

MISSOURI PUBLIC SERVICE COMMISSION

STAFF REPORT

**REVENUE REQUIREMENT
COST OF SERVICE**

APPENDIX 2

**Support for Staff
Cost of
Capital Recommendations**

KANSAS CITY POWER & LIGHT COMPANY

CASE NO. ER-2016-0285

*Jefferson City, Missouri
November 2016*

Case No.: ER-2016-0285
Recommended Cost of Capital

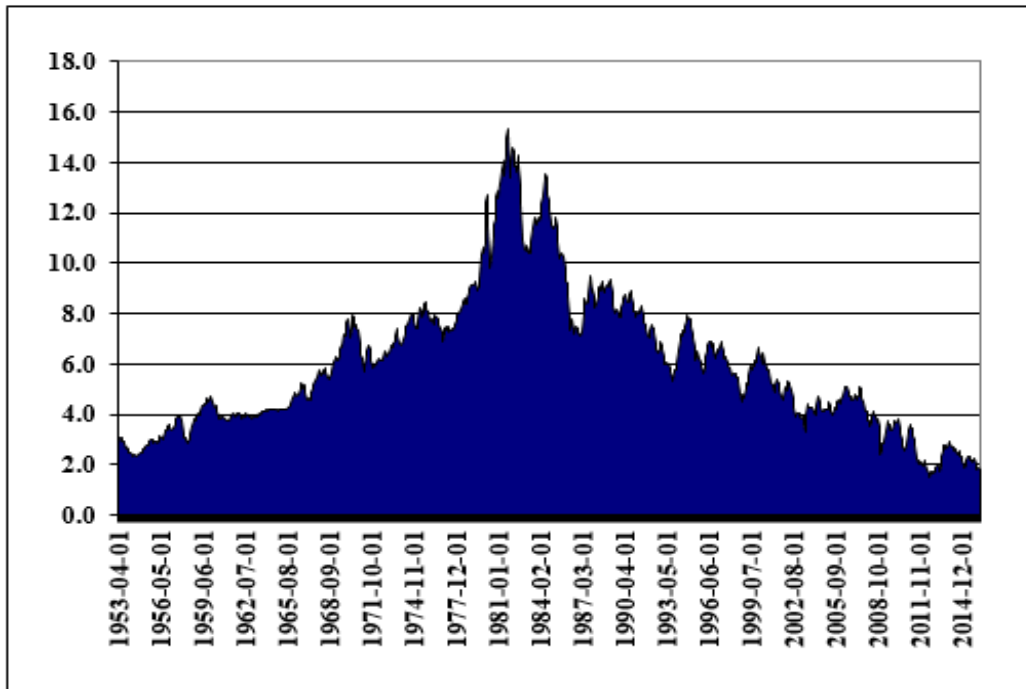
Exhibit JRW-1

Kansas City Power & Light Company
Recommended Cost of Capital

Capital Source	Capitalization Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	50.80%	5.42%	2.75%
Common Equity	49.20%	8.65%	4.26%
Total	100.00%		7.01%

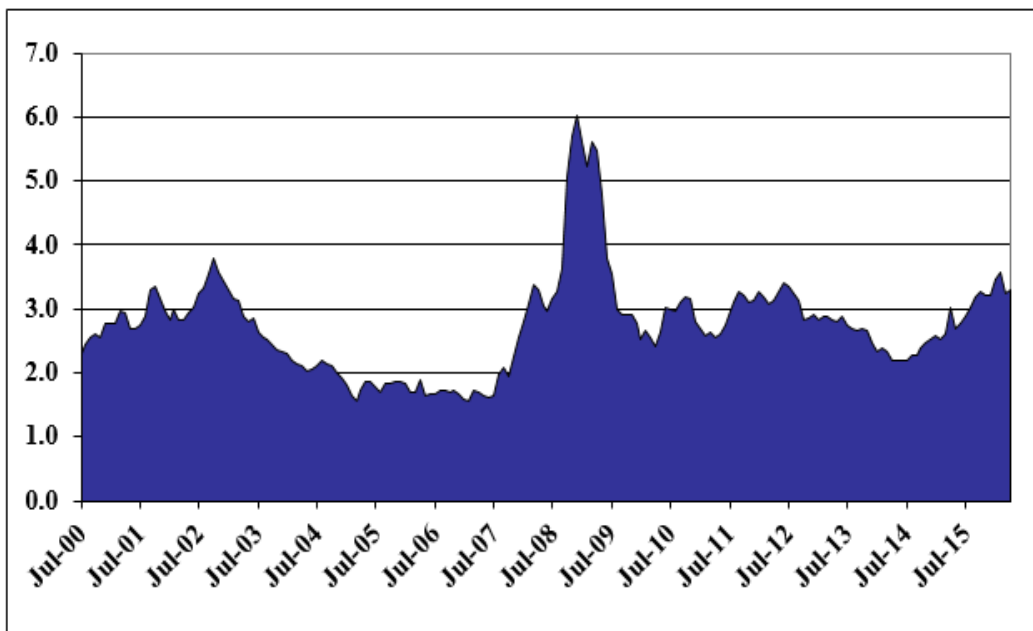
Exhibit JRW-2

Panel A
Ten-Year Treasury Yields
1953-Present



Source: <http://research.stlouisfed.org/fred2/data/GS10.txt>

Panel B
Long-Term Moody's Baa Yields Minus Ten-Year Treasury Yields
2000-Present

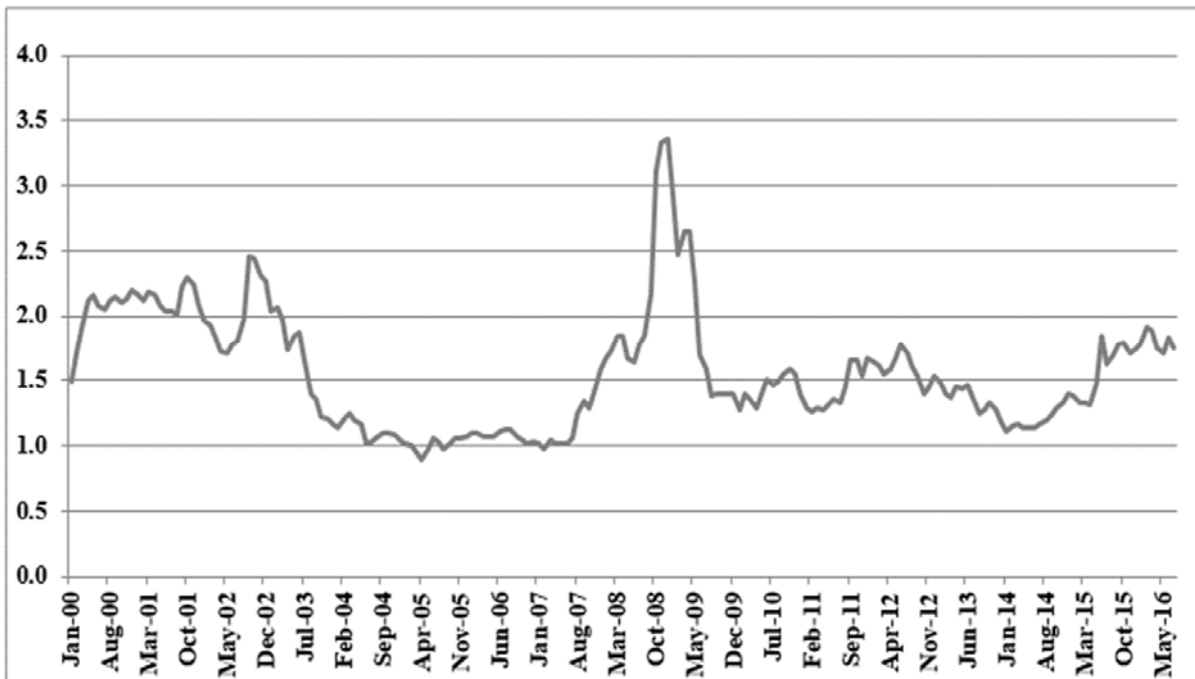


Source: Federal Reserve Bank of St. Louis, FRED Database.

Exhibit JRW-3
Panel A
Long-Term, A-Rated Public Utility Yields



Panel B
Long-Term, A-Rated Public Utility Yields minus -Twenty-Year Treasury Yields



Source: Mergent Bond Record, Federal Reserve Bank of St. Louis, FRED Database.

Exhibit JRW-4

Kansas City Power & Light Company
Summary Financial Statistics for Proxy GroupsPanel A
Electric Proxy Group

