

**MISSOURI PUBLIC SERVICE COMMISSION**

**STAFF REPORT**

**REVENUE REQUIREMENT  
COST OF SERVICE**

**APPENDICES 1-3**

**KANSAS CITY POWER & LIGHT COMPANY**

**CASE NO. ER-2016-0285**

*Jefferson City, Missouri  
November 2016*

*Staff* Exhibit No 200  
Date 2-28-17 Reporter XF  
File No EL-2016-0285

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**APPENDIX 1**

**Staff Credentials**

**KANSAS CITY POWER & LIGHT COMPANY**

**CASE NO. ER-2016-0285**

*Jefferson City, Missouri  
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**APPENDIX 1**  
**STAFF CREDENTIALS**  
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## **ALAN J. BAX**

I graduated from the University of Missouri - Columbia with a Bachelor of Science degree in Electrical Engineering in December 1995. Concurrent with my studies, I was employed as an Engineering Assistant in the Energy Management Department of the University of Missouri - Columbia from the Fall of 1992 through the Fall of 1995. Prior to this, I completed a tour of duty in the United States Navy, completing a course of study at the Navy Nuclear Power School and a Navy Nuclear Propulsion Plant. Following my graduation from the University of Missouri - Columbia, I was employed by The Empire District Electric Company (Empire or Company) as a Staff Engineer until August 1999, at which time I began my employment with the Staff of the Missouri Public Service Commission (Staff). I am a member of the Institute of Electrical/Electronic Engineers (IEEE).

TESTIMONY AND REPORTS  
BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION

BY ALAN J. BAX

<u>COMPANY</u>	<u>CASE NUMBER</u>
Aquila Networks – MPS	ER-2004-0034
Union Electric Company d/b/a AmerenUE	EO-2004-0108
Empire District Electric Company	ER-2002-0424
Kansas City Power and Light Company	EA-2003-0135
Union Electric Company d/b/a AmerenUE	EO-2003-0271
Aquila Networks – MPS	EO-2004-0603
Union Electric Company d/b/a AmerenUE	EC-2002-0117
Three Rivers and Gascosage Electric Coops	EO-2005-0122
Union Electric Company d/b/a AmerenUE	EC-2002-1
Empire District Electric Company	ER-2001-299
Aquila Networks – MPS	EA-2003-0370
Union Electric Company d/b/a AmerenUE	EW-2004-0583
Union Electric Company d/b/a AmerenUE	EO-2005-0369
Trigen Kansas City	HA-2006-0294
Union Electric Company d/b/a AmerenUE	EC-2005-0352
Missouri Public Service	ER-2001-672
Aquila Networks – MPS	EO-2003-0543
Kansas City Power and Light Company	ER-2006-0314
Macon Electric Coop	EO-2005-0076
Aquila Networks – MPS	EO-2006-0244
Union Electric Company d/b/a AmerenUE	EC-2004-0556
Union Electric Company d/b/a AmerenUE	EC-2004-0598
Empire District Electric Company	ER-2004-0570
Union Electric Company d/b/a AmerenUE	EC-2005-0110
Union Electric Company d/b/a AmerenUE	EC-2005-0177
Union Electric Company d/b/a AmerenUE	EC-2005-0313
Empire District Electric Company	EO-2005-0275
Aquila Networks – MPS	EO-2005-0270
Union Electric Company d/b/a AmerenUE	EO-2006-0145
Empire District Electric Company	ER-2006-0315
Aquila Networks – MPS	ER-2005-0436

ALAN J. BAX cont'd

<u>COMPANY</u>	<u>CASE NUMBER</u>
Union Electric Company d/b/a AmerenUE	EO-2006-0096
West Central Electric Cooperative	EO-2006-0339
Union Electric Company d/b/a AmerenUE	EO-2008-0031
Union Electric Company d/b/a AmerenUE	EC-2009-0193
Empire District Electric Company	ER-2008-0093
Missouri Rural Electric Cooperative	EO-2008-0332
Grundy Electric Cooperative	EO-2008-0414
Osage Valley Electric Cooperative	EO-2009-0315
Union Electric Company d/b/a AmerenUE	EO-2009-0400
Union Electric Company d/b/a AmerenUE	EO-2008-0310
Aquila Networks – MPS	EA-2008-0279
West Central Electric Cooperative	EO-2008-0339
Empire District Electric Company	EO-2009-0233
Union Electric Company d/b/a/ AmerenUE	EO-2009-0272
Empire District Electric Company	EO-2009-0181
Union Electric Company d/b/a AmerenUE	ER-2008-0318
Kansas City Power and Light Company	ER-2009-0089
Kansas City Power and Light – GMO	ER-2009-0090
Union Electric Company d/b/a AmerenUE	ER-2010-0036
Empire District Electric Company	ER-2010-0130
Laclede Electric Cooperative	EO-2010-0125
Union Electric Company d/b/a AmerenUE	EC-2010-0364
Union Electric Company d/b/a AmerenUE	EO-2011-0052
Kansas City Power and Light Company	ER-2010-0355
Kansas City Power and Light – GMO	EO-2011-0137
Kansas City Power and Light – GMO	ER-2010-0356
Empire District Electric Company	ER-2011-0004
Union Electric Company d/b/a AmerenUE	ER-2011-0028
Kansas City Power and Light – GMO	EO-2012-0119
Kansas City Power and Light Company	EO-2011-0137
Union Electric Company d/b/a/ Ameren Missouri	ER-2012-0121
Empire District Electric Company	EO-2011-0085
Empire District Electric Company	EO-2012-0192
Empire District Electric Company	EO-2013-0313
Union Electric Company d/b/a/ Ameren Missouri	EO-2005-0180

ALAN J. BAX cont'd

<u>COMPANY</u>	<u>CASE NUMBER</u>
Union Electric Company d/b/a/ Ameren Missouri	EO-2013-0418
City Utilities of Springfield	EO-2012-0441
Kansas City Power and Light – GMO	EO-2012-0367
Empire District Electric Company	ER-2011-0004
Union Electric Company d/b/a/ Ameren Missouri	ER-2012-0166
Kansas City Power and Light Company	ER-2012-0174
Union Electric Company d/b/a/ Ameren Missouri	ER-2013-0044
Kansas City Power and Light – GMO	ER-2012-0175
Central Missouri Electric Cooperative	EO-2015-0137
Empire District Electric Company	ER-2012-0345
Kansas City Power and Light Company	EO-2012-0367
Boone Electric Cooperative	EO-2015-0012
Transource Missouri, LLC	EA-2013-0098
Black River Electric Cooperative	EO-2015-0096
Union Electric Company d/b/a/ Ameren Missouri	EW-2012-0369
Empire District Electric Company	ER-2014-0351
Union Electric Company d/b/a/ Ameren Missouri	EO-2014-0044
Union Electric Company d/b/a/ Ameren Missouri	EO-2013-0418
Union Electric Company d/b/a/ Ameren Missouri	EE-2013-0511
Union Electric Company d/b/a/ Ameren Missouri	EO-2015-0017
Union Electric Company d/b/a/ Ameren Missouri	EO-2016-0087
Union Electric Company d/b/a/ Ameren Missouri	EO-2014-0009
Kansas City Power and Light Company	EO-2014-0128
Empire District Electric Company	ER-2014-0351
Empire District Electric Company	EO-2016-0192
Union Electric Company d/b/a/ Ameren Missouri	EO-2014-0296
Union Electric Company d/b/a/ Ameren Missouri	EO-2015-0328
Union Electric Company d/b/a/ Ameren Missouri	EC-2016-0235
Union Electric Company d/b/a/ Ameren Missouri	ER-2014-0258
Empire District Electric Company	ER-2016-0023
Union Electric Company d/b/a/ Ameren Missouri	EO-2017-0044
Kansas City Power and Light Company	ER-2014-0370
Kansas City Power and Light – GMO	ER-2016-0156

## **MICHELLE BOCKLAGE**

### **Present Position**

I am currently employed as a Rate & Tariff Examiner III with the Tariff/Rate Design Unit within the Operational Analysis Department of the Missouri Public Service Commission (Commission). The Tariff/Rate Design Unit participates and makes recommendations on tariff filings and various case filings at the Commission; such as, rate, complaint, applications, territorial agreements, sales and merger cases. We also perform and provide technical support on the issues of rate design, class-cost-of-service studies and weather normalizations.

### **Educational and Employment Background and Credentials**

I have been employed at the Missouri Public Service Commission as a Rate & Tariff Examiner III since July 2013. I began my employment with the Commission as a Clerk IV in December 1997. In June 1999, I moved to the Consumer Services section where my responsibilities included investigating informal and formal consumer complaints for compliance with the rules and regulations of the Commission. In January 2011, I moved to the Energy Resource Analysis section where my testimony and responsibility topics included tariff issues relating to Missouri Energy Efficiency Investment Act (MEEIA), Fuel Adjustment Clause (FAC), and promotional programs. Prior to joining the Commission I was employed by the Missouri Department of Transportation.

In December 2010, I earned a Bachelor of Science degree in Business Administration with majors in Management and Human Resources Management from Columbia College. In May 2014, I earned a Masters in Business Administration degree from Columbia College.



## Case Proceedings Participation

### Michelle Bocklage

Case Number	Company Name	Testimony Type	Issue(s)
EO-2012-0009	Greater Missouri Operations	Rebuttal	Tariff Issue
EO-2012-0142	Ameren Missouri	Rebuttal	Tariff Issue
EO-2012-0142	Ameren Missouri	Surrebuttal	Tariff Issue
GR-2014-0007	Laclede Gas Co.	Direct	Weather Normalization
GR-2014-0086	Summit Natural Gas	Direct	Weather Normalization
GR-2014-0086	Summit Natural Gas	Rebuttal	Weather Normalization
GR-2014-0086	Summit Natural Gas	Surrebuttal	Weather Normalization

## **KORY BOUSTEAD**

### **Present Position**

I am currently employed as a Rate & Tariff Examiner II with the Tariff & Rate Design Unit within the Commission Staff Division, Operational Analysis Department of the Missouri Public Service Commission (Commission). The Tariff & Rate Design Unit participates and makes recommendations on tariff filings and various case filings at the Commission; such as, rate, complaint, applications, territorial agreements, sales and merger cases. We also perform and provide technical support on the issues of rate design, class-cost-of-service studies and weather normalizations.

### **Educational and Employment Background and Credentials**

In December 2008, I earned a Bachelor of Science degree in Business Administration with an emphasis in Marketing from Columbia College. I went on to earn a Master of Business Administration, in Business Administration and Management from William Woods University in 2001.

I have been employed at the Missouri Public Service Commission as a Rate & Tariff Examiner II since July 2012. Prior to joining the Commission, beginning in 2002, I was employed with Ameren Missouri as a Customer Service Representative in the Jefferson City Call Center. In this role, I was responsible for answering customer inquiries and requests through the call center including establishment of new and transfer accounts. I effectively managed customer complaints, resolving billing issues, and handling trouble calls. I was responsible for establishing payment agreements, advising customers regarding collection procedures and responsible for maintaining personal telephone statistics and call volume in excess of company average. Prior to my employment with Ameren Missouri I worked for different Jefferson City companies in the fields of advertising and wireless phone service.

List of Previous Testimony Filed

Kory Boustead

<b>Date Filed</b>	<b>Issue</b>	<b>Case Number</b>	<b>Case Name</b>
05/30/2014	<b>Direct - Staff Report -</b> Low Income Weatherization Programs, Energy Efficiency, Service Line Extension	GR-2014-0086	Summit Natural Gas of Missouri, Inc.
06/06/2014	<b>Direct - Staff Report -</b> Low Income Weatherization Programs, Energy Efficiency, Main Line Extension	GR-2014-0152	Liberty Utilities
07/11/2014	<b>Rebuttal -</b> Energy Efficiency, Weatherization	GR-2014-0086	Summit Natural Gas of Missouri, Inc.
07/30/2014	<b>Rebuttal -</b> Low Income Weatherization Programs, Energy Efficiency, Main Line Extension	GR-2014-0152	Liberty Utilities
08/08/2014	<b>Surrebuttal -</b> Low Income Weatherization	GR-2014-0086	Summit Natural Gas of Missouri, Inc.
12/05/2014	<b>Direct - Staff Report -</b> Low Income Keeping Current Pilot Program	ER-2014-0258	Ameren Missouri
02/06/15	<b>Surrebuttal -</b> Keeping Current Pilot Program	ER-2014-0258	Ameren Missouri
04/03/2015	<b>Direct - Staff Report -</b> Economic Relief Pilot Program, Low Income Weatherization	ER-2014-0370	Kansas City Power & Light Company
03/25/2016	<b>Direct - Staff Report -</b> Low Income Programs, Low Income Weatherization	ER-2016-0023	The Empire District Electric Company
05/12/2016	<b>Rebuttal -</b> Low Income Weatherization Program	ER-2016-0023	The Empire District Electric Company

**DANA EAVES**  
**CAREER EXPERIENCE**

**Missouri Public Service Commission, Jefferson City, Missouri**

**Utility Regulatory Auditor IV** January 1, 2013 – Present

**Utility Regulatory Auditor III** April 23, 2003– December 31, 2012

**Utility Regulatory Auditor II** April, 2002 – April, 2003

**Utility Regulatory Auditor I** April, 2001 – April, 2002

Perform rate audits and prepare miscellaneous filings as ordered by the Commission. Review all exhibits and testimony on assigned issues from the most recent previous case and the current case. Develop accounting adjustments and issue positions which are supported by workpapers and written testimony. Prepare Staff Recommendation Memorandum for filings that do not require prepared testimony. As a Utility Regulatory Auditor IV, in the Energy Resource Analysis Department, I am the lead Auditor for Fuel Adjustment Clause Prudence Reviews and Missouri Energy Efficiency Investment Act Prudence Reviews and perform other tasks as assigned by management. I have testified under cross-examination as an expert witness for litigated rate cases.

**Midwest Block and Brick, Jefferson City, Missouri**

**Accountant** December 2000 – March 2001

**CIS/Accounting Assistant** July 2000 – December 2000

**Practice Management Plus, Inc., Jefferson City, Missouri**

**Vice President Operations** October 1998 – May 2000

**Capital City Medical Associates (CCMA), Jefferson City, Missouri**

**Director of Finance** March, 1995-October, 1998

**ADDITIONAL EXPERIENCE**

Wright Camera Shop/Sales	1987-1995
Movies To Go, Inc/Store Manager	1984-1987
Butler Shoe Corp./Store Manager	1982-1984
Southeastern Illinois College/Student	1979-1982
Kassabaum's Bicycle Shop/Store Manager	1977-1979

**EDUCATION**

**Bachelor of Science, Business Administration; Emphasis Accounting (1995)**

COLUMBIA COLLEGE, JEFFERSON CITY, MO

**CASE PROCEEDING PARTICIPATION**

DANA E. EAVES

PARTICIPATION		TESTIMONY
COMPANY	CASE NO.	ISSUES
Ameren Missouri	ER-2016-0179	Fuel Adjustment Clause
KCPL GMO	EO-2015-0180	MEEIA Prudence Review Program costs and TD-NSB Share, Software system costs, Contractors, Interest Costs
Ameren Missouri	EO-2015-0029	MEEIA Prudence Review Program costs and TD-NSB Share, Software system costs, Contractors, Interest Costs
Empire District Electric Company	EO-2014-0057	FAC Prudence Review Risk Management
AmerenUE	EO-2013-0407	FAC Prudence Review Risk Management
KCP&L Greater Missouri Operations (GMO)	EO-2013-0325	FAC Prudence Review Purchased Power Agreements & Costs, Hourly weighted Transfer Pricing, Off- system sales revenue
Empire District Electric Company	EO-2013-0114	FAC Prudence Review Financial Hedges, Off-system sales revenue
Ameren Missouri	EO-2012-0074	FAC Prudence Review Direct/Rebuttal Requirements Contracts
KCP&L Greater Missouri Operations (GMO)	EO-2011-0390	FAC Prudence Review Direct/Rebuttal Hedging Purchased Power
Empire District Electric Company	EO-2011-0285	FAC Prudence Review FAC Components
AmerenUE	EO-2010-0255	FAC Prudence Review Direct/Rebuttal Requirements Contracts

PARTICIPATION		TESTIMONY
COMPANY	CASE NO.	ISSUES
Empire District Electric Company	EO-2010-0084	FAC Prudence Review Fuel Cost, Off-System Sales, Interest Cost
Missouri American Water Company	WR-2008-0311	Surrebuttal; Pension and Other Post-Retirement Employee Benefits Costs, Annual Incentive Plan Pay-out Based Upon Meeting Financial Goals and Customer Satisfaction Survey, Labor and Labor-Related Expenses, Rate Case Expenses, Insurance Other than Group, and Waste Disposal Expense
Empire District Electric Company	ER-2008-0093	Fuel and Purchased Power, Fuel Inventories, FAS 87 (pension), FAS 106 (OPEBS), Expenses and Regulatory Assets, Off System Sales, Transmission Revenue, SO2 Allowances, Maintenance Expense
Laclede Gas Company	GR-2007-0208	Accounting Schedules Reconciliation
Aquila, Inc d/b/a Aquila Networks-MPS & L&P	ER-2007-0004	Payroll Expense, Payroll Taxes and Employee Benefits
Empire District Electric Company	ER-2006-0315	Direct - Jurisdictional Allocations Factors, Revenue, Uncollectible Expense, Pensions, Prepaid Pension Asset, Other Post-Employment Benefits  Rebuttal - Updated: Pension Expense, Updated Prepaid Pension Asset, OPEB's Tracker, Minimum Pension Liability
Missouri Gas Energy (Gas)	GR-2004-0209	Direct - Cash Working Capital, Payroll, Payroll Taxes, Incentive Compensation, Bonuses, Materials and Supplies, Customer Deposits and Interest, Customer Advances and Employee Benefits  Surrebuttal - Incentive Compensation

PARTICIPATION		TESTIMONY
COMPANY	CASE NO.	ISSUES
Aquila, Inc. d/b/a Aquila Networks-MPS & L&P (Natural Gas)	GR-2004-0072	Direct - Payroll Expense, Employee Benefits, Payroll Taxes Rebuttal – Payroll Expense, Incentive Compensation, Employer Health, Dental and Vision Expense
Aquila, Inc. d/b/a Aquila Networks-MPS (Electric)	ER-2004-0034	Direct - Payroll Expense, Employee Benefits, Payroll Taxes Rebuttal – Payroll Expense, Incentive Compensation, Employer Health, Dental and Vision Expense
Aquila, Inc. d/b/a Aquila Networks-L&P (Electric & Steam)	HR-2004-0024	Direct - Payroll Expense, Employee Benefits, Payroll Taxes
Osage Water Company	ST-2003-0562 WT-2003-0563	Direct - Plant Adjustment, Operating & Maintenance Expense Adjustments
Empire District Electric Company	ER-2002-0424	Direct - Cash Working Capital, Property Tax, Tree Trimming, Injuries and Damages, Outside Services, Misc. Adjustments
Citizens Electric Corporation	ER-2002-0297	Direct - Depreciation Expense, Accumulated Depreciation, Customer Deposits, Material & Supplies, Prepayments, Property Tax, Plant in Service, Customer Advances in Aid of Construction
UtiliCorp United Inc, d/b/a Missouri Public Service	ER-2001-672	Direct - Advertising, Customer Advances, Customer Deposits, Customer Deposit Interest Expense, Dues and Donations, Material and Supply, Prepayments, PSC Assessment, Rate Case Expense

