

**MISSOURI PUBLIC SERVICE COMMISSION**

**STAFF REPORT**  
**COST OF SERVICE**  
**APPENDICES**

**UNION ELECTRIC COMPANY**  
**d/b/a AMERENUE**

**CASE NO. GR-2010-0363**

*Jefferson City, Missouri*  
*November 2010*

**MISSOURI PUBLIC SERVICE COMMISSION**

**STAFF REPORT**

**COST OF SERVICE**

**APPENDIX 1**

**Staff Credentials**

**UNION ELECTRIC COMPANY  
d/b/a AMERENUE**

**CASE NO. GR-2010-0363**

# **APPENDIX 1**

## **STAFF CREDENTIALS TABLE OF CONTENTS**

<b>Boateng, Kofi Ageyenim .....</b>	<b>1</b>
<b>Carle, Erin M. ....</b>	<b>4</b>
<b>Cox, Kim .....</b>	<b>6</b>
<b>Ferguson, Lisa M.. ....</b>	<b>7</b>
<b>Grissum, Roberta A. ....</b>	<b>10</b>
<b>Marevangepo, Zephania .....</b>	<b>14</b>
<b>Rackers, Stephen M. ....</b>	<b>16</b>
<b>Stahlman, Michael .....</b>	<b>19</b>
<b>Williams, David.....</b>	<b>20</b>
<b>Won, Seoung Jong .....</b>	<b>22</b>

## **KOFI AGYENIM BOATENG**

### **EDUCATIONAL BACKGROUND AND EXPERIENCE**

I graduated from Ho Polytechnic, Ghana in September 2000, and received a Higher National Diploma (HND) in Accountancy. In May 2004, I received a Master's of Business Administration (MBA) degree with emphasis in Accounting from Lincoln University in Jefferson City, Missouri. In September of 2004, I commenced employment with the Missouri Public Service Commission Staff (Staff) in my current position of Utility Regulatory Auditor. Prior to employment with the Commission, I held the position of Accountant with the Controller & Accountant General's Dept., Ghana; Accountant with ACS-BPS (Ghana) Limited; Payroll Account Technician with Scholastic Book Club, Inc., Jefferson City; and Account Officer II with the Missouri Department of Revenue, Jefferson City. In 2006, I passed the Certified Public Accountant (CPA) examination and, in January 2007, received a license to practice as a professional accountant in the state of Missouri. On August 4, 2008, I completed all of the requirements for the Certified Internal Auditor program and earned the Certified Internal Auditor (CIA) designation. I am also a Certified Fraud Examiner. I hold professional membership with the American Institute of Certified Public Accountants (AICPA), Missouri Society of Certified Public Accountants (MSCPA), The Institute of Internal Auditors-Central Missouri Chapter, and the Association of Certified Fraud Examiners.

I have actively participated and assisted with audits and examinations of the books and records of utility companies operating under the Commission's jurisdiction within the state of Missouri in both formal and informal rate cases. I have also filed and given testimony before the Missouri Public Service Commission.

**CASE PROCEEDING PARTICIPATION****KOFI AGYENIM BOATENG**

<b>PARTICIPATION</b>		
<b>COMPANY</b>	<b>CASE NO.</b>	<b>FILING TYPE/ISSUES</b>
KMB Utility Corporation	SR-2010-0345 WR-2010-0346	Staff Memorandum/ Expenses
Union Electric Company d/b/a AmerenUE	ER-2010-0036	Direct Report: Electric Revenues (growth), Other Revenues – MISO related Revenues and Expenses, Bad Debt, Pension & OPEB, Incentive Compensation
Kansas City Power & Light Company	ER-2009-0089	Direct Report: Electric Revenues (growth), Other Revenues, Bad Debit Expense, Forfeited Discount, Gross Receipt Taxes, Electronic Card Acceptance Program, Fly Ash Sales
KCP&L Greater Missouri Operation Company – MPS & L&P	ER-2009-0090	Direct Report: Electric Revenues (growth), Other Revenues, Bad Debit Expense, Forfeited Discount, Gross Receipt Taxes, Electronic Card Acceptance Program, Inter-Company Off-System Sales Revenue and Off-System Fuel & Purchased Power
Missouri-American Water Company	WR-2008-0311	Testimony: Revenues, Gross Receipt Taxes, Bad Debt Expense, Chemical Expense, Uncountable-For-Water
Gladlo Water & Sewer Company	WR-2009-0418 SR-2009-0419	Staff Memorandum
Missouri Gas Utility	GR-2008-0060	Testimony: Materials & Supplies, Gas Inventory, Prepayments, Customer Deposits, Payroll, Advertising, Property Taxes, Rate Case Expense.
Roy-L Utilities, Inc.	QS-2008-0001 QW-2008-0002	Staff Memorandum
Laclede Gas Company	GR-2007-0208	Testimony: Customer Deposits, Payroll & Payroll Taxes, Incentive Compensation, Dues & Donations, Miscellaneous Expenses, Lobbying, Equity Plan, Directors' Fees, and Customer Deposit Interest
Bilyeu Water Co. LLC	WA-2007-0270	Certificate Case: No Staff Memorandum

**CASE PROCEEDING PARTICIPATION****KOFI AGYENIM BOATENG**

<b>PARTICIPATION</b>		
<b>COMPANY</b>	<b>CASE NO.</b>	<b>FILING TYPE/ISSUES</b>
Aquila, Inc., d/b/a Aquila Networks-MPS and Aquila Networks-L&P	ER-2007-0004	Testimony: Materials and Supplies, Prepayments, Customer Deposits, Advertising, Dues & Donations, Postage, PSC Assessment, Rate Case Expense, Customer Deposit Interest Expense
Gladlo Water & Sewer Company	QS-2007-0001 QW-2007-0002	Staff Memorandum (Case Still Pending)
Algonquin Water Resources of Missouri, LLC	WR-2006-0425	Testimony: Revenues, Electric Expense, Office Rents, Postage, Telephone Expense, Rate Case Expense
The Empire District Electric Company	ER-2006-0315	Testimony: Plant and Depreciation, Reserve, Cash Working Capital, Property Taxes, Advertising, Dues and Donations, Outside Services, Banking Fees, Promotional Giveaways, Transmission Billing Adjustment, Maintenance
New Florence Telephone Company	TC-2006-184	Stipulation and Agreement
Suburban Water and Sewer Company	WR-2005-0455	Staff Memorandum
Noel Water Company, Inc.	WR-2005-0452	Staff Memorandum
Aquila, Inc., d/b/a Aquila Networks-L&P	HR-2005-0450	Testimony: Materials and Supplies, Prepayments, Customer Deposits, Customer Deposits Interests, Customer Advances, PSC Assessments, Rate Case Expense
Aquila, Inc., d/b/a Aquila Networks-MPS and Aquila Networks-L&P	ER-2005-0436	Testimony: Materials and Supplies, Prepayments, PSC Assessments, Rate Case Expense
Public Service Commission of the State of Missouri v. Cass County Telephone Company Limited Partnership	TC-2005-0357	Stipulation and Agreement
Southtown Utilities, Inc.	WA-2005-0268	Staff Memorandum
Aqua Missouri Company, Inc. (Water and Sewer)	QS-2005-0008 QW-2005-0009 QS-2005-0010 QW-2005-0011	Staff Memorandum

**Erin M. Carle**  
Utility Regulatory Auditor

Educational Background

Bachelor's degree in Accounting – Maryville University, May 2006

Work Experience

October 2000-January 2007 – Meramec Valley R-III – Aid/Substitute Teacher/Computer Teacher

December 2005-April 2006 – Fitzgerald & Fitzgerald P.C. – Prepared personal and corporate income taxes, reviewed corporate accounting procedures

April 2002-August 2005 – Longview Animal Nutrition Center – Assist in nutrition testing, data entry, animal surgeries and vaccinations, basic animal care