Company	Operating Revenue (\$mil)	Percent Elec Revenue	Percent Gas Revenue	Net Plant (\$mil)	Market Cap (\$mil)	S&P Issuer Credit Rating	Moody's Long Term Rating	Pre-Tax Interest Coverage	Primary Service Area	Common Equity Ratio	Return on Equity	Market to Book Ratio
ALLETE, Inc. (NYSE-ALE)	1,491.7	66		3,631.3	2.94	BBB+	A3	4.1	MN, WI	54.2	8.2	1.59
Alliant Energy Corporation (NYSE-LNT)	3,237.4	77	10	9,846.4	8.68	A-	A3	3.6	WI,IA,IL,MN	48.0	10.1	2.18
Ameren Corporation (NYSE-AEE)	6,002.0	86	19	19,324.0	12.09	BBB+	Baa1	3.8	IL,MO	46.5	9.2	1.75
American Electric Power Co. (NYSE-AEP)	15,983.8	82		47,436.2	32.29	BBB	Baa1	3.8	10 States	46.0	11.1	1.76
Avista Corporation (NYSE-AVA)	1,438.0	69	33	3,990.7	2.62	BBB	Baa1	3.5	WA,ID,AK	49.7	8.6	1.62
Black Hills Corporation (NYSE-BKH)	1,365.8	50	45	4,389.9	3.03	BBB	Baa1	3.4	NE,IA,CO,WY,AR,SD,MT	31.8	1.2	1.94
CMS Energy Corporation (NYSE-CMS)	6,167.0	69	26	15,187.0	11.80	BBB+	Baa2	2.8	MI	30.3	13.6	2.84
Consolidated Edison, Inc. (NYSE-ED)	12,100.0	71	14	32,600.0	22.82	A-	A3	3.7	NY,PA	47.8	8.6	1.64
Dominion Resources, Inc. (NYSE-D)	11,046.0	65	1	43,682.0	46.08	BBB+	Baa2	3.8	NC,OH,FL,SCKY	31.7	14.4	3.23
DTE Energy Company (NYSE-DTE)	9,913.0	50	13	18,295.0	16.81	BBB+	A3	3.4	MI	47.5	8.6	1.92
Duke Energy Corporation (NYSE-DUK)	22,911.0	91	2	77,329.0	55.42	A-	A3	3.0	NC,OH,FL,SCKY	47.2	6.6	1.39
Edison International (NYSE-EIX)	11,321.0	100		35,629.0	23.89	BBB+	A3	3.9	CA	44.3	7.8	2.07
El Paso Electric Company (NYSE-EE)	842.3	100		2,752.2	1.82	BBB	Baa1	2.3	TX,NM	42.3	7.4	1.80
Entergy Corporation (NYSE-ETR)	10,952.3	82	1	29,069.7	13.83	BBB	Baa3	2.4	LA,AR,MS,TX	39.2	1.7	1.42
Eversource Energy (NYSE-ES)	7,447.2	89	11	20,448.5	17.60	A	Baa1	4.7	CT,NH,MA	50.3	8.4	1.67
FirstEnergy Corporation (NYSE-FE)	14,934.0	71		37,461.0	13.78	BBB-	Baa3	2.2	OH,PA,NY,NJ,WV,MD	33.5	NM	1.21
IDACORP, Inc. (NYSE-IDA)	1,251.0	100		4,045.3	3.84	BBB	Baa1	3.5	ID	54.1	9.2	1.84
MGE Energy, Inc. (NYSE-MGEE)	540.9	76	24	1,266.8	1.92	AA-	A1	6.6	WI	64.4	10.6	2.72
NorthWestern Corporation (NYSE-NWE)	1,223.4	80	20	4,109.7	2.99	BBB	A3	2.5	MT,SD,NE	44.2	9.1	1.84
OGE Energy Corp. (NYSE-OGE)	2,151.4	100		7,469.9	6.01	A-	A3	4.0	OK,AR	53.3	7.2	1.81
Otter Tail Corporation (NYSE-OTTR)	798.5	52		1,428.6	1.30	BBB	A3	3.6	MN,ND,SD	51.6	9.8	2.04
PG&E Corporation (NYSE-PCG)	16,860.0	82	18	48,597.0	31.20	BBB	Baa1	2.0	CA	47.6	4.6	1.86
Pinnacle West Capital Corp. (NYSE-PNW)	3,526.1	100		12,132.1	8.40	A-	Baa1	4.8	AZ	51.1	9.4	1.83
PNM Resources, Inc. (NYSE-PNM)	1,379.7	100		4,790.2	1.26	BBB+	Baa3	2.4	NM,TX	37.3	0.4	0.75
Portland General Electric Company (NYSE-POR)	1,890.0	100		6,284.0	3.73	BBB	A3	2.6	OR	49.8	8.2	1.62
PPL Corporation (NYSE-PPL)	7,454.0	60		30,794.0	23.69	A-	Baa2	3.2	PA,KY	34.0	17.3	2.30
SCANA Corporation (NYSE-SCG)	4,102.0	61	18	13,145.0	10.16	BBB+	Baa3	3.4	SC,NC,GA	NaN	19.7	1.85
Southern Company (NYSE-SO)	17,393.0	94		63,893.0	47.96	A-	Baa1	5.2	GA,FL,NJ,IL,VA,TN,MS	37.1	10.7	2.12
WEC Energy Group (NYSE-WEC)	7,343.8	62	28	19,398.9	18.94	A-	A3	4.5	WI,IL,MN,MI	47.1	10.2	2.14
Xcel Energy Inc. (NYSE-XEL)	10,819.3	85	14	31,823.3	21.15	A-	A3	3.8	MN,WI,ND,SD,MI	42.9	10.2	1.98
Mean	7,129.5	79	17	21,675.0	15.6	BBB+	Baa1	3.6		45.0	9.0	1.89
Median	6,084.5	81	18	16,741.0	11.9	BBB+	Baa1	3.6		47.1	9.1	1.84

Data Source: AUS Utility Reports, September, 2016; Pre-Tax Interest Coverage and Primary Service Territory are from Value Line Investment Survey, 2016.

Panel B
Hvert Proxy Group

Company	Operating Revenue (\$mil)	Percent Elec Revenue	Percent Gas Revenue	Net Plant (\$mil)	Market Cap (\$mil)	S&P Issuer Credit Rating	Moody's Long Term Rating	Pre-Tax Interest Coverage	Primary Service Area	Common Equity Ratio	Return on Equity	Market to Book Ratio
ALLETE, Inc. (NYSE-ALE)	1,491.7	66		3,631.3	2.94	BBB+	A3	4.1	MN, WI	54.2	8.2	1.59
Alliant Energy Corporation (NYSE-LNT)	3,237.4	77	10	9,846.4	8.68	A-	A3	3.6	WI,IA,IL,MN	48.0	10.1	2.18
Ameren Corporation (NYSE-AEE)	6,002.0	86	19	19,324.0	12.09	BBB+	Baa1	3.8	IL,MO	46.5	9.2	1.75
American Electric Power Co. (NYSE-AEP)	15,983.8	82		47,436.2	32.29	BBB	Baa1	3.8	10 States	46.0	11.1	1.76
Avista Corporation (NYSE-AVA)	1,438.0	69	33	3,990.7	2.62	BBB	Baa1	3.4	WA,ID,AK	49.7	8.6	1.62
CMS Energy Corporation (NYSE-CMS)	6,167.0	69	26	15,187.0	11.80	BBB+	Baa2	2.8	MI	30.3	13.6	2.84
DTE Energy Company (NYSE-DTE)	9,913.0	50	13	18,295.0	16.81	BBB+	A3	3.4	MI	47.5	8.6	1.92
IDACORP, Inc. (NYSE-IDA)	1,251.0	100		4,045.3	3.84	BBB	Baa1	3.5	ID	54.1	9.2	1.84
NorthWestern Corporation (NYSE-NWE)	1,223.4	80	20	4,109.7	2.99	BBB	A3	2.5	MT,SD,NE	44.2	9.1	1.84
OGE Energy Corp. (NYSE-OGE)	2,151.4	100		7,469.9	6.01	A-	A3	4.0	OK,AR	53.3	7.2	1.81
Otter Tail Corporation (NYSE-OTTR)	798.5	52		1,428.6	1.30	BBB	A3	3.6	MN,ND,SD	51.6	9.8	2.04
Pinnacle West Capital Corp. (NYSE-PNW)	3,526.1	100		12,132.1	8.40	A-	Baa1	4.8	AZ	51.1	9.4	1.83
PNM Resources, Inc. (NYSE-PNM)	1,379.7	100		4,790.2	1.26	BBB+	Baa3	2.4	NM,TX	37.3	0.4	0.75
Portland General Electric Company (NYSE-POR)	1,890.0	100		6,284.0	3.73	BBB	A3	2.6	OR	49.8	8.2	1.62
SCANA Corporation (NYSE-SCG)	4,102.0	61	18	13,145.0	10.16	BBB+	Baa3	3.4	SC,NC,GA	NaN	19.7	1.85
Xcel Energy Inc. (NYSE-XEL)	10,819.3	85	14	31,823.3	21.15	A-	A3	3.8	MN,WI,ND,SD,MI	42.9	10.2	1.98
Mean	4,460.9	80	19	12,683.7	9.1	BBB+	Baa1	3.5		47.1	9.5	1.82
Median	2,694.4	81	19	8,658.2	7.2	BBB+	Baa1	3.6		48.0	9.2	1.83

Data Source: AUS Utility Reports, September, 2016; Pre-Tax Interest Coverage and Primary Service Territory are from Value Line Investment Survey, 2016.

Value Line Risk Metrics for Proxy Groups

Exhibit JRW-4

Kansas City Power & Light Company

Value Line Risk Metrics

Panel A
Electric Proxy Group

Company	Beta	Financial Strength	Safety	Earnings Predictability	Stock Price Stability
ALLETE, Inc. (NYSE-ALE)	0.75	A	2	90	95
Alliant Energy Corporation (NYSE-LNT)	0.75	A	2	85	100
Ameren Corporation (NYSE-AEE)	0.70	A	2	85	95
American Electric Power Co. (NYSE-AEP)	0.65	A	2	90	100
Avista Corporation (NYSE-AVA)	0.70	A	2	80	95
Black Hills Corporation (NYSE-BKH)	0.90	A	2	50	85
CMS Energy Corporation (NYSE-CMS)	0.65	B++	2	80	100
Consolidated Edison, Inc. (NYSE-ED)	0.55	A+	1	95	100
Dominion Resources, Inc. (NYSE-D)	0.70	B++	2	80	100
DTE Energy Company (NYSE-DTE)	0.70	B++	2	90	100
Duke Energy Corporation (NYSE-DUK)	0.60	A	2	80	100
Edison International (NYSE-EIX)	0.65	A	2	65	95
El Paso Electric Company (NYSE-EE)	0.70	B++	2	80	90
Entergy Corporation (NYSE-ETR)	0.65	B++	3	70	95
Eversource Energy (NYSE-ES)	0.70	A	1	85	95
FirstEnergy Corporation (ASE-FE)	0.65	B+	3	45	90
IDACORP, Inc. (NYSE-IDA)	0.75	A	2	90	95
MGE Energy, Inc. (NYSE-MGEE)	0.70	A	1	90	95
NorthWestern Corporation (NYSE-NWE)	0.70	B+	3	90	95
OGE Energy Corp. (NYSE-OGE)	0.90	A	2	85	90
Otter Tail Corporation (NDQ-OTTR)	0.85	B++	2	50	85
PG&E Corporation (NYSE-PCG)	0.65	B+	3	55	95
Pinnacle West Capital Corp. (NYSE-PNW)	0.70	A+	1	80	95
PNM Resources, Inc. (NYSE-PNM)	0.75	B	3	40	90
Portland General Electric Company (NYSE-POR)	0.70	B++	2	70	95
PPL Corporation (NYSE-PPL)	0.70	B++	2	60	100
SCANA Corporation (NYSE-SCG)	0.70	B++	2	100	100
Southern Company (NYSE-SO)	0.55	A	2	100	100
WEC Energy Group (NYSE-WEC)	0.65	A+	1	85	100
Xcel Energy Inc. (NYSE-XEL)	0.60	A+	1	100	100
Mean	0.70	A	2.0	78	96

Data Source: Value Line Investment Survey, 2016.

