Exhibit No.:
Issue: Revenue Requirement
Witness: Michael P. Gorman
Type of Exhibit: Direct Testimony
Sponsoring Party: Midwest Energy
                             Consumers' Group
Case No.:   ER-2016-0285
Date Testimony Prepared: November 30, 2016

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service))))))	**Case No. ER-2016-0285**

Direct Testimony and Schedules of

Michael P. Gorman

On behalf of

Midwest Energy Consumers' Group

November 30, 2016

BAI

BRUBAKER & ASSOCIATES, INC.

Project 10290

In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service	)))))))

Case No. ER-2016-0285

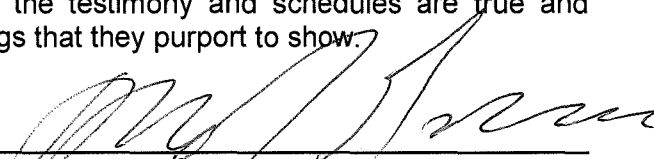|		
STATE OF MISSOURI	))	SS
COUNTY OF ST. LOUIS	)	

Affidavit of Michael P. Gorman

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

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

2.   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-2016-0285.
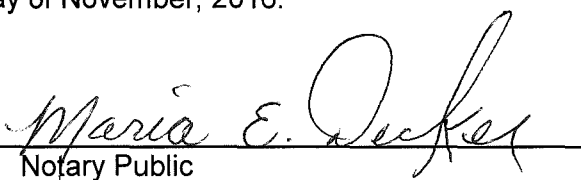
3.   I hereby swear and affirm that the testimony and schedules are true and correct and that they show the matters and things that they purport to show.

_____
Michael P. Gorman

Subscribed and sworn to before me this 30th day of November, 2016.

_____
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

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Direct Testimony of Michael P. Gorman

In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service	)))))) Case No. ER-2016-0285

Direct Testimony of Michael P. Gorman

1   **I. INTRODUCTION AND SUMMARY**

2   **Q**   **PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

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

4   Chesterfield, MO 63017.

5   **Q**   **WHAT IS YOUR OCCUPATION?**

6   A   I am a consultant in the field of public utility regulation and a Managing Principal of

7   Brubaker & Associates, Inc., energy, economic and regulatory consultants.

8   **Q**   **PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

9   A   This information is included in Appendix A to this testimony.

10   **Q**   **ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

11   A   This testimony is presented on behalf of the Midwest Energy Consumers' Group

12   ("MECG"). MECG is an incorporated association representing the interests of large

13   commercial and industrial users of electricity in Kansas City Power & Light

14   Company's ("KCPL" or "Company") service territory.

1 **Q WHAT IS THE SUBJECT MATTER OF YOUR TESTIMONY?**

2 A My testimony will address the current market cost of equity, and resulting overall rate

3 of return, for KCPL. In my analyses, I consider the results of several market models

4 and the current economic environment and outlook for the electric utility industry as

5 well as the financial integrity of KCPL given my recommended return on equity and

6 overall rate of return.

7 My silence in regard to any issue should not be construed as an endorsement

8 of KCPL's position.

9 **Q PLEASE SUMMARIZE YOUR RECOMMENDATIONS AND CONCLUSIONS ON**

10 **RATE OF RETURN.**

11 A I recommend the Missouri Public Service Commission (the "Commission") award a

12 return on common equity of 9.00%, which is the midpoint of my recommended range

13 of 8.80% to 9.20%. My recommended return on equity will fairly compensate KCPL

14 for its current market cost of common equity, and it will mitigate the claimed revenue

15 deficiency in this proceeding by fairly balancing the interests of all stakeholders. I will

16 update this study in subsequent testimony to reflect any change in market costs.

17 For purposes of calculating an appropriate overall weighted cost of capital, I

18 have agreed to KCPL's proposed capital structure. That said, my agreement to utilize

19 a capital structure consisting of 50.12% long-term debt and 49.88% common equity in

20 this case should not be construed as agreement with the appropriateness of the

21 method by which KCPL determined a capital structure in this case.

1 **Q WHAT IS YOUR RECOMMENDED OVERALL RATE OF RETURN?**

2 A Based on my recommended return on equity of 9.00%, and the Company's proposed

3 capital structure and embedded cost of debt, I recommend an overall rate of return of

4 7.25% as developed on my Schedule MPG-1.

5 **Q DOES YOUR RECOMMENDED RETURN ON EQUITY AND OVERALL RATE OF**

6 **RETURN REFLECT KCPL'S EXISTING REGULATORY MECHANISMS, OR THE**

7 **NEW RIDER SURCHARGES IT IS PROPOSING IN THIS PROCEEDING?**

8 A My recommended return on equity and overall rate of return reflect KCPL's existing

9 regulatory mechanisms and the resulting investment risk attributed to cash flow

10 variability, cost recovery and revenue stability. These existing regulatory

11 mechanisms impact KCPL's business risk and overall investment risk. My

12 recommended rate of return reflects KCPL's existing investment risk.

13 To the extent the Commission approves new rider mechanisms that increase

14 the probability and timeliness of cost recovery, and reduce KCPL's business risk, then

15 my return on equity should be reduced to reflect a shift in this risk from investors to

16 ratepayers. KCPL is proposing new or modified rider mechanisms that are addressed

17 in the testimony of my colleague, Mr. Michael Brosch. To the extent those rider

18 mechanisms are adopted by the Commission, then I encourage it to consider a return

19 on equity at the low end of my recommended range, or 8.80%. This would

20 correspondingly reduce my recommended overall rate of return to 7.15%.

21 This shift in cost recovery risk to ratepayers from investors created by these

22 proposed new regulatory mechanisms is addressed in Mr. Brosch's testimony.

II. RATE OF RETURN

Q   **PLEASE DESCRIBE THIS SECTION OF YOUR TESTIMONY.**

A   In this section of my testimony, I will explain the analysis I performed to determine the reasonable rate of return in this proceeding and present the results of my analysis. I begin my estimate of a fair return on equity by reviewing the authorized returns approved by the regulatory commissions in various jurisdictions as well as the market assessment of the regulated utility industry investment risk, credit standing, and stock price performance. I used this information to get a sense of the market's perception of the risk characteristics of regulated utility investments in general, which is then used to produce a refined estimate of the market's return requirement for assuming investment risk similar to KCPL's utility operations.

As described below, I find the credit rating outlook of the industry to be strong, supportive of the industry's financial integrity, and access to capital. Further, regulated utilities' stocks have exhibited strong price performance over the last several years, which is evidence of utility access to capital.

Based on this review of credit outlooks and stock price performance, I conclude that the market continues to embrace the regulated utility industry as a safe-haven investment and views utility equity and debt investments as low-risk securities.

1 **II.A. Electric Industry Authorized Returns on Equity,**
2 **　　　Access to Capital, and Credit Strength**

3 **Q DO YOU AGREE WITH MR. HEVERT THAT CURRENT MARKET CONDITIONS**

4 **SHOULD BE REFLECTED IN KCPL'S AUTHORIZED RETURN?**

5 A Yes, I do. By reviewing recent regulatory decisions and the current market

6 environment, I conclude that my estimated return on equity range of 8.80% to 9.20%

7 will fairly compensate KCPL's investors and allow the utility to access capital without

8 unnecessarily increasing the revenue requirements and placing a burden on

9 ratepayers. Further, the evidence in this case finds that the 9.5% and 9.3% return on

10 equity authorized by the Missouri and Kansas Commissions for KCPL in 2015,

11 respectively, are now above market costs, and should be reduced in this case.

12 **Q HOW DOES YOUR RECOMMENDED RETURN ON EQUITY RANGE COMPARE**

13 **TO KCPL'S RECENT AUTHORIZED RETURN ON EQUITY OF 9.5%?**

14 A On September 2, 2015, the Commission issued its final order in KCPL's rate case

15 (Missouri Public Service Commission, Case No. ER-2014-0370) which included a

16 return on equity of 9.5%. In KCPL's recent rate case in Kansas, it was awarded a

17 return on common equity of 9.3%.[1]

18 　　This return on equity falls above the upper end of my recommended return on

19 equity range. This also clearly shows the Company's requested return on equity of

20 9.90% is excessive.

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[1]State Corporation Commission of the State of Kansas Docket No. 15-KCPE-116-RTS, September 10, 2015.

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1 **Q IN HIS DIRECT TESTIMONY, KCPL WITNESS MR. HEVERT OUTLINED**

2 **INDUSTRY AUTHORIZED RETURNS ON EQUITY FOR VERTICALLY**

3 **INTEGRATED ELECTRIC UTILITY COMPANIES. HE FINDS THAT HIS**

4 **RECOMMENDATION IS HIGHLY CONSISTENT WITH RECENTLY AUTHORIZED**

5 **RETURNS ON EQUITY.[2] PLEASE COMMENT.**

6 A   As shown in Table 1 below, I outline the individual authorized returns on equity for

7   vertically integrated electric utilities in 2015 and the first three quarters of 2016. This

8   data includes most of the data used by Mr. Hevert but also reflects additional data for

9   the first three quarters of 2016. Like Mr. Hevert, I excluded the Virginia decisions

10   based on their rider return on equity obligations.

---

[2]Hevert Direct Testimony at 4.

TABLE 1

**2015 and 2016 Vertically Integrated Electric
Utility Rate Case Authorized Returns on Equity
Litigated Decisions**

Line	Company	State	Return on Equity	Date	S&P Credit Rating
	(1)	(2)	(3)	(4)	(5)
1	Kansas City Power & Light Company	KS	9.30%	09/10/15	BBB+
2	El Paso Electric Company	NM	9.48%	06/08/16	BBB
3	PacifiCorp	WY	9.50%	01/23/15	A
4	PacifiCorp	WA	9.50%	03/25/15	A
5	Kansas City Power & Light Company	MO	9.50%	09/02/15	BBB+
6	PacifiCorp	WY	9.50%	12/30/15	A
7	UNS Electric, Inc.	AZ	9.50%	08/18/16	
8	PacifiCorp	WA	9.50%	09/01/16	A
9	Union Electric Company	MO	9.53%	04/29/15	BBB+
10	Public Service Company of New Mexico	NM	9.58%	09/28/16	BBB+
11	Southwestern Public Service Company	TX	9.70%	12/17/15	A-
12	Northern States Power Company - MN	MN	9.72%	03/26/15	A-
13	Appalachian Power Company	WV	9.75%	05/26/15	BBB
14	Indianapolis Power & Light Company	IN	9.85%	03/16/16	BBB-
15	Wisconsin Public Service Corporation	WI	10.00%	11/19/15	A-
16	Northern States Power Company - WI	WI	10.00%	12/03/15	A-
17	Upper Peninsula Power Company	MI	10.00%	09/08/16	
18	Consumers Energy Company	MI	10.30%	11/19/15	BBB+
19	DTE Electric Company	MI	10.30%	12/11/15	BBB+

_____

Source: SNL Financial, downloaded November 3, 2016.

Notes:
[1]Data through the third quarter of 2016.
[2]Rate cases for limited issue riders are excluded.
[3]Rate cases decided by settlement are excluded.
[4]Rate cases without return on equity authorization are excluded.

1   As shown in the table above, the industry authorized returns on equity have

2   predominantly ranged between 9.3% and 9.75%. There were 19 total observations

3   and 12 were below 9.75%, and 9 at or below 9.53%. The data illustrates that

4   authorized returns on equity in Michigan and Wisconsin are well above industry

1   average authorized returns on equity. The Michigan and Wisconsin rate decisions

2   were the only return awards above 9.85% in 2015 and 2016.

3   Other awards are also notable. Specifically, the return on equity for

4   Indianapolis Power & Light Company was for a utility with a minimum investment

5   grade bond rating of BBB-, and whose parent company is actually a below investment

6   grade entity (AES Corporation – BB from Standard & Poor's ("S&P") and Ba3 from

7   Moody's). Excluding this notable decision, along with the Wisconsin and Michigan

8   decisions, an overwhelming majority of authorized returns on equity in 2015 and the

9   first three quarters of 2016 were approximately 9.5% plus or minus 20 basis points.

10   Of additional importance is that the authorized return for vertically integrated

11   utilities has continued to decline since the Missouri and Kansas decisions in the 2014

12   KCPL rate cases. Specifically, the average authorized return for vertically integrated

13   utilities dropped by about 20 basis points from 2014 to 2016.

14   **Q   SHOULD THE COMMISSION GIVE MUCH CONSIDERATION TO THE**

15   **AUTHORIZED RETURNS ON EQUITY FOR THE WISCONSIN AND MICHIGAN**

16   **UTILITIES?**

17   A   No. In my experience, these jurisdictions often award utilities well above industry

18   average authorized returns on equity. What is significant about this observation is,

19   while these utilities get above industry average returns on equity, their bond ratings

20   are generally comparable to the industry average credit ratings. As shown in the

21   table above, Wisconsin Public Service Corporation and Northern States Power

22   Company - WI both have A- bond ratings. In Michigan, Consumers Energy Company

23   and DTE Electric Company have BBB+ bond ratings. These bond ratings are

24   comparable to KCPL's BBB+, which is the same bond rating from S&P for Ameren

1   Missouri. While these utilities' investors are receiving the benefit of well-above

2   industry average authorized returns on equity, these return on equity awards are not

3   supporting stronger credit standing or reduced cost of debt for these utilities. Indeed,

4   the authorized returns on equity in Wisconsin and Michigan are simply inflating these

5   utilities' cost of service and providing above market returns to investors with no

6   measurable benefit to their retail customers. As shown on my Schedule MPG-2,

7   Wisconsin and Michigan industrial rates are amongst the highest in the central United

8   States region for integrated electric utilities.

9 **Q   HOW SHOULD THE COMMISSION INTERPRET THIS DATA ON AUTHORIZED**

10   **RETURNS ON EQUITY FOR ELECTRIC UTILITIES?**

11 A   I recommend the Commission find that its past decisions have struck a balance

12   between investors and customers by mitigating the unnecessary increases in cost of

13   service sought by the utilities, while preserving the financial integrity of Missouri

14   utilities and supporting their access to large amounts of capital under reasonable

15   terms and conditions, rather than the Company's proposal in this proceeding.

16 **Q   PLEASE DESCRIBE THE OBSERVABLE EVIDENCE ON TRENDS IN**

17   **AUTHORIZED RETURNS ON EQUITY FOR ELECTRIC UTILITIES.**

18 A   Authorized returns on equity for electric utilities have been steadily declining over the

19   last 10 years as illustrated in the graph below. More recent authorized returns on

20   equity for all electric utilities (both vertically integrated and distribution utilities) have

21   declined down to about the 9.6% area.

Figure 1

Authorized Electric Returns on Equity
(Excludes Limited Issue Riders)
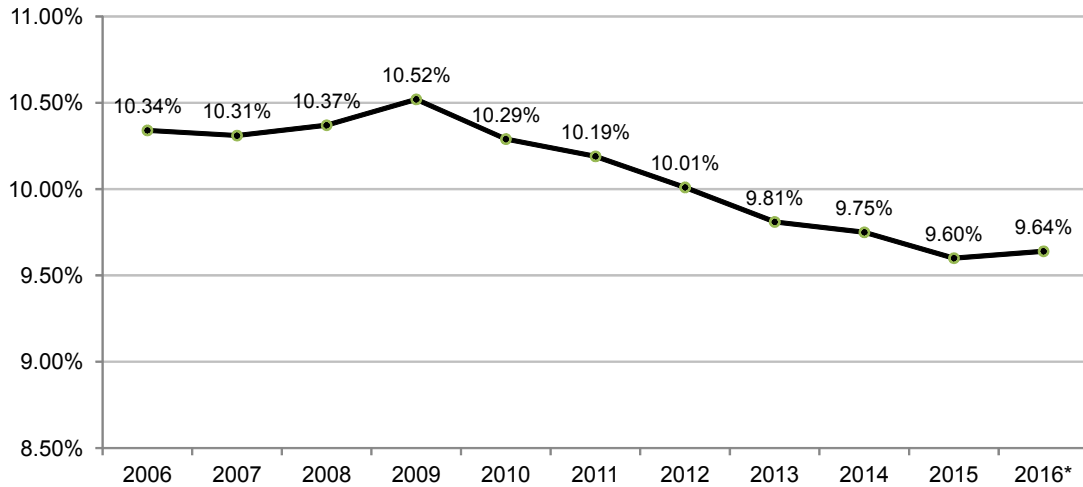
Source and Note:
  Regulatory Research Associates, Inc., Regulatory Focus, Major Rate Case Decisions -- January - September 2016,
  October 14, 2016 at page 6.

* The data includes the period Jan - Sep 2016.

1   As illustrated on the graph above, excluding these Virginia rider decisions, the

2   authorized return on equity for electric utilities has steadily declined in 2015/2016

3   from preceding periods.

4   While the decline in authorized returns on equity is public knowledge, and

5   aligns with declining capital market costs, utilities are maintaining strong investment

6   grade credit standing, and have been able to attract large amounts of capital at low

7   costs to fund very large capital programs.

1 **Q   PLEASE DESCRIBE THE TREND IN CREDIT RATING CHANGES IN THE**

2 **ELECTRIC UTILITY INDUSTRY OVER THE LAST FIVE YEARS.**

3 A   As shown below in Table 2, over the period 2010-2015, the electric utility industry has

4   experienced a significant number of upgrades in credit ratings by all of the major

5   credit rating agencies (Fitch Ratings, Moody's, and Standard & Poor's).

TABLE 2

Credit Rating Changes
(U.S. Shareholder-Owned Electric Utility Industry)

	2010	2011	2012	2013	2014	2015
Upgrades	29	39	37	60	103	35
Downgrades	51	21	39	20	3	15
% Upgrades	36%	65%	49%	75%	97%	70%
Total Rating Activity	**80**	**60**	**76**	**80**	**106**	**50**

_____
Source: EEI Q4 2015 Credit Ratings, Tab IV Direction of Rating Action.

6   As noted above in Table 2, the upgrades in utility credit ratings started

7   outpacing downgrades in 2011, and more recently, the number of upgrades

8   substantially exceeds the amount of downgrades. For example, in 2014, there were

9   103 upgrades and only three downgrades. In 2015, the number of upgrades were

10   more than twice the number of downgrades (at 35 upgrades and 15 downgrades).

11 **Q   HOW DID THIS CREDIT RATING ACTIVITY IMPACT THE CREDIT RATING OF**

12 **THE ELECTRIC UTILITY INDUSTRY?**

13 A   The credit rating changes for the electric utility industry reflected a significant

14   strengthening of the electric utility industry credit rating as shown below in Table 3.

15   As shown in this table, in 2008, approximately 69% of the electric utility industry was

16   rated from BBB- to BBB+, 18% had a bond rating better than BBB+, and around 13%

17   of the industry was below investment grade. This industry rating improves steadily

1   over the subsequent six years. By 2016, only about 3% of the industry is below

2   investment grade, around 65% continue to be in the range of BBB- to BBB+, and 32%

3   of the industry has a bond rating above BBB+. Overall, the improvement to the credit

4   rating of the electric utility industry has been very significant.

TABLE 3

S&P Ratings by Category
(Year End)

Description	2008	2012	2013	2014	2015	2016 Q3
Regulated						
A or higher	8%	6%	3%	3%	3%	5%
A-	10%	17%	20%	21%	22%	27%
BBB+	23%	14%	17%	32%	33%	35%
BBB	23%	36%	49%	37%	33%	22%
BBB-	23%	17%	6%	3%	3%	8%
Below BBB-	13%	11%	6%	5%	6%	3%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Sources: Edison Electric Institute, Electric Industry Credit Standing.

5   **Q   HAVE CREDIT RATING AGENCIES COMMENTED ON DECLINING AUTHORIZED**

6   **RETURNS ON EQUITY?**

7   A   Yes. Credit rating agencies recognize the declining trend in authorized returns and

8   the expectation that regulators will continue lowering the returns for U.S. utilities while

9   maintaining a stable credit profile. Specifically, Moody's states:

10   **Lower Authorized Equity Returns Will Not Hurt Near-Term Credit**
11   **Profiles**

12   The credit profiles of US regulated utilities will remain intact over the
13   next few years despite our expectation that regulators will continue to
14   trim the sector's profitability by lowering its authorized returns on equity
15   (ROE).[3]

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[3]*Moody's Investors Service,* "US Regulated Utilities: Lower Authorized Equity Returns Will Not Hurt Near-Term Credit Profiles," March 10, 2015.

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1   Further, in a recent report, S&P states:

2. Earned returns will remain in line with authorized returns

Authorized returns on equity granted by U.S. utility regulators in rate cases this year have been steady at about <u>9.5%</u>. Utilities have been adept at earning at or very near those authorized returns in today's economic and fiscal environment. A slowly recovering economy, natural gas and electric prices coming down and then stabilizing at fairly low levels, and the same experience with interest rates have led to a perfect "non-storm" for utility ratepayers and regulators, with utilities benefitting alongside those important constituencies. Utilities have largely used this protracted period of favorable circumstances to consolidate and institutionalize the regulatory practices that support earnings and cash flow stability. We have observed and we project continued use of credit-supportive policies such as short lags between rate filings and final decisions, up-to-date test years, flexible and dynamic tariff clauses for major expense items, and alternative ratemaking approaches that allow faster rate recognition for some new investments.[4]

Q   HAVE UTILITIES BEEN ABLE TO ACCESS EXTERNAL CAPITAL TO SUPPORT INFRASTRUCTURE CAPITAL PROGRAMS?

A   Yes. While cost of capital and authorized returns on equity were declining, the utility industry has been able to fund substantial increases in capital investments needed for infrastructure modernization and expansion. The Edison Electric Institute ("EEI") reported in a 2015 financial review of the electric industry financial performance that in 2011 electric "industry-wide capex has more than doubled since 2005."[5]

EEI also observed that, despite this more than doubling of capital expenditures during the period 2005-2015, a majority of the funding for utilities' capital expenditures has been provided by internal funds. EEI reports that approximately 25% of funding needed to meet these increasing capital expenditures

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[4] *Standard & Poor's Ratings Services*: "Corporate Industry Credit Research: Industry Top Trends 2016, Utilities," December 9, 2015, at 23, emphasis added.
[5] Edison Electric Institute, *2015 Financial Review, Annual Report of the U.S. Investor-Owned Electric Utility Industry*, page 17.