**PROCEEDING PARTICIPATION**

**DANA E. EAVES**

<b>PARTICIPATION – No direct testimony filed or NON-Case (Informal) proceeding</b>		
<b>COMPANY</b>	<b>CASE or Tracking No.</b>	<b>ISSUES</b>
Osage Water Company Camden County Circuit Court	APCV102627CC	Legal Fees
RDG Sanitation	SA-2010-0096	Certificate Case
Mid Mo Sanitation	SR-2009-0153	Informal General Rate Case
Highway H Utilities, Inc.	SR-2009-0392 and WR-2009-0393	Informal General Rate Case Lead Auditor
Osage Water Company	SR-2009-0149 WR-2009-0152	General Rate Case Lead Auditor
Hickory Hills	SR-2009-0151 WR-2009-0154	General Rate Case Lead Auditor
Missouri Utilities	SR-2009-0153 WR-2009-0150	General Rate Case Lead Auditor
Roy L. Utilities	QS-2008-0001 and QW-2008-0002	General Informal Rate Case Lead Auditor
IH Utilities, Inc.	QW-2007-0003	General Rate Case Lead Auditor
W.P.C. Sewer Company	QS-2007-0005	Rate Case Lead Auditor



<b>PARTICIPATION – No direct testimony filed or NON-Case (Informal) proceeding</b>		
<b>COMPANY</b>	<b>CASE or Tracking No.</b>	<b>ISSUES</b>
West 16 <sup>th</sup> Street Sewer Company, Inc.	QS-2007-0004	Rate Case Lead Auditor
Gladlo Water & Sewer Company, Inc.	QS-2007-0001 and QW-2007-0002	Rate Case Lead Auditor Supervised: Kofi Boateng
Taneycomo Highlands, Inc.	QS-2006-0004	Rate Case Lead Auditor
Empire District Electric	QW-2005-0013	Informal General Rate Case
Cass County Telephone Company	TO-2005-0237	Cash Flow Analysis, LEC Invoices, Bank Reconciliations, Expense Analysis
LTA Water Company	WM-2005-0058	Merger Case with Missouri American Main Issue: Plant Valuation Lead Auditor
Noel Water Company, Inc.	QW-2005-0002	Rate Case Lead Auditor Supervised: Kofi Boateng
Suburban Water and Sewer Company, Inc.	QW-2005-0001	Rate Case Lead Auditor Supervised: Kofi Boateng
Osage Water Company	WC-2003-0134	Customer Refund Review
Noel Water Company, Inc.	QW-2003-0022	Rate Case Lead Auditor Supervised: Trisha Miller
AquaSource	WR-2003-0001 and SR-2003-0002	Plant in Service, Construction Work in Progress, Payroll, Depreciation Expense
Warren County Water and Sewer Company	WC-2002-155	Pump Repair/replacement, Revenue, Salary

cont'd Dana E. Eaves

<b>PARTICIPATION – No direct testimony filed or NON-Case (Informal) proceeding</b>		
<b>COMPANY</b>	<b>CASE or Tracking No.</b>	<b>ISSUES</b>
Environmental Utilities, LLC	WA-2002-65	Certificate Case
Meadows Water Company	WR-2001-966 and SR-2001-967	Expense Items

**CLAIRE M. EUBANKS, PE**

**PRESENT POSITION:**

I am a Utility Regulatory Engineer I in the Engineering Analysis Unit, Operational Analysis Department, of the Commission Staff Division of the Missouri Public Service Commission.

**EDUCATIONAL BACKGROUND AND WORK EXPERIENCE:**

I received my Bachelor of Science degree in Environmental Engineering from the University of Missouri – Rolla, now referred to as Missouri University of Science and Technology, in May 2006. I am a licensed professional engineer in the states of Missouri and Arkansas. Immediately after graduating from UMR, I began my career with Aquaterra Environmental Solutions, Inc., now SCS Aquaterra, an engineering consulting firm based in Overland Park, Kansas. During my time with Aquaterra, I worked on various engineering projects related to the design, construction oversight, and environmental compliance of solid waste landfills. I began my employment with the Commission in November 2012. My primary responsibility in my current position is related to the Renewable Energy Standard. Additionally, over the past two years I have served on work groups related to the Clean Power Plan.

**CASE HISTORY:**

Case Number	Utility	Type	Issue
EA-2012-0281	Ameren	Rebuttal	Certificate of Convenience and Necessity
EC-2013-0379 EC-2013-0380	KCP&L KCP&L GMO	Rebuttal	RES Compliance
EO-2013-0458	Empire	Memorandum	RES Compliance Plan & Report
EO-2013-0462	Ameren	Memorandum	RES Compliance Report
EO-2013-0503	Ameren	Memorandum	RES Compliance Plan
EO-2013-0504	KCPL	Memorandum	RES Compliance Plan & Report
EO-2013-0505	GMO	Memorandum	RES Compliance Plan & Report
ET-2014-0059	KCP&L GMO	Rebuttal	RES Retail Rate Impact
ET-2014-0071	KCP&L	Rebuttal	RES Retail Rate Impact
ET-2014-0085	Ameren	Rebuttal	RES Retail Rate Impact
ER-2014-0258	Ameren	Cost of Service Report, Surrebuttal	RES, In-Service

Case Number	Utility	Type	Issue
EO-2014-0287	KCPL	Memorandum	RES Compliance Plan
EO-2014-0288	GMO	Memorandum	RES Compliance Plan
EO-2014-0289	KCPL	Memorandum	RES Compliance Report
EO-2014-0290	GMO	Memorandum	RES Compliance Plan
ER-2014-0370	KCP&L	Cost of Service Report	RES
EX-2014-0352	N/A	Live Comments	RES rulemaking
EC-2015-0155	GMO	Memorandum	Solar Rebate Complaint
EO-2015-0260	Empire	Memorandum	RES Compliance Plan & Report
EO-2015-0263	KCPL	Memorandum	RES Compliance Report
EO-2015-0264	GMO	Memorandum	RES Compliance Report
EO-2015-0265	KCPL	Memorandum	RES Compliance Plan
EO-2015-0266	GMO	Memorandum	RES Compliance Plan
EO-2015-0267	Ameren	Memorandum	RES Compliance Plan & Report
EO-2015-0252	GMO	Staff Report	Integrated Resource Plan – Renewable Energy Standard
EO-2015-0254	KCPL	Staff Report	Integrated Resource Plan – Renewable Energy Standard
EA-2015-0256	KCP&L GMO	Live Testimony	Greenwood Solar CCN
EO-2015-0279	Empire	Memorandum	RES Compliance Plan & Report
EO-2016-0280	KCPL	Memorandum	RES Compliance Report
EO-2016-0281	GMO	Memorandum	RES Compliance Report
EO-2016-0282	KCPL	Memorandum	RES Compliance Plan
EO-2016-0283	GMO	Memorandum	RES Compliance Plan
EO-2016-0284	Ameren	Memorandum	RES Compliance Plan & Report
ER-2016-0156	KCP&L GMO	Rebuttal	RESRAM Prudence Review
EA-2016-0208	Ameren	Rebuttal	Certificate of Convenience and Necessity

## **CARY G. FEATHERSTONE**

### **Education and Employment Background and Credentials**

I graduated from the University of Missouri-Kansas City in December 1978 with a Bachelor of Arts degree in Economics. My course work included study in the field of accounting and auditing.

Currently, I am a Utility Regulatory Auditor with the Missouri Public Service Commission ("Commission"). I have assisted, conducted, and supervised audits and examinations of the books and records of public utility companies operating within the state of Missouri. I have participated in examinations of electric, industrial steam, natural gas, water, sewer and telecommunication companies. I have been involved in cases concerning proposed rate increases, earnings investigations, complaint cases, and cases relating to mergers and acquisitions and certification cases. Below is a list of rate cases in which I have submitted testimony. In addition, I also identify other cases where I directly supervised and assisted Commission Staff in audits of public utilities, but where I did not testify.

I have acquired knowledge of the ratemaking and regulatory process through my employment with the Commission. I have participated in numerous rate cases, complaint cases, merger cases and certificate cases, and filed testimony on a variety of topics. I have also acquired knowledge of these topics through review of work papers from prior rate cases filed before this Commission relating to this company and its utility operations. I have also been involved in numerous other rate cases and merger cases involving electric, natural gas, steam, water and sewer and telecommunication companies. I have previously examined generation and generation-related topics and capacity planning areas; conducted and participated in several construction audits involving plant and construction records, specifically the costs of construction projects relating to power plants. I have been involved in the fuel and fuel-related areas for power plant production, and purchased power and off-system sales on numerous occasions. I have also worked in the area of utility income taxes, property taxes and gross receipts taxes. In addition, I have been the project coordinator, provided management oversight and involved in negotiations of many rate and merger cases throughout my employment with the Commission.

**CARY G. FEATHERSTONE**

**SUMMARY OF RATE CASE INVOLVEMENT**

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony/Issue</u>	<u>Case</u>
2016	ER-2016-0156	KCP&L Greater Missouri Operations Company	<b>Direct-</b> Jurisdictional Allocations, Emission Allowances, Resource Planning, Crossroads Transmission Costs <b>Rebuttal-</b> Rate Increases Crossroads Energy Center <b>Surrebuttal-</b> Crossroads Energy Center and Resource Planning	Stipulated
2015	ER-2014-0370  Coordinated	Kansas City Power & Light Company  (electric rate increase)	<b>Direct-</b> sponsor Utility Services Cost of Service Report; policy; Additional Amortizations Regulatory Plan; Jurisdictional Allocation Factors; <b>Rebuttal-</b> Collection of Various Amortizations, Regulatory Lag and Earned Returns <b>Surrebuttal-</b> Collection of Various Amortizations, Regulatory Lag and Earned Returns <b>True-up Direct-</b> True-up Revenue Requirement <b>True-up Rebuttal-</b> Capacity Agreements	Contested
2014	SR-2014-0247  Coordinated	Central Rivers Wastewater Utility Inc.	<b>Surrebuttal Testimony/Rebuttal of Supplemental Direct</b>	Stipulated
2014	EU-2015-0094  Coordinated	Kansas City Power & Light Company (electric accounting order request)	Supervised- no testimony filed	Addressed in KCPL's 2015 Rate Case ER-2014-0370
2014	EU-2014-0255  Coordinated	Kansas City Power & Light Company (electric continuance of construction accounting request)	Supervised- no testimony filed	Stipulated-consolidated with KCPL's 2015 Rate Case ER-2014-0370

**CARY G. FEATHERSTONE**

**SUMMARY OF RATE CASE INVOLVEMENT**

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony/Issue</u>	<u>Case</u>
2014	HR-2014-0066 Coordinated	Veolia Energy Kansas City Company (former Trigen Kansas City Energy Company) (steam rate increase)	Direct- sponsor Utility Services Cost of Service Report	Stipulated
2014	GR-2014-0007 Coordinated	Missouri Gas Energy division of Laclede Gas Company  (natural gas rate increase)	Direct- sponsor Utility Services Cost of Service Report  Supplemental Direct-sponsor true-up revenue requirement <b>Rebuttal</b> Surrebuttal- update true-up revenue requirement	Stipulated
2013 2012	HC-2012-0259 Consolidated with HC-2010-0235 Coordinated	KCP&L Greater Missouri Operations Company  Ag Processing complaint against GMO's Quarterly Cost Adjustment (industrial steam fuel clause)	Additional Surrebuttal Report <b>Rebuttal- Overview;</b> Natural Gas Hedging Costs	Stipulated
2010	HC-2010-0235	Ag Processing complaint against GMO's Quarterly Cost Adjustment (industrial steam fuel clause)	Deposition	Contested
2007 2008	HR-2007-0028, HR-2007-0399 and HR-2008-0340	Aquila, Inc., d/b/a Aquila Networks- L&P (industrial steam fuel clause review)		
2012	ER-2012-0175  Coordinated	KCPL Greater Missouri Operations Company  (electric rate increase)	Direct- sponsor Utility Services Cost of Service Report; Policy; Plant Valuation; Capacity Planning; Jurisdictional Allocation Factors; <b>Rebuttal- Capacity Planning</b> <b>Surrebuttal- Plant Valuation; Capacity True-up Direct- true-up revenue requirement</b>	Contested

**CARY G. FEATHERSTONE**

**SUMMARY OF RATE CASE INVOLVEMENT**

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony/Issue</u>	<u>Case</u>
2012	ER-2012-0174  Coordinated	Kansas City Power & Light Company  (electric rate increase)	<b>Direct-</b> sponsor Utility Services Cost of Service Report; Policy; Additional Amortizations Regulatory Plan; Jurisdictional Allocation Factors; Iatan 2 Advanced Coal Credits; Rate Analysis <b>Rebuttal-</b> Iatan 2 Advanced Coal Credits; Interim Energy Charge <b>Surrebuttal-</b> Iatan 2 Advanced Coal Credits; Interim Energy Charge True-up Direct- true-up revenue requirement	Contested
2011	SA-2010-0219 and SC-2010-0161 Coordinated	Canyon Treatment Facility LLC (sewer certificate and complaint case)	Recommendation Memorandum	Stipulated
2011	HR-2011-0241  Coordinated	Veolia Energy Kansas City Company (former Trigen Kansas City Energy Company) (steam rate increase)	<b>Direct-</b> sponsor Utility Services Cost of Service Report	Stipulated
2010	ER-2010-0356  Coordinated	KCP&L Greater Missouri Operations Company (electric rate increase)	<b>Direct-</b> sponsor Utility Services Cost of Service Report; Policy; Plant Valuation; Capacity Planning; Jurisdictional Allocations; <b>Rebuttal-</b> Capacity Planning <b>Surrebuttal-</b> Plant Valuation; Capacity True-up Direct True-up Rebuttal	Contested



**CARY G. FEATHERSTONE**

**SUMMARY OF RATE CASE INVOLVEMENT**

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony/Issue</u>	<u>Case</u>
2010	ER-2010-0355  Coordinated	Kansas City Power & Light Company (electric rate increase)	<b>Direct-</b> sponsor Utility Services Cost of Service Report; Policy; Additional Amortizations Regulatory Plan; Jurisdictional Allocations Rate Analysis <b>Rebuttal-</b> Jurisdictional Allocation <b>Surrebuttal-</b> <b>True-up Direct</b> <b>True-up Rebuttal</b>	Contested
2010	SR-2010-0110 and WR-2010-0111  Coordinated	Lake Region Water and Sewer Company (water & sewer rate increase)	<b>Direct-</b> sponsor Utility Services Cost of Service Report <b>Surrebuttal</b> <b>True-up Direct</b> Reports to Commission	Contested
2009	HR-2009-0092  Coordinated	KCPL Greater Missouri Operations Company (former Aquila, Inc. Missouri electric properties) (industrial steam rate increase)	<b>Direct-</b> sponsor Utility Services Cost of Service Report; Policy	Stipulated
2009	ER-2009-0090  Coordinated	KCPL Greater Missouri Operations Company (former Aquila, Inc. Missouri electric properties) (electric rate increase)	<b>Direct-</b> sponsor Utility Services Cost of Service Report; Policy <b>Surrebuttal-</b> Plant Valuation; Capacity Planning	Stipulated
2009	ER-2009-0089  Coordinated	Kansas City Power & Light Company (electric rate increase)	<b>Direct-</b> sponsor Utility Services Cost of Service Report; Policy; Additional Amortizations and Iatan 1 Construction <b>Rebuttal-</b> Jurisdictional Allocations <b>Surrebuttal-</b> Allocations	Stipulated

**CARY G. FEATHERSTONE**

**SUMMARY OF RATE CASE INVOLVEMENT**

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony/Issue</u>	<u>Case</u>
2008	HR-2008-0300 Coordinated	Trigen Kansas City Energy (steam rate increase)	<b>Direct</b> - sponsor Utility Services portion of the Cost of Service Report, Overview of rate case, Plant Review and Plant Additions, Fuel and Income Taxes	Stipulated
2007	HO-2007-0419 Coordinated	Trigen Kansas City Energy [sale of coal purchase contract] (steam)	Recommendation Memorandum	Stipulated
2007	ER-2007-0004 Coordinated	Aquila, Inc., d/b/a Aquila Networks- MPS and Aquila Networks- L&P (electric rate increase)	<b>Direct</b> - Fuel Clause, Fuel, Capacity Planning <b>Rebuttal</b> <b>Surrebuttal</b> - Fuel Clause	Contested
2006	WR-2006-0425 Coordinated	Algonquin Water Resources (water & sewer rate increases)	<b>Rebuttal</b> - Unrecorded Plant; Contributions In Aid Of Construction <b>Surrebuttal</b> - Unrecorded Plant; Contributions In Aid Of Construction	Contested
2006	ER-2006-0314 Coordinated	Kansas City Power & Light Company (electric rate increase)	<b>Direct</b> - Construction Audits <b>Rebuttal</b> - Allocations <b>Surrebuttal</b> - Allocations	Contested
2005	HR-2005-0450 Coordinated	Aquila, Inc., d/b/a Aquila Networks- L&P (industrial steam rate increase)	<b>Direct</b>	Stipulated
2005	ER-2005-0436 Coordinated	Aquila, Inc., d/b/a Aquila Networks- MPS and Aquila Networks- L&P (electric rate increase)	<b>Direct</b> - Interim Energy Charge; Fuel; Plant Construction; Plant Commercial In Service; Capacity Planning, Plant Valuation <b>Rebuttal</b> <b>Surrebuttal</b>	Stipulated

**CARY G. FEATHERSTONE**

**SUMMARY OF RATE CASE INVOLVEMENT**

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony/Issue</u>	<u>Case</u>
2005	EO-2005-0156 Coordinated	Aquila, Inc., d/b/a Aquila Networks- MPS (electric- South Harper Generating Station asset valuation case)	Rebuttal- plant valuation Surrebuttal- plant valuation	Stipulated
2005	HC-2005-0331 Coordinated	Trigen Kansas City Energy [Jackson County Complaint relocation of plant for Sprint Arena] (steam complaint case)	Cross examination- relocation of plant assets	Contested
2004	GR-2004-0072 Coordinated	Aquila, Inc., d/b/a Aquila Networks-MPS and Aquila Networks-L&P (natural gas rate increase)	Direct- acquisition adjustment; merger savings tracking  Rebuttal	Stipulated
2004	HM-2004-0618 Coordinated	Trigen- Kansas City Energy purchase by Thermal North America (steam - sale of assets)	Supervised Case -Did not file testimony	Stipulated
2003	ER-2004-0034 and HR-2004-0024 (Consolidated) Coordinated	Aquila, Inc., (formerly UtiliCorp United Inc.) d/b/a Aquila Networks-MPS and Aquila Networks-L&P (electric & industrial steam rate increases)	Direct- acquisition adjustment; merger savings tracking Rebuttal Surrebuttal Deposition	Stipulated
2002	ER-2002-424 Coordinated	Empire District Electric Company (electric rate increase)	Direct- fuel-interim energy charge Surrebuttal	Stipulated
2001	ER-2001-672 and EC-2002-265 Coordinated	UtiliCorp United Inc./Missouri Public Service Company (electric rate increase)	Verified Statement Direct- capacity purchased power agreement; plant recovery Rebuttal Surrebuttal	Stipulated
2001	ER-2001-299 Coordinated	Empire District Electric Company (electric rate increase)	Direct- income taxes; cost of removal; plant construction costs; fuel- interim energy charge Surrebuttal True-Up Direct	Contested