Panel B
Hevert Proxy Group

Company	Beta	Financial Strength	Safety	Earnings Predictability	Stock Price Stability
ALLETE, Inc. (NYSE-ALE)	0.75	A	2	90	95
Alliant Energy Corporation (NYSE-LNT)	0.75	A	2	85	100
Ameren Corporation (NYSE-AEE)	0.70	A	2	85	95
American Electric Power Co. (NYSE-AEP)	0.65	A	2	90	100
Avista Corporation (NYSE-AVA)	0.70	A	2	80	95
CMS Energy Corporation (NYSE-CMS)	0.65	B++	2	80	100
DTE Energy Company (NYSE-DTE)	0.70	B++	2	90	100
IDACORP, Inc. (NYSE-IDA)	0.75	A	2	90	95
NorthWestern Corporation (NYSE-NWE)	0.70	B+	3	95	95
OGE Energy Corp. (NYSE-OGE)	0.90	A	2	85	90
Otter Tail Corporation (NDQ-OTTR)	0.85	B++	2	50	85
Pinnacle West Capital Corp. (NYSE-PNW)	0.70	A+	1	75	95
PNM Resources, Inc. (NYSE-PNM)	0.75	B	3	40	90
Portland General Electric Company (NYSE-POR)	0.70	B++	2	70	95
SCANA Corporation (NYSE-SCG)	0.70	B++	2	100	100
Xcel Energy Inc. (NYSE-XEL)	0.60	A+	1	100	100
Mean	0.72	A	2.0	82	96

Data Source: Value Line Investment Survey, 2016.

Value Line Risk Metrics

Beta

A relative measure of the historical sensitivity of a stock's price to overall fluctuations in the New York Stock Exchange Composite Index. A of 1.50 indicates a stock tends to rise (or fall) 50% more than the New York Stock Exchange Composite Index. The "coefficient" is derived from a regression analysis of the relationship between weekly percent-age changes in the price of a stock and weekly percentage changes in the NYSE Index over a period of five years. In the case of shorter price histories, a smaller time period is used, but two years is the minimum. Betas are adjusted for their long-term tendency to converge toward 1.00.

Financial Strength

A relative measure of of the companies reviewed by Value Line. The relative ratings range from A++ (strongest) down to C (weakest).

Safety Rank

A measurement of potential risk associated with individual common stocks. The Safety Rank is computed by averaging two other Value Line indexes the Price Stability Index and the Financial strength Rating. Safety Ranks range from 1 (Highest) to 5 (Lowest). Conservative investors should try to limit their purchases to equities ranked 1 (Highest) and 2 (Above Average) for Safety.

Earnings Predictability

A measure of the reliability of an earnings forecast. Earnings Predictability is based upon the stability of year-to-year comparisons, with recent years being weighted more heavily than earlier ones. The most reliable forecasts tend to be those with the highest rating (100); the least reliable, the lowest (5). The earnings stability is derived from the standard deviation of percentage changes in quarterly earnings over an eight-year period. Special adjustments are made for comparisons around zero and from plus to minus.

Stock Price Stability

A measure of the stability of a stock's price It includes sensitivity to the market (see Beta as well as the stock's inherent volatility. Value Line Stability ratings range from 1 (highest) to 5 (lowest).

Source: *Value Line Investment Analyzer*.

Exhibit JRW-5

Kansas City Power & Light Company
Capital Structure Ratios and Debt Cost Rates

Panel A -KCP&L's Proposed Capitalization Ratios and Senior Capital Cost Rate

Capital Source	Capitalization Ratio	Cost Rate
Long-Term Debt	50.12%	5.51%
Common Equity	49.88%	
Total	100.00%	

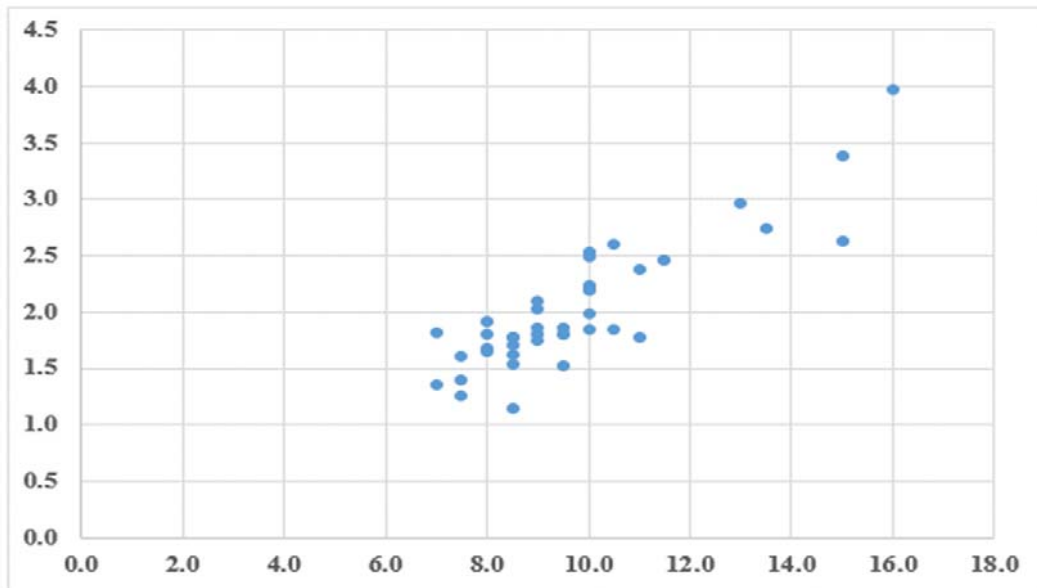
Panel B - Staff's Proposed Capitalization Ratios and Cost Rates

Capital Source	Capitalization Ratio	Cost Rate
Long-Term Debt	50.80%	5.42%
Common Equity	49.20%	
Total	100.00%	

The Relationship Between Expected ROE and Market-to-Book Ratios

Exhibit JRW-6
Electric Utilities
Panel A

Market-to-Book

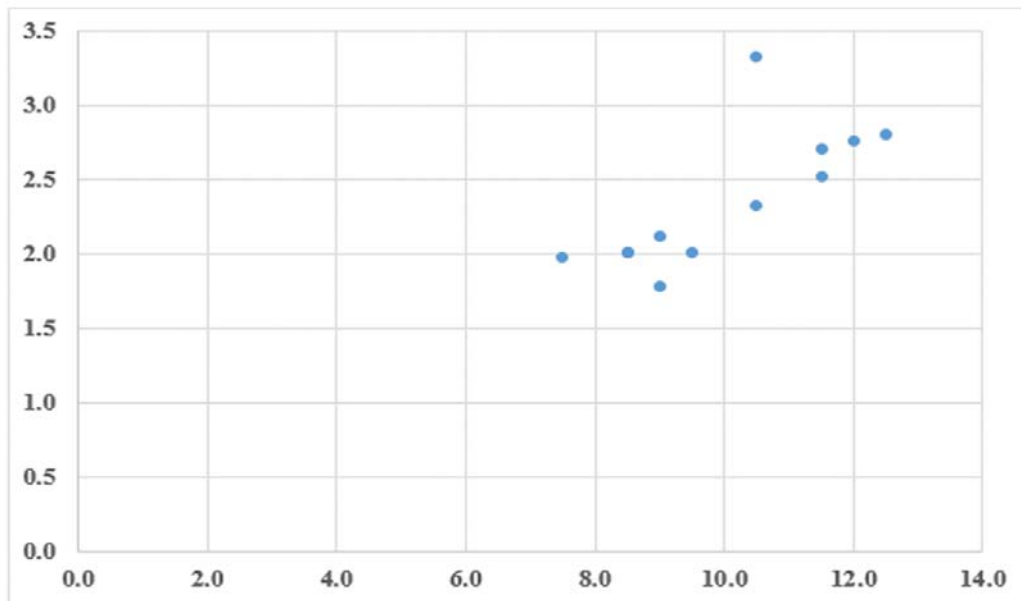


Expected Return on Equity
R-Square = .77, N=42

Source: Value Line Investment Survey, 2016.

Panel B
Gas Companies

Market-to-Book



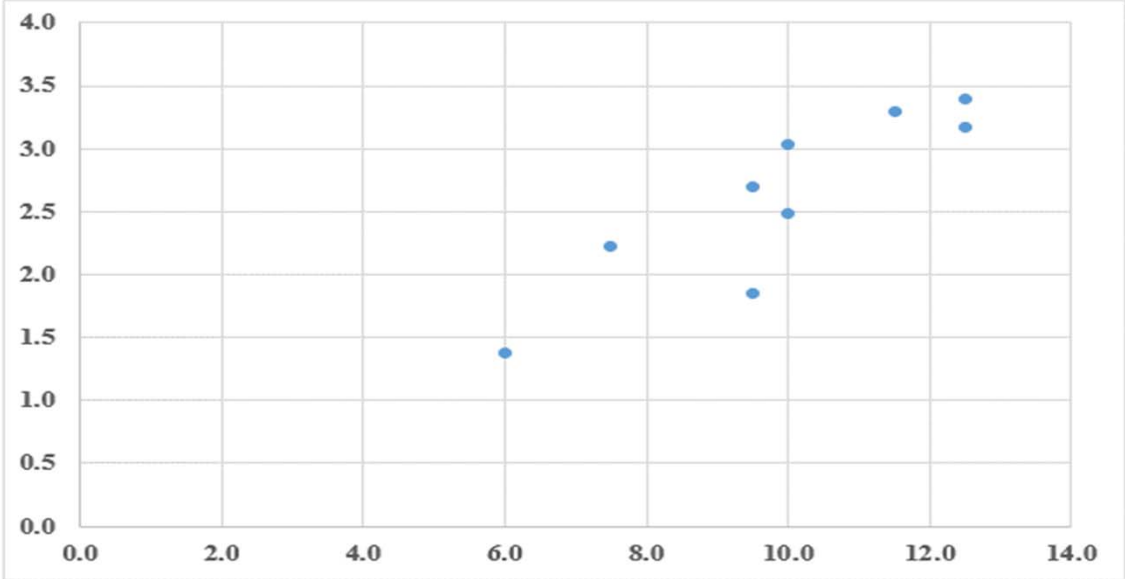
Expected Return on Equity
R-Square = .56, N=12

Source: Value Line Investment Survey, 2016.

The Relationship Between Expected ROE and Market-to-Book Ratios

Exhibit JRW-6
Water Companies
Panel C

Market-to-Book



Expected Return on Equity

R-Square = .75, N=9

Source: Value Line Investment Survey, 2016.