1   has been derived from external sources and 75% of these capital expenditures have

2   been funded by internal cash. Further, despite nearly tripling capital expenditures,

3   the electric utility industry debt interest expense has declined by approximately 1.9%

4   despite increases in the amount of outstanding debt.[6] This is clear proof that capital

5   market costs have declined.

6 **Q   IS THERE EVIDENCE OF ROBUST VALUATIONS OF ELECTRIC UTILITY EQUITY**

7   **SECURITIES?**

8 A   Yes. These robust valuations are an indication that utilities can sell equity securities

9   at high prices, which is a strong indication that they can access capital under

10   reasonable terms and conditions, and at relatively low cost. As shown on my

11   Schedule MPG-3, the historical valuation of the electric utilities included in

12   Mr. Hevert's proxy group based on a price-to-earnings ratio, price-to-cash flow ratio

13   and market price-to-book value ratio, indicates utility security valuations today are

14   very strong and robust relative to the last 10 to 15 years. These strong valuations of

15   utility stocks indicate that utilities have access to equity capital under reasonable

16   terms and costs.

17 **Q   HOW SHOULD THE COMMISSION USE THIS MARKET INFORMATION IN**

18   **ASSESSING A FAIR RETURN FOR KCPL?**

19 A   Market evidence is quite clear that capital market costs are near historically low

20   levels. Authorized returns on equity have fallen to the low to mid 9.0% area, and

21   utilities continue to have access to large amounts of external capital to fund large

22   capital programs, and utilities' investment grade credit standings are stable to

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[6]*Id.*, pages 8 and 11.

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1   improving.   The Commission should carefully weigh all this important observable

2   market evidence in assessing a fair return on equity for KCPL. Clearly, the return on

3   equity that I recommend for KCPL is not unreasonable given these macroeconomic

4   indicators.

5 **II.B. Regulated Utility Industry Market Outlook**

6 **Q   PLEASE DESCRIBE THE CREDIT RATING OUTLOOK FOR REGULATED**

7 **UTILITIES.**

8 A   Regulated utilities' credit ratings have improved over the last few years and the

9   outlook has been labeled "Stable" by credit rating agencies. Credit analysts have

10   also observed that utilities have strong access to capital at attractive pricing (i.e., low

11   capital costs), which has supported very large capital programs.

12   S&P recently published a report titled "Corporate Industry Credit Research:

13   Industry Top Trends 2016, Utilities." In that report, S&P noted the following:

14   **Ratings Outlook.** <u>Stable</u> with a slight bias toward the negative.
15   Utilities in the U.S. continue to enjoy a confluence of financial,
16   economic, and regulatory environments that are tailor-made for
17   supporting credit quality. Low interest rates, modest economic growth,
18   and relatively stable commodity costs make for little pressure on rates
19   and therefore on the sunny disposition of regulators.

20   • **Credit Metrics.** We see credit metrics remaining within historic
21   norms for the industry as a whole and do not project overall financial
22   performance that would affect the industry's creditworthiness.

23   • **Industry Trends.** Taking advantage of the favorable market
24   conditions, utilities have been maintaining aggressive capital spending
25   programs to bolster system safety and reliability, as well as
26   technological advances to make the systems "smarter." The elevated
27   spending has not led to large rate increases, but if macro conditions
28   reverse and lead to rising costs that command higher rates, we would
29   expect utilities to throttle back on spending to manage regulatory risk.[7]

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[7] *Standard & Poor's Ratings Services*: "Corporate Industry Credit Research: Industry Top Trends 2016, Utilities," December 9, 2015, at 22, emphasis added.

1   Similarly, Fitch states:

2   **Stable Financial Performance:** The stable financial performance of
3   Utilities, Power & Gas (UPG) issuers continues to support a sound
4   credit profile for the sector, with 93% of the UPG portfolio carrying
5   investment-grade ratings as of June 30, 2015, including 65% in the
6   'BBB' rating category. Second-quarter 2015 LTM [Long-Term Maturity]
7   leverage metrics remained relatively unchanged year over year (YOY)
8   while interest coverage metrics modestly improved. Fitch Ratings
9   expects this trend to broadly sustain for the remainder of 2015, driven
10   by positive recurring factors.

11   **Low Debt-Funded Costs:** The sustained low interest rate
12   environment has allowed UPG companies to refinance high-coupon
13   legacy debt with lower coupon new debt. Gross interest expense on an
14   absolute value represented approximately 4.6% of total adjusted debt
15   as of June 30, 2015, a decline of about 150 bps from the 6.1%
16   recorded in the midst of the recession. Fitch believes a rise in interest
17   rates would largely be neutral to credit quality, as issuers have
18   generally built enough headroom in coverage metrics to withstand
19   higher financing costs.

20   **Capex Moderately Declining:** Fitch expects the capex/depreciation
21   ratio to be at the lower end of its five-year historical range of 2.0x–2.5x
22   in the near term, reflecting a moderate decline in projected capex from
23   the 2011–2014 highs. The capex depreciation ratio was relatively flat
24   YOY at about 2.4x.   Capex targets investments toward base
25   infrastructure upgrades, utility-scale renewables and transmission
26   investments.

27   *   *   *

28   Key credit metrics for IUCs [investor-owned utility companies]
29   remained relatively stable YOY and continue to support the sound
30   credit profiles and <u>Stable Outlooks</u> characteristic of the sector.
31   EBITDAR [Earnings Before Interest, Taxes, Depreciation, Amortization
32   and Rent] and FFO [Funds From Operations] coverage ratios were
33   5.6x and 5.9x, respectively, for the LTM ended second-quarter 2015,
34   while adjusted debt/EDITDAR and FFO-adjusted leverage were 3.5x
35   and 3.4x, respectively.[8]

36   Moody's recent comments on the U.S. Utility Sector state as follows:

37   Our outlook for the US regulated utilities industry <u>is stable</u>. This outlook
38   reflects our expectations for fundamental business conditions in the
39   industry over the next 12 to 18 months.

---

[8]*Fitch Ratings*: "U.S. Utilities, Power & Gas Data comparator," September 21, 2015, at 1
and 7, emphasis added.

1   **» The credit-supportive regulatory environment is the main**
2   **reason for our stable outlook.** We expect that the relationship
3   between regulators and utilities in 2016 will remain credit-supportive,
4   enabling utilities to recover costs in a timely manner and maintain
5   stable cash flows.

6   **» We estimate that the ratio of cash flow from operations (CFO) to**
7   **debt will hold steady at about 21%, on average for the industry,**
8   **over the next 12 to 18 months.** The use of timely cost-recovery
9   mechanisms and continued expense management will help utilities
10   offset a lack of growth in electricity demand and lower allowed returns
11   on equity, enabling financial metrics to remain stable. Tax benefits tied
12   to the expected extension of bonus depreciation will also support CFO-
13   to-debt ratios.

14   *   *   *

15   **» Utilities are increasingly using holding company leverage to**
16   **drive returns, a credit negative.** Although not a driver of our outlook,
17   utilities are using leverage at the holding company level to invest in
18   other businesses, make acquisitions and earn higher returns on equity,
19   which could have negative implications across the whole family.[9]

20 **Q**   **PLEASE DESCRIBE UTILITY STOCK PRICE PERFORMANCE OVER THE LAST**

21   **SEVERAL YEARS.**

22 A   As shown in the graph below, SNL Financial has recorded utility stock price

23   performance compared to the market. The industry's stock performance data from

24   2004 through March 2016 shows that the SNL Electric Company Index has

25   outperformed the market in downturns and trailed the market during recovery. This

26   relatively stable price performance for utilities supports my conclusion that utility stock

27   investments are regarded by market participants as a moderate- to low-risk

28   investment.

---

[9]*Moody's Investors Service*: "2016 Outlook – US Regulated Utilities: Credit-Supportive Regulatory Environment Drives Stable Outlook," November 6, 2015, at 1, emphasis added.

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FIGURE 2

Index Comparison

Source: SNL Financial, data through September 30, 2016.

1 **Q   HAVE ELECTRIC UTILITY INDUSTRY TRADE ORGANIZATIONS COMMENTED**

2 **ON ELECTRIC UTILITY STOCK PRICE PERFORMANCE?**

3 A   Yes. In its 4th Quarter 2015 Financial Update, EEI stated the following concerning

4   the EEI Electric Utility Stock Index ("EEI Index"):

5   EEI Index returns during 2015 embodied the larger pattern seen in
6   Table I since the 2008/2009 financial crisis, as industry business
7   models have migrated to an increasingly regulated emphasis. The
8   industry has generated consistent positive returns but has lagged the
9   broader markets when markets post strong gains, which in turn have
10   been sparked both by slow but steady U.S. economic growth and
11   corporate profit gains and by the willingness of the Federal Reserve to
12   bolster markets with historically unprecedented monetary support in
13   the form of three rounds of quantitative easing and near-zero short-
14   term interest rates. While the Fed did raise short-term rates in
15   December 2015 for the first time since 2006 (from zero to a range of
16   0.25% to 0.50%), this hardly effects longer-term yields, which remain
17   at historically low levels and are influenced more by the level of
18   inflation and economic strength than by the Fed's short-term rate
19   policy.

20   *   *   *

| 1 | **Regulated Fundamentals Remain Stable** |

2	The rate stability offered by state regulation and the ability to recover
3	rising capital spending in rate base shield regulated utilities from the
4	volatility in the competitive power arena and turn the growth of
5	renewable generation (and the resulting need for new and upgraded
6	transmission lines) into a rate base growth opportunity for many
7	industry players.

| 8 | * * * |

9	In the shorter-term, analysts continue to see opportunity for 4-6%
10	earnings growth for regulated utilities in general along with prospects
11	for slightly rising dividends (with a dividend yield now at about 4% for
12	the industry overall). That formula has served utility investors quite
13	well in recent years, delivering long-term returns equivalent to those of
14	the broad markets but with much lower volatility. Provided state
15	regulation remains fair and constructive in an effort to address the
16	interests of ratepayers and investors, it would appear that the industry
17	can continue to deliver success for all stakeholders, even in an
18	environment of flat demand and considerable technological change.[10]

19 **Q WHAT ARE THE IMPORTANT TAKEAWAY POINTS FROM THIS ASSESSMENT**

20 **OF UTILITY INDUSTRY CREDIT AND INVESTMENT RISK OUTLOOKS?**

21 A Credit rating agencies consider the regulated utility industry to be "Stable" and believe

22 investors will continue to provide an abundance of low-cost capital to support utilities'

23 large capital programs at attractive costs and terms. All of this reinforces my belief

24 utility investments are generally regarded as safe-haven or low-risk investments and

25 the market continues to embrace and demand low-risk investments such as utility

26 securities. The ongoing demand for low-risk investments can reasonably be

27 expected to continue to provide attractive low-cost capital for regulated utilities.

---

[10] *EEI Q4 2015 Financial Update*: "Stock Performance" at 4 and 6, emphasis added.

1   **II.C. KCPL Investment Risk**

2   **Q   PLEASE DESCRIBE THE MARKET'S ASSESSMENT OF THE INVESTMENT RISK**

3   **OF KCPL.**

4   A   The market's assessment of KCPL's investment risk is described by credit rating

5   analysts' reports. KCPL's current corporate bond ratings from S&P and Moody's are

6   BBB+ and Baa1, respectively. KCPL's outlook from both credit rating agencies is

7   "Negative" due to its parent company Great Plains Energy's ("GPE") intent to acquire

8   Westar Energy announced on May 31, 2016. Specifically, S&P states:

9   **Outlook: Negative**

10   The outlook on KCP&L reflects the outlook on parent Great Plains
11   Energy Inc. (GPE). The negative outlook on GPE and its subsidiaries
12   reflects the potential for lower ratings if GPE's financial risk profile,
13   which will deteriorate due to the financing used in the proposed
14   acquisition of Westar Energy Inc., does not improve after the
15   transaction closes such that funds from operations (FFO) to total debt
16   is well over 13% after 2018.

17   *   *   *

18   **Business Risk: Excellent**

19   We base our assessment of KCP&L's business risk profile on what we
20   view as the company's strong competitive position, very low industry
21   risk stemming from the regulated utility industry, and the very low
22   country risk stemming from the utility's U.S.-based operations.
23   KCP&L's competitive position reflects the company's fully regulated
24   integrated electric utility operations and our expectation for continued
25   solid operational performance and generally credit-supportive
26   regulation. The utility serves about 527,000 retail customers mainly in
27   the greater Kansas City metropolitan area. The competitive position is
28   also supported by an economically healthy service territory centered
29   on a single metropolitan area with little industrial concentration, solid
30   nuclear power operations, very low fuel costs, and lower electric rates.
31   These attributes are partially offset by nuclear risks associated with the
32   47%-owned Wolf Creek station. The utility now operates with
33   generally supportive regulation, cash flow stability from its customer
34   base, and no competition.

1   **Financial Risk: Significant**

2   Based on our medial volatility financial ratio benchmarks, our
3   assessment of KCP&L's financial risk profile is significant, reflecting
4   the vertically integrated utility model and the recurring cash flow from
5   selling electricity. As a utility, capital spending is ongoing for
6   maintenance and for new projects. Recovery of these costs through
7   rates has generally been supportive. We expect discretionary cash
8   flow to turn positive over the next two years due to declining capital
9   spending. Under our base case forecast, we expect FFO to total debt
10   of about 18% to 19% and operating cash flow to debt to average about
11   18%, within the significant category.[11]

12   Similarly, Moody's states the following:

13   **Summary Rating Rationale**

14   KCPL's Baa1 senior unsecured rating is based on the company's
15   vertically integrated utility operation in generally stable regulatory
16   environments. The rating reflects our expectation that KCPL will
17   improve its standalone financial profile through ongoing rate case
18   filings and receive supportive decisions from its primary regulators in
19   Missouri and Kansas.

20   **Recent Events**

21   On 31 May, we affirmed the Baa1 rating and stable outlook of KCPL,
22   following Great Plains Energy's (GPE; Baa2 ratings under review
23   down) announced intention to acquire Westar Energy, Inc. (Westar;
24   Baa1 stable) for over $12 billion, including the assumption of around
25         $4 billion of expected Westar debt. At the same time, we placed
26   GPE's ratings on review for possible downgrade, due to the expected
27   addition of $4.4 billion in holding company debt to finance the
28   transaction.

29   We see the additional leverage and new capital structure complexity
30   reducing financial flexibility across the entire corporate family. At
31   transaction close, GPE's ratio of parent holding company debt to
32   consolidated debt will rise to 35%, from roughly 2% as of March 31,
33   2016, which could place greater pressure on upstream dividends from
34   subsidiaries in order to service the corporate dividend and parent
35   interest payments.

36   *   *   *

---

[11] *Standard & Poor's RatingsDirect:* "Summary: Kansas City Power & Light Co.," June 17, 2016, at 3-4.

1   **Rating Outlook**

2   The stable outlook reflects our expectation that KCPL's Missouri and
3   Kansas regulatory environments will remain stable and consistent,
4   leading to an improving financial profile through reasonable general
5   rate case outcomes over the next two years.[12]

6

7 **Q**   **WHAT ARE THE IMPORTANT TAKEAWAY POINTS FROM THIS ASSESSMENT**

8   **OF UTILITY INDUSTRY CREDIT AND INVESTMENT RISK OUTLOOKS?**

9 **A**   Generally, credit rating agencies rate KCPL as an excellent business risk. That said,

10   agencies have expressed concerns with financial risk primarily stemming from the

11   significant debt being assumed and issued at the parent company level to finance the

12   acquisition of Westar. In addition, each of the rating agencies comments on the

13   stable and consistent Missouri regulatory environment.

14   **III. KCPL'S PROPOSED CAPITAL STRUCTURE**

15 **Q**   **WHAT IS KCPL'S PROPOSED CAPITAL STRUCTURE?**

16 **A**   KCPL's proposed capital structure is shown below in Table 4. This capital structure

17   ending on the pro forma period December 31, 2016 is sponsored by KCPL witness

18   Mr. Bryant. Mr. Bryant proposes using KCPL's actual capital structure instead of

19   GPE's consolidated capital structure as used in KCPL's last rate case. He states

20   using the Company's own capital structure rather than the capital structure of the

21   parent company will be more in line with providing the utility an opportunity to earn the

22   rate of return or earnings permitted by the regulatory commission in setting rates.

23   (Bryant Direct at 4).

---

[12] *Moody's Investors Service*, "Credit Opinion: Kansas City Power & Light Company," June 2, 2016, at 1-2, provided by KCPL in response to MPSC data request 0256.

```
                    TABLE 4

           KCPL's Proposed Capital Structure
                 (December 31, 2016)


        Description              Weight

  Long-Term Debt                 50.12%
  Common Equity                  49.88%
      Total                      100.00%
  _____

  Source:  Schedule RBH-10, Page 1 of 3.
```

1 **Q**   **IS KCPL'S PROPOSED CAPITAL STRUCTURE REASONABLE?**

2 A   The Company's proposed capital structure contains a common equity ratio slightly

3   above its actual common equity ratio of 48.64% at year-end 2015, as shown on

4   page 2 of Schedule RBH-10. The proposed common equity ratio is in line with the

5   common equity ratio for the electric utility industry as authorized by regulatory

6   commissions in setting rates.

7 ## III.A. Embedded Cost of Debt

8 **Q**   **WHAT IS THE COMPANY'S EMBEDDED COST OF DEBT?**

9 A   Mr. Hevert is proposing an embedded cost of debt of 5.51% as developed on page 3

10   of his Schedule RBH-10. I have used the Company's proposed cost of debt in my

11   calculation of an overall weighted cost of capital.

IV. RETURN ON EQUITY

1

2 **Q** **PLEASE DESCRIBE WHAT IS MEANT BY A "UTILITY'S COST OF COMMON**

3 **EQUITY."**

4 A A utility's cost of common equity is the expected return that investors require on an

5 investment in the utility. Investors expect to earn their required return from receiving

6 dividends and through stock price appreciation.

7 **Q** **PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED**

8 **UTILITY'S COST OF COMMON EQUITY.**

9 A In general, determining a fair cost of common equity for a regulated utility has been

10 framed by two hallmark decisions of the U.S. Supreme Court: Bluefield Water Works

11 & Improvement Co. v. Pub. Serv. Comm'n of W. Va., 262 U.S. 679 (1923) and Fed.

12 Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944).

13 These decisions identify the general financial and economic standards to be

14 considered in establishing the cost of common equity for a public utility.   Those

15 general standards provide the authorized return should: (1) be sufficient to maintain

16 financial integrity; (2) attract capital under reasonable terms; and (3) be

17 commensurate with returns investors could earn by investing in other enterprises of

18 comparable risk.

19 **Q** **PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE KCPL'S**

20 **COST OF COMMON EQUITY.**

21 A I have used several models based on financial theory to estimate KCPL's cost of

22 common equity. These models are: (1) a constant growth Discounted Cash Flow

23 ("DCF") model using consensus analysts' growth rate projections; (2) a constant

1   growth DCF using sustainable growth rate estimates; (3) a multi-stage growth DCF

2   model; (4) a Risk Premium model; and (5) a Capital Asset Pricing Model ("CAPM"). I

3   have applied these models to a group of publicly traded utilities with investment risk

4   similar to KCPL.

IV.A. Risk Proxy Group

6   **Q**   **PLEASE DESCRIBE HOW YOU IDENTIFIED A PROXY UTILITY GROUP THAT**

7   **COULD BE USED TO REASONABLY REFLECT THE INVESTMENT RISK OF**

8   **KCPL AND USED TO ESTIMATE ITS CURRENT MARKET COST OF EQUITY.**

9   A   I relied on the same proxy group developed by KCPL witness Mr. Hevert with one

10   exception. I excluded Otter Tail because it did not have analysts' growth rates from

11   Zacks, SNL Financial or Reuters at the time I developed my studies.

12 **Q**   **WHY IS IT IMPORTANT TO LIMIT THE PROXY GROUP COMPANIES TO THOSE**

13   **THAT HAVE CONSENSUS ANALYSTS' GROWTH RATES PUBLISHED BY**

14   **ZACKS, SNL FINANCIAL OR REUTERS?**

15 A   Selecting companies that have consensus analysts' growth rate projections from at

16   least one of these three sources is an indication that market participants are following

17   the security and there is adequate liquidity and market demand for the security to

18   support the assumption that the market valuation of the security is based on

19   fundamental valuation principles. A stock that is thinly traded, or is not widely

20   followed by the market, may have an observable market price inconsistent with

21   fundamental valuation principles.

1 **Q PLEASE DESCRIBE WHY YOU BELIEVE YOUR PROXY GROUP IS**

2 **REASONABLY COMPARABLE IN INVESTMENT RISK TO KCPL.**

3 A The proxy group is shown in Schedule MPG-4, The proxy group has an average

4 corporate credit rating from S&P of BBB+, which is identical to S&P's corporate credit

5 rating for KCPL. The proxy group has an average corporate credit rating from

6 Moody's of Baa1, which is also identical to KCPL's corporate credit rating from

7 Moody's. Based on this information, I believe my proxy group is reasonably

8 comparable in investment risk to KCPL.

9 The proxy group has an average common equity ratio of 46.9% (including

10 short-term debt) from SNL Financial ("SNL") and 49.5% (excluding short-term debt)

11 from *The Value Line Investment Survey* ("*Value Line*") in 2015.

