Exhibit No.:

issue:

Witness:

Type of Exhibit:

Sponsoring Parties: Case No.:

Date Testimony Prepared:

Revenue Requirement Michael Gorman Direct Testimony MEUA, MIEC and DOE

ER-2010-0355 November 10, 2010

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-2010-0355

Direct Testimony and Schedules of

Michael Gorman

On behalf of

The Midwest Energy Users Association Missouri Industrial Energy Consumers United States Department of Energy

November 10, 2010



Industrials Exhibit No 1263

Brubaker & Associates, Inc. Chesterfield, MO 63017

Date Vis/II Reporter LMB File No. ER-2010-0355

Project 9384

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-2010-0355

STATE OF MISSOURI SS COUNTY OF ST. LOUIS

Affidavit of Michael Gorman

Michael Gorman, being first duly sworn, on his oath states:

- 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, MO 63017. We have been retained by the Midwest Energy Users Association ("MEUA"), Missouri Industrial Energy Consumers ("MIEC"), and the United States Department of Energy ("DOE") in this proceeding on their behalf.
- Attached hereto and made a part hereof for all purposes are my direct testimony and schedules which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2010-0355.

I hereby swear and affirm that the testimony and schedules are true and correct and that they show the matters and things they purport to show.

Subscribed and sworn to before me this 9th day of November, 2010.

MARIA E. DE Notary Public - Notary Seal STATE OF MISSOURI St. Louis City My Commission Expires: May 5, 2013 Commission # 09706793

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-2010-0355

Table of Contents to the <u>Direct Testimony of Michael Gorman</u>

			<u>Page</u>
l.	SUMI	MARY	2
II.	ELEC	CTRIC UTILITY INDUSTRY MARKET OUTLOOK	3
W.	KCPI	L'S INVESTMENT RISK	8
IV.	КСРІ	L'S PROPOSED CAPITAL STRUCTURE	9
٧.	RETU	JRN ON COMMON EQUITY	10
QU	A. B. C. D. E. F. G.	Discounted Cash Flow Model. Sustainable Growth DCF	23 24 27 32 37
ام	adula	MPC 1 through Schodulo MPC 17	

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-2010-0355

Page 1

Direct Testimony of Michael Gorman

1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS. 2 Michael Gorman. My business address is 16690 Swingley Ridge Road, Suite 140, 3 Chesterfield, MO 63017. 4 Q WHAT IS YOUR OCCUPATION? 5 Α I am a consultant in the field of public utility regulation and a managing principal with 6 the firm of Brubaker & Associates, Inc. ("BAI"), energy, economic, and regulatory 7 consultants. 8 Q PLEASE SUMMARIZE YOUR **EDUCATIONAL BACKGROUND** AND 9 EXPERIENCE. 10 These are set forth in Appendix A of my testimony. Α 11 Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING? 12 Α This testimony is presented on behalf of the Midwest Energy Users Association 13 ("MEUA"), Missouri Industrial Energy Consumers ("MIEC"), and the United States 14 Department of Energy ("DOE"). MEUA members, MIEC members and DOE are Michael Gorman

1		large commercial and/or industrial users of electricity served by Kansas City
2		Power & Light Company ("KCPL" or "Company").
3	Q	WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?
4	Α	The purpose of my testimony is to recommend an overall rate of return, and a fair
5		return on common equity for KCPL in this proceeding.
6		I. SUMMARY
7	Q	PLEASE SUMMARIZE YOUR RATE OF RETURN RECOMMENDATIONS.
8	Α	I recommend the Missouri Public Service Commission ("Commission") award KCPL a
9		return on common equity of 9.65%.
10		My recommended return on equity for KCPL is based on a constant growth
11		Discounted Cash Flow ("DCF") model, a sustainable growth DCF model, a
12		multi-stage growth DCF model, a Risk Premium ("RP") analysis, and a Capital Asset
13		Pricing Model ("CAPM") analysis. These analyses estimate a fair return on equity
14		based on observable market information for a group of publicly traded electric utility
15		companies that approximate KCPL's investment risk.
16		I also show that my proposed return on equity provides KCPL an opportunity
17		to achieve cash flow credit metrics that will support an investment grade bond rating,
18		and maintain financial integrity for a delivery service utility.
19		As such, my recommended return on equity represents fair compensation for
20		KCPL's investment risk and will support KCPL's financial integrity.
21		As set forth on Schedule MPG-1, I recommend an overall rate of return of

8.42% be used to set KCPL's rates in this proceeding.

22

	DOES YOUR RECOMMENDED RETURN ON EQUITY FAIRLY COMPENSATE
	KCPL'S INVESTORS AND MAINTAIN ITS FINANCIAL INTEGRITY BASED ON
	CURRENT CAPITAL MARKET COSTS?
Α	Yes. While my return on equity represents a reduction to previous authorized returns
	on equity for KCPL, it reflects the current very low cost capital market environment for
	low-risk regulated utility companies. Further, my recommended return on equity and
	KCPL's current proposed capital structure will produce credit metrics that will support
	its investment grade bond rating. Therefore, this return on equity represents fair
	compensation, will maintain KCPL's financial integrity, and recognizes the very low
	capital market costs that exist for utility companies in this marketplace.
Q	HOW IS YOUR TESTIMONY ORGANIZED?
Α	My testimony is organized as follows:
	1. I will review the current electric utility industry market outlook;
	2. I will review KCPL's current investment risk and credit standing;
	I will review KCPL's proposed capital structure used to set rates in this proceeding;
	4. I will estimate a fair return on equity for KCPL; and
	I will verify that my proposed rate of return will support KCPL's financial integrity and credit rating.
	II. ELECTRIC UTILITY INDUSTRY MARKET OUTLOOK
Q	PLEASE DESCRIBE THIS SECTION OF YOUR TESTIMONY.
	I review the credit rating and investment return performance of the electric utility
	industry. Based on the assessments described below, I find the credit rating outlook
	of the industry to be strong and supportive of the industry's financial integrity.
	Q

1		Further, electric utilities' stocks have exhibited strong return performance and are
2		characterized as a safe investment.
3	Q	PLEASE DESCRIBE THE ELECTRIC UTILITIES' CREDIT RATING OUTLOOK.
4	Α	Electric utilities' credit rating outlook is improving over the recent past. Standard &
5		Poor's ("S&P") recently provided an assessment of the credit rating of U.S. electric
6		utilities for the second quarter of 2010. S&P's commentary included the following:
7 8 9 10		The past three months witnessed several outlook changes, most of which were positive or revisions to stable from negative. The principal drivers for the positive outlooks were constructive rate decisions, overall improving business risk profiles, and stronger measures of bondholder protection.
12		* * *
13 14 15 16 17 18 19 20		The universe of U.S. electric utilities is relatively highly rated, certainly compared with the average 'B' category for U.S. industrial companies. This is due to the large percentage of firms carrying 'excellent' (84%) and 'strong' (13%) business risk profiles What typically distinguishes one utility's business profile score from another is the quality of the regulatory climate and management's commitment to credit quality and financial policies. We consider the financial risk profile for most electric companies to be 'aggressive' The ratings distribution for electric utilities in the U.S. remains solidly
22 23 24 25 26 27 28 29		entrenched in investment grade. Approximately 67% of the industry carries a 'BBB' category corporate credit rating ('BBB+', 'BBB', and 'BBB-'), nearly 29% 'A-'and above, and about 4% below investment grade ('BB+' and below). Some 86% of all domestic electric utility companies carry a stable outlook, so the number of rating changes is expected to remain moderate in the near to intermediate term. Ratings stability for the electric sector continues to be based in large part on the following expectations:
30 31 32 33 34 35 36		 Generally responsive rate orders, including mechanisms or automatic provisions that allow that for the timely recovery of commodity prices, environmental compliance costs, and other expenses; Receptive capital markets, access to liquidity, and manageable debt maturity schedules; Moderation in growth and expansion capital expenditures; and
~		- πουσιατίου τη φιστάτι από ολραμβίση σαρμαί σλροπμίμησε, αλίθ

Credit-supportive actions by utility management.¹

From an economic standpoint, S&P stated the following:

Effects On Ratings

Regulated electric utilities have been, and are expected to continue, weathering the difficult economy with little lasting effect on the collective financial risk profile of the industry, and we assess ratings and outlooks based on our stable view of industry and company-specific factors. Outlooks and ratings should remain predominantly unchanged, even if industry conditions worsen in the near term, as described in our pessimistic scenario (see table 1). However, if lack of economic growth persists for an extended period, regulatory risk could rise if concerns about the plight of ratepayers leads to resistance to rate increases.

Solid Industry Fundamentals Support Stable Outlook

Throughout 2009, U.S. electric utilities performed well with continued favorable access to capital compared to most corporate issuers. Despite difficult market conditions last year, external financing activity for the U.S. regulated electric utility industry was about \$49.8 billion, roughly matching 2008 activity. Many companies have proactively re-financed issuance well in advance of their debt maturities, taking advantage of investor appetite and favorable spreads. Investor appetite for first-mortgage bonds remained healthy, and deals remained oversubscribed. Credit fundamentals indicate that most, if not all, electric utilities should continue to have ample access to capital markets and credit. Banking syndicates are also expressing willingness to renegotiate credit facilities, although at more demanding terms than in the previous years.²

Moody's also acknowledges the following for the electric utility industry in its report:

Overview

The fundamental credit outlook for the U.S. investor-owned electric utility sector remains stable, thanks to a supportive regulatory framework that provides good transparency into operating cost and capital investment recovery; adequate liquidity profiles; relatively

¹Standard & Poor's RatingsDirect on the Global Credit Portal: "Ratings Roundup: Strongly Positive Rating Changes In U.S. Electric Utility Sector In Second-Quarter 2010; No Downgrades," July 15, 2010 (emphasis added).

²Standard & Poor's RatingsDirect on the Global Credit Portal: "Industry Economic And Ratings Outlook: Slightly Positive Outlook For U.S. Regulated Electric Utilities Supports Rating Stability," February 2, 2010 (emphasis added).

unfettered access to the capital markets; and reasonably stable financial credit metrics. The investor-owned utility business model remains well positioned within its investment-grade rating category for 2010 and at least the first half of 2011.³

Similarly, Fitch states:

Overview

The U.S. Utilities, Power, and Gas (UPG) sector 2010 outlook is framed in the context of Fitch Ratings' outlook for a slow U.S. economic recovery in 2010, with stable outlooks for most of the business segments within the UPG universe except for negative 2010 credit outlook for competitive generators and retail propane distributors.

Resilient Performance in 2009

Companies in the UPG sector weathered the recession and financial crisis of 2008–2009 with considerably less pain than sectors such as financial institutions, cyclical industrials, and retailers. The absence of significant defaults in the sector is in stark contrast to the upswing in defaults and bankruptcy filings across the rest of the U.S. economy, consistent with the defensive reputation of the sector.

In general, companies in the UPG sector entered 2009 in reasonably sound financial condition; some drew down their bank credit facilities during the banking crisis in late 2008 and repaid the loans as the bank and financial markets stabilized during 2009.

As noted in the commentary by S&P, Moody's and Fitch above, the regulated electric utility industry is maintaining strong investment grade credit and is well positioned to weather the recent economic downturn. Therefore, reasonable and rational adjustments to KCPL's rates would be appropriate to provide fair compensation, but not excessive compensation. Designing rates to achieve this objective will support KCPL's competitive position and investment grade credit quality.

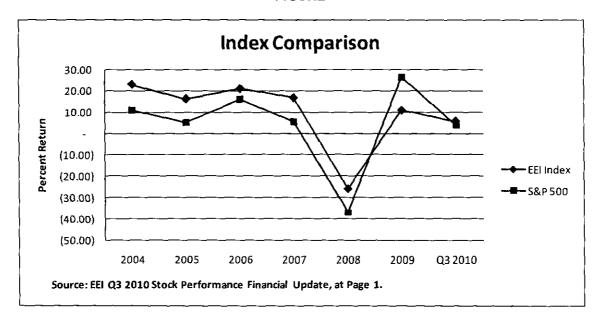
³Moody's Investors Service Industry Outlook: "U.S. Electric Utilities Face Challenges Beyond Near-Term," January 2010 (emphasis added).

⁴Fitch Ratings: "U.S. Utilities, Power and Gas 2010 Outlook," December 4, 2009.

Q PLEASE DESCRIBE ELECTRIC UTILITY STOCK PRICE PERFORMANCE OVER THE LAST FIVE YEARS.

As shown in Figure 1 below, the Edison Electric Institute ("EEI") has recorded electric utility stock price performance compared to the market. The EEI data shows that its Electric Utility Index has outperformed the market over the last five years (2004-3rd Quarter 2010).

FIGURE 1



During 2009, the EEI Index trailed the market, but has outperformed the market during the first nine months of 2010. The EEI states the following:

Given the explosive market rally that began in March, the EEI Index's underperformance of the major averages is not surprising. Defensive stocks typically lag early in market rebounds coming out of recessions, and the EEI Index surpassed broad market returns in each year from 2004 through 2008. Five years is a long stretch of outperformance for any industry but especially so for the traditionally staid and conservative utilities, who spent much of the middle years of the past decade rebuilding balance sheets and refocusing business strategies on basic regulated distribution and generation after the turbulence and missteps into non-core businesses that followed deregulation in the late 1990s.