**CARY G. FEATHERSTONE**

**SUMMARY OF RATE CASE INVOLVEMENT**

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony/Issue</u>	<u>Case</u>
2000	EM-2000-369 Coordinated	UtiliCorp United Inc. merger with Empire District Electric Company (electric acquisition/ merger case)	<b>Rebuttal-</b> acquisition adjustment; merger costs/savings tracking	Contested (Merger eventually terminated)
2000	EM-2000-292 Coordinated	UtiliCorp United Inc. merger with St. Joseph Light & Power Company (electric, natural gas and industrial steam acquisition/ merger case)	<b>Rebuttal-</b> acquisition adjustment; merger costs/savings tracking	Contested (Merger closed)
1999	EM-97-515 Coordinated	Kansas City Power & Light Company merger with Western Resources, Inc. (electric acquisition/ merger case)	<b>Rebuttal-</b> acquisition adjustment; merger costs/savings tracking	Stipulated (Merger eventually terminated)
1998	GR-98-140 Coordinated	Missouri Gas Energy Division of Southern Union Company (natural gas rate increase)	Testimony in Support of Stipulation And Agreement	Contested
1997	EM-97-395	UtiliCorp United Inc./Missouri Public Service (electric-application to spin-off generating assets to EWG subsidiary)	<b>Rebuttal-</b> plant assets & purchased power agreements	Withdrawn
1997	ER-97-394 and EC-98-126 Coordinated	UtiliCorp United Inc./Missouri Public Service (electric rate increase and rate complaint case)	<b>Direct-</b> fuel and purchased power; fuel inventories; re-organizational costs <b>Rebuttal Surrebuttal</b>	Contested
1997	EC-97-362 and EO-97-144	UtiliCorp United Inc./Missouri Public Service (electric rate complaint case)	<b>Direct-</b> - fuel and purchased power; fuel inventories Verified Statement	Contested Commission Denied Motion
1997	GA-97-133	Missouri Gas Company (natural gas—certificate case)	<b>Rebuttal-</b> natural gas expansion	Contested
1997	GA-97-132	UtiliCorp United Inc./Missouri Public Service Company (natural gas—certificate case)	<b>Rebuttal-</b> natural gas expansion	Contested
1996	ER-97-82	Empire District Electric Company (electric-- interim rate increase case)	<b>Rebuttal-</b> fuel and purchased power	Contested

**CARY G. FEATHERSTONE**

**SUMMARY OF RATE CASE INVOLVEMENT**

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony/Issue</u>	<u>Case</u>
1996	GR-96-285 Coordinated	Missouri Gas Energy Division of Southern Union Company (natural gas rate increase)	<b>Direct-</b> merger savings recovery; property taxes <b>Rebuttal</b> <b>Surrebuttal</b>	Contested
1996	EM-96-149 Coordinated	Union Electric Company merger with CIPSCO Incorporated (electric and natural gas-- acquisition/merger case)	<b>Rebuttal-</b> acquisition adjustment; merger costs/savings	Stipulated
1996	GA-96-130	UtiliCorp United, Inc./Missouri Pipeline Company (natural gas-- certificate case)	<b>Rebuttal-</b> natural gas expansion	Contested
1995	ER-95-279 Coordinated	Empire District Electric Company (electric rate increase)	<b>Direct-</b> fuel & purchased power; fuel inventories	Stipulated
1995	GR-95-160 Coordinated	United Cities Gas Company (natural gas rate increase)	<b>Direct-</b> affiliated transactions; plant	Contested
1994	GA-94-325 Coordinated	UtiliCorp United Inc., expansion of natural gas to City of Rolla, MO (natural gas-- certificate case)	<b>Rebuttal-</b> natural gas expansion	Contested
1994	GM-94-252 Coordinated	UtiliCorp United Inc., acquisition of Missouri Gas Company and Missouri Pipeline Company (natural gas--acquisition case)	<b>Rebuttal-</b> acquisition of assets case	Contested
1994	ER-94-194	Empire District Electric Company (electric rate increase)	Supervised Case -Did not file testimony	
1993	GM-94-40	Western Resources, Inc. and Southern Union Company (natural gas-- sale of Missouri property)	<b>Rebuttal-</b> acquisition adjustment; merger costs/savings tracking	Stipulated
1993	TR-93-181	United Telephone Company of Missouri (telephone rate increase)	<b>Direct-</b> directory advertising <b>Surrebuttal</b>	Contested

**CARY G. FEATHERSTONE**

**SUMMARY OF RATE CASE INVOLVEMENT**

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony/Issue</u>	<u>Case</u>
1993	TC-93-224 and TO-93-192  Coordinated Directory	Southwestern Bell Telephone Company (telephone-- rate complaint case)	<b>Direct-</b> directory advertising <b>Rebuttal</b> <b>Surrebuttal</b>	Contested
1991	EM-91-290	UtiliCorp United Inc./ Missouri Public Service and Centel acquisition (electric – acquisition/ merger case)	Recommendation Memorandum	Stipulated
1991	GO-91-359  Coordinated	UtiliCorp United Inc., Missouri Public Service Division (natural gas-- accounting authority order)	Memorandum Recommendation- Service Line Replacement Program cost recovery deferral	Stipulated
1991	EO-91-358 and EO-91-360  Coordinated	UtiliCorp United Inc., Missouri Public Service Division (electric-- accounting authority orders)	<b>Rebuttal-</b> plant construction cost deferral recovery; purchased power cost recovery deferral	Contested
1991	EM-91-213	Kansas Power & Light - Gas Service Division (natural gas-- acquisition/merger case)	<b>Rebuttal-</b> acquisition adjustment; merger costs/savings tracking	Contested
1990	GR-90-152	Associated Natural Gas Company (natural gas rate increase)	<b>Rebuttal-</b> acquisition adjustment; merger costs/savings	Stipulated
1990	GR-90-198  Coordinated	UtiliCorp United, Inc., Missouri Public Service Division (natural gas rate increase)	<b>Direct-</b> Corporate Costs and Merger and Acquisition Costs	Stipulated
1990	ER-90-101  Coordinated	UtiliCorp United Inc., Missouri Public Service Division (electric rate increase- Sibley Generating Station Life Extension Case)	<b>Direct-</b> Corporate Costs and Merger and Acquisition Costs <b>Surrebuttal</b>	Contested
1990	GR-90-50  Coordinated	Kansas Power & Light - Gas Service Division (natural gas rate increase)	<b>Direct-</b> prudency review of natural gas explosions	Stipulated

**CARY G. FEATHERSTONE**

**SUMMARY OF RATE CASE INVOLVEMENT**

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony/Issue</u>	<u>Case</u>
1989	TR-89-182 and TC-90-75	GTE North, Incorporated (telephone rate increase)	<b>Direct-</b> directory advertising <b>Rebuttal</b> <b>Surrebuttal</b>	Contested Decided Feb. 9, 1990
1988	TC-89-14  Coordinated Directory	Southwestern Bell Telephone Company (telephone-- rate complaint case)	<b>Direct-</b> directory Surrebuttal advertising <b>Surrebuttal</b> Deposition	Contested
1988	GR-88-115  Coordinated	St. Joseph Light & Power Company (natural gas rate increase)	Supervised Case-- Did not file testimony Deposition	Stipulated
1988	HR-88-116	St. Joseph Light & Power Company (industrial steam rate increase)	Supervised Case-- Did not file testimony Deposition	Stipulated
1987	HO-86-139  Coordinated	Kansas City Power & Light Company (district steam heating-- discontinuance of public utility and rate increase)	<b>Direct-</b> policy testimony on abandonment of steam service <b>Rebuttal</b> <b>Surrebuttal</b>	Contested
1986	TR-86-117  Coordinated	United Telephone Company of Missouri (telephone rate increase)	Withdrawn prior to filing	Withdrawn
1986	GR-86-76  Coordinated	KPL-Gas Service Company (natural gas rate increase)	Withdrawn prior to filing	Withdrawn
1986	TR-86-55  Coordinated	Continental Telephone Company of Missouri (telephone rate increase)	Supervised Case-- Did not file testimony	Stipulated
1986	TR-86-63  Coordinated	Webster County Telephone Company (telephone rate increase)	Supervised Case-- Did not file testimony	Stipulated
1986	TR-86-14  Coordinated	ALLTEL Missouri, Inc. (telephone rate increase)	Supervised Case—Did not file testimony	Stipulated

**CARY G. FEATHERSTONE**

**SUMMARY OF RATE CASE INVOLVEMENT**

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony/Issue</u>	<u>Case</u>
1985	ER-85-128 and EO-85-185  Coordinated	Kansas City Power & Light Company (electric rate increase- Wolf Creek Nuclear Generating Unit Case)	Supervised Case-- <b>Direct-</b> fuel inventories; coordinated Wolf Creek Nuclear construction audit	Contested
1984	EO-84-4	Investigation and Audit of Forecasted Fuel Expense of Kansas City Power & Light Company (electric-- forecasted fuel true-up)	<b>Direct</b>	Contested
1983	TR-83-253	Southwestern Bell Telephone Company (telephone rate increase - ATT Divesture Case)	<b>Direct-</b> revenues and directory advertising	Contested
1983	ER-83-49	Kansas City Power & Light Company (electric rate increase)	<b>Direct-</b> fuel and fuel inventories <b>Rebuttal</b> <b>Surrebuttal</b>	Contested
1983	EO-83-9	Investigation and Audit of Forecasted Fuel Expense of Kansas City Power & Light Company (electric-- forecasted fuel true-up)	<b>Direct</b>	Contested
1982	TR-82-199	Southwestern Bell Telephone Company (telephone rate increase)	<b>Direct-</b> revenues and directory advertising	Contested
1982	ER-82-66 and HR-82-67	Kansas City Power & Light Company (electric and district steam heating rate increase)	<b>Direct-</b> fuel and purchased power; fuel inventories <b>Rebuttal</b> <b>Surrebuttal</b>	Contested
1981	TO-82-3	Southwestern Bell Telephone Company Investigation of Equal Life Group and Remaining Life Depreciation Rates (telephone-- depreciation case)	<b>Direct-</b> construction work in progress	Contested
1981	TR-81-302	United Telephone Company of Missouri (telephone rate increase)	<b>Direct-</b> construction work in progress	Stipulated



**CARY G. FEATHERSTONE**

**SUMMARY OF RATE CASE INVOLVEMENT**

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony/Issue</u>	<u>Case</u>
1981	TR-81-208	Southwestern Bell Telephone Company (telephone rate increase)	Direct-cash working capital; construction work in progress; income taxes-flow-through <b>Rebuttal</b> <b>Surrebuttal</b>	Contested
1981	ER-81-42	Kansas City Power & Light Company (electric rate increase)	Direct-payroll and payroll related benefits; cash working capital <b>Rebuttal</b>	Contested
1980	TR-80-235	United Telephone Company of Missouri (telephone rate increase)	Direct- construction work in progress <b>Rebuttal</b>	Contested
1980	GR-80-249 Coordinated	Rich Hill-Hume Gas Company (natural gas rate increase)	No Testimony filed-revenues and rate base	Stipulated
1980	GR-80-173	The Gas Service Company (natural gas rate increase)	<b>Direct</b> <b>Deposition</b>	Stipulated
1980	HR-80-55	St. Joseph Light & Power Company (industrial steam rate increase)	<b>Direct</b>	Stipulated
1980	OR-80-54	St. Joseph Light & Power Company (transit rate increase)	<b>Direct</b>	Stipulated
1980	ER-80-53	St. Joseph Light & Power Company (electric rate increase)	<b>Direct</b>	Stipulated

**CARY G. FEATHERSTONE**  
**SUMMARY OF CASE INVOLVEMENT**  
**CASES SUPERVISED AND ASSISTED:**

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Involvement</u>	<u>Case</u>
2015	SR-2016-0112	Cannon Homes	Supervised Case	Pending
2015	WR-2016-0109 SR-2016-0110	Roy L Utilities	Supervised Case	Pending
2014	WR-2015-0104	Spokane Highlands Water	Supervised Case	Stipulated
2014	WR-2015-0020	Gascony Water Company	Supervised Case	withdrawn
2014	SM-2015-0014	Raccoon Creek acquisition of West 16, WPC and Villages  (Sewer acquisition case)	Supervised Case	Stipulated
2013	SA-2014-0005	Central Rivers Wastewater (sewer certificate case)	Supervised Case	Stipulated
2013	SC-2013-0332	West 16 <sup>th</sup> Street (Public Counsel complaint case)	Supervised Case	Stipulated
2013	WR-2013-0326	Woodland Manor (water informal rate increase)	Supervised Case	Stipulated
2013	SR-2013-0053	WPC Sewer	Supervised Case	Stipulated
2013	WM-2013-0329	Bilyean Ridge Water	Supervised Case	Stipulated
2012	WR-2012-0163	Tandy County (water informal rate increase)	Supervised Case  Recommendation Memorandum	Stipulated
2011	WO-2022-0328	Algonquin Liberty Water purchase of Noel Water	Supervised Case  Recommendation Memorandum	Stipulated
2010	SR-2010-0320  Coordinated	Timber Creek Sewer Company	Supervised Case Did Not File Testimony	Contested

**CARY G. FEATHERSTONE**  
**SUMMARY OF CASE INVOLVEMENT**  
**CASES SUPERVISED AND ASSISTED:**

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Involvement</u>	<u>Case</u>
2010	WR-2010-0202	Stockton Water Company	Recommendation Memorandum	Stipulated
2010	EO-2010-0211	KCP&L Greater Missouri Operations--- Liberty service center sale	Recommendation Memorandum	Stipulated
2009	EO-2010-0060	KCP&L Greater Missouri Operations----- Blue Springs service center sale	Recommendation Memorandum	Withdrawn
2009	WR-2010-0139 SR-2010-0140	Valley Woods Water Company	Recommendation Memorandum	Stipulated
2008	QW-2008-0003	Spokane Highlands Water Company (water- informal rate increase)	Recommendation Memorandum	Stipulated
2007	SR-2008-0080 QS-2007-0008	Timber Creek (sewer- informal rate increase)	Recommendation Memorandum	Stipulated
2006	WR-2006-0250  Coordinated	Hickory Hills Water (water- informal rate increase)	Supervised Case - Did Not File Testimony	Contested
2006	HA-2006-0294  Coordinated	Trigen Kansas City Energy (steam- expansion of service area)	Recommendation Memorandum and Testimony	Contested
2005	WO-2005-0206  Coordinated	Silverleaf sale to Algonquin (water & sewer- sale of assets)	Supervised Case - Did not file testimony	Stipulated
2005	GM-2005-0136  Coordinated	Partnership interest of DTE Enterprises, Inc. and DTE Ozark, Inc in Southern Gas Company purchase by Sendero SMGC LP (natural gas -- sale of assets)	Recommendation Memorandum	Stipulated
2003	QW-2003-016 QS-2003-015	Tandy County (water & sewer informal rate increase)	Recommendation Memorandum	Stipulated

**Brad J. Fortson**

**Education and Employment Background**

I am a Regulatory Economist in the Energy Resources Department, Commission Staff Division of the Missouri Public Service Commission. I have been employed at the Missouri Public Service Commission as a Regulatory Economist from December 2012 through March 2015 and August 2015 through current.

I received an Associate of Applied Science degree in Computer Science in May 2003, Bachelor of Science degree in Business Administration in May 2009, and Master of Business Administration degree with an emphasis in Management in May 2012, all from Lincoln University, Jefferson City, Missouri.

Prior to first joining the Commission, I worked in various accounting positions within four state agencies of the State of Missouri. I was employed as an Account Clerk II for the Inmate Finance Section of the Missouri Department of Corrections; as an Account Clerk II for the Accounts Payable Section of the Missouri Department of Health and Senior Services; as a Contributions Specialist for the Employer Accounts Section of the Missouri Department of Labor and Industrial Relations; and as an Accountant I for the Payroll Section of the Missouri Office of Administration. From April 1 through July 31, 2015, I worked for the Missouri Office of Public Counsel before joining the Commission once again.

**Brad J. Fortson**

**Case Participation History**

<b>Case Number</b>	<b>Company</b>	<b>Issue</b>	<b>Exhibit</b>
HT-2013-0456	KCP&L Greater Missouri Operations Company	Quarterly Cost Adjustment	Staff Memorandum
HR-2014-0066	Veolia Energy Kansas City	Revenue by Class and Rate Design	Staff Report
HR-2014-0066	Veolia Energy Kansas City	Recommendation of tariff approval	Staff Memorandum
GR-2014-0086	Summit Natural Gas of Missouri, Inc.	Large Volume Service Revenue	Staff Report
HT-2014-0286	KCP&L Greater Missouri Operations Company	Quarterly Cost Adjustment	Staff Memorandum
ER-2015-0132	Union Electric Company d/b/a Ameren Missouri	Recommendation of tariff approval	Staff Memorandum
ER-2014-0258	Union Electric Company d/b/a Ameren Missouri	Revenue by Class and Rate Design	Staff Report
ER-2014-0258	Union Electric Company d/b/a Ameren Missouri	Revenue by Class and Rate Design	Rebuttal & Surrebuttal
ER-2014-0351	The Empire District Electric Company	Revenue by Class and Rate Design	Staff Report
ER-2014-0351	The Empire District Electric Company	Revenue by Class and Rate Design	Rebuttal
EO-2015-0240	Kansas City Power & Light Company	Custom Program Incentive Level	Direct Testimony
EO-2015-0241	KCP&L Greater Missouri Operations Company	Custom Program Incentive Level	Direct Testimony
ET-2016-0145	Kansas City Power & Light Company	Recommendation of tariff approval	Staff Memorandum
ET-2016-0146	KCP&L Greater Missouri Operations Company	Recommendation of tariff approval	Staff Memorandum
ET-2016-0152	Union Electric Company d/b/a Ameren Missouri	Recommendation of tariff approval	Staff Memorandum
EO-2015-0240	Kansas City Power & Light Company	Recommendation of tariff approval	Staff Memorandum
EO-2015-0241	KCP&L Greater Missouri Operations Company	Recommendation of tariff approval	Staff Memorandum
ER-2016-0023	The Empire District Electric Company	DSM Programs and MEEIA Filings	Staff Report
ER-2016-0023	The Empire District Electric Company	DSM Programs and MEEIA Filings	Rebuttal & Surrebuttal
ET-2016-0268	Kansas City Power & Light Company	Recommendation of tariff approval	Staff Memorandum
ET-2016-0269	KCP&L Greater Missouri Operations Company	Recommendation of tariff approval	Staff Memorandum
JE-2016-0344	Kansas City Power & Light Company	Recommendation of tariff approval	Staff Memorandum

Tammy Huber

**Educational and Employment Background and Credentials**

I am a Utility Policy Analyst II in the Energy Recourses Department since 2014. From November 2011 through June 2014, I worked in the Engineering and Management Services Unit as a Management Analyst. Previously I was employed by Missouri Department of Transportation (MO DOT) as an Auditor in the Internal Auditing Department. Prior to my employment with MO DOT I was employed by the Commission in the General Counsel's Office. I earned a Bachelor of Science in Business Administration with emphases in Business Management from Columbia College in October 2008. I completed additional coursework in 2009 from Columbia College in Accounting.

