requested capital structure, projected as of August 30, 2012, are as follows:

<u>Long-Term Debt</u>

Net Long-Term Debt is projected to decrease by $376 million due to $663 million of long-term debt maturities partially offset by $287 million of new long-term debt from the remarketing of the debt component of the equity units as senior notes.

<u>Equity</u>

Equity is projected to increase by **[redacted]** million, which is driven primarily by the $287 million issuance of common stock from the settlement of the equity units stock purchase contract, a projected **[redacted]** million increase in retained earnings and a small amount of equity issued by GPE through the dividend reinvestment and direct stock purchase plan and company benefit plans.

Equity-linked Convertible Debt

The $287 million equity-linked convertible debt component of the capital structure as of September 30, 2011 is not part of the August 31, 2012 projected capital structure. Prior to August 31, 2012, the subordinated notes component of the Equity Units will be remarketed as Senior Notes which have been included in the long-term debt component of the projected capital structure. On June 15, 2012, the purchase contract component of the Equity Units will be settled with the issuance of common stock which has been included in the equity component of the projected capital structure.

III. FUNDAMENTAL FACTORS THAT AFFECT THE COST OF EQUITY

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

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

Q. What is the current outlook for the U.S. economy?

A. Growth for the U.S. economy is expected to remain slow in the near term. While most economists expect real growth to remain positive, in the 1.5 percent range, unemployment is also expected to remain stubbornly high in the 8 percent to 9 percent range. Forecasts for 2012 indicate continuing, but slow recovery with new job creation a fundamental concern. Equity markets have continued to be extremely volatile and only recently have utility stocks had favorable performance relative to the general market recovery. As I will explain later in this testimony, the recent positive utility stock performance is not necessarily a reflection of improving economic conditions. Rather it very likely reflects a search for yield by investors discouraged by the persistent intervention of the federal government in the fixed income market and its stated intention of maintaining low bond yields. On top of these market dislocations, investors are also concerned about the European sovereign debt crisis. All of these factors point to elevated risk aversion, a fundamental lack of equilibrium conditions in the financial markets, and a continuing relatively high cost for equity capital.

Q. What has been the experience in the U.S. capital markets over the past several years?

A. In Schedule SCH-3, page 1, I provide a 10-year review of annual interest rates and rates of inflation. During the time period, interest rates and inflation generally have been lower than in the previous decade. Inflation, as measured by the Consumer Price Index, has fluctuated between a low of zero percent (in 2008) and a high of 4.1 percent (caused by the spike in energy costs that occurred in 2007). The decade's average annual inflation rate (2.4 percent) was approximately 100 basis points lower than the longer-term average rate of the past 60 years (see Schedule SCH-4). Interest rates declined steadily over most of the period, with the 2011 average utility interest rate at its lowest level for more than 30 years (see Schedule SCH-6, page 1).

Q. What has been the more recent trend in utility borrowing costs?

A. In Schedule SCH-3, page 2, I provide the month-by-month interest rate data since the beginning of 2009. Those data are summarized below in Table 2 below.

Table 2
Long-Term Interest Rate Trends

Month	Triple-B Utility Rate	30-Year Treasury Rate	Triple-B Utility Spread
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
May-10	5.97	4.29	1.68
Jun-10	6.18	4.13	2.05
Jul-10	5.98	3.99	1.99
Aug-10	5.55	3.80	1.75
Sep-10	5.53	3.77	1.76
Oct-10	5.62	3.87	1.75
Nov-10	5.85	4.19	1.66
Dec-10	6.04	4.42	1.62
Jan-11	6.06	4.52	1.54
Feb-11	6.10	4.65	1.45
Mar-11	5.97	4.51	1.46
Apr-11	5.98	4.50	1.48
May-11	5.74	4.29	1.45
Jun-11	5.67	4.23	1.44
Jul-11	5.70	4.27	1.43
Aug-11	5.22	3.65	1.57
Sep-11	5.11	3.18	1.93
Oct-11	5.24	3.13	2.11
Nov-11	4.93	3.02	1.91
Dec-11	5.07	2.98	2.09
3-Mo Avg	**5.08**	**3.04**	**2.04**
12-Mo Avg	**5.57**	**3.91**	**1.66**

Sources: Mergent Bond Record (Utility Rates); www.federalreserve.gov (Treasury Rates).
Three month average is for October 2011-December 2011.
Twelve month average is for January 2011-December 2011.

The data in Table 2 track the steady decline in corporate interest rates that has occurred since early 2009 and the market turmoil that has existed during this time period. The Federal Reserve's continuing intervention in the financial markets and its efforts to keep short-term rates near zero and longer-term U.S. Treasury rates at historically low levels are now affecting yields on high quality corporate debt as well. While the effects of these monetary policy efforts are not easily captured in rate of return estimation models, equity market turbulence and the resulting elevated level of risk aversion indicate that the decline in ROE has been less than the decline in corporate borrowing costs.

Q. Do the smaller spreads between yields on triple-b utility bonds and U.S. treasury bonds mean that the markets have fully recovered from the economic turmoil that resulted from the financial crisis?

A. No. While markets have stabilized considerably from the conditions that existed in 2008 and early 2009, investors remain concerned about high unemployment, large federal deficits, turmoil in the Mideast, the sovereign debt crisis in Europe as well as other domestic economic issues. These factors combined with sluggish growth in gross domestic product ("GDP") continue to raise substantial equity market concerns and contribute to heightened investor risk aversion.

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

A. During 2012, interest rates are expected to rise only slightly from currently low levels. In Schedule SCH-3, page 3, I provide S&P’s most recent interest rate forecast from its *Trends & Projections* publication for November 2011. Table 3 below summarizes the interest rate forecasts:

Table 3
Standard & Poor's Interest Rate Forecast

	Dec. 2011 Average	Average 2011 Est.	Average 2012 Est.
Treasury Bills	0.1%	0.1%	0.0%
10-Yr. T-Bonds	2.0%	2.8%	2.3%
30-Yr. T-Bonds	3.0%	3.9%	3.3%
Aaa Corporate Bonds	3.9%	4.6%	4.2%

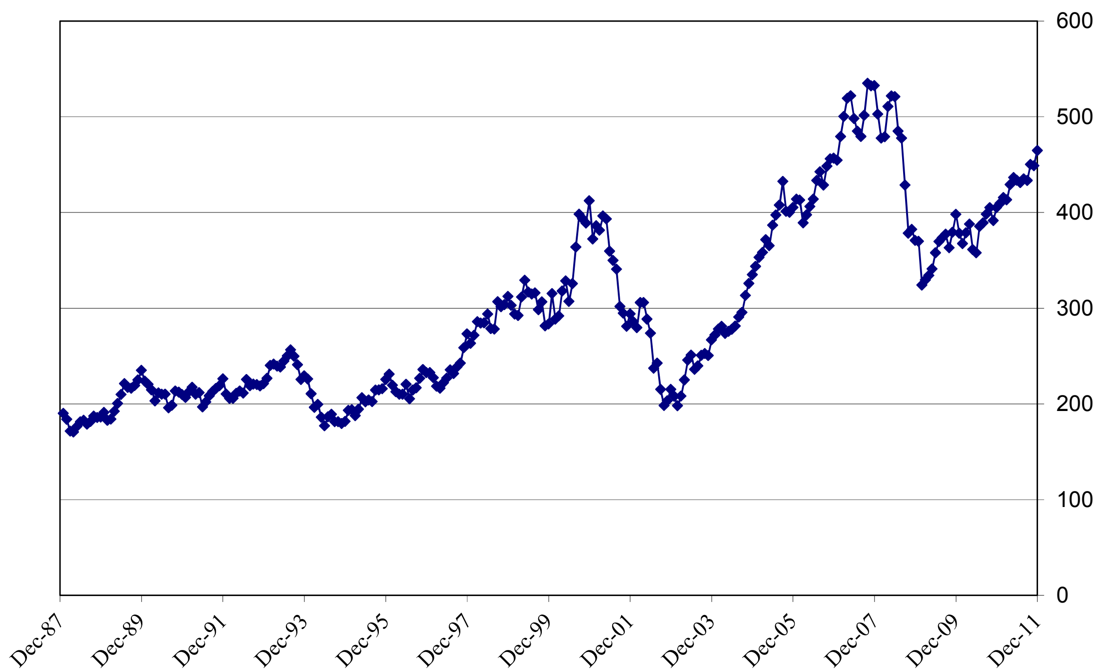
Sources: www.federalreserve.gov, (Current Rates). Standard & Poor's *Trends & Projections*, Nov. 2011, p. 8 (Projected Rates).

These data show that, during 2012, average long-term Treasury interest rates are expected to increase by 30 basis points relative to the low levels in December 2011. Yields on the other bonds shown in the table are also expected to increase slightly. The small interest rate increases projected by S&P are consistent with a sluggishly improving economy and the government's announced intention to maintain low interest rates.

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

A. Utility stock prices have been more volatile in recent years as compared to their traditional performance. The wider fluctuations in more recent years are vividly illustrated in the following Graph 1, which depicts Dow Jones Utility Average ("DJUA") prices over the past 25 years.

Graph 1
Dow Jones Utility Average
1987-2011



Until the late 1990s, utility stocks were viewed as relatively stable investments. Over the past decade, however, utility stock prices have fluctuated much more widely. In this environment, investors' return expectations and requirements for providing capital to the utility industry are high relative to the longer-term, traditional view of the industry.

Q. How have utility stocks performed since the market low point reached in March 2009?

A. Prior to the last several months (since May 2011), utility stock prices had lagged well behind the general market recovery. Since May, however, fears of potential sovereign defaults as well as domestic financial problems have increased equity market risk aversion. This situation has made dividend oriented stocks, like utilities, relatively more attractive for all income-oriented investors. For the May-December time period, the

DJUA rose over 6 percent (6.5%), while the S&P 500 dropped by over 7 percent (-7.5%). The relatively better performance for utilities has produced lower dividend yields in the DCF model; *i.e.*, the DCF model results, with respect to dividend yields, do not reflect the overall market's volatility and heightened risk aversion. This anomaly makes it more difficult to interpret current DCF cost of equity estimates for utility companies.

Q. How has the "flight to quality" in the traditional fixed income (bond) markets affected dividend oriented stocks?

A. As bond yields have fallen (as a result of the government's ongoing policies in the financial markets), investors have looked for income from dividend paying stocks. Consequently, utility stocks have experienced favorable performance as investors in search of yield have substituted utility common stocks for low-yielding bonds.

Q. Does this imply that the cost of equity capital for utilities has declined as much as interest rates have dropped?

A. No. Equity market risk aversion has increased, not decreased. The domestic economy faces severe challenges—growth in GDP has slowed, unemployment remains stubbornly high, and job creation is weak. The federal government is responding to this economic distress by artificially depressing interest rates through its ongoing purchases of Treasury bonds and other securities. While this government policy pumps liquidity into the financial markets, it also removes yield opportunities for traditional investors in safe, fixed income investments. Thus, investors are trying to react rationally to a market environment that has many risks but few income opportunities. Such circumstances reduce ROE estimates from traditional rate of return estimation methods, but these lower estimates do not reflect ongoing market volatility and increased equity market risk aversion that continues to exist.

Q. Has equity market volatility been recognized as a cause for reduced equity capital availability in the U.S.?

A. Yes. A recent Associated Press article describes this problem in some detail. In that article the author notes that since August, market swings have been particularly troublesome:

> In market-speak, it's called volatility: Large jumps followed by deep dives, within the course of a week or sometimes the same day. The surge in volatility since early August has been blamed for preventing companies from going public and scaring people out of stocks. Some think that even if Europe resolves its debt crisis, large price swings are here to stay.
>
> The long-term trend is toward more volatility. Judging by the number of times in a year the S&P 500 swung 2 percent or more in a single day, markets are much more likely to have large leaps up or dives down, according to S&P's equity research group. Swings of 2 percent occurred an average of five times a year from 1950 to 1999. It's already happened 20 times this year, with three months left to go. (Matthew Craft, Associated Press/Yahoo Finance, Oct. 2, 2011).