Utilities a Winner for the Decade

Indeed, the industry's return to its roots in the traditional power business proved a winning strategy for long-term growth of shareholder value during the decade that just ended. From January 1, 2000 through December 31, 2009, the EEI Index returned 134%, substantially outperforming the Dow Jones Industrials 14% return, the S&P 500's -9% return, and the Nasdag's 44% decline. tech-heavy Nasdag never fully retraced the ground lost after the tech bubble collapsed in 2001, and the S&P 500 was also heavily weighted with technology at the decade's start, which accounts in part for its negative showing. The financial crisis and "Great Recession" (the popular label for our current economic malaise) capped the ten-year stretch, producing severe losses in financial stocks and a new round of weakness for the Nasdaq. All in all, conservative, plodding utilities were the tortoise that outran the hare, demonstrating that sound regulation, financial stability, operational and service excellence and good investment returns can all coexist, and in fact be mutually reinforcing.

19

20

21

22

23 24

25

26

27

1

2

3

4

5

6

7 8

9 10

11 12

13

14

15

16

17 18

Fundamentals Remain Solid

While the changed economic landscape since mid-2008 has diminished the industry's near-term earnings prospects, industry analysts continue to believe that many companies offer potential for a return to reasonably strong earnings growth — supported by rate base growth and rate relief from cases decided in recent months — as the economy recovers from recession and enters a new expansion phase.⁵

28

III. KCPL'S INVESTMENT RISK

- 29 Q PLEASE PROVIDE A BRIEF OVERVIEW OF KCPL AND ITS INVESTMENT
- 30 **CHARACTERISTICS**.
- 31 A KCPL's current senior secured credit ratings from S&P and Moody's are "BBB+" and
- 32 "A3," respectively. KCPL's corporate credit ratings from S&P and Moody's are "BBB"
- and "Baa2," respectively.

⁵EEI Q4 2009 Financial Update (emphasis added).

Concerning KCPL, S&P states the following:

1

2

3

4

5

8

The rating on Kansas City Power and Light Co. (KCP&L) reflects Great Plains Energy Inc.'s consolidated credit profile. The ratings also reflect the company's excellent business risk profile and aggressive financial risk profile. Great Plains' subsidiaries include KCP&L and KCP&L Greater Missouri Operations Co. (GMO).⁶

IV. KCPL'S PROPOSED CAPITAL STRUCTURE

9 Q WHAT CAPITAL STRUCTURE IS THE COMPANY REQUESTING TO USE TO
10 DEVELOP ITS OVERALL RATE OF RETURN FOR ELECTRIC OPERATIONS IN
11 THIS PROCEEDING?
12 A KCPL's proposed capital structure, as supported by KCPL witness Dr. Samuel
13 Hadaway, is shown below in Table 1.

TABLE 1 KCPL's Proposed Capital S (March 31, 2010)	tructure
Description	Percent of Total Capital
Long-Term Debt	48.69%
Convertible Debt	4.53%
Preferred Equity	0.62%
Common Equity	46.16%
Total Financial Capital Structure	100.00%

⁶Standard & Poor's RatingsDirect on the Global Credit Portal: "Summary: Kansas City Power & Light Co.," October 27, 2010.

1	Q	DO YOU TAKE ANY ISSUES WITH KCPL'S PROPOSED CAPITAL STRUCTURE?
2	Α	Not as proposed in KCPL's direct filing. However, I may propose adjustments to
3		KCPL's proposed true-up capital structure if the component weights and/or costs
4		differ from those currently proposed.
5		V. RETURN ON COMMON EQUITY
6	Q	PLEASE DESCRIBE WHAT IS MEANT BY A "UTILITY'S COST OF COMMON
7		EQUITY."
8	Α	A utility's cost of common equity is the return investors expect, or require, in order to
9		make an investment in the utility. Investors expect to achieve their return requiremen
10		from receiving dividends and stock price appreciation.
11	Q	PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED
12		UTILITY'S COST OF COMMON EQUITY.
13	Α	In general, determining a fair cost of common equity for a regulated utility has been
14		framed by two decisions of the U.S. Supreme Court: Bluefield Water Works 8
15		Improvement Co. v. Public Serv. Commission of West Virginia, 262 U.S. 679 (1923
16		and Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944).
17		These decisions identify the general standards to be considered in
18		establishing the cost of common equity for a public utility. Those general standards
19		provide that the authorized return should: (1) be sufficient to maintain financia
20		integrity; (2) attract capital under reasonable terms; and (3) be commensurate with

returns investors could earn by investing in other enterprises of comparable risk.

21

1	Q	PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE THE COST
2		OF COMMON EQUITY FOR KCPL.
3	Α	I have used several models based on financial theory to estimate KCPL's cost of
4		common equity. These models are: (1) a constant growth Discounted Cash Flow
5		("DCF") model; (2) a sustainable growth DCF model; (3) a multi-stage growth DCF
6		model; (4) a Risk Premium ("RP") analysis; and (5) a Capital Asset Pricing Model
7		("CAPM"). I have applied these models to a group of publicly traded utilities that I
8		have determined reflect investment risk similar to KCPL.
9	Q	HOW DID YOU SELECT A PROXY GROUP OF UTILITIES SIMILAR IN
10		INVESTMENT RISK TO KCPL TO ESTIMATE ITS CURRENT MARKET COST OF
11		EQUITY?
12	Α	I relied on the same proxy group used by KCPL witness Dr. Hadaway to estimate
13		KCPL's return on equity.
14	Q	HOW DOES THIS PROXY GROUP'S INVESTMENT RISK COMPARE TO THE
15		INVESTMENT RISK OF KCPL?
16	Α	The proxy group is shown in Schedule MPG-2. This proxy group has an average
17		senior secured credit rating from S&P of "A-," which is comparable to KCPL's senior
18		secured credit rating from S&P of "BBB+." The proxy group's senior secured credit
19		rating from Moody's is "A3," which is identical to KCPL's senior secured credit rating
20		from Moody's. Therefore, these ratings confirm that my proxy group has comparable
21		total investment risk to KCPL.
22		The proxy group has an average common equity ratio of 46.5% (including
23		short-term debt) from AUS and 47.8% (excluding short-term debt) from Value Line in

2009. This proxy group's common equity ratio is comparable to KCPL's proposed common equity ratio of 46.2%. A comparable common equity ratio demonstrates that KCPL's financial risks are comparable to my proxy group.

Q

Α

I also compared KCPL's business risk to the business risk of my proxy group based on S&P's ranking methodology. KCPL has a business risk profile of "Excellent," which is identical to the risk profile of my proxy group.⁷

IN YOUR PROXY GROUP, THE GROUP AVERAGE S&P BOND RATING IS ONE NOTCH STRONGER THAN KCPL'S. WOULD THIS CREDIT RATING DIFFERENTIAL REQUIRE A HIGHER RETURN ON EQUITY FOR KCPL THAN THE PROXY GROUP?

No. This one notch credit rating by itself would suggest KCPL was slightly higher risk than the proxy group. However, all other factors suggest the proxy group is a reasonable risk proxy. Specifically, the Moody's bond rating for KCPL is the same as the proxy group average. Also, for the S&P bond rating, there are many companies included in the proxy group that have the same or lower credit rating than that of KCPL from S&P. Again, since the proxy group average is nearly identical to that of KCPL (only a one notch differential), I believe these bond ratings are reasonably comparable, and would not justify an increase in the authorized return on equity for KCPL based on S&P's bond rating alone. Further, the common equity ratio of the proxy group is nearly identical to that of KCPL. While the proxy group's common equity ratio is slightly higher, KCPL's common equity ratio does not reflect its

⁷Standard & Poor's business risk methodology ranks a corporate entity's operating risk based on a scale of "Excellent" (lowest risk) to "Vulnerable" (highest risk). S&P has a six-tiered scale with "Excellent" the highest, "Vulnerable" the weakest, and most utilities falling into the highest business risk profile score (indicating lowest business risk) of "Excellent" and "Strong." (Standard & Poor's RatingsDirect Credit Criteria Methodology: "Business Risk/Financial Risk Matrix Expanded," May 27, 2009).

issuance of \$280 million of equity convertible debt securities. These convertible debt securities can be executed in calendar year 2012 and at that point would eliminate the debt-like characteristics of these debt securities. As such, KCPL's capital structure is already structured in order to allow for an increase in common equity ratio within the next couple of years. Further, KCPL has an "Excellent" business profile score, which suggests that its operating risk is lower than that of all the other proxy group companies that have a business risk position ranking of "Strong." Approximately 7 of the 31 companies have greater business risk than that of KCPL. For all these reasons, taking all the risk factors as a whole, I believe clearly proves that KCPL's investment risk is reasonably comparable to that of the proxy group, and no return on equity adjustment to that estimated for the proxy group would be necessary in order to provide fair compensation for KCPL's investment risk.

13 A. Discounted Cash Flow Model

1

2

3

5

6

7

8

9

10

11

12

21 22

- 14 Q PLEASE DESCRIBE THE DCF MODEL.
- 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 or cost of capital. This model is expressed mathematically as follows:

18
$$P_0 = \frac{D_1}{1 + \frac{D_2}{1 +$$

20 P₀ = Current stock price

D = Dividends in periods 1 - ∞

K = Investor's required return

1 This model can be rearranged in order to estimate the discount rate or investor 2 required return, "K." If it is reasonable to assume that earnings and dividends will 3 grow at a constant rate, then Equation 1 can be rearranged as follows: 4 $K = D_1/P_0 + G$ (Equation 2) 5 6 K = Investor's required return 7 D_1 = Dividend in first year 8 P_0 = Current stock price G = Expected constant dividend growth rate 10 Equation 2 is referred to as the annual "constant growth" DCF model. WILL YOU INCLUDE A QUARTERLY COMPOUNDING ADJUSTMENT TO YOUR 11 Q 12 DCF RETURN ESTIMATE? 13 No. Including the quarterly compounding adjustment to KCPL's authorized return on 14 equity is inappropriate. If a quarterly compounding adjustment is added to a DCF 15 return estimate, shareholders will be permitted to earn the dividend reinvestment 16 return twice: (1) through the higher authorized return on equity, and (2) through 17 actual receipt of dividends and the reinvestment of those dividends throughout the 18 year. This double counting of the dividend reinvestment return is not reasonable, and 19 will unjustly inflate KCPL's rates. 20 Q PLEASE EXPLAIN WHY THE QUARTERLY COMPOUNDING RETURN SHOULD NOT BE INCLUDED IN KCPL'S AUTHORIZED RETURN ON EQUITY. 21 22 Α Simply put, the quarterly compounding component of the return is not a cost to the 23 utility. Only the utility's cost of common equity capital should be included in the authorized return on equity. 24 25 This issue surrounds whether or not the DCF return estimate should include 26 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!

Q

Α

The reinvestment return is not a cost to the utility and therefore should not be included in the authorized return on equity. 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.

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

Yes. I will provide two examples to help illustrate this point. First, consider 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. 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 \times [(1.06)^{\frac{1}{4}} - 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%.

Q

Α

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 six 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.

DOES THIS EXAMPLE ALSO APPLY TO UTILITY STOCK INVESTMENTS?

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 \$6.13.8 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

 $^{^{8}1.5 \}times (1.06)^{.75} + 1.5 \times (1.06)^{.5} + 1.5 \times (1.06)^{.25} + 1.5 = $6.13.$

investments	that	earn	the	same	return,	which	the	dividends	were	invested	ir
throughout th	ne yea	ar.									

O

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.

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

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

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

I relied on the average of the weekly high and low stock prices over a 13-week period ended October 22, 2010. An average stock price is less susceptible to market price variations than 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 still short enough to contain data that reasonably reflect 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. 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.

Α

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?

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. 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 three sources of analysts' growth rate estimates: Zacks, SNL Financial and Reuters. All

⁹See, e.g., David Gordon, Myron Gordon, and Lawrence Gould, "Choice Among Methods of Estimating Share Yield," *The Journal of Portfolio Management*, Spring 1989.

consensus analysts' projections used were available on October 29, 2010, as reported online.

Q

Α

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 more representative of general market expectations. Therefore, a simple average, or arithmetic mean, of analyst forecasts is a good proxy for market consensus expectations.

ARE ANALYSTS' GROWTH RATE PROJECTIONS INTENDED TO REPRESENT LONG-TERM SUSTAINABLE GROWTH FOR THE UNDERLYING SECURITY?

No. Analyst growth rate projections are intended to represent a period of three to five years. These growth rates reflect the analysts' assessments of the growth outlooks for these companies during this time period. This is significant, because the constant growth DCF model requires a growth rate that can be sustained over a long-term indefinite period. Since analysts' three- to five-year growth rate estimates may or may not be reasonable estimates of long-term sustainable growth, I will test the reasonableness of assuming these growth rate outlooks can be sustained over the long-term period later in this testimony.

1	Q	WHAT ARE THE GROWTH RATES YOU USED IN YOUR CONSTANT GROWTH
2		DCF MODEL?
3	Α	The growth rates I used in my DCF analysis are shown in Schedule MPG-3. The
4		average and median growth rates for my proxy group are 5.68% and 5.41%,
5		respectively.
6	Q	WHAT ARE THE RESULTS OF YOUR CONSTANT GROWTH DCF MODEL?
7	Α	As shown in Schedule MPG-4, the average and median constant growth DCF returns
8		for the proxy group are 10.48% and 10.39%, respectively.
9	Q	DO YOU HAVE ANY COMMENTS CONCERNING THE RESULTS OF YOUR
10		CONSTANT GROWTH DCF ANALYSIS?
11	Α	Yes. The three- to five-year growth rate exceeds a sustainable long-term growth rate,
12		which is a required input for the constant growth DCF model.
13	Q	WHY DO YOU BELIEVE THE PROXY GROUP'S THREE- TO FIVE-YEAR
14		GROWTH RATE IS IN EXCESS OF A LONG-TERM SUSTAINABLE GROWTH?
15	Α	The three- to five-year growth rate of the proxy group (5.68%) exceeds the growth
16		rate of the overall U.S. economy. As developed below, the consensus of published
17		economists projects that the U.S. Gross Domestic Product ("GDP") will grow at a rate
18		of no more than 4.8% and 4.7% over the next 5 and 10 years, respectively. A
19		company cannot grow, indefinitely, at a faster rate than the market in which it sells its
20		products. The U.S. economy, or GDP, growth projection represents a ceiling, or
21		high-end, sustainable growth rate for a utility over an indefinite period of time.