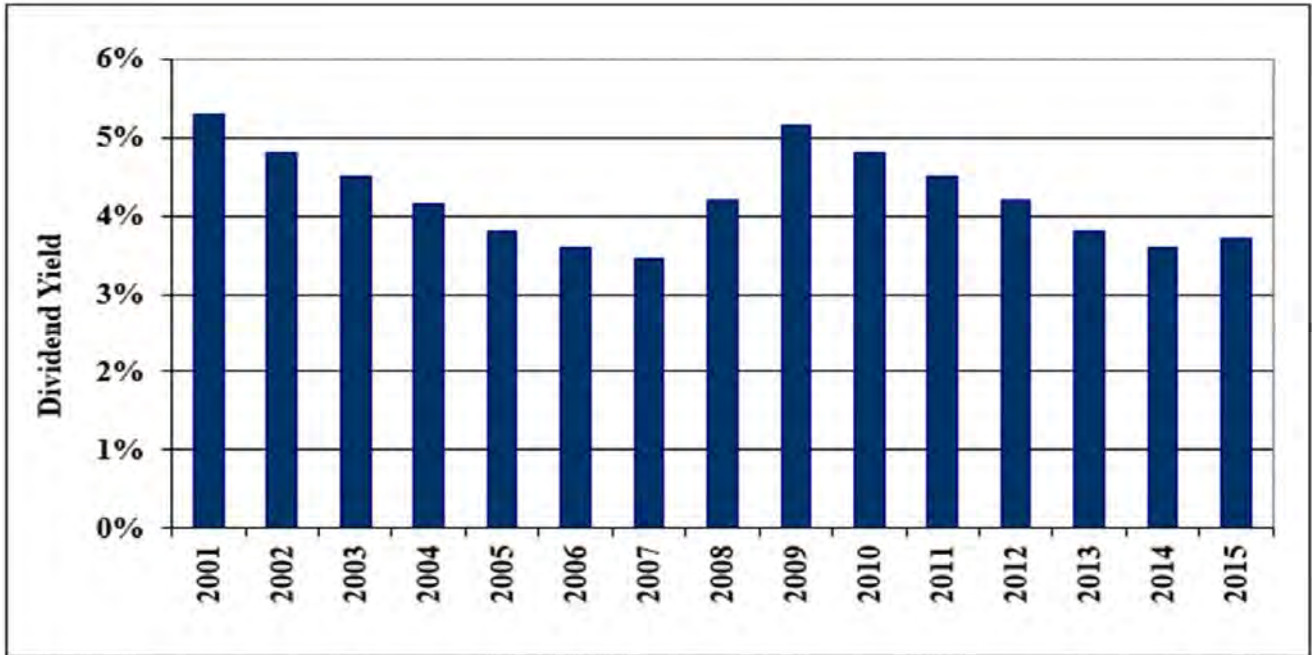
Exhibit JRW-7
Long-Term 'A' Rated Public Utility Bonds



Data Source: Mergent Bond Record

Exhibit JRW-7

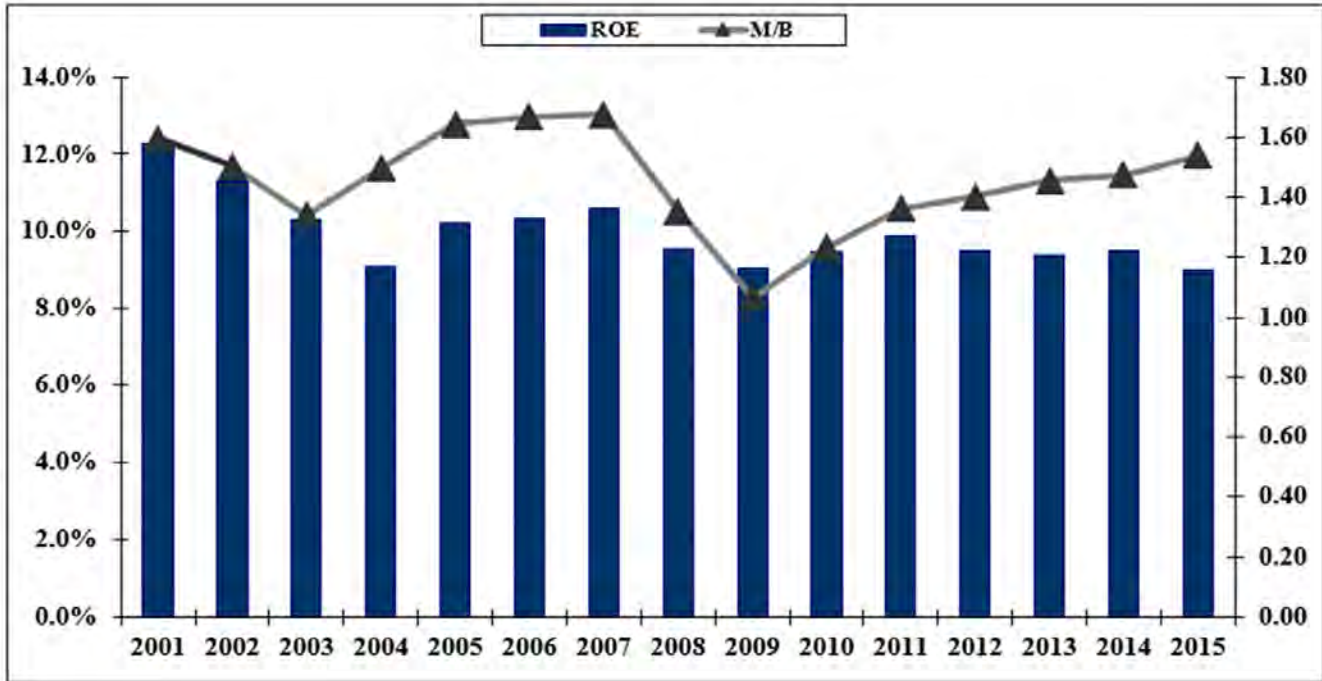
Electric Utility Average Dividend Yield



Data Source: Value Line Investment Survey.

Exhibit JRW-7

Electric Utility Average Return on Equity and Market-to-Book Ratios



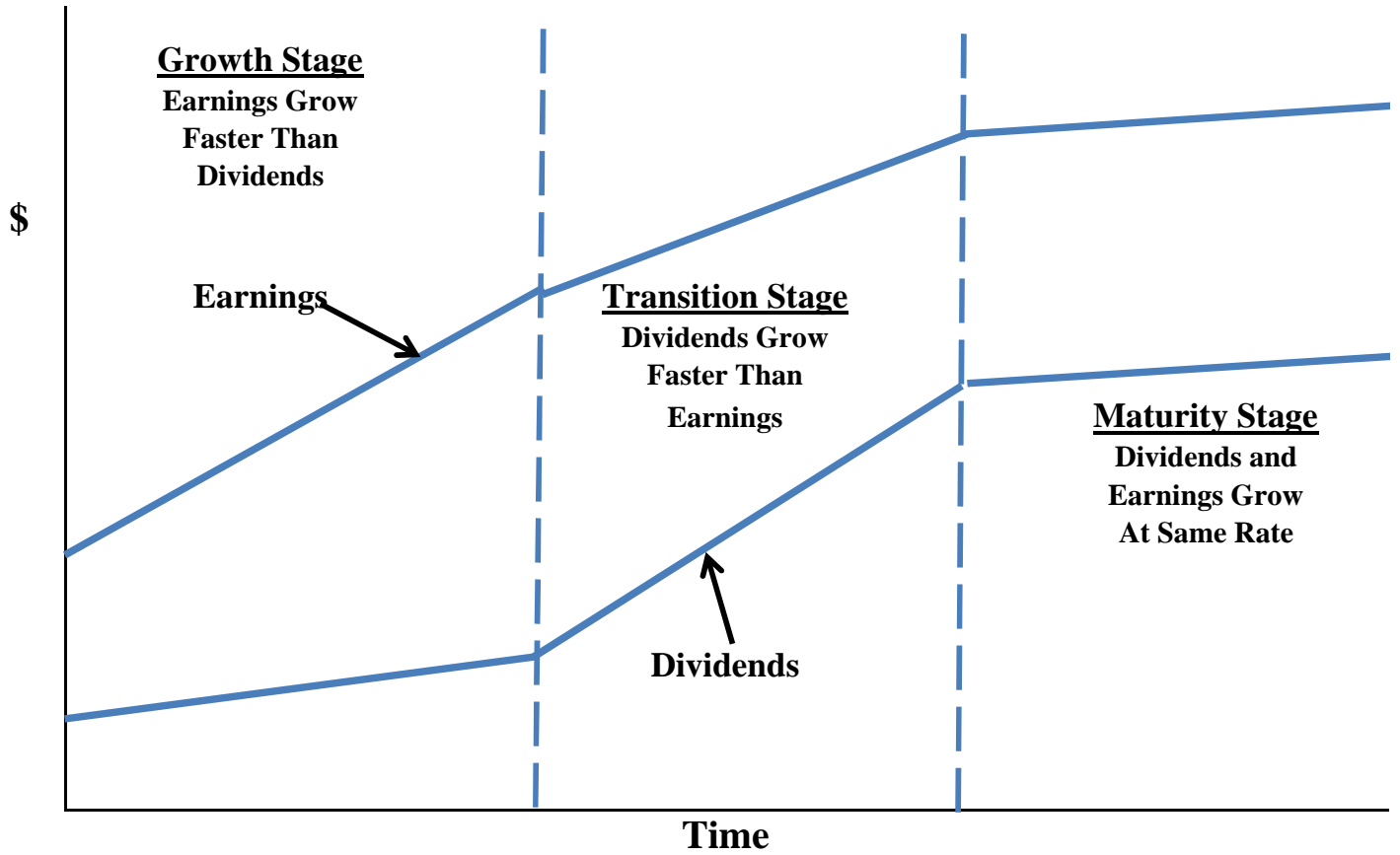
Data Source: Value Line Investment Survey.