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

A. The industry has seen significant volatility both in terms of fundamental operating characteristics and the effects of the economy. Slow economic growth has reduced sales volumes. Moreover, there is great uncertainty regarding environmental rules proposed by the U.S. Environmental Protection Agency ("EPA"). Both of these factors have increased the difficulty of planning for future load requirements. This Commission recognized these concerns when it opened a docket on August 30, 2011 entitled "In the Matter of an Investigation of the Cost to Missouri Electric Utilities Resulting from Compliance with Federal Environmental Regulations," Case No. EW-2012-0065. One of the investigation's purposes is to examine "the potential impact" of "current and future EPA rules under the Clean Air and Clean Water Acts" "to determine [their] potential impact on reliability and costs" for the state's electric utilities.

In the equity markets, ongoing turmoil has increased investors' preferences for safer, dividend paying companies. Value Line discusses this phenomenon and provides a warning of possible overvaluation in its recent Electric Utility update.

Value Line Investor Survey

> With most of 2011 completed, it seems almost certain that electric utility stocks will have outperformed the broader market averages when the year is over. As of mid-December, the Value Line Utility Average is up slightly, while the Value Line Geometric Average is down about 14%. Electric utility stocks have long been viewed as a safe haven in volatile markets, due in large part to their generous dividend yields. However, many of these issues are now trading within their 2014-2016 Target Price Ranges. This is often an indication that they have become expensively priced. (*Value Line Investor Survey*, Dec. 23, 2011, p. 901).

In the summary in its recent assessment of the Electric Utility Industry, S&P provides perspective for investors' concerns for 2012:

Standard & Poor's

> Regulated U.S. electric utility companies will begin implementing Environmental Protection Agency (EPA) rules concerning carbon and other pollutants in 2012. Other challenges included the continued need for substantial capital spending, the potential for rate pressure in a slow growth period, and the changing global capital markets. ("The Top 10 Investor Questions For U.S. Regulated Electric Utilities In 2012," Standard & Poor's RatingsDirect, Jan. 3, 2012, p. 2).

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 equity capital.

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 most significant risk factor for utility investors was the industry's continuing transition to more open market conditions and competition. With the passage of the Energy Policy Act ("EPACT") in 1992 and the Federal Energy Regulatory Commission's ("FERC") Order No. 888 in 1996, the stage was set for vastly increased competition in the electric utility industry. The EPACT's mandate for open access to the transmission grid and the FERC's implementation through Order No. 888 effectively opened the market for wholesale electricity to competition. Previously protected utility service territory and lack of wholesale transmission access in some parts of the country had limited the availability of competitive bulk power prices. The EPACT and Order No. 888 have essentially eliminated such constraints and allowed most utilities to seek alternative wholesale suppliers for their incremental power needs.

In addition to wholesale issues at the federal level, in states that have implemented retail access, even retail markets have opened to competition. Concerns about these issues and additional efforts for dealing with larger construction programs and power cost recovery mechanisms have developed as well. As expected, the opening of previously protected utility markets to competition, the uncertainty created by the removal of regulatory protection, and continuing fuel price volatility have raised the level of uncertainty about investment returns across the entire industry.

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

A. Yes. To some extent all electric utilities are being affected by the industry's transition to competition. KCP&L's power costs and other operating activities have been significantly affected by transition and restructuring events around the country. In fact, the uncertainty associated with the changes that are transforming the utility industry as a whole, as viewed from the perspective of the investor, remain a factor in assessing any utility's required ROE, including the ROE from KCP&L's operations in Missouri. This is true even though Missouri has not adopted retail choice or other major forms of restructuring.

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

A. Yes. The above-mentioned climate change initiatives create fairly significant risk for the Company going forward. Approximately 80 percent of the Company's fuel mix based on actual generation is coal. The Company discussed the potential impact of climate change risk in its most recent Form 10-K:

> The Companies are subject to extensive federal, state and local environmental laws, regulations and permit requirements relating to air and water quality, waste management and disposal, natural resources and health and safety. In addition to imposing continuing compliance obligations and remediation costs for historical and pre-existing conditions, these laws and regulations authorize the imposition of substantial penalties for noncompliance, including fines, injunctive relief and other sanctions. There is also a risk that new environmental laws and regulations, new judicial interpretations of environmental laws and regulations, or the requirements in new or renewed environmental permits could adversely affect the Companies' operations. In addition, there is also a risk of lawsuits brought by third parties alleging violations of environmental commitments or requirements, creation of a public nuisance or other matters, and seeking injunctions or monetary or other damages and certain federal courts have held that state and local

governments and private parties have standing to bring climate change tort suits seeking company-specific emission reductions and damages.

The Environmental Protection Agency (EPA) has enacted various regulations regarding the reporting and permitting of greenhouse gases, and has proposed other permitting regulations, under the existing Clean Air Act. These existing and proposed rules establish new thresholds for greenhouse gas emissions, defining when Clean Air Act permits under the New Source Performance Standards, New Source Review and Title V operating permits programs would be required for new or existing industrial facilities and when the installation of best available control technology would be required. Most of the Companies' generating facilities would be affected by these existing and proposed rules. Additional federal and/or state legislation or regulation respecting greenhouse gas emissions may be proposed or enacted in the near future. Further, pursuant to the Collaboration Agreement, KCP&L agreed to pursue a set of initiatives including energy efficiency, additional wind generation, lower emission permit levels at its Iatan and LaCygne stations and other initiatives designed to offset CO2 emissions. Requirements to reduce greenhouse gas emissions may cause the Companies to incur significant costs relating to their ongoing operations (through additional environmental control equipment, retiring and replacing existing generation, or selecting more costly generation alternatives), to procure emission allowance credits, or due to the imposition of taxes, fees or other governmental charges as a result of such emissions.

Due to all of the above, the Companies' projected capital and other expenditures for environmental compliance are subject to significant uncertainties, including the timing of implementation of any new or modified environmental requirements, the emissions limits imposed by such requirements and the types and costs of the compliance alternatives selected by the Companies. As a result, costs to comply with environmental requirements cannot be estimated with certainty, and actual costs could be significantly higher than projections. Other new environmental laws and regulations affecting the operations of the Companies may be adopted, and new interpretations of existing laws and regulations could be adopted or become applicable to the Companies or their facilities, any of which may materially adversely affect the Companies' business, adversely affect the Companies' ability to continue operating its power plants as currently done and substantially increase their environmental expenditures or liabilities in the future. (2010 GPE and KCP&L SEC Joint Form 10-K, pp. 13-16).

Q. What risks does KCP&L face as a result of the conclusion of its Regulatory Plan (Case No. EO-2005-0329)?

A. The Regulatory Plan ended with the Commission's Report and Order issued in April 2011 in Case No. ER-2010-0355. This was the fourth and final rate case described in the Plan's Stipulation and Agreement approved by the Commission in 2005. Although the Plan has been concluded, it provides that prior to June 1, 2015 KCP&L will not seek to utilize any mechanism authorized by Missouri law that would allow riders, surcharges or changes in rates outside of a general rate case. Therefore, KCP&L cannot rely upon a fuel adjustment clause or similar recovery technique for several more years. Although the Company has the ability to seek approval of an interim energy charge subject to certain parameters (and is doing so in this rate case), such a charge does not provide the same cost recovery that a fuel adjustment clause would and, thus, KCP&L does face an additional risk.

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

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

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

A. Over the past five years, quarterly allowed ROEs have averaged about 10.4 percent. For integrated electrics, like KCP&L, the average allowed rate for 2010 was 10.38 percent and for 2011, it was 10.24 percent.[1] Table 4 below summarizes the quarterly ROE data for all types of electric utilities, which are published by SNL's Regulatory Research Associates, an authoritative source for this information that is regularly relied upon by experts in the field of public utility regulation, as well as by regulatory commissions and their staffs:

Table 4
Authorized Electric Utility Equity Returns

	2007	2008	2009	2010	2011
1st Quarter	10.27%	10.45%	10.29%	10.66%	10.32%
2nd Quarter	10.27%	10.57%	10.55%	10.08%	10.12%
3rd Quarter	10.02%	10.47%	10.46%	10.27%	10.00%
4th Quarter	10.56%	10.33%	10.54%	10.30%	10.34%
Full Year Average	10.36%	10.46%	10.48%	10.34%	10.22%
Average Utility Debt Cost	6.11%	6.65%	6.28%	5.55%	5.17%
Indicated Average Risk Premium	4.25%	3.81%	4.20%	4.79%	5.05%

Source: Regulatory Focus, SNL Regulatory Research Associates, Major Rate Case Decisions, Jan. 10, 2012. Utility debt costs are the "average" public utility bond yields as reported by Moody's.

Based on these data, over the past five years, the allowed equity risk premium for electric utilities has ranged between 3.81 percent and 5.05 percent.

[1] See Schedule SCH-1, p. 2.

IV. ESTIMATING THE COST OF EQUITY CAPITAL

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

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

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

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

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

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

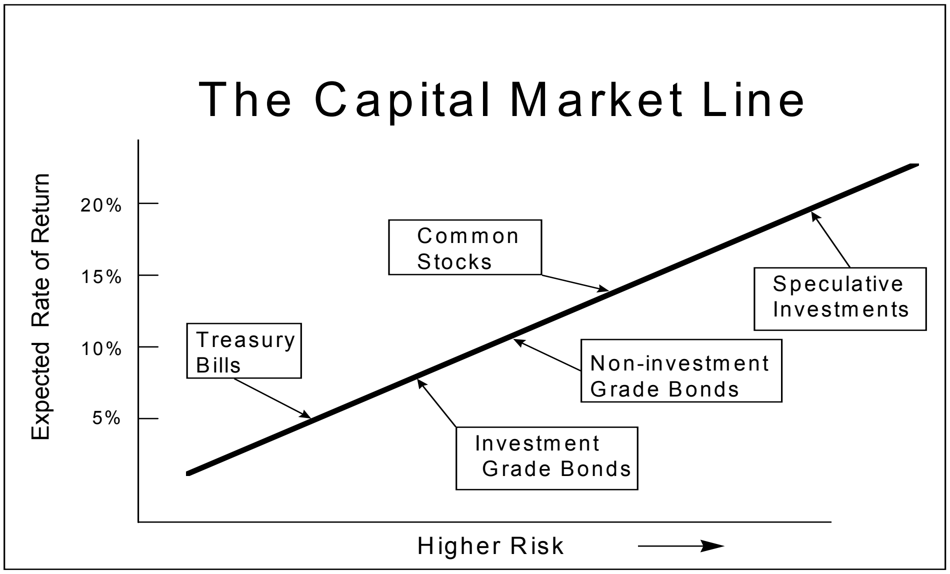
Q. How does the market account for risk differences among the various investments?

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

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

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

Risk-Return Tradeoffs



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

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

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

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

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

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

> From the investor or company point of view, it is important that there be enough revenue not only for operating expenses, but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure

> confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital. *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944).

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

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

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

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

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

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

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

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

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

A. The DCF model is the most widely used regulatory cost of equity estimation method. Like the risk premium approach, the DCF model has a sound basis in theory, and many argue that it has the additional advantage of simplicity. I will describe the DCF model in detail below, but in essence its estimate of ROE is simply the sum of the expected dividend yield and the expected long-term dividend (or price) growth rate. While dividend yields are easy to obtain, estimating long-term growth is more difficult.