1 Q WHY IS THE GDP GROWTH PROJECTION CONSIDERED A CEILING GROWTH 2 RATE FOR A UTILITY?

 Α

Α

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. GDP growth, as shown in Schedule MPG-5. Utility sales growth has lagged behind 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.

14 Q IS THERE RESEARCH THAT SUPPORTS YOUR POSITION THAT, OVER THE 15 LONG TERM, A COMPANY'S EARNINGS AND DIVIDENDS CANNOT GROW AT 16 A RATE GREATER THAN THE GROWTH OF THE U.S. GDP?

Yes. This position is supported in both published analyst literature and academic work. Specifically, in a textbook entitled "Fundamentals of Financial Management," published by Eugene Brigham and Joel F. Houston, the authors state 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).¹⁰

¹⁰"Fundamentals of Financial Management," Eugene F. Brigham and Joel F. Houston, Eleventh Edition 2007, Thomson South-Western, a Division of Thomson Corporation at 298.

Also, Morningstar's Stocks, Bonds, Bills and Inflation 2009 Yearbook
Valuation Edition tracked dividends of the stock market in comparison to GDP growth
over the period 1926 through the end of 2008.11 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
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

Α

HAVE ANALYSTS RECOGNIZED THAT SHORT-TERM GROWTH OUTLOOKS WILL SLOW OVER TIME?

Yes. Value Line recognized that dividend growth will likely slow from short-term growth patterns. Value Line stated as follows:

Dividends have been increasing at a rapid pace since 2002, reflecting relatively healthy balance sheets throughout the industry. In fact, last year 61% of electric utilities raised their dividend, 33% reported no change, 2% reinstated theirs, 2% lowered them, and only 2% are not paying them at all. In any industry these statistics would be viewed as quite favorable. But, 2008 actually marked the slowing of a trend for the electric utility industry, in which the percentage of dividend increases declined. The reversal is attributable to deteriorating economic conditions, elevated capital spending, and higher debt-to-

¹¹Stocks, Bonds, Bills and Inflation 2009 Yearbook Valuation Edition (Morningstar, Inc.) at 67.

Α

B. Sustainable Growth DCF

4 Q PLEASE DESCRIBE HOW YOU ESTIMATE A SUSTAINABLE LONG-TERM

GROWTH RATE FOR YOUR SUSTAINABLE GROWTH DCF MODEL.

A sustainable growth rate is based on the percentage of the utility's earnings that are retained and reinvested in utility plant and equipment. These reinvested earnings increase the earnings base (rate base) and will grow earnings when the reinvested earnings investment is put into service, and the Company is allowed to earn its authorized return on the additional rate base 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 in Schedule MPG-6, *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 analysts' current three- to five-year growth rate projections can be sustained over an indefinite period of time.

The data used to estimate the long-term sustainable growth rate is based on the Company's current market to book ratio, and *Value Line's* three-to-five year projections per earnings, dividends, earned return on book equity, and projected stock issuances.

¹²Value Line Investment Survey, May 29, 2009 (emphasis added).

As shown in Schedule MPG-7, page 1 of 2, the average and median sustainable growth rates for the proxy group using this internal growth rate model are 4.92% and 4.59%, respectively.

4 Q WHAT IS THE CONSTANT GROWTH DCF ESTIMATE USING THIS 5 SUSTAINABLE LONG-TERM GROWTH RATE?

A DCF estimate based on this sustainable growth rate is developed in Schedule MPG-8. As shown there, a sustainable growth DCF analysis produces group average and median DCF results of 9.74% and 9.38%, respectively.

The average result is skewed due to a significant outlier – DPL, Inc., which produces a return on equity of 19.97%. Excluding DPL, Inc., the proxy group's average DCF would be 9.40%. Therefore, I conclude that the median result of 9.38% better represents the central tendency of my proxy group. Hence, I will rely on the median DCF result.

The sustainable growth DCF result is based on the dividend and price data used in my constant growth DCF study (using analyst growth rates) and the sustainable growth rate discussed above and developed in Schedule MPG-7.

C. Multi-Stage Growth DCF Model

Α

Α

18 Q HAVE YOU CONDUCTED ANY OTHER DCF STUDIES?

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 a multi-stage growth DCF analysis to reflect this outlook of changing growth expectations.

Q PLEASE DESCRIBE YOUR MULTI-STAGE GROWTH DCF MODEL.

Α

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, starting in year 11 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 transition period, the growth rates were reduced or increased by an equal annual factor, that transitioned the analysts' growth rates up/down to a long-term sustainable growth (GDP growth) rate by the start of the sustainable growth period (year 11). 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 4.75%.

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

A reasonable growth rate that can be sustained in the long run should be based on consensus analysts' projections. Blue Chip Economic Indicators publishes consensus GDP growth projections twice a year. Based on its latest issue, the

consensus economists' published GDP growth rate outlook is 4.8% over the next 5 years, and 4.7% over the next 6-10 years.¹³

I propose to use 4.75%, the average of the consensus economists' projected 5-year and 10-year GDP consensus growth rates of 4.7% and 4.8%, respectively, as published by *Blue Chip Financial Forecasts*, as an estimate of sustainable long-term growth. This consensus GDP growth forecast represents the most likely views of market participants because it is based on published economist projections.

Q WHAT STOCK PRICE, DIVIDEND AND GROWTH RATES DID YOU USE IN YOUR

MULTI-STAGE GROWTH DCF ANALYSIS?

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

Q

Α

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. The transition period begins in year 6 and ends in year 10. For the long-term sustainable growth rate starting in year 11, I used 4.75%, the average of the consensus economists' 5-year and 10-year projected nominal GDP growth rates.

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

As shown in Schedule MPG-9, the average and median multi-stage growth DCF returns on equity for the proxy group are 9.78% and 9.86%, respectively.

19 Q PLEASE SUMMARIZE THE RESULTS FROM YOUR DCF ANALYSES.

20 A The results from my DCF analyses are summarized in Table 2:

¹³Blue Chip Economic Indicators, October 10, 2010 at 15.

TABLE 2

Summary of DCF Results

Description	Proxy Group
Constant Growth DCF Model (Analysts' Growth) Constant Growth DCF Model (Sustainable Growth) Multi-Stage Growth DCF Model Average DCF Return	10.39% 9.38% <u>9.86%</u> 9.88%

For reasons set forth above, I believe my constant growth DCF model based on analysts' growth is inflated because short-term analyst growth rate projections are not reasonable estimates of long-term sustainable growth. Therefore, the DCF model based on analysts' growth rate estimates should not be used on a stand-alone basis. I recommend it be averaged with my other DCF estimates to produce a very conservative (i.e., favorable to KCPL), but reasonable, DCF point estimate that can be used to derive KCPL's return on equity. The constant growth DCF model based on the sustainable growth approach is based on a growth rate that is sustainable in the long term in comparison to GDP growth, but may not reflect analysts' short-term growth outlooks. The multi-stage growth DCF model return reflects the expectation of changing growth rates over time. Even though I have strong concerns about the accuracy of the constant growth DCF at this time, I included all estimates in my DCF return of approximately 9.88%.

D. Risk Premium Model

1

2

3

4

5

6

7

8

9

10

11

12

13

14

- 15 Q PLEASE DESCRIBE YOUR BOND YIELD PLUS RISK PREMIUM MODEL.
- 16 A This model is based on the principle that investors require a higher return to assume 17 greater risk. Common equity investments have greater risk than bonds because

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 U.S. Treasury bonds. The difference between the required return on common equity and the Treasury bond yield is the risk premium. I estimated the risk premium on an annual basis for each year over the period 1986 through September 2010. 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 September 2010, public utility stocks have consistently traded at a premium to book value. This is illustrated in Schedule MPG-10, where the market to book ratio since 1986 for the electric utility industry was consistently above 1.0. 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.

1
2
_

9

10

11

Based on this analysis, as shown in Schedule MPG-11, the average indicated equity risk premium over U.S. Treasury bond yields has been 5.19%. Of the 25 observations, 19 indicated risk premiums fall in the range of 4.40% to 6.08%. 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 in Schedule MPG-12, the average indicated equity risk premium over contemporary Moody's utility bond yields was 3.75% over the period 1986 through September 2010. The indicated equity risk premium estimates based on this analysis primarily fall in the range of 3.03% to 4.59% over this time period.

DO YOU BELIEVE THAT THESE EQUITY RISK PREMIUM ESTIMATES ARE

BASED ON A TIME PERIOD THAT IS TOO LONG OR TOO SHORT TO DRAW

CONTEMPORARY

CONCERNING

12 Q

13 14 15

Α

16

17

18

19

20

21

22

23

24

ACCURATE

CONDITIONS?

RESULTS

No. Contemporary market conditions can change dramatically during the period that rates determined in this proceeding will be in effect. 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. Further, this time period is long enough to smooth abnormal market movement that might distort equity risk premiums. While market conditions and risk premiums do vary over time, this historical time period is a reasonable period to estimate contemporary risk premiums.

MARKET

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

Q

Α

The time period I use in this risk premium study is a generally accepted period to develop a risk premium study using "expectational" data. Conversely, studies have recommended that use of "actual achieved return data" should be based on very long historical time periods. The studies find that achieved returns over short time periods may not reflect investors' expected returns due to unexpected and abnormal stock price performance. However, these short-term abnormal actual returns would be smoothed over time and the achieved actual returns over long time periods would approximate investors' expected returns. Therefore, it is reasonable to assume that averages of annual achieved returns over long time periods will generally converge on the investors' expected returns.

My risk premium study is based on expectational data, not actual returns, and, thus, need not encompass very long time periods.

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

The equity risk premium should reflect the relative market perception of risk in the utility industry today. I have gauged investor perceptions of utility risk today in Schedule MPG-13. On that exhibit, I show the yield spread between utility bonds and Treasury bonds over the last 30 years. As shown in this exhibit, the 2008 utility bond yield spreads over Treasury bonds for "A" rated and "Baa" rated utility bonds are 2.25% and 2.97%, respectively. The utility bond spreads over Treasury bonds for "A" and "Baa" rated utility bonds for 2009 are 1.96% and 2.98%, respectively. These utility bond yield spreads over Treasury bond yields are much higher than the 30-year average spreads of 1.60% and 2.00%, respectively.

While the yield spreads for 2008 and 2009 reflect unusually large spreads, the 2 market has started to improve and these spreads have started to decline. For 3 example, the 13-week average "A" rated utility bond yield has subsided relative to the end of 2008 and 2009, down to around 5.06%. This utility bond yield, when 5 compared to the current Treasury bond yield of 3.82%, as shown in Schedule 6 MPG-14, page 1 of 3, implies a yield spread of around 1.24%, which is lower than the 7 30-year average spread for "A" utility bonds of 1.60%. The same is true for the 8 current "Baa" utility yield spread of 1.78% compared to the 30-year average of 2.00%. 9 This reduced utility bond yield spread is clear evidence that the market considers the utility industry to be a relatively low risk investment in a turbulent market, and exhibits 10 11 that utilities continue to have strong access to capital.

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

PREMIUM MODEL?

1

12

13

14

15

16

17

18

19

20

21

22

23

Q

Α

I added a projected long-term Treasury bond yield to my estimated equity risk premium over Treasury yields. The 13-week average 30-year Treasury bond yield, ending October 22, 2010 was 3.82%, as shown in Schedule MPG-14, page 1 of 3. Blue Chip Financial Forecasts projects the 30-year Treasury bond yield to be 4.7%, and a 10-year Treasury bond yield to be 3.8%. 14 Using the projected 30-year bond yield of 4.70%, and a Treasury bond risk premium of 4.40% to 6.08%, as developed above, produces an estimated common equity return in the range of 9.10% (4.70% + 4.40%) to 10.78% (4.70% + 6.08%), with a midpoint of 9.94%.

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 October 22,

¹⁴Blue Chip Financial Forecasts, October 1, 2010 at 2.

2010 of 5.60%. Adding the utility equity risk premium of 3.03% to 4.59%, as developed above, to a "Baa" rated bond yield of 5.60%, produces a cost of equity in the range of 8.63% to 10.19%, with a midpoint of 9.41%.

My risk premium analyses produce a return estimate in the range of 9.41% to 9.94%, with a midpoint estimate of 9.68%.

6 E. Capital Asset Pricing Model

1

2

3

5

8

9

10

11

12

13

17

18

19

20

21

22

23

24

25

Α

7 Q PLEASE DESCRIBE THE CAPM.

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:

$$R_i = R_f + B_i \times (R_m - R_f)$$
 where:

 $R_i = Required return for stock i$

 $R_f = Risk-free rate$

15 R_m = Expected return for the market portfolio

B_i = 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 non-systematic risks. In a broad sense, systematic risks are market
risks, and non-systematic 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 non-diversifiable risks. The beta is a measure of the systematic or
non-diversifiable risks.

7 Q PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.

1

2

3

4

5

6

Α

16

17

18

19

20

21

- 8 A The CAPM requires an estimate of the market risk-free rate, the company's beta, and the market risk premium.
- 10 Q WHAT DID YOU USE AS AN ESTIMATE OF THE MARKET RISK-FREE RATE?
- As previously noted, *Blue Chip Financial Forecasts*' projected 30-year Treasury bond yield is 4.7%.¹⁵ The current 30-year bond yield is 3.9%. I used *Blue Chip Financial Forecasts*' projected 30-year Treasury bond yield of 4.7% for my CAPM analysis.
- 14 Q WHY DID YOU USE LONG-TERM TREASURY BOND YIELDS AS AN ESTIMATE
 15 OF THE RISK-FREE RATE?
 - 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)

¹⁵Blue Chip Financial Forecasts, October 1, 2010 at 2.