12 The Company's proposed common equity ratio of 49.9% is slightly higher

13 than, but comparable to, the proxy group common equity ratio. Based on these risk

14 factors, I conclude the proxy group reasonably approximates the investment risk of

15 KCPL.

16 ## IV.B. Discounted Cash Flow Model

17 **Q PLEASE DESCRIBE THE DCF MODEL.**

18 A The DCF model posits that a stock price is valued by summing the present value of

19 expected future cash flows discounted at the investor's required rate of return or cost

20 of capital. This model is expressed mathematically as follows:

1 2 $$P_0 = \frac{D_1}{(1+K)^1} + \frac{D_2}{(1+K)^2} \; \ldots \; \frac{D_\infty}{(1+K)^\infty} \qquad \text{(Equation 1)}$$

3   P_0 = Current stock price

4   D = Dividends in periods 1 - ∞

5   K = Investor's required return

6   This model can be rearranged in order to estimate the discount rate or

7 investor-required return otherwise known as "K." If it is reasonable to assume that

8 earnings and dividends will grow at a constant rate, then Equation 1 can be

9 rearranged as follows:

10       $K = D_1/P_0 + G$ (Equation 2)

11   K = Investor's required return

12   D_1 = Dividend in first year

13   P_0 = Current stock price

14   G = Expected constant dividend growth rate

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

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

17 A   As shown in Equation 2 above, the DCF model requires a current stock price,

18   expected dividend, and expected growth rate in dividends.

19 **Q   WHAT STOCK PRICE HAVE YOU RELIED ON IN YOUR CONSTANT GROWTH**

20   **DCF MODEL?**

21 A   I relied on the average of the weekly high and low stock prices of the utilities in the

22   proxy group over a 13-week period ending on October 28, 2016. An average stock

23   price is less susceptible to market price variations than a price at a single point in

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1   time. Therefore, an average stock price is less susceptible to aberrant market price

2   movements, which may not reflect the stock's long-term value.

3   A 13-week average stock price reflects a period that is still short enough to

4   contain data that reasonably reflects current market expectations but the period is not

5   so short as to be susceptible to market price variations that may not reflect the stock's

6   long-term value. In my judgment, a 13-week average stock price is a reasonable

7   balance between the need to reflect current market expectations and the need to

8   capture sufficient data to smooth out aberrant market movements.

9   **Q   WHAT DIVIDEND DID YOU USE IN YOUR CONSTANT GROWTH DCF MODEL?**

10   A   I used the most recently paid quarterly dividend as reported in *Value Line*.[13] This

11   dividend was annualized (multiplied by 4) and adjusted for next year's growth to

12   produce the D_1 factor for use in Equation 2 above.

13   **Q   WHAT DIVIDEND GROWTH RATES HAVE YOU USED IN YOUR CONSTANT**

14   **GROWTH DCF MODEL?**

15   A   There are several methods that can be used to estimate the expected growth in

16   dividends. However, regardless of the method, for purposes of determining the

17   market-required return on common equity, one must attempt to estimate investors'

18   consensus about what the dividend, or earnings growth rate, will be and not what an

19   individual investor or analyst may use to make individual investment decisions.

---

[13]*The Value Line Investment Survey*, August 19, September 16, and October 28, 2016.

1   As predictors of future returns, security analysts' growth estimates have been

2   shown to be more accurate than growth rates derived from historical data.[14] That is,

3   assuming the market generally makes rational investment decisions, analysts' growth

4   projections are more likely to influence investors' decisions which are captured in

5   observable stock prices than growth rates derived only from historical data.

6   For my constant growth DCF analysis, I have relied on a consensus, or mean,

7   of professional security analysts' earnings growth estimates as a proxy for investor

8   consensus dividend growth rate expectations. I used the average of analysts' growth

9   rate estimates from three sources: Zacks, SNL, and Reuters. All such projections

10   were available on October 28, 2016, and all were reported online.

11   Each consensus growth rate projection is based on a survey of security

12   analysts. There is no clear evidence whether a particular analyst is most influential

13   on general market investors. Therefore, a single analyst's projection does not as

14   reliably predict consensus investor outlooks as does a consensus of market analysts'

15   projections. The consensus estimate is a simple arithmetic average, or mean, of

16   surveyed analysts' earnings growth forecasts. A simple average of the growth

17   forecasts gives equal weight to all surveyed analysts' projections. Therefore, a

18   simple average, or arithmetic mean, of analyst forecasts is a good proxy for market

19   consensus expectations.

20 **Q   WHAT ARE THE GROWTH RATES YOU USED IN YOUR CONSTANT GROWTH**

21 **DCF MODEL?**

22 A   The growth rates I used in my DCF analysis are shown in Schedule MPG-5. The

23   average growth rate for my proxy group is 5.41%.

---

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

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

2 A As shown in Schedule MPG-6, the average and median constant growth DCF returns

3 for my proxy group for the 13-week analysis are 8.80% and 8.79%, respectively.

4 **Q DO YOU HAVE ANY COMMENTS ON THE RESULTS OF YOUR CONSTANT**

5 **GROWTH DCF ANALYSIS?**

6 A Yes. The constant growth DCF analysis for my proxy group is based on a group

7 average long-term sustainable growth rate of 5.41%. The three- to five-year growth

8 rates are higher than my estimate of a maximum long-term sustainable growth rate of

9 4.10%, which I discuss later in this testimony. I believe the constant growth DCF

10 analysis produces a reasonable high-end return estimate.

11 **Q HOW DID YOU ESTIMATE A MAXIMUM LONG-TERM SUSTAINABLE GROWTH**

12 **RATE?**

13 A A long-term sustainable growth rate for a utility stock cannot exceed the growth rate

14 of the economy in which it sells its goods and services. Hence, the long-term

15 maximum sustainable growth rate for a utility investment is best proxied by the

16 projected long-term Gross Domestic Product ("GDP"). *Blue Chip Economic Indicators*

17 projects that over the next 5 and 10 years, the U.S. nominal GDP will grow

18 approximately 4.10%. These GDP growth projections reflect a real growth outlook of

19 around 2.1% and an inflation outlook of around 2.0% going forward. As such, the

20 average growth rate over the next 10 years is around 4.10%, which I believe is a

21 reasonable proxy of long-term sustainable growth.[15]

---

[15]*Blue Chip Economic Indicators*, October 10, 2016, at 14.

1   In my multi-stage growth DCF analysis, I discuss academic and investment

2   practitioner support for using the projected long-term GDP growth outlook as a

3   maximum sustainable growth rate projection. Hence, recognizing the long-term GDP

4   growth rate as a maximum sustainable growth is logical, and is generally consistent

5   with academic and economic practitioner accepted practices.

6 ## IV.C. Sustainable Growth DCF

7 **Q   PLEASE DESCRIBE HOW YOU ESTIMATED A SUSTAINABLE LONG-TERM**

8 **GROWTH RATE FOR YOUR SUSTAINABLE GROWTH DCF MODEL.**

9 A   A sustainable growth rate is based on the percentage of the utility's earnings that is

10   retained and reinvested in utility plant and equipment. These reinvested earnings

11   increase the earnings base (rate base). Earnings grow when plant funded by

12   reinvested earnings is put into service, and the utility is allowed to earn its authorized

13   return on such additional rate base investment.

14   The internal growth methodology is tied to the percentage of earnings retained

15   in the company and not paid out as dividends. The earnings retention ratio is 1 minus

16   the dividend payout ratio. As the payout ratio declines, the earnings retention ratio

17   increases. An increased earnings retention ratio will fuel stronger growth because

18   the business funds more investments with retained earnings.

19   The payout ratios of the proxy group are shown in my Schedule MPG-7.

20   These dividend payout ratios and earnings retention ratios then can be used to

21   develop a sustainable long-term earnings retention growth rate. A sustainable

22   long-term earnings retention ratio will help gauge whether analysts' current three- to

23   five-year growth rate projections can be sustained over an indefinite period of time.

1   The data used to estimate the long-term sustainable growth rate is based on

2   the Company's current market-to-book ratio and on *Value Line*'s three- to five-year

3   projections of earnings, dividends, earned returns on book equity, and stock

4   issuances.

5   As shown in Schedule MPG-8, the average sustainable growth rate for the

6   proxy group using this internal growth rate model is 4.29%.

7   **Q   WHAT IS THE DCF ESTIMATE USING THESE SUSTAINABLE LONG-TERM**

8   **GROWTH RATES?**

9   A   A DCF estimate based on these sustainable growth rates is developed in Schedule

10   MPG-9. As shown there, a sustainable growth DCF analysis produces proxy group

11   average and median DCF results for the 13-week period of 7.65% and 7.32%,

12   respectively.

13 **IV.D. Multi-Stage Growth DCF Model**

14 **Q   HAVE YOU CONDUCTED ANY OTHER DCF STUDIES?**

15 A   Yes. My first constant growth DCF is based on consensus analysts' growth rate

16   projections so it is a reasonable reflection of rational investment expectations over the

17   next three to five years. The limitation on this constant growth DCF model is that it

18   cannot reflect a rational expectation that a period of high or low short-term growth can

19   be followed by a change in growth to a rate that is more reflective of long-term

20   sustainable growth. Hence, I performed a multi-stage growth DCF analysis to reflect

21   this outlook of changing growth expectations.

1 Q **WHY DO YOU BELIEVE GROWTH RATES CAN CHANGE OVER TIME?**

2 A Analyst-projected growth rates over the next three to five years will change as utility

3   earnings growth outlooks change. Utility companies go through cycles in making

4   investments in their systems. When utility companies are making large investments,

5   their rate base grows rapidly, which in turn accelerates earnings growth. Once a

6   major construction cycle is completed or levels off, growth in the utility rate base

7   slows and its earnings growth slows from an abnormally high three- to five-year rate

8   to a lower sustainable growth rate.

9   As major construction cycles extend over longer periods of time, even with an

10   accelerated construction program, the growth rate of the utility will slow simply

11   because rate base growth will slow and the utility has limited human and capital

12   resources available to expand its construction program. Therefore, the three- to five-

13   year growth rate projection should be used as a long-term sustainable growth rate but

14   not without making a reasonable informed judgment to determine whether it

15   considers the current market environment, the industry, and whether the three- to

16   five-year growth outlook is sustainable.

17 Q **PLEASE DESCRIBE YOUR MULTI-STAGE GROWTH DCF MODEL.**

18 A The multi-stage growth DCF model reflects the possibility of non-constant growth for

19   a company over time. The multi-stage growth DCF model reflects three growth

20   periods: (1) a short-term growth period consisting of the first five years; (2) a transition

21   period, consisting of the next five years (6 through 10); and (3) a long-term growth

22   period starting in year 11 through perpetuity.

23   For the short-term growth period, I relied on the consensus analysts' growth

24   projections described above in relationship to my constant growth DCF model. For

1   the transition period, the growth rates were reduced or increased by an equal factor

2   reflecting the difference between the analysts' growth rates and the long-term

3   sustainable growth rate. For the long-term growth period, I assumed each company's

4   growth would converge to the maximum sustainable long-term growth rate.

5   **Q   WHY IS THE GDP GROWTH PROJECTION A REASONABLE PROXY FOR THE**

6   **MAXIMUM SUSTAINABLE LONG-TERM GROWTH RATE?**

7   A   Utilities cannot indefinitely sustain a growth rate that exceeds the growth rate of the

8   economy in which they sell services. Utilities' earnings/dividend growth is created by

9   increased utility investment or rate base. Such investment, in turn, is driven by

10   service area economic growth and demand for utility service. In other words, utilities

11   invest in plant to meet sales demand growth. Sales growth, in turn, is tied to

12   economic growth in their service areas.

13   The U.S. Department of Energy, Energy Information Administration ("EIA")

14   has observed utility sales growth tracks the U.S. GDP growth, albeit at a lower level,

15   as shown in Schedule MPG-10. Utility sales growth has lagged behind GDP growth

16   for more than a decade. As a result, nominal GDP growth is a very conservative

17   proxy for utility sales growth, rate base growth, and earnings growth. Therefore, the

18   U.S. GDP nominal growth rate is a conservative proxy for the highest sustainable

19   long-term growth rate of a utility.

1 **Q   IS THERE RESEARCH THAT SUPPORTS YOUR POSITION THAT, OVER THE**

2 **LONG TERM, A COMPANY'S EARNINGS AND DIVIDENDS CANNOT GROW AT**

3 **A RATE GREATER THAN THE GROWTH OF THE U.S. GDP?**

4 A   Yes. This concept is supported in published analyst literature and academic work.

5 Specifically, in a textbook titled "Fundamentals of Financial Management," published

6 by Eugene Brigham and Joel F. Houston, the authors state as follows:

7 The constant growth model is most appropriate for mature companies
8 with a stable history of growth and stable future expectations.
9 Expected growth rates vary somewhat among companies, but
10 dividends for mature firms are often expected to grow in the future at
11 about the same rate as nominal gross domestic product (real GDP
12 plus inflation).[16]

13 The use of the economic growth rate is also supported by investment

14 practitioners as outlined as follows:

15 **Estimating Growth Rates**

16 One of the advantages of a three-stage discounted cash flow model is
17 that it fits with life cycle theories in regards to company growth. In
18 these theories, companies are assumed to have a life cycle with
19 varying growth characteristics. Typically, the potential for extraordinary
20 growth in the near term eases over time and eventually growth slows
21 to a more stable level.

22   *   *   *

23 Another approach to estimating long-term growth rates is to focus on
24 estimating the overall economic growth rate. Again, this is the
25 approach used in the *Ibbotson Cost of Capital Yearbook*. To obtain
26 the economic growth rate, a forecast is made of the growth rate's
27 component parts. Expected growth can be broken into two main parts:
28 expected inflation and expected real growth. By analyzing these
29 components separately, it is easier to see the factors that drive
30 growth.[17]

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[16]*"Fundamentals of Financial Management,"* Eugene F. Brigham and Joel F. Houston, Eleventh Edition 2007, Thomson South-Western, a Division of Thomson Corporation at 298, emphasis added.

[17]*Morningstar, Inc., Ibbotson SBBI 2013 Valuation Yearbook* at 51 and 52.

1 **Q** **IS THERE ANY ACTUAL INVESTMENT HISTORY THAT SUPPORTS THE**

2 **NOTION THAT THE CAPITAL APPRECIATION FOR STOCK INVESTMENTS WILL**

3 **NOT EXCEED THE NOMINAL GROWTH OF THE U.S. GDP?**

4 **A** Yes. This is evident by a comparison of the compound annual growth of the U.S.

5 GDP compared to the geometric growth of the U.S. stock market. Morningstar

6 measures the historical geometric growth of the U.S. stock market over the period

7 1926-2015 to be approximately 5.8%. During this same time period, the U.S. nominal

8 compound annual growth of the U.S. GDP was approximately 6.2%.[18]

9 As such, the compound geometric growth of the U.S. nominal GDP has been

10 higher but comparable to the nominal growth of the U.S. stock market capital

11 appreciation. This historical relationship indicates the U.S. GDP growth outlook is a

12 conservative estimate of the long-term sustainable growth of U.S. stock investments.

13 **Q** **HOW DID YOU DETERMINE A SUSTAINABLE LONG-TERM GROWTH RATE**

14 **THAT REFLECTS THE CURRENT CONSENSUS OUTLOOK OF THE MARKET?**

15 **A** I relied on the consensus analysts' projections of long-term GDP growth. *Blue Chip*

16 *Economic Indicators* publishes consensus economists' GDP growth projections twice

17 a year. These consensus analysts' GDP growth outlooks are the best available

18 measure of the market's assessment of long-term GDP growth. These analyst

19 projections reflect all current outlooks for GDP and are likely the most influential on

20 investors' expectations of future growth outlooks. The consensus economists'

21 published GDP growth rate outlook is 4.10% over the next 10 years.[19]

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[18] *Duff & Phelps 2016 Valuation Handbook* inflation rate of 3.0% at 2-4, and U.S. Bureau of Economic Analysis, January 29, 2016.
[19] *Blue Chip Economic Indicators*, October 10, 2016, at 14.

1   Therefore, I propose to use the consensus economists' projected 5- and

2   10-year average GDP consensus growth rates of 4.10%, as published by *Blue Chip*

3   *Economic Indicators*, as an estimate of long-term sustainable growth. *Blue Chip*

4   *Economic Indicators* projections provide real GDP growth projections of 2.1% and

5   GDP inflation of 2.0%[20] over the 5-year and 10-year projection periods. These

6   consensus GDP growth forecasts represent the most likely views of market

7   participants because they are based on published consensus economist projections.

8 **Q   DO YOU CONSIDER OTHER SOURCES OF PROJECTED LONG-TERM GDP**

9 **GROWTH?**

10 A   Yes, and these sources corroborate my consensus analysts' projections, as shown

11   below in Table 5.

TABLE 5

GDP Forecasts

Source	Term	Real GDP	Inflation	Nominal GDP
Blue Chip Economic Indicators[21]	5-10 Yrs	2.1%	2.0%	4.1%
EIA – Annual Earnings Outlook[22]	25 Yrs	2.2%	2.1%	4.4%
Congressional Budget Office[23]	10 Yrs	2.0%	2.0%	4.0%
Moody's Analytics[24]	30 Yrs	2.0%	2.0%	4.1%
Social Security Administration[25]	50 Yrs			4.4%
The Economist Intelligence Unit[26]	35 Yrs	1.9%	2.0%	3.9%

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[20] *Id.*
[21] *Blue Chip Economic Indicators*, October 10, 2016 at 14.

1   The EIA in its *Annual Energy Outlook* projects real GDP out until 2040. In its

2   2016 Annual Report, the EIA projects real GDP through 2040 to be 2.2% and a long-

3   term GDP price inflation projection of 2.1%. The EIA data supports a long-term

4   nominal GDP growth outlook of 4.4%.[22]

5   Also, the Congressional Budget Office ("CBO") makes long-term economic

6   projections. The CBO is projecting real GDP growth to be 2.0% during the next

7   10 years with a GDP price inflation outlook of 2.0%.[23] The CBO 10-year outlook for

8   nominal GDP based on this projection is 4.0%.

9   Moody's Analytics also makes long-term economic projections. In its recent

10   30-year outlook to 2045, Moody's Analytics is projecting real GDP growth of 2.0%

11   with GDP inflation of 2.0%.[24] Based on these projections, Moody's is projecting

12   nominal GDP growth of 4.1% over the next 30 years.

13   The Social Security Administration ("SSA") makes long-term economic

14   projections out to 2090. The SSA's nominal GDP projection, under its intermediate

15   cost scenario of 50 years, is 4.4%.[25] The Economist Intelligence Unit, a division of

16   *The Economist* and a third-party data provider to SNL Financial, makes a long-term

17   economic projection out to 2050.[26] The Economist Intelligence Unit is projecting real

18   GDP growth of 1.9% with an inflation rate of 2.0% out to 2050. The real GDP growth

19   projection is in line with the consensus economists. The long-term nominal GDP

20   projection based on these outlooks is approximately 3.9%.

21   The real GDP and nominal GDP growth projections made by these

22   independent sources support the use of the consensus economist 5-year and 10-year

---

[22]DOE/EIA Annual Energy Outlook 2016 With Projections to 2040, May 2016, Table 20.
[23]*CBO: The Budget and Economic Outlook: 2016 to 2026*, January 2016, at 140.
[24]www.economy.com, *Moody's Analytics Forecast*, January 6, 2016.
[25]www.ssa.gov, "2016 OASDI Trustees Report," Table VI.G4.
[26]*SNL Financial, Economist Intelligence Unit*, downloaded on January 13, 2016.

1   projected GDP growth outlooks as a reasonable estimate of market participants'

2   long-term GDP growth outlooks.

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

4   **MULTI-STAGE GROWTH DCF ANALYSIS?**

5 **A**   I relied on the same 13-week average stock prices and the most recent quarterly

6   dividend payment data discussed above. For stage one growth, I used the

7   consensus analysts' growth rate projections discussed above in my constant growth

8   DCF model. The first stage growth covers the first five years, consistent with the term

9   of the analyst growth rate projections. The second stage, or transition stage, begins

10   in year 6 and extends through year 10. The second stage growth transitions the

11   growth rate from the first stage to the third stage using a linear trend. For the third

12   stage, or long-term sustainable growth stage, starting in year 11, I used a 4.10%

13   long-term sustainable growth rate based on the consensus economists' long-term

14   projected nominal GDP growth rate.

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

16 **A**   As shown in Schedule MPG-11, the average and median DCF returns on equity for

17   my proxy group using the 13-week average stock price are 7.74% and 7.82%,

18   respectively.

19 **Q**   **PLEASE SUMMARIZE THE RESULTS FROM YOUR DCF ANALYSES.**

20 **A**   The results from my DCF analyses are summarized in Table 6 below:

TABLE 6

Summary of DCF Results

Description	Proxy Group	
	Average	Median
Constant Growth DCF Model (Analysts' Growth)	8.80%	8.79%
Constant Growth DCF Model (Sustainable Growth)	7.65%	7.32%
Multi-Stage Growth DCF Model	7.74%	7.82%

1   I conclude my DCF studies support a return on equity of 8.8%, primarily based

2   on my constant growth DCF (analysts' growth) result, which I find as a reasonable

3   high-end DCF return estimate.

4   **IV.E. Risk Premium Model**

5   **Q   PLEASE DESCRIBE YOUR BOND YIELD PLUS RISK PREMIUM MODEL.**

6   A   This model is based on the principle investors require a higher return to assume

7   greater risk. Common equity investments have greater risk than bonds because

8   bonds have more security of payment in bankruptcy proceedings than common equity

9   and the coupon payments on bonds represent contractual obligations. In contrast,

10 companies are not required to pay dividends or guarantee returns on common equity

11 investments. Therefore, common equity securities are considered to be riskier than

12 bond securities.

13   This risk premium model is based on two estimates of an equity risk premium.

14 First, I estimated the difference between the required return on utility common equity

15 investments and U.S. Treasury bonds. The difference between the required return on

16 common equity and the Treasury bond yield is the risk premium. I estimated the risk

1   premium on an annual basis for each year over the period January 1986 through

2   September 2016. The common equity required returns were based on regulatory

3   commission-authorized returns for electric utility companies. Authorized returns are

4   typically based on expert witnesses' estimates of the contemporary investor-required

5   return.