As an analyst for the Commission, I have participated in and conducted customer service and business office operations reviews. I have researched and managed a number of customer complaints and public comment projects. I have prepared and reviewed audit and investigative reports at the Commission. I have previously provided testimony before the Commission. I have participated in electric case staff recommendations and reviewed tariffs. I was the Co-Case Coordinator for the Operations Department in Case No. ER-2014-0370 and am currently the Case Manager in this case.

Cases in which I have participated and the scope of my contributions are listed below:

<b>Case/Tracking Number</b>	<b>Company Name- Type of Case; Issues</b>
WR-2013-0322	Lincoln County Sewer & Water Company – Management Audit ; Testimony
ER-2014-0370	Kansas City Power & Light Company – Co-Case Coordinator

## **Credentials and Background of**

### **J Luebbert**

I have a Bachelor of Science degree in Biological Engineering from the University of Missouri. My work experience includes three years of regulatory work as an Environmental Engineer II for the Air Pollution Control Program of the Missouri Department of Natural Resources.

I am currently employed as a Utility Engineering Specialist III in the Engineering Resources Department of the Commission Staff Division of the Missouri Public Service Commission. I have been employed at the Missouri Public Service Commission since March 2016 and am responsible for preparing staff recommendations regarding electric utility resource planning, demand-side management programs, and fuel adjustment clauses.

**Educational and Employment Background and Credentials**  
**of**  
**Karen Lyons**

I am currently employed as a Utility Regulatory Auditor V for the Missouri Public Service Commission ("Commission"). I was employed by the Commission in April 2007. Previously, I was employed by AT&T as a Regulatory Complaint Manager from December 1999 to February 2007. In that capacity I was responsible for addressing consumer and business complaints filed with various state and federal regulatory agencies. I earned a Bachelor of Science degree in Management Accounting and a Master's in Business Administration from Park University.

As a Utility Regulatory Auditor V, I perform rate audits and prepare miscellaneous filings as ordered by the Commission. In addition, I review all exhibits and testimony on assigned issues, develop accounting adjustments and issue positions which are supported by workpapers and written and oral testimony. For cases that do not require prepared testimony, I prepare Staff Recommendation Memorandums.

Cases I have been assigned are shown in the following table:

<b>Date Filed</b>	<b>Case/Tracking Number</b>	<b>Company Name - Issue</b>
	ER-2016-0285	Kansas City Power & Light Company (Electric Rate Case)-pending
7/15/2016-Direct 8/15/2016-Rebuttal 9/02/2016-Surrebuttal	ER-2016-0156-Stipulated	KCP&L Greater Missouri Operations Company (Electric Rate Case)
2/09/2016-Deposition	EA-2015-0256-Contested	KCP&L Greater Missouri Operations Company (Solar CCN)
12/29/2015 Staff Memorandum	WO-2016-0098	Missouri American Water Company- Infrastructure Service Replacement Surcharge (ISRS)



Date Filed	Case/Tracking Number	Company Name - Issue
4/02/2015-Direct 5/07/2015-Rebuttal 6/05/2015-Surrebuttal 7/15/2015-True Up Rebuttal	ER-2014-0370-Contested	Kansas City Power & Light Company (Electric Rate Case)
5/01/2014-Direct	HR-2014-0066-Stipulated	Veolia Energy Kansas City, Inc. (Steam Rate Case)
1/23/2014-Direct 4/01/2014-Surrebuttal	GR-2014-0007-Stipulated	Missouri Gas Energy Company (Gas Rate Case)
4/09/2013 Staff Memorandum	GO-2013-0391	Missouri Gas Energy - Infrastructure Service Replacement Surcharge (ISRS)
2/01/13 Staff Memorandum	WM-2013-0329	Bilyeu Ridge Water Company, LLC (Water Sale Case)
8/09/2012-Direct 9/12/12-Rebuttal 10/10/12-Surrebuttal	ER-2012-0175 Contested	KCP&L Greater Missouri Operations Company (Electric Rate Case)
8/02/2012-Direct 9/05/2012-Rebuttal 10/08/2012-Surrebuttal	ER-2012-0174 Contested	Kansas City Power & Light Company (Electric Rate Case)
4/20/2012 Staff Memorandum	WM-2012-0288	Valley Woods Water Company, Inc. (Water Sale Case)
1/06/2012 Staff Memorandum	GO-2012-0144	Missouri Gas Energy - Infrastructure Service Replacement Surcharge (ISRS)
8/08/2011-Direct	HR-2011-0241-Stipulated	Veolia Energy Kansas City, Inc. (Steam Rate Case)
11/17/2010-Direct 12/15/2010-Rebuttal 1/05/2011-Surrebuttal	ER-2010-0356 Contested	KCP&L Greater Missouri Operations Company (Electric Rate Case)
11/10/2010-Direct 12/08/2010-Rebuttal 1/05/2011-Surrebuttal	ER-2010-0355 Contested	Kansas City Power & Light Company (Electric Rate Case)

Date Filed	Case/Tracking Number	Company Name - Issue
12/22/2011 Staff Memorandum	SA-2010-0219	Canyon Treatment Facility, LLC (Certificate Case)
6/07/2010 Staff Memorandum	WR-2010-0202	Stockton Water Company (Water Rate Case)
4/02/2010 Staff Memorandum	SR-2010-0140	Valley Woods Water Company (Water Rate Case)
4/02/2010 Staff Memorandum	WR-2010-0139	Valley Woods Water Company (Sewer Rate Case)
1/14/2010-Direct	SR-2010-0110	Lake Region Water and Sewer (Sewer Rate Case)
1/14/2010-Direct	WR-2010-0111	Lake Region Water and Sewer (Water Rate Case )
8/12/2009-Direct	GR-2009-0355 Stipulated	Missouri Gas Energy (Gas Rate Case)
2/13/2009-Direct 3/13/2009-Rebuttal 4/09/2009-Surrebuttal	ER-2009-0090 Global Settlement	KCP&L Greater Missouri Operations Company (Electric Rate Case)
2/13/2009-Direct 3/13/2009-Rebuttal 4/09/2009-Surrebuttal	HR-2009-0092 Global Settlement	KCP&L Greater Missouri Operations Company (Steam Rate Case)
2/11/2009-Direct 3/11/2009-Rebuttal 4/07/2009-Surrebuttal	ER-2009-0089 Global Settlement	Kansas City Power & Light Company (Electric Rate Case)
8/01/2008	HR-2008-0300 Stipulated	Trigen Kansas City Energy Corporation (Steam Rate Case)
4/28/2008	QW-2008-0003	Spokane Highlands Water Company (Water Rate Case)
12/17/2007	GO-2008-0113	Missouri Gas Energy - Infrastructure Service Replacement Surcharge (ISRS)

## Keith Majors

### Educational and Employment Background and Credentials

I am currently employed as a Utility Regulatory Auditor IV for the Missouri Public Service Commission (Commission). I was employed by the Commission in June 2007. I earned a Bachelor of Science degree in Accounting from Truman State University in May 2007.

As a Utility Regulatory Auditor, I perform rate audits and prepare miscellaneous filings as ordered by the Commission. In addition, I review all exhibits and testimony on assigned issues, develop accounting adjustments and issue positions which are supported by workpapers and written testimony. For cases that do not require prepared testimony, I prepare Staff Recommendation Memorandums.

Cases I have been assigned are shown in the following table:

Case Name	Case Number	Issues	Exhibit
KCP&L GMO	ER-2016-0156	Income Taxes, Pension & OPEB	Staff Report, Rebuttal, Surrebuttal
KCP&L & KCP&L GMO	EC-2015-0309	Affiliate Transactions, Allocations	Surrebuttal Testimony
KCP&L	EU-2015-0094	DOE Nuclear Waste Fund Fees	Direct Testimony
KCP&L	ER-2014-0370	Income Taxes, Pension & OPEB, Revenues	Staff Report, Rebuttal, Surrebuttal
KCP&L	EU-2014-0255	Construction Accounting	Rebuttal Testimony
Veolia Kansas City	HR-2014-0066	Income Taxes, Revenues, Corporate Allocations	Staff Report
Missouri Gas Energy	GR-2014-0007	Corporate Allocations, Pension & OPEB, Incentive Compensation, Income Taxes	Staff Report, Rebuttal, Surrebuttal
Missouri Gas Energy ISRS	GO-2013-0391	ISRS	Staff Memorandum
KCP&L & KCP&L GMO	ER-2012-0174 & ER-2012-0175	Acquisition Transition Costs, Fuel, Legal and Rate Case Expense	Staff Report, Rebuttal, Surrebuttal
Noel Water Sale Case	WO-2011-0328	Sale Case Evaluation	Staff Recommendation
Missouri Gas Energy ISRS	GO-2011-0269	ISRS	Staff Memorandum
KCP&L & KCP&L GMO	ER-2010-0355 & ER-2010-0356	Acquisition Transition Costs, Rate Case Expense	Staff Report, Rebuttal, Surrebuttal
KCP&L Construction Audit & Prudence Review	EO-2010-0259	AFUDC, Property Taxes	Staff Report
KCP&L, KCP&L GMO, & KCP&L GMO – Steam	ER-2009-0089, ER- 2009-0090, & HR- 2009-0092	Payroll, Employee Benefits, Incentive Compensation	Staff Report, Rebuttal, Surrebuttal
Spokane Highlands Water Company	WR-2008-0314	Plant, CIAC	Staff Recommendation
Trigen Kansas City	HR-2008-0300	Fuel Inventories, Rate Base Items, Rate Case Expense, Maintenance	Staff Report
Missouri Gas Energy ISRS	GO-2008-0113	ISRS	Staff Memorandum

**Erin L. Maloney, P.E.**

Missouri Public Service Commission, Jefferson City, MO  
January 2005 – Present  
Utility Regulatory Engineer I  
Commission Staff/Utility Operations/ Engineering Analysis

**Previous Position**

Electronic Data Systems, Kansas City, Missouri  
August 1995 – November 2002  
System Engineer

**Education**

Bachelor of Science Mechanical Engineering  
University of Las Vegas, Nevada, May 1992

**Previous Testimony Filed Before the Commission**

<b>File Number</b>	<b>Type of Testimony</b>	<b>Issue</b>
ER-2016-0156	Staff Report	Purchased Power Prices
ER-2016-0023	Staff Report	Construction Audit, In-Service Criteria, Riverton 12 Combined Cycle Conversion
ER-2016-0023	Staff Report	Purchased Power Prices
ER-2014-0351	Staff Report	Purchased Power Prices
ER-2014-0258	Staff Report	Purchased Power Prices
HR-2014-0066	Direct, Rebuttal	Production Adjustment Clause
EO-2012-0135	Rebuttal	Kansas City Power & Light Company Application for Continued Participation in Southwest Power Pool Inc. Regional Transmission Organization
EO-2012-0136	Rebuttal	KCP&L Greater Missouri Operations Inc. Application for Continued Participation in Southwest Power Pool Inc. Regional Transmission Organization
ER-2012-0175	Staff Report	GMO Rate District Fuel Allocation
ER-2012-0174	Staff Report, Rebuttal	Purchased Power Prices, Missouri Flood AAO
ER-2012-0166	Staff Report	Fuel and Purchased Power Prices

Maloney  
cont'd Previous Testimony Filed Before the Commission

File Number	Type of Testimony	Issue
ER-2011-0028	Rebuttal	Fuel and Purchased Power Prices
ER-2011-0028	Staff Report	Fuel and Purchased Power Prices
ER-2010-0356	Staff Report	Purchased Power Prices
ER-2010-0355	Staff Report, Surrebuttal	Purchased Power Prices
ER-2010-0036	Staff Report, Rebuttal	Fuel and Purchased Power Prices
ER-2009-0089	Staff Report	Allocation Factor for Fuel & Purchased Power
ER-2009-0090	Staff Report	Purchased Power Prices
ER-2008-0318	Staff Report, Rebuttal, Surrebuttal	Fuel and Purchased Power Prices
ER-2008-0093	Staff Report	System Losses and Jurisdictional Demand and Energy Allocation
ER-2007-0291	Staff Report	System Losses and Jurisdictional Demand and Energy Allocation
ER-2007-0004	Direct	System Losses and Jurisdictional Demand and Energy Allocation
ER-2007-0002	Direct	System Losses and Jurisdictional Demand and Energy Allocation
ER-2006-0314	Direct, Rebuttal, Surrebuttal, True-up Direct	System Losses and Jurisdictional Demand and Energy Allocation
ER-2006-0315	Direct	System Losses and Jurisdictional Demand and Energy Allocation
ER-2005-0436	Direct	Reliability

## BYRON M. MURRAY CREDENTIALS

### PRESENT POSITION

I am currently employed as a Regulatory Economist III in the Tariff/Rate Design Unit, Operational Analysis Department within the Commission Staff Division of the Missouri Public Service Commission. I have been employed at the Missouri Public Service Commission since October 2013.

### EDUCATION

I received my Bachelor of Science in Agricultural Business from Lincoln University in Jefferson City, MO in May 1997. I completed my Master of Public Administration from the University of Missouri – Columbia in Columbia, MO in May 2004.

### EMPLOYMENT BACKGROUND

Prior to joining the Commission, I worked as an Energy Planner II for the Division of Energy, Department of Economic Development. I was a Unit Chief/Fiscal and Administrative Manager, in the Water Protection Program of the Department of Natural Resources responsible for the management of fee collections. I also worked as a Management Analyst Specialist II in the Administration Division and the Solid Waste Management Program of the Department of Natural Resources. I was employed as a Planner II/State Project Manager for the Scrap Tire Unit in the Solid Waste Management Program of the Department of Natural Resources. I have approximately 23 years of professional regulatory enforcement experience with the State of Missouri.

This will be my third participation in a rate case before the commission. Please see the table below of case proceedings:

Case Number	Company Name	Testimony Type	Type of Case	Issue
ER-2014-0370	KCP&L	Direct/Rebuttal/Surrebuttal	Electric Rate Case	Tariff/Rate Design
ET-2016-0246	Ameren Missouri	Rebuttal	Electric Vehicle Tariff	Tariff/Rate Design for Electric Vehicle Charging Station Network
EW-2016-0123	Electric Vehicle Working Docket	Staff Report	Working Group	Tariff/Rate Design Electric Vehicle Charging Station
EW-2016-0313	A Working Case To Consider Policies To Improve Electric Utility Regulation	Staff Report	Working Group	Tariff / Rate Design to improve regulation
GA-2017-0016	Summit Natural Gas of Missouri	Staff Recommendation	Working Group	CCN Application

Antonija Nieto

**Educational and Employment Background and Credentials**

I am currently employed as a Utility Regulatory Auditor for the Missouri Public Service Commission ("Commission"). Previously I was employed by Lauterbach, Borschow and Company, P. C. in El Paso, TX as an auditor specializing in financial institutions audits from January 2008 to November 2009. I earned a Bachelor of Accounting from New Mexico State University in December 2006 and a Master of Accounting with minor in Management, also from New Mexico State University in December 2007. I have been employed by the Commission since October 2016.

As a Utility Regulatory Auditor, I perform rate audits and prepare miscellaneous filings for consideration by the Commission. In addition, I review all exhibits and testimony on assigned issues, develop accounting adjustments and issue positions which are supported by workpapers and written testimony. For cases that do not require prepared testimony, I prepare Staff Recommendation Memorandums.

Cases in which I have participated and the scope of my contributions are listed below:

Case/Tracking Number	Company Name- Type of Case; Issues
ER-2016-0285	Kansas City Power & Light -- EMS Run, Insurance expense, Amortization, PSC Assessment, Lease expense

KEENAN PATTERSON, PE

Education and Employment Background and Credentials

I am currently employed as a Utility Engineering Specialist for the Missouri Public Service Commission (Commission). I have been employed by the Commission in this position since August 2015.

I am a graduate of the University of Missouri where I earned the degrees of Bachelor of Science in Agricultural Engineering and Master of Public Administration. In addition, I am licensed as a Professional Engineer in Missouri.

Prior to working for the Commission I was employed as an Environmental, Health and Safety Coordinator by Pittsburgh Corning Corporation from 2013 to 2015. I have also been employed as an Associate at The Cadmus Group from 2010 to 2013, an Environmental Engineer at GREDELL Engineering Resources in 2009, the owner of Infra Consulting from 2006 to 2013, and various environmental engineering positions at the Missouri Department of Natural Resources from 1994 to 2006.

Cases I have been assigned to or that I have participated in are listed below.

Case Number	Company	Issues
WO-2017-0012	Missouri American Water Company	Depreciation
SR-2016-0202	Raccoon Creek Utility Operating Company, Inc.	Depreciation
WM-2016-0169	Woodland Manor Water Company, LLC	Depreciation
SR-2016-0110 WR-2016-0109	Roy-L Utilities, Inc.	Depreciation



Charles T. Poston, P.E.

Current Position

I am employed as a Utility Regulatory Engineer I in the Engineering Analysis Unit, Operational Analysis Department, Commission Staff Division, of the Missouri Public Service Commission.

Education and Prior Work Experience

I received a Bachelor of Science degree in Civil Engineering from the University of Missouri-Columbia in 2006 and a Master of Science degree in Nuclear Engineering from the same institution in 2008.

From May 2008 through August 2013 I was employed by Ameren Missouri as an engineer in the Safety Analysis and Reactor Engineering Departments at the Callaway Energy Center. My duties consisted of post-accident thermo-hydraulic analyses, radiation dose calculations, atmospheric dispersion estimates for radiological and chemical hazards, and root cause determinations following operational faults in mechanical and administrative systems.

From September 2013 to March 2015, I worked as a Utility Engineering Specialist II in the Safety Engineering Unit of the Missouri Public Service Commission. In that capacity I conducted comprehensive gas safety inspections and participated in incident investigations following natural gas explosions.

I have been a licensed professional engineer in the State of Missouri since January 2015.

**Charles T. Poston, P.E.**

**Case History:**

<b>Case Number</b>	<b>Utility</b>	<b>Type</b>	<b>Issue(s)</b>
EO-2015-0320	Ameren Missouri	Staff Recommendation	SO <sub>2</sub> and NO <sub>x</sub> emission allowance trading and reporting
GS-2014-0226	Laclede Gas Company	Staff Report	Staff investigation following natural gas explosion
ER-2016-0023	Empire District Electric Company	Staff Report	Heat Rate Testing
ER-2016-0156	KCP&L Greater Missouri Operations Company	Staff Report	Fuel and Purchased Power Expense Lake Road Allocation Factors Planned and Forced Outages Heat Rate Testing
EC-2016-0230	KCP&L Greater Missouri Operations Company	Staff Report and Memorandum	Formal Complaint, RE: "Smart" meters

## David C. Roos

**Present Position:** I am a Regulatory Economist III in the Energy Resource Department, Commission Staff Division of the Missouri Public Service Commission.

### **Educational Background and Work Experience:**

In May 1983, I graduated from the University of Notre Dame, Notre Dame, Indiana, with a Bachelor of Science Degree in Chemical Engineering. I also graduated from the University of Missouri in December 2005, with a Master of Arts in Economics. I have been employed at the Missouri Public Service Commission as a Regulatory Economist III since March 2006. I began my employment with the Commission in the Economics Analysis section where my responsibilities included class cost of service and rate design. In 2008, I moved to the Energy Resource Analysis section where my testimony and responsibility topics include energy efficiency, resource analysis, and fuel adjustment clauses. Prior to joining the Public Service Commission I taught introductory economics and conducted research as a graduate teaching assistant and graduate research assistant at the University of Missouri. Prior to the University of Missouri, I was employed by several private firms where I provided consulting, design, and construction oversight of environmental projects for private and public sector clients.