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. 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.

WHAT BETA DID YOU USE IN YOUR ANALYSIS?

Q

Q

Α

A As shown in Schedule MPG-15, the proxy group average *Value Line* beta estimate is 0.70.

HOW DID YOU DERIVE YOUR MARKET RISK PREMIUM ESTIMATE?

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 2010 Yearbook publication estimates the historical arithmetic average real market return over the period 1926 to

2009 as 8.6%. 16 A current consensus analysts' inflation projection, as measured by the Consumer Price Index, is 2.0%.17 Using these estimates, the expected market return is 10.77%.18 The market premium then is the difference between the 10.77% expected market return, and my 4.7% risk-free rate estimate, or 6.07%.

The historical estimate of the market risk premium was also estimated by Morningstar in Stocks, Bonds, Bills and Inflation 2010 Yearbook. Over the period 1926 through 2009, Morningstar's study estimated that the arithmetic average of the achieved total return on the S&P 500 was 11.80%, 19 and the total return on long-term Treasury bonds was 5.8%.²⁰ The indicated equity risk premium is 6.0% (11.80% -5.8% = 6.00%).

HOW DOES YOUR ESTIMATED MARKET RISK PREMIUM RANGE COMPARE TO

THAT ESTIMATED BY MORNINGSTAR?

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

Q

Α

Morningstar estimates a forward-looking market risk premium based on actual achieved data from the historical period of 1926 through year-end 2009. 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 risk-free rate associated with the Treasury bond and is the best approximation of a truly

¹⁶Morningstar, Inc. Ibbotson SBBI 2010 Classic Yearbook at 82.

¹⁷Blue Chip Financial Forecasts, October 1, 2010 at 2.

¹⁸{ [(1 + 0.086) * (1 + 0.020)] - 1] } * 100. ¹⁹Morningstar, Inc. *Ibbotson SBBI 2010 Classic Yearbook* at 82. ²⁰ld.

1 2

 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. Nevertheless, I will use Morningstar's conclusion to show the reasonableness of my market risk premium estimates.

risk-free rate. I disagree with this assessment from Morningstar, because it does not

Morningstar's analysis indicates that a market risk premium falls somewhere in the range of 5.2% to 6.7%. This range is based on several methodologies. First, Morningstar estimates a market risk premium of 6.7% 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 6.4% and not 6.7%. Third, if only the two deciles of the largest companies included in the NYSE were considered, the market risk premium would be 5.9%.²¹

Finally, Morningstar found that the 6.7% 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 5.2%.²²

²¹Morningstar observes that the S&P 500 and the NYSE Decile 1-2 are both large capitalization benchmarks. Morningstar, Inc. *Ibbotson SBBI 2010 Valuation Yearbook* at 54.
²²Id. at 66.

Thus, based on all of Morningstar's estimates, the market risk premium falls somewhere in the range of 5.2% to 6.7%.

Q WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?

As shown in Schedule MPG-16, based on my low-end market risk premium of 5.2%, high-end market risk premium of 6.7%, a risk-free rate of 4.7%, and a beta of 0.70, my CAPM analysis produces a return in the range of 8.33% to 9.38%, with a midpoint of 8.86%. For purposes of this case, I will rely on the high-end CAPM return of 9.38% (rounded to 9.40%) to form my recommended return on equity.

F. Return on Equity Summary

3

9

14

15

16

- 10 Q BASED ON THE RESULTS OF YOUR RATE OF RETURN ON COMMON EQUITY
 11 ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY DO
 12 YOU RECOMMEND FOR KCPL?
- 13 A Based on my analyses, I estimate KCPL's current market cost of equity to be 9.65%.

TABLE 3							
Return on Common Equity Summary							
Results							
9.88%							
9.68% 9.40%							

My recommended return on equity range is 9.40% to 9.90%, with a midpoint of 9.65%. My low end is based on my CAPM return estimate and my high end is based on my DCF analysis. The midpoint is very close to my risk premium estimate.

1 G. Financial Integrity

- 2 Q WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT AN
- 3 INVESTMENT GRADE BOND RATING FOR KCPL?
- 4 A Yes. I have reached this conclusion by comparing the key credit rating financial
- 5 ratios for KCPL at its proposed capital structure and my return on equity to S&P's
- 6 benchmark financial ratios using S&P's new credit metric ranges.
- 7 Q PLEASE DESCRIBE THE MOST RECENT S&P FINANCIAL RATIO CREDIT

S&P publishes a matrix of financial ratios that correspond to its assessment of the

8 METRIC METHODOLOGY.

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

Α

business risk of the utility company and related bond rating. S&P updated its credit metric guidelines on November 30, 2007, and incorporated utility metric benchmarks with the general corporate rating metrics. However, the effect of integrating the utility metrics with that of general corporate bonds resulted in a reduction to the transparency in S&P's credit metric guideline for utilities. Most recently, on May 27, 2009 S&P expanded its matrix criteria and included an additional business and financial risk category. Based on S&P's most recent credit matrix, the business risk profile categories are "Excellent," "Strong," Satisfactory," "Fair," Weak," and "Vulnerable." Most electric utilities have a business risk profile of "Excellent" or "Strong." The S&P financial risk profile categories are "Minimal," "Modest," "Intermediate," "Significant," "Aggressive," and "Highly Leveraged." Most of the

electric utilities have a financial risk profile of "Significant" or "Aggressive."

KCPL has an "Excellent" business risk profile and an "Aggressive" financial risk profile.

1	Q	PLEASE DESCRIBE S&P'S USE OF THE FINANCIAL BENCHMARK RATIOS II
2		ITS CREDIT RATING REVIEW.

Q

Α

S&P evaluates a utility's credit rating based on an assessment of its financial and business risks. A combination of financial and business risks equates to the overall assessment of KCPL's total credit risk exposure. S&P publishes a matrix of financial ratios that defines the level of financial risk as a function of the level of business risk.

S&P publishes ranges for three primary financial ratios that it uses as guidance in its credit review for utility companies. The three primary financial ratio benchmarks it relies on in its credit rating process include: (1) debt to EBITDA,²³ (2) funds from operations ("FFO") to total debt, and (3) total debt to total capital.

HOW DID YOU APPLY S&P'S FINANCIAL RATIOS TO TEST THE REASONABLENESS OF YOUR RATE OF RETURN RECOMMENDATIONS?

I calculated each of S&P's financial ratios based on KCPL's cost of service for retail operations. While S&P would normally look at total consolidated financial ratios in its credit review process, my investigation in this proceeding is to judge the reasonableness of my proposed cost of capital for rate-setting in KCPL's utility operations. Hence, I am attempting to determine whether the rate of return and cash flow generation opportunity reflected in my proposed utility rates for KCPL will support target investment grade bond ratings and financial integrity.

²³Earnings Before Interest, Taxes, Depreciation and Amortization.

Q DID YOU INCLUDE ANY OFF-BALANCE SHEET DEBT?

Α

Yes. As shown in Schedule MPG-17, page 4 of 4, I estimated the total Company off-balance sheet debt equivalents to be \$189.9 million which are attributed to KCPL's operating leases and purchased power obligations.

Q HAS THE COMMISSION USED S&P'S PUBLISHED BENCHMARKS AS PART OF ITS REGULATORY DECISION-MAKING?

Yes. Both KCPL's and Empire District Electric Company's regulatory plans used S&P's credit metrics to target cash flow in support of their major construction efforts. These regulatory programs relied on S&P's published benchmark credit metrics to estimate the amount of regulatory amortization necessary to support adequate utility cash flow during the construction period. These credit metrics can also be used to assess the strength of the designed rates to support investment grade credit standing on regulated utility operations within the test year.

Q HOW DID YOU ESTIMATE KCPL'S OFF-BALANCE SHEET DEBT?

The off-balance sheet debt is shown in Schedule MPG-17, page 4 of 4. First, I used the Missouri production retail allocator in the Company's filing to allocate a portion of its total Company off-balance sheet debt to Missouri retail.

Second, I obtained KCPL's total Company off-balance sheet debt and associated imputed interest and amortization expenses from the S&P report. Then, I applied the KCPL production retail allocator to KCPL's total Company off-balance sheet debt and associated imputed interest and amortization expense. I used total Company capital structure and off-balance sheet debt to calculate the adjusted total debt ratio.

7	Q	PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS FOR
2		KCPL.
3	Α	The S&P financial metric calculations for KCPL are developed on Schedule MPG-17,
4		page 1 of 4.
5		As shown in Schedule MPG-17, page 1 of 4, column 1, based on an equity
6		return of 9.65%, KCPL will be provided an opportunity to produce a debt to EBITDA
7		ratio of 3.3x. This is at the low end of S&P's new "Significant" guideline range of 3.0x
8		to 4.0x.24 This ratio supports an investment grade credit rating.
9		KCPL's retail operations FFO to total debt coverage at a 9.65% equity return
10		would be 19%, which is within the new "Aggressive" metric guideline range of 12% to
11		20%. The FFO/total debt ratio will support an investment grade bond rating.
12		Finally, KCPL's total debt ratio to total capital is 56%. This is within the
13		"Aggressive" guideline range of 50% to 60%, but slightly above the "Significant"
14		range. This total debt ratio will support a utility investment grade bond rating.
15		At my recommended return on equity and KCPL's proposed capital structure,
16		the Company's financial credit metrics are supportive of its current investment grade
17		secured utility bond rating.
18	Q	DO YOU BELIEVE THIS CREDIT METRIC EVALUATION OF KCPL AT YOUR
19		PROPOSED RETURN ON EQUITY PROVIDES MEANINGFUL INFORMATION TO
20		HELP THE COMMISSION DETERMINE THE APPROPRIATENESS OF YOUR
21		RECOMMENDATION?
22	Α	Yes. While S&P calculates these credit metrics based on total Company operations,
23		and not the retail operations of KCPL as I have performed in this study, my review of

²⁴Standard & Poor's RatingsDirect: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009.

these ratios still provides meaningful information on the proposed rate of return for KCPL in this case and how it will contribute and help support consolidated operations credit standing. Further, while credit rating agencies also consider other financial metrics and qualitative considerations, these metrics are largely driven by the cost of service items of depreciation expense and return on equity. Hence, to the extent these important aspects of cost of service impact KCPL's internal cash flows, the relative impact on KCPL will be measured by these credit metrics. As illustrated above, an authorized return on equity of 9.65% will support internal cash flows that will be adequate to maintain KCPL's current investment grade bond rating.

10 Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

11 A Yes, it does.

1

2

3

5

6

7

8

9

Appendix A

Qualifications of Michael Gorman

PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

Q

2	Α	Michael Gorman. My business address is 16690 Swingley Ridge Road, Suite 140,
3		Chesterfield, MO 63017.
4	Q	PLEASE STATE YOUR OCCUPATION.
5	Α	I am a consultant in the field of public utility regulation and a Managing Principal with
6		Brubaker & Associates, Inc., energy, economic and regulatory consultants.
7	Q	PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK
8		EXPERIENCE.
9	Α	In 1983 I received a Bachelors of Science Degree in Electrical Engineering from
10		Southern Illinois University, and in 1986, I received a Masters Degree in Business
11		Administration with a concentration in Finance from the University of Illinois at
12		Springfield. I have also completed several graduate level economics courses.
13		In August of 1983, I accepted an analyst position with the Illinois Commerce
14		Commission ("ICC"). In this position, I performed a variety of analyses for both formal
15		and informal investigations before the ICC, including: marginal cost of energy, central
16		dispatch, avoided cost of energy, annual system production costs, and working
17		capital. In October of 1986, I was promoted to the position of Senior Analyst. In this
18		position, I assumed the additional responsibilities of technical leader on projects, and
19		my areas of responsibility were expanded to include utility financial modeling and
20		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.

HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?

Q

Α

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.

19 Q PLEASE DESCRIBE ANY PROFESSIONAL REGISTRATIONS OR 20 ORGANIZATIONS TO WHICH YOU BELONG.

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.

\huey\shares\pldocs\sdw\9384\testimony - bai\186884.doc

Rate of Return

<u>Line</u>	<u>Description</u>	<u>Weight</u> (1)	<u>Cost</u> (2)	Weighted <u>Cost</u> (3)
1	Long-Term Debt	48.69%	6.82%	3.32%
2	Convertible Debt	4.53%	13.59%	0.62%
3	Preferred Equity	0.62%	4.29%	0.03%
4	Common Equity	<u>46.16%</u>	9.65%	<u>4.45%</u>
5	Total	100.00%		8.42%

Source:

Hadaway Direct at 7.