6   The second equity risk premium estimate is based on the difference between

7   regulatory commission-authorized returns on common equity and contemporary

8   "A" rated utility bond yields by Moody's. I selected the period January 1986 through

9   September 2016 because public utility stocks consistently traded at a premium to

10   book value during that period. This is illustrated in Schedule MPG-12, which shows

11   the market-to-book ratio since 1986 for the electric utility industry was consistently

12   above a multiple of 1.0x. Over this period, regulatory authorized returns were

13   sufficient to support market prices that at least exceeded book value. This is an

14   indication that regulatory authorized returns on common equity supported a utility's

15   ability to issue additional common stock without diluting existing shares. It further

16   demonstrates utilities were able to access equity markets without a detrimental

17   impact on current shareholders.

18   Based on this analysis, as shown in Schedule MPG-13, the average indicated

19   equity risk premium over U.S. Treasury bond yields has been 5.47%. Since the risk

20   premium can vary depending upon market conditions and changing investor risk

21   perceptions, I believe using an estimated range of risk premiums provides the best

22   method to measure the current return on common equity for a risk premium

23   methodology.

24   I incorporated five-year and 10-year rolling average risk premiums over the

25   study period to gauge the variability over time of risk premiums. These rolling

1   average risk premiums mitigate the impact of anomalous market conditions and

2   skewed risk premiums over an entire business cycle. As shown on my Schedule

3   MPG-13, the five-year rolling average risk premium over Treasury bonds ranged from

4   4.25% to 6.75%, while the 10-year rolling average risk premium ranged from 4.38%

5   to 6.41%.

6   As shown on my Schedule MPG-14, the average indicated equity risk

7   premium over contemporary Moody's utility bond yields was 4.09%. The five-year

8   and 10-year rolling average risk premiums ranged from 2.88% to 5.58% and 3.20% to

9   5.05%, respectively.

10   **Q   DO YOU BELIEVE THAT THE TIME PERIOD USED TO DERIVE THESE EQUITY**

11   **RISK PREMIUM ESTIMATES IS APPROPRIATE TO FORM ACCURATE**

12   **CONCLUSIONS ABOUT CONTEMPORARY MARKET CONDITIONS?**

13   A   Yes. The time period I use in this risk premium study is a generally accepted period

14   to develop a risk premium study using "expectational" data.

15   Contemporary market conditions can change dramatically during the period

16   that rates determined in this proceeding will be in effect. A relatively long period of

17   time where stock valuations reflect premiums to book value is an indication the

18   authorized returns on equity and the corresponding equity risk premiums were

19   supportive of investors' return expectations and provided utilities access to the equity

20   markets under reasonable terms and conditions. Further, this time period is long

21   enough to smooth abnormal market movement that might distort equity risk

22   premiums. While market conditions and risk premiums do vary over time, this

23   historical time period is a reasonable period to estimate contemporary risk premiums.

1   Alternatively, some studies, such as Duff & Phelps referred to later in this

2   testimony, have recommended that use of "actual achieved investment return data" in

3   a risk premium study should be based on long historical time periods. The studies

4   find that achieved returns over short time periods may not reflect investors' expected

5   returns due to unexpected and abnormal stock price performance. Short-term,

6   abnormal actual returns would be smoothed over time and the achieved actual

7   investment returns over long time periods would approximate investors' expected

8   returns. Therefore, it is reasonable to assume that averages of annual achieved

9   returns over long time periods will generally converge on the investors' expected

10   returns.

11   My risk premium study is based on expectational data, not actual investment

12   returns, and, thus, need not encompass a very long historical time period.

13 **Q   BASED ON HISTORICAL DATA, WHAT RISK PREMIUM HAVE YOU USED TO**

14 **ESTIMATE KCPL'S COST OF COMMON EQUITY IN THIS PROCEEDING?**

15 A   The equity risk premium should reflect the relative market perception of risk in the

16   utility industry today. I have gauged investor perceptions in utility risk today in

17   Schedule MPG-15, where I show the yield spread between utility bonds and Treasury

18   bonds over the last 36 years. As shown in this schedule, the average utility bond

19   yield spreads over Treasury bonds for "A" and "Baa" rated utility bonds for this

20   historical period are 1.52% and 1.96%, respectively. The utility bond yield spreads

21   over Treasury bonds for "A" and "Baa" rated utilities for 2016 were 1.37% and 2.18%,

22   respectively. The current average "A" rated utility bond yield spread over Treasury

23   bond yields is now lower than the 36-year average spread. The current "Baa" rated

1   utility bond yield spread over Treasury bond yields is higher than the 36-year average

2   spread.

3   A current 13-week average "A" rated utility bond yield of 3.69% when

4   compared to the current Treasury bond yield of 2.39% as shown in Schedule

5   MPG-16, page 1, implies a yield spread of around 130 basis points. This current

6   utility bond yield spread is lower than the 36-year average spread for "A" rated utility

7   bonds of 1.52%. The current spread for the "Baa" rated utility bond yield of 1.89% is

8   also lower than the 36-year average spread of 1.96%. Further, when compared to

9   the projected Treasury bond yield of 3.10%, the current "Baa" utility spread is around

10   1.18%, lower than the 36-year average of 1.96%.

11   These utility bond yield spreads are evidence that the market perception of

12   utility risk is about average relative to this historical time period and demonstrate that

13   utilities continue to have strong access to capital in the current market.

14 **Q**   **HOW DO YOU DETERMINE WHERE A REASONABLE RISK PREMIUM IS IN THE**

15   **CURRENT MARKET?**

16 A   I observed the spread of Treasury securities relative to public utility bonds and

17   corporate bonds in gauging whether or not the risk premium in current market prices

18   is relatively stable relative to the past. What this observation of market evidence

19   clearly provides is that the valuations in the current market place an above average

20   risk premium on securities that have greater risk.

21   This market evidence is summarized below in Table 7, which shows the utility

22   bond yield spreads over Treasury bond yields on average for the period 1980 through

23   2016 and the spreads for the first three quarters of 2016. I also show the corporate

24   bond yield spreads for Aaa corporates and Baa corporates.

TABLE 7

Comparison of Yield Spreads Over Treasury Bonds

Description	Utility		Corporate	
	A	Baa	Aaa	Baa
Average Historical Spread	1.52%	1.96%	0.84%	1.94%
Q3, 2016 Spread	1.37%	2.18%	1.10%	2.22%

Source: Schedule MPG-15.

1   The observable yield spreads shown in the table above illustrate securities of

2   greater risk have above average risk premiums relative to the long-term historical

3   average risk premium. Specifically, A-rated utility bonds to Treasuries, a relatively

4   low-risk investment, have a yield spread in 2016 that has been very comparable to

5   that of its long-term historical yield spread. The A-rated utility bond yield spread is

6   actually below the yield spread over the last 36 years. This is an indication that low

7   risk investments like A-rated utility bond yield have premium values relative to

8   minimal risk Treasury securities.

9   In contrast, the higher risk Baa utility and corporate bond yields currently have

10   an above-average yield spread of approximately 20 basis points (2.18% vs. 1.96%).

11   The higher risk Baa utility bond yields do not have the same premium valuations as

12   their lower risk A-rated utility bond yields, and thus the yield spread for greater risk

13   investments is wider than lower risk investments.

14   This illustrates securities with greater risk such as Baa yields versus A yields

15   are commanding above average risk premium spreads in the current marketplace.

16   Utility equity securities are greater risk than Baa utility bonds. Because greater risk

17   securities appear to support an above-average risk premium relative to historical

1   averages, this would support an above-average risk premium in measuring a fair

2   return on equity for a utility stock or equity security.

3 **Q**   **WHAT IS YOUR RECOMMENDED RETURN FOR KCPL BASED ON YOUR RISK**

4   **PREMIUM STUDY?**

5 A   To be conservative, I am recommending more weight to the high-end risk premium

6   estimates than the low-end. I state this because of the relatively low level of interest

7   rates now but relative upward movements of utility yields more recently. Hence, I

8   propose to provide 75% weight to my high-end risk premium estimates and 25% to

9   the low-end. Applying these weights, the risk premium for Treasury bond yields

10   would be approximately 6.1%,[27] which is considerably higher than the 31-year

11   average risk premium of 5.47% and reasonably reflective of the 3.1% projected

12   Treasury bond yield. A Treasury bond risk premium of 6.1% and projected Treasury

13   bond yield of 3.1% produce a risk premium estimate of 9.20%. Similarly, applying

14   these weights to the utility risk premium indicates a risk premium of 4.9%.[28] This risk

15   premium is above the 31-year historical average risk premium of 4.09%. This risk

16   premium in connection with the current Baa observable utility bond yield of 4.28%

17   produces an estimated return on equity of approximately 9.20%.

18   Based on this methodology, both my Treasury bond risk premium and my

19   utility bond risk premium indicate a return of 9.20%.

---

[27](4.25% * 25%) + (6.75% * 75%) = 6.13%.
[28](2.88% * 25%) + (5.58% * 75%) = 4.91%.

IV.F. Capital Asset Pricing Model ("CAPM")

1

2 **Q** **PLEASE DESCRIBE THE CAPM.**

3 A The CAPM method of analysis is based upon the theory that the market-required rate

4 of return for a security is equal to the risk-free rate, plus a risk premium associated

5 with the specific security. This relationship between risk and return can be expressed

6 mathematically as follows:

7 $R_i = R_f + B_i \times (R_m - R_f)$ where:

8 R_i = Required return for stock i
9 R_f = Risk-free rate
10 R_m = Expected return for the market portfolio
11 B_i = Beta - Measure of the risk for stock

12 The stock-specific risk term in the above equation is beta. Beta represents

13 the investment risk that cannot be diversified away when the security is held in a

14 diversified portfolio. When stocks are held in a diversified portfolio, firm-specific risks

15 can be eliminated by balancing the portfolio with securities that react in the opposite

16 direction to firm-specific risk factors (e.g., business cycle, competition, product mix,

17 and production limitations).

18 The risks that cannot be eliminated when held in a diversified portfolio are

19 non-diversifiable risks. Non-diversifiable risks are related to the market in general

20 and referred to as systematic risks. Risks that can be eliminated by diversification are

21 non-systematic risks. In a broad sense, systematic risks are market risks and

22 non-systematic risks are business risks. The CAPM theory suggests the market will

23 not compensate investors for assuming risks that can be diversified away. Therefore,

24 the only risk investors will be compensated for are systematic or non-diversifiable

25 risks. The beta is a measure of the systematic or non-diversifiable risks.

1	Q	PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.
2	A	The CAPM requires an estimate of the market risk-free rate, the Company's beta, and
3		the market risk premium.

4	Q	WHAT DID YOU USE AS AN ESTIMATE OF THE MARKET RISK-FREE RATE?
5	A	As previously noted, *Blue Chip Financial Forecasts'* projected 30-year Treasury bond
6		yield is 3.10%.[29] The current 30-year Treasury bond yield is 2.39%, as shown in
7		Schedule MPG-16. I used *Blue Chip Financial Forecasts'* projected 30-year Treasury
8		bond yield of 3.10% for my CAPM analysis.

9	Q	WHY DID YOU USE LONG-TERM TREASURY BOND YIELDS AS AN ESTIMATE
10		OF THE RISK-FREE RATE?
11	A	Treasury securities are backed by the full faith and credit of the United States
12		government so long-term Treasury bonds are considered to have negligible credit
13		risk. Also, long-term Treasury bonds have an investment horizon similar to that of
14		common stock. As a result, investor-anticipated long-run inflation expectations are
15		reflected in both common stock required returns and long-term bond yields.
16		Therefore, the nominal risk-free rate (or expected inflation rate and real risk-free rate)
17		included in a long-term bond yield is a reasonable estimate of the nominal risk-free
18		rate included in common stock returns.
19		Treasury bond yields, however, do include risk premiums related to
20		unanticipated future inflation and interest rates. A Treasury bond yield is not a
21		risk-free rate. Risk premiums related to unanticipated inflation and interest rates are
22		systematic of market risks. Consequently, for companies with betas less than 1.0,

---

[29]*Blue Chip Financial Forecasts*, November 1, 2016 at 2.

| 1 | | using the Treasury bond yield as a proxy for the risk-free rate in the CAPM analysis |

1   using the Treasury bond yield as a proxy for the risk-free rate in the CAPM analysis

2   can produce an overstated estimate of the CAPM return.

3   **Q**   **WHAT BETA DID YOU USE IN YOUR ANALYSIS?**

4   A   As shown in Schedule MPG-17, the proxy group average *Value Line* beta estimate is

5   0.71.

6   **Q**   **HOW DID YOU DERIVE YOUR MARKET RISK PREMIUM ESTIMATE?**

7   A   I derived two market risk premium estimates: a forward-looking estimate and one

8   based on a long-term historical average.

9   The forward-looking estimate was derived by estimating the expected return

10   on the market (as represented by the S&P 500) and subtracting the risk-free rate from

11   this estimate. I estimated the expected return on the S&P 500 by adding an expected

12   inflation rate to the long-term historical arithmetic average real return on the market.

13   The real return on the market represents the achieved return above the rate of

14   inflation.

15   Duff & Phelps' *2016 Valuation Handbook* estimates the historical arithmetic

16   average real market return over the period 1926 to 2015 as 8.7%.[30] A current

17   consensus analysts' inflation projection, as measured by the Consumer Price Index,

18   is 2.3%.[31] Using these estimates, the expected market return is 11.20%.[32] The

19   market risk premium then is the difference between the 11.20% expected market

20   return and my 3.10% risk-free rate estimate, or approximately 8.10%.

---

[30] *Duff & Phelps, 2016 Valuation Handbook: Guide to Cost of Capital* at 2-4. Calculated as $[(1+0.12)/(1+0.03)] - 1$.

[31] *Blue Chip Financial Forecasts*, November 1, 2016 at 2.

[32] $\{ [(1 + 0.087) * (1 + 0.023)] - 1 \} * 100$.

1   My historical estimate of the market risk premium was also calculated by using

2   data provided by Duff & Phelps in its *2016 Valuation Handbook*. Over the period

3   1926 through 2015, the Duff & Phelps study estimated that the arithmetic average of

4   the achieved total return on the S&P 500 was 12.0%[33] and the total return on

5   long-term Treasury bonds was 6.00%.[34] The indicated market risk premium is 6.0%

6   (12.0% - 6.0% = 6.0%).

7   **Q**   **HOW DOES YOUR ESTIMATED MARKET RISK PREMIUM RANGE COMPARE TO**

8   **THAT ESTIMATED BY DUFF & PHELPS?**

9   A   The Duff & Phelps analysis indicates a market risk premium falls somewhere in the

10   range of 5.5% to 6.9%. My market risk premium falls in the range of 6.0% to 8.1%.

11   My average market risk premium of 7.1% is slightly above the high-end of the Duff &

12   Phelps range.

13   **Q**   **HOW DOES DUFF & PHELPS MEASURE A MARKET RISK PREMIUM?**

14   A   Duff & Phelps makes several estimates of a forward-looking market risk premium

15   based on actual achieved data from the historical period of 1926 through 2015 as well

16   as normalized data. Using this data, Duff & Phelps estimates a market risk premium

17   derived from the total return on large company stocks (S&P 500), less the income

18   return on Treasury bonds. The total return includes capital appreciation, dividend or

19   coupon reinvestment returns, and annual yields received from coupons and/or

20   dividend payments. The income return, in contrast, only reflects the income return

21   received from dividend payments or coupon yields. Duff & Phelps claims the income

22   return is the only true risk-free rate associated with Treasury bonds and is the best

---

[33] *Duff & Phelps, 2016 Valuation Handbook: Guide to Cost of Capital* at 2-4.
[34] *Id.*

1   approximation of a truly risk-free rate.[35] I disagree with this assessment from Duff &

2   Phelps because it does not reflect a true investment option available to the

3   marketplace and therefore does not produce a legitimate estimate of the expected

4   premium of investing in the stock market versus that of Treasury bonds.

5   Nevertheless, I will use Duff & Phelps' conclusion to show the reasonableness of my

6   market risk premium estimates.

7   Duff & Phelps' range is based on several methodologies. First, Duff & Phelps

8   estimates a market risk premium of 6.9% based on the difference between the total

9   market return on common stocks (S&P 500) less the income return on Treasury bond

10   investments over the 1926-2015 period.

11   Second, Duff & Phelps updated the Ibbotson & Chen supply-side model which

12   found that the 6.9% market risk premium based on the S&P 500 was influenced by an

13   abnormal expansion of price-to-earnings ("P/E") ratios relative to earnings and

14   dividend growth during the period, primarily over the last 25 years. Duff & Phelps

15   believes this abnormal P/E expansion is not sustainable.[36] Therefore, Duff & Phelps

16   adjusted this market risk premium estimate to normalize the growth in the P/E ratio to

17   be more in line with the growth in dividends and earnings. Based on this alternative

18   methodology, Duff & Phelps published a long-horizon supply-side market risk

19   premium of 6.03%.[37]

20   Finally, Duff & Phelps develops its own recommended equity, or market, risk

21   premium by employing an analysis that takes into consideration a wide range of

22   economic information, multiple risk premium estimation methodologies, and the

23   current state of the economy by observing measures such as the level of stock

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[35] *Id.* at 3-28.
[36] *Id.* at 3-30.
[37] *Id.* at 3-31.

1		indices and corporate spreads as indicators of perceived risk. Based on this
2		methodology, and utilizing a "normalized" risk-free rate of 4.0%, Duff & Phelps
3		concludes the current expected, or forward-looking, market risk premium is 5.5%,
4		implying an expected return on the market of 9.5%.[38]
5	**Q**	**WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?**
6	A	As shown in Schedule MPG-18, based on my low market risk premium of 6.0% and
7		my high market risk premium of 8.1%, a risk-free rate of 3.10%, and a beta of 0.71,
8		my CAPM analysis produces a return of 7.38% to 8.88%. Based on my assessment
9		of risk premiums in the current market, as discussed above, I recommend the
10		high-end CAPM return estimate because it closely aligns the market risk premium
11		with the prevailing risk-free rate. I recommend a CAPM return of 8.88%, rounded to
12		8.90%.

13 ## **IV.G. Return on Equity Summary**

14	**Q**	**BASED ON THE RESULTS OF YOUR RETURN ON COMMON EQUITY**
15		**ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY DO**
16		**YOU RECOMMEND FOR KCPL?**
17	A	Based on my analyses, I estimate KCPL's current market cost of equity to be 9.00%.

---

[38] *Id.* at 3-40.

	TABLE 8	
	Return on Common Equity Summary	
Description		**Results**
DCF		8.80%
Risk Premium		9.20%
CAPM		8.90%

1   My recommended return on common equity of 9.00% is at the midpoint of my

2   estimated range of 8.80% to 9.20%. As shown in Table 8 above, the high-end of my

3   estimated range is based on my risk premium studies. The low-end is based on my

4   DCF studies. My CAPM return falls just below the midpoint of this range.

5   My return on equity estimates reflect observable market evidence, the impact

6   of Federal Reserve policies on current and expected long-term capital market costs,

7   an assessment of the current risk premium built into current market securities, and a

8   general assessment of the current investment risk characteristics of the electric utility

9   industry, and the market's demand for utility securities.

10   **Q   DO YOU HAVE ANY OTHER THOUGHTS ON THE REASONABLENESS OF YOUR**

11   **RETURN ON EQUITY RECOMMENDATION?**

12   A   Yes. It is important to recognize that in the last KCPL rate case, Mr. Hevert

13   recommended a return on equity of 10.2%. In this case, he has recommended a

14   return on equity of 9.9%. Thus, Mr. Hevert has explicitly recognized that the cost of

15   equity has declined since the last case. In fact, he quantifies this reduction at 30

16   basis points.

1   In the last case, the Commission authorized a return on equity for KCPL of

2   9.5%. Using Mr. Hevert's own quantification for the reduction in the cost of common

3   equity (30 basis points), the Commission's return on equity would now be 9.2%. This

4   aligns exactly with the high end of my recommended return on equity range.

5   ## IV.H. Financial Integrity

6   **Q**   **WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT AN**

7   **INVESTMENT GRADE BOND RATING FOR KCPL?**

8   A   Yes. I have reached this conclusion by comparing the key credit rating financial

9   ratios for KCPL at my proposed return on equity and the Company's actual test-year-

10   end capital structure to S&P's benchmark financial ratios using S&P's new credit

11   metric ranges.

12   **Q**   **PLEASE DESCRIBE THE MOST RECENT S&P FINANCIAL RATIO CREDIT**

13   **METRIC METHODOLOGY.**

14   A   S&P publishes a matrix of financial ratios corresponding to its assessment of the

15   business risk of utility companies and related bond ratings. On May 27, 2009, S&P

16   expanded its matrix criteria by including additional business and financial risk

17   categories.[39]

18   Based on S&P's most recent credit matrix, the business risk profile categories

19   are "Excellent," "Strong," "Satisfactory," "Fair," "Weak," and "Vulnerable." Most

20   utilities have a business risk profile of "Excellent" or "Strong."

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[39]S&P updated its 2008 credit metric guidelines in 2009, and incorporated utility metric benchmarks with the general corporate rating metrics. *Standard & Poor's RatingsDirect*: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009.

1   The financial risk profile categories are "Minimal," "Modest," "Intermediate,"

2   "Significant," "Aggressive," and "Highly Leveraged." Most of the utilities have a

3   financial risk profile of "Aggressive." KCPL has an "Excellent" business risk profile

4   and a "Significant" financial risk profile.

5   **Q   PLEASE DESCRIBE S&P'S USE OF THE FINANCIAL BENCHMARK RATIOS IN**

6   **ITS CREDIT RATING REVIEW.**

7   A   S&P evaluates a utility's credit rating based on an assessment of its financial and

8   business risks. A combination of financial and business risks equates to the overall

9   assessment of KCPL's total credit risk exposure. On November 19, 2013, S&P

10   updated its methodology. In its update, S&P published a matrix of financial ratios that

11   defines the level of financial risk as a function of the level of business risk.

