Exhibit No.:
Witness: Michael Gorman
Type of Exhibit: Direct Testimony
Issue: Revenue Requirement
Sponsoring Party: The Office of Public Counsel
Case No.: ER-2009-0089

Before the Public Service Commission
of the State of Missouri

In the Matter of the Application of Kansas City Power & Light Company for Approval to Make Certain Changes in its Charges for Electric Service to Continue the Implementation of Its Regulatory Plan.	)))))))	Case No. ER-2009-0089

Direct Testimony and Schedules of

Michael Gorman

On behalf of

The Office of Public Counsel

Project 9073
February 11, 2009

BRUBAKER & ASSOCIATES, INC.
CHESTERFIELD, MO 63017

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Kansas City Power & Light Company for Approval to Make Certain Changes in its Charges for Electric Service to Continue the Implementation of Its Regulatory Plan.	)))))))	Case No. ER-2009-0089

AFFIDAVIT OF MICHAEL GORMAN

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

Michael Gorman, of lawful age and being first duly sworn, deposes and states:

1. My name is Michael Gorman. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by the Office of Public Counsel in this proceeding on its behalf.

2. Attached hereto and made a part hereof for all purposes are my direct testimony and schedules.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Michael Gorman
Consultant

Subscribed and sworn to me this 11th day of February, 2009.

Maria E. Decker
Notary Public

My commission expires May 5, 2009.

MARIA E. DECKER
Notary Public, State of Missouri
St. Louis City
Commission # 05706793
My Commission Expires May 05, 2009

Before the Public Service Commission
of the State of Missouri

In the Matter of the Application of Kansas City Power & Light Company for Approval to Make Certain Changes in its Charges for Electric Service to Continue the Implementation of Its Regulatory Plan.	)))))))	Case No. ER-2009-0089

Direct Testimony of Michael Gorman

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A My name is Michael Gorman and my business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017.

Q WHAT IS YOUR OCCUPATION?

A I am an energy advisor and a consultant in the field of public utility regulation and a managing principal in the firm of Brubaker & Associates, Inc. (BAI).

Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A These are set forth in Appendix A.

Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

A I am appearing on behalf of the Office of Public Counsel.

Q WHAT IS THE SUBJECT OF YOUR TESTIMONY?

A I will recommend a fair return on common equity and overall rate of return for Kansas City Power & Light Company ("KCPL" or "Company").

Q PLEASE SUMMARIZE YOUR RATE OF RETURN RECOMMENDATIONS.

A I recommend the Missouri Public Service Commission ("MPSC" or the "Commission") award KCPL a return on common equity of 10.30%.

My recommended return on equity for KCPL is based on a constant growth Discounted Cash Flow ("DCF"), a two-stage growth DCF model, a multi-stage DCF model, Risk Premium ("RP") model and Capital Asset Pricing Model ("CAPM") analyses. These analyses estimate a fair return on equity based on observable market information for a group of publicly traded electric utility companies that proxy KCPL's going-forward investment risk.

Finally, I recommend an overall rate of return for KCPL of 8.45%, as shown on my Schedule MPG-1. My recommended overall rate of return is based on KCPL's proposed capital structure, my recommended return on equity, and the Company's projected embedded cost of debt.

ELECTRIC UTILITY INDUSTRY MARKET PERSPECTIVE

Q DID YOU ATTEMPT TO VALIDATE THE ACCURACY OF YOUR MARKET RETURN ON EQUITY ESTIMATE FOR KCPL?

A Yes. As shown on my Schedule MPG-2, I compared my estimated return on equity for KCPL in this case to the industry average authorized return on equity for electric utility companies over the last five years. I also reviewed the credit rating history, and stock investment returns for the industry over that same period. Industry authorized

returns on equity have averaged approximately 10.5% over the last 6 years, and approximately 10.3% from 2006 to date.

These authorized returns on equity have supported improvement to the investment grade credit rating of the electric utility industry and have resulted in robust stock price performance over this time period. Indeed, electric utility stock price performance has consistently outperformed the overall market during this time period. This market evidence indicates that commission-authorized returns on equity in the range of approximately 10.3% to 10.5% have supported stock prices and investment grade credit ratings of utility companies. This is evidence that a return of 10.30% for KCPL will support its financial integrity and access to capital.

Q PLEASE DESCRIBE THE EVIDENCE THAT THE INDUSTRY'S AUTHORIZED RETURNS ON EQUITY HAVE SUPPORTED UTILITIES' FINANCIAL INTEGRITY AND ACCESS TO CAPITAL.

A In its Q3 2008 "Credit Ratings," the Edison Electric Institute (EEI), an electric utility industry trade organization, provided an assessment of the credit rating history of U.S. electric utilities over the period 2002 through the third quarter 2008. EEI's commentary included the following:

> **COMMENTARY**
> Ratings changes were minimal in Q3 for a third straight quarter. The 14 actions (upgrades plus downgrades) were the third lowest quarterly total on record since EEI began gathering data in Q1 2001 (Q2 2008's nine actions were the lowest).
>
> Industry credit quality rose slightly, with nine upgrades and five downgrades, although five of the upgrades related to one company. This follows a modest decline in credit quality during the first half of 2008, leaving 23 downgrades outnumbering 18 upgrades through the first nine months of the year. Credit quality improved steadily over the previous three years, with upgrades outnumbering downgrades in 10 of the 12 quarters prior to Q1 2008.

> The quarter's upgrades centered on prospects for effective management of capital spending programs and an improved regulatory environment in Illinois. Downgrades related primarily to the non-utility side of the business. Ratings outlooks at quarter-end were mostly negative, a trend in place throughout 2008 and for most of 2007.
>
> Although it has not yet impacted ratings actions or individual company outlooks, the severity of the credit crisis that erupted in early October is a concern given the industry's rising capital spending and associated capital needs. Despite this recent market turmoil, the volume of rating actions remained low in October (through 10/24).[1]

Further, Moody's also acknowledges the following for the electric utility industry in its report. Moody's states:

> **Overview**
> The U.S. investor-owned electric utility sector enjoys solid credit metrics and the fundamental credit outlook remains stable. In general, state regulators continue to let the utilities recover prudently incurred operating costs and capital expenditures relatively quickly, and with reasonable rates of return. Moreover, we believe state regulators would otherwise prefer to regulate financially healthy companies.
>
> The sector is also well positioned relative to many other corporate/industrial sectors, primarily due to the fundamental business plan: providing monopolistic electric service within a designated service territory in exchange for oversight and limitations on profitability. However, we are increasingly concerned with business and operating risks, which are not new but appear to be accelerating faster than previously understood. These business and operating risks include potential environmental legislation from the Obama Administration; the continued capital investment needs for refurbishing aging infrastructure; and a potentially more contentious regulatory relationship amid a protracted or severe recession.[2]

Similarly, Fitch states:

> The utilities segment is not immune to the economic challenges facing corporate America, but is relatively well positioned. Providing essential services and largely regulated, utilities benefit from investor perceptions as a defensive group. For the most part, electric utilities reduced debt and focused on improving their core business over the past four years. Consequently, while many industries and companies have recently been shut out of the capital markets, stronger utilities have accessed both secured and unsecured markets. However,

[1] "Q3 2008 Credit Ratings," EEI Q3 2008 *Financial Update*, emphasis added.

[2] Moody's Investors Service Industry Outlook: "U.S. Investor-Owned Electric Utilities," January 2009, emphasis added.

investor "flight to quality" is selective within the sector, favoring companies at higher rating levels, with a marked preference for secured debt and lending at the operating, rather than parent, company.

* * *

Key Drivers of the 2009 Outlook
The positive and negative factors driving Fitch's outlook in 2009 include:

Positives

- Continued capital market access in a difficult financing environment, particularly for higher-rated regulated utilities and pipelines.
- The decline in commodity prices from record peak levels will ease cost pressures for materials and labor.
- Lower market prices for natural gas and electric power will be neutral to beneficial to electric and gas distribution utilities, and in many cases will reduce working capital needs and cash collateral postings on hedging activities.