Proxy Group

		Credit i	Ratings ¹	Common	Equity Ratios	S&P Business	
<u>Line</u>	Company	S&P	Moody's	AUS1	Value Line ²	Risk Score ³	
_		(1)	(2)	(3)	(4)	(5)	
1	ALLETE	Α-	A2	57.0%	57.2%	Strong	
2	Alliant Energy Co.	Α-	A2	51.0%	51.2%	Excellent	
3	American Elec, Pwr.	BBB	Baa2	43.0%	45.4%	Excellent	
4	Avista Corp.	BBB+	Baa1	49.0%	49.1%	Excellent	
5	Black Hills Corp	BBB	A3	52.0%	51.6%	Excellent	
6	Cleco Corporation	BBB	Baa2	51.0%	45.8%	Excellent	
7	Con. Edison	Α-	A3	49.0%	51.0%	Excellent	
8	DPL Inc.	Α	Aa3	47.0%	46.9%	Excellent	
9	DTE Energy Co.	Α-	A2	46.0%	46.0%	Strong	
10	Duke Energy	A-	A2	57.0%	57.4%	Excellent	
11	Edison Internat.	N/R	A1	46.0%	46.5%	Strong	
12	Empire District	BBB+	A3	47.0%	48.4%	Excellent	
13	Entergy Corp.	A-	Baa1	42.0%	43.1%	Strong	
14	NextEra Energy	Α	Aa3	40.0%	44.3%	Strong	
15	Hawaiian Electric	BBB	Baa2	51.0%	50.7%	Strong	
16	IDACORP	A-	A2	50.0%	49.8%	Excellent	
17	Northeast Utilities	BBB+	A3	43.0%	41.5%	Excellent	
18	NSTAR	AA-	A1	39.0%	48.2%	Excellent	
19	PG&E Corp.	BBB+	A3	49.0%	47.4%	Excellent	
20	Pinnacle West	BBB-	Baa2	48.0%	49.6%	Excellent	
21	Portland General	A-	A3	46.0%	49.7%	Strong	
22	Progress Energy	A-	A1	44.0%	43.3%	Excellent	
23	SCANA Corp.	A-	A3	42.0%	43.2%	Excellent	
24	Sempra Energy	A+	Aa3	54.0%	54.1%	Excellent	
25	Southern Co.	Α	A2	42.0%	43.6%	Excellent	
26	Teco Energy, Inc.	BBB	Baa1	31.0%	39.4%	Excellent	
27	UIL Holdings Co.	N/R	Baa2	44.0%	46.0%	Excellent	
28	Vectren Corp.	Α	A2	44.0%	47.5%	Excellent	
29	Westar Energy	BBB+	Baa1	48.0%	47.4%	Excellent	
30	Wisconsin Energy	Α-	A1	45.0%	47.7%	Excellent	
31	Xcel Energy Inc.	Α-	A2	46.0%	47.7%	Excellent	
32	Average	A-	А3	46.5%	47.8%	Excellent	
33	Kansas City Power & Light	BBB+4	A3⁴		46.2% ⁵	Excellent	

Sources:

¹ AUS Utility Reports, October 2010.

² The Value Line Investment Survey, August 6, August 27, and September 24, 2010.

³ S&P RatingsDirect: "U.S. Regulated Electric Utilities, Strongest to Weakest," October 6, 2010.

⁴ Kansas City Power & Light Company, 2009 10-K, at 43, 12/31/09.

⁵ Schedule MPG-1.

Growth Rates

		Zac	cks	SI	٧L	Reu	Average of	
		Estimated	Number of	Estimated	Number of	Estimated	Number of	Growth
Line	Company	Growth %1	Estimates	Growth %2	Estimates	Growth %3	<u>Estimates</u>	Rates
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	ALLETE	4.00%	2	6.50%	2	5.33%	3	5.28%
2	Alliant Energy Co.	5.00%	2	6.00%	3	7.94%	5	6.31%
3	American Elec. Pwr.	4.00%	4	4.00%	5	4.50%	5	4.17%
4	Avista Corp.	4.67%	3	4.00%	2	4.67%	3	4.45%
5	Black Hills Corp	6.00%	1	6.00%	1	6.00%	1	6.00%
6	Cleco Corporation	7.00%	1	3.00%	7	3.00%	1	4.33%
7	Con. Edison	4.61%	3	4.80%	3	4.72%	4	4.71%
8	DPL Inc.	N/A	N/A	5.90%	2	11.80%	1	8.85%
9	DTE Energy Co.	5.00%	1	5.00%	1	4.60%	3	4.87%
10	Duke Energy	1.50%	6	4.00%	5	5.17%	7	3.56%
11	Edison Internat.	3.00%	3	5.00%	6	4.32%	6	4.11%
12	Empire District	N/A	N/A	N/A	N/A	N/A	N/A	N/A
13	Entergy Corp.	3.00%	4	2.00%	3	6.45%	2	3.82%
14	NextEra Energy	6.40%	5	6.30%	6	6.70%	7	6.47%
15	Hawaiian Electric	9.54%	2	5.00%	3	7.28%	4	7.27%
16	IDACORP	4.00%	3	4.00%	3	4.00%	3	4.00%
17	Northeast Utilities	7.93%	4	7.40%	4	7.08%	8	7.47%
18	NSTAR	5.99%	4	5.20%	3	5.42%	5	5.54%
19	PG&E Corp.	6.75%	4	6.70%	6	6.63%	7	6.69%
20	Pinnacle West	6.80%	5	6.00%	4	8.07%	5	6.96%
21	Portland General	9.60%	5	6.00%	4	5.50%	6	7.03%
22	Progress Energy	4.00%	3	4.00%	6	3.83%	7	3.94%
23	SCANA Corp.	4.27%	6	5.30%	4	5.12%	5	4.90%
24	Sempra Energy	7.00%	1	5.30%	2	5.50%	3	5.93%
25	Southern Co.	5.06%	5	5.40%	7	4.65%	7	5.04%
26	Teco Energy, Inc.	5.25%	4	5.00%	5	8.43%	7	6.23%
27	UIL Holdings Co.	3.57%	2	4.10%	4	3.90%	5	3.86%
28	Vectren Corp.	5.00%	2	4.90%	2	4.85%	2	4.92%
29	Westar Energy	8.00%	3	10.00%	2	6.95%	4	8.32%
30	Wisconsin Energy	8.67%	3	10.00%	3	8.70%	6	9.12%
31	Xcel Energy Inc.	5.70%	5	7.00%	7	6.26%	8	6.32%
32	Average	5.56%	3	5.46%	4	5.91%	5	5.68%
33	Median							5.41%

Sources:

¹ Zacks Elite, http://www.zackselite.com/, downloaded on October 29, 2010.

² SNL Interactive, http://www.snl.com/, downloaded on October 29, 2010.

³ Reuters, http://www.reuters.com/, downloaded on October 29, 2010.

Constant Growth DCF Model

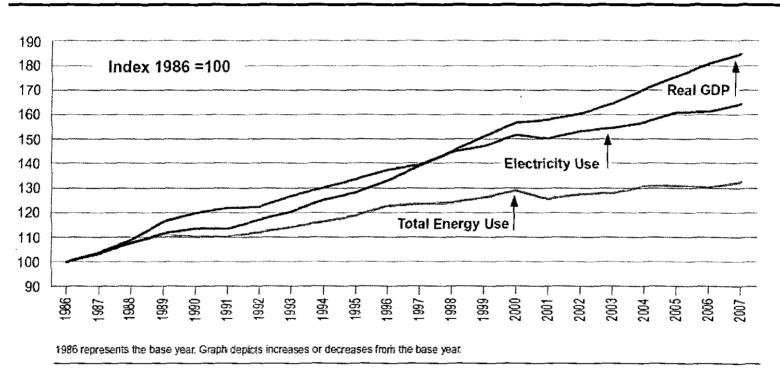
<u>Line</u>	Company	13-Week AVG <u>Stock Price¹</u> (1)	Analysts' Growth ² (2)	Annualized <u>Dividend³</u> (3)	Adjusted <u>Yield</u> (4)	Constant Growth DCF (5)
1	ALLETE	\$36.35	5.28%	\$1.76	5.10%	10.37%
2	Alliant Energy Co.	\$35.70	6.31%	\$1.58	4.71%	11.02%
3	American Elec. Pwr.	\$36.02	4.17%	\$1.68	4.86%	9.03%
4	Avista Corp.	\$21.07	4.45%	\$1.00	4.96%	9.40%
5	Black Hills Corp	\$31.39	6.00%	\$1.44	4.86%	10.86%
6	Cleco Corporation	\$29.22	4.33%	\$1.00	3.57%	7.90%
7	Con. Edison	\$47.81	4.71%	\$2.38	5.21%	9.92%
8	DPL Inc.	\$25.94	8.85%	\$1.21	5.09%	13.94%
9	DTE Energy Co.	\$46.73	4.87%	\$2.24	5.03%	9.89%
10	Duke Energy	\$17.47	3.56%	\$0.98	5.81%	9.36%
11	Edison Internat.	\$34.31	4.11%	\$1.26	3.82%	7.93%
12	Empire District	\$20.03	N/A	\$1.28	N/A	N/A
13	Entergy Corp.	\$78.00	3.82%	\$3.32	4.42%	8.24%
14	NextEra Energy	\$54.06	6.47%	\$2.00	3.94%	10.41%
15	Hawailan Electric	\$23.40	7.27%	\$1.24	5.68%	12.96%
16	IDACORP	\$35.78	4.00%	\$1.20	3.49%	7.49%
17	Northeast Utilities	\$29.35	7.47%	\$1.03	3.75%	11.22%
18	NSTAR	\$38.56	5.54%	\$1.60	4.38%	9.92%
19	PG&E Corp.	\$45.87	6.69%	\$1.82	4.23%	10.93%
20	Pinnacle West	\$40.44	6.96%	\$2.10	5.55%	12.51%
21	Portland General	\$20.09	7.03%	\$1.04	5.54%	12.57%
22	Progress Energy	\$43.31	3.94%	\$2.48	5.95%	9.89%
23	SCANA Corp.	\$39.85	4.90%	\$1.90	5.00%	9.90%
24	Sempra Energy	\$52.44	5.93%	\$1.56	3.15%	9.08%
25	Southern Co.	\$36.80	5.04%	\$1.82	5.19%	10.23%
26	Teco Energy, Inc.	\$17.09	6.23%	\$0.82	5.10%	11.32%
27	UIL Holdings Co.	\$27.38	3.86%	\$1.73	6.55%	10.41%
28	Vectren Corp.	\$25.35	4.92%	\$1,36	5.63%	10.55%
29	Westar Energy	\$24.16	8.32%	\$1.24	5.56%	13.88%
30	Wisconsin Energy	\$56.82	9.12%	\$1.60	3.07%	12.20%
31	Xcel Energy Inc.	\$22.71	6.32%	\$1.01	4.73%	11.05%
32	Average	\$35.27	5.68%	\$1.57	4.80%	10.48%
33	Median		5.41%			10.39%

Sources:

1 http://moneycentral.msn.com, downloaded on October 29, 2010.
2 Schedule MPG-3, Column 7.

³ The Value Line Investment Survey, August 6, August 27, and September 24, 2010.

Electricity Sales Are Linked to U.S. Economic Growth



Source: U.S. Department of Energy, Energy Information Administration (EIA).

© 2008 by the Edison Electric Institute. All rights reserved.

Payout Ratios

		Dividend	s Per Share	Earnings	Per Share	Payou	ıt Ratio
Line	<u>Company</u>	2009	Projected	2009	Projected	2009	Projected
		(1)	(2)	(3)	(4)	(5)	(6)
1	ALLETE	\$1.76	\$1.85	\$1.89	\$2.75	93.12%	67.27%
2	Alliant Energy Co.	\$1.50	\$1.92	\$1.89	\$3.60	79.37%	53.33%
3	American Elec, Pwr.	\$1.64	\$1.90	\$2.97	\$3.50	55.22%	54.29%
4	Avista Corp.	\$0.81	\$1.30	\$1.58	\$2.00	51.27%	65.00%
5	Black Hills Corp	\$1.42	\$1.60	\$2.32	\$2.50	61.21%	64.00%
6	Cleco Corporation	\$0.90	\$1.45	\$1.76	\$2.75	51.14%	52.73%
7	Con. Edison	\$2.36	\$2.46	\$3.16	\$3.85	74.68%	63.90%
8	DPL Inc.	\$1.14	\$1.50	\$2.01	\$3.00	56.72%	50.00%
9	DTE Energy Co.	\$2.12	\$2.70	\$3.24	\$4.25	65.43%	63.53%
10	Duke Energy	\$0.94	\$1.05	\$1.13	\$1.50	83.19%	70.00%
1 1	Edison Internat.	\$1.25	\$1.50	\$3.24	\$3.50	38.58%	42.86%
12	Empire District	\$1.28	\$1.35	\$1.18	\$1.75	108.47%	77.14%
13	Entergy Corp.	\$3.00	\$4.15	\$6.30	\$7.75	47.62%	53.55%
14	NextEra Energy	\$1.89	\$2.40	\$3.97	\$5.00	47.61%	48.00%
15	Hawaiian Electric	\$1.24	\$1.30	\$0.91	\$2.00	136.26%	65.00%
16	IDACORP	\$1.20	\$1.40	\$2.64	\$3.10	45.45%	45.16%
17	Northeast Utilities	\$0.95	\$1.30	\$1.91	\$2.50	49.74%	52.00%
18	NSTAR	\$1.53	\$2.05	\$2.28	\$3.25	67.11%	63.08%
19	PG&E Corp.	\$1.68	\$2.40	\$3.03	\$4.50	55.45%	53.33%
20	Pinnacle West	\$2.10	\$2.30	\$2.26	\$3.50	92.92%	65.71%
21	Portland General	\$1.01	\$1.20	\$1.31	\$2.00	77.10%	60.00%
22	Progress Energy	\$2.48	\$2.58	\$2.99	\$3.55	82.94%	72.68%
23	SCANA Corp.	\$1.88	\$2.00	\$2.85	\$3.50	65.96%	57.14%
24	Sempra Energy	\$1.56	\$2.05	\$4.78	\$5.00	32.64%	41.00%
25	Southern Co.	\$1.73	\$2.10	\$2.32	\$3.00	74.57%	70.00%
26	Teco Energy, Inc.	\$0.80	\$0.95	\$1.00	\$1.60	80.00%	59.38%
27	UIL Holdings Co.	\$1.73	\$1.73	\$1.94	\$2.30	89.18%	75.22%
28	Vectren Corp.	\$1.35	\$1.50	\$1.79	\$2,25	75.42%	66.67%
29	Westar Energy	\$1.20	\$1.40	\$1.28	\$2.25	93.75%	62.22%
30	Wisconsin Energy	\$1.35	\$2.40	\$3.20	\$5.25	42.19%	45.71%
31	Xcel Energy Inc.	\$0.97	\$1.15	\$1.49	\$2.00	65.10%	57.50%
32	Average	\$1.51	\$1.84	\$2.41	\$3.20	69.01%	59.27%

Source:

The Value Line Investment Survey, August 6, August 27, and September 24, 2010.