Because the constant growth DCF model also requires very long-term growth estimates (technically to infinity), some argue that its application is too speculative to provide reliable results, resulting in the preference for the multistage growth DCF analysis.

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

A. From my experience, a combination of DCF and risk premium methods provides the most reliable approach. While the caveat about estimating long-term growth must be observed, the DCF model's other inputs are readily obtainable, and the model's results typically are consistent with capital market behavior. The risk premium methods provide a good parallel approach to the DCF model and further ensure that current market conditions are accurately reflected in the cost of equity estimate.

Q. Please explain the DCF model.

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

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

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

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

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

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

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

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

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

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

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

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

$$P_0 = D_1/(1+k) + D_2/(1+k)^2 + ... + P_T/(1+k)^T \qquad (3)$$

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

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

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

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

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

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

Q. Please explain the risk premium methodology.

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

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

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

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

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

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

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

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

The DCF and risk premium methods have become the most widely accepted in regulatory practice. Under normal market conditions, a combination of the DCF model and a review of risk premium data provides the most reliable cost of equity estimate. While the DCF model does require judgment about future growth rates, the dividend yield is straightforward, and the model's results are generally consistent with actual capital market behavior. Given current market conditions, I will rely on the DCF model estimates from the cost of equity studies that follow.

Q. Please explain why you have not provided ROE estimates based on the CAPM.

A. I have not included a CAPM estimate in this case because, under current market conditions, the CAPM does not provide reliable estimates of the cost of equity. This situation is caused by the government's continuing intervention in the credit markets and the resulting artificially low U.S. Treasury bond interest rates that have resulted, as well as the recent market turmoil's effects on the CAPM's other required inputs.

The CAPM is based on three principal inputs:

1) the risk-free interest rate (R_f);

2) the expected market risk premium for stocks relative to the risk-free rate $E(R_m) - R_f$; and

3) a measure of market-related, or nondiversifiable, risk (β or beta).

The CAPM estimate of ROE is then calculated as:

$$ROE = R_f + \beta[E(R_m) - R_f]$$

The market data discussed previously in Section IV of this testimony show that, under present market conditions, potentially all three of the CAPM's principal inputs tend to understate ROE. The risk-free rate, R_f, is understated because, due to governmental credit market policies and investors' increased risk aversion, the U.S. Treasury rates used for R_f are artificially low. The second input, the expected market risk premium $[E(R_m) - R_f]$, when based on historical data, may also be understated because such data cannot reflect the heighted investor risk aversion that has resulted from the financial crisis. Finally, utility beta coefficients may have declined because utility stocks moved in the opposite direction of the overall market on recent occasions. All these factors cause CAPM estimates of ROE for utilities to be understated. For this reason, in the present case, I rely on the DCF and other risk premium models to estimate the cost of equity for KCP&L.

V. <u>COST OF EQUITY CAPITAL FOR KCP&L</u>

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

A. In this section I present my quantitative studies of the cost of equity capital for KCP&L and discuss the details of my analysis.

Q. How are your studies organized?

A. In the first part of my analysis, I apply three versions of the DCF model to the 22-company group of electric utilities based on the selection criteria discussed previously. In the second part of this section, I describe my risk premium analysis and review projected economic conditions and projected capital costs for the coming year.

My DCF analysis is based on three versions of the DCF model. In the first version, I use the constant growth format with long-term expected growth based on analysts' growth rate projections. In the second version of the DCF model, for the estimated growth rate, I use the estimated long-term GDP growth rate. In the third version of the DCF model, I use a two-stage growth approach, with stage one based on Value Line's three-to-five-year dividend growth projections and stage two based on long-term projected growth in GDP. The dividend yields in all three of the DCF models are from Value Line's projections of dividends for the coming year and stock prices are from the three-month average for the months that correspond to the Value Line editions from which the underlying financial data are taken.

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

A. There are at least three reasons. First, most econometric forecasts are derived from the trending of historical data or the use of weighted averages. This is the approach I have taken in Schedule SCH-4. The long-run historical average GDP growth rate is 6.7 percent, but my estimate of long-term expected growth is 5.8 percent. My forecast is lower because my forecasting method gives much more weight to the more recent 10- and 20-year periods.

Second, some currently lower GDP growth forecasts likely understate very long growth rate expectations that are required in the DCF model. Many of those forecasts are currently low because they are based on the assumption of permanently low inflation rates, in the range of 2 percent. As shown in my Schedule SCH-4 the average long-term inflation rate has been over 3 percent in all but the most recent 10- and 20- year periods.

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

Q. Does independent academic research support using GDP growth in the DCF model?

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

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

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

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

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

These findings support the notion that long-term growth expectations are more closely predicted by broader measures of economic growth than by near-term analysts' estimates.

Especially for the very long-term growth rate requirements of the DCF model, the growth in nominal GDP should be considered an important input.

Q. How did you estimate the expected long-run GDP growth rate?

A. I developed my long-term GDP growth forecast from nominal GDP data contained in the St. Louis Federal Reserve Bank database. That data for the period 1950 through 2011 is summarized in my Schedule SCH-4. As shown at the bottom of that schedule, the overall average for the period was 6.7 percent. The data also show, however, that in the more recent years since 1980, lower inflation has resulted in lower overall GDP growth. For this reason I gave more weight to the more recent years in my GDP forecast. This approach is consistent with the concept that more recent data should have a greater effect on expectations and with generally lower near- and intermediate-term growth rate forecasts that presently exist. Based on this approach, my overall forecast for long-term GDP growth is 5.8 percent.

Q. Please summarize the results of your DCF analyses.

A. The DCF results for my comparable company group are presented in Schedule SCH-5. As shown in the first column of page 1 of that schedule, the traditional constant growth model produces an ROE of 10.0 percent. In the second column of page 1, I recalculate the constant growth results with the growth rate based on long-term forecasted growth in GDP. With the GDP growth rate, the constant growth model indicates an ROE range of 10.2 percent to 10.4 percent. Finally, in the third column of page 1, I present the results from the multistage DCF model. The multistage model indicates an ROE range of 10.0 percent to 10.1 percent. The overall results from the DCF model indicate an ROE range of 10.0 percent to 10.4 percent.

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

A. The details and results of my risk premium studies are shown in Schedule SCH-6. These studies indicate an ROE range of 9.97 percent to 10.12 percent, based on both projected and currently low Baa interest rates. The Federal Reserve System's continuing "easy money" policies have provided renewed liquidity in the credit markets that is reflected in these lower yields. These results are not consistent with DCF results, which reflect at least a portion of the increased equity market risk aversion as shown in continuing the volatility in stock prices for utility shares. These circumstances indicate that the cost of equity capital for utilities has not declined to the same extent as interest rates on utility debt.

Q. How are your risk premium studies structured?

A. My equity risk premium studies are divided into two parts. First, I compare electric utility authorized ROEs for the period 1980-2011 to contemporaneous long-term utility interest rates. The differences between the average authorized ROEs and the average interest rate for the year is the indicated equity risk premium. I then add the indicated equity risk premium to the forecasted and current triple-B utility bond interest rate to estimate ROE. Because there is a strong inverse relationship between equity risk premiums and interest rates (when interest rates are high, risk premiums are low and vice versa), further analysis is required to estimate the current equity risk premium level.

The inverse relationship between equity risk premiums and interest rate levels is well documented in numerous, well-respected academic studies. These studies typically use regression analysis or other statistical methods to predict or measure the equity risk premium relationship under varying interest rate conditions. On page 3 of Schedule

SCH-6, I provide regression analyses of the allowed annual equity risk premiums relative to interest rate levels. The negative and statistically significant regression coefficients confirm the inverse relationship between equity risk premiums and interest rates. This means that when interest rates rise by one percentage point, the cost of equity increases, but by a smaller amount. Similarly, when interest rates decline by one percentage point, the cost of equity declines by less than one percentage point. I use this negative interest rate change coefficient in conjunction with current interest rates to establish the appropriate current equity risk premium.

Q. Can you illustrate the inverse relationship between equity risk premiums and interest rates without using the statistical analysis described above?

A. Yes. Statistical analysis is often used, especially in academic research, to substantiate certain economic and financial relationships. For equity risk premium analysis, however, the fundamental issue can be observed by simply averaging the data for various time periods without further statistical analysis. The data in Table 5 below show average utility bond yields and equity risk premiums for each non-overlapping, five-year period between 1980 and 2011.

Table 5
Average Five-Year Utility Bond Yields and Equity Risk Premiums
(1980-2011)

Period	Average Utility Bond Interest Rate	Average Equity Risk Premium
1980-1986	13.31%	1.69%
1987-1991	9.81%	2.99%
1992-1996	8.02%	3.54%
1997-2001	7.61%	3.66%
2002-2006	6.42%	4.34%
2007-2011	5.95%	4.42%

Source: Schedule SCH-6, p. 1.

These data show that equity risk premiums have consistently increased as interest rates have declined, and that they were lower when interest rates were high. This result is a market-based reflection, which shows that required rates of return in the stock market do not move in lockstep with changes in interest rates. Because utilities must compete with other types of equity investments for capital, the ROE for utilities does not change by as much as the observed changes in interest rates. Arguments that unadjusted, long-term average risk premiums can be used with current, historically low interest rates to estimate ROE are mistaken. That approach to equity risk premium analysis will consistently understate the required rate of return.

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

A. My quantitative results are summarized in Table 6 below:

Table 6
Summary of Cost of Equity Estimates

DCF Analysis	Indicated Cost
Constant Growth (Traditional Growth)	10.0%
Constant Growth (GDP Growth)	10.2%-10.4%
Multistage Growth Model	10.0%-10.1%
DCF Range	10.0%-10.4%
Risk Premium Analysis	Indicated Cost
Projected Utility Interest Rate + Risk Premium	
Risk Premium (5.34% + 4.78%)	10.12%
Current Utility Interest Rate + Risk Premium	
Risk Premium (5.08% + 4.89%)	9.97%
KCP&L ROE	10.4%

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

A. The midpoint DCF estimate my for comparable group is 10.2 percent. Given current market conditions, I support an ROE at the top of my DCF range at 10.4 percent. Such conditions make it difficult to strictly interpret quantitative model estimates for the cost of equity. The government's continuing intervention in the credit markets and the continuing turmoil that exists in the equity markets support the higher estimate. Under these circumstances, use of a lower DCF range or equity risk premium estimates based strictly on historical risk premium relationships would likely understate the cost of equity.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Kansas City Power & Light Company's Request for Authority to Implement A General Rate Increase for Electric Service	)))	Case No. ER-2012-0174

AFFIDAVIT OF SAMUEL C. HADAWAY

STATE OF TEXAS)
) **ss**
COUNTY OF TRAVIS)

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

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

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Kansas City Power & Light Company consisting of forty-two (42) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

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

Samuel C. Hadaway
Samuel C. Hadaway

Subscribed and sworn before me this 15th day of February, 2012.