### **Previous Cases**

<u>Company</u>	<u>Case No.</u>
Empire District Electric Company	ER-2006-0315
AmerenUE	ER-2007-0002
Aquila Inc.	ER-2007-0004
Kansas City Power and Light Company	ER-2007-0291
AmerenUE	EO-2007-0409
Empire District Electric Company	ER-2008-0093
Kansas City Power and Light Company	ER-2008-0034
Greater Missouri Operations	HR-2008-0340

Previous Cases

<u>Company</u>	<u>Case No.</u>
Greater Missouri Operations	ER-2009-0091
Greater Missouri Operations	EO-2009-0115
Greater Missouri Operations	EE-2009-0237
Greater Missouri Operations	EO-2009-0431
Empire District Electric Company	ER-2010-0105
Greater Missouri Operations	EO-2010-0002
AmerenUE	ER-2010-0036
AmerenUE	ER-2010-0044
Empire District Electric Company	EO-2010-0084
Empire District Electric Company	ER-2010-0105
AmerenUE	ER-2010-0165
Greater Missouri Operations	EO-2010-0167
AmerenUE	EO-2010-0255
Greater Missouri Operations (Aquila)	EO-2008-0216
Ameren Missouri	ER-2011-0028
Empire District Electric Company	EO-2011-0066
Empire District Electric Company	EO-2011-0285
Ameren Missouri	EO-2012-0074
Greater Missouri Operations	EO-2012-0009
Ameren Missouri	EO-2012-0142
Ameren Missouri	ER-2012-0166
Greater Missouri Operations	EO-2013-0325
Ameren Missouri	EO-2013-0407
Empire District Electric Company	EO-2014-0057
Greater Missouri Operations	EO-2014-0256
Empire District Electric Company	ER-2014-0351
Greater Missouri Operations	EO-2015-0252
Kansas City Power and Light Company	EO-2015-0254
Empire District Electric Company	ER-2015-0214
Greater Missouri Operations	EO-2016-0053
Empire District Electric Company	ER-2016-0023
KCP&L Greater Missouri Operations Company	ER-2016-0156

## Michael L. Stahlman

### Education

- 2009 M. S., Agricultural Economics, University of Missouri, Columbia.  
2007 B.A., Economics, Summa Cum Laude, Westminster College, Fulton, MO.

### Professional Experience

- 2010 - Regulatory Economist, Missouri Public Service Commission  
2007 – 2009 Graduate Research Assistant, University of Missouri  
2008 Graduate Teaching Assistant, University of Missouri  
2007 American Institute for Economic Research (AIER) Summer  
Fellowship Program  
2006 Price Analysis Intern, Food and Agricultural Policy Research Institute  
(FAPRI), Columbia, MO  
2006 Legislative Intern for State Representative Munzlinger  
2005 – 2006 Certified Tutor in Macroeconomics, Westminster College, Fulton, MO  
1998 – 2004 Engineering Watch Supervisor, United States Navy

### Expert Witness Testimony

- Union Electric Company d/b/a AmerenUE GR-2010-0363  
In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File  
Tariffs Increasing Rates for Natural Gas Service Provided to Customers in the  
Company's Missouri Service Area
- Union Electric Company d/b/a Ameren Missouri GT-2011-0410  
In the Matter of the Union Electric Company's (d/b/a Ameren Missouri) Gas  
Service Tariffs Removing Certain Provisions for Rebates from Its Missouri Energy  
Efficient Natural Gas Equipment and Building Shell Measure Rebate Program
- KCP&L Great Missouri Operations Company EO-2012-0009  
In the Matter of KCP&L Greater Missouri Operations Company's Notice of Intent  
to File an Application for Authority to Establish a Demand-Side Programs  
Investment Mechanism
- Union Electric Company d/b/a Ameren Missouri EO-2012-0142  
In the Matter of Union Electric Company d/b/a Ameren Missouri's Filing to  
Implement Regulatory Changes Furtherance of Energy Efficiency as Allowed by  
MEEIA
- Kansas City Power & Light Company EO-2012-0323  
In the Matter of the Resource Plan of Kansas City Power & Light Company
- KCP&L Great Missouri Operations Company EO-2012-0324  
In the Matter of the Resource Plan of KCP&L Greater Missouri Operations  
Company
- Kansas City Power & Light Company, KCP&L Great Missouri Operations Company, and Transource Missouri EA-2013-0098  
EO-2012-0367  
In the Matter of the Application of Transource Missouri, LLC for a Certificate of  
Convenience and Necessity Authorizing it to Construct, Finance, Own, Operate,  
and Maintain the Iatan-Nashua and Sibley-Nebraska City Electric Transmission  
Projects

**cont'd Expert Witness Testimony**  
**Michael L. Stahlman**

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Kansas City Power & Light Company	EO-2012-0135
KCP&L Great Missouri Operations Company	EO-2012-0136
In the Matter of the Application of Kansas City Power & Light Company [KCP&L Great Missouri Operations Company] for Authority to Extend the Transfer of Functional Control of Certain Transmission Assets to the Southwest Power Pool, Inc.	
Kansas City Power & Light Company	EU-2014-0077
KCP&L Great Missouri Operations Company	
In the Matter of the Application of Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company for the Issuance of an Accounting Authority Order relating to their Electrical Operations and for a Contingent Waiver of the Notice Requirement of 4 CSR 240-4.020(2)	
Kansas City Power & Light Company	EO-2014-0095
In the Matter of Kansas City Power & Light Company's Notice of Intent to File an Application for Authority To Establish a Demand-Side Programs Investment Mechanism	
Veolia Energy Kansas City, Inc	HR-2014-0066
In the Matter of Veolia Energy Kansas City, Inc for Authority to File Tariffs to Increase Rates	
Grain Belt Express Clean Line, LLC	EA-2014-0207
In the Matter of the Application of Grain Belt Express Clean Line LLC for a Certificate of Convenience and Necessity Authorizing It to Construct, Own, Operate, Control, Manage, and Maintain a High Voltage, Direct Current Transmission Line and an Associated Converter Station Providing an Interconnection on the Maywood - Montgomery 345 kV Transmission Line	
Union Electric Company d/b/a Ameren Missouri	ER-2014-0258
In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariff to Increase Its Revenues for Electric Service	
Empire District Electric Company	ER-2014-0351
In the Matter of The Empire District Electric Company for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area	
Kansas City Power & Light Company	ER-2014-0370
In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service	
Kansas City Power & Light Company	EO-2014-0240
In the Matter of Kansas City Power & Light Company's Filing for Approval of Demand-Side Programs and for Authority to Establish a Demand-Side Programs Investment Mechanism	
KCP&L Great Missouri Operations Company	EO-2014-0241
In the Matter of KCP&L Greater Missouri Operations Company's Filing for Approval of Demand-Side Programs and for Authority to Establish a Demand-Side Programs Investment Mechanism	

**cont'd Expert Witness Testimony**  
**Michael L. Stahlman**

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- Ameren Transmission Company of Illinois EA-2015-0146  
In the Matter of the Application of Ameren Transmission Company of Illinois for Other Relief or, in the Alternative, a Certificate of Public Convenience and Necessity Authorizing it to Construct, Install, Own, Operate, Maintain and Otherwise Control and Manage a 345,000-volt Electric Transmission Line from Palmyra, Missouri to the Iowa Border and an Associated Substation Near Kirksville, Missouri
- Empire District Electric Company ER-2016-0023  
In the Matter of The Empire District Electric Company's Request for Authority to Implement a General Rate Increase for Electric Service
- KCP&L Great Missouri Operations Company ER-2016-0156  
In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service

**Selected Manuscripts**

- Stahlman, Michael and Laura M.J. McCann. "Technology Characteristics, Choice Architecture and Farmer Knowledge: The Case of Phytase." *Agriculture and Human Values* (2012) 29: 371-379.
- Stahlman, Michael. "The Amoral of Signals." Awarded in top 50 authors for SEVEN Fund essay competition, "The Morality of Profit."

**Selected Posters**

- Stahlman, Michael, Laura M.J. McCann, and Haluk Gedikoglou. "Adoption of Phytase by Livestock Farmers." Selected poster at the American Agricultural Economics Association Annual Meeting, Orlando, FL, July 27-29, 2008. Also presented at the USDA/CSREES Annual Meeting in St. Louis, MO in February 2009.
- McCann, Laura, Haluk Gedikoglu, Bob Broz, John Lory, Ray Massey, and Michael Stahlman. "Farm Size and Adoption of BMPs by AFOs." Selected poster at the 5<sup>th</sup> National Small Farm Conference in Springfield, IL in September 2009.

**Non-Peer-Reviewed Works**

- Poole-King, Contessa, Henry Warren, and Michael Stahlman. "Forecasters Predicting Cold, Wet Winter For Most Of Midwest." *PSConnection* (Fall 2013) 3(7):3-4.
- Poole-King, Contessa, Henry Warren, and Michael Stahlman. "Low Income Weatherization Programs Provides Services To Help Consumers." *PSConnection* (Fall 2013) 3(7):5-6.

Michael Jason Taylor

Educational and Employment Background and Credentials

I am currently employed as a Utility Regulatory Auditor for the Missouri Public Service Commission (Commission). I was employed by the Commission in April 2016. I earned a Bachelor of Science degree; dual majored in Accounting and Finance from Missouri Western State University in May 2007.

As a Utility Regulatory Auditor, I perform rate audits and prepare miscellaneous filings as ordered by the Commission. In addition, I review all exhibits and testimony on assigned issues, develop accounting adjustments and issue positions which are supported by work papers and written testimony. For cases that do not require prepared testimony, I prepare Staff Recommendation Memorandums.

Cases I have been assigned are shown in the following table:

Case Filed	Case/Tracking Number	Company Name - Issues
July 1, 2016	ER-2016-0285	Kansas City Power & Light Company (Rate Case) <ul style="list-style-type: none"><li>• Accounts Receivable Bank Fees</li><li>• Customer Advances</li><li>• Customer Deposits</li><li>• Debit/Credit Card Acceptance Program</li><li>• Dues and Donations</li><li>• Material and Supplies</li><li>• Prepayments</li><li>• Injuries and Damages</li><li>• Maintenance – Iatan 2 O&amp;M Expenses/Tracker</li><li>• Maintenance – Wolf Creek Mid-Cycle Outage</li><li>• Maintenance – Wolf Creek Nuclear Refueling Outage</li><li>• Maintenance – Meter Replacement O&amp;M</li><li>• Maintenance – Generation, Transmission, Distribution, Nuclear, Normalization adjustments</li></ul>
February 23, 2016	ER-2016-0156	KCP&L Greater Missouri Operations (Rate Case) <ul style="list-style-type: none"><li>• Advertising</li><li>• Dues &amp; Donations</li><li>• Leases</li><li>• Plant Amortizations</li><li>• PSC Assessment</li></ul>



## **Credentials and Background of**

### **Seoung Joun Won**

I am currently employed as a Regulatory Economist III in the Tariff/Rate Design Unit of the Operational Analysis Department, Commission Staff Division of the Missouri Public Service Commission. I have been employed at the Missouri Public Service Commission since May 2010.

I received my Bachelor of Arts, Master of Arts, and Doctor of Philosophy in Mathematics from Yonsei University in Seoul, South Korea, and earned my Doctor of Philosophy in Economics from the University of Missouri - Columbia. Also, I passed several certificate examinations for Finance Specialist in South Korea such as Enterprise Resource Planning Consultant, Financial Risk Management, Derivatives Consultant, and Financial Planner.

Prior to joining the Commission, I taught both undergraduate and graduate level mathematics at the Korean Air Force Academy and Yonsei University for 13 years. I served as the director of the Education and Technology Research Center in NeoEdu for 5 years.

My duties at the Commission include managing weather data, calculating normal weather, weather normalization and analyzing revenues and developing rate designs.

## List of Previous Testimony Filed

### Seoung Joun Won

Case/File Number	Company	Issue
ER-2010-0355	Kansas City Power & Light Co.	Weather Variables Revenue
ER-2010-0356	KCP&L Greater Missouri Operations Co.	Weather Variables
GR-2010-0363	Union Electric Co., d/b/a Ameren Missouri	Weather Variables
ER-2011-0028	Union Electric Co., d/b/a Ameren Missouri	Weather Variables Revenue
ER-2011-0004	Empire District Electric Co.	Weather Variables Revenue
HR-2011-0028	Veolia Energy Kansas City, Inc.	Weather Variables
ER-2012-0166	Union Electric Co., d/b/a Ameren Missouri	Weather Variables Revenue
ER-2012-0174	Kansas City Power & Light Co.	Weather Variables Revenue
ER-2012-0175	KCP&L Greater Missouri Operations Co.	Weather Variables
ER-2012-0345	Empire District Electric Co.	Weather Variables Revenue
GR-2013-0171	Laclede Gas Co.	Weather Variables
HR-2014-0066	Veolia Energy Kansas City, Inc.	Weather Variables Weather Normalization
GR-2014-0086	Summit Natural Gas of Missouri, Inc.	Weather Variables
GR-2014-0152	Liberty Utilities (Midstates Natural Gas) Corp.	Weather Variables
EC-2014-0223	Noranda Aluminum, Inc., et al, Complaint v. Union Electric Co., d/b/a Ameren Missouri	Weather Variables
ER-2014-0258	Union Electric Co., d/b/a Ameren Missouri	Weather & Normalization Net System Input

cont'd List of Previous Testimony Filed

**Seoung Joun Won**

<b>Case/File Number</b>	<b>Company</b>	<b>Issue</b>
ER-2014-0351	Empire District Electric Co.	Weather & Normalization Net System Input
ER-2014-0370	Kansas City Power & Light Co	Weather & Normalization Net System Input
ER-2016-0023	Empire District Electric Co.	Weather & Normalization Net System Input
ER-2016-0156	KCP&L Greater Missouri Operations Co.	Weather & Normalization Net System Input

**Work Related Publication**

Won, Seoung Joun, X. Henry Wang, and Henry E. Warren. "Climate normals and weather normalization for utility regulation." *Energy Economics* (2016).

## Educational Background, Research, and Related Business Experience

### J. Randall Woolridge

J. Randall Woolridge is a Professor of Finance and the Goldman, Sachs & Co. and Frank P. Smeal Endowed Faculty Fellow in Business Administration in the College of Business Administration of the Pennsylvania State University in University Park, PA. In addition, Professor Woolridge is Director of the Smeal College Trading Room and President and CEO of the Nittany Lion Fund, LLC.

Professor Woolridge received a Bachelor of Arts degree in Economics from the University of North Carolina, a Master of Business Administration degree from the Pennsylvania State University, and a Doctor of Philosophy degree in Business Administration (major area-finance, minor area-statistics) from the University of Iowa. He has taught Finance courses including corporation finance, commercial and investment banking, and investments at the undergraduate, graduate, and executive MBA levels.

Professor Woolridge's research has centered on empirical issues in corporation finance and financial markets. He has published over 35 articles in the best academic and professional journals in the field, including the *Journal of Finance*, the *Journal of Financial Economics*, and the *Harvard Business Review*. His research has been cited extensively in the business press. His work has been featured in the *New York Times*, *Forbes*, *Fortune*, *The Economist*, *Barron's*, *Wall Street Journal*, *Business Week*, *Investors' Business Daily*, *USA Today*, and other publications. In addition, Dr. Woolridge has appeared as a guest to discuss the implications of his research on CNN's *Money Line*, CNBC's *Morning Call* and *Business Today*, and Bloomberg's *Morning Call*.

Professor Woolridge's stock valuation book, *The StreetSmart Guide to Valuing a Stock* (McGraw-Hill, 2003), was released in its second edition. He has also co-authored *Spinoffs and Equity Carve-Outs: Achieving Faster Growth and Better Performance* (Financial Executives Research Foundation, 1999) as well as a textbook entitled *Basic Principles of Finance* (Kendall Hunt, 2011).

Professor Woolridge has also consulted with corporations, financial institutions, and government agencies. In addition, he has directed and participated in university- and company-sponsored professional development programs for executives in 25 countries in North and South America, Europe, Asia, and Africa.

Over the past twenty-five years Dr. Woolridge has prepared testimony and/or provided consultation services in regulatory rate cases in the rate of return area in following states: Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Hawaii, Indiana, Kansas, Kentucky, Maryland, Massachusetts, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Washington, D.C. He has also testified before the Federal Energy Regulatory Commission.

**J. Randall Woolridge**

**Office Address**

302 Business Building  
The Pennsylvania State University  
University Park, PA 16802  
814-865-1160

**Home Address**

120 Haymaker Circle  
State College, PA 16801  
814-238-9428

**Academic Experience**

**Professor of Finance**, the Smeal College of Business Administration, the Pennsylvania State University (July 1, 1990 to the present).

**President, Nittany Lion Fund LLC**, (January 1, 2005 to the present)

**Director, the Smeal College Trading Room** (January 1, 2001 to the present)

**Goldman, Sachs & Co. and Frank P. Smeal Endowed University Fellow in Business Administration** (July 1, 1987 to the present).

**Associate Professor of Finance**, College of Business Administration, the Pennsylvania State University (July 1, 1984 to June 30, 1990).

**Assistant Professor of Finance**, College of Business Administration, the Pennsylvania State University (September, 1979 to June 30, 1984).

**Education**

**Doctor of Philosophy in Business Administration**, the University of Iowa (December, 1979).  
Major field: Finance.

**Master of Business Administration**, the Pennsylvania State University (December, 1975).

**Bachelor of Arts**, the University of North Carolina (May, 1973) Major field: Economics.

**Books**

James A. Miles and J. Randall Woolridge, *Spinoffs and Equity Carve-Outs: Achieving Faster Growth and Better Performance* (Financial Executives Research Foundation), 1999

Patrick Cusatis, Gary Gray, and J. Randall Woolridge, *The StreetSmart Guide to Valuing a Stock* (2<sup>nd</sup> Edition, McGraw-Hill), 2003.

J. Randall Woolridge and Gary Gray, *The New Corporate Finance, Capital Markets, and Valuation: An Introductory Text* (Kendall Hunt, 2003).

**Research**

Dr. Woolridge has published over 35 articles in the best academic and professional journals in the field, including the *Journal of Finance*, the *Journal of Financial Economics*, and the *Harvard Business Review*.

Matthew R. Young

**Educational and Employment Background and Credentials**

I am currently employed as a Utility Regulatory Auditor for the Missouri Public Service Commission (“Commission”). I earned a Bachelor of Liberal Arts from The University of Missouri – Kansas City in May 2009 and a Master of Science in Accounting, also from The University of Missouri – Kansas City, in December 2011. I have been employed by the Commission since July 2013.

As a Utility Regulatory Auditor, I perform rate audits and prepare miscellaneous filings for consideration by the Commission. In addition, I review all exhibits and testimony on assigned issues, develop accounting adjustments and issue positions which are supported by workpapers and written testimony. For cases that do not require prepared testimony, I prepare Staff Recommendation Memorandums.