Negatives

- Higher marginal cost of debt.
- Depressed equity valuations.
- Liquidity and market access to remain fragile.
- Administration change creates uncertainty about national environmental and tax and dividend policies.
- More stringent implementation of environmental regulations.
- Reduced electricity and gas consumption.
- Lower prices for natural gas and wholesale power, resulting in reduced spark spreads and dark spreads for un-hedged competitive power generators.
- Investor-owned and public power utilities may face resistance from regulators and consumers to rate increases in a recessionary environment.[3]

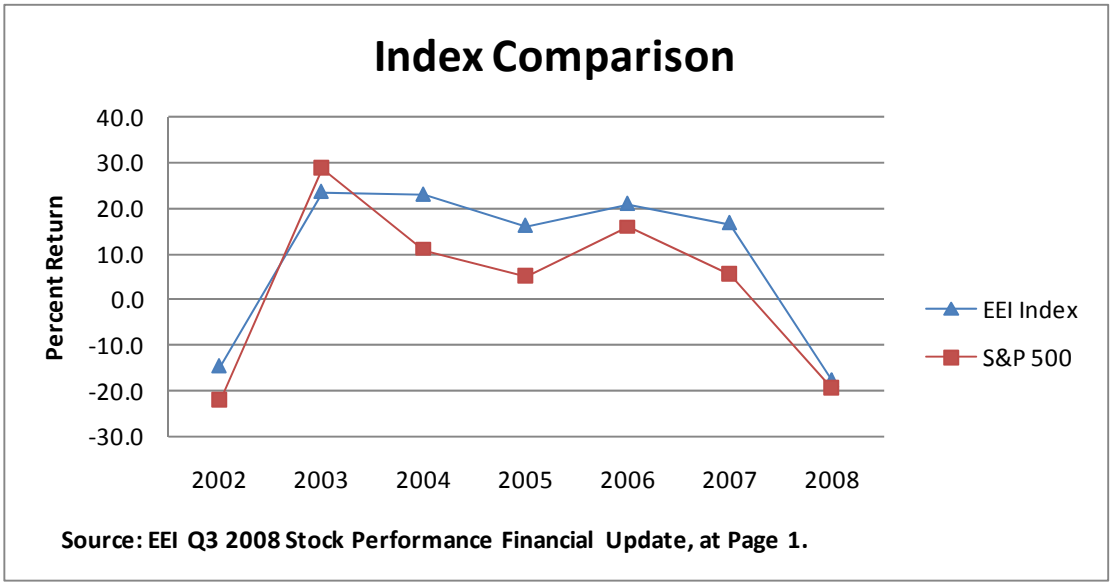
As noted by EEI, Moody's and Fitch above, the regulated electric utility industry is maintaining strong investment grade credit, and is well positioned to weather the current economic downturn. Therefore, reasoned and rational adjustments to KCPL's rates would be appropriate to provide fair compensation, but

[3] Fitch Ratings: "U.S. Utilities, Power and Gas 2009 Outlook," December 22, 2008, emphasis added.

not excessive compensation, in an effort to improve KCPL's competitive position, strengthen its credit, and support its distressed service territory.

Q IS THERE EVIDENCE THAT ELECTRIC UTILITY STOCK PRICE PERFORMANCE HAS BEEN STRONG OVER THE LAST FIVE YEARS?

A Yes. As shown in the graph below, EEI has recorded electric utility stock price performance compared to the market. The EEI data shows that its Electric Utility Stock Index has outperformed the market in every year over the last five years. Again, this strong stock performance indicates commission-authorized returns on equity over the last several years have been positively received by the market.



Source: EEI Q3 2008 Stock Performance Financial Update, at Page 1.

As shown in the graph above, the EEI Electric Utility Index has outperformed the market since 2003.

Q FOR 2008, THE ELECTRIC UTILITY STOCK AND THE OVERALL MARKET PRICE PERFORMANCE HAS BEEN SIGNIFICANTLY NEGATIVE. DOES THIS TIME PERIOD ALSO SUPPORT YOUR CONTENTION THAT REGULATED ELECTRIC UTILITY STOCK PERFORMANCE HAS BEEN STRONG RELATIVE TO THE MARKET?

A Yes. While clearly the market performance for all securities has been dismal throughout 2008, the only positive signal from the market performance is the fact that electric utility stocks and bonds have continued to be perceived by the market as "safe" investments. Indeed, during times of market duress, the market generally exhibits a "flight to quality" and lower-risk securities generally perform better than the overall market and higher-risk securities. This has happened through the first three quarters of 2008. For example, EEI noted the following concerning electric utility stock performance in 2008:

> **COMMENTARY**
> The second quarter's surge in energy-related stocks and commodities sharply reversed in the third quarter, and the EEI Index posted a -14.3% total return – strongly underperforming the Dow Jones Industrials' -3.7% return and the S&P 500's -8.4% return (see Table VIII).
>
> The third quarter's weakness was most evident in the Mostly Regulated and Diversified categories, which returned -13.9% and -15.5%, respectively, on a non-capitalization weighted basis (an average of constituent company returns).
>
> By contrast, the Regulated group offered something of a safe harbor with a -0.3% return. Given their dependable dividend yields and slow but steady growth, regulated utilities are often viewed as a safe haven investment in times of market turmoil – a status that certainly benefitted the category during the third quarter.[4]

This stock price performance again supports the notion that regulated electric utilities are perceived by the market as safe haven investments, which will help

[4] "Q3 2008 Stock Performance," EEI Q3 2008 *Financial Update*, emphasis added.

support their access to capital during difficult financial times. This is clearly evident through a review of their stable credit outlook and stable stock prices, relative to the securities of non-regulated companies.

KCPL RISK FACTORS

Q PLEASE PROVIDE AN OVERVIEW OF KCPL'S INVESTMENT RISK.

A KCPL has a Standard & Poor's (S&P) corporate and senior secured credit rating of "BBB." S&P assigned the Company an "Excellent" business risk position rating and an "Aggressive" financial risk position rating. These ratings represent normal financial and operating risk for an integrated electric utility.

S&P concludes that KCPL's credit risk is affected by the greater risk of its parent company, Great Plains Energy Inc. (GPE). KCPL's credit outlook was positively impacted when GPE divested its non-regulated affiliates and focused on its regulated business.

S&P stated as follows:

> The ratings on Kansas City Power and Light Co. (KCP&L) reflect parent Great Plains Energy Inc.'s consolidated credit profile. In addition, Great Plains owns regulated Aquila Inc., which was acquired in July 2008. The ratings also reflect KCP&L's excellent business profile and Great Plains' aggressive financial profile. (The business profile is ranked as excellent, strong, satisfactory, weak, or vulnerable, and the financial profile is ranked as modest, intermediate, aggressive, or highly leveraged.) Kansas City-based Great Plains Energy has about $2.8 billion of debt outstanding.
>
> * * *
>
> In most circumstances, Standard & Poor's will not rate a wholly owned subsidiary higher than the parent. Exceptions can be made on the basis of structural or regulatory insulation, which in the case of KCP&L, in our view, is not present. Therefore, regardless of the excellent business profile and relatively healthy financial condition of KCP&L as a stand-alone basis, Standard & Poor's views the rating on KCP&L to

be affected by Great Plains' other, and financially weaker, regulated utility business.

* * *

The excellent business profile reflects management's growth strategy of increasing its investments in regulated electric assets. This includes the acquisition of regulated assets (Aquila), the building of regulated assets (comprehensive energy plan), and the sale of non-core, unregulated assets (Strategic Energy). In June 2008, Great Plains completed the sale of Strategic Energy, which had exposed Great Plains to counterparty credit, market, customer demand, and weather-related risks. Removing these risks enhanced the company's business profile.[5]

KCPL's corporate and senior secured credit ratings from Moody's are "A3" and "A2," respectively. Moody's stated the following:

Rating Rationale
KCPL's A3 long-term senior unsecured rating considers the company's demonstrated ability to achieve good levels of cash flow from its regulated operations and the challenging yet generally supportive regulatory environments in Missouri and Kansas which should enable KCPL to continue to recover capital invested, and earn a return on that capital at a level adequate to maintain its solid investment-grade credit profile. The rating also reflects the increased environmental expenditures and large capital expansion program at KCPL which will likely reduce financial flexibility in the near-term, less? reliance on the wholesale power market for a sizeable portion of its revenues, and the potential for increased dividend pressure from its parent company, Great Plains Energy.