JAMES MILLER
Notary Public
STATE OF TEXAS
My Comm. Exp. 11-09-2013

James Miller
Notary Public

My commission expires: 11-09-13

SAMUEL C. HADAWAY

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SUMMARY OF QUALIFICATIONS

- Principal, Financial Analysis Consultants (FINANCO, Inc.).
- Ph.D. in Finance and Economics.
- 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, previously 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

- Oregon Public Utility Commission, Docket No. UG 221, December 30, 2011 (NW Natural Gas Company).
- Wyoming Public Service Commission, Docket No. 20000-405-ER-11, December 9, 2011 (Rocky Mountain Power dba/PacifiCorp).
- Texas Public Utility Commission, Docket No. 39896, November 28, 2011, (Entergy Texas, Inc.)
- Idaho Public Utilities Commission, Case No. PAC-E-111-12, May 27, 2011 (Rocky Mountain Power/PacifiCorp).
- Maine Public Utilities Commission, Docket No. 2011-92, May 5, 2011 (Northern Utilities, Inc.)
- New Hampshire Public Utilities Commission, Docket No. DG 11-069, May 4, 2011(Northern Utilities, Inc.)
- Arizona Corporation Commission, Docket No. G-04204A-11-0158, April 8, 2011 (UNS Gas, Inc.)
- Utah Public Service Commission, Docket No. 10-035-124, January 24, 2011 (Rocky Mountain Power/PacifiCorp).
- Massachusetts Department of Public Utilities, D.P.U. 11.01 (Electric) and D.P.U. 11.02 (Gas), January 14, 2011, (Fitchburg Gas and Electric Light Company d/b/a/ Unitil)
- Wyoming Public Service Commission, Docket No. 20000-384-ER-10, November 22, 2010 (Rocky Mountain Power dba/PacifiCorp).
- Illinois Commerce Commission, Docket No. 10-0467, July 28, 2010 (Commonwealth Edison Company).
- Missouri Public Service Commission, Case No. ER-2010-0355, June 4, 2010 (Kansas City Power & Light Company).
- Missouri Public Service Commission, Case No. ER-2010-0356, June 4, 2010 (KCP&L Greater Missouri Operations Company).
- Idaho Public Utilities Commission, Case No. PAC-E-10-07, May 28, 2010 (Rocky Mountain Power/PacifiCorp).
- 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/ Unitil)
- Arizona Corporation Commission, Docket No. E-01933A-07-0402, July 2, 2007, (Tucson Electric Power Company).
- Wyoming Public Service Commission, Docket No. 20000-277-ER-07, June 29, 2007 (Rocky Mountain Power dba/PacifiCorp).
- Idaho Public Utilities Commission, Case No. PAC-E-05-1, June 8, 2007 (Rocky Mountain Power dba/PacifiCorp).
- Kansas Corporation Commission, Docket No. 07-KCPE-905-RTS, March 1, 2007 (Kansas City Power & Light Company).
- New Mexico Public Regulation Commission, Case No. 07-00077-UT, February 21, 2007, (Public Service Company of New Mexico).
- Missouri Public Service Commission, Case No. ER-2006-0291, February 1, 2007 (Kansas City Power & Light Company).
- Texas PUC Docket Nos. 33734, January 22, 2007 (Electric Transmission Texas, LLC).
- Texas PUC Docket Nos. 33309 and 33310, November 2006, (AEP Texas Central Company and AEP Texas North Company).
- Louisiana Public Service Commission, Docket No. U-23327, October 2006 and January 2005 (Southwestern Electric Power Company, American Electric Power Company)

- Missouri Public Service Commission, Case No. ER-2007-0004, July 3, 2006 (Aquila, Inc.).
- New Mexico Public Regulation Commission, Case No. 06-00258-UT, June 30, 2006 (El Paso Electric Company).
- New Mexico Public Regulation Commission, Case No. 06-00210-UT, May 30, 2006 (Public Service Company of New Mexico).
- Texas Public Utility Commission, Docket No. 32093, April 14, 2006 (CenterPoint Energy-Houston Electric, LLC).
- Utah Public Service Commission, Docket No. 06-035-21, March 7, 2006 (PacifiCorp).
- Oregon Public Utility Commission, Case No. UE-179, February 23, 2006 (PacifiCorp).
- Kansas Corporation Commission, Docket No. 06-KCPE-828-RTS, January 31, 2006 (Kansas City Power & Light Company).
- Missouri Public Service Commission, Case No. ER-2006-0314, January 27, 2006 (Kansas City Power & Light Company).
- California Public Utilities Commission, Docket No. 05-11-022, November 29, 2005 (PacifiCorp).
- Texas Public Utility Commission, Docket No. 31994, November 5, 2005 (Texas-New Mexico Power Company).
- New Hampshire Public Utilities Commission, Docket No. DE 05-178, November 4, 2005 (Unitil Energy Systems).
- Wyoming Public Service Commission, Docket No. 20000-ER-05-230, October 14, 2005 (PacifiCorp).
- Minnesota Public Utilities Commission, Docket. No. G-008/GR-05-1380, October 2005 (CenterPoint Energy Minnegasco).
- Texas Railroad Commission, Gas Utilities Division No. 9625, September 2005 (CenterPoint Energy Entex).
- Illinois Commerce Commission, Docket No. 05-0597, August 31, 2005 (Commonwealth Edison Company).
- Washington Utilities and Transportation Commission, Docket ,UE-050684/General Rate Case, May 2005 (PacifiCorp).
- Missouri Public Service Commission, Case No. ER-2005-0436, May 2005 (Aquila, Inc.).
- Idaho Public Utilities Commission, Case No. PAC-E-05-1, January 14, 2005 (PacifiCorp).
- Arkansas Public Service Commission, Docket No. 04-121-U, December 3, 2004 (CenterPoint Energy Arkla).
- Oregon Public Utility Commission, Case No. UE-170, November 12, 2004 (PacifiCorp).
- Texas Public Utility Commission, Docket No. 29206, November 8, 2004 (Texas-New Mexico Power Company).
- Texas Railroad Commission, Gas Utilities Division Nos. 9533 and 9534, October 13, 2004 (CenterPoint Energy Entex).
- Texas Public Utility Commission, Docket No. 29526, August 18 and September 2, 2004 (CenterPoint Energy Houston Electric).
- Utah Public Service Commission, Docket No. 04-2035-, August 4, 2004 (PacifiCorp).
- Oklahoma Corporation Commission, Cause No. PUD-200400187, July 2, 2004, (CenterPoint Energy Arkla).
- Minnesota Public Utilities Commission, Docket No. G-008/GR-04-901, July 2004, (CenterPoint Energy Minnegasco).
- Washington Utilities and Transportation Commission, Docket ,UE-032065/General Rate Case, December 2003 (PacifiCorp).
- Washington Utilities and Transportation Commission, Docket ,UG-031885, November 2003 (Northwest Natural Gas Company.).

- Wyoming Public Service Commission, Docket No. 20000-ER-03-198, May 2003 (PacifiCorp).
- Public Service Commission of Utah, Docket No. 03-2035-02, May 2003 (PacifiCorp).
- Public Utility Commission of Oregon, Case. UE-147, March 2003 (PacifiCorp).
- Wyoming Public Service Commission, Docket No. 20000-ER-00-162, May 2002 (PacifiCorp).
- Public Utility Commission of Oregon, UG-152, November 2002 (Northwest Natural).
- Massachusetts Department of Telecommunications and Energy, D.T.E. 02-24/24, May 2002 (Fitchburg Gas and Electric Light Company).
- New Hampshire Public Utilities Commission, Docket No. DE 01-247, January 2002 (Unitil Corporation).
- Washington Utilities and Transportation Commission, Docket UE-011569,70,UG-011571, November 2001 (Puget Sound Energy, Inc.).
- California Public Utilities Commission, Docket No. 01-03-026, September and December 2001 (PacifiCorp).
- New Mexico Public Regulation Commission, Docket No. 3643, July 2001 (Texas-New Mexico Power Company).
- Texas Natural Resources Conservation Commission, Docket No. 2001-1074/5-URC, May 2001 (AquaSource Utility, Inc.).
- Massachusetts Department of Telecommunications and Energy, Docket No. 99-118, May 2001 (Fitchburg Gas and Electric Light Company).
- Public Service Commission of Utah, Docket No. 01-035-01, January 2001 (PacifiCorp)
- Federal Energy Regulatory Commission, Docket No. ER-01-651, January 2001 (Southwestern Electric Power Company).
- Wyoming Public Service Commission, Docket No. 20000-ER-00-162, December 2000 (PacifiCorp).
- Public Utility Commission of Oregon, Case. UE-116, November 2000, (PacifiCorp)
- Public Utility Commission of Texas, Docket No. 22344, September 2000, (AEP Texas Companies, Entergy Gulf States, Inc., Reliant Energy HL&P, Texas-New Mexico Power Company, TXU Electric Company)
- Public Utility Commission of Oregon, Case UE-111, August 2000, (PacifiCorp)
- Texas Public Utility Commission, Docket Nos. 22352,3,4, March 2000 (Central Power and Light Co., Southwestern Electric Power Co., West Texas Utilities Co.).
- Texas Public Utility Commission, Docket No. 22355, March 2000 (Reliant Energy, Inc.).
- Texas Public Utility Commission, Docket No. 22349, March 2000 (Texas-New Mexico Power Co.).
- Texas Public Utility Commission, Docket No. 22350, March 2000 (TXU Electric).
- Washington Utilities and Transportation Commission, Docket UE-991831, November 1999 (PacifiCorp).
- Public Service Commission of Utah, Docket No. 99-035-10, September 1999 (PacifiCorp)
- Louisiana Public Service Commission Docket No. U-23029, August 1999 (Southwestern Electric Power Company)
- Wyoming Public Service Commission, Docket No. 2000-ER-99-145, July 1999, January 2000 (PacifiCorp, dba Pacific Power and Light Company).
- Texas PUC Docket No. 20150, March 1999 (Entergy Gulf States, Inc.)
- Federal Energy Regulatory Commission Docket No. ER-98-3177-00, May and December 1998 (Southwestern Electric Power Company).
- Public Service Commission of Utah, Docket No. 97-035-01, June 1998 (PacifiCorp, dba Utah Power and Light Company).
- Massachusetts Dept. of Telecommunications and Energy, Docket No. DTE 98-51, May 1998, (Fitchburg Gas and Electric Light Company, a subsidiary of 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).
- Maine PUC Dkt. No. 83-213, March 1984, (New England Telephone Company).

Regulatory Policy and Other Regulatory Issues:

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

Insurance Rate Testimony:

- Texas Department of Insurance, Docket No. 2673, January 2008, (Texas Land Title Association).

- Texas Department of Insurance, Docket No. 2601, December 2006, (Texas Land Title Association).
- Texas Department of Insurance, Docket No. 2394, November 1999, (Texas Title Insurance Agents).
- Senate Interim Committee on Title Insurance of the Texas Legislature, February 6, 1998
- Texas Department of Insurance, Docket No. 2279, October 1997, (Texas Title Insurance Agents).
- Texas Department of Insurance, January 1996, (Independent Metropolitan Title Insurance Agents of Texas).
- Texas Insurance Board, January 1992, (Texas Land Title Association).
- Texas Insurance Board, December 1990, (Texas Land Title Association).
- Texas Insurance Board, November 1989, (Texas Land Title Association).
- Texas Insurance Board, December 1987, (Texas Land Title Association).

Testimony On Behalf Of Texas PUC Staff:

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

ECONOMIC ANALYSIS AND TESTIMONY

Antitrust Litigation:

- Marginal Cost Analysis of Concrete Production/Predatory Pricing (Stiles)
- Analysis of Lost Business Opportunity due to denial of Waste Disposal Site Permit (Browning-Ferris Industries, Inc.).
- Analysis of Electric Power Transmission Costs in Purchased Power Dispute, 1995, (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).

- Analysis of Lost Profits in Highway Construction Dispute, Jones Bros., Plaintiff, v. Flour Daniel, Balfour Beatty, Lambrecht, and Lone Star Infrastructure, LLC, Defendants, 53rd Judicial District Court of Travis County, Texas, Cause No. GN204386, 2005, (Flour, et al)
- Analysis of Lost Profits in Insurance Dispute, Nickelson v. International Shipbreaking Ltd., LLC, et al, 332nd District Court, Hidalgo County, Texas, Cause No. C-482-01-F, 2005, (Great American Insurance Company).
- Analysis of Lost Profits and Other Economic Damages due to Patent Infringement, Climb Tech, Guthrie, & Schwartz Design, Plaintiffs, v. Verble, Hagler, Reeves, Valcor Industries, Inc., Defendants, U.S. District Court, Western District, Austin, Texas, Civil Action No. 1:05-cv-864-LY, 2008, (Verble, Hagler, et al).