12   S&P publishes ranges for primary financial ratios that it uses as guidance in its

13   credit review for utility companies. The two core financial ratio benchmarks it relies

14   on in its credit rating process include: (1) Debt to Earnings Before Interest, Taxes,

15   Depreciation and Amortization ("EBITDA"); and (2) Funds From Operations ("FFO") to

16   Total Debt.[40]

17 **Q   HOW DID YOU APPLY S&P'S FINANCIAL RATIOS TO TEST THE**

18   **REASONABLENESS OF YOUR RATE OF RETURN RECOMMENDATIONS?**

19 A   I calculated each of S&P's financial ratios based on KCPL's cost of service for its

20   retail jurisdictional operations. While S&P would normally look at total consolidated

21   KCPL financial ratios in its credit review process, my investigation in this proceeding

22   is not the same as S&P's. I am attempting to judge the reasonableness of my

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[40] *Standard & Poor's RatingsDirect:* "Criteria: Corporate Methodology," November 19, 2013.

1 proposed cost of capital for rate-setting in KCPL's retail regulated utility operations.

2 Hence, I am attempting to determine whether my proposed rate of return will in turn

3 support cash flow metrics, balance sheet strength, and earnings that will support an

4 investment grade bond rating and KCPL's financial integrity.

5 **Q   DID YOU INCLUDE ANY OFF-BALANCE SHEET DEBT EQUIVALENTS?**

6 A   Yes, I did. The off-balance sheet debt related to purchased power agreements and

7   operating leases and the associated amortization and interest expense were obtained

8   from the S&P Capital IQ website, as shown on my Schedule MPG-19.

9 **Q   PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS AS IT**

10   **RELATES TO KCPL.**

11 A   The S&P financial metric calculations for KCPL at a 9.00% return on equity are

12   developed on Schedule MPG-19, page 1. The credit metrics produced below, with

13   KCPL's financial risk profile from S&P of "Significant" and business risk profile by S&P

14   of "Excellent", will be used to assess the strength of the credit metrics based on

15   KCPL's retail operations in Missouri.

16   KCPL's adjusted total debt ratio is approximately 51.7%. As shown on page 4

17   of Schedule MPG-19, this adjusted debt ratio is above the S&P median debt ratio of

18   approximately 50.8% for A-rated utilities and below the S&P median of 53.6% for

19   BBB-rated utilities. Hence, I concluded this capital structure reasonably supports

20   KCPL's current investment grade bond rating.

21   Based on an equity return of 9.00%, KCPL will be provided an opportunity to

22   produce a debt to EBITDA ratio of 3.0. This is at the midpoint of S&P's "Intermediate"

1   guideline range of 2.5x to 3.5x."[41]   This ratio supports an investment grade credit

2   rating.

3   KCPL's retail operations FFO to total debt coverage at a 9.00% equity return

4   is 22%, which is within the S&P "Significant" metric guideline range of 13% to 23%.

5   This FFO/total debt ratio will support an investment grade bond rating.

6   At my recommended return on equity of 9.00% and the Company's embedded

7   debt cost and capital structure, KCPL's financial credit metrics continue to support

8   credit metrics at an investment grade utility level.

9 **Q**   **DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

10 A   Yes.

---

[41] *Id.*

Qualifications of Michael P. Gorman

1 **Q** **PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

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

3 Chesterfield, MO 63017.

4 **Q** **PLEASE STATE YOUR OCCUPATION.**

5 A 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 WORK**

9 **EXPERIENCE.**

10 A In 1983 I received a Bachelors of Science Degree in Electrical Engineering from

11 Southern Illinois University, and in 1986, I received a Masters Degree in Business

12 Administration with a concentration in Finance from the University of Illinois at

13 Springfield. I have also completed several graduate level economics courses.

14 In August of 1983, I accepted an analyst position with the Illinois Commerce

15 Commission ("ICC"). In this position, I performed a variety of analyses for both formal

16 and informal investigations before the ICC, including: marginal cost of energy, central

17 dispatch, avoided cost of energy, annual system production costs, and working

18 capital. In October of 1986, I was promoted to the position of Senior Analyst. In this

19 position, I assumed the additional responsibilities of technical leader on projects, and

1   my areas of responsibility were expanded to include utility financial modeling and

2   financial analyses.

3   In 1987, I was promoted to Director of the Financial Analysis Department. In

4   this position, I was responsible for all financial analyses conducted by the Staff.

5   Among other things, I conducted analyses and sponsored testimony before the ICC

6   on rate of return, financial integrity, financial modeling and related issues. I also

7   supervised the development of all Staff analyses and testimony on these same

8   issues. In addition, I supervised the Staff's review and recommendations to the

9   Commission concerning utility plans to issue debt and equity securities.

10   In August of 1989, I accepted a position with Merrill-Lynch as a financial

11   consultant. After receiving all required securities licenses, I worked with individual

12   investors and small businesses in evaluating and selecting investments suitable to

13   their requirements.

14   In September of 1990, I accepted a position with Drazen-Brubaker &

15   Associates, Inc. ("DBA"). In April 1995, the firm of Brubaker & Associates, Inc. was

16   formed. It includes most of the former DBA principals and Staff. Since 1990, I have

17   performed various analyses and sponsored testimony on cost of capital, cost/benefits

18   of utility mergers and acquisitions, utility reorganizations, level of operating expenses

19   and rate base, cost of service studies, and analyses relating to industrial jobs and

20   economic development. I also participated in a study used to revise the financial

21   policy for the municipal utility in Kansas City, Kansas.

22   At BAI, I also have extensive experience working with large energy users to

23   distribute and critically evaluate responses to requests for proposals ("RFPs") for

24   electric, steam, and gas energy supply from competitive energy suppliers. These

25   analyses include the evaluation of gas supply and delivery charges, cogeneration

Michael P. Gorman
Appendix A
Page 2

BRUBAKER & ASSOCIATES, INC.

1   and/or combined cycle unit feasibility studies, and the evaluation of third-party

2   asset/supply management agreements. I have participated in rate cases on rate

3   design and class cost of service for electric, natural gas, water and wastewater

4   utilities. I have also analyzed commodity pricing indices and forward pricing methods

5   for third party supply agreements, and have also conducted regional electric market

6   price forecasts.

7   In addition to our main office in St. Louis, the firm also has branch offices in

8   Phoenix, Arizona and Corpus Christi, Texas.

9   **Q**   **HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?**

10   A   Yes. I have sponsored testimony on cost of capital, revenue requirements, cost of

11   service and other issues before the Federal Energy Regulatory Commission and

12   numerous state regulatory commissions including: Arkansas, Arizona, California,

13   Colorado, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas,

14   Louisiana, Michigan, Mississippi, Missouri, Montana, New Jersey, New Mexico, New

15   York, North Carolina, Ohio, Oklahoma, Oregon, South Carolina, Tennessee, Texas,

16   Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming, and before

17   the provincial regulatory boards in Alberta and Nova Scotia, Canada. I have also

18   sponsored testimony before the Board of Public Utilities in Kansas City, Kansas;

19   presented rate setting position reports to the regulatory board of the municipal utility

20   in Austin, Texas, and Salt River Project, Arizona, on behalf of industrial customers;

21   and negotiated rate disputes for industrial customers of the Municipal Electric

22   Authority of Georgia in the LaGrange, Georgia district.

1 **Q   PLEASE   DESCRIBE   ANY   PROFESSIONAL   REGISTRATIONS   OR**

2 **ORGANIZATIONS TO WHICH YOU BELONG.**

3 A   I earned the designation of Chartered Financial Analyst ("CFA") from the CFA

4   Institute.   The CFA charter was awarded after successfully completing three

5   examinations which covered the subject areas of financial accounting, economics,

6   fixed income and equity valuation and professional and ethical conduct.   I am a

7   member of the CFA Institute's Financial Analyst Society.

Kansas City Power & Light Company

Rate of Return
(December 31, 2016)

Line	Description	Amount (1)		Weight (2)	Cost (3)	Weighted Cost (4)
1	Long-Term Debt	$	2,565,176	50.12%	5.51%	2.76%
2	Common Equity	$	2,553,004	49.88%	**9.00%**	4.49%
3	**Total**	**$**	**5,118,180**	**100.00%**		**7.25%**

Source:
Schedule RBH-10.

Kansas City Power & Light Company

Ranking of Industrial Electric Rates for
Kansas City Power & Light Company and State Averages of
Investor Owned Utilities
<u>50 MW Demand and 90% Load Factor</u>

Rank	State or Utility	2016 ¢/kWh
1	Wisconsin	7.32
2	Minnesota	7.07
3	**Kansas City Power & Light Company**	**6.61**
4	Kansas	6.56
5	North Dakota	6.56
6	Michigan	6.05
7	South Dakota	6.03
8	Missouri	6.00
9	Indiana	5.94
10	Iowa	4.89

Rank	State or Utility	2015 ¢/kWh
1	Wisconsin	7.28
2	Michigan	6.92
3	Minnesota	6.73
4	North Dakota	6.59
5	Indiana	6.54
6	Kansas	6.54
7	South Dakota	6.28
8	Missouri	5.87
9	**Kansas City Power & Light Company**	**5.79**
10	Iowa	4.80

Rank	State or Utility	2014 ¢/kWh
1	Wisconsin	7.11
2	Michigan	6.99
3	Minnesota	6.78
4	Indiana	6.54
5	North Dakota	6.47
6	Kansas	6.35
7	South Dakota	5.89
8	Missouri	5.65
9	**Kansas City Power & Light Company**	**5.50**
10	Iowa	4.61

Kansas City Power & Light Company

Ranking of Industrial Electric Rates for
Kansas City Power & Light Company and State Averages of
Investor Owned Utilities
<u>50 MW Demand and 90% Load Factor</u>

<u>Rank</u>	<u>State or Utility</u>	2013 <u>¢/kWh</u>
1	Michigan	7.15
2	Wisconsin	7.03
3	Kansas	6.86
4	Minnesota	6.48
5	Indiana	6.18
6	North Dakota	6.02
7	South Dakota	5.70
8	Missouri	5.33
9	**Kansas City Power & Light Company**	**5.12**
10	Iowa	4.64

<u>Rank</u>	<u>State or Utility</u>	2012 <u>¢/kWh</u>
1	Michigan	7.20
2	Wisconsin	7.00
3	Minnesota	6.27
4	North Dakota	6.22
5	Indiana	5.80
6	Kansas	5.69
7	South Dakota	5.37
8	Missouri	5.06
9	**Kansas City Power & Light Company**	**4.89**
10	Iowa	4.08

<u>Rank</u>	<u>State or Utility</u>	2011 <u>¢/kWh</u>
1	Wisconsin	6.85
2	Michigan	6.82
3	Minnesota	6.33
4	Indiana	6.04
5	North Dakota	5.90
6	Kansas	5.41
7	South Dakota	5.16
8	Missouri	4.91
9	**Kansas City Power & Light Company**	**4.75**
10	Iowa	4.55

Kansas City Power & Light Company

Ranking of Industrial Electric Rates for
Kansas City Power & Light Company and State Averages of
Investor Owned Utilities
<u>50 MW Demand and 90% Load Factor</u>

Rank	State or Utility	2010 ¢/kWh
1	Michigan	6.30
2	Wisconsin	6.29
3	Minnesota	6.13
4	Indiana	5.58
5	North Dakota	5.51
6	South Dakota	5.17
7	Kansas	5.06
8	**Kansas City Power & Light Company**	**4.67**
9	Missouri	4.55
10	Iowa	3.67

Rank	State or Utility	2009 ¢/kWh
1	Michigan	6.47
2	Wisconsin	6.22
3	Minnesota	5.74
4	Indiana	5.64
5	North Dakota	5.52
6	South Dakota	4.90
7	Iowa	4.50
8	Kansas	4.43
9	**Kansas City Power & Light Company**	**4.09**
10	Missouri	4.08

Source:
This report was prepared by Brubaker & Associates, Inc.
using Edison Electric Institute Typical Bills and Average
Rates Reports.

Kansas City Power & Light Company

Valuation Metrics

Price to Earnings (P/E) Ratio [1]

Line	Company	15-Year Average (1)	2016 [2] (2)	2015 (3)	2014 (4)	2013 (5)	2012 (6)	2011 (7)	2010 (8)	2009 (9)	2008 (10)	2007 (11)	2006 (12)	2005 (13)	2004 (14)	2003 (15)	2002 (16)
1	ALLETE	17.01	19.30	15.06	17.23	18.59	15.88	14.66	15.98	16.08	13.95	14.78	16.55	17.91	25.21	N/A	N/A
2	Alliant Energy	15.31	19.90	18.07	16.60	15.28	14.50	14.45	12.47	13.86	13.43	15.08	16.82	12.59	14.00	12.69	19.93
3	Ameren Corp.	15.15	19.00	17.55	16.71	16.52	13.35	11.93	9.66	9.26	14.21	17.45	19.39	16.72	16.28	13.51	15.78
4	American Electric Power	13.54	16.20	15.77	15.88	14.49	13.77	11.92	13.42	10.03	13.06	16.27	12.91	13.70	12.42	10.66	12.68
5	Avista Corp.	17.66	19.60	17.60	17.28	14.64	19.30	14.08	12.74	11.42	14.97	30.88	15.39	19.45	24.43	13.84	19.27
6	Black Hills	17.45	21.00	16.14	19.03	18.24	17.13	31.13	18.10	9.93	N/A	15.02	15.77	17.27	17.13	15.95	12.52
7	CenterPoint Energy	14.45	22.80	18.10	16.96	18.75	14.85	14.58	13.78	11.81	11.27	15.00	10.27	19.06	17.84	6.05	5.59
8	CMS Energy Corp.	16.29	20.30	18.29	17.30	16.32	15.07	13.62	12.46	13.56	10.87	26.84	22.18	12.60	12.39	N/A	N/A
9	Consol. Edison	14.89	18.40	15.59	15.90	14.72	15.39	15.08	13.30	12.55	12.29	13.78	15.49	15.13	18.21	14.30	13.28
10	Dominion Resources	17.62	19.10	22.14	22.97	19.25	18.91	17.27	14.35	12.74	13.78	20.63	15.98	24.89	15.07	15.24	12.05
11	DTE Energy	15.07	18.70	18.11	14.91	17.92	14.89	13.51	12.27	10.41	14.81	18.27	17.43	13.80	16.04	13.69	11.28
12	Duke Energy	16.28	18.60	18.22	17.91	17.45	17.46	13.76	12.69	13.32	17.28	16.13	N/A	N/A	N/A	N/A	N/A
13	Edison Int'l	13.71	18.10	14.77	13.05	12.70	9.71	11.81	10.32	9.72	12.36	16.03	12.99	11.74	37.59	6.97	7.78
14	El Paso Electric	16.74	17.90	18.33	16.38	15.88	14.47	12.60	10.72	10.79	11.89	15.26	16.92	26.72	22.03	18.26	22.99
15	Empire District Electric	18.27	25.40	18.71	16.21	15.00	15.76	15.76	16.75	14.34	17.26	21.70	15.92	24.50	24.81	15.83	16.18
16	Entergy Corp.	13.37	11.30	12.53	12.89	13.21	11.22	9.06	11.57	11.98	16.56	19.30	14.28	16.28	15.09	13.77	11.53
17	Eversource Energy	17.45	18.80	18.11	17.92	16.94	15.35	13.42	11.96	13.66	18.75	27.07	19.76	20.77	13.35	16.07	
18	Exelon Corp.	14.28	16.00	12.58	16.02	13.43	19.08	11.30	10.97	11.49	17.97	18.22	16.53	15.37	12.99	11.77	10.46
19	FirstEnergy Corp.	17.55	14.10	17.02	39.79	13.06	21.10	22.39	11.75	13.02	15.64	15.59	14.23	16.07	14.13	22.47	12.95
20	Great Plains Energy	15.72	21.00	19.37	16.47	14.19	15.53	16.11	12.10	16.03	20.55	16.35	18.30	13.96	12.59	12.23	11.09
21	Hawaiian Elec.	17.77	13.00	20.40	15.88	16.21	15.81	17.09	18.59	19.79	23.16	21.57	20.33	18.27	19.18	13.76	13.47
22	IDACORP, Inc.	15.60	18.90	16.22	14.67	13.45	12.41	11.54	11.83	10.20	13.93	18.19	15.07	16.70	15.49	26.51	18.88
23	ITC Holdings	23.34	23.90	22.84	23.75	20.38	20.71	21.44	19.95	17.06	23.21	27.59	32.94	26.37	N/A	N/A	N/A
24	MGE Energy	17.37	23.90	20.28	17.19	17.01	17.23	15.82	14.98	15.14	14.22	15.01	15.88	22.40	17.98	17.55	15.96
25	NextEra Energy, Inc.	15.81	26.10	16.89	17.25	16.57	14.43	11.54	10.83	13.42	14.48	18.90	13.65	17.88	13.65	17.88	13.60
26	NorthWestern Corp	16.50	15.10	18.36	16.24	16.86	15.72	12.62	12.90	11.54	13.87	21.74	25.95	17.09	N/A	N/A	N/A
27	OGE Energy	14.65	17.50	17.69	18.27	17.69	15.16	14.37	13.31	10.83	12.41	13.75	13.68	14.95	14.13	11.84	14.12
28	Otter Tail Corp.	24.56	21.80	18.20	18.84	21.12	21.75	47.48	55.10	31.16	30.06	19.02	17.35	15.40	17.34	17.77	16.01
29	PG&E Corp.	16.41	17.30	26.40	15.00	23.67	20.70	15.46	15.80	13.01	12.08	16.85	14.84	15.37	13.81	9.50	N/A
30	Pinnacle West Capital	15.26	18.30	16.04	15.89	15.27	14.35	14.60	12.57	13.74	16.07	14.93	13.69	19.24	15.80	13.96	14.43
31	PNM Resources	17.60	18.90	N/A	18.68	16.13	14.97	14.53	14.05	18.09	N/A	35.65	15.57	17.38	15.02	14.73	15.08
32	Portland General	15.73	18.80	17.71	15.32	16.88	13.98	12.37	12.00	14.40	16.30	11.94	23.35	N/A	N/A	N/A	N/A
33	PPL Corp.	14.06	12.80	13.92	14.08	12.84	10.88	10.52	11.93	25.69	17.64	17.26	14.10	15.12	12.51	10.59	11.06
34	Public Serv. Enterprise	13.23	16.70	12.41	12.61	13.50	12.79	10.40	10.37	10.04	13.65	16.54	17.81	16.74	14.26	10.58	10.00
35	SCANA Corp.	14.00	17.90	14.67	13.68	14.43	14.80	13.67	12.93	11.63	12.67	14.96	15.42	14.44	13.57	13.05	12.17
36	Sempra Energy	14.09	25.80	19.73	21.87	19.68	14.89	11.77	12.60	10.09	11.80	14.01	11.50	11.79	8.65	8.96	8.19
37	Southern Co.	15.76	18.70	15.85	16.04	16.19	16.97	15.85	14.90	13.52	16.13	15.95	16.19	15.92	14.68	14.83	14.63
38	Vectren Corp.	16.67	20.00	17.92	19.98	20.66	15.02	15.83	15.10	12.89	16.79	15.33	18.92	15.11	17.57	14.80	14.16
39	Westar Energy	15.08	21.90	18.45	15.36	14.04	13.43	14.78	12.96	14.95	16.96	14.10	12.18	14.79	17.44	10.78	14.02
40	WEC Energy Group	15.69	20.40	21.33	17.71	16.50	15.76	14.25	14.01	13.35	14.77	16.47	15.97	14.46	17.51	12.43	10.46
41	Xcel Energy Inc.	16.49	17.90	16.54	15.44	15.04	14.82	14.24	14.13	12.66	13.69	16.65	14.80	15.36	13.65	11.62	40.80
42	Average	16.10	19.05	17.60	17.35	16.36	15.70	15.38	14.38	13.60	15.38	17.99	16.84	16.98	16.79	13.76	14.37
43	Median	15.33	18.80	17.82	16.47	16.21	15.07	14.37	12.93	12.89	14.22	16.47	15.90	16.07	15.49	13.69	13.54

Sources:

[1] *The Value Line Investment Survey Investment Analyzer Software,* downloaded on July 27, 2016.

[2] *The Value Line Investment Survey,* August 19, September 16, and October 28, 2016.