We note there is a two notch differential between KCPL (A3) and GP (Baa2). The notching primarily reflects GP's structural subordination to the cash flows of its subsidiaries, and the higher leverage at the newly acquired operations at Aquila which are guaranteed by GP. We note as well the increased reliance that Great Plains will have on KCPL for up-streamed cash dividends as it tries to maintain its own consolidated financial profile as it absorbs Aquila. While KCPL's credit metrics are not expected to be initially affected by the Aquila transaction, the outlook is also negative given our expectation for relative weakness in key credit metrics due to the large capital spending program at the utility.[6]

[5] Standard & Poor's RatingsDirect: "Kansas City Power & Light Co.," September 19, 2008, emphasis added.

[6] Moody's Investors Service Credit Opinion: "Kansas City Power & Light Company," July 16, 2008, emphasis added.

KCPL'S PROPOSED CAPITAL STRUCTURE

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

A KCPL's proposed capital structure, as supported by Dr. Samuel Hadaway, is shown below in Table 1.

TABLE 1

KCPL's Requested Capital Structure
(Projected March 31, 2009)

Description	Percent of Total Capital
Debt	45.47%
Preferred Stock	0.71%
Common Equity	53.82%
Total Regulatory Capital Structure	100.00%

Source: Hadaway Direct at 5.

Q DO YOU HAVE ANY CONCERNS WITH THE COMPANY'S PROPOSED CAPITAL STRUCTURE?

A Yes. KCPL's proposed capital structure is heavily weighted with common equity and therefore inflates its claimed revenue deficiency in this proceeding. Further, the proposed capital structure is based on its parent company GPE's capital structure rather the utility's stand-alone capital structure.

If this capital structure is used to set rates, the Commission should recognize the abnormally high common equity ratio, which reduces its financial risk. The Commission should therefore reduce the authorized return on equity to reflect this reduced financial risk for this capital structure. Further, the capital structure reflects

significant planned equity additions that have not yet been made, and may not be made through the end of the true-up period. As such, a conservative measure if the Commission approves this capital structure would be to recognize the reduced financial risk created by this equity thick capital structure and award KCPL a lower return on equity.

Q DO YOU HAVE ANY OTHER CONCERNS WITH THE PROPOSED CAPITAL STRUCTURE?

A Yes. The capital structure is in direct conflict with the commitments KCPL made in its regulatory plan. In order to support an investment grade bond rating through the construction of the Iatan 2 project, KCPL's regulatory plan targeted a total debt ratio of 51%. In significant contrast, KCPL's proposed capital structure contains a debt ratio of only 45.47%. This equates to a total debt ratio of 46.91%, when off-balance-sheet debt equivalents and short-term debt are included, as shown on Highly Confidential Schedule MPG-3. KCPL's proposed capital structure contains far more equity than it anticipated in its regulatory plan. This inflated equity capital structure unnecessarily increases KCPL's revenue requirements and its rates in this proceeding.

Q WHY DO YOU BELIEVE KCPL'S PROPOSED CAPITAL STRUCTURE INCLUDES SIGNIFICANT AMOUNTS OF PLANNED EQUITY ISSUANCES THAT ARE NOT LIKELY TO BE MADE IN THE TEST YEAR?

A As outlined at page 6, KCPL witness Dr. Hadaway developed the Company's proposed capital structure by including significant planned equity issuance proceeds between the historical test year of December 31, 2007, and the forecasted test year

of March 31, 2009. That equity issuance has not been made through end of calendar year 2008, and given the current state of the capital market is unlikely to be made before March 31, 2009.

Q WHY DO YOU BELIEVE THAT THE PROPOSED CAPITAL STRUCTURE IS INCONSISTENT WITH THE FINANCIAL OBJECTIVES OUTLINED IN KCPL'S REGULATORY PLAN?

A As part of its regulatory plan in support of its investment grade credit rating during the construction of the Iatan 2 project, KCPL agreed to certain financial benchmarks that would help support its investment grade bond rating and cash flows during construction of the Iatan 2 coal-fired plant. One of those financial benchmarks was targeted to maintain a total debt to total capitalization ratio of 51%.

Many stakeholders agreed to these targets, in an effort to limit customers' cost to support KCPL's credit rating while it constructs the Iatan 2 project. The Company's proposed capital structure is directly contrary to these financial commitments. KCPL's financing decisions should be held to the terms of the regulatory plan.

Q WHY WOULD A CAPITAL STRUCTURE TOO HEAVILY WEIGHTED WITH COMMON EQUITY UNNECESSARILY INCREASE KCPL'S COST OF SERVICE IN THIS PROCEEDING?

A A capital structure too heavily weighted with common equity unnecessarily increases KCPL's claimed revenue deficiency, because common equity is the most expensive form of capital and is subject to income tax expense. For example, if KCPL's authorized return on equity is set at 10.30%, the revenue requirement cost to customers would be approximately 16.5%, or 10.30% adjusted by a tax revenue

conversion factor of approximately 1.6x. In contrast, the cost of debt capital is not subject to an income tax expense. KCPL's current marginal cost of debt is around 7.50%. As such, common equity is more than twice as expensive on a revenue requirement basis than is debt capital.

Of course, a reasonable mix of debt and equity is necessary in order to balance KCPL's financial risk, support an investment grade credit rating, and permit KCPL access to capital under reasonable terms and prices. However, a capital structure too heavily weighted with common equity will unnecessarily increase its cost of capital and revenue requirement.

RETURN ON COMMON EQUITY

Q PLEASE DESCRIBE WHAT IS MEANT BY A "UTILITY'S COST OF COMMON EQUITY."

A A utility's cost of common equity is the return investors expect, or require, in order to make an investment. Investors expect to achieve their return requirement from receiving dividends and stock price appreciation.

Q PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED UTILITY'S COST OF COMMON EQUITY.

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

These decisions identify the general standards to be considered in establishing the cost of common equity for a public utility. Those general standards

provide that the authorized return should: (1) be sufficient to maintain financial integrity; (2) attract capital under reasonable terms; and (3) be commensurate with returns investors could earn by investing in other enterprises of comparable risk.

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

A I have used several models based on financial theory to estimate KCPL's cost of common equity. These models are: (1) a constant growth Discounted Cash Flow (DCF) model; (2) a two-stage growth DCF model; (3) a multi-stage growth DCF model; (4) a Risk Premium model; and (5) a Capital Asset Pricing Model (CAPM). I have applied these models to a group of publicly traded utilities that I have determined reflect investment risk similar to KCPL.

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

A I relied on the same proxy group used by KCPL witness Dr. Hadaway to estimate KCPL's return on equity.

Q HOW DOES THE PROXY GROUP USED BY DR. HADAWAY COMPARE TO THE INVESTMENT RISK OF KCPL?

A The proxy group is shown on Schedule MPG-4. This proxy group has an average senior secured credit rating from S&P of "BBB+," which is a notch higher than KCPL's senior secured credit rating of "BBB." This proxy group's senior secured credit rating from Moody's is "A3," which is a notch lower than KCPL's senior secured credit rating

from Moody's of "A2." As such, my proxy group has comparable total investment risk to KCPL.

The proxy group has an average common equity ratio of 44.5% (including short-term debt) from AUS and 49.9% (excluding short-term debt) from *Value Line*. This proxy group's common equity ratio is comparable to my proposed common equity ratio for KCPL of 53.82% (excluding short-term debt). Hence, KCPL has lower financial risk compared to the proxy group.