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, 1995, (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).
- Present Value Analysis of Life Care Plan, U.S. District Court, Eastern District of Texas, Texarkana Division, Chisum v. Ford Motor Company, Civil Action No. 5:05-cv-0045, 2005, (Ford Motor Company).
- Analysis of Lost Earnings Capacity due to Industrial Accident, 122nd District Court, Galveston County, Texas, Trevino v. BP Products North America, Inc., Cause No. 05-cv-0341, 2006, (BP Products North America, Inc.

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).
- Analysis of Lost Profits due to Equipment Failure in Electric Power Plant, Houston Casualty Co., Comision Federal de Electricidad, and Seguros Comercial America S.A. de C.V. (Plaintiffs) v. Siemens Power Corporation, et al, District Court of Dallas County Texas, Cause No. DV-99-02749, 2005, (Siemens).
- Analysis of Lost Profits due to Manufacturing Parts Failure, Sanijet Corp. (Plaintiff) v. Lexor International, Inc., U.S. District Court, Northern Division of Texas, Dallas, Texas, Case No. 3:06-cv-1258-B ECF (Lexor International)

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^2 Institute, University of Texas at Austin, December 1996 and 1997.
"Fundamentals of Financial Analysis and Project Evaluation," Central and South West Companies, April, May, and June 1997.
"Fundamentals of Financial Management and Valuation," West Texas Utilities Company, November 1995.
"Financial Modeling: Testing the Reasonableness of Regulatory Results," University of Texas Center for Legal and Regulatory Studies Conference, June 1991.
"Estimating the Cost of Equity Capital," University of Texas at Austin Utilities Conference, June 1989, June 1990.
"Regulation: The Bottom Line," Texas Society of Certified Public Accountants, Annual Utilities Conference, Austin, Texas, April 1990.
"Alternative Treatments of Large Plant Additions -- Modeling the Alternatives," University of Texas at Dallas Public Utilities Conference, July 1989.
"Industrial Customer Electrical Requirements," Edison Electric Institute Financial Conference, Scottsdale, Arizona, October 1988.
"Acquisitions and Consolidations in the Electric Power Industry," Conference on Emerging Issues of Competition in the Electric Utility Industry, University of Texas at Austin, May 1988.
"The General Fund Transfer - Is It A Tax? Is It A Dividend Payout? Is It Fair?" The Texas Public Power Association Annual Meeting, Austin, May 1984.
"Avoiding 'Rate Shock' - Preoperational Phase-In Through CWIP in Rate Base," Edison Electric Institute, Finance Committee Annual Meeting, May 1983.
"A Cost-Benefit Analysis of Alternative Bond Ratings Among Electric Utility Companies in Texas," (with B.L. Heidebrecht and J.L. Nash), Texas Senate Subcommittee on Consumer Affairs, December 1982.
"Texas PUC Rate of Return and Construction Work in Progress Methods," New York Society of Security Analysts, New York, August 1982.
"In Support of Debt Service Requirements as a Guide to Setting Rates of Return for Subsidiaries," Financial Forum, National Society of Rate of Return Analysts, Washington, D.C., May 1982.

PUBLICATIONS

"Institutional Constraints on Public Fund Performance," (with B.L. Hadaway) *Journal of Portfolio Management*, Winter 1989.
"Implications of Savings and Loan Conversions in a Deregulated World," (with B.L. Hadaway) *Journal of Bank Research*, Spring 1984.
"Regulatory Treatment of Construction Work in Progress," abstract, (with B.L. Heidebrecht and J. L. Nash), *Rate & Regulation Review*, Edison Electric Institute, December 20, 1982.
"Financial Integrity and Market-to-Book Ratios in an Efficient Market," (with W. L. Beedles), *Gas Pricing & Ratemaking*, December 7, 1982.

"An Analysis of the Performance Characteristics of Converted Savings and Loan Associations," (with B.L. Hadaway) *Journal of Financial Research*, Fall 1981.

"Inflation Protection from Multi-Asset Sector Investments: A Long-Run Examination of Correlation Relationships with Inflation Rates," (with B.L. Hadaway), *Review of Business and Economic Research*, Spring 1981.

"Converting to a Stock Company-Association Characteristics Before and After Conversion," (with B.L. Hadaway), *Federal Home Loan Bank Board Journal*, October 1980.

"A Large-Sample Comparative Test for Seasonality in Individual Common Stocks," (with D.P. Rochester), *Journal of Economics and Business*, Fall 1980.

"Diversification Possibilities in Agricultural Land Investments," *Appraisal Journal*, October 1978.

"Further Evidence on Seasonality in Common Stocks," (with D.P. Rochester), *Journal of Financial and Quantitative Analysis*, March 1978.

Kansas City Power & Light Company
Comparable Company Fundamental Characteristics

		(1)	(2)		(3)		
					Capital Structure (2010)		
		% Regulated	Credit Rating		Common Eq	L-T Debt	Pfd Stock
No.	Company	Revenue	S&P	Moody's	Ratio	Ratio	Ratio
1	ALLETE	92.1%	A-	Baa1	55.8%	44.2%	0.0%
2	Alliant Energy Co.	92.4%	A-/BBB+	A2/A3	49.5%	46.3%	4.2%
3	Ameren	100.0%	BBB-	Baa2	50.9%	48.2%	0.9%
4	American Elec. Pwr.	94.9%	BBB	Baa2	46.7%	53.1%	0.2%
5	Avista Corp.	91.0%	A-	Baa1	48.4%	51.6%	0.0%
6	Black Hills Corp	85.7%	BBB+	A3	48.1%	51.9%	0.0%
7	Cleco Corporation	94.6%	BBB	Baa2	48.5%	51.5%	0.0%
8	DTE Energy Co.	77.6%	A	A2	48.7%	51.3%	0.0%
9	Edison Internat.	80.4%	BBB+	A1	44.3%	51.8%	3.9%
10	Great Plains Energy	100.0%	BBB	Baa2	49.2%	50.2%	0.6%
11	Hawaiian Electric	89.4%	BBB-	Baa2	54.3%	44.5%	1.2%
12	IDACORP	84.0%	A-	A2	50.7%	49.3%	0.0%
13	Pinnacle West	97.5%	BBB-	Baa2	54.7%	45.3%	0.0%
14	Portland General	100.0%	A-	A3	47.0%	53.0%	0.0%
15	SCANA Corp.	72.9%	A-	A3	47.1%	52.9%	0.0%
16	Sempra Energy	75.7%	A+	Aa3	49.6%	49.4%	1.0%
17	Southern Co.	84.7%	A	A2/A3	45.7%	51.2%	3.1%
18	Teco Energy, Inc.	76.6%	BBB+	Baa1	40.8%	59.2%	0.0%
19	Vectren Corp.	73.4%	A-	A2	50.1%	49.9%	0.0%
20	Westar Energy	100.0%	BBB+	Baa1	46.4%	53.6%	0.0%
21	Wisconsin Energy	99.1%	A-	A1	49.0%	50.6%	0.4%
22	Xcel Energy Inc.	99.3%	A	A3	46.3%	53.1%	0.6%
	Average	89.1%	A-/BBB+	A3	48.7%	50.6%	0.7%

Column Sources:

(1) Most recent company 10-Ks.

(2) AUS Utility Reports, Jan 2012.

(3) Value Line Investment Survey, Electric Utility (East), Nov 25, 2011; (Central), Dec 23, 2011; (West), Nov 4, 2011.

Kansas City Power & Light Company
Authorized Electric Utility Equity Returns

Average Authorized ROE	2007	No.	2008	No.	2009	No.	2010	No.	2011	No.
All Electric Utilities	10.36%	39	10.46%	37	10.48%	39	10.34%	59	10.22%	41
Vertically-Integrated Utilities	10.56%	28	10.45%	25	10.63%	27	10.38%	42	10.24%	27
Delivery-Only Utilities	9.86%	11	9.78%	7	10.15%	10	9.98%	15	9.85%	12
Power Plant Only Cases	NA	0	11.44%	5	10.18%	2	12.30%	2	12.30%	2

Data Source:
Regulatory Focus , "Major Rate Case Decisions," Regulatory Research Associates, Jan 10, 2012; January 7, 2011; January 8, 2010; and January 12, 2009.

GREAT PLAINS ENERGY INCORPORATED
Capitalization
September 30, 2011 (Actual)

($ in 000's)

	GPE Consolidated				GPE Capitalization for KCPL Ratemaking				GPE Capitalization for GMO Ratemaking				Other			
CAPITAL COMPONENT	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	$2,064,519	30.58%	6.6216%		2,064,519	49.77%	6.6216%		-	0.00%	6.6216%		-	0.00%	6.6216%	
GMO Long-term Debt	$1,222,149	18.10%	6.2981%		-	0.00%	6.2981%		1,222,149	47.49%	6.2981%		-	0.00%	6.2981%	
GPE Long-term Debt	$103,150	1.53%	7.4635%		18,439	0.44%	7.4635%		70,028	2.72%	7.4635%		14,683	50.21%	7.4635%	
Long-Term Debt (Note 1)	$3,389,818	50.21%	6.5306%	3.2791%	2,082,958	50.21%	6.6291%	3.3286%	1,292,177	50.21%	6.3612%	3.1941%	14,683	50.21%	7.4635%	3.7475%
Debt Related Tax Deductible Interest			10.5771%	0.4504%			10.5771%	0.4504%			10.5771%	0.4504%			10.5771%	0.4504%
Equity Related Non-Deductible Dividends			3.0109%	0.1282%			3.0109%	0.1282%			3.0109%	0.1282%			3.0109%	0.1282%
Equity-linked Convertible Debt	287,500	4.26%	13.5880%	0.5786%	176,662	4.26%	13.5880%	0.5786%	109,593	4.26%	13.5880%	0.5786%	1,245	4.26%	13.5880%	0.5786%
Preferred Stock	39,000	0.58%	4.2913%	0.0248%	23,965	0.58%	4.2913%	0.0248%	14,867	0.58%	4.2913%	0.0248%	169	0.58%	4.2913%	0.0248%
Common Equity (Note 2)	3,034,756	44.95%	10.4000%	4.6750%	1,864,781	44.95%	10.4000%	4.6750%	1,156,830	44.95%	10.4000%	4.6750%	13,145	44.95%	10.4000%	4.6750%
Total Capitalization	$6,751,074	100.00%		8.5575%	$4,148,365	100.00%		8.6070%	$2,573,467	100.00%		8.4725%	$29,242	100.00%		9.0259%

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
September 30, 2011 (Actual)

($ in 000's)

CAPITAL COMPONENT	AMOUNT	PERCENT	REQUIRED RETURN	WEIGHTED RETURN
Long-Term Debt (Note 1)	$3,389,818	50.21%	6.53%	3.2791%
Equity-linked Convertible Debt	287,500	4.26%	13.59%	0.5787%
Preferred Stock	39,000	0.58%	4.29%	0.0248%
Common Equity (Note 2)	3,034,756	44.95%	10.40%	4.6750%
	$6,751,074	100.00%		8.5576%

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

Note 2: Excludes accumulated other comprehensive income or loss

KANSAS CITY POWER & LIGHT COMPANY
Capitalization
September 30, 2011 (Actual)

($ in 000's)