Cases in which I have participated and the scope of my contributions are listed below:

<b>Case/Tracking Number</b>	<b>Company Name- Type of Case; Issues</b>
SR-2016-0202	<b>Raccoon Creek Utility Operating Company –</b> Rate Case; Rate Base.
ER-2016-0156	<b>KCP&amp;L Greater Missouri Operations –</b> Rate Case; Payroll, Payroll Benefits, Payroll Taxes, Incentive Compensation, Injuries and Damages, Insurance Expense, Property Tax Expense, Rate Case Expense.
SR-2016-0112	<b>Cannon Home Association –</b> Rate Case; Revenues and Expenses, Rate Base.
WR-2016-0109 SR-2016-0110	<b>Roy-L Utilities –</b> Rate Case; Revenues and Expenses, Rate Base.
WO-2016-0098	<b>Missouri American Water Company –</b> ISRS; ISRS Revenues.
WR-2015-0246	<b>Raytown Water Company –</b> Rate Case; Revenues and Expenses, Rate Base.
SC-2015-0152	<b>Central Rivers Wastewater Utility –</b> Complaint; Verification of amounts identified in Complaint.

Matthew R. Young

Case/Tracking Number	Company Name- Type of Case; Issues
WR-2015-0104	<b>Spokane Highlands Water Company –</b> Rate Case; Revenues and Expenses, Rate Base.
GR-2015-0026	<b>Laclede Gas Company –</b> ISRS; Plant Additions and Retirements, Contributions in Aid of Construction.
GR-2015-0025	<b>Missouri Gas Energy –</b> ISRS; Plant Additions and Retirements, Contributions in Aid of Construction.
WR-2015-0020	<b>Gascony Water Company –</b> Rate Case; Revenues and Expenses, Rate Base.
SM-2015-0014	<b>Raccoon Creek Utility Operating Company –</b> Sale Case; Rate Base, Acquisition Premium.
ER-2014-0370	<b>Kansas City Power &amp; Light –</b> Rate Case; Injuries & Damages, Insurance, Payroll, Payroll Benefits, Payroll Taxes, Property Taxes, Rate Case Expense.
SR-2014-0247	<b>Central Rivers Wastewater Utility –</b> Rate Case; Revenues and Expenses, Rate Base, Affiliated Transactions.
HR-2014-0066	<b>Veolia Energy Kansas City –</b> Rate Case; Payroll, Payroll Benefits, Payroll Taxes, Bonus Compensation, Property Taxes, Insurance Expense, Injuries & Damages Expense, Outside Services, Rate Case Expense.
GO-2014-0179	<b>Missouri Gas Energy –</b> ISRS; Plant Additions, Contributions in Aid of Construction.
GR-2014-0007	<b>Missouri Gas Energy –</b> Rate Case; Advertising & Promotional Items, Dues and Donations, Lobbying Expense, Miscellaneous Expenses, PSC Assessment, Plant in Service, Depreciation Expense, Depreciation Reserve, Prepayments, Materials & Supplies, Customer Advances, Customer Deposits, Interest on Customer Deposits.
SA-2014-0005	<b>Central Rivers Wastewater Utility –</b> Certificate Case; Revenue and Expenses, Plant in Service, Depreciation Reserve. Other Rate Base Items.

**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

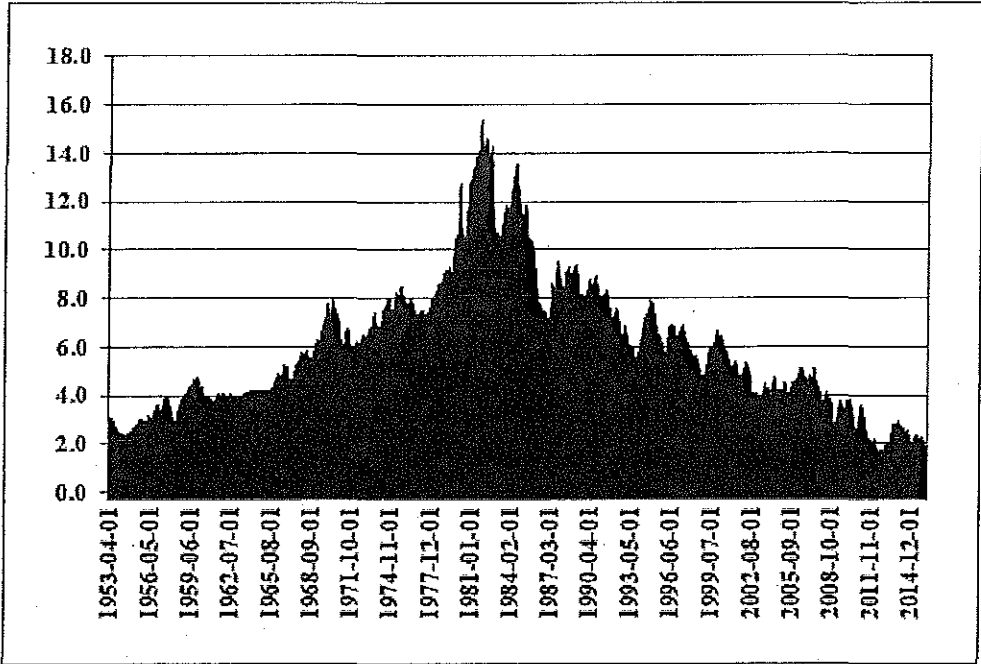
Exhibit JRW-1

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%

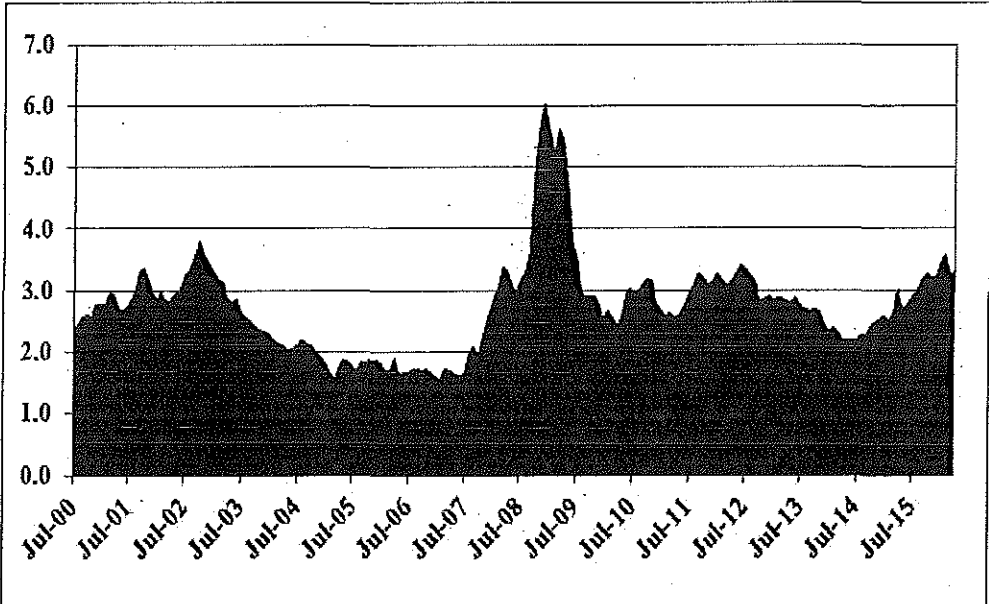
Exhibit JRW-2

Panel A  
Ten-Year Treasury Yields  
1953-Present



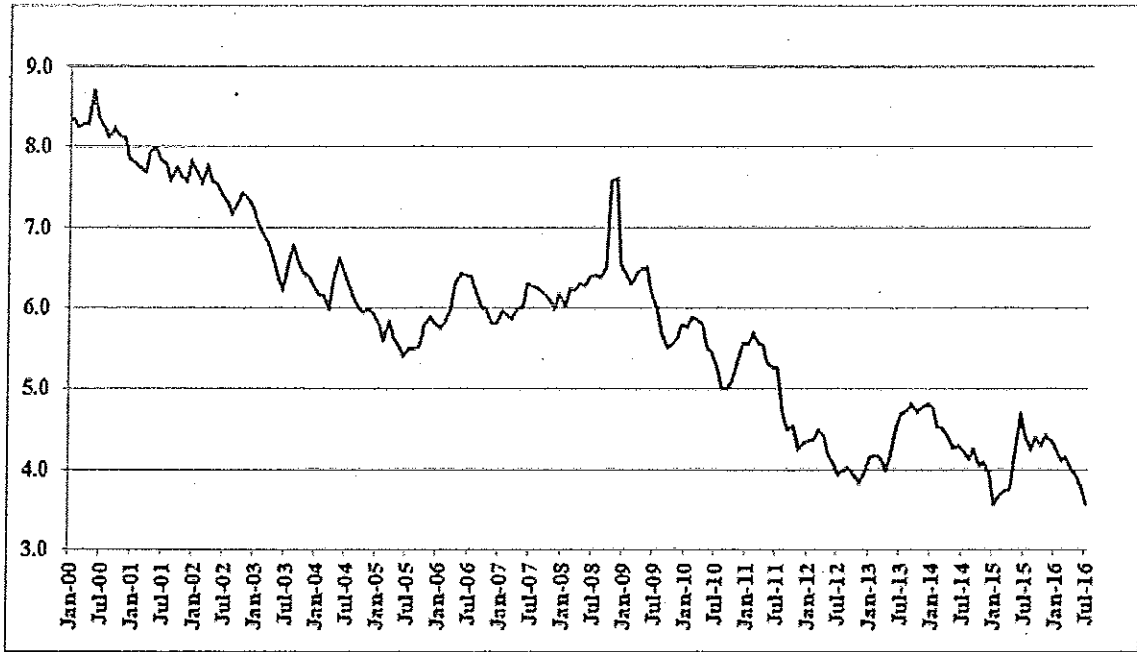
Source: <http://research.stlouisfed.org/fred2/data/GS10.txt>

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

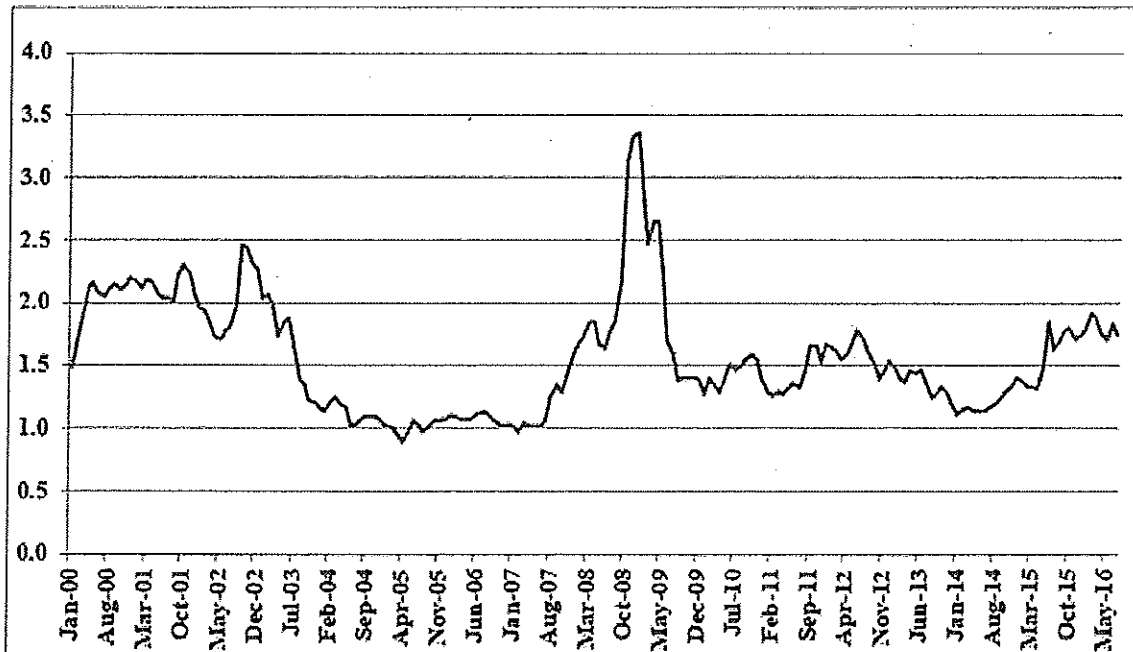


Source: Federal Reserve Bank of St. Louis, FRED Database.

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  
Heverly 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.

## Exhibit JRW-4

Kansas City Power & Light Company  
Value Line Risk MetricsPanel 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 (NYSE-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 (NYSE-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 (NYSE-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

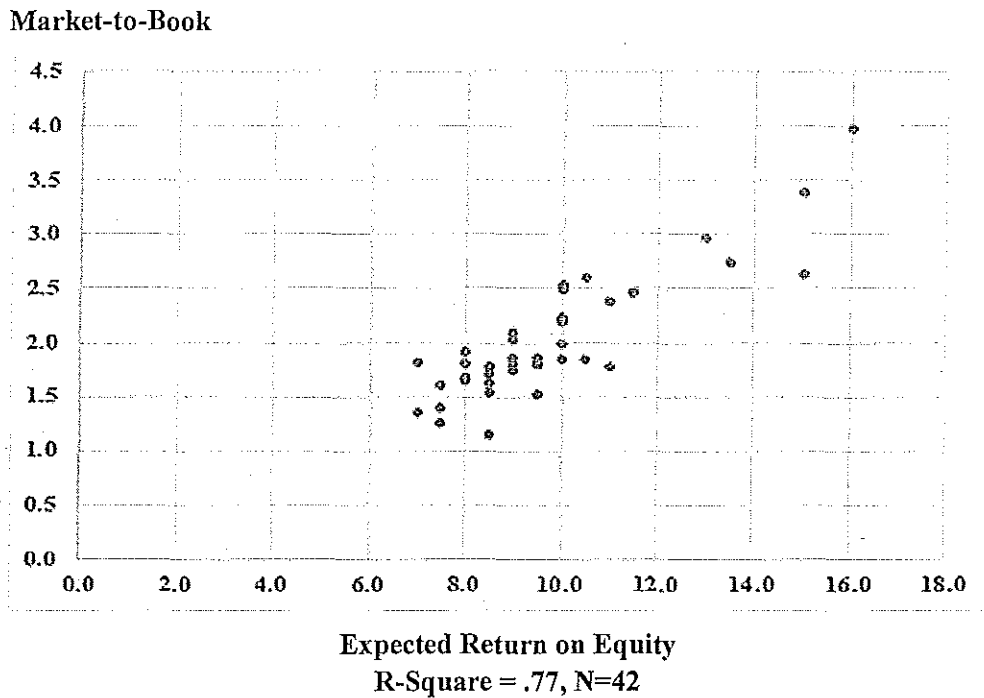
Capital Source	Capitalization Ratio	Cost Rate
Long-Term Debt	50.12%	5.51%
Common Equity	49.88%	
Total	100.00%	

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%	

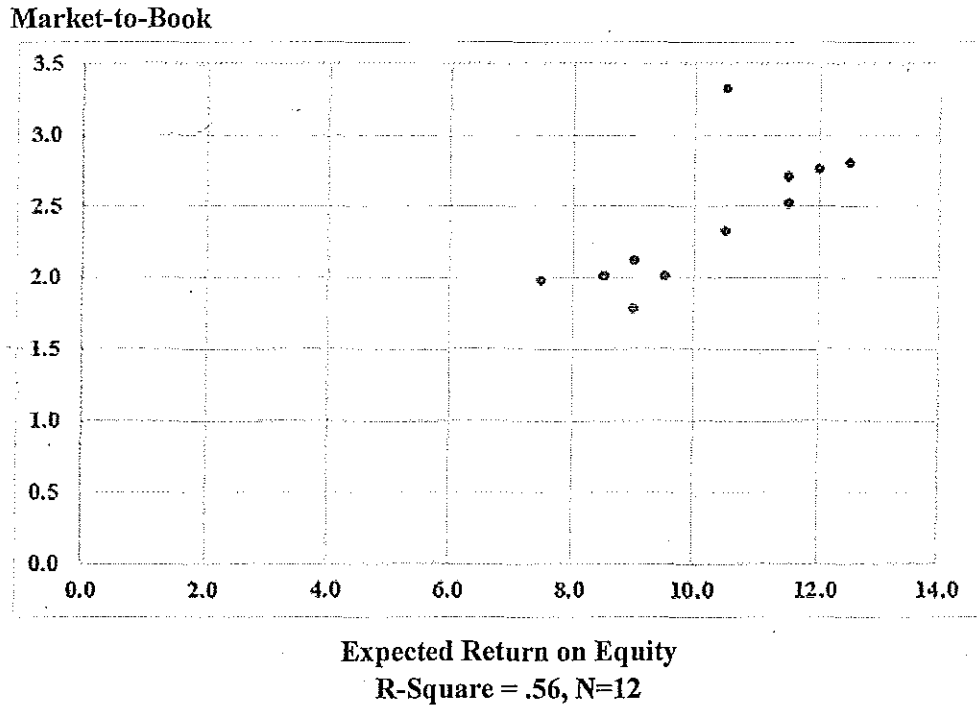
The Relationship Between Expected ROE and Market-to-Book Ratios

Exhibit JRW-6  
Electric Utilities  
Panel A



Source: Value Line Investment Survey, 2016.

Panel B  
Gas Companies

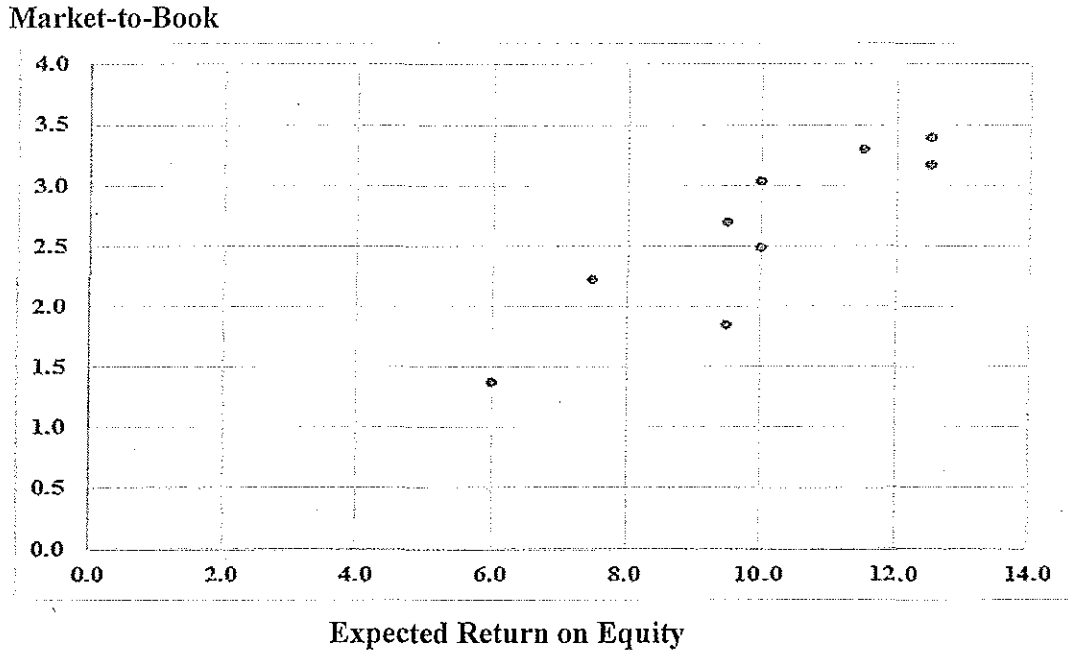


Source: Value Line Investment Survey, 2016.