January 2007 – Missouri Public Service Commission – Utility Regulatory Auditor

**Case Summary  
Of  
Erin Carle**

<b>Company</b>	<b>Case No.</b>	<b>Issues</b>
Ameren UE	ER-2008-0318	900 Account Analyses, Advertising, CWC, Outside Services, Customer Advances, Dues and Donations, Interest on Customer Deposits, Leases, Materials and Supplies, Prepayments, Property Taxes, PSC Assessment, Rate Case Expense
RD Sewer	SR-2009-0226	Outside Services, Revenues, Vehicle Expense, Rent Exp., Payroll, Plant, PSC Assessment, Repairs, Sludge Hauling, Office Expense, Utility Bills, EMS
Lakeland Heights Water	WR-2009-0227	Outside Services, Revenues, Vehicle Expense, Rent Exp., Payroll, Plant, PSC Assessment, Repairs, Sludge Hauling, Office Expense, Utility Bills, Meter Reads, EMS
Whispering Hills Water	WR-2009-0228	Outside Services, Revenues, Vehicle Expense, Rent Exp., Payroll, Plant, PSC Assessment, Repairs, Sludge Hauling, Office Expense, Utility Bills, Meter Reads, EMS
Oakbrier Water	WR-2009-0229	Outside Services, Revenues, Vehicle Expense, Rent Exp., Payroll, Plant, PSC Assessment, Repairs, Sludge Hauling, Office Expense, Utility Bills, Meter Reads, EMS
Aqua Missouri	SR-2010-0026 SR-2010-0023 WR-2010-0025 WR-2010-0027	Outside Services, Transportation Exp., Payroll, EMS, Lab Testing, PSC Assessment, Property Tax, Supplies and Expenses, Tank Painting, General Insurance, Legal Expenses, Rate Case Exp.
Aqua Missouri	SC-2010-0150 SC-2010-0152 WC-2010-0151 WC-2010-0153	Complaint Case
Laclede Gas	GR-2010-0171	900 Acct Analysis, Advertising, Directors Fees, Dues & Donations, Payroll, Plant, Property Taxes, PSC Assessment, Depreciation, Amortization, Materials & Supplies, Natural Gas Stored Underground, Leases



# **Kim Cox**

## **EDUCATION**

Bachelor of Science

Central Missouri State University, Warrensburg, MO – May 1996

## **PROFESSIONAL EXPERIENCE**

I am currently employed as a Rate and Tariff Examiner III for the Missouri Public Service Commission (Commission). I began my employment with the Commission on July 13, 2009. Before coming to the Commission I was in the regulatory field for ten years where I held the position of a Quality Assurance Analyst.

Since starting with the Commission I have completed the Consumer Affairs Training held by NARUC and Economics of Efficiency and Demand Response. I have assisted with gathering data from the Local Distribution Companies for the Demand Side Management study performed by Kema.

I have provided a Staff Recommendation on the following:

- Missouri Gas Utility Certificate of Convenience and Necessity case GA-2010-0012;
- Missouri Gas Utility Certificate of Convenience and Necessity case GA-2010-0189;
- Laclede Gas Company Winter Season PGA, case GR-2010-0138;
- Union Electric d/b/a Ameren UE Winter PGA, case GR-2009-0337.

I have provided written testimony on the following:

- Weather-Normalized Sales and Coincident-Peak-Day Demand for The Empire District Gas Company, case GR-2009-0434;
- Weather-Normalized Sales and Coincident-Peak Day Demand for Laclede Gas Company, case GR-2010-0171;
- Weather-Normalized Sales and Coincident-Peak-Day Demand for Atmos Gas Company, GR-2010-0192;
- Weather-Normalized Sales for Southern Missouri Natural Gas Company, case GR-2010-0347.

## **Lisa M. Ferguson**

### **Present Position:**

I am a Utility Regulatory Auditor III, Auditing Department, Utility Services Division of the Missouri Public Service Commission. As a Utility Regulatory Auditor, I review all exhibits and testimony on assigned issues, develop accounting adjustments and issue positions that are supported by workpapers and written testimony.

### **Educational Credentials and Work Experience:**

I have an Associate of Science degree from Moberly Area Community College, a Bachelor's of Science degree in Accounting from Truman State University, and a Master's degree in Accounting from Truman State University. I have been employed by the Missouri Public Service Commission since June, 2008. Prior to joining the Commission, I worked in several departments, primarily Customer Service and as an accounting assistant, for Hy-Vee Food and Drug from July 1998 to May 2002. I was also employed by Kelly L. Lovekamp as a legal office assistant during 2001. From June 2002 to May 2008, I was employed as a support staff for Chariton Valley Association. My duties included support of daily living activities for people with disabilities.

**Past Rate Case Proceedings:**

Laclede Gas Company	GO-2009-0029	Assisted on Abandonment Case – Recommendation Submission
Ameren UE (GAS)	GT-2009-0038	Assisted on ISRS Filing; Extending data to Effective Date; Additions/Retirements; Deferred Taxes; Accumulated Depreciation
Mill Creek	SR-2005-0116	Quarterly Reviews; Procedural Schedule; A/P Billing Calendar; Conference Calls; Discussion Notes; Revenues
Atmos Energy	GO-2009-0046	Assisted on ISRS Filing; Extending data to Effective Date; Retirements; Deferred Taxes; Accumulated Depreciation; Removal of Meters
Cannon Home Association	SR-2009-0144	Informal Small Water Request for Rate Increase
Peaceful Valley	SR-2009-0146 WR-2009-0145	Informal Small Water and Sewer Request for Rate Increase
Ameren UE (ELEC)	ER-2010-0036	Advertising, Capitalized O&M Depreciation, Dues & Donations, 900 Account Analysis, Property Taxes, Other Rate Base Items, Corp. Franchise Taxes, Leases, CWC, Plant, Depreciation/ Reserve, PSC Assessment, Rate Case Expense, Interest on Customer Deposits, Insurance Expenses, Accounting Runs, Injuries and Damages Reconciliation Filed Direct and Surrebuttal Testimony

KMB Utility Corporation	WR-2010-0345 & SR-2010-0346	Revenues, Late Fees, Electric Bills, Lost Water Adjustment, Uncollectibles, Master meter reads  Filed Staff Recommendation
AmerenUE (GAS)	GR-2010-0363	EMS Runs, Capitalized O&M Depreciation, Dues & Donations, 900 Account analysis, Property Taxes, Other Rate Base Items, Corporate Franchise Taxes, CWC, Plant and Reserve, PSC Assessment, Rate Case Expense, Advertising, Interest on Customer Deposits, Outside Contractors/Services  Reconciliation  Filed Direct Testimony

## **Background and Credentials**

### **Roberta A. Grissum**

I am currently employed as a Utility Regulatory Auditor IV in the Commission's Auditing Department. From August 1, 2002 through February 2003, I was employed as a Utility Regulatory Auditor III in the Financial Analysis Department. From May 1998 to July 2002, I was employed as a Public Utility Financial Analyst in the Financial Analysis Department where I was responsible for rate of return analyses. I served in an administrative support position within the Utility Services Division, Accounting Department prior to my appointment to the Financial Analysis Department. In total, I have been with the Commission over fifteen (15) years. Schedule 1 attached to this report lists the cases in which I have filed testimony. Schedule 1 also lists the issues I was responsible for in each of those cases.

I earned a Masters of Business Administration degree from William Woods University on June 8, 2000. I earned a Bachelor of Science degree in Business Administration with an emphasis in Finance from Columbia College in July 1997 and acquired an emphasis in Accounting in October 2002. In addition, I have been an adjunct faculty member with William Woods University in the Adult Evening Business Program for the past nine years. I am certified to facilitate Fundamentals of Financial Management (undergraduate) and Financial Decisions (graduate).

Prior to employment with the Commission, I was employed by the State Emergency Management Agency for the state of Missouri. I also have previous experience in the areas of accounting, insurance, consumer protection and mortgage banking.