CAPITAL COMPONENT	AMOUNT	PERCENT
KCP&L Long-Term Debt (Note 1)	$2,064,519	49.77%
KCP&L Common Equity (Note 2)	2,083,846	50.23%
Total KCP&L Capital	$4,148,365	100.00%

Note 1: Includes amounts classified as current liabilities
Note 2: Excludes accumulated other comprehensive income or loss

KCP&L GREATER MISSOURI OPERATIONS COMPANY
Capitalization
September 30, 2011 (Actual)

($ in 000's)

CAPITAL COMPONENT	AMOUNT	PERCENT
GMO Long-Term Debt (Note 1)	$1,222,149	47.49%
GMO Common Equity (Note 2)	1,351,318	52.51%
Total GMO Capital	$2,573,467	100.00%

Note 1: Includes amounts classified as current liabilities and excludes the Fair Value Adjustment
Note 2: Excludes accumulated other comprehensive income or loss

SCHEDULE SCH-2
Pages 5-9

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GREAT PLAINS ENERGY INCORPORATED
Capitalization
August 31, 2012 (Projection)

($ in 000's)

	GPE Consolidated				GPE Capitalization for KCPL Ratemaking				GPE Capitalization for GMO Ratemaking				Other			
CAPITAL COMPONENT	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	$1,902,360	29.612%	6.6347%		1,881,222	46.92%	6.6347%		2,895	0.12%	6.6347%		18,242	46.92%	6.6347%	
GMO Long-term Debt	$1,008,524	15.699%	5.5526%		-	0.00%	5.5526%		1,008,524	42.45%	5.5526%		-	0.00%	5.5526%	
GPE Long-term Debt	$103,263	1.607%	7.4656%		-	0.00%	7.4656%		103,263	4.35%	7.4656%		-	0.00%	7.4656%	
Long-Term Debt (Note 1)	$3,014,147	46.918%	6.3011%	2.9564%	1,881,222	46.92%	6.6347%	3.1129%	1,114,683	46.92%	5.7326%	2.6897%	18,242	46.92%	6.6347%	3.1129%
Preferred Stock	39,000	0.607%	4.2913%	0.0261%	24,341	0.61%	4.2913%	0.0261%	14,423	0.61%	4.2913%	0.0261%	236	0.61%	4.2913%	0.0261%
Common Equity (Note 2)	3,371,087	52.475%	10.4000%	5.4574%	2,104,000	52.47%	10.4000%	5.4574%	1,246,685	52.47%	10.4000%	5.4574%	20,402	52.47%	10.4000%	5.4574%
Total Capitalization	$6,424,234	100.000%		8.4399%	$4,009,564	100.00%		8.5964%	$2,375,791	100.00%		8.1732%	$38,880	100.00%		8.5964%

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
August 31, 2012 (Projection)

($ in 000's)

CAPITAL COMPONENT	AMOUNT	PERCENT	REQUIRED RETURN	WEIGHTED RETURN
Long-Term Debt (Note 1)	$3,014,147	46.92%	6.30%	2.9564%
Preferred Stock	39,000	0.61%	4.29%	0.0261%
Common Equity (Note 2)	3,371,087	52.47%	10.40%	5.4574%
	$6,424,234	100.00%		8.4399%

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
August 31, 2012 (Projection)

($ in 000's)

CAPITAL COMPONENT	AMOUNT	PERCENT
KCP&L Long-Term Debt (Note 1)	$1,902,360	47.45%
KCP&L Common Equity (Note 2)	2,107,204	52.55%
Total KCP&L Capital	$4,009,564	100.00%

Note 1: Includes amounts classified as current liabilities
Note 2: Excludes accumulated other comprehensive income or loss

KCP&L GREATER MISSOURI OPERATIONS COMPANY
Capitalization
August 31, 2012 (Projection)

($ in 000's)

CAPITAL COMPONENT	AMOUNT	PERCENT
GMO Long-Term Debt (Note 1)	$1,008,524	42.45%
GMO Common Equity (Note 2)	1,367,267	57.55%
Total GMO Capital	$2,375,791	100.00%

Note 1: Includes amounts classified as current liabilities and excludes the Fair Value Adjustment
Note 2: Excludes accumulated other comprehensive income or loss

SCHEDULE SCH-2
Pages 14-16

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Kansas City Power & Light Company
Historical Capital Market Costs

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011*
Prime Rate	4.7%	4.1%	4.3%	6.2%	8.0%	8.1%	5.1%	3.3%	3.3%	3.3%
Consumer Price Index	2.5%	2.0%	3.3%	3.3%	2.5%	4.1%	0.0%	2.8%	1.4%	3.0%
Long-Term Treasuries	5.4%	5.0%	5.1%	4.7%	5.0%	4.8%	4.3%	4.1%	4.3%	3.9%
Moody's Avg Utility Debt	7.5%	6.6%	6.2%	5.7%	6.1%	6.1%	6.7%	6.3%	5.6%	5.2%
Moody's Baa Utility Debt	8.0%	6.8%	6.4%	5.9%	6.3%	6.3%	7.2%	7.1%	6.0%	5.6%

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 2001 and 2007-2011; 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
*Consumer Price Index for 2011 is through November 2011

Kansas City Power & Light Company
Long-Term Interest Rate Trends

Month	Triple-B Utility Rate	30-Year Treasury Rate	Triple-B Utility Spread
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
May-10	5.97	4.29	1.68
Jun-10	6.18	4.13	2.05
Jul-10	5.98	3.99	1.99
Aug-10	5.55	3.80	1.75
Sep-10	5.53	3.77	1.76
Oct-10	5.62	3.87	1.75
Nov-10	5.85	4.19	1.66
Dec-10	6.04	4.42	1.62
Jan-11	6.06	4.52	1.54
Feb-11	6.10	4.65	1.45
Mar-11	5.97	4.51	1.46
Apr-11	5.98	4.50	1.48
May-11	5.74	4.29	1.45
Jun-11	5.67	4.23	1.44
Jul-11	5.70	4.27	1.43
Aug-11	5.22	3.65	1.57
Sep-11	5.11	3.18	1.93
Oct-11	5.24	3.13	2.11
Nov-11	4.93	3.02	1.91
Dec-11	5.07	2.98	2.09
3-Mo Avg	**5.08**	**3.04**	**2.04**
12-Mo Avg	**5.57**	**3.91**	**1.66**

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

Three month average is for October 2011-December 2011.

Twelve month average is for January 2011-December 2011.

Economic Indicators

Seasonally Adjusted Annual Rates — Dollar Figures in Billions

2010	E2011	E2012	Annual % Change 2010	Annual % Change E2011	Annual % Change E2012		2011 Q1	2011 Q2	2011 AQ3	2011 EQ4	E2012 Q1	E2012 Q2	E2012 Q3	E2012 Q4
						Gross Domestic Product								
$14,526.6	$15,100.1	$15,565.8	4.2	3.9	3.1	GDP (current dollars)	$14,867.8	$15,012.8	$15,198.6	$15,321.3	$15,441.6	$15,514.1	$15,598.6	$15,708.8
4.2	3.9	3.1	-	-	-	Annual rate of increase (%)	3.1	4.0	5.0	3.3	3.2	1.9	2.2	2.9
3.0	1.8	1.7	-	-	-	Annual rate of increase–real GDP (%)	0.4	1.3	2.5	2.4	1.5	1.1	1.4	2.0
1.2	2.1	1.4	-	-	-	Annual rate of increase–GDP deflator (%)	2.5	2.5	2.5	1.0	1.7	0.8	0.8	0.8
						***Components of Real GDP**								
$9,220.9	$9,432.2	$9,636.6	2.0	2.3	2.2	Personal consumption expenditures	$9,376.7	$9,392.7	$9,449.5	$9,509.7	$9,559.7	$9,613.4	$9,662.2	$9,711.3
2.0	2.3	2.2	-	-	-	% change	2.1	0.7	2.4	2.6	2.1	2.3	2.0	2.0
1,188.3	1,281.1	1,352.7	7.2	7.8	5.6	Durable goods	1,277.4	1,260.2	1,273.0	1,313.7	1,324.5	1,341.4	1,363.4	1,381.5
2,041.3	2,078.9	2,117.0	2.9	1.8	1.8	Nondurable goods	2,075.4	2,076.6	2,077.7	2,085.8	2,101.4	2,113.5	2,122.5	2,130.9
5,991.8	6,087.0	6,192.5	0.9	1.6	1.7	Services	6,039.1	6,067.0	6,111.4	6,130.3	6,155.0	6,182.0	6,203.8	6,229.3
1,319.2	1,438.5	1,516.8	4.4	9.0	5.4	Nonresidental fixed investment	1,378.9	1,413.2	1,467.5	1,494.4	1,503.1	1,512.7	1,516.7	1,534.5
4.4	9.0	5.4	-	-	-	% change	2.1	10.3	16.3	7.5	2.4	2.6	1.1	4.8
1,019.4	1,127.5	1,205.5	14.6	10.6	6.9	Producers durable equipment	1,086.9	1,103.5	1,148.7	1,170.8	1,179.8	1,195.6	1,211.4	1,235.3
321.5	314.1	323.6	(4.6)	(2.3)	3.0	Residental fixed investment	311.5	314.8	316.7	313.3	314.4	318.5	327.2	334.4
(4.6)	(2.3)	3.0	-	-	-	% change	(2.6)	4.2	2.5	(4.2)	1.4	5.3	11.4	9.0
58.8	26.9	35.9	-	-	-	Net change in business inventories	49.1	39.1	5.4	14.0	33.0	37.1	37.0	36.4
2,556.8	2,504.5	2,437.6	0.7	(2.0)	(2.7)	Gov't purchases of goods & services	2,513.9	2,508.2	2,508.2	2,487.7	2,465.9	2,444.0	2,427.8	2,412.5
1,075.9	1,057.6	1,027.1	4.5	(1.7)	(2.9)	Federal	1,053.3	1,058.3	1,063.5	1,055.2	1,043.4	1,031.8	1,021.6	1,011.6
1,487.0	1,453.2	1,416.4	(1.8)	(2.3)	(2.5)	State & local	1,466.4	1,456.1	1,451.2	1,438.9	1,428.8	1,418.3	1,412.0	1,406.6
(421.8)	(413.0)	(411.9)	-	-	-	Net exports	(424.4)	(416.4)	(409.4)	(401.9)	(409.2)	(420.0)	(415.7)	(402.8)
1,663.2	1,772.9	1,833.4	11.3	6.6	3.4	Exports	1,749.6	1,765.0	1,782.4	1,794.7	1,806.4	1,817.9	1,839.3	1,870.2
2,085.0	2,185.9	2,245.3	12.5	4.8	2.7	Imports	2,173.9	2,181.4	2,191.8	2,196.6	2,215.6	2,237.9	2,255.0	2,273.0
						****Income & Profits**								
$12,373.5	$12,989.6	$13,401.5	3.7	5.0	3.2	Personal income	$12,846.9	$12,992.6	$13,022.1	$13,096.8	$13,235.2	$13,347.6	$13,455.6	$13,567.4
11,179.7	11,590.3	11,895.8	3.6	3.7	2.6	Disposable personal income	11,481.0	11,591.5	11,608.5	11,680.3	11,781.6	11,868.5	11,932.8	12,000.2
5.3	4.5	3.7	-	-	-	Savings rate (%)	5.0	5.1	4.1	3.9	4.0	3.9	3.6	3.4
1,819.5	1,930.6	2,046.9	25.0	6.1	6.0	Corporate profits before taxes	1,877.1	1,890.6	1,992.8	1,961.8	2,061.6	2,034.2	2,030.6	2,061.3
1,408.4	1,504.2	1,573.5	19.0	6.8	4.6	Corporate profits after taxes	1,454.8	1,470.1	1,558.0	1,534.0	1,580.3	1,561.5	1,562.1	1,590.0
77.35	90.18	98.14	51.2	16.6	8.8	‡Earnings per share (S&P 500)	81.31	83.87	87.85	90.18	93.39	95.37	96.80	98.14
						†Prices & Interest Rates								
1.6	3.2	1.5	-	-	-	Consumer price index	5.2	4.1	3.1	1.1	0.9	0.9	1.4	1.2
0.1	0.1	0.0	-	-	-	Treasury bills	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0
3.2	2.8	2.3	-	-	-	10-yr notes	3.5	3.2	2.4	2.0	2.1	2.3	2.4	2.5
4.3	3.9	3.3	-	-	-	30-yr bonds	4.6	4.3	3.7	3.0	3.1	3.2	3.3	3.4
4.9	4.6	4.2	-	-	-	New issue rate–corporate bonds	5.1	5.0	4.5	3.9	4.0	4.2	4.3	4.3
						Other Key Indicators								
584.9	596.8	664.7	5.6	2.0	11.4	Housing starts (1,000 units SAAR)	582.3	572.3	615.0	617.7	623.8	643.3	678.5	713.1
11.6	12.7	13.4	11.1	9.8	5.6	Auto & truck sales (1,000,000 units)	13.0	12.1	12.4	13.2	13.1	13.3	13.4	13.8
9.6	9.1	9.2	-	-	-	Unemployment rate (%)	8.9	9.1	9.1	9.2	9.2	9.2	9.2	9.2
(3.0)	(6.1)	3.7	-	-	-	§U.S. dollar	(5.7)	(12.2)	1.0	12.0	8.2	4.6	(3.2)	(3.2)