Sustainable Growth Rates

					3 to	5 Year Project	ions				Growth
		Dividends	Earnings	Book Value		Adjustment	Adjusted	Payout	Retention	Internal	Rate Plus
Line	Сотрапу	Per Share	Per Share	Per Share	ROE	Factor	ROE	Ratio	Rate	Growth Rate	<u>s • v¹</u>
	 -	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	ALLETE	\$1.85	\$2.75	\$30.00	9,17%	1.01	9.28%	67.27%	32.73%	3.04%	3.72%
2	Alliant Energy Co.	\$1.92	\$3.60	\$31.05	11.59%	1.02	11.84%	53.33%	46,67%	5.53%	5.93%
3	American Elec. Pwr.	\$1.90	\$3.50	\$34.75	10.07%	1.02	10.31%	54.29%	45.71%	4.71%	4.99%
4	Avista Corp.	\$1.30	\$2.00	\$22,50	8.89%	1.02	9.03%	65.00%	35.00%	3.16%	3.31%
5	Black Hills Corp	\$1.60	\$2.50	\$31.50	7.94%	1.01	8.03%	64.00%	36,00%	2.89%	2.98%
6	Cleco Corporation	\$1.45	\$2,75	\$26.25	10.48%	1.03	10.84%	52.73%	47.27%	5.13%	6.01%
7	Con, Edison	\$2.46	\$3.85	\$41.10	9,37%	1.01	9.48%	63.90%	36,10%	3.42%	3.55%
8	DPL Inc.	\$1.50	\$3.00	\$12.00	25.00%	1.03	25.65%	50.00%	50.00%	12.83%	14.62%
9	DTE Energy Co.	\$2.70	\$4.25	\$46.50	9.14%	1.02	9.33%	63.53%	36.47%	3.40%	3.74%
10	Duke Energy	\$1.05	\$1.50	\$18.00	8,33%	1.01	8.40%	70.00%	30.00%	2.52%	2.54%
11	Edison Internat	\$1.50	\$3.50	\$39,50	8.86%	1.03	9.10%	42.86%	57.14%	5.20%	5.20%
12	Empire District	\$1.35	\$1.75	\$17.25	10.14%	1.01	10.24%	77.14%	22.86%	2.34%	2.94%
13	Entergy Corp.	\$4.15	\$7.75	\$60.75	12.76%	1.03	13.12%	53.55%	46.45%	6.10%	4.59%
14	NextEra Energy	\$2.40	\$5.00	\$44.75	11.17%	1.04	11.57%	48.00%	52,00%	6.02%	6.85%
15	Hawaiian Electric	\$1.30	\$2.00	\$18.50	10.81%	1.02	11.00%	65.00%	35.00%	3.85%	4.53%
16	IDACORP	\$1.40	\$3.10	\$36.50	8,49%	1.02	8.68%	45.16%	54.84%	4.76%	5.14%
17	Northeast Utilities	\$1.30	\$2.50	\$26.00	9.62%	1.02	9.85%	52.00%	48.00%	4.73%	5.33%
18	NSTAR	\$2.05	\$3.25	\$22.75	14.29%	1.03	14.66%	63.08%	36,92%	5.41%	4.08%
19	PG&E Corp.	\$2.40	\$4,50	\$38.25	11.76%	1.03	12.14%	53.33%	46.67%	5.66%	6.66%
20	Pinnacle West	\$2.30	\$3.50	\$38.25	9.15%	1.02	9.29%	65.71%	34.29%	3.19%	4.08%
21	Portland General	\$1.20	\$2.00	\$23.25	8,60%	1.01	8.71%	60.00%	40.00%	3.48%	3.41%
22	Progress Energy	\$2.58	\$3.55	\$38.00	9.34%	1.01	9.47%	72.68%	27.32%	2.59%	2.98%
23	SCANA Corp.	\$2.00	\$3,50	\$35.25	9.93%	1.02	10.17%	57.14%	42.86%	4.36%	5.95%
24	Sempra Energy	\$2.05	\$5.00	\$49.75	10.05%	1.03	10.36%	41.00%	59.00%	6.11%	5.66%
25	Southern Co.	\$2.10	\$3.00	\$23.25	12.90%	1.02	13.22%	70.00%	30.00%	3.97%	5.67%
26	Teco Energy, Inc.	\$0.95	\$1.60	\$12.50	12.80%	1.02	13.12%	59.38%	40.63%	5.33%	5.68%
27	UIL Haldings Co.	\$1.73	\$2.30	\$22.30	10.31%	1.02	10,47%	75.22%	24.78%	2.59%	2.88%
28	Vectren Corp.	\$1.50	\$2.25	\$22.00	10.23%	1.02	10.48%	66.67%	33.33%	3.49%	3.82%
29	Westar Energy	\$1.40	\$2.25	\$26.10	8,62%	1.02	8.82%	62.22%	37.78%	3.33%	3.50%
30	Wisconsin Energy	\$2.40	\$5.25	\$41,50	12.65%	1.03	13.04%	45.71%	54.29%	7.08%	7.08%
31	Xcel Energy Inc.	\$1.15	\$2.00	\$19.75	10.13%	1.02	10.34%	57.50%	42.50%	4.40%	5.04%
32	Average	\$1.84	\$3,20	\$30.64	10.73%	1.02	10,97%	59.27%	40.73%	4.54%	4.92%
33	Median										4.59%

Sources:

The Value Line Investment Survey, August 6, August 27, and September 24, 2010.

¹ Page 2, Column 9.

Sustainable Growth Rates

		13-Week	2009	Market		n Shares				
	_	Average	Book Value	to Book		g (in Millions) ²			4	
<u>Line</u>	Company	Stock Price ¹ (1)	Per Share ² (2)	Ratio (3)	<u>2009</u> (4)	<u>3-5 Years</u> (5)	Growth (6)	S Factor ³ (7)	V Factor* (8)	(9)
1	ALLETE	\$36.35	\$26.41	1.38	35.20	38.50	1.81%	2.49%	27,34%	0.68%
2	Alliant Energy Co.	\$35.70	\$25.07	1.42	110.66	116.00	0.95%	1.35%	29.77%	0.40%
3	American Elec. Pwr.	\$36.02	\$27.49	1.31	478.05	500.00	0.90%	1.18%	23.68%	0.28%
4	Avista Corp.	\$21.07	\$19.17	1.10	54.84	59.00	1.47%	1.62%	9.02%	0.15%
5	Black Hills Corp	\$31.39	\$27.84	1.13	38.97	40.25	0.65%	0.73%	11.30%	0.08%
6	Cleco Corporation	\$29.22	\$18.50	1.58	60.26	65.00	1.53%	2.41%	36.69%	0.88%
7	Con. Edison	\$47.81	\$36.46	1.31	281.12	287.00	0.41%	0.54%	23.75%	0.13%
8	DPL Inc.	\$25.94	\$9.25	2.80	118.97	125.00	0.99%	2,79%	64,34%	1.79%
9	DTE Energy Co.	\$46.73	\$37.96	1.23	165.40	178.00	1.48%	1.82%	18.76%	0.34%
10	Duke Energy	\$17.47	\$16.62	1.05	1309.00	1335.00	0.39%	0.41%	4.89%	0.02%
11	Edison internat.	\$34.31	\$30.20	1.14	325.81	325.81	0.00%	0.00%	11.99%	0.00%
12	Empire District	\$20.03	\$15.75	1.27	38.11	42.50	2.20%	2.80%	21.38%	0.60%
13	Entergy Corp.	\$78.00	\$45.54	1.71	189,12	170.00	-2.11%	-3.61%	41.62%	-1.50%
14	NextEra Energy	\$54.06	\$31.35	1.72	413.62	438.00	1.15%	1.99%	42.01%	0.83%
15	Hawaiian Electric	\$23.40	\$15.58	1.50	92.52	99.00	1.36%	2.05%	33.43%	0.68%
16	IDACORP	\$35.78	\$29,17	1.23	47.90	52.00	1.66%	2.03%	18.46%	0.38%
17	Northeast Utilities	\$29.35	\$20.37	1.44	175,62	188.00	1.37%	1.98%	30.59%	0.60%
18	NSTAR	\$38.56	\$17.53	2.20	106.81	101,00	-1.71%	-2.45%	54.54%	-1.33%
19	PG&E Corp.	\$45.87	\$27.88	1.65	370.60	400.00	1.54%	2.53%	39.22%	0.99%
20	Pinnacle West	\$40.44	\$32.69	1.24	101.43	122.00	3.76%	4.65%	19.16%	0.89%
21	Portland General	\$20.09	\$20.50	0.98	75.21	90.00	3.66%	3.58%	-2.03%	-0.07%
22	Progress Energy	\$43.31	\$33.30	1.30	281.00	300.00	1.32%	1.71%	23.12%	0.40%
23	SCANA Corp.	\$39.85	\$27.71	1.44	123.00	147.00	3.63%	5.22%	30.46%	1.59%
24	Sempra Energy	\$52.44	\$36.54	1.44	246.50	234.00	-1.04%	-1.49%	30.32%	-0.45%
25	Southern Co.	\$36.80	\$18.15	2.03	819.65	00.068	1.86%	3.37%	50.68%	1.71%
26	Teco Energy, Inc.	\$17.09	\$9.75	1.75	213.90	219.00	0.47%	0.83%	42.95%	0.36%
27	UIL Holdings Co.	\$27.38	\$19.15	1.43	29,98	31.00	0.67%	0.96%	30.05%	0.29%
28	Vectren Corp.	\$25.35	\$17.23	1.47	81.10	84.00	0.71%	1.04%	32.03%	0.33%
29	Westar Energy	\$24.16	\$20.78	1.16	109.07	115.00	1.06%	1.24%	13.98%	0.17%
30	Wisconsin Energy	\$56.82	\$30.51	1.86	116.91	116.90	0.00%	0.00%	46,30%	0.00%
31	Xcel Energy Inc.	\$22.71	\$15.92	1.43	457.51	493.00	1.51%	2.15%	29.91%	0.64%
32	Average	\$35.27	\$24.63	1.47	227.99	238,77	1.10%	1.48%	28.70%	0.38%

Sources and Notes:

¹ http://moneycentral.msn.com, downloaded on October 29, 2010.

² The Value Line Investment Survey, August 6, August 27, and September 24, 2010.

³ Expected Growth in the Number of Shares, Column (3) * Column (6).

⁴ Expected Profit of Stock Investment, [1 - 1 / Column (3)].

⁵ Column (7) * Column (8).

Sustainable Constant Growth DCF Model

<u>Line</u>	<u>Company</u>	13-Week AVG Stock Price ¹ (1)	Sustainable <u>Growth²</u> (2)	Annualized <u>Dividend³</u> (3)	Adjusted <u>Yield</u> (4)	Constant Growth DCF (5)
1	ALLETE	\$36.35	3.72%	\$1.76	5.02%	8.74%
2	Alliant Energy Co.	\$35.70	5.93%	\$1.58	4.69%	10.62%
3	American Elec. Pwr.	\$36.02	4.99%	\$1.68	4.90%	9.89%
4	Avista Corp.	\$21.07	3.31%	\$1.00	4.90%	8.21%
5	Black Hills Corp	\$31.39	2.98%	\$1.44	4.72%	7.70%
6	Cleco Corporation	\$29.22	6.01%	\$1.00	3.63%	9.64%
7	Con. Edison	\$47.81	3.55%	\$2.38	5.15%	8.71%
8	DPL Inc.	\$25.94	14.62%	\$1.21	5.36%	19.97%
9	DTE Energy Co.	\$46.73	3.74%	\$2.24	4.97%	8.72%
10	Duke Energy	\$17.47	2.54%	\$0.98	5.75%	8.29%
11	Edison Internat.	\$34.31	5.20%	\$1.26	3.86%	9.06%
12	Empire District	\$20.03	2.94%	\$1.28	6.58%	9.52%
13	Entergy Corp.	\$78.00	4.59%	\$3.32	4.45%	9.05%
14	NextEra Energy	\$54.06	6.85%	\$2.00	3.95%	10.80%
15	Hawaiian Electric	\$23.40	4.53%	\$1.24	5.54%	10.07%
16	IDACORP	\$35.78	5.14%	\$1.20	3.53%	8.66%
17	Northeast Utilities	\$29.35	5.33%	\$1.03	3.68%	9.01%
18	NSTAR	\$38.56	4.08%	\$1.60	4.32%	8.40%
19	PG&E Corp.	\$45.87	6.66%	\$1.82	4.23%	10.89%
20	Pinnacle West	\$40.44	4.08%	\$2.10	5.41%	9.48%
21	Portland General	\$20.09	3.41%	\$1.04	5.35%	8.76%
22	Progress Energy	\$43.31	2.98%	\$2.48	5.90%	8.88%
23	SCANA Corp.	\$39.85	5.95%	\$1.90	5.05%	11.00%
24	Sempra Energy	\$52.44	5.66%	\$1.56	3.14%	8.81%
25	Southern Co.	\$36.80	5.67%	\$1.82	5.23%	10.90%
26	Teco Energy, Inc.	\$17.09	5.68%	\$0.82	5.07%	10.76%
27	UIL Holdings Co.	\$27.38	2.88%	\$1.73	6.49%	9.38%
28	Vectren Corp.	\$25.35	3.82%	\$1.36	5.57%	9.40%
29	Westar Energy	\$24.16	3.50%	\$1.24	5.31%	8.82%
30	Wisconsin Energy	\$56.82	7.08%	\$1.60	3.02%	10.09%
31	Xcel Energy Inc.	\$22.71	5.04%	\$1.01	4.67%	9.71%
32 33	Average Median	\$35.27	4.92%	\$1.57	4.82%	9.74% 9.38%

¹ http://moneycentral.msn.com, downloaded on October 29, 2010. ² Schedule MPG-7, Page 1 of 2, Column 10.