**ROBERTA GRISSUM**  
**SUMMARY OF TESTIMONY/STAFF RECOMMENDATION DATABASE**  
**SCHEDULE 1**

Issue	Case Number	Witness	Case Name
Electric Utility Industry Merger History: Rebuttal Testimony	EM-2000-292	McKiddy, Roberta A.	UtiliCorp United Inc. / St. Joseph Light and Power
Financial Theory of Utility Mergers: Rebuttal Testimony	EM-2000-292	McKiddy, Roberta A.	UtiliCorp United Inc. / St. Joseph Light and Power
History of the UtiliCorp United / St. Joseph Light and Power Merger: Rebuttal Testimony	EM-2000-292	McKiddy, Roberta A.	UtiliCorp United Inc. / St. Joseph Light and Power
Merger Overview: Rebuttal Testimony	EM-2000-292	McKiddy, Roberta A.	UtiliCorp United Inc. / St. Joseph Light and Power
Merger Rationale: Rebuttal Testimony	EM-2000-292	McKiddy, Roberta A.	UtiliCorp United Inc. / St. Joseph Light and Power
Surveillance Data Reporting Rebuttal Testimony Cross-examined at Hearing	EM-2000-292	McKiddy, Roberta A.	UtiliCorp United Inc. / St. Joseph Light and Power
Electric Utility Industry Merger History: Rebuttal Testimony	EM-2000-369	McKiddy, Roberta A.	UtiliCorp United Inc. / Empire District Electric
Financial Theory of Utility Merger: Rebuttal Testimony	EM-2000-369	McKiddy, Roberta A.	UtiliCorp United Inc. / Empire District Electric
History of the UtiliCorp United Inc. / Empire Electric Company Merger: Rebuttal Testimony	EM-2000-369	McKiddy, Roberta A.	UtiliCorp United Inc. / Empire District Electric
Merger Overview: Rebuttal Testimony	EM-2000-369	McKiddy, Roberta A.	UtiliCorp United Inc. / Empire District Electric
Surveillance Data Reporting: Rebuttal Testimony Cross-examined at Hearing	EM-2000-369	McKiddy, Roberta A.	UtiliCorp United Inc. / Empire District Electric
Cost of Capital: Direct Testimony Rebuttal Testimony Surrebuttal Testimony True-up Direct Testimony True-up Rebuttal Testimony Cross-examined at Hearing	ER-2001-299	McKiddy, Roberta A.	The Empire District Electric Company
Cost of Capital Direct Testimony	ER-2002-217	McKiddy, Roberta A.	Citizens Electric Corporation
Rate Base and Related Issues, Retired Plant, Depreciation and Amortization Expense, Property and Liability Insurance Expense, Property Tax, Banking Fees, Flotation Costs, PSC Assessment, and Rate Case Expense: Direct Testimony: All Issues Surrebuttal Testimony: Rate Case Expense & Energy Center 3&4 Issues Settled at Prehearing	ER-2004-0570	McKiddy, Roberta A.	Empire District Electric Company
Review of Company testimony related to	ER-2007-0002	Grissum, Roberta A.	AmerenUE

Issue	Case Number	Witness	Case Name
Rate case filings of AmerenCIPS, AmerenIP, and AmerenCILCO before the Illinois Commerce Commission			
Payroll and Related Issues, Pensions & OPEBs, Ameren Services Issues settled at Prehearing	ER-2008-0318	Grissum, Roberta A.	AmerenUE
Fuel and Power Plant Maintenance Contributed to Cost of Service Report Deposition on both issues Cross-examined at Hearing	ER-2010-0036	Grissum, Roberta A.	AmerenUE
Evaluation of Transaction and Standard of Public Detriment Rebuttal Testimony Cross-examined at Hearing	GM-2001-585	McKiddy, Roberta A.	Gateway Pipeline Company Inc., et al
Revenue Requirement, Rate Design/Surcharge (ISRS Filing) Staff Rec Filed and Approved	GO-2007-0177	Grissum, Roberta	Laclede Gas Company
Revenue Requirement, Rate Design/Surcharge (ISRS Filing) Staff Rec Filed and Approved	GO-2008-0155	Grissum, Roberta	Laclede Gas Company
Revenue Requirement, Rate Design/Surcharge (ISRS Filing) Staff Rec Filed and Approved	GO-2008-0351	Grissum, Roberta	Laclede Gas Company
Rate of Return	GR-2000-512	McKiddy, Roberta A.	Union Electric Co d/b/a AmerenUE
Cost of Capital: Direct Testimony Case Settled by S&A	GR-2001-629	McKiddy, Roberta A.	Laclede Gas Company
Cost of Capital: Direct Testimony Case Settled by S&A	GR-2002-356	McKiddy, Roberta A.	Laclede Gas Company
Cash Working Capital, Rate Base and Related Issues, Depreciation and Amortization Expense, Revenues: Case Settled before testimony was Filed	GR-2005-0284	McKiddy, Roberta A.	Laclede Gas Company
Actual Cost Adjustment Review Staff Recommendation	GR-2008-0136	Grissum, Roberta A.	Missouri Gas Utility, Inc.
Capital Structure, Cost of Capital, Embedded Cost, Return on Equity: Direct Testimony Rebuttal Testimony Surrebuttal Testimony True-up Direct Cross-examined at Hearing	SR-2000-282	McKiddy, Roberta	Missouri-American Water Company
Surveillance Data Reporting	TM-2002-232	McKiddy, Roberta A.	Verizon/CenturyTel
Surveillance Data Reporting	WM-2001-309	McKiddy, Roberta A.	Missouri-American Water Company, et al
Revenue Requirement/Surcharge Rate Design (ISRS Filing) Staff Rec Filed and Approved	WO-2006-0284	Grissum, Roberta A.	Missouri-American Water Company, et al
Revenue Requirement, Rate	WO-2007-0043	Grissum, Roberta	Missouri-American Water Company

Issue	Case Number	Witness	Case Name
Design/Surcharge (ISRS Filing) Staff Rec Filed and Approved			
Revenue Requirement, Rate Design/Surcharge (ISRS Filing) Staff Rec Filed and Approved	WO-2007-0272	Grissum, Roberta	Missouri-American Water Company
Capital Structure, Cost of Capital, Embedded Cost, Return on Equity: Direct Testimony Rebuttal Testimony Surrebuttal Testimony True-up Direct Cross-Examined at Hearing	WR-2000-281	McKiddy, Roberta	Missouri-American Water Company
Capital Structure, Cost of Capital, Embedded Cost, Return on Equity: Direct Testimony: All Issues Rebuttal Testimony: All Issues Surrebuttal Testimony: Return on Common Equity and Response to Depreciation Testimony of Company Witness Cross-Examined at Hearing	WR-2000-844	McKiddy, Roberta A.	St. Louis County Water Company
Cash Working Capital, Tank Painting Expense, Main Incident Expense, Facility Locates Expense and Advertising Expense: Direct Testimony Surrebuttal Testimony Most Issues Settled at Prehearing Cross-examined at Hearing re: Cash Working Capital	WR-2003-500	McKiddy, Roberta A.	Missouri-American Water Company
Bad Debt Expense, Chemical Expense, Fuel & Power Expense, Postage Expense, Purchased Water Expense, Revenues and Staff Accounting Schedules	WR-2007-0216 and WR-2007-0217	Grissum, Roberta A.	Missouri-American Water Company
Rate Base and Related Issues, Maintenance Expense and Staff Accounting Schedules Staff Recommendation Filed	WR-2010-0345	Grissum, Roberta A.	KMB Utility Corporation



## **ZEPHANIA MAREVANGEPO**

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

I am currently employed as a Utility Regulatory Auditor II for the Missouri Public Service Commission (Commission). I accepted the position of Utility Regulatory Auditor I in December 2008.

I earned a Bachelor of Science degree in Business Administration with an emphasis in Accounting and Financial Services from Columbia College in July 2007. I earned a Masters in Business Administration with an emphasis in Accounting from Lincoln University in May 2009. My accounting and financial services degrees required an understanding of financial concepts, including the cost of capital.