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

Exhibit JRW-6  
Water Companies  
Panel C

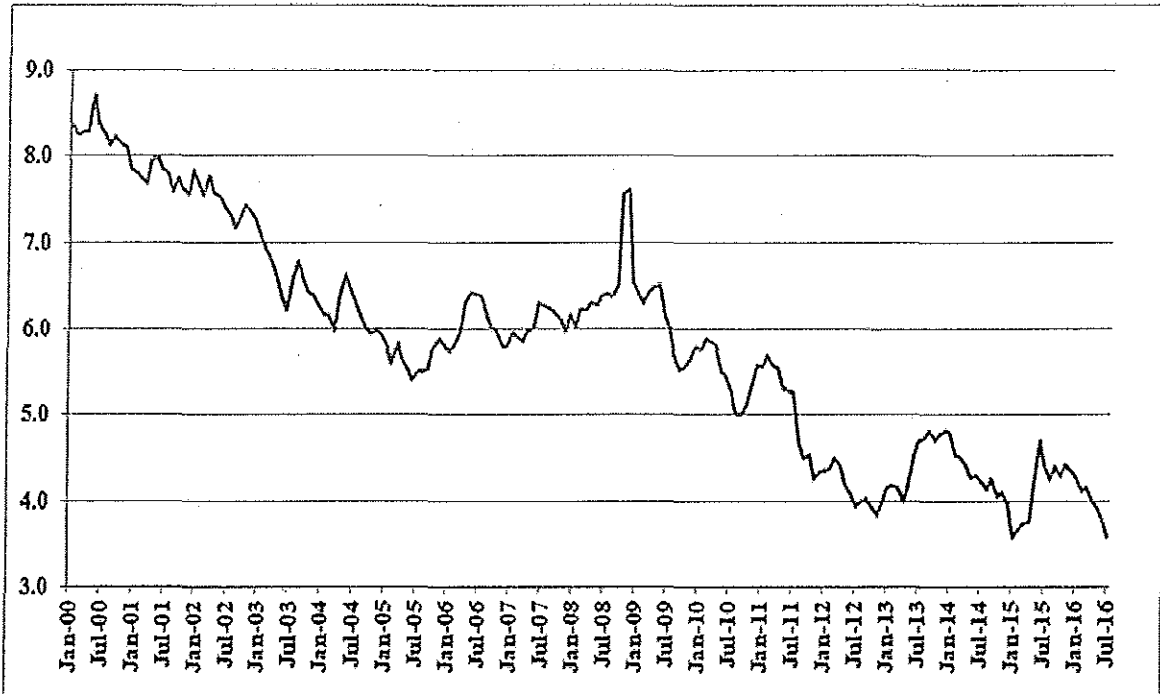


Expected Return on Equity

R-Square = .75, N=9

Source: *Value Line Investment Survey*, 2016.

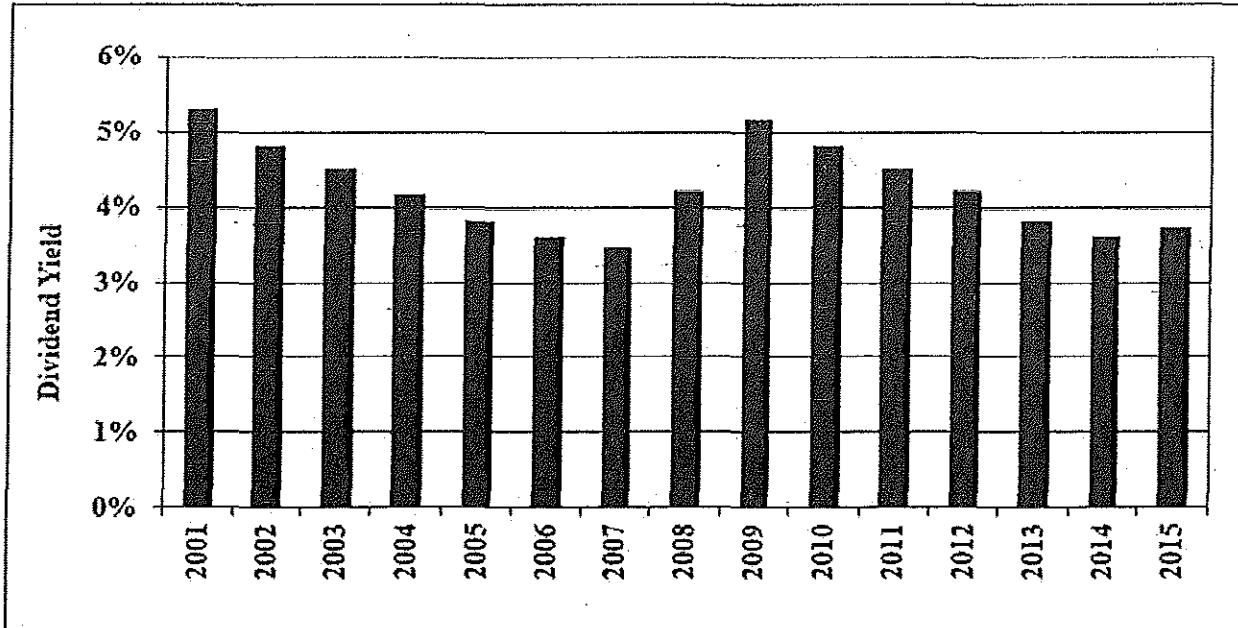
Exhibit JRW-7  
Long-Term 'A' Rated Public Utility Bonds



Data Source: Mergent Bond Record

Exhibit JRW-7

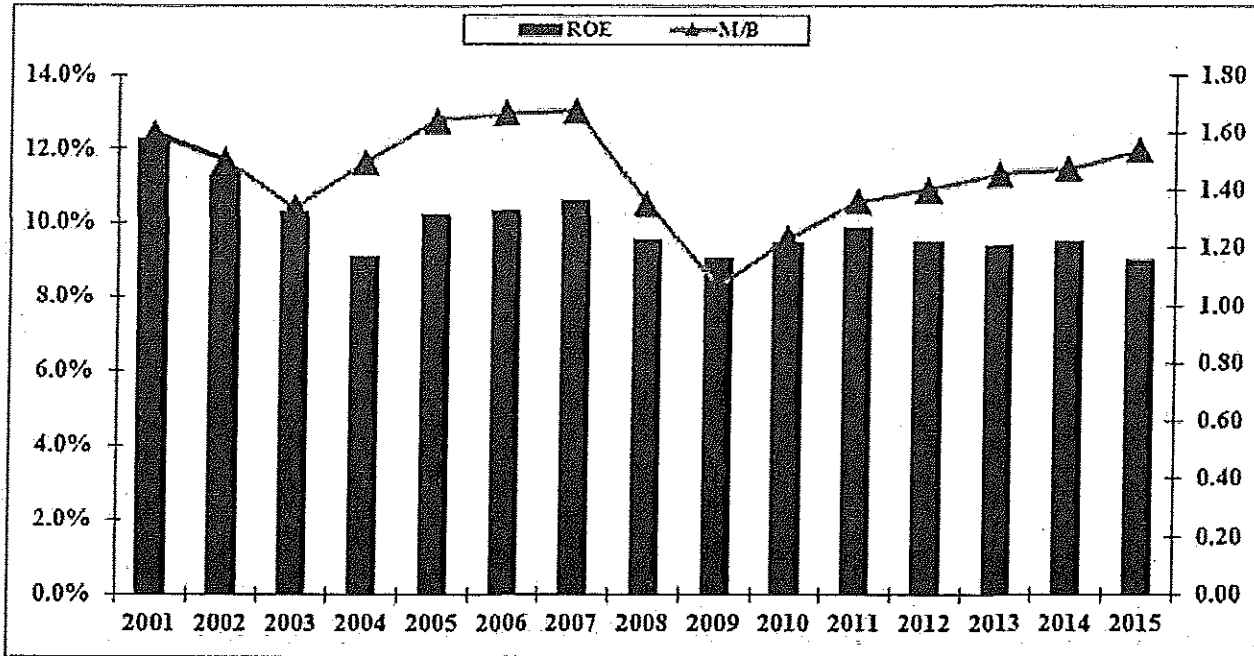
Electric Utility Average Dividend Yield



Data Source: Value Line Investment Survey.

Exhibit JRW-7

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



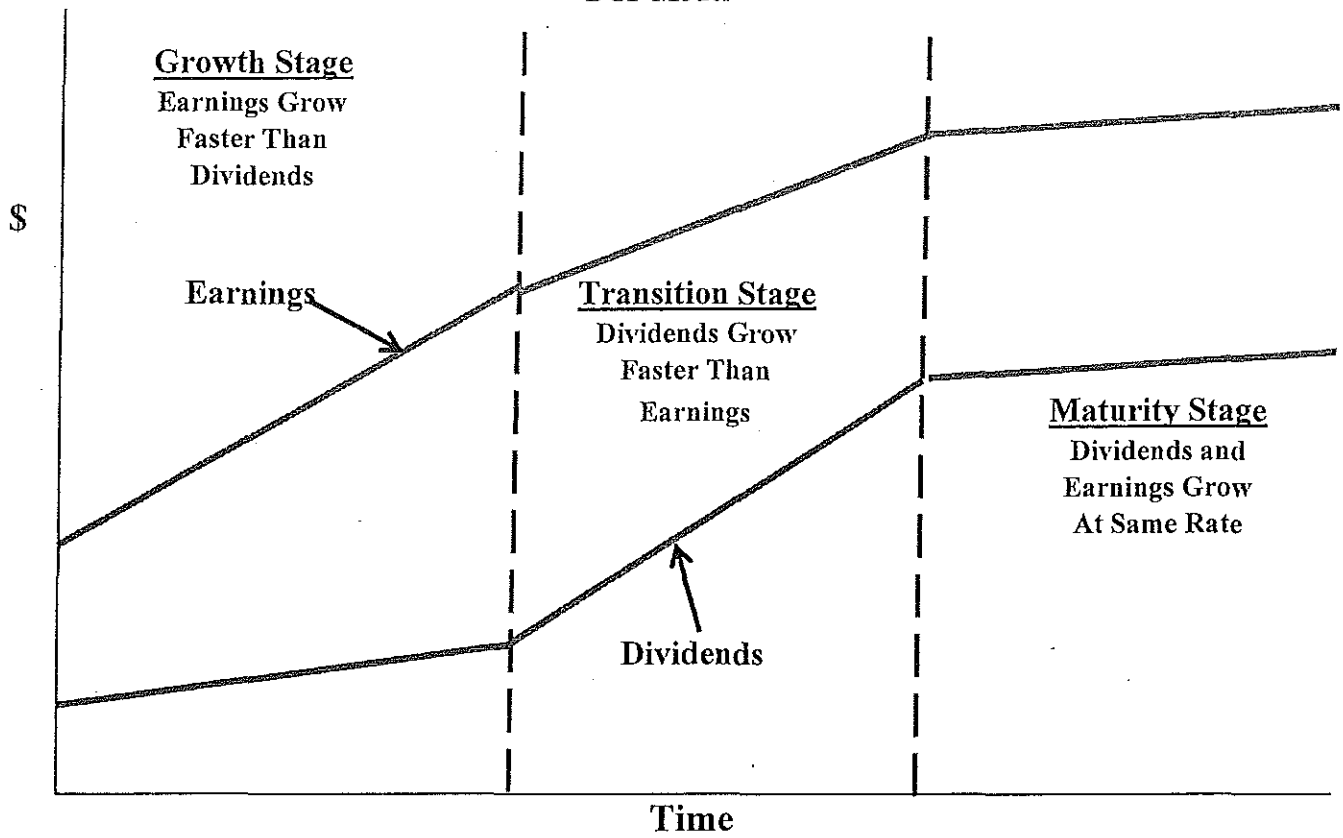
Data Source: Value Line Investment Survey.

## 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](http://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 YieldsPanel 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 (NYSE-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 (NYSE-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 (NYSE-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
Data Source: Value Line Investment Survey.				Average of Median Figures = 4.2		

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
Data Source: Value Line Investment Survey.				Average of Median Figures = 4.5		

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 Equity	Retention Rate	Internal Growth
	Earnings	Dividends	Book Value			
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%
Offer 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 Equity	Retention Rate	Internal Growth
	Earnings	Dividends	Book Value			
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%
Offer 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%
Energys 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

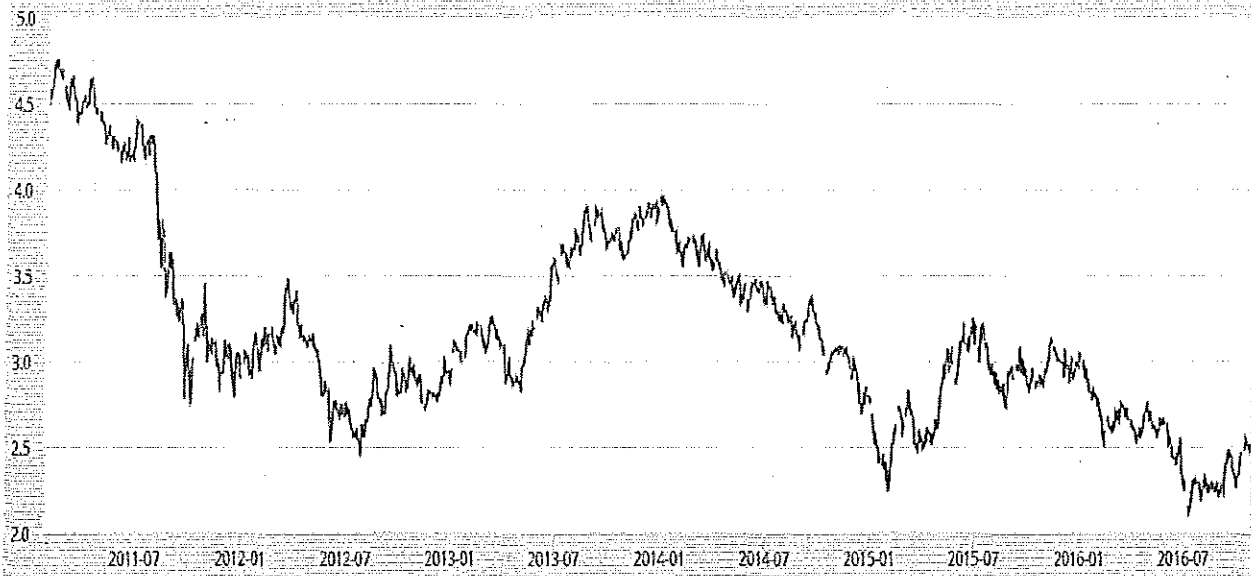
Risk-Free Interest Rate	4.00%
Beta*	0.70
<u>Ex Ante Equity Risk Premium**</u>	<u>5.50%</u>
CAPM Cost of Equity	7.9%

\* See page 3 of Exhibit JRW-11

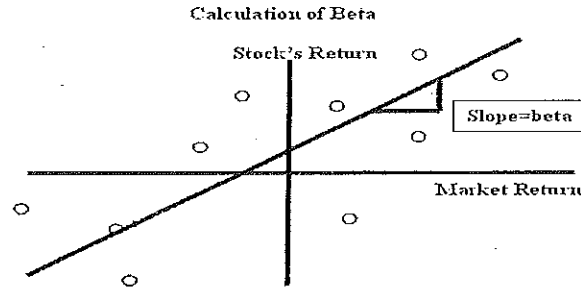
\*\* See pages 5 and 6 of Exhibit JRW-11

Exhibit JRW-11

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



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



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
Energys Corporation (NYSE-ETR)	0.65
Eversource Energy (NYSE-ES)	0.70
FirstEnergy Corporation (NYSE-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 (NYSE-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 (NYSE-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	Ebbotson	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				4.50%	
	Bair	2008	1900-2007	Historical Stock Returns - Bond Returns	Arithmetic				7.00%	
					Geometric				5.50%	
	Siegal	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%		
Gojal & Welch	2006	1872-2004	Historical Stock Returns - Bond Returns					4.77%		
	Median									5.14%
Ex Ante Models (Puzzle Research)	Clair 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%	
	Eason, 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%	
	Siegal	2005	1802-2001	Historical Earnings Yield	Geometric				2.50%	
	Grabowski	2006	1926-2005	Historical and Projected		3.50%	6.00%	4.75%	4.75%	
	Mahru & McCurdy	2006	1885-2003	Historical Excess Returns, Structural Breaks,		4.03%	5.10%	4.56%	4.56%	
	Bosock	2004	1960-2002	Bond Yields, Credit Risk, and Income Volatility		3.50%	3.30%	2.60%	2.60%	
	Bakshi & Chen	2005	1982-1998	Fundamentals - Interest Rates					7.31%	
	Donaldson, Kazetra, & 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 & Magia	2008		Projection Earnings Yield - TIPS					3.22%	
	Siegal - 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%	
	Mitchehowski - 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									
	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 Year Fundamentals (D/P, GDP Growth)		3.00%	4.80%	3.90%	3.90%		
John Shoven	2001		Projected for 75 Year 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								
Building Block	Ebbotson 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%	
	Haransen - Rethink ERP	2010	Projection	Current Supply Model (D/P & Earnings Growth)	Geometric				3.00%	
	Gruzel, 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		Mid point of Range		Average
						Low	High	Mean	Mean	
<b>Historical Risk Premium</b>	Ibbotson	2016	1928-2015	Historical Stock Returns - Bond Returns	Arithmetic					
					Geometric				6.00%	
	Damodaran	2015	1928-2014	Historical Stock Returns - Bond Returns	Arithmetic				4.40%	
					Geometric				6.25%	
					Geometric				4.60%	
	Dimson, Marsh, Staunton	2015	1900-2014	Historical Stock Returns - Bond Returns	Arithmetic				4.40%	
	Median				Geometric					4.40%
										5.13%
<b>Ex Ante Models (Puzzle Research)</b>	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									5.42%
										5.50%
<b>Surveys</b>	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%
										4.78%
<b>Building Block</b>	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%
										4.12%
<b>Mean</b>										4.88%
<b>Median</b>										4.95%

**MISSOURI PUBLIC SERVICE COMMISSION**

**STAFF REPORT**

**REVENUE REQUIREMENT  
COST OF SERVICE**

**APPENDIX 3**

**Other Staff Schedules**

**KANSAS CITY POWER & LIGHT COMPANY**

**CASE NO. ER-2016-0285**

*Jefferson City, Missouri  
November 2016*

Greenwood Central Solar Station  
In-Service Test Criteria

1. All major construction work is complete.

*Based on review of Schedule TMR-12 "In-service testing Report Greenwood Solar Plant" attached to Tim Rush's testimony in ER-2016-0156, a walk-through was performed by KCPL and substantial completion was awarded on June 20, 2016.*

2. All preoperational tests have been successfully completed.

*Based on review of Schedule TMR-12 "In-service testing Report Greenwood Solar Plant" attached to Tim Rush's testimony in ER-2016-0156 and response to Staff Data Request 280.2 in ER-2016-0285, preoperational tests have been successfully completed.*

3. Facility successfully meets contract operational guarantees that are necessary for satisfactory completion of all other items in this list.

*Applicable operational contract guarantees have been satisfied.*

4. Upon observation of the facility for 72 consecutive hours, the facility will have demonstrated that when sunlight was shining on it during that period it produced power in a standard operating mode.

*Based on data obtained from June 8, 2016 through June 10, 2016, the unit produced power when sunlight was shining on it.*

5. Facility shall meet at least 95% of the guaranteed AC capacity based on the Capacity Test as outlined in the contract or amended contract. The Capacity Test shall determine the facility's Corrected Capacity at the Design Point Conditions.