Note: Annual changes are from prior year and quarterly changes are from prior quarter. Figures may not add to totals because of rounding. A–Advance data. P–Preliminary. E–Estimated. R–Revised.
*2005 Chain-weighted dollars. **Current dollars. ‡Trailing 4 quarters. †Average for period. §Quarterly % changes at quarterly rates. This forecast prepared by Standard & Poor's.

Kansas City Power & Light Company

GDP Growth Rate Forecast

	Nominal GDP	% Change	GDP Price Deflator	% Change	CPI	% Change
1950	313.3		15.0		25.0	
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	14291.3	5.0%	106.9	2.6%	211.4	4.1%
2008	14191.2	-0.7%	109.2	2.1%	211.3	0.0%
2009	14277.3	0.6%	109.7	0.4%	217.2	2.8%
2010	14861.0	4.1%	111.2	1.4%	220.2	1.4%
10-Year Average		3.9%		2.2%		2.4%
20-Year Average		4.8%		2.1%		2.5%
30-Year Average		5.6%		2.7%		3.2%
40-Year Average		6.9%		3.9%		4.4%
50-Year Average		7.0%		3.7%		4.1%
60-Year Average		6.7%		3.4%		3.7%
Average of Periods		5.8%		3.0%		3.4%

Source: St. Louis Federal Reserve Bank, www.research.stlouisfed.org

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

Company	Constant Growth DCF Model Analysts' Growth Rates	Constant Growth DCF Model Long-Term GDP Growth	Low Near-Term Growth Two-Stage Growth DCF Model
1 ALLETE	10.4%	10.4%	10.0%
2 Alliant Energy Co.	10.2%	10.2%	10.1%
3 Ameren	9.1%	10.9%	10.5%
4 American Elec. Pwr.	9.0%	10.7%	10.4%
5 Avista Corp.	9.3%	10.5%	10.5%
6 Black Hills Corp	11.1%	10.4%	9.9%
7 Cleco Corporation	8.8%	9.3%	9.5%
8 DTE Energy Co.	8.9%	10.5%	10.3%
9 Edison Internat.	7.4%	9.1%	8.8%
10 Great Plains Energy	9.7%	10.0%	10.3%
11 Hawaiian Electric	15.9%	10.7%	10.2%
12 IDACORP	7.4%	8.8%	8.9%
13 Pinnacle West	10.2%	10.4%	10.1%
14 Portland General	10.6%	10.2%	10.0%
15 SCANA Corp.	8.6%	10.5%	10.0%
16 Sempra Energy	9.9%	9.8%	9.8%
17 Southern Co.	10.1%	10.3%	10.1%
18 Teco Energy, Inc.	11.8%	10.7%	10.7%
19 Vectren Corp.	10.1%	10.8%	10.6%
20 Westar Energy	11.4%	10.7%	10.3%
21 Wisconsin Energy	11.2%	9.5%	10.0%
22 Xcel Energy Inc.	9.2%	9.9%	9.6%
GROUP AVERAGE	10.0%	10.2%	10.0%
GROUP MEDIAN	10.0%	10.4%	10.1%

Sources: Value Line Investment Survey, Electric Utility (East), Nov 25, 2011; (Central), Dec 23, 2011; (West), Nov 4, 2011.

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

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

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
				Analysts' Estimated Growth				
Company	Recent Price(P0)	Next Year's Div(D1)	Dividend Yield	Value Line	Zacks	Thomson	Average Growth *(Cols 4-6)*	**ROE** K=Div Yld+G *(Cols 3+7)*
1 ALLETE	39.13	1.80	4.60%	6.00%	5.00%	6.50%	5.83%	10.4%
2 Alliant Energy Co.	41.06	1.80	4.38%	6.50%	6.00%	4.90%	5.80%	10.2%
3 Ameren	31.77	1.62	5.10%	NA	4.00%	NA	4.00%	9.1%
4 American Elec. Pwr.	38.85	1.90	4.89%	4.50%	4.00%	3.87%	4.12%	9.0%
5 Avista Corp.	24.90	1.18	4.74%	4.50%	4.70%	4.50%	4.57%	9.3%
6 Black Hills Corp	32.25	1.48	4.59%	8.50%	5.00%	6.00%	6.50%	11.1%
7 Cleco Corporation	35.75	1.25	3.50%	6.00%	7.00%	3.00%	5.33%	8.8%
8 DTE Energy Co.	51.36	2.42	4.71%	4.50%	4.20%	3.75%	4.15%	8.9%
9 Edison Internat.	39.32	1.31	3.33%	NA	5.00%	3.18%	4.09%	7.4%
10 Great Plains Energy	20.57	0.86	4.18%	6.00%	6.50%	4.10%	5.53%	9.7%
11 Hawaiian Electric	25.27	1.24	4.91%	11.00%	8.60%	13.47%	11.02%	15.9%
12 IDACORP	40.27	1.20	2.98%	4.00%	4.70%	4.50%	4.40%	7.4%
13 Pinnacle West	45.61	2.10	4.60%	6.00%	5.30%	5.58%	5.63%	10.2%
14 Portland General	24.35	1.08	4.43%	7.50%	5.00%	5.88%	6.13%	10.6%
15 SCANA Corp.	42.26	1.98	4.69%	3.00%	4.20%	4.48%	3.89%	8.6%
16 Sempra Energy	52.63	2.08	3.95%	3.50%	7.00%	7.33%	5.94%	9.9%
17 Southern Co.	43.58	1.94	4.45%	6.00%	5.10%	5.92%	5.67%	10.1%
18 Teco Energy, Inc.	18.16	0.89	4.90%	10.50%	4.70%	5.41%	6.87%	11.8%
19 Vectren Corp.	28.31	1.41	4.98%	5.50%	4.30%	5.50%	5.10%	10.1%
20 Westar Energy	27.01	1.32	4.89%	8.50%	6.10%	5.08%	6.56%	11.4%
21 Wisconsin Energy	32.63	1.20	3.68%	8.50%	6.30%	7.80%	7.53%	11.2%
22 Xcel Energy Inc.	25.72	1.06	4.12%	5.00%	5.10%	5.13%	5.08%	9.2%
GROUP AVERAGE	34.58	1.51	4.39%	6.28%	5.35%	5.52%	5.63%	10.0%
GROUP MEDIAN			4.59%					10.0%

Sources: Value Line Investment Survey, Electric Utility (East), Nov 25, 2011; (Central), Dec 23, 2011; (West), Nov 4, 2011.

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

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

		(9)	(10)	(11)	(12)	(13)
			Next			**ROE**
		Recent	Year's	Dividend	GDP	K=Div Yld+G
	Company	Price(P0)	Div(D1)	Yield	Growth	*(Cols 12+13)*
1	ALLETE	39.13	1.80	4.60%	5.80%	10.4%
2	Alliant Energy Co.	41.06	1.80	4.38%	5.80%	10.2%
3	Ameren	31.77	1.62	5.10%	5.80%	10.9%
4	American Elec. Pwr.	38.85	1.90	4.89%	5.80%	10.7%
5	Avista Corp.	24.90	1.18	4.74%	5.80%	10.5%
6	Black Hills Corp	32.25	1.48	4.59%	5.80%	10.4%
7	Cleco Corporation	35.75	1.25	3.50%	5.80%	9.3%
8	DTE Energy Co.	51.36	2.42	4.71%	5.80%	10.5%
9	Edison Internat.	39.32	1.31	3.33%	5.80%	9.1%
10	Great Plains Energy	20.57	0.86	4.18%	5.80%	10.0%
11	Hawaiian Electric	25.27	1.24	4.91%	5.80%	10.7%
12	IDACORP	40.27	1.20	2.98%	5.80%	8.8%
13	Pinnacle West	45.61	2.10	4.60%	5.80%	10.4%
14	Portland General	24.35	1.08	4.43%	5.80%	10.2%
15	SCANA Corp.	42.26	1.98	4.69%	5.80%	10.5%
16	Sempra Energy	52.63	2.08	3.95%	5.80%	9.8%
17	Southern Co.	43.58	1.94	4.45%	5.80%	10.3%
18	Teco Energy, Inc.	18.16	0.89	4.90%	5.80%	10.7%
19	Vectren Corp.	28.31	1.41	4.98%	5.80%	10.8%
20	Westar Energy	27.01	1.32	4.89%	5.80%	10.7%
21	Wisconsin Energy	32.63	1.20	3.68%	5.80%	9.5%
22	Xcel Energy Inc.	25.72	1.06	4.12%	5.80%	9.9%
	GROUP AVERAGE	34.58	1.51	4.39%	5.80%	10.2%
	GROUP MEDIAN			4.59%		10.4%

Sources: Value Line Investment Survey, Electric Utility (East), Nov 25, 2011; (Central), Dec 23, 2011; (West), Nov 4, 2011.