On June 21, 2010, I was awarded the Certified Rate of Return Analyst (CRRA) professional designation by the Society of Utility and Regulatory Financial Analysts (SURFA). This designation is awarded based upon experience and successful completion of a written examination, which I completed during my attendance at a SURFA conference in April 2008.

I have developed rate of return recommendations for numerous small water and sewer rate cases and have assisted as needed in small water and sewer certificate cases.

### **SUMMARY OF CASE PARTICIPATION**

<b>Date Filed</b>	<b>Issue</b>	<b>Case Number</b>	<b>Exhibit</b>	<b>Case Name</b>
07/20/2010	Rate of Return	GR-2010-0171	Surrebuttal	Laclede Gas Company
06/24/2010	Rate of Return	GR-2010-0171	Rebuttal	Laclede Gas Company

<b>Date Filed</b>	<b>Issue</b>	<b>Case Number</b>	<b>Exhibit</b>	<b>Case Name</b>
06/04/2010	Rate of Return/ Cost of Capital	GR-2010-0192	Cost of Service Report	Atmos Energy Corporation
05/24/2010	Rate of Return/ Cost of Capital	GR-2010-0171	Cost of Service Report	Laclede Gas Company
03/16/2010	Finance Case	GR-2009-0450	Rebuttal	Laclede Gas Company
02/23/2010	Finance Case	GR-2009-0450	Direct	Laclede Gas Company

Regulatory Case Proceeding Participation

**Stephen M. Rackers**

<b>Issue</b>	<b>Case Number</b>	<b>Exhibit</b>	<b>Case Name</b>
Interim Rates	ER-2010-0036	Direct, Rebuttal, Surrebuttal, True-Up	Union Electric Company d/b/a AmerenUE
Revenue Requirement Cost Of service Report, Taum Sauk Capacity Sales, Nuclear Plant Licensing	ER-2008-0318	Direct, Surrebuttal	Union Electric Company d/b/a AmerenUE
True-Up, Income Taxes, MGP Sites, Other Rates Base Items, Revenue Requirement and OPEB	GR-2007-0387	Direct, Rebuttal	ATMOS Energy Corporation
True-up, Security AAO, Joplin Surcharge	WR-2007-0216	Direct, Rebuttal, Supplemental True-up Direct	Missouri-American Water Company
Income Taxes, Accumulated Deferred Income Taxes in Rate Base, Taum Sauk Generating Plant, Pinckneyville and Kinmundy Generating Plants, Accumulated Income Deferred Income Tax Balance, Income Tax Expense	ER-2007-0002	Direct, Rebuttal, Surrebuttal	Union Electric Company d/b/a AmerenUE
Revenue-Requirement, True-up, Income Taxes, MGP Sites, Other Rate Base Items, OPEBs	GR-2006-0387	Direct, Rebuttal	ATMOS Energy Corporation
Affidavit in Support of the Stipulation and Agreement on various issues.	GR-2005-0284	Stipulation and Agreement	Laclede Gas Company
ISRS Income Taxes	GO-2004-0443	Direct	Laclede Gas Company
St. Joseph Treatment Plant, AAOs, Depreciation, Transaction Costs, Old St. Joseph Treatment Plant, Security Accounting Authority Order, Acquisition Adjustments	WC-2004-0168	Direct, Surrebuttal	Missouri-American Water Company
Security AAO, Recovery Of Undepreciated Plant Balances and Acquisition Adjustments	WR-2003-0500	Direct, Surrebuttal	Missouri-American Water Company
Transaction Costs, Depreciation, AAO's, Acquisition Adjustment, Security Accounting Authority Order, Old St. Joseph Treatment Plant	WR-2003-0500	Direct, Surrebuttal	Missouri-American Water Company
Financial Aspects	GT-2003-0117	Direct	Laclede Gas Company

Regulatory Case Proceeding Participation

**Stephen M. Rackers**

<b>Issue</b>	<b>Case Number</b>	<b>Exhibit</b>	<b>Case Name</b>
Copper Surveys, Net Salvage Expense, Environmental Cost, Test Year & True-Up, Accounting Authority Orders, Laclede Pipeline, Safety and Copper Service Replacement Program	GR-2002-356	Direct, Rebuttal, Surrebuttal	Laclede Gas Company
Purchase Power	ER-2002-217	Direct	Citizens Electric Corporation
Income Taxes, Pension Liability	EC-2002-1025	Direct	Union Electric Company d/b/a AmerenUE
Pension Liability, Income Tax Expense, Deferred Income Taxes, Income Tax Expense, Deferred Income Taxes – Rate Base Offset, Pension Liability, Income Taxes, Territorial Agreements	EC-2002-1	Direct, Surrebuttal	Union Electric Company d/b/a AmerenUE
Incentive Compensation, Post-Retirement Benefits Other than Pensions, Prepaid Pension Assets, Pensions	GR-2001-629	Direct	Laclede Gas Company
Application Recommendation	GM-2001-342	Rebuttal	Laclede Gas Company
Merger Recommendation, Cost Allocation Manual	WM-2001-309	Rebuttal, Surrebuttal	Missouri-American Water Company, et al
Merger Cost and Savings, Infrastructure Replacement Deferrals, Income Taxes, Net Salvage Expense, Revenue Requirement, Merger Costs and Savings, Accounting Authority Orders (AAO's), Infrastructure Replacement, Depreciation	WR-2000-844	Direct, Rebuttal, Surrebuttal	St. Louis County Water Company
Pension Liability, AFUDC, Deferred OPEB Asset, Pension Expense – FAS 87, New St. Joseph Treatment Plant Phase-In, OPEBS – FAS 106, Phase-In, Accounting Authority Order, Phase-In	SR-2000-282	Direct, Rebuttal, Surrebuttal	Missouri-American Water Company
Staff's Explanation and Rationale for Supporting the Stipulation Agreement	WR-2000-281	Direct in Support of Stipulation Agreement	Missouri-American Water Company
Pension Expense-FAS 87, Pension Liability, AFUDC, Deferred OPEB Asset, New St. Joseph Treatment Plant Phase-In, OPEBS-FAS 106, Accounting Authority Order, Phase-In, St. Joseph Treatment Plant	WR-2000-281	Direct, Rebuttal, Surrebuttal	Missouri-American Water Company

Regulatory Case Proceeding Participation

**Stephen M. Rackers**

<b>Issue</b>	<b>Case Number</b>	<b>Exhibit</b>	<b>Case Name</b>
Staff's Explanation and Rationale for Supporting the Stipulation Agreement	SR-2000-282	Direct in Support of Stipulation Agreement	Missouri-American Water Company
Territorial Agreements	EO-99-599	Rebuttal	Union Electric Company / Ozark Border Electric Cooperative
Safety Deferral, FAS 87, FAS 88, FAS 106, Prepaid Pension Asset, Environmental Cost, Computer Cost, Supplemental Pension, Accounting Authority Orders	GR-99-315	Direct, Rebuttal, Surrebuttal	Laclede Gas Company
Main Replacement Program, Order-Infrastructure, Accounting Authority, Main Replacement Programs	WO-98-223	Direct	St. Louis County Water Company
Lease Classification & Terms	WA-97-46	Rebuttal	Missouri-American Water Company
Amortization of Depreciation Reserve Deficiency, Appointment Meter Reading, Main Incident Expense, Income Tax, Infrastructure Replacement Deferral, Property Tax	WR-97-382	Direct	St. Louis County Water Company
Lease Classification & Terms	WF-97-241	Rebuttal	Missouri-American Water Company
Income Tax, Territorial Agreement, Overview, Income Taxes, Alternative Regulation Plan and Agreements, Pension Liability	EM-96-149	Direct, Surrebuttal	Union Electric Company
Overview, Income Tax, Territorial Agreements, Alternative Regulation Plan and Agreement	EO-96-14	Direct, Surrebuttal	Union Electric Company

## **Michael 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

### **SELECTED MANUSCRIPTS AND 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.

Stahlman, Michael. “The Amoralism of Signals.” Awarded in top 50 authors for SEVEN Fund essay competition, “The Morality of Profit.”