³ The Value Line Investment Survey, August 6, August 27, and September 24, 2010.

Multi-Stage Growth DCF Model

		13-Week AVG	Annualized	First Stage		Sec	cond Stage Gro	wth		Third Stage	Multi-Stage
Line	Company	Stock Price1	Dividend ²	Growth ³	Year 6	Year 7	Year 8	Year 9	Year 10	Growth ⁴	Growth DCF
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	ALLETE	\$36.35	\$1.76	5.28%	5.19%	5.10%	5.01%	4.93%	4.84%	4.75%	9.99%
2	Alliant Energy Co.	\$35.70	\$1.58	6.31%	6.05%	5.79%	5.53%	5.27%	5.01%	4.75%	9.85%
3	American Elec. Pwr.	\$36.02	\$1.68	4.17%	4.26%	4.36%	4.46%	4.56%	4.65%	4.75%	9.46%
4	Avista Corp.	\$21.07	\$1.00	4.45%	4.50%	4.55%	4.60%	4.65%	4.70%	4.75%	9.63%
5	Black Hills Corp	\$31.39	\$1.44	6.00%	5.79%	5.58%	5.38%	5.17%	4.96%	4.75%	9.94%
6	Cleco Corporation	\$29.22	\$1.00	4.33%	4.40%	4.47%	4,54%	4.61%	4.68%	4.75%	8.24%
7	Con, Edison	\$47.81	\$2.38	4.71%	4.72%	4.72%	4.73%	4.74%	4.74%	4.75%	9.95%
8	DPL Inc.	\$25.94	\$1.21	8.85%	8.17%	7.48%	6.80%	6.12%	5.43%	4.75%	10.98%
9	DTE Energy Co.	\$46.73	\$2.24	4.87%	4.85%	4.83%	4.81%	4.79%	4.77%	4.75%	9.81%
10	Duke Energy	\$17.47	\$0.98	3.56%	3,76%	3.95%	4.15%	4.35%	4.55%	4.75%	10.21%
11	Edison internat.	\$34.31	\$1.26	4.11%	4.21%	4.32%	4.43%	4.54%	4.64%	4.75%	8.44%
12	Empire District	\$20.03	\$1.28	N/A	N/A	N/A	N/A	N/A	N/A	4.75%	N/A
13	Entergy Corp.	\$78.00	\$3.32	3.82%	3.97%	4.13%	4.28%	4.44%	4.59%	4.75%	8.95%
14	NextEra Energy	\$54.06	\$2.00	6.47%	6.18%	5.89%	5.61%	5.32%	5.04%	4.75%	9.06%
15	Hawalian Electric	\$23.40	\$1.24	7.27%	6.85%	6.43%	6.01%	5.59%	5.17%	4.75%	11.19%
16	IDACORP	\$35.78	\$1.20	4.00%	4.13%	4.25%	4.38%	4.50%	4.63%	4.75%	8.09%
17	Northeast Utilities	\$29.35	\$1.03	7.47%	7.02%	6.56%	6.11%	5.66%	5.20%	4.75%	9.08%
18	NSTAR	\$38.56	\$1.60	5.54%	5.41%	5.27%	5.14%	5.01%	4.88%	4.75%	9.31%
19	PG&E Corp.	\$45.87	\$1.82	8.69%	6.37%	6.05%	5.72%	5.40%	5.07%	4.75%	9.44%
20	Pinnacle West	\$40.44	\$2.10	6.96%	6.59%	6.22%	5.85%	5.49%	5.12%	4,75%	10.95%
21	Portrand General	\$20.09	\$1.04	7.03%	6.65%	6.27%	5,89%	5.51%	5.13%	4,75%	10.96%
22	Progress Energy	\$43.31	\$2.48	3.94%	4.08%	4.21%	4.35%	4.48%	4.62%	4.75%	10.46%
23	SCANA Corp.	\$39.85	\$1.90	4.90%	4.87%	4.85%	4.82%	4.80%	4.77%	4.75%	9.79%
24	Sempra Energy	\$52.44	\$1.56	5.93%	5.74%	5.54%	5.34%	5.14%	4.95%	4.75%	8.11%
25	Southern Co.	\$36,80	\$1.82	5.04%	4.99%	4.94%	4.89%	4.85%	4.80%	4.75%	10.02%
26	Teco Energy, Inc.	\$17.09	\$0.82	6.23%	5.98%	5.73%	5.49%	5.24%	5.00%	4.75%	10.25%
27	UIL Holdings Co.	\$27.38	\$1.73	3.86%	4.01%	4.15%	4.30%	4.45%	4.60%	4.75%	11.02%
28	Vectren Corp.	\$25.35	\$1.36	4.92%	4.89%	4.86%	4.83%	4.81%	4.78%	4.75%	10.43%
29	Westar Energy	\$24,16	\$1.24	8.32%	7.72%	7.13%	6.53%	5.94%	5.34%	4.75%	11,37%
30	Wisconsin Energy	\$56.82	\$1.60	9.12%	8.39%	7.67%	6.94%	6.21%	5.48%	4.75%	8.63%
31	Xcel Energy Inc.	\$22.71	\$1.01	6.32%	6.06%	5.80%	5.54%	5.27%	5.01%	4.75%	9.88%
32	Average	\$35.24	\$1.56	5.70%	5.53%	5.37%	5,22%	5.06%	4.91%	4.75%	9.78%
33	Median										9.86%

Sources:

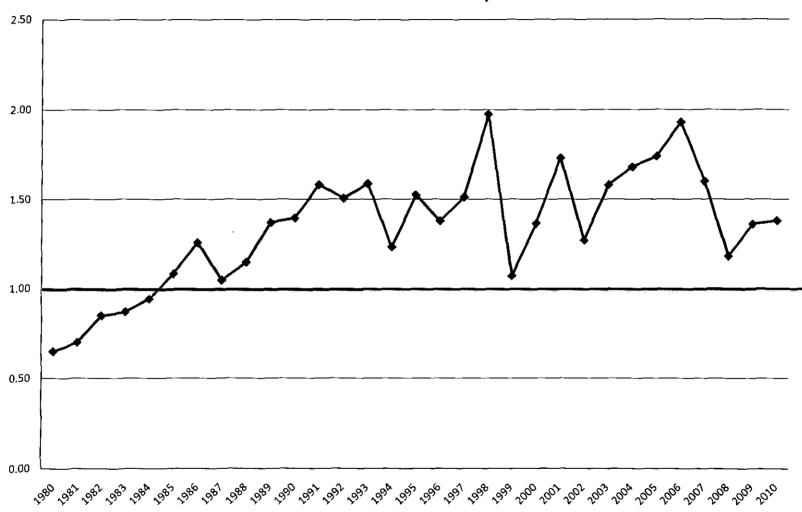
¹ http://moneycentral.msn.com, downloaded on October 29, 2010.

² The Value Line Investment Survey, August 6, August 27, and September 24, 2010.

³ Schedule MPG-3, Column 7.

⁴ Blue Chip Economic Indicators, October 10, 2010 at 15.

Electric Common Stock Market/Book Ratio



Sources:

2001 - June 2010: AUS Utility Reports.

1980 - 2000: Mergent Public Utility Manual, 2003.

Electric Equity Risk Premium - Treasury Bond

<u>Line</u>	<u>Year</u>	Authorized Electric <u>Returns¹</u> (1)	Treasury <u>Bond Yield²</u> (2)	Indicated Risk <u>Premium</u> (3)
1	1986	13.93%	7.78%	6.15%
2	1987	12.99%	8.59%	4.40%
3	1988	12.79%	8.96%	3.83%
4	1989	12.97%	8.45%	4.52%
5	1990	12.70%	8.61%	4.09%
6	1991	12.55%	8.14%	4.41%
7	1992	12.09%	7.67%	4.42%
8	1993	11.41%	6.59%	4.82%
9	1994	11.34%	7.37%	3.97%
10	1995	11.55%	6.88%	4.67%
11	1996	11.39%	6.71%	4.68%
12	1997	11.40%	6.61%	4.79%
13	1998	11.66%	5.58%	6.08%
14	1999	10.77%	5.87%	4.90%
15	2000	11.43%	5.94%	5.49%
16	2001	11.09%	5.49%	5.60%
17	2002	11.16%	5.43%	5.73%
18	2003	10.97%	4.96%	6.01%
19	2004	10.75%	5.05%	5.70%
20	2005	10.54%	4.65%	5.89%
21	2006	10.36%	4.91%	5.45%
22	2007	10.36%	4.84%	5.52%
23	2008	10.46%	4.28%	6.18%
24	2009	10.48%	4.08%	6.40%
25	Sep 2010 ³	10.36%	4.28%	6.08%
26	Average	11.50%	6.31%	5.19%

Sources:

¹ Regulatory Research Associates, Inc., Regulatory Focus, Jan. 85 - Dec. 06, and October 4, 2010.

² Economic Report of the President 2010: Table 73. The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

³ St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/, January to June 2010.

Electric Equity Risk Premium - Utility Bond

<u>Line</u>	<u>Year</u>	Authorized Electric <u>Returns¹</u> (1)	Average "A" Rated Utility Bond Yield ² (2)	Indicated Risk <u>Premium</u> (3)
1	1986	13.93%	9.58%	4.35%
2	1987	12.99%	10.10%	2.89%
3	1988	12.79%	10.49%	2.30%
4	1989	12.97%	9.77%	3.20%
5	1990	12.70%	9.86%	2.84%
6	1991	12.55%	9.36%	3.19%
7	1992	12.09%	8.69%	3.40%
8	1993	11.41%	7.59%	3.82%
9	1994	11.34%	8.31%	3.03%
10	1995	11.55%	7.89%	3.66%
11	1996	11.39%	7.75%	3.64%
12	1997	11.40%	7.60%	3.80%
13	1998	11.66%	7.04%	4.62%
14	1999	10.77%	7.62%	3.15%
15	2000	11.43%	8.24%	3.19%
16	2001	11.09%	7.76%	3.33%
17	2002	11.16%	7.37%	3.79%
18	2003	10.97%	6.58%	4.39%
19	2004	10.75%	6.16%	4.59%
20	2005	10.54%	5.65%	4.89%
21	2006	10.36%	6.07%	4.29%
22	2007	10.36%	6.07%	4.29%
23	2008	10.46%	6.53%	3.93%
24	2009	10.48%	6.04%	4.44%
25	Sep 2010 ³	10.36%	5.50%	4.86%
26	Average	11.50%	7.75%	3.75%

Sources:

³ www.moodys.com, Bond Yields and Key Indicators.

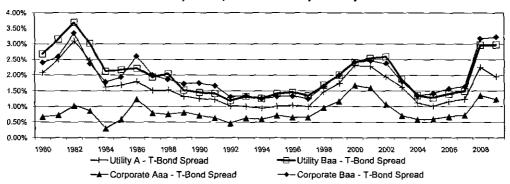
¹ Regulatory Research Associates, Inc., Regulatory Focus, Jan. 85 - Dec. 06, and October 4, 2010.

² Mergent Public Utility Manual, Mergent Weekly News Reports, 2003. The utility yields for the period 2001-2009 were obtained from the Mergent Bond Record. The utility yields were obtained from http://credittrends.moodys.com/.