The EEI operating designation for most of the companies in the proxy group is "Regulated" or "Mostly Regulated." The average for all the companies is "Regulated," which indicates comparable operating risk to that of KCPL.

Q PLEASE DESCRIBE EEI'S BUSINESS RISK ASSESSMENT OF ELECTRIC UTILITY COMPANIES.

A EEI rates publicly traded companies based on their relative exposure to regulated and non-regulated operating risk. It uses three categories: "Regulated," "Mostly Regulated" and "Diversified." EEI rates companies that have 80% or more of total assets in regulated operations and designates them as "Regulated" entities. "Mostly Regulated" entities are those companies that have 50% to 80% of total assets in regulated operations. Finally, EEI rates companies with less than 50% of assets in regulated enterprises as "Diversified" companies.[7]

[7] "Q3 2008 Stock Performance," EEI Q3 2008 *Financial Update*.

Discounted Cash Flow Model

Q PLEASE DESCRIBE THE DCF MODEL.

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

$$Po = \frac{D1}{(1+K)1} + \frac{D2}{(1+K)2} \ldots \frac{D\infty}{(1+K)\infty} \quad \text{where} \qquad \text{(Equation 1)}$$

Po= Current stock price

D = Dividends in periods 1 - ∞

K = Investor's required return

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

$$K = D1/Po + G \qquad \text{(Equation 2)}$$

K = Investor's required return

D1 = Dividend in first year

Po = Current stock price

G = Expected constant dividend growth rate

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

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

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

Q WHAT STOCK PRICE AND DIVIDEND HAVE YOU RELIED ON IN YOUR CONSTANT GROWTH DCF MODEL?

A I relied on the average of the weekly high and low stock prices over a 13-week period ended January 16, 2009. An average stock price is less susceptible to market price variations than is a spot price. Therefore, an average stock price is less susceptible to aberrant market price movements, which may not be reflective of the stock's long-term value.

A 13-week average stock price is short enough to contain data that reasonably reflects current market expectations, but is not so short a period as to be susceptible to market price variations that may not be reflective of the security's long-term value. Therefore, in my judgment, a 13-week average stock price is a reasonable balance between the need to reflect current market expectations and the need to capture sufficient data to smooth out aberrant market movements.

I used the most recently paid quarterly dividend, as reported in *The Value Line Investment Survey*. This dividend was annualized (multiplied by 4) and adjusted for next year's growth to produce the D1 factor for use in Equation 2 above.

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

A There are several methods one can use in order to estimate the expected growth in dividends. However, for purposes of determining the market required return on common equity, one must attempt to estimate investors' consensus about what the dividend or earnings growth rate will be, and not what an individual investor or analyst may use to form individual investment decisions.

Security analysts' growth estimates have been shown to be more accurate predictors of future returns than growth rates derived from historical data because they are more reliable estimates.[8] Assuming the market generally makes rational investment decisions, analysts' growth projections are more likely the growth estimates considered by the market that influence observable stock prices than are growth rates derived from only historical data.

For my constant growth DCF analysis, I have relied on a consensus, or mean, of professional security analysts' earnings growth estimates as a proxy for the investor consensus dividend growth rate expectations. I used the average of two sources of analysts' growth rate estimates: Zacks and SNL Financial. All consensus analysts' projections used were available on January 19, 2009, as reported on-line.

Each consensus growth rate projection is based on a survey of security analysts. The consensus estimate is a simple arithmetic average, or mean, of surveyed analysts' earnings growth forecasts. A simple average of the growth forecasts gives equal weight to all surveyed analysts' projections. It is problematic as to whether any particular analyst's forecast is most representative of general market expectations. Therefore, a simple average, or arithmetic mean, of analyst forecasts is a good proxy for market consensus expectations. The growth rates I used in my DCF analysis are shown on Schedule MPG-5.

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

A As shown on Schedule MPG-6, the constant growth DCF return for the proxy group is 12.02%.

[8] *See*, e.g., David Gordon, Myron Gordon, and Lawrence Gould, "Choice Among Methods of Estimating Share Yield," The Journal of Portfolio Management, Spring 1989.

Q DO YOU HAVE ANY COMMENTS CONCERNING THE RESULTS OF YOUR CONSTANT GROWTH DCF ANALYSIS?

A Yes. The constant growth DCF return is not reasonable and represents an inflated return for KCPL at this time. The average three- to five-year growth rate for the proxy group is 6.60% (shown on Schedule MPG-6). This growth rate is far too high to be a rational estimate of the proxy group's long-term sustainable growth. Because the current three- to five-year growth rate is too high to be a reasonable long-term sustainable growth rate estimate, the constant growth DCF model is currently producing an inflated DCF return and should not be used in the calculation of KCPL's return on equity.

Q WHY DO YOU BELIEVE THE PROXY GROUP'S THREE- TO FIVE-YEAR GROWTH RATE IS IN EXCESS OF A RATIONAL ESTIMATE OF LONG-TERM SUSTAINABLE GROWTH?

A The three- to five-year growth rate of the proxy group exceeds the growth rate of the overall U.S. economy. As developed below, the consensus of published economists projects that the U.S. GDP will grow at a rate of no more than 5.0% over the next 10 years. A company cannot grow, indefinitely, at a faster rate than the market in which it sells its products. The U.S. economy, or GDP, growth projection represents a ceiling, or high-end, sustainable growth rate for a utility over an indefinite period of time.

Q WHY IS THE GDP GROWTH PROJECTION CONSIDERED A CEILING GROWTH RATE FOR A UTILITY?

A Utilities cannot indefinitely sustain a growth rate that exceeds the growth rate of the overall economy. Utilities' earnings/dividend growth is created by increased utility investment or rate base. Utility plant investment, in turn, is driven by service area economic growth and demand for utility service. In other words, utilities invest in plant to meet sales demand growth, and sales growth in turn is tied to economic growth in their service areas. The Energy Information Administration (EIA) has observed that utility sales growth is less than U.S. economic growth, as shown on Schedule MPG-7. Utility sales growth has lagged the GDP growth. Hence, nominal GDP growth is a very conservative, albeit overstated, proxy for electric utility sales growth, rate base growth, and earnings growth. Therefore, GDP growth is a reasonable proxy for the highest sustainable long-term growth rate of a utility.

Q HOW DO THE PROXY GROUP'S HISTORIC GROWTH RATES COMPARE TO HISTORICAL NOMINAL GDP GROWTH RATES?

A As shown on Schedule MPG-8, the historical growth of the proxy group's dividend (columns 1 & 2) is lower than the historical nominal GDP growth (columns 7 and 8). Over the last five and ten years, my proxy group's dividend growth was lower than the inflation growth (columns 4 and 5).

Value Line projections indicate that dividend growth will be similar to the projected nominal GDP growth over the next three to five years.

This historical perspective confirms the robust outlook for earnings growth over the next three to five years, and supports my contention that current three- to

five-year earnings growth projections are not reasonable estimates of sustainable long-term growth.

While history may not provide all information needed to form forward expectations, this historical relationship strongly supports the contention that forward-looking utility earnings growth will not exceed nominal GDP growth for a sustained long-term period and the actual growth will likely trail nominal GDP growth over long-term periods.

Q IS THERE RESEARCH THAT SUPPORTS YOUR CONTENTION THAT OVER THE LONG TERM, A COMPANY'S EARNINGS AND DIVIDENDS CANNOT GROW AT A RATE GREATER THAN THE GROWTH OF THE U.S. GDP?

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

> The constant growth model is most appropriate for mature companies with a stable history of growth and stable future expectations. 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).[9]

Also, Morningstar's Stocks, Bonds, Bills and Inflation 2008 Yearbook Valuation Edition tracked dividends of the stock market in comparison to GDP growth over the period 1926 through the end of 2007.[10] Based on that study, the authors found that earnings and dividends for the market have historically grown in tandem with the overall economy. It is important to note that the growth of companies

[9] "Fundamentals of Financial Management," Eugene F. Grigham and Joel F. Houston, Eleventh Edition 2007, Thomson South-Western, a Division of Thomson Corporation at 298.