In Preparation: Stahlman, Michael and Laura M.J. McCann. “Phytase: Anatomy of an Invisible Win-Win Technology.” For Agriculture and Human Values

In Preparation: Stahlman, Michael. “Was the NBER decision to declare the recession over a political decision? Using the S&P 500 P/E Ratio as a Business Cycle Indicator.” For American Institute for Economic Research

### **CASE INVOLVEMENT**

- GR-2010-0372 – MGE Summer and Winter PGA Filings
- GR-2011-0117 – MGU Winter PGA Filing
- AO-2011-0035 – Status Reports of Energy Efficiency Advisory Groups and Collaboratives
- GC-2011-0045 – SMNG Complaint Case
- GR-2010-0347 – SMNG Small Rate Case

**David Williams**

I am currently employed as a Utility Engineering Specialist III for the Missouri Public Service Commission (Commission). I was employed by the Commission in July of 2008. I received a Master of Science degree in Industrial Engineering from the University of Missouri - Columbia in 1967, and undergraduate degrees in engineering and business management in 1965.

From 1967 until 2000 I was employed by the University of Missouri in engineering, research and information technology capacities.

I have worked on the cases indicated below.

<b>Company</b>	<b>Case Number</b>
AmerenUE decommissioning	EO-2006-0098
Ameren Missouri	GR-2010-0363
Aqua Missouri (Development)	SC-2010-0150
Aqua Missouri, Inc.	SC-2010-0152
Aqua Missouri (Development)	SR-2010-0023
Aqua Missouri, Inc.	WC-2010-0151
Aqua Missouri, Inc. (CU)	SR-2010-0026
Aqua Missouri, Inc. (CU)	WR-2010-0027
Aqua Missouri, Inc. (RU)	WC-2010-0153
Aqua Missouri, Inc. (RU)	WR-2010-0025
Citizens Telephone Company	IO-2009-0032
Empire District Electric	ER-2010-0130
Empire District Gas	GR-2009-0434

<b>Company</b>	<b>Case Number</b>
Hickory Hills Water & Sewer	SR-2009-0154
Hickory Hills Water & Sewer	WR-2009-0151
Kansas City Power and Light	ER-2009-0089
KCP&L Greater Missouri Op.	ER-2009-0090
KCP&L Greater Missouri Op.	HR-2009-0092
Laclede Gas	GR-2010-0171
Lake Region Water & Sewer	SR-2010-0110
Lake Region Water & Sewer	WR-2010-0111
Mid-Missouri Telephone	IU-2010-0164
Missouri Gas Energy	GE-2010-0030
Missouri Gas Energy	GR-2009-0355
Missouri Utilities	SR-2009-0153
Missouri Utilities	WR-2009-0150
Osage Water	SR-2009-0152
Osage Water	WR-2009-0149
Suburban Water and Sewer	WR-2009-0197
Swiss Villa Utilities	WO-2007-0410
US Water Lexington	WM-2011-0030
Whiteside Hidden Acres	SA-2009-0262
Whiteside Hidden Acres	WA-2009-0261
Whiteside Hidden Acres	WA-2011-0024
Woodland Acres	WA-2009-0031



## **Credentials and Background of**

### **Seoung Joun Won**

I am currently employed as a Regulatory Economist I in the Economic Analysis Section, Energy Department, Utility Operation 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 in 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 in the Commission include managing weather data, calculating normal weather, and analyzing revenues and rate designs.

**MISSOURI PUBLIC SERVICE COMMISSION**

**STAFF REPORT  
COST OF SERVICE**

**APPENDIX 2  
Support for Staff Cost  
of  
Capital Recommendations**

**UNION ELECTRIC COMPANY  
d/b/a AMERENUE**

**CASE NO. GR-2010-0363**

**AN ANALYSIS OF THE COST OF CAPITAL**

**FOR**

**Union Electric Company d/b/a AmerenUE**

**CASE NO. GR-2010-0363**

**SCHEDULES**

**BY**

**ZEPHANIA MAREVANGEPO**

**UTILITY SERVICES DIVISION**

**MISSOURI PUBLIC SERVICE COMMISSION**

**NOVEMBER 2010**

## List of Schedules

Schedule Number	Description of Schedule
1	List of Schedules
2-1	Federal Reserve Discount Rate Changes and Federal Reserve Funds Rate Changes
2-2	Graph of Federal Reserve Discount Rates and Federal Funds Rates
3-1	Rate of Inflation
3-2	Graph of Rate of Inflation
4-1	Average Yields on Public Utility Bonds
4-2	Average Yields on Thirty-Year U.S. Treasury Bonds
4-3	Graph of Average Yields on Public Utility Bonds and Thirty-Year U.S. Treasury Bonds
4-4	Graph of Monthly Spreads Between Yields on Mergent's Public Utility Bonds and Thirty-Year U.S. Treasury Bonds
4-5	Graph of Moody's Baa Corporate Bond Yields
5	Historical Capital Structures for Ameren Corporation and Union Electric Company d/b/a AmerenUE
6	Capital Structure as of December 31, 2009 for Union Electric Company d/b/a AmerenUE
7	Criteria for Selecting Comparable Natural Gas Distribution Companies
8	Seven Comparable Natural Gas Distribution Companies for Union Electric Company d/b/a AmerenUE
9-1	Ten-Year Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates for the Seven Comparable Natural Gas Distribution Companies
9-2	Five-Year Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates for the Seven Natural Gas Distribution Companies
9-3	Average of Ten and Five-Year Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates for the Seven Natural Gas Distribution Companies
10	Five-Year Projected Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates for the Seven Comparable Natural Gas Distribution Companies
11	Historical and Projected Growth Rates for the Seven Comparable Natural Gas Distribution Companies
12	Average High / Low Stock Price for July 2010 through September 2010 for the Seven Comparable Natural Gas Distribution Companies
13	DCF Estimated Costs of Common Equity for the Seven Comparable Natural Gas Distribution Companies
14	Capital Asset Pricing Model (CAPM) Costs of Common Equity Estimates for the Seven Comparable Natural Gas Distribution Companies
15	Public Utility Revenue Requirement or Cost of Service
16	Weighted Cost of Capital for Union Electric Company d/b/a AmerenUE