Kansas City Power & Light Company

Valuation Metrics

Market Price to Cash Flow (MP/CF) Ratio [1]

Line	Company	15-Year Average (1)	2016 [2/a] (2)	2015 (3)	2014 (4)	2013 (5)	2012 (6)	2011 (7)	2010 (8)	2009 (9)	2008 (10)	2007 (11)	2006 (12)	2005 (13)	2004 (14)	2003 (15)	2002 (16)
1	ALLETE	9.24	8.36	7.49	8.80	9.15	8.18	7.91	8.04	8.51	9.29	10.30	11.06	11.54	11.46	N/A	N/A
2	Alliant Energy	7.05	9.52	8.86	8.40	7.52	7.50	7.21	6.59	6.23	7.49	7.92	8.00	5.09	5.52	4.76	5.20
3	Ameren Corp.	6.72	7.24	6.87	6.95	6.61	5.48	5.02	4.23	4.25	6.35	7.69	8.57	8.57	8.24	6.74	7.96
4	American Electric Power	5.97	7.72	7.09	7.00	6.57	5.93	5.46	5.54	4.71	5.71	6.84	5.54	6.07	5.50	4.69	5.19
5	Avista Corp.	6.33	8.11	6.76	7.30	6.21	6.88	6.40	5.80	4.06	5.12	7.58	5.30	6.58	7.58	5.36	5.90
6	Black Hills	7.36	8.28	8.06	8.81	8.03	6.04	7.85	6.16	4.25	11.26	7.62	6.92	7.57	6.69	6.89	5.92
7	CenterPoint Energy	4.70	6.04	5.75	6.25	6.56	5.15	5.39	4.70	4.05	4.29	5.17	3.94	4.70	4.26	2.08	2.16
8	CMS Energy Corp.	5.21	8.47	7.53	7.13	6.68	6.03	5.41	4.48	3.64	3.45	5.57	4.40	4.04	3.20	2.88	NMF
9	Consol. Edison	8.04	9.14	7.96	7.89	7.77	8.31	8.15	7.39	6.72	6.89	8.31	8.65	8.59	9.31	7.90	7.64
10	Dominion Resources	9.13	11.01	11.84	12.27	10.88	9.92	9.45	8.12	6.98	8.27	8.65	7.81	10.09	7.68	7.51	6.53
11	DTE Energy	5.86	8.66	8.52	6.42	6.65	5.91	5.18	4.69	3.59	4.90	5.73	5.21	5.54	6.00	5.62	5.20
12	Duke Energy	7.45	7.99	7.95	8.12	8.11	9.53	6.56	6.01	5.96	7.13	7.16	N/A	N/A	N/A	N/A	N/A
13	Edison Int'l	5.15	6.54	5.92	5.68	5.46	4.59	4.22	4.11	3.95	5.63	7.01	5.87	5.61	6.84	2.82	2.96
14	El Paso Electric	5.51	7.17	6.47	6.33	6.19	5.78	5.16	4.31	3.98	4.95	6.44	6.25	6.67	4.65	3.90	4.39
15	Empire District Electric	7.69	8.38	7.27	7.29	7.07	6.97	6.43	6.88	6.23	6.94	8.78	8.17	9.20	9.60	8.22	7.93
16	Entergy Corp.	5.83	4.03	4.11	4.21	4.03	4.23	3.90	4.66	5.68	7.96	9.21	7.16	8.76	7.12	6.84	5.57
17	Eversource Energy	6.31	11.15	10.12	10.14	8.08	9.30	6.99	4.97	4.61	4.12	6.18	6.02	3.55	3.78	2.85	2.75
18	Exelon Corp.	6.31	4.60	4.70	5.09	4.61	5.54	5.86	5.10	5.98	9.65	9.89	8.62	7.97	6.29	5.71	4.97
19	FirstEnergy Corp.	6.29	5.09	5.38	7.43	6.15	7.42	7.33	4.49	4.91	7.58	7.89	7.53	6.04	5.15	6.90	5.10
20	Great Plains Energy	6.27	6.98	6.66	6.45	5.73	6.09	5.74	4.49	5.06	7.71	7.13	7.68	6.70	6.52	5.92	5.14
21	Hawaiian Elec.	7.86	7.69	9.25	7.64	8.15	8.05	7.73	7.81	6.95	9.10	7.95	8.47	8.29	8.44	6.12	6.20
22	IDACORP, Inc.	7.64	10.83	9.37	8.59	7.78	7.05	6.64	6.52	5.31	7.10	8.23	7.73	7.55	7.15	7.27	7.53
23	ITC Holdings	13.67	14.24	14.06	15.25	13.43	13.23	13.65	12.36	10.17	12.37	14.08	17.53	13.67	N/A	N/A	N/A
24	MGE Energy	10.35	14.41	12.53	11.42	11.20	10.77	9.48	9.05	8.40	8.42	9.23	9.30	11.73	11.04	10.20	8.09
25	NextEra Energy, Inc.	7.10	10.01	7.93	7.98	7.60	7.58	5.98	5.33	6.09	7.34	9.02	6.51	6.71	6.71	5.97	5.77
26	NorthWestern Corp	7.45	8.79	8.99	9.01	7.61	6.85	5.89	5.79	5.05	5.57	8.45	9.39	7.31	8.13	N/A	N/A
27	OGE Energy	7.42	8.42	9.25	10.65	9.93	7.35	7.48	6.61	5.37	6.43	7.58	7.50	7.04	6.73	5.62	5.39
28	Otter Tail Corp.	8.94	9.00	9.04	9.45	9.58	8.43	9.04	8.07	8.01	11.65	9.53	8.66	8.18	9.01	8.13	8.33
29	PG&E Corp.	6.16	6.75	7.24	5.65	6.84	5.86	5.32	5.42	4.71	4.61	5.84	5.28	5.07	5.13	4.05	14.69
30	Pinnacle West Capital	5.80	7.81	6.91	7.03	6.85	6.34	5.80	5.65	3.84	4.19	4.76	4.48	7.48	5.88	4.80	5.21
31	PNM Resources	6.95	8.49	10.95	7.48	6.47	5.80	4.94	4.58	4.53	7.10	10.67	7.50	7.62	6.84	5.55	5.72
32	Portland General	5.44	7.00	6.73	5.49	6.06	5.08	4.86	4.13	4.63	4.81	5.34	5.74	N/A	N/A	N/A	N/A
33	PPL Corp.	7.30	8.38	8.73	7.32	6.59	5.87	5.98	7.46	8.82	9.17	8.90	7.58	7.57	6.49	5.41	5.30
34	Public Serv. Enterprise	7.15	7.47	6.66	6.48	6.40	6.40	6.03	6.04	6.20	8.46	9.83	8.41	8.59	7.17	6.79	6.24
35	SCANA Corp.	7.05	10.07	8.33	7.50	7.49	7.40	6.75	6.52	5.88	6.38	7.15	7.03	5.40	6.86	6.59	6.36
36	Sempra Energy	7.40	10.95	9.99	10.77	9.37	7.26	6.13	6.53	6.07	7.07	8.61	7.22	6.96	5.16	4.85	4.00
37	Southern Co.	8.28	9.40	8.23	8.42	8.30	8.75	8.22	7.79	7.08	8.18	8.62	8.47	8.41	8.28	8.28	7.83
38	Vectren Corp.	6.85	8.35	7.82	7.57	6.82	5.79	5.81	5.58	5.24	6.90	6.53	7.37	7.06	7.63	7.27	6.92
39	Westar Energy	6.62	10.34	9.05	7.93	7.23	6.71	6.67	5.51	5.32	7.09	6.88	5.81	7.00	6.54	4.24	2.94
40	WEC Energy Group	8.04	10.69	12.90	10.27	9.58	9.24	8.43	8.15	6.87	7.57	7.84	7.27	6.40	6.27	4.91	4.27
41	Xcel Energy Inc.	6.22	7.98	7.62	7.31	7.00	6.85	6.47	6.28	5.43	5.71	6.51	5.54	5.62	5.31	4.27	5.46
42	Average	7.07	8.57	8.22	7.98	7.52	7.11	6.66	6.14	5.69	7.07	7.87	7.39	7.35	6.85	5.77	5.91
43	Median	6.85	8.38	7.95	7.50	7.07	6.85	6.40	5.80	5.37	7.09	7.84	7.44	7.06	6.72	5.66	5.57

Sources:

[1] *The Value Line Investment Survey Investment Analyzer Software,* downloaded on July 27, 2016.

[2] *The Value Line Investment Survey* , August 19, September 16, and October 28, 2016.

Note:

[a] Based on the average of the high and low price for 2016 and the projected 2016 cash flow per share,
published in *The Value Line Investment Survey* , August 19, September 16, and October 28, 2016.

Kansas City Power & Light Company

Valuation Metrics

Market Price to Book Value (MP/BV) Ratio [1]

Line	Company	12-Year Average (1)	2016 [2/a] (2)	2015 (3)	2014 (4)	2013 (5)	2012 (6)	2011 (7)	2010 (8)	2009 (9)	2008 (10)	2007 (11)	2006 (12)	2005 (13)
1	ALLETE	1.56	1.49	1.37	1.42	1.51	1.34	1.35	1.28	1.15	1.55	1.89	2.09	2.22
2	Alliant Energy	1.55	1.98	1.86	1.86	1.70	1.57	1.46	1.31	1.04	1.33	1.67	1.52	1.33
3	Ameren Corp.	1.31	1.62	1.46	1.45	1.29	1.18	0.90	0.83	0.78	1.25	1.60	1.62	1.68
4	American Electric Power	1.46	1.68	1.55	1.54	1.40	1.31	1.23	1.23	1.08	1.48	1.85	1.56	1.57
5	Avista Corp.	1.23	1.56	1.36	1.33	1.25	1.21	1.19	1.07	0.94	1.11	1.29	1.30	1.13
6	Black Hills	1.41	1.81	1.59	1.79	1.62	1.21	1.14	1.07	0.83	1.22	1.57	1.47	1.63
7	CenterPoint Energy	2.38	2.57	2.43	2.27	2.30	1.99	1.87	1.96	1.77	2.49	3.13	2.75	3.06
8	CMS Energy Corp.	1.78	2.71	2.43	2.26	2.09	1.91	1.66	1.48	1.10	1.23	1.82	1.42	1.32
9	Consol. Edison	1.37	1.56	1.42	1.34	1.38	1.47	1.38	1.22	1.08	1.17	1.47	1.47	1.52
10	Dominion Resources	2.63	2.98	3.34	3.55	2.97	2.84	2.37	2.01	1.80	2.42	2.69	2.07	2.50
11	DTE Energy	1.35	1.76	1.65	1.62	1.51	1.35	1.20	1.16	0.89	1.10	1.35	1.29	1.39
12	Duke Energy	1.14	1.33	1.29	1.28	1.19	1.12	1.11	1.00	0.91	1.06	1.15	N/A	N/A
13	Edison Int'l	1.59	1.86	1.76	1.68	1.57	1.53	1.24	1.07	1.04	1.56	2.05	1.80	1.93
14	El Paso Electric	1.50	1.65	1.48	1.52	1.49	1.59	1.64	1.17	0.98	1.33	1.69	1.71	1.76
15	Empire District Electric	1.34	1.63	1.32	1.39	1.27	1.23	1.25	1.24	1.07	1.30	1.47	1.45	1.49
16	Entergy Corp.	1.68	1.33	1.40	1.33	1.21	1.31	1.35	1.62	1.66	2.44	2.65	1.89	2.01
17	Eversource Energy	1.37	1.64	1.53	1.47	1.38	1.28	1.50	1.31	1.12	1.31	1.60	1.22	1.05
18	Exelon Corp.	2.45	1.13	1.14	1.28	1.17	1.46	1.95	2.07	2.57	4.39	4.79	3.89	3.60
19	FirstEnergy Corp.	1.57	1.22	1.16	1.15	1.28	1.44	1.33	1.36	1.54	2.52	2.23	1.92	1.64
20	Great Plains Energy	1.20	1.22	1.12	1.11	1.02	0.96	0.93	0.87	0.80	1.11	1.66	1.77	1.86
21	Hawaiian Elec.	1.59	1.64	1.71	1.49	1.54	1.62	1.54	1.44	1.16	1.61	1.57	2.01	1.78
22	IDACORP, Inc.	1.28	1.74	1.54	1.45	1.33	1.19	1.17	1.13	0.92	1.09	1.26	1.37	1.22
23	ITC Holdings	2.96	3.43	3.18	3.40	2.93	2.75	2.89	2.57	2.18	2.72	3.53	2.42	3.52
24	MGE Energy	1.90	2.42	2.10	2.10	2.06	1.92	1.75	1.65	1.54	1.62	1.75	1.83	2.09
25	NextEra Energy, Inc.	1.92	2.31	2.09	2.15	1.93	1.74	1.55	1.49	1.70	2.06	2.34	1.80	1.93
26	NorthWestern Corp	1.43	1.69	1.60	1.54	1.56	1.42	1.35	1.22	1.07	1.15	1.48	1.65	1.42
27	OGE Energy	1.83	1.63	1.79	2.22	2.24	1.94	1.90	1.70	1.37	1.52	1.98	1.91	1.80
28	Otter Tail Corp.	1.66	1.81	1.78	1.90	1.96	1.58	1.35	1.19	1.18	1.71	1.93	1.76	1.74
29	PG&E Corp.	1.58	1.64	1.57	1.39	1.38	1.41	1.46	1.56	1.41	1.50	1.94	1.83	1.84
30	Pinnacle West Capital	1.30	1.70	1.52	1.44	1.47	1.39	1.25	1.14	0.95	1.00	1.26	1.26	1.25
31	PNM Resources	1.05	1.44	1.33	1.21	1.09	0.98	0.80	0.69	0.56	0.66	1.23	1.21	1.45
32	Portland General	1.22	1.53	1.42	1.37	1.28	1.14	1.09	0.94	0.92	1.05	1.32	1.36	N/A
33	PPL Corp.	2.13	2.23	2.24	1.64	1.55	1.58	1.47	1.61	2.10	3.19	3.05	2.43	2.50
34	Public Serv. Enterprise	1.93	1.59	1.58	1.57	1.44	1.46	1.59	1.67	1.78	2.58	2.99	2.46	2.45
35	SCANA Corp.	1.49	1.71	1.47	1.48	1.48	1.48	1.36	1.33	1.20	1.45	1.62	1.64	1.72
36	Sempra Energy	1.72	2.10	2.17	2.20	1.84	1.53	1.28	1.35	1.32	1.60	1.87	1.70	1.73
37	Southern Co.	2.04	1.74	1.99	2.02	2.04	2.15	1.99	1.83	1.73	2.12	2.24	2.23	2.35
38	Vectren Corp.	1.75	2.15	2.11	2.08	1.82	1.57	1.53	1.41	1.34	1.64	1.74	1.77	1.82
39	Westar Energy	1.31	1.86	1.49	1.44	1.33	1.26	1.20	1.10	0.93	1.10	1.36	1.30	1.41
40	WEC Energy Group	1.83	2.07	1.82	2.34	2.21	2.05	1.81	1.65	1.40	1.57	1.77	1.71	1.62
41	Xcel Energy Inc.	1.47	1.86	1.66	1.55	1.50	1.51	1.41	1.32	1.19	1.30	1.53	1.40	1.38
42	Average	1.65	1.83	1.73	1.72	1.62	1.54	1.46	1.37	1.27	1.65	1.94	1.78	1.84
43	Median	1.52	1.70	1.58	1.54	1.50	1.46	1.36	1.31	1.15	1.48	1.74	1.71	1.73

Sources:

[1] *The Value Line Investment Survey Investment Analyzer Software,* downloaded on July 27, 2016.

[2] *The Value Line Investment Survey* , August 19, September 16, and October 28, 2016.

Note:

[a] Based on the average of the high and low price for 2016 and the projected 2016 cash flow per share, published in *The Value Line Investment Survey* , August 19, September 16, and October 28, 2016.

Kansas City Power & Light Company

Proxy Group

Line	Company	Credit Ratings[1]		Common Equity Ratios	
		S&P (1)	**Moody's** (2)	**SNL**[1] (3)	**Value Line**[2] (4)
1	ALLETE, Inc.	BBB+	A3	53.3%	53.7%
2	Alliant Energy Corporation	A-	Baa1	46.5%	51.4%
3	Ameren Corporation	BBB+	Baa1	47.4%	49.7%
4	American Electric Power Company, Inc.	BBB+	Baa1	46.3%	50.2%
5	Avista Corporation	BBB	Baa1	46.9%	50.0%
6	CMS Energy Corporation	BBB+	Baa2	29.3%	31.4%
7	DTE Energy Company	BBB+	Baa1	47.3%	49.8%
8	IDACORP, Inc.	BBB	Baa1	54.0%	54.4%
9	NorthWestern Corporation	BBB	A3	44.1%	46.9%
10	OGE Energy Corp.	A-	A3	54.8%	55.7%
11	Pinnacle West Capital Corporation	A-	A3	53.7%	57.0%
12	PNM Resources, Inc.	BBB+	Baa3	40.6%	45.5%
13	Portland General Electric Company	BBB	A3	50.7%	52.2%
14	SCANA Corporation	BBB+	Baa3	45.5%	48.1%
15	Xcel Energy Inc.	A-	A3	43.3%	45.9%
16	**Average**	**BBB+**	**Baa1**	**46.9%**	**49.5%**
17	**Kansas City Power & Light Company**	**BBB+**	**Baa1**		**49.9%**[3]

Sources:

[1] SNL Financial, Downloaded on October 28, 2016.

[2] *The Value Line Investment Survey*, August 19, September 16, and October 28, 2016.

[3] Bryant Direct at 6.

Kansas City Power & Light Company

Consensus Analysts' Growth Rates

		Zacks		SNL		Reuters		Average of Growth Rates
Line	Company	Estimated Growth %[1] (1)	Number of Estimates (2)	Estimated Growth %[2] (3)	Number of Estimates (4)	Estimated Growth %[3] (5)	Number of Estimates (6)	(7)
1	ALLETE, Inc.	5.50%	N/A	6.00%	1	5.00%	1	5.50%
2	Alliant Energy Corporation	6.10%	N/A	7.20%	2	6.60%	2	6.63%
3	Ameren Corporation	6.10%	N/A	7.00%	2	5.60%	2	6.23%
4	American Electric Power Company, Inc.	5.20%	N/A	3.30%	5	2.75%	1	3.75%
5	Avista Corporation	5.30%	N/A	5.30%	1	N/A	N/A	5.30%
6	CMS Energy Corporation	6.60%	N/A	6.40%	4	7.26%	2	6.75%
7	DTE Energy Company	5.80%	N/A	5.40%	4	5.63%	3	5.61%
8	IDACORP, Inc.	4.30%	N/A	4.40%	2	4.10%	2	4.27%
9	NorthWestern Corporation	5.00%	N/A	4.70%	3	4.50%	2	4.73%
10	OGE Energy Corp.	5.20%	N/A	5.60%	3	4.30%	2	5.03%
11	Pinnacle West Capital Corporation	4.30%	N/A	4.50%	5	3.95%	2	4.25%
12	PNM Resources, Inc.	6.70%	N/A	7.00%	4	5.90%	2	6.53%
13	Portland General Electric Company	6.00%	N/A	4.80%	3	5.10%	1	5.30%
14	SCANA Corporation	5.50%	N/A	6.20%	3	6.00%	1	5.90%
15	Xcel Energy Inc.	5.40%	N/A	5.10%	4	5.36%	2	5.29%
16	**Average**	**5.53%**	**N/A**	**5.53%**	**3**	**5.15%**	**2**	**5.41%**

Sources:

[1] Zacks Elite, http://www.zackselite.com/, downloaded on October 28, 2016.

[2] SNL Interactive, http://www.snl.com/, downloaded on October 28, 2016.

[3] Reuters, http://www.reuters.com/, downloaded on October 28, 2016.

Kansas City Power & Light Company

Constant Growth DCF Model
(Consensus Analysts' Growth Rates)

Line	Company	13-Week AVG Stock Price[1] (1)	Analysts' Growth[2] (2)	Annualized Dividend[3] (3)	Adjusted Yield (4)	Constant Growth DCF (5)
1	ALLETE, Inc.	$60.00	5.50%	$2.08	3.66%	9.16%
2	Alliant Energy Corporation	$38.30	6.63%	$1.18	3.29%	9.92%
3	Ameren Corporation	$49.59	6.23%	$1.70	3.64%	9.88%
4	American Electric Power Company, Inc.	$64.97	3.75%	$2.24	3.58%	7.33%
5	Avista Corporation	$41.30	5.30%	$1.37	3.49%	8.79%
6	CMS Energy Corporation	$42.36	6.75%	$1.24	3.13%	9.88%
7	DTE Energy Company	$93.90	5.61%	$3.08	3.46%	9.07%
8	IDACORP, Inc.	$77.18	4.27%	$2.20	2.97%	7.24%
9	NorthWestern Corporation	$57.78	4.73%	$2.00	3.63%	8.36%
10	OGE Energy Corp.	$31.16	5.03%	$1.10	3.71%	8.74%
11	Pinnacle West Capital Corporation	$75.95	4.25%	$2.50	3.43%	7.68%
12	PNM Resources, Inc.	$32.52	6.53%	$0.88	2.88%	9.42%
13	Portland General Electric Company	$42.50	5.30%	$1.28	3.17%	8.47%
14	SCANA Corporation	$71.69	5.90%	$2.30	3.40%	9.30%
15	Xcel Energy Inc.	$41.51	5.29%	$1.36	3.45%	8.74%
16	**Average**	**$54.71**	**5.41%**	**$1.77**	**3.39%**	**8.80%**
17	**Median**					**8.79%**

Sources:
[1] SNL Financial, Downloaded on November 4, 2016.
[2] Schedule MPG-5.
[3] *The Value Line Investment Survey*, August 19, September 16, and October 28, 2016.

Kansas City Power & Light Company

Payout Ratios

Line	Company	Dividends Per Share		Earnings Per Share		Payout Ratio	
		2015 (1)	Projected (2)	2015 (3)	Projected (4)	2015 (5)	Projected (6)
1	ALLETE, Inc.	$2.02	$2.40	$3.38	$3.75	59.76%	64.00%
2	Alliant Energy Corporation	$1.10	$1.50	$1.69	$2.45	65.09%	61.22%
3	Ameren Corporation	$1.66	$2.05	$2.38	$3.25	69.75%	63.08%
4	American Electric Power Company, Inc.	$2.15	$2.75	$3.59	$4.25	59.89%	64.71%
5	Avista Corporation	$1.32	$1.60	$1.89	$2.50	69.84%	64.00%
6	CMS Energy Corporation	$1.16	$1.60	$1.89	$2.50	61.38%	64.00%
7	DTE Energy Company	$2.84	$3.70	$4.45	$6.25	63.82%	59.20%
8	IDACORP, Inc.	$1.92	$2.70	$3.87	$4.50	49.61%	60.00%
9	NorthWestern Corporation	$1.92	$2.32	$2.90	$4.00	66.21%	58.00%
10	OGE Energy Corp.	$1.05	$1.65	$1.69	$2.25	62.13%	73.33%
11	Pinnacle West Capital Corporation	$2.44	$3.10	$3.92	$4.75	62.24%	65.26%
12	PNM Resources, Inc.	$0.80	$1.30	$1.64	$2.35	48.78%	55.32%
13	Portland General Electric Company	$1.18	$1.60	$2.04	$2.75	57.84%	58.18%
14	SCANA Corporation	$2.18	$2.80	$3.81	$4.75	57.22%	58.95%
15	Xcel Energy Inc.	$1.28	$1.70	$2.10	$2.75	60.95%	61.82%
16	**Average**	**$1.67**	**$2.18**	**$2.75**	**$3.54**	**60.97%**	**62.07%**

Source:
The Value Line Investment Survey, August 19, September 16, and October 28, 2016.