[10] *Stocks, Bonds, Bills and Inflation 2008 Yearbook Valuation Edition* (Morningstar, Inc.) at 92-93.

included in the overall market will normally be higher than that of utility companies. These non-utility companies achieve a higher level of growth because they retain a larger percentage of their earnings and pay out a much smaller percentage of their earnings as dividends. Retaining higher percentages of total earnings fuels stronger growth for these non-utility companies. Since the market in general grows at the overall GDP growth rate, it is very conservative to assume that utility companies could achieve this same level of sustained growth without a material reduction in their dividend payout ratios. As such, using the GDP as a maximum sustainable growth rate is a very conservative and high-end estimate for utility companies.

Q IS THERE A WAY OF TESTING WHETHER IT IS RATIONAL TO EXPECT THAT THE ANALYSTS' THREE- TO FIVE-YEAR EARNINGS GROWTH OUTLOOKS ARE A REASONABLE ESTIMATE OF SUSTAINABLE LONG-TERM GROWTH?

A Yes. This can be gauged using an internal growth rate calculation for the companies included in the proxy group using *Value Line*'s three- to five-year earnings and dividends projections, and estimated earned return on equity. An internal growth rate methodology estimates the sustainable growth rate based on the percentage of the utility's earnings that are retained in the company and reinvested in utility plant and equipment. These reinvested earnings then increase the earnings base, and will increase the earned return on equity as those additional earnings are put into service and the company is allowed to earn its authorized return on the additional investment.

The internal growth methodology is tied to the percentage of earnings retained in the Company and not paid out as dividends. The earnings retention ratio is 1 minus the dividend payout ratio. As the payout ratio declines, the earnings retention ratio increases. An increased earnings retention ratio will fuel stronger growth

because the business funds more investments with retained earnings. As shown on Schedule MPG-9, *Value Line* projects the proxy group to have a declining dividend payout ratio over the next three to five years. These dividend payout ratios and earnings retention ratios can then be used to develop a sustainable long-term earnings retention growth rate to help gauge whether or not analysts' current three- to five-year growth rate projections can be sustained over an indefinite period of time.

As shown on Schedule MPG-10, the average sustainable growth rate for the proxy group using this internal growth rate model is approximately 4.30%.

Using the proxy group average growth rate of 6.60%, and a three- to five-year projected dividend payout ratio of 60.15%, would require an earned return on book equity of 16.56% to support a long-term sustainable growth rate of 6.60%. In comparison, *Value Line* is projecting a group average return on book equity of 10.61%. Again, this information supports my conclusion that current analysts' three- to five-year earnings growth projections are not sustainable, and will decline over time.

Q COULD YOU CONSTRUCT A CONSTANT GROWTH DCF STUDY USING YOUR SUSTAINABLE GROWTH RATE OF 4.30%?

A Yes. However, the sustainable growth rate does not reflect the expectation that analysts and investors anticipate exceptionally high growth over the next three to five years. However, the sustainable growth rate in combination with three- to five-year analysts' growth rate expectations, can be used to proxy a long-term sustainable growth rate estimate that reflects exceptionally high growth over the next three to five years.

As such, using a composite weight of the analysts' growth rate estimates, and the sustainable growth rate can be used to develop a sustainable long-term growth rate for use in a constant growth model. I develop this modified growth rate by applying two-thirds weight to the analysts' growth rate estimates, and one-third weight to this sustainable growth rate. This constant growth DCF study is shown on my Schedule MPG-11. As shown on that schedule, using a modified estimate of long-term sustainable growth in this version of the constant growth DCF study, produces a constant growth DCF result of 11.25%.

Q HAVE YOU CONDUCTED ANY OTHER DCF STUDIES?

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

Two-Stage Growth DCF Model

Q PLEASE DESCRIBE YOUR TWO-STAGE GROWTH DCF MODEL.

A The two-stage growth DCF model reflects the possibility of non-constant growth for a company over time. The two-stage growth model reflects two growth periods: (1) a short-term growth period, which consists of the first five years; and (2) a long-term growth period, which consists of each year starting in year six through perpetuity. For the short-term growth period, I relied on the consensus analysts' growth projections

described above in relationship to my constant growth DCF model. For the long-term growth period, I assumed each company's growth would converge on the maximum sustainable growth rate for a utility company as proxied by the consensus analysts' projected growth for the U.S. GDP.

Q WHAT DO YOU BELIEVE IS A REASONABLE SUSTAINABLE LONG-TERM GROWTH RATE?

A A reasonable growth rate that can be sustained in the long run should be based on consensus analysts' projections. *The Blue Chip Economic Indicators* publishes consensus gross domestic product (GDP) growth projections twice a year. Based on its latest issue, the consensus economists' published five- to ten-year GDP growth rate outlook is 5.0% to 4.8%.[11]

Q HAVE YOU CONSIDERED OTHER ESTIMATES OF LONG-TERM SUSTAINABLE GROWTH RATE?

A Yes. In the recent AmerenUE order (ER-2008-0318), the MPSC stated a preference for Morningstar's GDP growth projection. However, Morningstar does not project a specific GDP growth rate. Rather, it proposes a methodology to derive an expected GDP growth using historical data, and the Treasury bond market data.

I relied on Morningstar's methodology to derive a GDP forecast on my Schedule MPG-12. On that schedule, based on Morningstar's methodology, I derived an inflation rate projection using contemporary 20-year Treasury Inflation-Protected Securities (TIPS) and 20-year Treasury bond yields over the 13-week period ending January 16, 2009. This produced a 20-year inflation outlook of 1.08%. Then,

[11] *Blue Chip Economic Indicators*, October 10, 2008 at 15.

consistent with Morningstar's methodology, I combined this 20-year inflation projection with the historical real GDP growth rate of 3.47%, that was realized over the period 1929-2008 using Morningstar's methodology and current market data, which produced a 20-year GDP growth rate outlook of 4.55%.

Q WHAT GDP GROWTH RATE DO YOU PROPOSE TO USE AS A SUSTAINABLE LONG-TERM GROWTH RATE IN YOUR DCF ANALYSES?

A I propose to use the consensus economists' projected five- and ten-year GDP consensus growth rate of 4.9%. This consensus GDP growth forecast represents the most likely views of market participants, because it is based on published economist projections. Further, considering the current market environment, the consensus GDP projections provides a conservative proxy of sustainable long-term growth. Therefore, in my two-stage and multi-stage DCF analyses, I will rely on the consensus GDP growth rate of 4.9% as published by the *Blue Chip Economic Indicators* as an estimate of sustainable long-term growth.

Q WHAT STOCK PRICE, DIVIDEND AND GROWTH RATES DID YOU USE IN YOUR TWO-STAGE GROWTH DCF ANALYSIS?

A I relied on the same 13-week stock price and the most recent quarterly dividend payment discussed above. For stage one growth, I used the consensus analysts' growth rate projections discussed above in my constant growth DCF model. For the long-term sustainable growth rate starting in year six, I used 4.9%, the average of the consensus economists' five- to ten-year projected nominal GDP growth rate (4.8% to 5.0%).

Q WHAT ARE THE RESULTS OF YOUR TWO-STAGE GROWTH DCF MODEL?

A As shown on Schedule MPG-13, the two-stage growth DCF return on equity result for the proxy group is 10.59%.

Multi-Stage Growth DCF Model

Q PLEASE DESCRIBE YOUR MULTI-STAGE GROWTH DCF MODEL.

A Similar to the two-stage growth DCF, the multi-stage growth DCF model reflects the possibility of non-constant growth for a company over time. The multi-stage growth DCF model reflects three growth periods: (1) a short-term growth period, which consists of the first five years; (2) a transition period, which consists of the next five years (6 through 10); and (3) a long-term growth period, which consists of each year starting in year 11 through perpetuity. This multi-stage growth DCF model differs from the two-stage growth model by allowing for a longer period of abnormally high growth and a more gradual decline from the abnormally high short-term growth rate to a lower long-term sustainable growth rate.