Union Electric Company d/b/a AmerenUE  
CASE NO. GR-2010-0363

**Federal Reserve Discount Rate Changes and Federal Reserve Funds Rate Changes**

Date	Federal Reserve Discount Rate	Federal Reserve Funds Rate	Date	Federal Reserve Discount Rate	Federal Reserve Funds Rate
01/01/83	8.50%		06/30/99	4.50%	5.00%
12/31/83	8.50%		08/24/99	4.75%	5.25%
04/09/84	9.00%		11/16/99	5.00%	5.50%
11/21/84	8.50%		02/02/00	5.25%	5.75%
12/24/84	8.00%		03/21/00	5.50%	6.00%
05/20/85	7.50%		05/19/00	6.00%	6.50%
03/07/86	7.00%		01/03/01	5.75%	6.00%
04/21/86	6.50%		01/04/01	5.50%	6.00%
07/11/86	6.00%		01/31/01	5.00%	5.50%
08/21/86	5.50%		03/20/01	4.50%	5.00%
09/04/87	6.00%		04/18/01	4.00%	4.50%
08/09/88	6.50%		05/15/01	3.50%	4.00%
02/24/89	7.00%		06/27/01	3.25%	3.75%
07/13/90		8.00% *	08/21/01	3.00%	3.50%
10/29/90		7.75%	09/17/01	2.50%	3.00%
11/13/90		7.50%	10/02/01	2.00%	2.50%
12/07/90		7.25%	11/06/01	1.50%	2.00%
12/18/90		7.00%	12/11/01	1.25%	1.75%
12/19/90	6.50%		11/06/02	0.75%	1.25%
01/09/91		6.75%	01/09/03	2.25%**	1.25%
02/01/91	6.00%	6.25%	06/25/03	2.00%	1.00%
03/08/91		6.00%	06/30/04	2.25%	1.25%
04/30/91	5.50%	5.75%	08/10/04	2.50%	1.50%
08/06/91		5.50%	09/21/04	2.75%	1.75%
09/13/91	5.00%	5.25%	11/10/04	3.00%	2.00%
10/31/91		5.00%	12/14/04	3.25%	2.25%
11/06/91	4.50%	4.75%	02/02/05	3.50%	2.50%
12/06/91		4.50%	03/22/05	3.75%	2.75%
12/20/91	3.50%	4.00%	05/03/05	4.00%	3.00%
04/09/92		3.75%	06/30/05	4.25%	3.25%
07/02/92	3.00%	3.25%	08/09/05	4.50%	3.50%
09/04/92		3.00%	09/20/05	4.75%	3.75%
01/01/93			11/01/05	5.00%	4.00%
12/31/93	No Changes	No Changes	12/13/05	5.25%	4.25%
02/04/94		3.25%	01/31/06	5.50%	4.50%
03/22/94		3.50%	03/28/06	5.75%	4.75%
04/18/94		3.75%	05/10/06	6.00%	5.00%
05/17/94	3.50%	4.25%	06/29/06	6.25%	5.25%
08/16/94	4.00%	4.75%	08/17/07	5.75%	5.25%
11/15/94	4.75%	5.50%	09/18/07	5.25%	4.75%
02/01/95	5.25%	6.00%	10/31/07	5.00%	4.50%
07/06/95		5.75%	12/11/07	4.75%	4.25%
12/19/95		5.50%	01/22/08	4.00%	3.50%
01/31/96	5.00%	5.25%	01/30/08	3.50%	3.00%
03/25/97		5.50%	03/16/08	3.25%	
12/12/97	5.00%		03/18/08	2.50%	2.25%
01/09/98	5.00%		04/30/08	2.25%	2.00%
03/06/98	5.00%		10/08/08	1.75%	1.50%
09/29/98		5.25%	10/29/08	1.25%	1.00%
10/15/98	4.75%	5.00%	12/16/08	0.50%	0.00-0.25%
11/17/98	4.50%	4.75%	02/19/10	0.75%	

\* Staff began tracking the Federal Funds Rate.

\*\*Revised discount window program begins. Reflects rate on primary credit. This revised discount window policy results in incomparability of the discount rates after January 9, 2003 to discount rates before January 9, 2003.

Source:

Federal Reserve Discount rate

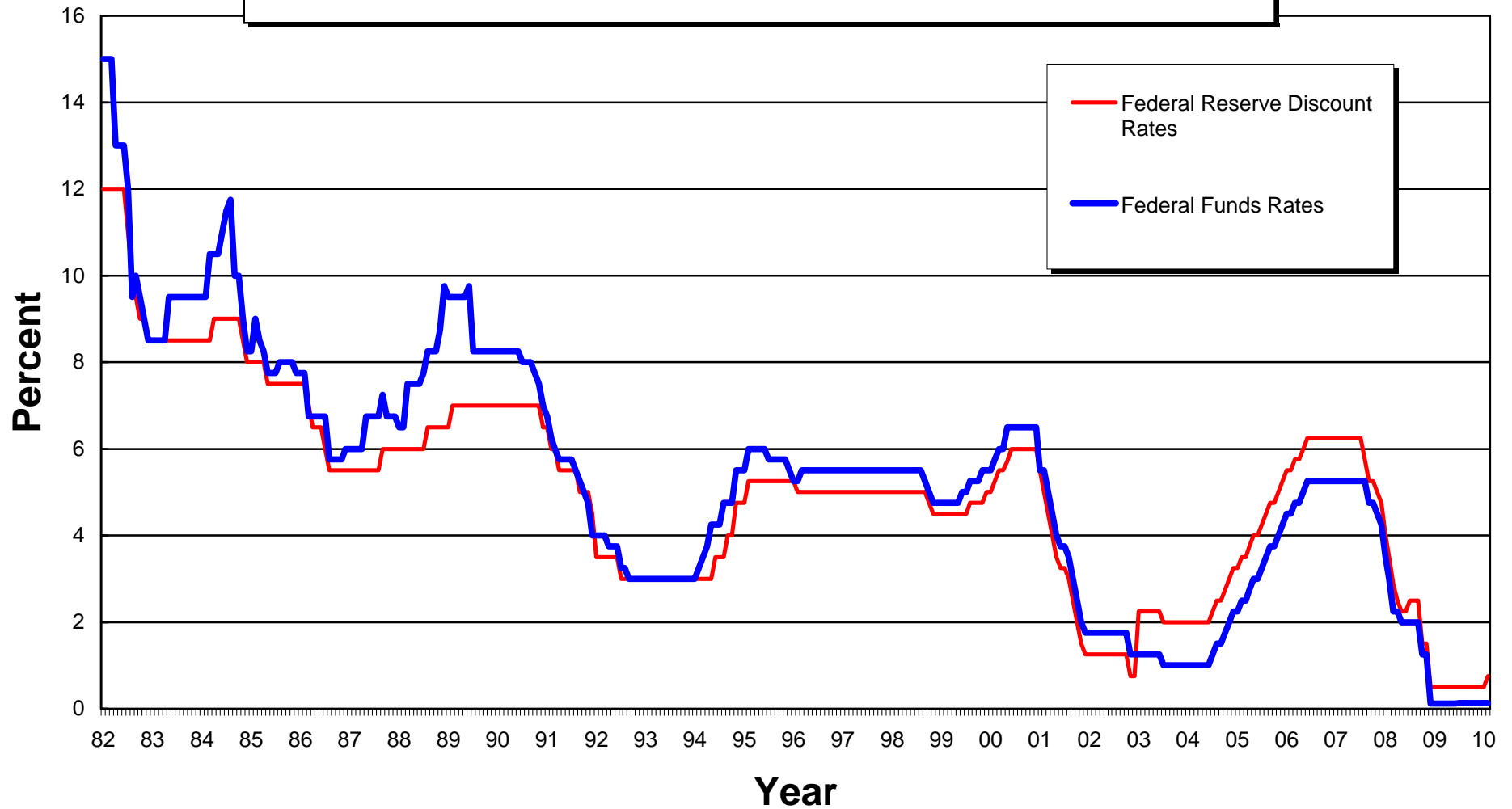
<http://www.newyorkfed.org/markets/statistics/dlyrates/fedrate.html>

Federal Reserve Funds rate

<http://www.newyorkfed.org/markets/statistics/dlyrates/fedrate.html>

Note: Interest rates as of December 31 for each year are underlined.