Exhibit JRW-8

		Industry Average Betas			
Industry Name	Beta	Industry Name	Beta	Industry Name	Beta
Petroleum (Producing)	1.62	Office Equip/Supplies	1.17	Foreign Electronics	1.01
Maritime	1.54	Furn/Home Furnishings	1.16	Retail (Softlines)	1.00
Homebuilding	1.48	Precision Instrument	1.16	Cable TV	0.99
Oilfield Svcs/Equip.	1.47	Entertainment	1.16	Information Services	0.99
Metals & Mining (Div.)	1.44	Advertising	1.16	Drug	0.99
Steel	1.43	Biotechnology	1.15	Healthcare Information	0.98
Natural Gas (Div.)	1.41	Trucking	1.15	Investment Co.(Foreign)	0.98
Metal Fabricating	1.36	Diversified Co.	1.14	Med Supp Non-Invasive	0.98
Auto Parts	1.35	Financial Svcs. (Div.)	1.14	Telecom. Utility	0.97
Heavy Truck & Equip	1.35	Computer Software	1.14	Precious Metals	0.97
Building Materials	1.34	Internet	1.14	R.E.I.T.	0.96
Engineering & Const	1.30	Newspaper	1.13	Med Supp Invasive	0.96
Hotel/Gaming	1.30	Apparel	1.13	Funeral Services	0.94
Railroad	1.30	Retail (Hardlines)	1.12	Environmental	0.94
Petroleum (Integrated)	1.29	Computers/Peripherals	1.12	Retail Store	0.93
Chemical (Diversified)	1.27	Educational Services	1.11	Restaurant	0.90
Insurance (Life)	1.26	Paper/Forest Products	1.10	Pharmacy Services	0.89
Electrical Equipment	1.26	Wireless Networking	1.10	Thrift	0.89
Public/Private Equity	1.26	Air Transport	1.09	Reinsurance	0.88
Power	1.25	Bank	1.09	Beverage	0.88
Chemical (Specialty)	1.25	Bank (Midwest)	1.08	Food Processing	0.86
Semiconductor	1.24	Recreation	1.07	Insurance (Prop/Cas.)	0.85
Oil/Gas Distribution	1.24	Medical Services	1.06	Investment Co.	0.85
Chemical (Basic)	1.22	Industrial Services	1.06	Household Products	0.84
E-Commerce	1.22	Retail Building Supply	1.06	Retail/Wholesale Food	0.80
Electronics	1.21	Pipeline MLPs	1.05	Tobacco	0.75
Human Resources	1.20	Packaging & Container	1.04	Electric Util. (Central)	0.75
Automotive	1.19	Toiletries/Cosmetics	1.04	Electric Utility (West)	0.74
Machinery	1.19	Shoe	1.02	Natural Gas Utility	0.74
Entertainment Tech	1.18	Retail Automotive	1.02	Water Utility	0.71
Semiconductor Equip	1.18	Telecom. Services	1.01	Electric Utility (East)	0.68
Telecom. Equipment	1.17	IT Services	1.01		
Publishing	1.171	Aerospace/Defense	1.01		

Source: ValueLine Investment Survey, June, 2016.

Exhibit JRW-9
DCF Model



Source: William F. Sharpe, Gordon J. Alexander, and Jeffrey V. Bailey, Investments (Prentice-Hall, 1995), pp. 590-91.

Exhibit JRW-9

DCF Model
Consensus Earnings Estimates
Alliant Energy Corp. (LNT)

www.reuters.com

10/21/2016

Line	Date	# of Estimates	Mean	High	Low
1	Quarter Ending Dec-16	2	0.18	0.20	0.16
2	Quarter Ending Mar-17	1	0.45	0.45	0.45
3	Year Ending Dec-16	9	2.10	2.28	1.88
4	Year Ending Dec-17	9	2.22	2.32	1.97
5	LT Growth Rate (%)	2	6.60	7.20	6.00

Exhibit JRW-10

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

**Panel A
Electric Proxy Group**

Dividend Yield*	3.35%
Adjustment Factor	<u>1.025</u>
Adjusted Dividend Yield	3.43%
Growth Rate**	<u>5.00%</u>
Equity Cost Rate	8.45%

* Page 2 of Exhibit JRW-10

** Based on data provided on pages 3, 4, 5, and
6 of Exhibit JRW-10

**Panel B
Hevert Proxy Group**

Dividend Yield*	3.35%
Adjustment Factor	<u>1.0265</u>
Adjusted Dividend Yield	3.44%
Growth Rate**	<u>5.30%</u>
Equity Cost Rate	8.75%

* Page 2 of Exhibit JRW-10

** Based on data provided on pages 3, 4, 5, and
6 of Exhibit JRW-10

Exhibit JRW-10

Kansas City Power & Light Company
Monthly Dividend Yields

Panel A
Electric Proxy Group

Company	Annual Dividend	Dividend Yield 30 Day	Dividend Yield 90 Day	Dividend Yield 180 Day
ALLETE, Inc. (NYSE-ALE)	\$ 2.08	3.5%	3.4%	3.6%
Alliant Energy Corporation (NYSE-LNT)	\$ 1.18	3.1%	3.0%	3.2%
Ameren Corporation (NYSE-AEE)	\$ 1.76	3.6%	3.5%	3.6%
American Electric Power Co. (NYSE-AEP)	\$ 2.24	3.5%	3.4%	3.5%
Avista Corporation (NYSE-AVA)	\$ 1.37	3.3%	3.3%	3.4%
Black Hills Corporation (NYSE-BKH)	\$ 1.68	2.8%	2.8%	2.8%
Consolidated Edison, Inc. (NYSE-ED)	\$ 2.68	3.6%	3.5%	3.6%
CMS Energy Corporation (NYSE-CMS)	\$ 1.24	3.0%	2.9%	3.0%
Dominion Resources, Inc. (NYSE-D)	\$ 2.80	3.8%	3.7%	3.8%
DTE Energy Company (NYSE-DTE)	\$ 3.08	3.3%	3.3%	3.4%
Duke Energy Corporation (NYSE-DUK)	\$ 3.42	4.3%	4.2%	4.3%
Edison International (NYSE-EIX)	\$ 1.92	2.7%	2.6%	2.7%
El Paso Electric Company (NYSE-EE)	\$ 1.24	2.7%	2.7%	2.8%
Entergy Corporation (NYSE-ETR)	\$ 3.40	4.4%	4.3%	4.5%
Eversource Energy (NYSE-ES)	\$ 1.78	3.3%	3.2%	3.2%
FirstEnergy Corporation (ASE-FE)	\$ 1.44	4.4%	4.3%	4.3%
IDACORP, Inc. (NYSE-IDA)	\$ 2.20	2.9%	2.8%	2.9%
MGE Energy, Inc. (NYSE-MGEE)	\$ 1.23	2.2%	2.2%	2.3%
NorthWestern Corporation (NYSE-NWE)	\$ 2.00	3.5%	3.4%	3.4%
OGE Energy Corp. (NYSE-OGE)	\$ 1.21	3.9%	3.9%	4.1%
Otter Tail Corporation (NDQ-OTTR)	\$ 1.25	3.6%	3.7%	4.0%
PG&E Corporation (NYSE-PCG)	\$ 1.96	3.2%	3.1%	3.3%
Pinnacle West Capital Corp. (NYSE-PNW)	\$ 2.62	3.5%	3.4%	3.5%
PNM Resources, Inc. (NYSE-PNM)	\$ 0.88	2.7%	2.7%	2.7%
Portland General Electric Company (NYSE-POR)	\$ 1.28	3.0%	3.0%	3.1%
PPL Corporation (NYSE-PPL)	\$ 1.52	4.5%	4.3%	4.2%
SCANA Corporation (NYSE-SCG)	\$ 2.30	3.2%	3.2%	3.3%
Southern Company (NYSE-SO)	\$ 2.24	4.4%	4.3%	4.4%
WEC Energy Group (NYSE-WEC)	\$ 1.98	3.3%	3.2%	3.3%
Xcel Energy Inc. (NYSE-XEL)	\$ 1.36	3.3%	3.2%	3.3%
Mean		3.4%	3.4%	3.5%
Median		3.3%	3.3%	3.4%

Data Sources: <http://quote.yahoo.com>, October 21, 2016.

Panel B
Hevert Proxy Group

Company	Annual Dividend	Dividend Yield 30 Day	Dividend Yield 90 Day	Dividend Yield 180 Day
ALLETE, Inc. (NYSE-ALE)	\$ 2.08	3.5%	3.4%	3.6%
Alliant Energy Corporation (NYSE-LNT)	\$ 1.18	3.1%	3.0%	3.2%
Ameren Corporation (NYSE-AEE)	\$ 1.76	3.6%	3.5%	3.6%
American Electric Power Co. (NYSE-AEP)	\$ 2.24	3.5%	3.4%	3.5%
Avista Corporation (NYSE-AVA)	\$ 1.37	3.3%	3.3%	3.4%
CMS Energy Corporation (NYSE-CMS)	\$ 1.24	3.0%	2.9%	3.0%
DTE Energy Company (NYSE-DTE)	\$ 3.08	3.3%	3.3%	3.4%
IDACORP, Inc. (NYSE-IDA)	\$ 2.20	2.9%	2.8%	2.9%
NorthWestern Corporation (NYSE-NWE)	\$ 2.00	3.5%	3.4%	3.4%
OGE Energy Corp. (NYSE-OGE)	\$ 1.21	3.9%	3.9%	4.1%
Otter Tail Corporation (NDQ-OTTR)	\$ 1.25	3.6%	3.7%	4.0%
Pinnacle West Capital Corp. (NYSE-PNW)	\$ 2.62	3.5%	3.4%	3.5%
PNM Resources, Inc. (NYSE-PNM)	\$ 0.88	2.7%	2.7%	2.7%
Portland General Electric Company (NYSE-POR)	\$ 1.28	3.0%	3.0%	3.1%
SCANA Corporation (NYSE-SCG)	\$ 2.30	3.2%	3.2%	3.3%
Xcel Energy Inc. (NYSE-XEL)	\$ 1.36	3.3%	3.2%	3.3%
Mean		3.3%	3.3%	3.4%
Median		3.3%	3.3%	3.4%

Data Sources: <http://quote.yahoo.com>, October 21, 2016.