For the short-term growth period, I relied on the consensus analysts' growth projections described above in relationship to my constant growth DCF model. For the transition period the growth rates were reduced or increased by an equal factor, which reflects the difference between the analysts' growth rates and the GDP growth rate. For the long-term growth period, I assumed each company's growth would converge to the maximum sustainable growth rate for a utility company as proxied by the consensus analysts' projected growth for the U.S. GDP of 4.9%.

Q WHAT STOCK PRICE AND DIVIDEND DID YOU USE IN YOUR MULTI-STAGE GROWTH DCF ANALYSIS?

A I relied on the same 13-week average stock price as used in my constant growth DCF model, and the most recent annualized quarterly dividend payment.

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

A As shown on Schedule MPG-14, the multi-stage growth DCF return on equity for the proxy group is 10.75%.

DCF Quarterly Compounding Adjustment

Q HAVE YOU INCLUDED A QUARTERLY COMPOUNDING ADJUSTMENT TO YOUR DCF RESULTS DESCRIBED ABOVE?

A No. In the Empire District Order ER-2008-093, and the recent AmerenUE Order ER-2008-0318, the Commission included a 5 basis point adjustment to the DCF return estimates to reflect quarterly compounding. If the Commission chooses to include that 5 basis point adjustment again in this case, then it should add it to the results of my DCF studies shown in Table 2 below.

Q DO YOU BELIEVE IT IS APPROPRIATE TO INCREASE YOUR DCF RETURN ESTIMATE FOR A 5 BASIS POINT QUARTERLY COMPOUNDING ADJUSTMENT?

A No. Including the quarterly compounding adjustment to KCPL's authorized return on equity is inappropriate. By including a quarterly compounding adjustment to a DCF return estimate, shareholders will be permitted to earn the dividend reinvestment return twice: (1) through the authorized return on equity, and (2) through actual

receipt of dividends and the reinvestment of those dividends throughout the year. This double counting of the dividend reinvestment return is not just and reasonable, and will unjustly inflate KCPL's retail price.

Q PLEASE EXPLAIN WHY THE QUARTERLY COMPOUNDING RETURN SHOULD NOT BE INCLUDED IN KCPL'S AUTHORIZED RETURN ON EQUITY.

A Simply put, the quarterly compounding component of the return is not a cost to the utility. Only the utility's cost of common equity capital should be included in the authorized return on equity.

This issue surrounds whether or not the DCF return estimate should include the expectations by investors that they will receive cash flows within the year, that can be reinvested in other investments of comparable risk, and thus the cash flows will produce compounded returns throughout the year. The relevant issue for setting rates is whether or not that reinvestment return is a cost to the utility. It is not!

I believe the reinvestment return is not a cost to the utility and should therefore not be included in the authorized return on equity. I believe while it is reasonable for investors to expect to have the opportunity to earn the compounded return produced by cash flows received within the year, the compound return is not paid to investors by the utility.

Q CAN YOU PROVIDE AN EXAMPLE OF WHY THE COMPOUNDING RETURN ESTIMATE IS NOT A COST TO THE UTILITY?

A Yes. I will provide two examples to help illustrate this point. First, the compounding issue is also relevant in estimating the cost to the utility of an outstanding utility bond. Most utility bonds pay a coupon every six months. The utility annual cost paid to the

bond investor is the sum of the two semi-annual coupon payments. However, a bond investor expects to receive the semi-annual coupon payments from the utility, but also has an opportunity to reinvest the first coupon payment for the remaining six months of the year to enhance his end-of-year return. This compound return component is, however, not a cost to the utility because the utility does not pay the extra return.

For example, assume KCPL has an outstanding bond with a face value of $1,000, at an interest rate of 6% which is paid in two semi-annual $30 coupon payments. KCPL's cost of this bond is 6%. This 6% cost to KCPL is based on a $30 coupon payment paid in month 6 and month 12 for an annual payment of $60 relative to the $1,000 face value of the bond. However, the bond investor would have an annual expected return on this bond of 6.1%. This annual expected return would be realized by receiving the first $30 semi-annual coupon payment from KCPL and reinvesting it for the remaining six months of the year. This would produce $0.89 of semi-annual compounding return ($30 x $[(1.06)^{½} - 1]$). Hence, the bond investor would receive $60 from KCPL, and $0.89 from investing the first coupon for a total annual return of 6.09%, or 6.1%.

Importantly, if KCPL were to recover a 6.1% cost of this bond in its cost of service, and paid that return out to the bond investor, then the bond investor would receive $60.89 from KCPL, rather than the $60.00 actual cost, but the bond investor could still reinvest the semi-annual coupon, now $30.89 for the remaining 6 months of the year. This would provide the investor with the reinvestment return twice, once from utility ratepayers, and a second time after the semi-annual coupon payment was paid and reinvested.

Reflecting this compounding assumption in the authorized return on equity therefore will double count the reinvestment return opportunity.

Q DOES THIS EXAMPLE ALSO APPLY TO UTILITY STOCK INVESTMENTS?

A Yes. Assume now that an investor purchased KCPL stock for $100, and expects to receive four quarterly dividends of $1.50, or $6.00 per year. The expected cost to the utility of this dividend payment over the year would be $6.00, or 6.0%. However, the expected effective yield of the dividend to investors would be 6.13% because the quarterly dividends could be reinvested for the remaining term of the year. Hence, the expected end-of-year value of those four $1.50 quarterly dividend payments to the investor would be $6.13.[12] Again, the utility pays $6.00 of annual dividends. The $0.13 is not paid to investors from the utility, but is rather earned in the other investments that earn the same return, which the dividends were invested in throughout the year.

Importantly, the reinvestment return of the dividends is not paid by the utility, and therefore is not part of the utility's cost of capital. Again, if this dividend reinvestment return is included in the utility's authorized return on equity, then investors will receive the dividend reinvestment return twice, once through the authorized return on equity, and a second time when dividends are actually received by investors and reinvested.

Q PLEASE SUMMARIZE THE RESULTS FROM YOUR DCF ANALYSIS.

A The results from my DCF analysis are summarized in the table below:

[12] $1.5 \times (1.06)^{.75} + 1.5 \times (1.06)^{.5} + 1.5 \times (1.06)^{.25} + 1.5 = \$6.13$.

TABLE 2

Summary of DCF Results

Description	Proxy Group
Constant Growth DCF (Analysts' Growth)	12.02%
Constant Growth DCF (Composite Long-Term Growth)	11.25%
Two-Stage Growth DCF Model	10.59%
Multi-Stage Growth DCF Model	10.75%
Average DCF	11.15%

The average of my DCF studies is 11.15%.

Risk Premium Model

Q PLEASE DESCRIBE YOUR BOND YIELD PLUS RISK PREMIUM MODEL.

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

This risk premium model is based on two estimates of an equity risk premium. First, I estimated the difference between the required return on utility common equity investments and Treasury bonds. The difference between the required return on common equity and the bond yield is the risk premium. I estimated the risk premium on an annual basis for each year over the period 1986 through the third quarter of 2008. The common equity required returns were based on regulatory commission-

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

The second equity risk premium method is based on the difference between regulatory commission-authorized returns on common equity and contemporary "A" rated utility bond yields. This time period was selected because over the period 1986 through the third quarter of 2008, public utility stocks have consistently traded at a premium to book value. This is illustrated on Schedule MPG-15, where the market to book ratio since 1986 for the electric utility industry was consistently above 1.0. Therefore, over this time period, regulatory authorized returns were sufficient to support market prices that at least exceeded book value. This is an indication that regulatory authorized returns on common equity supported a utility's ability to issue additional common stock, without diluting existing shares. It further demonstrates that utilities were able to access equity markets without a detrimental impact on current shareholders.