Utility Bond Yield Spreads

			Public Utility Bond Yields				Corporate Bond Yields				
		T-Bond			A-T-Bond	Baa-T-Bond		·	Aaa-T-Bond	Baa-T-Bond	Baa Utility -
Line	<u>Year</u>	<u>Yield¹</u> (1)	<u>A²</u> (2)	<u>Baa²</u> (3)	Spread (4)	Spread (5)	<u>Aaa¹</u> (6)	<u>Baa¹</u> (7)	Spread (8)	Spread (9)	Corporate (10)
1	1980	11.27%	13.34%	13.95%	2.07%	2.68%	11.94%	13.67%	0.67%	2,40%	0.28%
2	1981	13.45%	15.95%	16.60%	2.50%	3.15%	14.17%	16.04%	0.72%	2.40%	0.26%
3	1982	12.76%	15.86%	16.45%	3.10%	3.69%	13.79%	16.11%	1,03%	2.35% 3.35%	0.34%
4	1983	11.18%	13.66%	14.20%	2.48%	3.02%	12.04%	13.55%	0.86%	2.37%	0.54%
5	1984	12,41%	14.03%	14.53%	1.62%	2.12%	12.71%	14.19%	0.30%	1.78%	0.83%
6	1985	10.79%	12.47%	12.96%	1.68%	2.12%	11.37%	12.72%	0.58%	1.78%	0.34%
7	1986	7.78%	9.58%	10.00%	1.80%	2.17%	9.02%	10.39%	1.24%	2.61%	
8	1987	8.59%	10.10%	10.53%	1.51%	1.94%	9.02%	10.58%	0.79%	1.99%	-0.39%
9	1988	8.96%	10.10%	11.00%	1.51%	2.04%	9.71%	10.83%	0.75%		-0.05%
10	1989	8.45%	9.77%	9.97%	1.33%		9.71%	10.63%		1.87%	0.17%
	1990	8.61%	9.77%	10.06%		1.52%			0.81%	1.73%	-0.21%
11	1990	8.14%	9.36%	9.55%	1.25%	1.45%	9.32% 8.77%	10.36%	0.71%	1.75%	-0.30%
12	1991	7.67%			1.22% 1.02%	1.41% 1.19%		9.80%	0.63%	1.66%	-0.25%
13			8.69%	8.86%			8.14%	8.98%	0.47%	1.31%	-0.12%
14	1993	6.59%	7.59%	7.91%	1.00%	1.32%	7.22%	7.93%	0.63%	1.34%	-0.02%
15	1994	7.37%	8.31%	8.63%	0.94%	1.26%	7.96%	8.62%	0.59%	1.25%	0.01%
16	1995	6.88%	7.89%	8.29%	1.01%	1.41%	7.59%	8.20%	0.71%	1.32%	0.09%
17	1996	6.71%	7.75%	8.17%	1.04%	1.46%	7.37%	8.05%	0.66%	1.34%	0.12%
18	1997	6.61%	7.60%	7.95%	0.99%	1.34%	7.26%	7.86%	0.65%	1,25%	0.09%
19	1998	5.58%	7.04%	7.26%	1.46%	1.68%	6.53%	7.22%	0.95%	1,64%	0.04%
20	1999	5.87%	7.62%	7.88%	1.75%	2.01%	7.04%	7.87%	1.17%	2.00%	0.01%
21	2000	5.94%	8.24%	8.36%	2.30%	2.42%	7.62%	8.36%	1.68%	2.42%	0.00%
22	2001	5.49%	7.76%	8.03%	2.27%	2.54%	7.08%	7.95%	1.59%	2.46%	%80.0
23	2002	5.43%	7.37%	8.02%	1.94%	2.59%	6.49%	7.80%	1.06%	2.37%	0.22%
24	2003	4.96%	6.58%	6.84%	1.62%	1.89%	5.67%	6.77%	0.71%	1.81%	0.07%
25	2004	5.05%	6.16%	6.40%	1.11%	1.35%	5.63%	6.39%	0.58%	1.34%	0.00%
26	2005	4.65%	5.65%	5.93%	1.00%	1.28%	5.24%	6.06%	0.59%	1.41%	-0.14%
27	2006	4.91%	6.07%	6.32%	1.16%	1.41%	5.59%	6.48%	· 0.68%	1.57%	-0.16%
28	2007	4.84%	6.07%	6.33%	1.23%	1.49%	5.56%	6.48%	0.72%	1.64%	-0.15%
29	2008	4.28%	6.53%	7.25%	2.25%	2.97%	5.63%	7.45%	1.35%	3.17%	-0.20%
30	2009	4.08%	6.04%	7.06%	1.96%	2.98%	5.31%	7.30%	1.23%	3.22%	-0.24%
31	Average	7.51%	9.11%	9.51%	1.60%	2.00%	8.35%	9.47%	0.84%	1,96%	0.04%

Yield Spreads
Treasury Vs. Corporate & Treasury Vs. Utility



Sources:

¹ Economic Report of the President 2008: Table 73 at 316. The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

² Mergent Public Utility Manual 2003, Moody's Daily News Reports.

Utility and Treasury Bond Yields

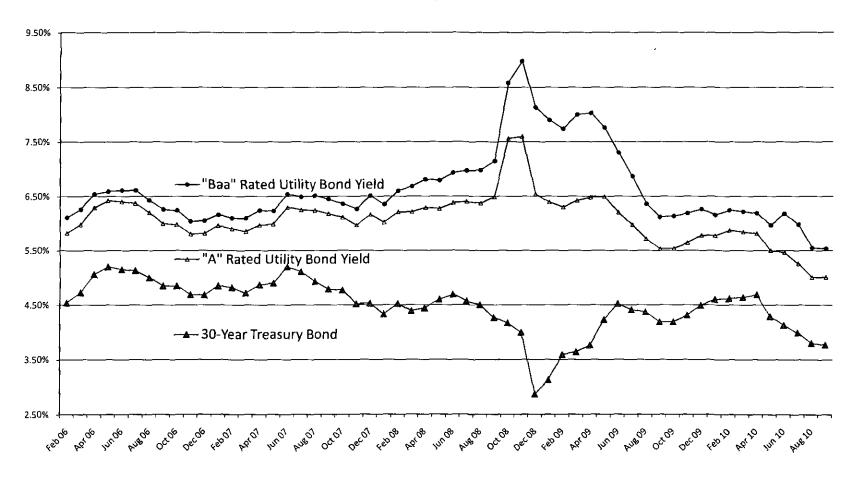
<u>Line</u>	<u>Date</u>	Treasury <u>Bond Yield¹</u> (1)	"A" Rated Utility <u>Bond Yield²</u> (2)	"Baa" Rated Utility <u>Bond Yield²</u> (3)
1	10/22/10	3.92%	5.17%	5.67%
2	10/15/10	3.88%	5.23%	5.77%
3	10/08/10	3.72%	4.99%	5.52%
4	10/01/10	3.69%	4.96%	5.48%
5	09/24/10	3.78%	5.03%	5.54%
6	09/17/10	3.86%	5.14%	5.65%
7	09/10/10	3.78%	5.10%	5.64%
8	09/03/10	3.66%	5.02%	5.57%
9	08/27/10	3.61%	4.94%	5.50%
10	08/20/10	3.71%	4.85%	5.40%
11	08/13/10	3.95%	5.06%	5.60%
12	08/06/10	4.04%	5.18%	5.70%
13	07/30/10	4.05%	5.17%	5.80%
14	13-Wk Average	3.82%	5.06%	5.60%

Sources:

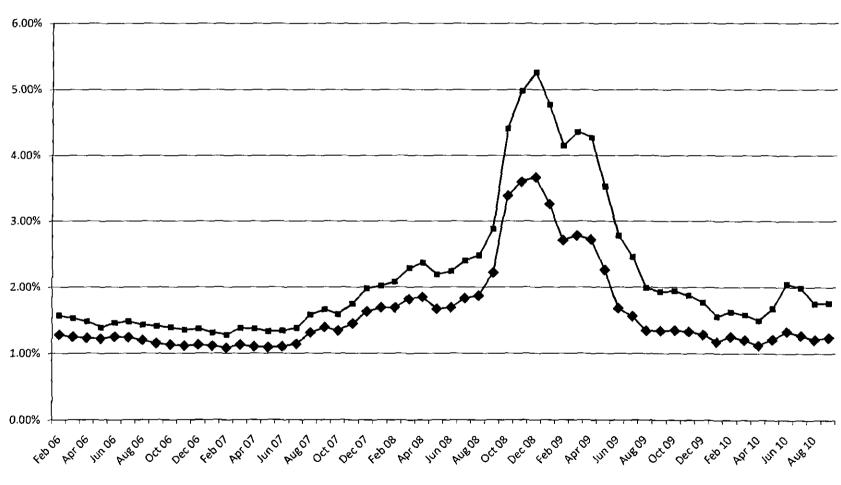
¹ St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org.

² www.moodys.com, Bond Yields and Key Indicators.

Trends in Utility Bond Yields



Spread Between "A" and "Baa" Rated Utility Bond Yield and 30-Year Treasury Bond Yield



Sources:

A Spread Baa Spread

Merchant Bond Record.

www.moodys.com, Bond Yields and Key Indicators.

Value Line Beta

<u>Line</u>	Company	<u>Beta</u>
1	ALLETE	0.70
2	Alliant Energy Co.	0.70
3	American Elec. Pwr.	0.70
4	Avista Corp.	0.70
5	Black Hills Corp	0.80
6	Cleco Corporation	0.65
7	Con. Edison	0.65
8	DPL Inc.	0.60
9	DTE Energy Co.	0.75
10	Duke Energy	0.65
11	Edison Internat.	0.80
12	Empire District	0.70
13	Entergy Corp.	0.70
14	NextEra Energy	0.75
15	Hawaiian Electric	0.70
16	IDACORP	0.70
17	Northeast Utilities	0.70
18	NSTAR	0.65
19	PG&E Corp.	0.55
20	Pinnacle West	0.75
21	Portland General	0.75
22	Progress Energy	0.60
23	SCANA Corp.	0.70
24	Sempra Energy	0.85
25	Southern Co.	0.55
26	Teco Energy, Inc.	0.85
27	UIL Holdings Co.	0.70
28	Vectren Corp.	0.70
29	Westar Energy	0.75
30	Wisconsin Energy	0.65
31	Xcel Energy Inc.	0.65
32	Average	0.70

Source:

The Value Line Investment Survey, August 6, August 27, and September 24, 2010.

CAPM Return

		CAPM Range			
<u>Line</u>	<u>Description</u>	Low	<u>High</u>		
1	Risk-Free Rate ¹	4.70%	4.70%		
2	Risk Premium ²	5.20%	6.70%		
3	Beta ³	0.70	0.70		
4	CAPM	8.33%	9.38%		
5	CAPM Average	8.8	6%		

Sources:

¹ Blue Chip Financial Forecasts; October 1, 2010, at 2.

Morningstar, Inc. Ibbotson SBBI 2010 Valuation Yearbook, at 54 and 66.

³ The Value Line Investment Survey, August 6, August 27, and and September 24, 2010.

Standard & Poor's Credit Metrics

		Co	Retail st of Service	S&P Ben	chmark ^{1/2}	
<u>Line</u>	<u>Description</u>		Amount (1)	Significant (2)	Aggressive (3)	<u>Reference</u> (4)
1	Rate Base	\$	2,121,588			Weinsensee Direct, Schedule 1, Page 3 of 46.
2	Weighted Common Return		4.45%			Page 2, Line 4, Col. 4.
3	Pre-Tax Rate of Return		11.28%			Page 2, Line 5, Col. 5.
4	Income to Common	\$	94,500			Line 1 x Line 2.
5	EBIT	\$	239,413			Line 1 x Line 3.
6	Depreciation & Amortization	\$	102,413			Weinsensee Direct, Schedule 1, Page 3 of 46.
7	Imputed Amortization	\$	10,410			Page 4, Line 13, Col. 1.
8	Deferred Income Taxes & ITC	\$	15,076			Weinsensee Direct, Schedule 7, Page 19 of 46.
9	Funds from Operations (FFO)	\$	222,399			Sum of Line 4 and Lines 6 through 8.
10	Imputed Interest Expense	\$	6,726			Page 4, Line 12, Col. 1.
11	EBITDA	\$	358,962			Sum of Lines 5 through 7 and Line 10.
12	Total Debt Ratio	Γ	56%	45% - 50%	50% - 60%	Page 3, Line 5, Col. 1.
13	Debt to EBITDA	ĺ	3.3x	3.0x - 4.0x	2.0x - 3.0x	(Line 1 x Line 12) / Line 11.
14	FFO to Total Debt	L	19%	20% - 30%	12% - 20%	Line 9 / (Line 1 x Line 12).

Sources

Note:

Based on the May 2009 S&P metrics, Kansas City Power & Light has an "Excellent" business profile and an "Aggressive" financial profile.

¹ Standard & Poor's: "U.S. Utilities Ratings Analysis Now Portrayed in The S&P Corporate Ratings Matrix," May 27, 2009.

² S&P RatingsDirect: "U.S. Regulated Electric Utilities, Strongest to Weakest," October 6, 2010.

Standard & Poor's Credit Metrics (Pre-Tax Rate of Return)

<u>Line</u>	Description	<u>Weight</u> (1)	<u>Cost</u> (2)	Weighted <u>Cost</u> (3)	Pre-Tax Weighted <u>Cost</u> (4)
1	Long-Term Debt	48.69%	6.82%	3.32%	3.32%
2	Convertible Debt	4.53%	13.59%	0.62%	0.62%
3	Preferred Equity	0.62%	4.29%	0.03%	0.03%
4	Common Equity	<u>46.16%</u>	9.65%	<u>4.45%</u>	<u>7.32%</u>
5	Total	100.00%		8.42%	11.28%
6	Tax Conversion Factor*				1.6438

Sources:

Hadaway Direct at 7.

^{*} Weinsensee Direct, Schedule 1, Page 3 of 46.

Standard & Poor's Credit Metrics (Financial Capital Structure)

<u>Line</u>	<u>Description</u>	Weight ¹
1	Long-Term Debt	46.39%
2	Convertible Debt	4.32%
3	Preferred Equity	0.59%
4	OBS ²	<u>4.73</u> %
5	Total Long-Term Debt	56.03%
		40.070/
6	Common Equity	<u>43.97</u> %
7	Total	100.00%

Sources:

¹ Hadaway Direct at 7.

² Page 4, Line 8, Col. 1.

Standard & Poor's Credit Metrics (Operating Leases)

<u>Line</u>	<u>Description</u>	<u>Am</u>	ount (000) (1)	Reference (2)
	Missouri Allocator ¹			
1	Missouri Production Allocator	•	53.38%	
	Total Company ²			
2	Operating Leases	\$	139,700	
3	Imputed Interest Expense	\$	9,400	
4	Imputed Amortization Expense	\$	7,500	
5	Purchased Power	\$	50,200	
6	Imputed Interest Expense	\$	3,200	
7	Imputed Amortization Expense	\$	12,000	
8	Total Off Balance Sheet Debt	\$	189,900	
9	Imputed Interest Expense	\$	12,600	
10	Imputed Amortization Expense	\$	19,500	
	Missouri Allocation			
11	Total Off Balance Sheet Debt	 \$	101,374	Line 1 * Line 8
12	Imputed Interest Expense	\$	6,726	Line 1 * Line 9
13	Imputed Amortization Expense	\$	10,410	Line 1 * Line 10

Sources:

¹ Weinsensee Direct, Schedule 5, page 14 of 46.

² Standard & Poor's RatingsDirect, "Kansas City Power and Light," April 30, 2010, at 5.