## Federal Reserve Discount Rates and Federal Funds Rates 1980 - 2010



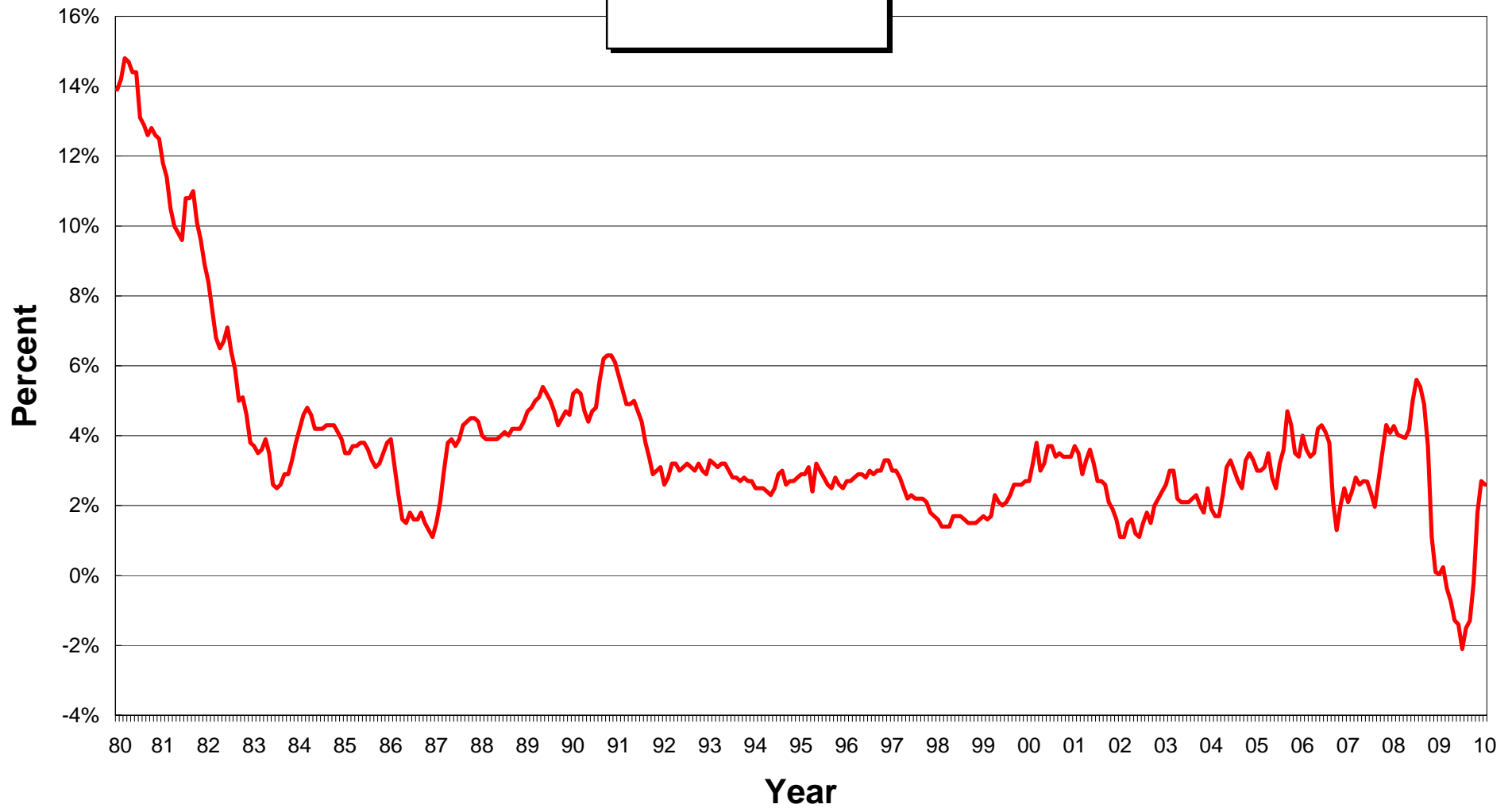
Union Electric Company d/b/a AmerenUE  
CASE NO. GR-2010-0363

Rate of Inflation

Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1980	13.90	Jan 1984	4.20	Jan 1988	4.00	Jan 1992	2.60	Jan 1996	2.70	Jan 2000	2.70	Jan 2004	1.90	Jan 2008	4.30
Feb	14.20	Feb	4.60	Feb	3.90	Feb	2.80	Feb	2.70	Feb	3.20	Feb	1.70	Feb	4.00
Mar	14.80	Mar	4.80	Mar	3.90	Mar	3.20	Mar	2.80	Mar	3.70	Mar	1.70	Mar	4.00
Apr	14.70	Apr	4.60	Apr	3.90	Apr	3.20	Apr	2.90	Apr	3.00	Apr	2.30	Apr	3.90
May	14.40	May	4.20	May	3.90	May	3.00	May	2.90	May	3.20	May	3.10	May	4.20
Jun	14.40	Jun	4.20	Jun	4.00	Jun	3.10	Jun	2.80	Jun	3.70	Jun	3.30	Jun	5.00
Jul	13.10	Jul	4.20	Jul	4.10	Jul	3.20	Jul	3.00	Jul	3.70	Jul	3.00	Jul	5.60
Aug	12.90	Aug	4.30	Aug	4.00	Aug	3.10	Aug	2.90	Aug	3.40	Aug	2.70	Aug	5.40
Sep	12.60	Sep	4.30	Sep	4.20	Sep	3.00	Sep	3.00	Sep	3.50	Sep	2.50	Sep	4.90
Oct	12.80	Oct	4.30	Oct	4.20	Oct	3.20	Oct	3.00	Oct	3.40	Oct	3.30	Oct	3.70
Nov	12.60	Nov	4.10	Nov	4.20	Nov	3.00	Nov	3.30	Nov	3.40	Nov	3.50	Nov	1.10
Dec	12.50	Dec	3.90	Dec	4.40	Dec	2.90	Dec	3.30	Dec	3.40	Dec	3.30	Dec	0.10
Jan 1981	11.80	Jan 1985	3.50	Jan 1989	4.70	Jan 1993	3.30	Jan 1997	3.00	Jan 2001	3.70	Jan 2005	3.00	Jan 2009	0.00
Feb	11.40	Feb	3.50	Feb	4.80	Feb	3.20	Feb	3.00	Feb	3.50	Feb	3.00	Feb	0.20
Mar	10.50	Mar	3.70	Mar	5.00	Mar	3.10	Mar	2.80	Mar	2.90	Mar	3.10	Mar	-0.40
Apr	10.00	Apr	3.70	Apr	5.10	Apr	3.20	Apr	2.50	Apr	3.30	Apr	3.50	Apr	-0.70
May	9.80	May	3.80	May	5.40	May	3.20	May	2.20	May	3.60	May	2.80	May	-1.28
Jun	9.60	Jun	3.80	Jun	5.20	Jun	3.00	Jun	2.30	Jun	3.20	Jun	2.50	June	-1.40
Jul	10.80	Jul	3.60	Jul	5.00	Jul	2.80	Jul	2.20	Jul	2.70	Jul	3.20	July	-2.10
Aug	10.80	Aug	3.30	Aug	4.70	Aug	2.80	Aug	2.20	Aug	2.70	Aug	3.60	Aug	-1.50
Sep	11.00	Sep	3.10	Sep	4.30	Sep	2.70	Sep	2.20	Sep	2.60	Sep	4.70	Sep	-1.30
Oct	10.10	Oct	3.20	Oct	4.50	Oct	2.80	Oct	2.10	Oct	2.10	Oct	4.30	Oct	-0.20
Nov	9.60	Nov	3.50	Nov	4.70	Nov	2.70	Nov	1.80	Nov	1.90	Nov	3.50	Nov	1.80
Dec	8.90	Dec	3.80	Dec	4.60	Dec	2.70	Dec	1.70	Dec	1.60	Dec	3.40	Dec	2.70
Jan 1982	8.40	Jan 1986	3.90	Jan 1990	5.20	Jan 1994	2.50	Jan 1998	1.60	Jan 2002	1.10	Jan 2006	4.00	Jan 2010	2.60
Feb	7.60	Feb	3.10	Feb	5.30	Feb	2.50	Feb	1.40	Feb	1.10	Feb	3.60	Feb	2.10
Mar	6.80	Mar	2.30	Mar	5.20	Mar	2.50	Mar	1.40	Mar	1.50	Mar	3.40	Mar	2.30
Apr	6.50	Apr	1.60	Apr	4.70	Apr	2.40	Apr	1.40	Apr	1.60	Apr	3.50	April	2.20
May	6.70	May	1.50	May	4.40	May	2.30	May	1.70	May	1.20	May	4.20	May	2.00
Jun	7.10	Jun	1.80	Jun	4.70	Jun	2.50	Jun	1.70	Jun	1.10	June	4.30	Jun	1.10
Jul	6.40	Jul	1.60	Jul	4.80	Jul	2.90	Jul	1.70	Jul	1.50	July	4.10	Jul	1.20
Aug	5.90	Aug	1.60	Aug	5.60	Aug	3.00	Aug	1.60	Aug	1.80	Aug	3.80	Aug	1.10
Sep	5.00	Sep	1.80	Sep	6.20	Sep	2.60	Sep	1.50	Sep	1.50	Sep	2.10	Sep	1.10
Oct	5.10	Oct	1.50	Oct	6.30	Oct	2.70	Oct	1.50	Oct	2.00	Oct	1.30		
Nov	4.60	Nov	1.30	Nov	6.30	Nov	2.70	Nov	1.50	Nov	2.20	Nov	2.00		
Dec	3.80	Dec	1.10	Dec	6.10	Dec	2.80	Dec	1.60	Dec	2.40	Dec	2.50		
Jan 1983	3.70	Jan 1987	1.50	Jan 1991	5.70	Jan 1995	2.90	Jan 1999	1.70	Jan 2003	2.60	Jan 2007	2.10		
Feb	3.50	Feb	2.10	Feb	5.30	Feb	2.90	Feb	1.60	Feb	3.00	Feb	2.40		
Mar	3.60	Mar	3.00	Mar	4.90	Mar	3.10	Mar	1.70	Mar	3.00	Mar	2.80		
Apr	3.90	Apr	3.80	Apr	4.90	Apr	2.40	Apr	2.30	Apr	2.20	Apr	2.60		
May	3.50	May	3.90	May	5.00	May	3.20	May	2.10	May	2.10	May	2.70		
Jun	2.60	Jun	3.70	Jun	4.70	Jun	3.00	Jun	2.00	Jun	2.10	Jun	2.70		
Jul	2.50	Jul	3.90	Jul	4.40	Jul	2.80	Jul	2.10	Jul	2.10	Jul	2.40		
Aug	2.60	Aug	4.30	Aug	3.80	Aug	2.60	Aug	2.30	Aug	2.20	Aug	2.00		
Sep	2.90	Sep	4.40	Sep	3.40	Sep	2.50	Sep	2.60	Sep	2.30	Sep	2.80		
Oct	2.90	Oct	4.50	Oct	2.90	Oct	2.80	Oct	2.60	Oct	2.00	Oct	3.50		
Nov	3.30	Nov	4.50	Nov	3.00	Nov	2.60	Nov	2.60	Nov	1.80	Nov	4.30		
Dec	3.80	Dec	4.40	Dec	3.10	Dec	2.50	Dec	2.70	Dec	1.90	Dec	4.10		