*Based on data obtained from June 15, 2016, the facility met at least 95% of the guaranteed capacity based on the Capacity Test. The Capacity Test procedures were provided to Staff in response to Data Request 251 in ER-2016-0156.*

6. Sufficient transmission/distribution interconnection facilities shall exist for the total plant design net electrical capacity at the time the facility is declared fully operational and used for service.

*Based on the summary of the interconnection study provided in EA-2015-0256 compliance filing on March 3, 2016 and the "In-service testing Report Greenwood Solar*

*Plant” attached to the rebuttal testimony of Tim Rush in ER-2016-0156, there is sufficient interconnection facilities.*

7. Sufficient transmission/distribution facilities shall exist for the total plant design net electrical capacity into the utility service territory at the time the facility is declared fully operational and used for service.

*Based on the summary of the interconnection study provided in EA-2015-0256 compliance filing on March 3, 2016 and the “In-service testing Report Greenwood Solar Plant” attached to the rebuttal testimony of Tim Rush in ER-2016-0156, there is sufficient facilities.*

KCP&L Case No. ER-2016-0285 Staff's Recommended Depreciation Rates, Update 11/22/2016

Account	Description	Probable Retirement Date	Survivor Curve	Net Salvage (%) [Interim Only]	Composite Remaining Life	Depreciation Rate (%)
<b>PRODUCTION PLANT</b>						
<b>STEAM PRODUCTION PLANT</b>						
<b>311.00</b>	<b>STRUCTURES AND IMPROVEMENTS</b>				<b>39.7</b>	<b>1.65</b>
	HAWTHORN COMMON	Jun-55	100-S0.5	(4)	39.3	
	HAWTHORN UNIT 5	Jun-55	100-S0.5	(6)	38.2	
	HAWTHORN UNIT 9	Jun-45	100-S0.5	(3)	30.2	
	MONTROSE COMMON	Jun-21	100-S0.5	(1)	7.5	
	MONTROSE UNIT 2	Jun-21	100-S0.5	0		
	MONTROSE UNIT 3	Jun-21	100-S0.5	0		
	IATAN COMMON	Jun-70	100-S0.5	(7)	52.0	
	IATAN UNIT 1	Jun-40	100-S0.5	(3)	25.8	
	LACYGNE COMMON	Jun-40	100-S0.5	(2)	25.9	
	LACYGNE UNIT 1	Jun-40	100-S0.5	(4)	25.5	
	LACYGNE UNIT 2	Jun-40	100-S0.5	(3)	25.7	
	MISCELLANEOUS		100-S0.5	(20)	98.1	
<b>312.00</b>	<b>BOILER PLANT EQUIPMENT</b>				<b>24.6</b>	<b>2.73</b>
	HAWTHORN COMMON	Jun-55	55-R1	(6)	35.7	
	HAWTHORN UNIT 5	Jun-55	55-R1	(8)	34.7	
	HAWTHORN UNIT 9	Jun-45	55-R1	(6)	27.4	
	MONTROSE COMMON	Jun-21	55-R1	(1)	7.3	
	MONTROSE UNIT 2	Jun-21	55-R1	(1)	7.3	
	MONTROSE UNIT 3	Jun-21	55-R1	(1)	7.3	
	IATAN COMMON	Jun-70	55-R1	(11)	43.1	
	IATAN UNIT 1	Jun-40	55-R1	(5)	23.9	
	LACYGNE COMMON	Jun-40	55-R1	(5)	23.9	
	LACYGNE UNIT 1	Jun-40	55-R1	(5)	23.9	
	LACYGNE UNIT 2	Jun-40	55-R1	(7)	23.1	
	MISCELLANEOUS		55-R1	(20)		
	LACYGNE ENVIRONMENTAL EQUIP - 2015	Jun-40	55-R1	(3)	22.8	
<b>312.01</b>	<b>BOILER PLANT EQUIPMENT - UNIT TRAINS</b>		25-R2.5	25	<b>18.2</b>	<b>2.77</b>
<b>312.02</b>	<b>BOILER PLANT EQUIPMENT- AQC</b>				<b>22.2</b>	<b>1.56</b>
	HAWTHORN UNIT 5	Jun-55	55-R1	(7)	33.8	
	LACYGNE UNIT 1	Jun-55	55-R2	(7)	22.2	
<b>314.00</b>	<b>TURBOGENERATOR UNITS</b>				<b>23.7</b>	<b>2.14</b>
	HAWTHORN COMMON	Jun-55	60-R1.5	(4)	37.2	
	HAWTHORN UNIT 5	Jun-55	60-R1.5	(6)	34.5	
	HAWTHORN UNIT 9	Jun-45	60-R1.5	(3)	28.5	
	MONTROSE COMMON	Jun-21	60-R1.5	0	7.4	
	MONTROSE UNIT 2	Jun-21	60-R1.5	(1)	7.4	
	MONTROSE UNIT 3	Jun-21	60-R1.5	(1)	7.4	
	IATAN COMMON	Jun-70	60-R1.5	(7)	46.4	
	IATAN UNIT 1	Jun-40	60-R1.5	(4)	24.0	
	LACYGNE COMMON	Jun-40	60-R1.5	(3)	24.3	
	LACYGNE UNIT 1	Jun-40	60-R1.5	(4)	23.9	
	LACYGNE UNIT 2	Jun-40	60-R1.5	(5)	23.3	
	MISCELLANEOUS		60-R1.5	(15)		

Account	Description	Probable Retirement Date	Survivor Curve	Net Salvage (%) [Interim Only]	Composite Remaining Life	Depreciation Rate (%)
<b>315.00</b>	<b>ACCESSORY ELECTRIC EQUIPMENT</b>				<b>21.6</b>	<b>3.22</b>
	HAWTHORN COMMON	Jun-55	55-S0.5	(6)	35.2	
	HAWTHORN UNIT 5	Jun-55	55-S0.5	(6)	34.2	
	HAWTHORN UNIT 9	Jun-45	55-S0.5	(5)	27.4	
	MONTROSE COMMON	Jun-21	55-S0.5	(1)	7.3	
	MONTROSE UNIT 2	Jun-21	55-S0.5	(1)	7.3	
	MONTROSE UNIT 3	Jun-21	55-S0.5	(1)	7.3	
	IATAN COMMON	Jun-70	55-S0.5	(9)	43.6	
	IATAN UNIT 1	Jun-40	55-S0.5	(4)	23.5	
	LACYGNE COMMON	Jun-40	55-S0.5	(4)	23.2	
	LACYGNE UNIT 1	Jun-40	55-S0.5	(5)	22.9	
	LACYGNE UNIT 2	Jun-40	55-S0.5	(4)	23.7	
	LACYGNE ENVIRONMENTAL EQUIP - 2015	Jul-40	55-S0.5	(2)	23.4	
	MISCELLANEOUS		55-S0.5	(10)	48.5	
<b>316.00</b>	<b>MISCELLANEOUS POWER PLANT EQUIP</b>				<b>27.3</b>	<b>2.28</b>
	HAWTHORN COMMON	Jun-55	55-S0.5	0	35.1	
	HAWTHORN UNIT 5	Jun-55	55-S0.5	0	31.0	
	HAWTHORN UNIT 9	Jun-45	55-S0.5	0	27.1	
	MONTROSE COMMON	Jun-21	55-S0.5	0	7.4	
	MONTROSE UNIT 2	Jun-21	55-S0.5	0		
	MONTROSE UNIT 3	Jun-21	55-S0.5	0		
	IATAN COMMON	Jun-70	55-S0.5	0	41.7	
	IATAN UNIT 1	Jun-40	55-S0.5	0	24.1	
	LACYGNE COMMON	Jun-40	55-S0.5	0	24.4	
	LACYGNE UNIT 1	Jun-40	55-S0.5	0	23.8	
	LACYGNE UNIT 2	Jun-40	55-S0.5	0	22.2	
	MISCELLANEOUS		55-S0.5	0	48.5	
	<b>HAWTHORN UNIT 5 REBUILD</b>					
<b>311.02</b>	<b>STRUCTURES AND IMPROVEMENTS</b>	Jun-55	100-S0.5	(5)	38.9	<b>0.30</b>
<b>312.03</b>	<b>BOILER PLANT EQUIPMENT</b>	Jun-55	55-R1	(8)	34.0	<b>0.56</b>
<b>315.01</b>	<b>ACCESSORY ELECTRIC EQUIPMENT</b>	Jun-55	55-S0.5	(9)	33.3	<b>0.59</b>
<b>316.01</b>	<b>MISCELLANEOUS POWER PLANT EQUIP</b>	Jun-55	55-S0.5	0	33.3	<b>0.34</b>
	<b>IATAN UNIT 2</b>					
<b>311.04</b>	<b>STRUCTURES AND IMPROVEMENTS</b>	Jun-70	100-S0.5	(6)	52.4	<b>1.16</b>
<b>312.04</b>	<b>BOILER PLANT EQUIPMENT</b>	Jun-70	55-R1	(10)	44.1	<b>1.38</b>
<b>314.04</b>	<b>TURBOGENERATOR UNITS</b>	Jun-70	60-R1.5	(7)	46.7	<b>1.87</b>
<b>315.04</b>	<b>ACCESSORY ELECTRIC EQUIPMENT</b>	Jun-70	55-S0.5	(8)	44.1	<b>1.87</b>
<b>316.04</b>	<b>MISCELLANEOUS POWER PLANT EQUIP</b>	Jun-70	55-S0.5	0	44.1	<b>1.35</b>
	<b>NUCLEAR PRODUCTION PLANT</b>					
<b>321.00</b>	<b>STRUCTURES AND IMPROVEMENTS</b>	Jun-45	100-S0.5	(1)	29.3	<b>1.30</b>
<b>322.00</b>	<b>REACTOR PLANT EQUIPMENT</b>	Jun-45	60-R2	(2)	27.3	<b>1.58</b>
<b>323.00</b>	<b>TURBOGENERATOR UNITS</b>	Jun-45	50-S1.5	(1)	26.2	<b>2.25</b>
<b>324.00</b>	<b>ACCESSORY ELECTRIC EQUIPMENT</b>	Jun-45	50-S1.5	0	23.0	<b>2.12</b>
<b>325.00</b>	<b>MISCELLANEOUS POWER PLANT EQUIP</b>	Jun-45	40-R0.5	0	23.9	<b>3.16</b>
<b>328.00</b>	<b>REGULATORY DISALLOWANCES</b>					<b>1.60</b>



Account	Description	Probable Retirement Date	Survivor Curve	Net Salvage (%) [Interim Only]	Composite Remaining Life	Depreciation Rate (%)
<b>OTHER PRODUCTION PLANT</b>						
<b>341.00</b>	<b>STRUCTURES AND IMPROVEMENTS</b>				<b>30.8</b>	<b>2.56</b>
	NORTHEAST COMBUSTION TURBINES	Jun-40	70-R2.5	(1)	25.4	
	WEST GARDNER COMBUSTION TURBINES	Jun-48	70-R2.5	(1)	33.0	
	MIAMI COUNTY COMBUSTION TURBINES	Jun-48	70-R2.5	(1)	32.8	
	HAWTHORN UNIT 6	Jun-45	70-R2.5	(1)	30.0	
	HAWTHORN UNIT 7	Jun-45	70-R2.5	(1)	30.0	
	HAWTHORN UNIT 8	Jun-45	70-R2.5	(1)	30.0	
<b>342.00</b>	<b>FUEL HOLDERS, PRODUCERS &amp; ACCESSORIES</b>				<b>28.4</b>	<b>2.11</b>
	NORTHEAST COMBUSTION TURBINES	Jun-40	50-R2.5	(4)	24.4	
	WEST GARDNER COMBUSTION TURBINES	Jun-48	50-R2.5	(3)	30.7	
	MIAMI COUNTY COMBUSTION TURBINES	Jun-48	50-R2.5	(3)	30.6	
	HAWTHORN UNIT 6	Jun-45	50-R2.5	(3)	28.1	
	HAWTHORN UNIT 7	Jun-45	50-R2.5	(3)	27.9	
	HAWTHORN UNIT 8	Jun-45	50-R2.5	(3)	27.9	
<b>344.00</b>	<b>GENERATORS</b>				<b>28.4</b>	<b>2.00</b>
	NORTHEAST COMBUSTION TURBINES	Jun-40	50-R1.5	(5)	22.3	
	WEST GARDNER COMBUSTION TURBINES	Jun-48	50-R1.5	(3)	29.6	
	MIAMI COUNTY COMBUSTION TURBINES	Jun-48	50-R1.5	(3)	29.6	
	HAWTHORN UNIT 6	Jun-45	50-R1.5	(3)	27.8	
	HAWTHORN UNIT 7	Jun-45	50-R1.5	(3)	27.1	
	HAWTHORN UNIT 8	Jun-45	50-R1.5	(3)	27.1	
<b>345.00</b>	<b>ACCESSORY ELECTRIC EQUIPMENT</b>				<b>27.2</b>	<b>1.84</b>
	NORTHEAST COMBUSTION TURBINES	Jun-40	45-R3	(8)	18.7	
	WEST GARDNER COMBUSTION TURBINES	Jun-48	45-R3	(4)	29.9	
	MIAMI COUNTY COMBUSTION TURBINES	Jun-48	45-R3	(4)	29.9	
	HAWTHORN UNIT 6	Jun-45	45-R3	(4)	27.4	
	HAWTHORN UNIT 7	Jun-45	45-R3	(4)	27.4	
	HAWTHORN UNIT 8	Jun-45	45-R3	(4)	27.5	
<b>346.00</b>	<b>MISCELLANEOUS POWER PLANT EQUIPMENT</b>				<b>23.6</b>	<b>4.19</b>
	NORTHEAST COMBUSTION TURBINES	Jun-40	45-R2.5	0	23.3	
	WEST GARDNER COMBUSTION TURBINES	Jun-48	45-R2.5	0	31.8	

Account	Description	Probable Retirement Date	Survivor Curve	Net Salvage (%) [Interim Only]	Composite Remaining Life	Depreciation Rate (%)
<b>SOLAR PRODUCTION PLANT</b>						
344.01	GENERATORS - SOLAR	Jun-33	45-R2	0	18.80	4.82
<b>GREENWOOD SOLAR FACILITY (FROM ER-2016-0156 ORDERED RATES)</b>						
341.00	STRUCTURES AND IMPROVEMENTS					5.26
344.01	GENERATORS					5.52
345.00	ACCESSORY ELECTRICAL EQUIPMENT					5.38
346.00	MISCELLANEOUS POWER PLANT EQUIPMENT					5.19
<b>WIND PRODUCTION PLANT</b>						
341.02	STRUCTURES AND IMPROVEMENTS				16.3	4.31
	SPEARVILLE UNIT 1	Jun-30	70-R2.5	0	16.3	
	SPEARVILLE UNIT 2	Jun-30	70-R2.6	0	16.3	
344.02	GENERATORS				13.6	5.39
	SPEARVILLE COMMON	Jun-30	45-R2	0	15.9	
	SPEARVILLE UNIT 1	Jun-26	45-R2	(1)	12.1	
	SPEARVILLE UNIT 2	Jun-30	45-R2	(1)	16.0	
345.02	ACCESSORY ELECTRIC EQUIPMENT				15.4	6.07
	SPEARVILLE COMMON	Jun-30	40-R2.5	0	16.1	
	SPEARVILLE UNIT 1	Jun-26	40-R2.5	0	12.2	
346.02	MISCELLANEOUS POWER PLANT EQUIPMENT				18.0	5.00
	SPEARVILLE COMMON	Jun-30	35-S2.5	0	18.0	5.00

Account	Description	Probable Retirement Date	Survivor Curve	Net Salvage (%) [Interim Only]	Composite Remaining Life	Depreciation Rate (%)
<b>TRANSMISSION PLANT</b>						
352.00	STRUCTURES AND IMPROVEMENTS		60-R3	(5)	37.8	1.98
353.00	STATION EQUIPMENT		55-R1	(10)	44.2	1.87
353.03	STATION EQUIPMENT- COMMUNICATION		25-S2.5	0	5.9	9.96
354.00	TOWERS AND FIXTURES		70-R4	(20)	38.4	0.88
355.00	POLES AND FIXTURES		52-R2	(50)	38.0	2.64
356.00	OVERHEAD CONDUCTORS AND DEVICES		55-R2.5	(25)	41.6	1.78
357.00	UNDERGROUND CONDUIT		65-R4	0	32.0	1.41
358.00	UNDERGROUND CONDUCTORS AND DEVICES		55-R4	0	28.8	0.68
<b>DISTRIBUTION PLANT</b>						
361.00	STRUCTURES AND IMPROVEMENTS		55-R2	(5)	41.3	1.32
362.00	STATION EQUIPMENT		52-R2	(5)	39.1	1.81
362.03	STATION EQUIPMENT- COMMUNICATION		25-S2.5	0	9.6	4.45
363.00	STORAGE BATTERY EQUIPMENT		10-L3	0	8.5	11.76
364.00	POLES, TOWERS AND FIXTURES		42-R2.5	(50)	29.3	3.37
365.00	OVERHEAD CONDUCTORS AND DEVICES		44-R1	(25)	31.4	3.08
366.00	UNDERGROUND CONDUIT		55-R2.5	(30)	38.0	2.91
367.00	UNDERGROUND CONDUCTORS AND DEVICES		51-R1.5	(10)	38.8	2.38
368.00	LINE TRANSFORMERS		37-R2	10	27.4	1.63
369.00	SERVICES		50-R2.5	(100)	34.0	4.44
370.00	METERS		40-R1.5	2	34.6	0.61
370.10	METERS-AMR (Auto Meter Read)	Jun-16	40-R1.5	2	33.8	0.00
370.20	METERS -AMI (Advanced Meter Infrastructure)		20-S2.5	2	19.5	4.91
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES		21-S1	(15)	20.5	0.05
373.00	STREET LIGHTING AND SIGNAL SYSTEMS		25-I0.5	(5)	18.4	3.75

Account	Description	Probable Retirement Date	Survivor Curve	Net Salvage (%) (Interim Only)	Composite Remaining Life	Depreciation Rate (%)
<b>GENERAL PLANT</b>						
390.00	STRUCTURES AND IMPROVEMENTS		45-R1.5	(20)	33.0	2.75
391.01	FURNITURE AND EQUIPMENT		20-SQ	0	11.9	5.00
391.01	FURNITURE AND EQUIP- WOLF CREEK		20-SQ	0	13.5	5.00
391.02	COMPUTER EQUIPMENT		8-SQ	0	5.3	12.50
<b>TRANSPORTATION EQUIPMENT</b>						
392.00	AUTOS		8-R2	25	0.0	9.38
392.01	LIGHT TRUCKS		7.5-L0.5	25	5.0	11.73
392.02	HEAVY TRUCKS		10-L2.5	25	6.1	9.94
392.03	TRACTORS		12-R2	25	4.9	5.68
392.04	TRAILERS		26-S0	25	21.5	1.36
393.00	STORES EQUIPMENT		25-SQ	0	14.1	4.00
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT		30-SQ	0	17.9	3.33
395.00	LABORATORY EQUIPMENT		30-SQ	0	17.8	3.33
396.00	POWER OPERATED EQUIPMENT		12-L2	15	7.6	7.94
397.00	COMMUNICATION EQUIPMENT		35-SQ	0	22.1	2.86
398.00	MISCELLANEOUS EQUIPMENT		30-SQ	0	17.0	3.33