Based on this analysis, as shown on Schedule MPG-16, the average indicated equity risk premium over U.S. Treasury bond yields has been 5.09%. Of the 23 observations, 17 indicated risk premiums fall in the range of 4.40% to 6.01%. Since the risk premium can vary depending upon market conditions and changing investor risk perceptions, I believe using an estimated range of risk premiums provides the best method to measure the current return on common equity using this methodology.

As shown on Schedule MPG-17, the average indicated equity risk premium over contemporary Moody's utility bond yields was 3.69% over the period 1986 through the third quarter of 2008. The equity risk premium estimates based on this analysis primarily fall in the range of 3.03% to 4.39% over this time period.

Q DO YOU BELIEVE THAT THIS RISK PREMIUM IS BASED ON A TIME PERIOD THAT IS TOO LONG OR TOO SHORT TO DRAW ACCURATE RESULTS CONCERNING CONTEMPORARY MARKET CONDITIONS?

A No. Contemporary market conditions can change dramatically during the period rates determined in this proceeding will be in effect. Therefore, relying on a relatively long period of time, where stock valuations reflect premiums to book value, is an indication that the authorized returns on equity, and the corresponding equity risk premiums were supportive of investors' return expectations, and provided utilities' access to the equity markets under reasonable terms and conditions. While market conditions and risk premiums do vary over time, this historical time period is a reasonable period to estimate contemporary risk premiums.

The time period I use in this risk premium I would also note is a generally accepted period to develop a risk premium study using this type of expectational data. For example, KCPL's own witness Dr. Hadaway develops his risk premium using the time period 1980-2007,[13] which is comparable to the time period I am proposing in this testimony. Conversely, witnesses that use an actual achieved return risk premium study would normally use very long time periods because annual actual achieved returns can vary significantly throughout the study period, and the annual returns may not reflect investors' expectations. However, taking averages over very long periods of time, it is reasonable to assume that averages of annual returns over long time periods will generally converge on the investors' expected returns.

[13] Schedule SLH-6.

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

A The equity risk premium should reflect the relative market perception of risk in the utility industry today. I have gauged investor perceptions in utility risk today on Schedule MPG-18. On that schedule, I show the yield spread between utility bonds and Treasury bonds over the last 28 years. As shown on this schedule, the 2008 utility bond yield spreads over Treasury bonds for "A" rated and "Baa" rated utility bonds are 2.23% and 2.93%, respectively. These utility bond yield spreads over Treasury bond yields are much higher than the 28-year average spreads of 1.59% and 1.96%, respectively.

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

A I added a projected long-term Treasury bond yield to my estimated equity risk premium over Treasury yields. *Blue Chip Financial Forecasts* projects the 30-year Treasury bond yield to be 4.0%, and a 10-year Treasury bond yield to be 3.5%.[14] Using the projected 30-year bond yield of 4.0%, and a Treasury bond risk premium of 4.40% to 6.01%, as developed above, produces an estimated common equity return in the range of 8.40% to 10.01%. I recommend a risk premium return above the midpoint, 9.21%, of this range to reflect the above average utility bond yield spread in this market. Therefore, using this methodology and recognizing the abnormally high yield spread, I recommend a range at this point in time based on the midpoint estimate of 9.21% and the high-end estimate of 10.01%. This produces a recommended return on equity of 9.61%.

[14] *Id*.

I next added my equity risk premium over utility bond yields to a current 13-week average yield on "Baa" rated utility bonds for the period ending January 16, 2009 of 8.44%, see Schedule MPG-19. Adding the utility equity risk premium of 3.03% to 4.39%, as developed above, to an "Baa" rated bond yield of 8.44%, produces a cost of equity in the range of 11.47% to 12.83%. I recommend the risk premium at the low end of this return estimate at this point in time. As shown on my Schedule MPG-19, utility bond yields reached very high levels during this 13-week average period. Indeed, during late October through December, utility bond yields increased dramatically over the 13-week average. More recent "Baa" utility bond yields have been in the mid to high 7% range. As shown on page 2 of Schedule MPG-19, current contemporary "Baa" utility bond yield is less than 8.0%, but this yield is still relatively high compared to those yields over the last 12 months. Hence, an average risk premium of a 7.5% utility bond yield that reflects a 12-month perspective of this yield would indicate a return on equity of around 11.2%. As such, I recommend the low end of my return estimate using the 13-week average bond yields to reflect relatively high 13-week average yield, and the expectations of declines to corporate utility bond yields during the period rates determined in this proceeding will be in effect.

My risk premium analyses produce a return estimate in the range of 9.61% to 11.47%, with a midpoint estimate of 10.54%.

Capital Asset Pricing Model

Q PLEASE DESCRIBE THE CAPM.

A The CAPM method of analysis is based upon the theory that the market required rate of return for a security is equal to the risk-free rate, plus a risk premium associated

with the specific security. This relationship between risk and return can be expressed mathematically as follows:

Ri = Rf + Bi x (Rm - Rf) where:

Ri = Required return for stock i
Rf = Risk-free rate
Rm = Expected return for the market portfolio
Bi = Beta - Measure of the risk for stock

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

The risks that cannot be eliminated when held in a diversified portfolio are nondiversifiable risks. Nondiversifiable risks are related to the market in general and are referred to as systematic risks. Risks that can be eliminated by diversification are regarded as nonsystematic risks. In a broad sense, systematic risks are market risks, and nonsystematic risks are business risks. The CAPM theory suggests that the market will not compensate investors for assuming risks that can be diversified away. Therefore, the only risk that investors will be compensated for are systematic or nondiversifiable risks. The beta is a measure of the systematic or nondiversifiable risks.

Q PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.

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

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

A As previously noted, *Blue Chip Financial Forecasts*' projected 30-year Treasury bond yield is 4.0%.[15] The current 30-year bond yield is 3.8%. I used *Blue Chip Financial Forecasts*' projected 30-year Treasury bond yield of 4.0% for my CAPM analysis.

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

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

Treasury bond yields, however, do include risk premiums related to unanticipated future inflation and interest rates. Therefore, a Treasury bond yield is not a risk-free rate. Risk premiums related to unanticipated inflation and interest rates are systematic or market risks. Consequently, for companies with betas less than 1.0, using the Treasury bond yield as a proxy for the risk-free rate in the CAPM analysis can produce an overstated estimate of the CAPM return.

[15] *Blue Chip Financial Forecasts*, December 1, 2008 at 2.

Q WHAT BETA DID YOU USE IN YOUR ANALYSIS?

A As shown on Schedule MPG-20, the proxy group average *Value Line* beta estimate is 0.76.

Q HOW DID YOU DERIVE YOUR MARKET RISK PREMIUM ESTIMATE?

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

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

Morningstar's Stocks, Bonds, Bills and Inflation 2008 Yearbook publication estimates the historical arithmetic average real market return over the period 1926 - 2007 as 9.0%. A current consensus analysts' inflation projection, as measured by the Consumer Price Index, is 2.0%.[16] Using these estimates, the expected market return is 11.18%.[17] The market premium then is the difference between the 11.18% expected market return, and my 4.0% risk-free rate estimate, or 7.18%.

The historical estimate of the market risk premium was also estimated by Morningstar in Stocks, Bonds, Bills and Inflation 2008 Yearbook. Over the period 1926 through 2007, Morningstar's study estimated that the arithmetic average of the

[16]Blue Chip Financial Forecasts, December 1, 2008 at 2.
[17]{ [(1 + 0.090) * (1 + 0.020)] – 1] } * 100.

achieved total return on the S&P 500 was 12.30%, and the total return on long-term Treasury bonds was 5.80%. The indicated equity risk premium is 6.50% (12.30% - 5.80% = 6.50%).