Kansas City Power & Light Company

Sustainable Growth Rate

Line	Company	Dividends Per Share (1)	Earnings Per Share (2)	Book Value Per Share (3)	Book Value Growth (4)	ROE (5)	Adjustment Factor (6)	Adjusted ROE (7)	Payout Ratio (8)	Retention Rate (9)	Internal Growth Rate (10)	Sustainable Growth Rate (11)
						3 to 5 Year Projections						
1	ALLETE, Inc.	$2.40	$3.75	$43.50	3.25%	8.62%	1.02	8.76%	64.00%	36.00%	3.15%	3.53%
2	Alliant Energy Corporation	$1.50	$2.45	$20.00	4.04%	12.25%	1.02	12.49%	61.22%	38.78%	4.84%	5.20%
3	Ameren Corporation	$2.05	$3.25	$34.00	3.50%	9.56%	1.02	9.72%	63.08%	36.92%	3.59%	3.59%
4	American Electric Power Company, Inc.	$2.75	$4.25	$44.25	3.96%	9.60%	1.02	9.79%	64.71%	35.29%	3.46%	3.74%
5	Avista Corporation	$1.60	$2.50	$28.50	3.05%	8.77%	1.01	8.90%	64.00%	36.00%	3.21%	4.10%
6	CMS Energy Corporation	$1.60	$2.50	$19.25	6.26%	12.99%	1.03	13.38%	64.00%	36.00%	4.82%	6.34%
7	DTE Energy Company	$3.70	$6.25	$61.00	4.53%	10.25%	1.02	10.47%	59.20%	40.80%	4.27%	4.73%
8	IDACORP, Inc.	$2.70	$4.50	$49.50	3.90%	9.09%	1.02	9.26%	60.00%	40.00%	3.71%	3.85%
9	NorthWestern Corporation	$2.32	$4.00	$40.00	3.78%	10.00%	1.02	10.19%	58.00%	42.00%	4.28%	4.68%
10	OGE Energy Corp.	$1.65	$2.25	$19.75	3.46%	11.39%	1.02	11.59%	73.33%	26.67%	3.09%	3.25%
11	Pinnacle West Capital Corporation	$3.10	$4.75	$49.00	3.48%	9.69%	1.02	9.86%	65.26%	34.74%	3.42%	3.80%
12	PNM Resources, Inc.	$1.30	$2.35	$25.50	4.18%	9.22%	1.02	9.40%	55.32%	44.68%	4.20%	4.25%
13	Portland General Electric Company	$1.60	$2.75	$30.25	3.53%	9.09%	1.02	9.25%	58.18%	41.82%	3.87%	4.02%
14	SCANA Corporation	$2.80	$4.75	$47.75	4.62%	9.95%	1.02	10.17%	58.95%	41.05%	4.18%	5.04%
15	Xcel Energy Inc.	$1.70	$2.75	$25.50	4.07%	10.78%	1.02	11.00%	61.82%	38.18%	4.20%	4.22%
16	**Average**	**$2.18**	**$3.54**	**$35.85**	**3.97%**	**10.08%**	**1.02**	**10.28%**	**62.07%**	**37.93%**	**3.89%**	**4.29%**

Sources and Notes:
Cols. (1), (2) and (3):   *The Value Line Investment Survey*, August 19, September 16, and October 28, 2016.
Col. (4): [Col. (3) / Page 2 Col. (2)] ^ (1/5) - 1.
Col. (5): Col. (2) / Col. (3).
Col. (6): [2 * (1 + Col. (4))] / (2 + Col. (4)).
Col. (7): Col. (6) * Col. (5).
Col. (8): Col. (1) / Col. (2).
Col. (9): 1 - Col. (8).
Col. (10): Col. (9) * Col. (7).
Col. (11): Col. (10) + Page 2 Col. (9).

Kansas City Power & Light Company

Sustainable Growth Rate

Line	Company	13-Week Average Stock Price[1] (1)	2015 Book Value Per Share[2] (2)	Market to Book Ratio (3)	Common Shares Outstanding (in Millions)[2]		Growth (6)	S Factor[3] (7)	V Factor[4] (8)	S * V (9)
					2015 (4)	3-5 Years (5)				
1	ALLETE, Inc.	$60.00	$37.07	1.62	49.10	50.60	0.60%	0.98%	38.21%	0.37%
2	Alliant Energy Corporation	$38.30	$16.41	2.33	226.92	230.00	0.27%	0.63%	57.16%	0.36%
3	Ameren Corporation	$49.59	$28.63	1.73	242.63	242.63	0.00%	0.00%	42.26%	0.00%
4	American Electric Power Company, Inc.	$64.97	$36.44	1.78	491.05	500.00	0.36%	0.65%	43.91%	0.28%
5	Avista Corporation	$41.30	$24.53	1.68	62.31	66.50	1.31%	2.21%	40.61%	0.90%
6	CMS Energy Corporation	$42.36	$14.21	2.98	277.16	288.00	0.77%	2.30%	66.45%	1.53%
7	DTE Energy Company	$93.90	$48.88	1.92	179.47	184.00	0.50%	0.96%	47.94%	0.46%
8	IDACORP, Inc.	$77.18	$40.88	1.89	50.34	50.75	0.16%	0.31%	47.03%	0.14%
9	NorthWestern Corporation	$57.78	$33.22	1.74	48.17	49.50	0.55%	0.95%	42.51%	0.40%
10	OGE Energy Corp.	$31.16	$16.66	1.87	199.70	201.50	0.18%	0.34%	46.53%	0.16%
11	Pinnacle West Capital Corporation	$75.95	$41.30	1.84	110.98	113.50	0.45%	0.83%	45.62%	0.38%
12	PNM Resources, Inc.	$32.52	$20.78	1.57	79.65	80.00	0.09%	0.14%	36.11%	0.05%
13	Portland General Electric Company	$42.50	$25.43	1.67	88.79	89.80	0.23%	0.38%	40.16%	0.15%
14	SCANA Corporation	$71.69	$38.09	1.88	142.90	150.00	0.97%	1.83%	46.87%	0.86%
15	Xcel Energy Inc.	$41.51	$20.89	1.99	507.54	508.00	0.02%	0.04%	49.67%	0.02%
16	**Average**	**$54.71**	**$29.56**	**1.90**	**183.78**	**186.99**	**0.43%**	**0.83%**	**46.07%**	**0.40%**

Sources and Notes:

[1] SNL Financial, Downloaded on November 4, 2016.

[2] *The Value Line Investment Survey*, August 19, September 16, and October 28, 2016.

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

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

Kansas City Power & Light Company

Constant Growth DCF Model
(Sustainable Growth Rate)

Line	Company	13-Week AVG Stock Price[1] (1)	Sustainable Growth[2] (2)	Annualized Dividend[3] (3)	Adjusted Yield (4)	Constant Growth DCF (5)
1	ALLETE, Inc.	$60.00	3.53%	$2.08	3.59%	7.12%
2	Alliant Energy Corporation	$38.30	5.20%	$1.18	3.24%	8.45%
3	Ameren Corporation	$49.59	3.59%	$1.70	3.55%	7.14%
4	American Electric Power Company, Inc.	$64.97	3.74%	$2.24	3.58%	7.32%
5	Avista Corporation	$41.30	4.10%	$1.37	3.45%	7.55%
6	CMS Energy Corporation	$42.36	6.34%	$1.24	3.11%	9.46%
7	DTE Energy Company	$93.90	4.73%	$3.08	3.44%	8.17%
8	IDACORP, Inc.	$77.18	3.85%	$2.20	2.96%	6.81%
9	NorthWestern Corporation	$57.78	4.68%	$2.00	3.62%	8.31%
10	OGE Energy Corp.	$31.16	3.25%	$1.10	3.64%	6.89%
11	Pinnacle West Capital Corporation	$75.95	3.80%	$2.50	3.42%	7.22%
12	PNM Resources, Inc.	$32.52	4.25%	$0.88	2.82%	7.07%
13	Portland General Electric Company	$42.50	4.02%	$1.28	3.13%	7.15%
14	SCANA Corporation	$71.69	5.04%	$2.30	3.37%	8.41%
15	Xcel Energy Inc.	$41.51	4.22%	$1.36	3.41%	7.63%
16	**Average**	**$54.71**	**4.29%**	**$1.77**	**3.36%**	**7.65%**
17	**Median**					**7.32%**

Sources:

[1] SNL Financial, Downloaded on November 4, 2016.

[2] Schedule MPG-8, page 1.

[3] *The Value Line Investment Survey*, August 19, September 16, and October 28, 2016.

Kansas City Power & Light Company

Electricity Sales Are Linked to U.S. Economic Growth

Index 1988 = 100

Chart showing three trend lines from 1988 to 2015, indexed to 1988 = 100:
- Real GDP (blue) rising from 100 to about 193
- Electricity Use (red) rising from 100 to about 150
- Total Energy Use (green) rising from 100 to about 118

Note:
1988 represents the base year. Graph depicts increases or decreases from the base year.

Sources:
U.S. Energy Information Administration
Federal Reserve Bank of St. Louis

Schedule MPG-10

Kansas City Power & Light Company

Multi-Stage Growth DCF Model

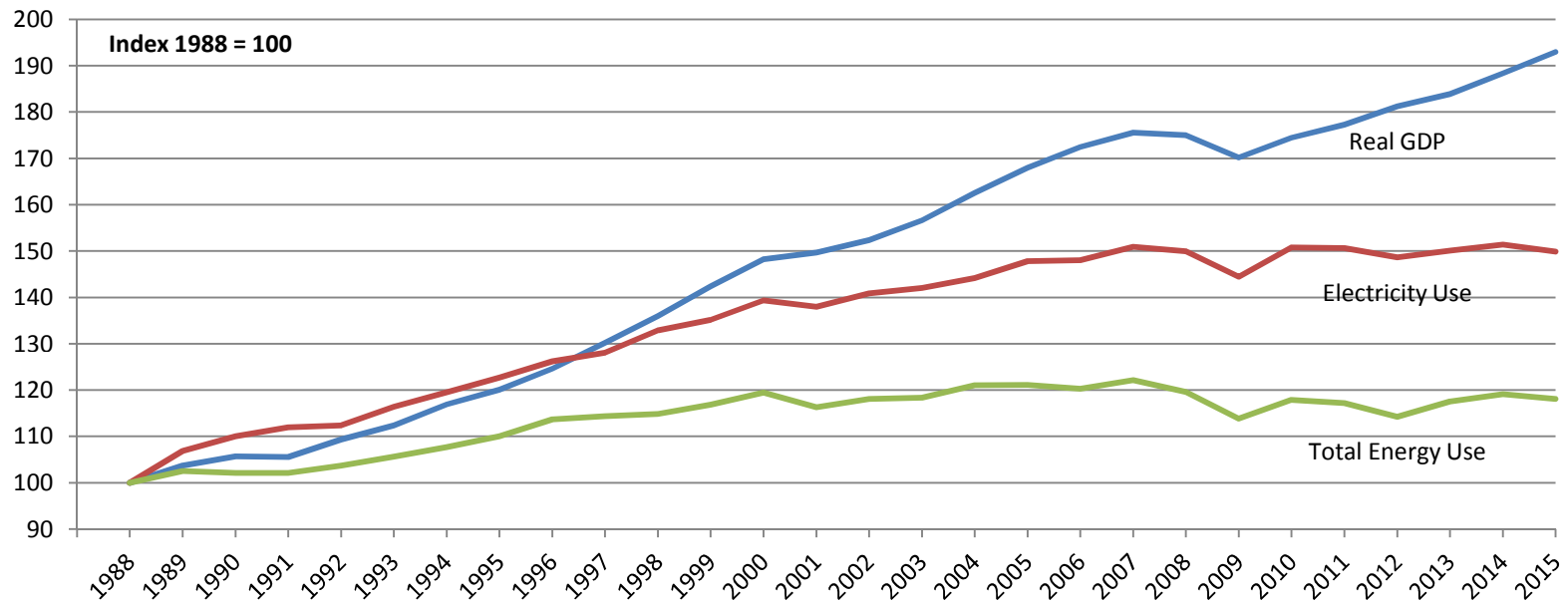| Line | Company | 13-Week AVG Stock Price[1] (1) | Annualized Dividend[2] (2) | First Stage Growth[3] (3) | Second Stage Growth | | | | | Third Stage Growth[4] (9) | Multi-Stage Growth DCF (10) |
					Year 6 (4)	Year 7 (5)	Year 8 (6)	Year 9 (7)	Year 10 (8)		
1	ALLETE, Inc.	$60.00	$2.08	5.50%	5.27%	5.03%	4.80%	4.57%	4.33%	4.10%	8.04%
2	Alliant Energy Corporation	$38.30	$1.18	6.63%	6.21%	5.79%	5.37%	4.94%	4.52%	4.10%	7.87%
3	Ameren Corporation	$49.59	$1.70	6.23%	5.88%	5.52%	5.17%	4.81%	4.46%	4.10%	8.18%
4	American Electric Power Company, Inc.	$64.97	$2.24	3.75%	3.81%	3.87%	3.93%	3.98%	4.04%	4.10%	7.60%
5	Avista Corporation	$41.30	$1.37	5.30%	5.10%	4.90%	4.70%	4.50%	4.30%	4.10%	7.82%
6	CMS Energy Corporation	$42.36	$1.24	6.75%	6.31%	5.87%	5.43%	4.98%	4.54%	4.10%	7.71%
7	DTE Energy Company	$93.90	$3.08	5.61%	5.36%	5.11%	4.86%	4.60%	4.35%	4.10%	7.86%
8	IDACORP, Inc.	$77.18	$2.20	4.27%	4.24%	4.21%	4.18%	4.16%	4.13%	4.10%	7.09%
9	NorthWestern Corporation	$57.78	$2.00	4.73%	4.63%	4.52%	4.42%	4.31%	4.21%	4.10%	7.85%
10	OGE Energy Corp.	$31.16	$1.10	5.03%	4.88%	4.72%	4.57%	4.41%	4.26%	4.10%	8.00%
11	Pinnacle West Capital Corporation	$75.95	$2.50	4.25%	4.23%	4.20%	4.18%	4.15%	4.13%	4.10%	7.56%
12	PNM Resources, Inc.	$32.52	$0.88	6.53%	6.13%	5.72%	5.32%	4.91%	4.51%	4.10%	7.39%
13	Portland General Electric Company	$42.50	$1.28	5.30%	5.10%	4.90%	4.70%	4.50%	4.30%	4.10%	7.48%
14	SCANA Corporation	$71.69	$2.30	5.90%	5.60%	5.30%	5.00%	4.70%	4.40%	4.10%	7.84%
15	Xcel Energy Inc.	$41.51	$1.36	5.29%	5.09%	4.89%	4.69%	4.50%	4.30%	4.10%	7.78%
16	**Average**	**$54.71**	**$1.77**	**5.41%**	**5.19%**	**4.97%**	**4.75%**	**4.54%**	**4.32%**	**4.10%**	**7.74%**
17	**Median**										**7.82%**

Sources:

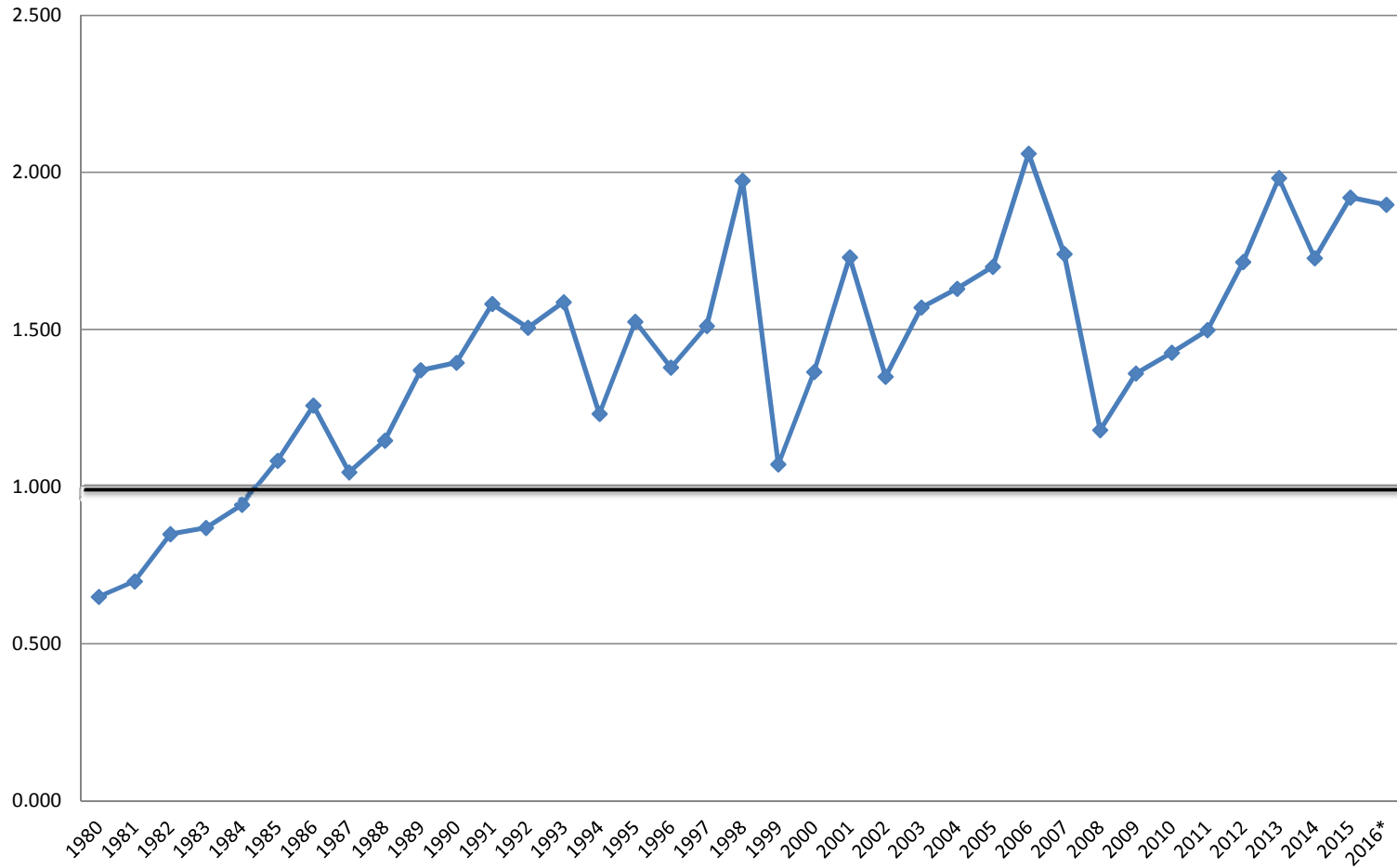[1] SNL Financial, Downloaded on November 4, 2016.

[2] *The Value Line Investment Survey*, August 19, September 16, and October 28, 2016.

[3] Schedule MPG-5.

[4] Blue Chip Economic Indicators, October 10, 2016 at 14.

Kansas City Power & Light Company

Common Stock Market/Book Ratio

* through June 2016

Source:
1980 - 2000: Mergent Public Utility Manual.
2001 - 2016: AUS Utility Reports, various dates.

Kansas City Power & Light Company

Equity Risk Premium - Treasury Bond

Line	Year	Authorized Electric Returns[1] (1)	30 yr. Treasury Bond Yield[2] (2)	Indicated Risk Premium (3)	Rolling 5 - Year Average (4)	Rolling 10 - Year Average (5)
1	1986	13.93%	7.80%	6.13%		
2	1987	12.99%	8.58%	4.41%		
3	1988	12.79%	8.96%	3.83%		
4	1989	12.97%	8.45%	4.52%		
5	1990	12.70%	8.61%	4.09%	4.60%	
6	1991	12.55%	8.14%	4.41%	4.25%	
7	1992	12.09%	7.67%	4.42%	4.26%	
8	1993	11.41%	6.60%	4.81%	4.45%	
9	1994	11.34%	7.37%	3.97%	4.34%	
10	1995	11.55%	6.88%	4.67%	4.46%	4.53%
11	1996	11.39%	6.70%	4.69%	4.51%	4.38%
12	1997	11.40%	6.61%	4.79%	4.59%	4.42%
13	1998	11.66%	5.58%	6.08%	4.84%	4.65%
14	1999	10.77%	5.87%	4.90%	5.03%	4.68%
15	2000	11.43%	5.94%	5.49%	5.19%	4.82%
16	2001	11.09%	5.49%	5.60%	5.37%	4.94%
17	2002	11.16%	5.43%	5.73%	5.56%	5.07%
18	2003	10.97%	4.96%	6.01%	5.55%	5.19%
19	2004	10.75%	5.05%	5.70%	5.71%	5.37%
20	2005	10.54%	4.65%	5.89%	5.79%	5.49%
21	2006	10.34%	4.99%	5.35%	5.74%	5.56%
22	2007	10.31%	4.83%	5.48%	5.69%	5.62%
23	2008	10.37%	4.28%	6.09%	5.70%	5.62%
24	2009	10.52%	4.07%	6.45%	5.85%	5.78%
25	2010	10.29%	4.25%	6.04%	5.88%	5.83%
26	2011	10.19%	3.91%	6.28%	6.07%	5.90%
27	2012	10.01%	2.92%	7.09%	6.39%	6.04%
28	2013	9.81%	3.45%	6.36%	6.44%	6.07%
29	2014	9.75%	3.34%	6.41%	6.44%	6.14%
30	2015	9.60%	2.84%	6.76%	6.58%	6.23%
31	2016 [3]	9.64%	2.52%	7.12%	6.75%	6.41%
32	**Average**	**11.17%**	**5.70%**	**5.47%**	**5.41%**	**5.40%**
33	**Minimum**				**4.25%**	**4.38%**
34	**Maximum**				**6.75%**	**6.41%**

Sources:

[1] *Regulatory Research Associates, Inc*., Regulatory Focus, Major Rate Case Decisions, January 1997 page 5, January 2011 page 3, and October 2016 page 6.