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

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

	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
			Annual	CASH FLOWS							ROE=Internal
Company	2012 Div	2015 Div	Change to 2015	Recent Price	Year 1 Div	Year 2 Div	Year 3 Div	Year 4 Div	Year 5 Div	Year 5-150 Div Growth	Rate of Return *(Yrs 0-150)*
1 ALLETE	1.80	1.95	0.05	-39.13	1.80	1.85	1.90	1.95	2.06	5.80%	10.0%
2 Alliant Energy Co.	1.80	2.10	0.10	-41.06	1.80	1.90	2.00	2.10	2.22	5.80%	10.1%
3 Ameren	1.62	1.75	0.04	-31.77	1.62	1.66	1.71	1.75	1.85	5.80%	10.5%
4 American Elec. Pwr.	1.90	2.10	0.07	-38.85	1.90	1.97	2.03	2.10	2.22	5.80%	10.4%
5 Avista Corp.	1.18	1.40	0.07	-24.90	1.18	1.25	1.33	1.40	1.48	5.80%	10.5%
6 Black Hills Corp	1.48	1.55	0.02	-32.25	1.48	1.50	1.53	1.55	1.64	5.80%	9.9%
7 Cleco Corporation	1.25	1.60	0.12	-35.75	1.25	1.37	1.48	1.60	1.69	5.80%	9.5%
8 DTE Energy Co.	2.42	2.70	0.09	-51.36	2.42	2.51	2.61	2.70	2.86	5.80%	10.3%
9 Edison Internat.	1.31	1.40	0.03	-39.32	1.31	1.34	1.37	1.40	1.48	5.80%	8.8%
10 Great Plains Energy	0.86	1.10	0.08	-20.57	0.86	0.94	1.02	1.10	1.16	5.80%	10.3%
11 Hawaiian Electric	1.24	1.30	0.02	-25.27	1.24	1.26	1.28	1.30	1.38	5.80%	10.2%
12 IDACORP	1.20	1.50	0.10	-40.27	1.20	1.30	1.40	1.50	1.59	5.80%	8.9%
13 Pinnacle West	2.10	2.30	0.07	-45.61	2.10	2.17	2.23	2.30	2.43	5.80%	10.1%
14 Portland General	1.08	1.20	0.04	-24.35	1.08	1.12	1.16	1.20	1.27	5.80%	10.0%
15 SCANA Corp.	1.98	2.10	0.04	-42.26	1.98	2.02	2.06	2.10	2.22	5.80%	10.0%
16 Sempra Energy	2.08	2.50	0.14	-52.63	2.08	2.22	2.36	2.50	2.65	5.80%	9.8%
17 Southern Co.	1.94	2.20	0.09	-43.58	1.94	2.03	2.11	2.20	2.33	5.80%	10.1%
18 Teco Energy, Inc.	0.89	1.05	0.05	-18.16	0.89	0.94	1.00	1.05	1.11	5.80%	10.7%
19 Vectren Corp.	1.41	1.60	0.06	-28.31	1.41	1.47	1.54	1.60	1.69	5.80%	10.6%
20 Westar Energy	1.32	1.44	0.04	-27.01	1.32	1.36	1.40	1.44	1.52	5.80%	10.3%
21 Wisconsin Energy	1.20	1.65	0.15	-32.63	1.20	1.35	1.50	1.65	1.75	5.80%	10.0%
22 Xcel Energy Inc.	1.06	1.15	0.03	-25.72	1.06	1.09	1.12	1.15	1.22	5.80%	9.6%
GROUP AVERAGE											10.0%
GROUP MEDIAN											10.1%

Sources: Value Line Investment Survey, Electric Utility (East), Nov 25, 2011; (Central), Dec 23, 2011; (West), Nov 4, 2011.

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

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

Column 1: Three-month Average Price per Share (Oct 2011-Dec 2011)

Column 2: Estimated 2012 Div per Share from Value Line

Column 3: Column 2 Divided by Column 1

Column 4: "Est'd '08-'10 to '14-'16" Earnings Growth Reported by Value Line

Column 5: "Next 5 Years" Company Growth Estimate as Reported by Zacks.com

Column 6: "Next 5 Years (per annum) Growth Estimate Reported by Thomson Financial Network (at Yahoo Finance)

Column 7: Average of Columns 4-6

Column 8: Column 3 Plus Column 7

Column 9: See Column 1

Column 10: See Column 2

Column 11: Column 10 Divided by Column 9

Column 12: Average of GDP Growth During the Last 10 year, 20 year, 30 year, 40 year, 50 year, and 60 year growth periods. See Schedule SCH-4

Column 13: Column 11 Plus Column 12

Column 14: Estimated 2012 Div per Share from Value Line

Column 15: Estimated 2015 Div per Share from Value Line

Column 16: (Column 15 Minus Column 14) Divided by Three

Column 17: See Column 1

Column 18: See Column 14

Column 19: Column 18 Plus Column 16

Column 20: Column 19 Plus Column 16

Column 21: Column 20 Plus Column 16

Column 22: Column 21 Increased by the Growth Rate Shown in Column 23

Column 23: See Column 12

Column 24: The Internal Rate of Return of the Cash Flows in Columns 17-22 along with the Dividends for the Years 6-150 Implied by the Growth Rates shown in Column 23

Kansas City Power & Light Company

Risk Premium Analysis

(Based on Projected Interest Rates)

	MOODY'S AVERAGE PUBLIC UTILITY BOND YIELD (1)	AUTHORIZED ELECTRIC RETURNS (2)	INDICATED RISK PREMIUM
1980	13.15%	14.23%	1.08%
1981	15.62%	15.22%	-0.40%
1982	15.33%	15.78%	0.45%
1983	13.31%	15.36%	2.05%
1984	14.03%	15.32%	1.29%
1985	12.29%	15.20%	2.91%
1986	9.46%	13.93%	4.47%
1987	9.98%	12.99%	3.01%
1988	10.45%	12.79%	2.34%
1989	9.66%	12.97%	3.31%
1990	9.76%	12.70%	2.94%
1991	9.21%	12.55%	3.34%
1992	8.57%	12.09%	3.52%
1993	7.56%	11.41%	3.85%
1994	8.30%	11.34%	3.04%
1995	7.91%	11.55%	3.64%
1996	7.74%	11.39%	3.65%
1997	7.63%	11.40%	3.77%
1998	7.00%	11.66%	4.66%
1999	7.55%	10.77%	3.22%
2000	8.14%	11.43%	3.29%
2001	7.72%	11.09%	3.37%
2002	7.53%	11.16%	3.63%
2003	6.61%	10.97%	4.36%
2004	6.20%	10.75%	4.55%
2005	5.67%	10.54%	4.87%
2006	6.08%	10.36%	4.28%
2007	6.11%	10.36%	4.25%
2008	6.65%	10.46%	3.81%
2009	6.28%	10.48%	4.20%
2010	5.55%	10.34%	4.79%
2011	5.17%	10.22%	5.05%
AVERAGE	8.82%	12.15%	3.33%

INDICATED COST OF EQUITY

PROJECTED TRIPLE-B UTILITY BOND YIELD*	5.34%
MOODY'S AVG ANNUAL YIELD DURING STUDY	8.82%
INTEREST RATE DIFFERENCE	-3.48%
INTEREST RATE CHANGE COEFFICIENT	-41.62%
ADUSTMENT TO AVG RISK PREMIUM	1.45%
BASIC RISK PREMIUM	3.33%
INTEREST RATE ADJUSTMENT	1.45%
EQUITY RISK PREMIUM	4.78%
PROJECTED TRIPLE-B UTILITY BOND YIELD*	5.34%
INDICATED EQUITY RETURN	**10.12%**

(1) Moody's Investors Service

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

*Projected triple-B bond yield is 204 basis points over average 2012 projected long-term Treasury bond rate of 3.3% from Schedule SCH-3, p. 3. The triple-B spread is for 3 months ended December 2011 from Schedule SCH-3, p. 2.

Kansas City Power & Light Company

Risk Premium Analysis

(Based on Current Interest Rates)

	MOODY'S AVERAGE PUBLIC UTILITY BOND YIELD (1)	AUTHORIZED ELECTRIC RETURNS (2)	INDICATED RISK PREMIUM
1980	13.15%	14.23%	1.08%
1981	15.62%	15.22%	-0.40%
1982	15.33%	15.78%	0.45%
1983	13.31%	15.36%	2.05%
1984	14.03%	15.32%	1.29%
1985	12.29%	15.20%	2.91%
1986	9.46%	13.93%	4.47%
1987	9.98%	12.99%	3.01%
1988	10.45%	12.79%	2.34%
1989	9.66%	12.97%	3.31%
1990	9.76%	12.70%	2.94%
1991	9.21%	12.55%	3.34%
1992	8.57%	12.09%	3.52%
1993	7.56%	11.41%	3.85%
1994	8.30%	11.34%	3.04%
1995	7.91%	11.55%	3.64%
1996	7.74%	11.39%	3.65%
1997	7.63%	11.40%	3.77%
1998	7.00%	11.66%	4.66%
1999	7.55%	10.77%	3.22%
2000	8.14%	11.43%	3.29%
2001	7.72%	11.09%	3.37%
2002	7.53%	11.16%	3.63%
2003	6.61%	10.97%	4.36%
2004	6.20%	10.75%	4.55%
2005	5.67%	10.54%	4.87%
2006	6.08%	10.36%	4.28%
2007	6.11%	10.36%	4.25%
2008	6.65%	10.46%	3.81%
2009	6.28%	10.48%	4.20%
2010	5.55%	10.34%	4.79%
2011	5.17%	10.22%	5.05%
AVERAGE	8.82%	12.15%	3.33%

INDICATED COST OF EQUITY

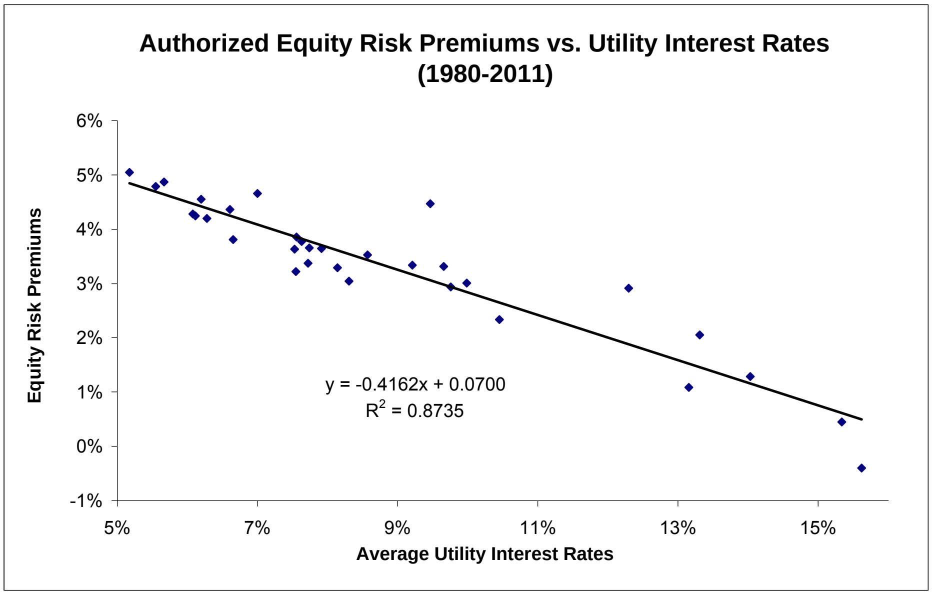
CURRENT TRIPLE-B UTILITY BOND YIELD*	5.08%
MOODY'S AVG ANNUAL YIELD DURING STUDY	8.82%
INTEREST RATE DIFFERENCE	-3.74%
INTEREST RATE CHANGE COEFFICIENT	-41.62%
ADUSTMENT TO AVG RISK PREMIUM	1.56%
BASIC RISK PREMIUM	3.33%
INTEREST RATE ADJUSTMENT	1.56%
EQUITY RISK PREMIUM	4.89%
CURRENT TRIPLE-B UTILITY BOND YIELD*	5.08%
INDICATED EQUITY RETURN	**9.97%**

(1) Moody's Investors Service

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

*Current triple-B utility bond yield is three month average of Moody's Triple-B Public Utility Bond Yield Average through December 2011 from Schedule SCH-3, p. 2.

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



SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.934607488
R Square	0.873491157
Adjusted R Square	0.869274196
Standard Error	0.004645908
Observations	32

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.004470953	0.004470953	207.1375734	5.236E-15
Residual	30	0.000647534	2.15845E-05		
Total	31	0.005118487			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.070011757	0.002679133	26.13224684	3.388E-22	0.064540238	0.075483276	0.064540238	0.075483276
X Variable 1	-0.41615627	0.028915253	-14.39227478	5.236E-15	-0.475209095	-0.357103445	-0.475209095	-0.357103445