Exhibit JRW-10

Kansas City Power & Light Company
DCF Equity Cost Growth Rate Measures
Value Line Historic Growth Rates

Panel A
Electric Proxy Group

Company	Value Line Historic Growth					
	Past 10 Years			Past 5 Years		
	Earnings	Dividends	Book Value	Earnings	Dividends	Book Value
ALLETE, Inc. (NYSE-ALE)	4.5	9.5	5.5	5.0	2.5	6.0
Alliant Energy Corporation (NYSE-LNT)	6.0	7.0	4.0	7.0	6.5	4.0
Ameren Corporation (NYSE-AEE)	-2.5	-4.5	-0.5	-4.0	-3.0	-3.0
American Electric Power Co. (NYSE-AEP)	2.5	3.0	5.0	3.5	4.0	5.0
Avista Corporation (NYSE-AVA)	7.5	9.5	4.0	4.0	9.0	4.0
Black Hills Corporation (NYSE-BKH)	4.0	2.5	3.0	15.0	2.0	1.5
CMS Energy Corporation (NYSE-CMS)	13.0		2.5	8.5	16.5	4.0
Consolidated Edison, Inc. (NYSE-ED)	3.5	1.0	4.0	3.0	1.5	3.5
Dominion Resources, Inc. (NYSE-D)	5.5	6.5	2.5	1.5	7.0	1.5
DTE Energy Company (NYSE-DTE)	4.5	3.0	4.0	6.5	5.0	4.0
Duke Energy Corporation (NYSE-DUK)				3.0	2.5	3.0
Edison International (NYSE-EIX)	6.5	9.5	6.0	3.5	4.0	1.5
El Paso Electric Company (NYSE-EE)	12.0		8.0	4.0		7.5
Entergy Corporation (NYSE-ETR)	3.0	6.0	3.5	-3.0	1.5	3.5
Eversource Energy (NYSE-ES)	9.5	9.5	6.0	6.0	11.0	9.0
FirstEnergy Corporation (ASE-FE)	-2.0	-1.0	1.0	-12.0	-7.5	1.5
IDACORP, Inc. (NYSE-IDA)	9.5	2.5	5.0	8.0	8.0	6.0
MGE Energy, Inc. (NYSE-MGEE)	6.5	2.0	6.0	7.0	2.5	5.5
NorthWestern Corporation (NYSE-NWE)		13.0	4.0	7.0	4.5	7.0
OGE Energy Corp. (NYSE-OGE)	7.5	3.5	8.5	6.5	6.0	8.5
Otter Tail Corporation (NDQ-OTTR)	-0.5	1.0	0.5	15.5	0.5	-3.5
PG&E Corporation (NYSE-PCG)	0.5		7.0	-5.5	1.5	3.5
Pinnacle West Capital Corp. (NYSE-PNW)	4.5	2.5	2.0	8.5	2.0	3.5
PNM Resources, Inc. (NYSE-PNM)	1.0	1.0	1.5	23.5	7.0	3.0
Portland General Electric Company (NYSE-POR)	7.0		2.5	6.5	2.5	3.0
PPL Corporation (NYSE-PPL)	2.5	5.5	5.5	4.0	1.5	4.0
SCANA Corporation (NYSE-SCG)	3.5	3.5	5.0	4.5	2.5	5.0
Southern Company (NYSE-SO)	3.0	4.0	5.0	3.5	3.5	4.0
WEC Energy Group (NYSE-WEC)	8.5	14.0	7.5	8.0	18.5	7.5
Xcel Energy Inc. (NYSE-XEL)	5.0	4.0	4.5	6.0	4.5	4.5
Mean	4.9	4.7	4.2	5.2	4.4	3.9
Median	4.5	3.5	4.0	5.5	3.5	4.0
Average of Median Figures =				4.2		

Data Source: Value Line Investment Survey.

Panel B
Hevert Proxy Group

Company	Value Line Historic Growth					
	Past 10 Years			Past 5 Years		
	Earnings	Dividends	Book Value	Earnings	Dividends	Book Value
ALLETE, Inc. (NYSE-ALE)	4.5	9.5	5.5	5.0	2.5	6.0
Alliant Energy Corporation (NYSE-LNT)	6.0	7.0	4.0	7.0	6.5	4.0
Ameren Corporation (NYSE-AEE)	-2.5	-4.5	-0.5	-4.0	-3.0	-3.0
American Electric Power Co. (NYSE-AEP)	2.5	3.0	5.0	3.5	4.0	5.0
Avista Corporation (NYSE-AVA)	7.5	9.5	4.0	4.0	9.0	4.0
CMS Energy Corporation (NYSE-CMS)	13.0		2.5	8.5	16.5	4.0
DTE Energy Company (NYSE-DTE)	4.5	3.0	4.0	6.5	5.0	4.0
IDACORP, Inc. (NYSE-IDA)	9.5	2.5	5.0	8.0	8.0	6.0
NorthWestern Corporation (NYSE-NWE)		13.0	4.0	7.0	4.5	7.0
OGE Energy Corp. (NYSE-OGE)	7.5	3.5	8.5	6.5	6.0	8.5
Otter Tail Corporation (NDQ-OTTR)	-0.5	1.0	0.5	15.5	0.5	-3.5
Pinnacle West Capital Corp. (NYSE-PNW)	4.5	2.5	2.0	8.5	2.0	3.5
PNM Resources, Inc. (NYSE-PNM)	1.0	1.0	1.5	23.5	7.0	3.0
Portland General Electric Company (NYSE-POR)	7.0		2.5	6.5	2.5	3.0
SCANA Corporation (NYSE-SCG)	3.5	3.5	5.0	4.5	2.5	5.0
Xcel Energy Inc. (NYSE-XEL)	5.0	4.0	4.5	6.0	4.5	4.5
Mean	4.9	4.2	3.6	7.3	4.9	3.8
Median	4.5	3.3	4.0	6.5	4.5	4.0
Average of Median Figures =				4.5		

Data Source: Value Line Investment Survey.

Exhibit JRW-10

Kansas City Power & Light Company
DCF Equity Cost Growth Rate Measures
Value Line Projected Growth Rates

Panel A

Electric Proxy Group

Company	Value Line			Value Line		
	Projected Growth			Sustainable Growth		
	Est'd. '13-'15 to '19-'21			Return on	Retention	Internal
	Earnings	Dividends	Book Value	Equity	Rate	Growth
ALLETE, Inc. (NYSE-ALE)	4.0	3.5	4.0	8.5%	37.0%	3.1%
Alliant Energy Corporation (NYSE-LNT)	6.0	4.5	4.0	12.5%	39.0%	4.9%
Ameren Corporation (NYSE-AEE)	6.0	4.0	3.5	9.5%	37.0%	3.5%
American Electric Power Co. (NYSE-AEP)	4.0	5.0	4.0	9.5%	33.0%	3.1%
Avista Corporation (NYSE-AVA)	5.0	4.0	3.5	8.5%	35.0%	3.0%
Black Hills Corporation (NYSE-BKH)	7.5	6.0	4.5	10.5%	47.0%	4.9%
CMS Energy Corporation (NYSE-CMS)	6.0	6.5	6.0	13.5%	38.0%	5.1%
Consolidated Edison, Inc. (NYSE-ED)	2.5	3.0	3.5	8.5%	35.0%	3.0%
Dominion Resources, Inc. (NYSE-D)	9.0	8.0	6.0	18.5%	30.0%	5.6%
DTE Energy Company (NYSE-DTE)	6.0	5.5	4.5	10.0%	40.0%	4.0%
Duke Energy Corporation (NYSE-DUK)	4.0	3.5	1.5	8.0%	25.0%	2.0%
Edison International (NYSE-EIX)	3.5	9.5	5.5	11.5%	45.0%	5.2%
El Paso Electric Company (NYSE-EE)	4.0	7.0	4.0	9.0%	41.0%	3.7%
Entergy Corporation (NYSE-ETR)	2.0	3.0	3.0	10.0%	35.0%	3.5%
Eversource Energy (NYSE-ES)	6.0	6.0	4.0	9.5%	42.0%	4.0%
FirstEnergy Corporation (ASE-FE)	7.0	1.0	1.5	9.0%	47.0%	4.2%
IDACORP, Inc. (NYSE-IDA)	3.0	7.5	4.0	9.0%	40.0%	3.6%
MGE Energy, Inc. (NYSE-MGEE)	7.0	4.0	5.0	13.0%	56.0%	7.3%
NorthWestern Corporation (NYSE-NWE)	6.5	5.5	4.5	10.0%	42.0%	4.2%
OGE Energy Corp. (NYSE-OGE)	3.0	9.5	3.5	12.0%	26.0%	3.1%
Otter Tail Corporation (NDQ-OTTR)	6.0	1.5	5.5	10.0%	36.0%	3.6%
PG&E Corporation (NYSE-PCG)	12.0	7.0	4.5	11.0%	41.0%	4.5%
Pinnacle West Capital Corp. (NYSE-PNW)	4.0	5.0	3.5	10.0%	36.0%	3.6%
PNM Resources, Inc. (NYSE-PNM)	9.0	10.0	3.5	9.5%	45.0%	4.3%
Portland General Electric Company (NYSE-POR)	5.5	6.0	3.5	9.0%	41.0%	3.7%
PPL Corporation (NYSE-PPL)	NMF	3.0	NMF	13.0%	31.0%	4.0%
SCANA Corporation (NYSE-SCG)	4.5	5.0	5.0	10.0%	41.0%	4.1%
Southern Company (NYSE-SO)	4.0	3.5	6.5	10.5%	26.0%	2.7%
WEC Energy Group (NYSE-WEC)	6.0	7.0	7.0	11.0%	33.0%	3.6%
Xcel Energy Inc. (NYSE-XEL)	5.5	6.0	4.0	11.0%	38.0%	4.2%
Mean	5.5	5.4	4.2	10.5%	37.9%	4.0%
Median	5.5	5.3	4.0	10.0%	38.0%	3.8%
Average of Median Figures =		4.9			Median =	3.8%

* 'Est'd. '13-'15 to '19-'21' is the estimated growth rate from the base period 2013 to 2015 until the future period 2019 to 2021.

Data Source: Value Line Investment Survey.

Panel B

Hevert Proxy Group

Company	Value Line			Value Line		
	Projected Growth			Sustainable Growth		
	Est'd. '13-'15 to '19-'21			Return on	Retention	Internal
	Earnings	Dividends	Book Value	Equity	Rate	Growth
ALLETE, Inc. (NYSE-ALE)	4.0	3.5	4.0	8.5%	37.0%	3.1%
Alliant Energy Corporation (NYSE-LNT)	6.0	4.5	4.0	12.5%	39.0%	4.9%
Ameren Corporation (NYSE-AEE)	6.0	4.0	3.5	9.5%	37.0%	3.5%
American Electric Power Co. (NYSE-AEP)	4.0	5.0	4.0	9.5%	33.0%	3.1%
Avista Corporation (NYSE-AVA)	5.0	4.0	3.5	8.5%	35.0%	3.0%
CMS Energy Corporation (NYSE-CMS)	6.0	6.5	6.0	13.5%	38.0%	5.1%
DTE Energy Company (NYSE-DTE)	6.0	5.5	4.5	10.0%	40.0%	4.0%
IDACORP, Inc. (NYSE-IDA)	3.0	7.5	4.0	9.0%	40.0%	3.6%
NorthWestern Corporation (NYSE-NWE)	6.5	5.5	4.5	10.0%	42.0%	4.2%
OGE Energy Corp. (NYSE-OGE)	3.0	9.5	3.5	12.0%	26.0%	3.1%
Otter Tail Corporation (NDQ-OTTR)	6.0	1.5	5.5	10.0%	36.0%	3.6%
Pinnacle West Capital Corp. (NYSE-PNW)	4.0	5.0	3.5	10.0%	36.0%	3.6%
PNM Resources, Inc. (NYSE-PNM)	9.0	10.0	3.5	9.5%	45.0%	4.3%
Portland General Electric Company (NYSE-POR)	5.5	6.0	3.5	9.0%	41.0%	3.7%
SCANA Corporation (NYSE-SCG)	4.5	5.0	5.0	10.0%	40.0%	4.0%
Xcel Energy Inc. (NYSE-XEL)	5.5	6.0	4.0	11.0%	38.0%	4.2%
Mean	5.3	5.6	4.2	10.2%	37.7%	3.8%
Median	5.5	5.3	4.0	10.0%	38.0%	3.6%
Average of Median Figures =		4.9			Median =	3.6%

* 'Est'd. '13-'15 to '19-'21' is the estimated growth rate from the base period 2013 to 2015 until the future period 2019 to 2021.