[2] St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/. The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

[3] The data includes the period Jan - Sep 2016.

Kansas City Power & Light Company

Equity Risk Premium - Utility Bond

Line	Year	Authorized Electric Returns[1] (1)	Average "A" Rated Utility Bond Yield[2] (2)	Indicated Risk Premium (3)	Rolling 5 - Year Average (4)	Rolling 10 - Year Average (5)
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%	3.12%	
6	1991	12.55%	9.36%	3.19%	2.88%	
7	1992	12.09%	8.69%	3.40%	2.99%	
8	1993	11.41%	7.59%	3.82%	3.29%	
9	1994	11.34%	8.31%	3.03%	3.26%	
10	1995	11.55%	7.89%	3.66%	3.42%	3.27%
11	1996	11.39%	7.75%	3.64%	3.51%	3.20%
12	1997	11.40%	7.60%	3.80%	3.59%	3.29%
13	1998	11.66%	7.04%	4.62%	3.75%	3.52%
14	1999	10.77%	7.62%	3.15%	3.77%	3.52%
15	2000	11.43%	8.24%	3.19%	3.68%	3.55%
16	2001	11.09%	7.76%	3.33%	3.62%	3.56%
17	2002	11.16%	7.37%	3.79%	3.61%	3.60%
18	2003	10.97%	6.58%	4.39%	3.57%	3.66%
19	2004	10.75%	6.16%	4.59%	3.86%	3.81%
20	2005	10.54%	5.65%	4.89%	4.20%	3.94%
21	2006	10.34%	6.07%	4.27%	4.39%	4.00%
22	2007	10.31%	6.07%	4.24%	4.48%	4.04%
23	2008	10.37%	6.53%	3.84%	4.37%	3.97%
24	2009	10.52%	6.04%	4.48%	4.34%	4.10%
25	2010	10.29%	5.46%	4.83%	4.33%	4.26%
26	2011	10.19%	5.04%	5.15%	4.51%	4.45%
27	2012	10.01%	4.13%	5.88%	4.84%	4.66%
28	2013	9.81%	4.48%	5.33%	5.13%	4.75%
29	2014	9.75%	4.28%	5.47%	5.33%	4.84%
30	2015	9.60%	4.12%	5.48%	5.46%	4.90%
31	2016 [3]	9.64%	3.89%	5.75%	5.58%	5.05%
32	**Average**	**11.17%**	**7.08%**	**4.09%**	**4.03%**	**4.00%**
33	**Minimum**				**2.88%**	**3.20%**
34	**Maximum**				**5.58%**	**5.05%**

Sources:

[1] *Regulatory Research Associates, Inc* ., Regulatory Focus, Major Rate Case Decisions, January 1997 page 5, January 2011 page 3, and October 2016 page 6.

[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 from 2010-2016 were obtained from http://credittrends.moodys.com/.
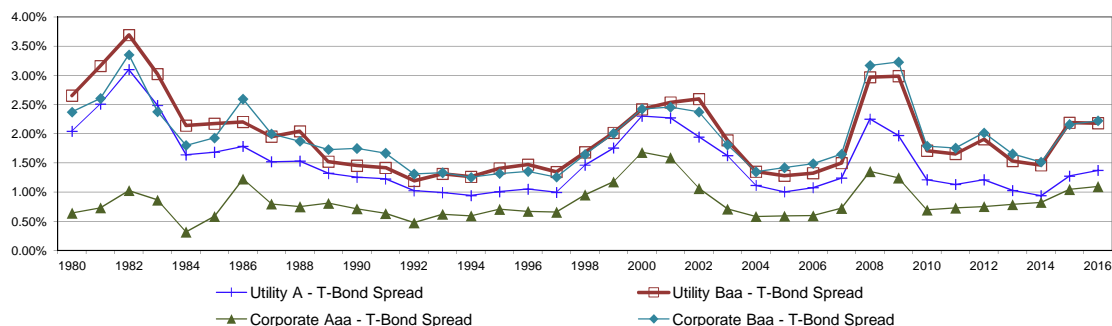
[3] The data includes the period Jan - Sep 2016.

Schedule MPG-14

Kansas City Power & Light Company

Bond Yield Spreads

Line	Year	T-Bond Yield[1] (1)	Public Utility Bond				Corporate Bond				Utility to Corporate	
			A[2] (2)	Baa[2] (3)	A-T-Bond Spread (4)	Baa-T-Bond Spread (5)	Aaa[1] (6)	Baa[1] (7)	Aaa-T-Bond Spread (8)	Baa-T-Bond Spread (9)	Baa Spread (10)	A-Aaa Spread (11)
1	1980	11.30%	13.34%	13.95%	2.04%	2.65%	11.94%	13.67%	0.64%	2.37%	0.28%	1.40%
2	1981	13.44%	15.95%	16.60%	2.51%	3.16%	14.17%	16.04%	0.73%	2.60%	0.56%	1.78%
3	1982	12.76%	15.86%	16.45%	3.10%	3.69%	13.79%	16.11%	1.03%	3.35%	0.34%	2.07%
4	1983	11.18%	13.66%	14.20%	2.48%	3.02%	12.04%	13.55%	0.86%	2.38%	0.65%	1.62%
5	1984	12.39%	14.03%	14.53%	1.64%	2.14%	12.71%	14.19%	0.32%	1.80%	0.34%	1.32%
6	1985	10.79%	12.47%	12.96%	1.68%	2.17%	11.37%	12.72%	0.58%	1.93%	0.24%	1.10%
7	1986	7.80%	9.58%	10.00%	1.78%	2.20%	9.02%	10.39%	1.22%	2.59%	-0.39%	0.56%
8	1987	8.58%	10.10%	10.53%	1.52%	1.95%	9.38%	10.58%	0.80%	2.00%	-0.05%	0.72%
9	1988	8.96%	10.49%	11.00%	1.53%	2.04%	9.71%	10.83%	0.75%	1.87%	0.17%	0.78%
10	1989	8.45%	9.77%	9.97%	1.32%	1.52%	9.26%	10.18%	0.81%	1.73%	-0.21%	0.51%
11	1990	8.61%	9.86%	10.06%	1.25%	1.45%	9.32%	10.36%	0.71%	1.75%	-0.29%	0.54%
12	1991	8.14%	9.36%	9.55%	1.22%	1.41%	8.77%	9.80%	0.63%	1.67%	-0.25%	0.59%
13	1992	7.67%	8.69%	8.86%	1.02%	1.19%	8.14%	8.98%	0.47%	1.31%	-0.12%	0.55%
14	1993	6.60%	7.59%	7.91%	0.99%	1.31%	7.22%	7.93%	0.62%	1.33%	-0.02%	0.37%
15	1994	7.37%	8.31%	8.63%	0.94%	1.26%	7.96%	8.62%	0.59%	1.25%	0.01%	0.35%
16	1995	6.88%	7.89%	8.29%	1.01%	1.41%	7.59%	8.20%	0.71%	1.32%	0.09%	0.30%
17	1996	6.70%	7.75%	8.17%	1.05%	1.47%	7.37%	8.05%	0.67%	1.35%	0.12%	0.38%
18	1997	6.61%	7.60%	7.95%	0.99%	1.34%	7.26%	7.86%	0.66%	1.26%	0.09%	0.34%
19	1998	5.58%	7.04%	7.26%	1.46%	1.68%	6.53%	7.22%	0.95%	1.64%	0.04%	0.51%
20	1999	5.87%	7.62%	7.88%	1.75%	2.01%	7.04%	7.87%	1.18%	2.01%	0.01%	0.58%
21	2000	5.94%	8.24%	8.36%	2.30%	2.42%	7.62%	8.36%	1.68%	2.42%	-0.01%	0.62%
22	2001	5.49%	7.76%	8.03%	2.27%	2.54%	7.08%	7.95%	1.59%	2.45%	0.08%	0.68%
23	2002	5.43%	7.37%	8.02%	1.94%	2.59%	6.49%	7.80%	1.06%	2.37%	0.22%	0.88%
24	2003	4.96%	6.58%	6.84%	1.62%	1.89%	5.67%	6.77%	0.71%	1.81%	0.08%	0.91%
25	2004	5.05%	6.16%	6.40%	1.11%	1.35%	5.63%	6.39%	0.58%	1.35%	0.00%	0.53%
26	2005	4.65%	5.65%	5.93%	1.00%	1.28%	5.24%	6.06%	0.59%	1.42%	-0.14%	0.41%
27	2006	4.99%	6.07%	6.32%	1.08%	1.32%	5.59%	6.48%	0.60%	1.49%	-0.16%	0.48%
28	2007	4.83%	6.07%	6.33%	1.24%	1.50%	5.56%	6.48%	0.72%	1.65%	-0.15%	0.52%
29	2008	4.28%	6.53%	7.25%	2.25%	2.97%	5.63%	7.45%	1.35%	3.17%	-0.20%	0.90%
30	2009	4.07%	6.04%	7.06%	1.97%	2.99%	5.31%	7.30%	1.24%	3.23%	-0.24%	0.72%
31	2010	4.25%	5.46%	5.96%	1.21%	1.71%	4.94%	6.04%	0.69%	1.79%	-0.08%	0.52%
32	2011	3.91%	5.04%	5.56%	1.13%	1.65%	4.64%	5.66%	0.73%	1.75%	-0.10%	0.40%
33	2012	2.92%	4.13%	4.83%	1.21%	1.91%	3.67%	4.94%	0.75%	2.01%	-0.11%	0.46%
34	2013	3.45%	4.48%	4.98%	1.03%	1.53%	4.24%	5.10%	0.79%	1.65%	-0.12%	0.24%
35	2014	3.34%	4.28%	4.80%	0.94%	1.46%	4.16%	4.85%	0.82%	1.51%	-0.06%	0.11%
36	2015	2.84%	4.12%	5.03%	1.27%	2.19%	3.89%	5.00%	1.05%	2.16%	0.03%	0.23%
37	2016 [3]	2.52%	3.89%	4.70%	1.37%	2.18%	3.62%	4.74%	1.10%	2.22%	-0.04%	0.28%
38	**Average**	**6.72%**	**8.24%**	**8.68%**	**1.52%**	**1.96%**	**7.56%**	**8.66%**	**0.84%**	**1.94%**	**0.02%**	**0.68%**

Yield Spreads
Treasury Vs. Corporate & Treasury Vs. Utility

Legend: Utility A - T-Bond Spread; Utility Baa - T-Bond Spread; Corporate Aaa - T-Bond Spread; Corporate Baa - T-Bond Spread

Sources:

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

[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 from 2010-2016 were obtained from http://credittrends.moodys.com/.

[3] The data includes the period Jan - Sep 2016.

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Treasury and Utility Bond Yields

Line	Date	Treasury Bond Yield[1] (1)	"A" Rated Utility Bond Yield[2] (2)	"Baa" Rated Utility Bond Yield[2] (3)
1	10/28/16	2.62%	3.86%	4.40%
2	10/21/16	2.48%	3.75%	4.30%
3	10/14/16	2.55%	3.83%	4.41%
4	10/07/16	2.46%	3.76%	4.33%
5	09/30/16	2.32%	3.64%	4.26%
6	09/23/16	2.34%	3.65%	4.26%
7	09/16/16	2.44%	3.76%	4.37%
8	09/09/16	2.39%	3.69%	4.29%
9	09/02/16	2.28%	3.58%	4.19%
10	08/26/16	2.29%	3.62%	4.22%
11	08/19/16	2.29%	3.60%	4.22%
12	08/12/16	2.23%	3.57%	4.18%
13	08/05/16	2.32%	3.64%	4.27%
14	**Average**	**2.39%**	**3.69%**	**4.28%**
15	**Spread To Treasury**		**1.30%**	**1.89%**

Sources:

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

[2] http://credittrends.moodys.com/.
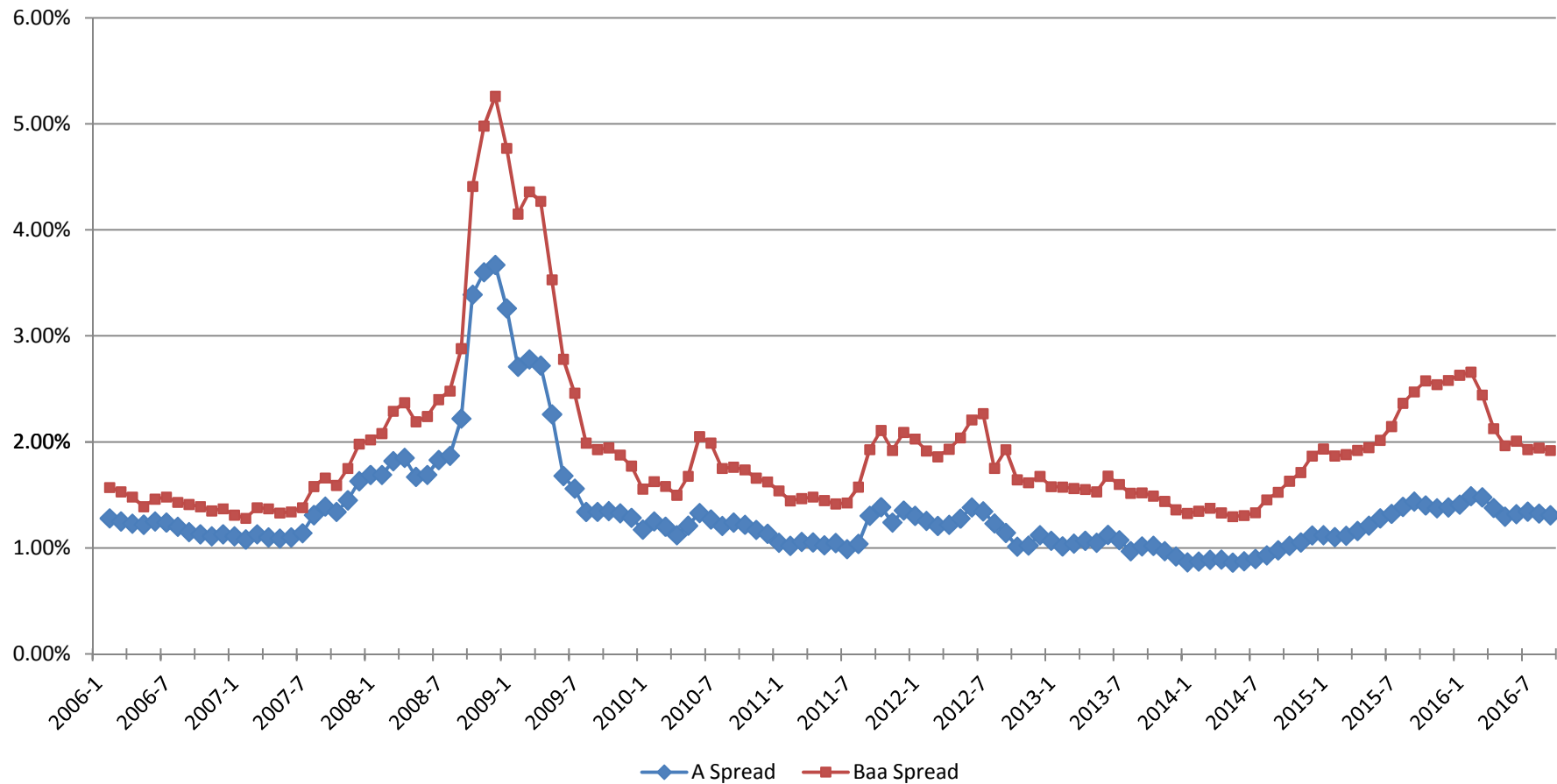
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Trends in Bond Yields

Sources:
Mergent Bond Record.
www.moodys.com, Bond Yields and Key Indicators.
St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/

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Yield Spread Between Utility Bonds and 30-Year Treasury Bonds

Legend: A Spread, Baa Spread

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Value Line Beta

Line	Company	Beta
1	ALLETE, Inc.	0.75
2	Alliant Energy Corporation	0.75
3	Ameren Corporation	0.70
4	American Electric Power Company, Inc.	0.65
5	Avista Corporation	0.70
6	CMS Energy Corporation	0.65
7	DTE Energy Company	0.70
8	IDACORP, Inc.	0.75
9	NorthWestern Corporation	0.70
10	OGE Energy Corp.	0.90
11	Pinnacle West Capital Corporation	0.70
12	PNM Resources, Inc.	0.75
13	Portland General Electric Company	0.70
14	SCANA Corporation	0.70
15	Xcel Energy Inc.	0.60
16	**Average**	**0.71**

Source:
The Value Line Investment Survey,
August 19, September 16, and October 28, 2016.

Schedule MPG-17

Kansas City Power & Light Company

CAPM Return

Line	Description	High Market Risk Premium (1)	Low Market Risk Premium (2)
1	Risk-Free Rate[1]	3.10%	3.10%
2	Risk Premium[2]	8.10%	6.00%
3	Beta[3]	0.71	0.71
4	**CAPM**	**8.88%**	**7.38%**

Sources:

[1] Blue Chip Financial Forecasts; November 1, 2016, at 2.

[2] *Duff & Phelps, 2016 Valuation Handbook Guide to Cost of Capital* at 2-4, 3-31, and 3-40.

[3] Schedule MPG-17.

Kansas City Power & Light Company

Standard & Poor's Credit Metrics

Line	Description	Retail Cost of Service Amount (1)	S&P Benchmark (Medial Volatility)[1/2]			Reference (5)
			Intermediate (2)	Significant (3)	Aggressive (4)	
1	Rate Base	$ 2,576,273,286				Schedule RAK-1 (KCPL-MO).
2	Weighted Common Return	4.49%				Page 2, Line 2, Col. 4.
3	Pre-Tax Rate of Return	10.05%				Page 2, Line 3, Col. 5.
4	Income to Common	$ 115,656,589				Line 1 x Line 2.
5	EBIT	$ 258,868,491				Line 1 x Line 3.
6	Depreciation & Amortization	$ 148,735,448				Schedule RAK-3 (KCPL-MO).
7	Imputed Amortization	$ 16,707,260				S&P Capital IQ, downloaded on October 25, 2016.
8	Deferred Income Taxes & ITC	$ 13,528,201				Schedule RAK-3 (KCPL-MO).
9	Funds from Operations (FFO)	$ 294,627,498				Sum of Line 4 and Lines 6 through 8.
10	Imputed Interest & Cap. Int. Expense	$ 15,240,365				S&P Capital IQ, downloaded on October 25, 2016.
11	EBITDA	$ 439,551,564				Sum of Lines 5 through 7 and Line 10.
12	Total Debt Ratio	51.7%				Page 3, Line 3, Col. 2.
13	Debt to EBITDA	3.0x	2.5x - 3.5x	3.5x - 4.5x	4.5x - 5.5x	(Line 1 x Line 12) / Line 11.
14	FFO to Total Debt	22%	23% - 35%	13% - 23%	9% - 13%	Line 9 / (Line 1 x Line 12).

Sources:

[1] Standard & Poor's RatingsDirect: "Criteria: Corporate Methodology," November 19, 2013.

[2] Standard & Poor's RatingsDirect: "Kansas City Power & Light Co." June 17, 2016.

Note:

Based on the June 2016 S&P report, KCP&L has an "Excellent" business risk profile and a "Significant" financial risk profile, and falls under the "Medial Volatility" matrix.

Kansas City Power & Light Company

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

Line	Description	Amount (000) (1)	Weight (2)	Cost (3)	Weighted Cost (4)	Pre-Tax Weighted Cost (5)
1	Long-Term Debt	$ 2,565,176	50.12%	5.51%	2.76%	2.76%
2	Common Equity	2,553,004	49.88%	**9.00%**	4.49%	7.29%
3	**Total**	**$ 5,118,180**	**100.00%**		**7.25%**	**10.05%**
4	Tax Conversion Factor*					1.6231

Sources:
Schedule MPG-1.
* Schedule RAK-1 (KCPL-MO).

Kansas City Power & Light Company

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

Line	Description		Amount (000) (1)	Weight (2)
1	Long-Term Debt	$	2,565,176	48.57%
2	Off-Balance Sheet Debt*		162,724	3.08%
3	**Total Debt**	**$**	**2,727,900**	51.66%
4	Common Equity	$	2,553,004	48.34%
5	**Total**	**$**	**5,280,904**	**100.00%**

Source:
* S&P Capital IQ, downloaded on October 25, 2016.

Kansas City Power & Light Company

Standard & Poor's Credit Metrics
(June 30, 2016)

Line		Credit Rating (1)	FFO / Debt (%) (2)	Debt / Capital (%) (3)
Value Line Publicly Traded Electric Utility Companies				
	A Rated			
1	Average	A-	19.02	56.43
2	Median	A-	16.26	54.51
	BBB Rated			
3	Average	BBB	16.39	56.29
4	Median	BBB	17.06	56.88
	All Utilities			
5	Average	BBB+	17.27	56.33
6	Median	BBB+	16.30	55.89
Electric Operating Subsidiary Companies				
	A Rated			
7	Average	A-	21.31	50.76
8	Median	A-	21.99	50.77
	BBB Rated			
9	Average	BBB	20.61	53.03
10	Median	BBB	19.94	53.63
	All Utilities			
11	Average	BBB+	20.92	52.03
12	Median	BBB+	20.93	52.15

Source:
www.globalcreditportal.com/ratingsdirect/
Downloaded November 17, 2016.