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

A Morningstar estimates a forward-looking market risk premium based on actual achieved data from the historical period of 1926 through year-end 2007. Using this data, Morningstar estimates a market risk premium derived from the total return on large company stocks (S&P 500), less the income return on Treasury bonds. The total return includes capital appreciation, dividend or coupon reinvestment returns, and annual yields received from coupons and/or dividend payments. The income return, in contrast, only reflects the income return received from dividend payments or coupon yields. Morningstar argues that the income return is the only true riskless rate associated with the Treasury bond and is the best approximation of a truly risk-free rate. While I disagree with this assessment from Morningstar, because it does not reflect a true investment option available to the marketplace, and therefore does not produce a legitimate estimate of the expected premium of investing in the stock market versus that of Treasury bonds, I will use Morningstar's conclusion to show the reasonableness of my market risk premium estimates.

Morningstar's analysis indicates that a market risk premium falls somewhere in the range of 6.2% to 7.1%. This range is based on several methodologies. First, Morningstar estimates a market risk premium of 7.1% based on the difference between the total market return on common stocks (S&P 500) less the income return on Treasury bond investments. Second, Morningstar found that if the New York

Stock Exchange (the "NYSE") was used as the market index rather than the S&P 500, that the market risk premium would be 6.8% and not 7.1%. Third, if only the two deciles of the largest companies included in the NYSE were considered, the market risk premium would be 6.35%.[18]

Finally, Morningstar found that the 7.1% market risk premium based on the S&P 500 was impacted by an abnormal expansion of price-to-earnings ("P/E") ratios relative to earnings and dividend growth during the period 1980 through 2001. Morningstar believes this abnormal P/E expansion is not sustainable. Therefore, Morningstar adjusted this market risk premium estimate to normalize the growth in the P/E ratio to be more in line with the growth in dividends and earnings. Based on this alternative methodology, Morningstar published a long-horizon supply-side market risk premium of 6.2%.[19]

Thus, based on all of Morningstar's estimates, the market risk premium falls somewhere in the range of 6.2% to 7.1%. This range supports my use of a 6.50% market risk premium in my CAPM study.

Q WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?

A As shown on my Schedule MPG-21, based on my historical market risk premium of 6.50% and prospective market risk premium of 7.18%, a risk-free rate of 4.0%, and a beta of 0.76, my CAPM analysis produces a return in the range of 8.94% to 9.46%, with a midpoint of 9.20%.

[18]Morningstar observes that the S&P 500 and the NYSE Decile 1-2 are both large capitalization benchmarks. *Ibbotson SBBI 2008 Valuation Yearbook* (Morningstar, Inc.) at 72 and 74.

[19]*Id.* at 92-98.

Return on Equity Summary

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

A Based on my analyses, I estimate KCPL's current market cost of equity to be 10.30%.

TABLE 3

Return on Common Equity Summary

Description	Results
DCF	11.15%
Risk Premium	10.54%
CAPM	9.20%

My recommended return on equity of 10.30% is the average return of my DCF, risk premium and CAPM analyses. My use of an average return on equity estimate is based on the recent AmerenUE Order ER-2008-0318.

Q DO YOU BELIEVE YOUR AUTHORIZED RETURN OF 10.30% REASONABLY REFLECTS UTILITIES' COST OF CAPITAL, GIVEN THE CURRENT DISTRESSED FINANCIAL MARKETS?

A Yes. In today's marketplace, a flight to quality has taken place which has significantly driven up the price of Treasury securities, and reduced the overall yield. This flight to quality investment has impacted corporate securities in the opposite direction. Specifically, by moving money out of corporate securities and into Treasury securities, Treasury yields are very low right now, but corporate yields are abnormally high. While utility corporate bonds and equity investments have not been hit as hard as non-regulated companies, their cost of capital has still been detrimentally impacted

in this marketplace. However, on a normalized basis, recognizing that the markets will soon recover, a reasonable estimate of KCPL's cost of equity is spread somewhere between the abnormally low CAPM return estimates driven by Treasury bond yields of 9.2%, and the abnormally high returns caused by depressed stock prices and utility bond prices as reflected in the DCF and risk premium study. As such, creating a range of returns as I have done above, produces a cost of equity of 10.3%, which is a reasonable estimate of KCPL's cost of equity during the period rates determined in this proceeding will be in effect. The range of reasonable returns on equity based on today's marketplace I believe would be around 50 basis points around this midpoint, or a high of 10.8% and a low of 9.8%.

REGULATORY PLAN FINANCIAL RATIOS

Q WILL YOUR PROPOSED CAPITAL STRUCTURE, RETURN ON EQUITY, AND OVERALL RATE OF RETURN IMPACT THE AMOUNT OF REGULATORY AMORTIZATION NECESSARY TO MEET THE FINANCIAL TARGETS IN KCPL'S REGULATORY PLAN?

A Yes. My recommended capital structure and return on equity reduce KCPL's revenue requirement in this proceeding. Therefore, they will impact KCPL's Funds From Operation (FFO), coverage of interest and total debt. Therefore, my recommendations will impact the amount of regulatory amortization that is necessary to achieve the objectives outlined in KCPL's regulatory plan.

Q WHAT AMOUNT OF REGULATORY AMORTIZATION IS KCPL PROPOSING IN THIS PROCEEDING?

A KCPL's proposed rate of return produces additional regulatory amortization in the amount of $47.8 million (Schedule MWC-3). However, based on a long-term review of credit metrics, KCPL is requesting only $15.1 million of additional regulatory amortization expense be included in its revenue requirement in this case.

Q DO YOU BELIEVE IT IS REASONABLE FOR KCPL TO REQUEST LESS REGULATORY AMORTIZATION EXPENSE THAN THAT JUSTIFIED IN THE REGULATORY PLAN?

A Yes. It is reasonable for KCPL to choose a lower amount of ratepayer funding assistance necessary to preserve its credit rating during the remaining construction period of Iatan 2. This was the underlying objective of the regulatory plan. Further, KCPL's proposal will help mitigate its rate increase, which is particularly important in today's distressed economic environment.

Q HOW MUCH REGULATORY AMORTIZATION EXPENSE, IF ANY, WOULD BE NECESSARY IF YOU ADJUST KCPL'S STUDY TO REFLECT YOUR PROPOSED OVERALL RATE OF RETURN?

A As shown on the attached Highly Confidential Schedule MPG-22, adjusting KCPL's capital structure, and reducing its return on equity from 10.75% down to 10.30%, would increase the amount of regulatory amortization expense to $53.67 million from KCPL's estimated amount of $47.76 million.

Q BY ADJUSTING THE RETURN ON EQUITY AS YOU PROPOSE, IS IT ACCURATE THAT THE REVENUE REQUIREMENT MAY NOT CHANGE, BUT JUST THE AMOUNT OF REGULATORY AMORTIZATION EXPENSE WILL CHANGE?

A Yes. However, I believe it is more appropriate to reflect additional amortization expense rather than to provide KCPL with an inflated return on equity. By increasing the amortization expense recovered from customers, customers will benefit later through a reduced cost of service for the Iatan plant investment. As such, the regulatory plan amortization expense creates a quid pro quo for customers. That is, customers pay higher rates today and receive the benefits of lower rates in the future. By contrast, providing an unreasonably high return on equity as proposed by KCPL, would result in customers paying higher rates today, with no benefit of lowering cost of service and rates in future periods.

Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A Yes.

Qualifications of Michael Gorman

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

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

Q PLEASE STATE YOUR OCCUPATION.

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

Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

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

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

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

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

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

At BAI, I also have extensive experience working with large energy users to distribute and critically evaluate responses to requests for proposals (RFPs) for electric, steam, and gas energy supply from competitive energy suppliers. These analyses include the evaluation of gas supply and delivery charges, cogeneration and/or combined cycle unit feasibility studies, and the evaluation of third-party asset/supply management agreements. I have also analyzed commodity pricing

indices and forward pricing methods for third party supply agreements, and have also conducted regional electric market price forecasts.

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

Q HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?

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

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

A I earned the designation of Chartered Financial Analyst (CFA) from the CFA Institute. The CFA charter was awarded after successfully completing three examinations which covered the subject areas of financial accounting, economics, fixed income and

equity valuation and professional and ethical conduct. I am a member of the CFA Institute's Financial Analyst Society.

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