Data Source: Value Line Investment Survey.

Exhibit JRW-10

Kansas City Power & Light Company
DCF Equity Cost Growth Rate Measures
Analysts Projected EPS Growth Rate Estimates

Panel A
Electric Proxy Group

Company	Yahoo	Reuters	Zacks	Mean
ALLETE, Inc. (NYSE-ALE)	5.0%	5.0%	5.5%	5.2%
Alliant Energy Corporation (NYSE-LNT)	6.6%	6.6%	6.1%	6.4%
Ameren Corporation (NYSE-AEE)	5.2%	5.6%	6.1%	5.6%
American Electric Power Co. (NYSE-AEP)	2.3%	2.3%	5.2%	3.3%
Avista Corporation (NYSE-AVA)	5.0%	NA	5.3%	5.2%
Black Hills Corporation (NYSE-BKH)	6.7%	6.7%	5.8%	6.4%
Consolidated Edison, Inc. (NYSE-ED)	2.1%	2.1%	2.8%	2.4%
CMS Energy Corporation (NYSE-CMS)	7.3%	7.3%	6.6%	7.0%
Dominion Resources, Inc. (NYSE-D)	5.8%	5.8%	6.2%	5.9%
DTE Energy Company (NYSE-DTE)	5.5%	5.5%	5.8%	5.6%
Duke Energy Corporation (NYSE-DUK)	4.4%	3.7%	4.7%	4.2%
Edison International (NYSE-EIX)	2.3%	2.3%	5.3%	3.3%
El Paso Electric Company (NYSE-EE)	7.0%	NA	4.4%	5.7%
Entergy Corporation (NYSE-ETR)	-2.6%	-2.6%	-4.4%	-3.2%
Eversource Energy (NYSE-ES)	6.3%	6.3%	6.1%	6.2%
FirstEnergy Corporation (ASE-FE)	-2.6%	-2.0%	-2.0%	-2.2%
IDACORP, Inc. (NYSE-IDA)	4.0%	3.8%	4.4%	4.1%
MGE Energy, Inc. (NYSE-MGEE)	4.0%	NA	NA	4.0%
NorthWestern Corporation (NYSE-NWE)	5.0%	4.5%	5.0%	4.8%
OGE Energy Corp. (NYSE-OGE)	4.3%	4.3%	5.2%	4.6%
Otter Tail Corporation (NDQ-OTTR)	6.0%	NA	NA	6.0%
PG&E Corporation (NYSE-PCG)	5.7%	5.6%	4.3%	5.2%
Pinnacle West Capital Corp. (NYSE-PNW)	4.0%	4.0%	4.3%	4.1%
PNM Resources, Inc. (NYSE-PNM)	5.9%	5.9%	6.7%	6.2%
Portland General Electric Company (NYSE-POR)	5.9%	5.9%	6.0%	5.9%
PPL Corporation (NYSE-PPL)	2.5%	1.7%	3.5%	2.6%
SCANA Corporation (NYSE-SCG)	6.0%	6.0%	5.5%	5.8%
Southern Company (NYSE-SO)	3.2%	3.7%	3.9%	3.6%
WEC Energy Group (NYSE-WEC)	6.7%	6.8%	6.2%	6.6%
Xcel Energy Inc. (NYSE-XEL)	5.3%	5.3%	5.4%	5.4%
Mean	4.5%	4.3%	4.6%	4.5%
Median	5.1%	5.1%	5.3%	5.2%

Data Sources: www.reuters.com, www.zacks.com, http://quote.yahoo.com, October 21, 2016.

Panel B
Hevert Proxy Group

Company	Yahoo	Reuters	Zacks	Mean
ALLETE, Inc. (NYSE-ALE)	5.0%	5.0%	5.5%	5.2%
Alliant Energy Corporation (NYSE-LNT)	6.6%	6.6%	6.1%	6.4%
Ameren Corporation (NYSE-AEE)	5.2%	5.6%	6.1%	5.6%
American Electric Power Co. (NYSE-AEP)	2.3%	2.3%	5.2%	3.3%
Avista Corporation (NYSE-AVA)	5.0%	NA	5.3%	5.2%
CMS Energy Corporation (NYSE-CMS)	7.3%	7.3%	6.6%	7.0%
DTE Energy Company (NYSE-DTE)	5.5%	5.5%	5.8%	5.6%
IDACORP, Inc. (NYSE-IDA)	4.0%	3.8%	4.4%	4.1%
NorthWestern Corporation (NYSE-NWE)	5.0%	4.5%	5.0%	4.8%
OGE Energy Corp. (NYSE-OGE)	4.3%	4.3%	5.2%	4.6%
Otter Tail Corporation (NDQ-OTTR)	6.0%	NA	NA	6.0%
Pinnacle West Capital Corp. (NYSE-PNW)	4.0%	4.0%	4.3%	4.1%
PNM Resources, Inc. (NYSE-PNM)	5.9%	5.9%	6.7%	6.2%
Portland General Electric Company (NYSE-POR)	5.9%	5.9%	6.0%	5.9%
SCANA Corporation (NYSE-SCG)	6.0%	6.0%	5.5%	5.8%
Xcel Energy Inc. (NYSE-XEL)	5.3%	5.3%	5.4%	5.4%
Mean	5.2%	5.1%	5.5%	5.3%
Median	5.3%	5.4%	5.5%	5.5%

Data Sources: www.reuters.com, www.zacks.com, http://quote.yahoo.com, October 21, 2016.

Exhibit JRW-10

Kansas City Power & Light Company
 DCF Growth Rate Indicators

Electric and Hevert Proxy Groups

Growth Rate Indicator	Electric Proxy Group	Hevert Proxy Group
Historic <i>Value Line</i> Growth in EPS, DPS, and BVPS	4.2%	4.5%
Projected <i>Value Line</i> Growth in EPS, DPS, and BVPS	4.9%	4.9%
Sustainable Growth ROE * Retention Rate	3.8%	3.6%
Projected EPS Growth from Yahoo, Zacks, and Reuters - Mean/Median	4.5%/5.2%	5.3%/5.5%

Exhibit JRW-11

Kansas City Power & Light Company
Capital Asset Pricing Model

Panel A
Electric Proxy Group

Risk-Free Interest Rate	4.00%
Beta*	0.70
<u>Ex Ante Equity Risk Premium**</u>	<u>5.50%</u>
CAPM Cost of Equity	7.9%

* See page 3 of Exhibit JRW-11

** See pages 5 and 6 of Exhibit JRW-11

Panel B
Hevert Proxy Group

Risk-Free Interest Rate	4.00%
Beta*	0.70
<u>Ex Ante Equity Risk Premium**</u>	<u>5.50%</u>
CAPM Cost of Equity	7.9%

* See page 3 of Exhibit JRW-11

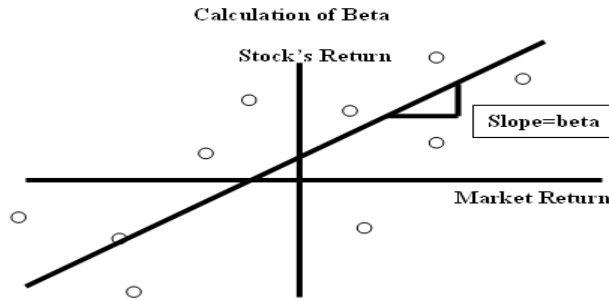
** See pages 5 and 6 of Exhibit JRW-11

Exhibit JRW-11

**Thirty-Year U.S. Treasury Yields
2011-2016**



Source: Federal Reserve Bank of St. Louis, FRED Database.



Panel A
Electric Proxy Group

Company Name	Beta
ALLETE, Inc. (NYSE-ALE)	0.75
Alliant Energy Corporation (NYSE-LNT)	0.75
Ameren Corporation (NYSE-AEE)	0.70
American Electric Power Co. (NYSE-AEP)	0.65
Avista Corporation (NYSE-AVA)	0.70
Black Hills Corporation (NYSE-BKH)	0.90
CMS Energy Corporation (NYSE-CMS)	0.65
Consolidated Edison, Inc. (NYSE-ED)	0.55
Dominion Resources, Inc. (NYSE-D)	0.70
DTE Energy Company (NYSE-DTE)	0.70
Duke Energy Corporation (NYSE-DUK)	0.60
Edison International (NYSE-EIX)	0.65
El Paso Electric Company (NYSE-EE)	0.70
Entergy Corporation (NYSE-ETR)	0.65
Eversource Energy (NYSE-ES)	0.70
FirstEnergy Corporation (ASE-FE)	0.65
IDACORP, Inc. (NYSE-IDA)	0.75
MGE Energy, Inc. (NYSE-MGEE)	0.70
NorthWestern Corporation (NYSE-NWE)	0.70
OGE Energy Corp. (NYSE-OGE)	0.90
Otter Tail Corporation (NDQ-OTTR)	0.85
PG&E Corporation (NYSE-PCG)	0.65
Pinnacle West Capital Corp. (NYSE-PNW)	0.70
PNM Resources, Inc. (NYSE-PNM)	0.75
Portland General Electric Company (NYSE-POR)	0.70
PPL Corporation (NYSE-PPL)	0.70
SCANA Corporation (NYSE-SCG)	0.70
Southern Company (NYSE-SO)	0.55
WEC Energy Group (NYSE-WEC)	0.65
Xcel Energy Inc. (NYSE-XEL)	0.60
Mean	0.70
Median	0.70

Data Source: *Value Line Investment Survey*, 2016.

Panel B
Hevert Proxy Group

Company Name	Beta
ALLETE, Inc. (NYSE-ALE)	0.75
Alliant Energy Corporation (NYSE-LNT)	0.75
Ameren Corporation (NYSE-AEE)	0.70
American Electric Power Co. (NYSE-AEP)	0.65
Avista Corporation (NYSE-AVA)	0.70
CMS Energy Corporation (NYSE-CMS)	0.65
DTE Energy Company (NYSE-DTE)	0.70
IDACORP, Inc. (NYSE-IDA)	0.75
NorthWestern Corporation (NYSE-NWE)	0.70
OGE Energy Corp. (NYSE-OGE)	0.90
Otter Tail Corporation (NDQ-OTTR)	0.85
Pinnacle West Capital Corp. (NYSE-PNW)	0.70
PNM Resources, Inc. (NYSE-PNM)	0.75
Portland General Electric Company (NYSE-POR)	0.70
SCANA Corporation (NYSE-SCG)	0.70
Xcel Energy Inc. (NYSE-XEL)	0.60
Mean	0.72
Median	0.70

Data Source: *Value Line Investment Survey*, 2016.

**Exhibit JRW-11
Risk Premium Approaches**

	Historical Ex Post Returns	Surveys	Expected Return Models and Market Data
Means of Assessing The Market Risk Premium	Historical Average Stock Minus Bond Returns	Surveys of CFOs, Financial Forecasters, Companies, Analysts on Expected Returns and Market Risk Premiums	Use Market Prices and Market Fundamentals (such as Growth Rates) to Compute Expected Returns and Market Risk Premiums
Problems/Debated Issues	Time Variation in Required Returns, Measurement and Time Period Issues, and Biases such as Market and Company Survivorship Bias	Questions Regarding Survey Histories, Responses, and Representativeness Surveys may be Subject to Biases, such as Extrapolation	Assumptions Regarding Expectations, Especially Growth

Source: Adapted from Antti Ilmanen, Expected Returns on Stocks and Bonds," *Journal of Portfolio Management* , (Winter 2003).

Exhibit JRW-11

Capital Asset Pricing Model
Equity Risk Premium

Category	Study Authors	Publication Date	Time Period Of Study	Methodology	Return Measure	Range		Midpoint of Range	Mean	Median	
						Low	High				
Historical Risk Premium											
	Ibbotson	2016	1928-2015	Historical Stock Returns - Bond Returns	Arithmetic				6.00%		
					Geometric				4.40%		
	Damodaran	2015	1928-2014	Historical Stock Returns - Bond Returns	Arithmetic				6.25%		
					Geometric				4.60%		
	Dimson, Marsh, Staunton	2015	1900-2014	Historical Stock Returns - Bond Returns	Arithmetic						
					Geometric				4.40%		
	Bate	2008	1900-2007	Historical Stock Returns - Bond Returns	Geometric				4.50%		
	Shiller	2006	1926-2005	Historical Stock Returns - Bond Returns	Arithmetic				7.00%		
					Geometric				5.50%		
	Siegel	2005	1926-2005	Historical Stock Returns - Bond Returns	Arithmetic				6.10%		
					Geometric				4.60%		
	Dimson, Marsh, and Staunton	2006	1900-2005	Historical Stock Returns - Bond Returns	Arithmetic				5.50%		
	Goyal & Welch	2006	1872-2004	Historical Stock Returns - Bond Returns					4.77%		
	Median									5.14%	
Ex Ante Models (Puzzle Research)											
	Claus Thomas	2001	1985-1998	Abnormal Earnings Model					3.00%		
	Arnott and Bernstein	2002	1810-2001	Fundamentals - Div Yld + Growth					2.40%		
	Constantinides	2002	1872-2000	Historical Returns & Fundamentals - P/D & P/E					6.90%		
	Cornell	1999	1926-1997	Historical Returns & Fundamental GDP/Earnings		3.50%	5.50%	4.50%	4.50%		
	Easton, Taylor, et al	2002	1981-1998	Residual Income Model					5.30%		
	Fama French	2002	1951-2000	Fundamental DCF with EPS and DPS Growth		2.55%	4.32%		3.44%		
	Harris & Marston	2001	1982-1998	Fundamental DCF with Analysts' EPS Growth					7.14%		
	Best & Byrne	2001									
	McKinsey	2002	1962-2002	Fundamental (P/E, D/P, & Earnings Growth)		3.50%	4.00%		3.75%		
	Siegel	2005	1802-2001	Historical Earnings Yield	Geometric				2.50%		
	Grabowski	2006	1926-2005	Historical and Projected		3.50%	6.00%	4.75%	4.75%		
	Maheu & McCurdy	2006	1885-2003	Historical Excess Returns, Structural Breaks,		4.02%	5.10%	4.56%	4.56%		
	Bostock	2004	1960-2002	Bond Yields, Credit Risk, and Income Volatility		3.90%	1.30%	2.60%	2.60%		
	Bakshi & Chen	2005	1982-1998	Fundamentals - Interest Rates					7.31%		
	Donaldson, Kamstra, & Kramer	2006	1952-2004	Fundamental, Dividend yld., Returns, & Volatility		3.00%	4.00%	3.50%	3.50%		
	Campbell	2008	1982-2007	Historical & Projections (D/P & Earnings Growth)		4.10%	5.40%		4.75%		
	Best & Byrne	2001	Projection	Fundamentals - Div Yld + Growth					2.00%		
	Fernandez	2007	Projection	Required Equity Risk Premium					4.00%		
	DeLong & Magin	2008	Projection	Earnings Yield - TIPS					3.22%		
	Siegel - Rethink ERP	2011	Projection	Real Stock Returns and Components					5.50%		
	Duff & Phelps	2016	Projection	Normalized with 4.0% Long-Term Treasury Yield					5.50%		
	Mschchowski - VL - 2014	2014	Projection	Fundamentals - Expected Return Minus 10-Year Treasury Rate					5.50%		
	American Appraisal Quarterly ERP	2015	Projection	Fundamental Economic and Market Factors					6.00%		
	Damodaran	2016	Projection	Fundamentals - Implied from FCF to Equity Model					5.42%		
	Social Security										
	Office of Chief Actuary		1900-1995								
	John Campbell	2001	1860-2000	Historical & Projections (D/P & Earnings Growth)	Arithmetic	3.00%	4.00%	3.50%	3.50%		
			Projected for 75 Years		Geometric	1.50%	2.50%	2.00%	2.00%		
	Peter Diamond	2001	Projected for 75 Years	Fundamentals (D/P, GDP Growth)		3.00%	4.80%	3.90%	3.90%		
	John Shoven	2001	Projected for 75 Years	Fundamentals (D/P, P/E, GDP Growth)		3.00%	3.50%	3.25%	3.25%		
	Median									4.00%	
Surveys											
	New York Fed	2015	Five-Year	Survey of Wall Street Firms					5.70%		
	Survey of Financial Forecasters	2016	10-Year Projection	About 20 Financial Forecasters					1.90%		
	Duke - CFO Magazine Survey	2016	10-Year Projection	Approximately 500 CFOs					4.25%		
	Welch - Academics	2008	30-Year Projection	Random Academics		5.00%	5.74%	5.37%	5.37%		
	Fernandez - Academics, Analysts, and Compa	2016	Long-Term	Survey of Academics, Analysts, and Companies					5.30%		
	Median									5.30%	
Building Block											
	Ibbotson and Chen	2015	Projection	Historical Supply Model (D/P & Earnings Growth)	Arithmetic			6.22%	5.21%		
					Geometric			4.20%			
	Chen - Rethink ERP	2010	20-Year Projection	Combination Supply Model (Historic and Projection)	Geometric				4.00%		
	Ilmanen - Rethink ERP	2010	Projection	Current Supply Model (D/P & Earnings Growth)	Geometric				3.00%		
	Grinold, Kroner, Siegel - Rethink ERP	2011	Projection	Current Supply Model (D/P & Earnings Growth)	Arithmetic			4.63%	4.12%		
					Geometric			3.60%			
	Woolridge		2015	Current Supply Model (D/P & Earnings Growth)					4.50%		
	Median									4.12%	
Mean										4.64%	
Median										4.63%	

Exhibit JRW-11

Capital Asset Pricing Model
Equity Risk Premium

Summary of 2010-15 Equity Risk Premium Studies

Category	Study Authors	Publication Date	Time Period Of Study	Methodology	Return Measure	Range Low	Range High	Midpoint of Range	Mean	Average	
Historical Risk Premium	Ibbotson	2016	1928-2015	Historical Stock Returns - Bond Returns	Arithmetic				6.00%		
					Geometric				4.40%		
	Damodaran	2015	1928-2014	Historical Stock Returns - Bond Returns	Arithmetic				6.25%		
					Geometric				4.60%		
	Dimson, Marsh, Staunton	2015	1900-2014	Historical Stock Returns - Bond Returns	Arithmetic				4.40%		
			Geometric					4.40%			
	Median								5.13%		
Ex Ante Models (Puzzle Research)	Siegel - Rethink ERP	2011	Projection	Real Stock Returns and Components					5.50%		
	Duff & Phelps	2016	Projection	Normalized with 4.0% Long-Term Treasury Yield					5.50%		
	Mschchowski - VL - 2014	2014	Projection	Fundamentals - Expected Return Minus 10-Year Treasury Rate					5.50%		
	American Appraisal Quarterly ERP	2015	Projection	Fundamental Economic and Market Factors					6.00%		
	Damodaran	2016	Projection	Fundamentals - Implied from FCF to Equity Model					5.42%		
		Median									5.50%
Surveys	Duarte & Rosa - NY Fed	2015	Projection	Projections from 29 Models					5.70%		
	Survey of Financial Forecasters	2016	10-Year Projection	About 20 Financial Forecasters					1.90%		
	Duke - CFO Magazine Survey	2016	10-Year Projection	Approximately 500 CFOs					4.25%		
	Fernandez - Academics, Analysts, and Companies	2016	Long-Term	Survey of Academics, Analysts, and Companies					5.30%		
		Median									4.78%
Building Block	Ibbotson and Chen	2015	Projection	Historical Supply Model (D/P & Earnings Growth)	Arithmetic			6.22%	5.21%		
					Geometric			4.20%			
	Chen - Rethink ERP	2010	20-Year Projection	Combination Supply Model (Historic and Projection)	Geometric				4.00%		
	Ilmanen - Rethink ERP	2010	Projection	Current Supply Model (D/P & Earnings Growth)	Geometric				3.00%		
	Grinold, Kroner, Siegel - Rethink ERP	2011	Projection	Current Supply Model (D/P & Earnings Growth)	Arithmetic			4.63%	4.12%		
					Geometric			3.60%			
	Woolridge	2015	Projection	Current Supply Model (D/P & Earnings Growth)	Geometric				4.50%		
	Median								4.12%		
Mean										4.88%	
Median										4.95%	