Source: U.S. Dept of Labor, Bureau of Labor Statistics, Consumer Price Index - All Urban Consumers,  
Change for 12-Month Period, Bureau of Labor Statistics,  
[http://www.bls.gov/schedule/archives/cpi\\_nr.htm](http://www.bls.gov/schedule/archives/cpi_nr.htm)

Rate of Inflation  
1980 - 2010





Union Electric Company d/b/a AmerenUE  
CASE NO. GR-2010-0363

**Average Yields on Mergent's Public Utility Bonds**

Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1980	12.12	Jan 1984	13.40	Jan 1988	10.75	Jan 1992	8.67	Jan 1996	7.20	Jan 2000	8.22	Jan 2004	6.23	Jan 2008	6.08
Feb	13.48	Feb	13.50	Feb	10.11	Feb	8.77	Feb	7.37	Feb	8.10	Feb	6.17	Feb	6.28
Mar	14.33	Mar	14.03	Mar	10.11	Mar	8.84	Mar	7.72	Mar	8.14	Mar	6.01	Mar	6.29
Apr	13.50	Apr	14.30	Apr	10.53	Apr	8.79	Apr	7.88	Apr	8.14	Apr	6.38	Apr	6.36
May	12.17	May	14.95	May	10.75	May	8.72	May	7.99	May	8.55	May	6.68	May	6.38
Jun	11.87	Jun	15.16	Jun	10.71	Jun	8.64	Jun	8.07	Jun	8.22	Jun	6.53	Jun	6.50
Jul	12.12	Jul	14.92	Jul	10.96	Jul	8.46	Jul	8.02	Jul	8.17	Jul	6.34	Jul	6.50
Aug	12.82	Aug	14.29	Aug	11.09	Aug	8.34	Aug	7.84	Aug	8.05	Aug	6.18	Aug	6.48
Sep	13.29	Sep	14.04	Sep	10.56	Sep	8.32	Sep	8.01	Sep	8.16	Sep	6.01	Sep	6.59
Oct	13.53	Oct	13.68	Oct	9.92	Oct	8.44	Oct	7.76	Oct	8.08	Oct	5.95	Oct	7.70
Nov	14.07	Nov	13.15	Nov	9.89	Nov	8.53	Nov	7.48	Nov	8.03	Nov	5.97	Nov	7.80
Dec	14.48	Dec	12.96	Dec	10.02	Dec	8.36	Dec	7.58	Dec	7.79	Dec	5.93	Dec	6.87
Jan 1981	14.22	Jan 1985	12.88	Jan 1989	10.02	Jan 1993	8.23	Jan 1997	7.79	Jan 2001	7.76	Jan 2005	5.80	Jan 2009	6.77
Feb	14.84	Feb	13.00	Feb	10.02	Feb	8.00	Feb	7.68	Feb	7.69	Feb	5.64	Feb	6.72
Mar	14.86	Mar	13.66	Mar	10.16	Mar	7.85	Mar	7.92	Mar	7.59	Mar	5.86	Mar	6.85
Apr	15.32	Apr	13.42	Apr	10.14	Apr	7.76	Apr	8.08	Apr	7.81	Apr	5.72	Apr	6.90
May	15.84	May	12.89	May	9.92	May	7.78	May	7.94	May	7.88	May	5.60	May	6.83
Jun	15.27	Jun	11.91	Jun	9.49	Jun	7.68	Jun	7.77	Jun	7.75	Jun	5.39	June	6.54
Jul	15.87	Jul	11.88	Jul	9.34	Jul	7.53	Jul	7.52	Jul	7.71	Jul	5.50	July	6.15
Aug	16.33	Aug	11.93	Aug	9.37	Aug	7.21	Aug	7.57	Aug	7.57	Aug	5.51	Aug	5.80
Sep	16.89	Sep	11.95	Sep	9.43	Sep	7.01	Sep	7.50	Sep	7.73	Sep	5.54	Sep	5.60
Oct	16.76	Oct	11.84	Oct	9.37	Oct	6.99	Oct	7.37	Oct	7.64	Oct	5.79	Oct	5.64
Nov	15.50	Nov	11.33	Nov	9.33	Nov	7.30	Nov	7.24	Nov	7.61	Nov	5.88	Nov	5.71
Dec	15.77	Dec	10.82	Dec	9.31	Dec	7.33	Dec	7.16	Dec	7.86	Dec	5.83	Dec	5.86
Jan 1982	16.73	Jan 1986	10.66	Jan 1990	9.44	Jan 1994	7.31	Jan 1998	7.03	Jan 2002	7.69	Jan 2006	5.77	Jan 2010	5.83
Feb	16.72	Feb	10.16	Feb	9.66	Feb	7.44	Feb	7.09	Feb	7.62	Feb	5.83	Feb	5.94
Mar	16.07	Mar	9.33	Mar	9.75	Mar	7.83	Mar	7.13	Mar	7.83	Mar	5.98	Mar	5.90
Apr	15.82	Apr	9.02	Apr	9.87	Apr	8.20	Apr	7.12	Apr	7.74	Apr	6.28	April	5.87
May	15.60	May	9.52	May	9.89	May	8.32	May	7.11	May	7.76	May	6.39	May	5.59
Jun	16.18	Jun	9.51	Jun	9.69	Jun	8.31	Jun	6.99	Jun	7.67	June	6.39	Jun	5.55
Jul	16.04	Jul	9.19	Jul	9.66	Jul	8.47	Jul	6.99	Jul	7.54	July	6.37	Jul	5.39
Aug	15.22	Aug	9.15	Aug	9.84	Aug	8.41	Aug	6.96	Aug	7.34	Aug	6.20	Aug	5.10
Sep	14.56	Sep	9.42	Sep	10.01	Sep	8.65	Sep	6.88	Sep	7.23	Sep	6.03	Sep	5.10
Oct	13.88	Oct	9.39	Oct	9.94	Oct	8.88	Oct	6.88	Oct	7.43	Oct	6.01	Oct	5.14
Nov	13.58	Nov	9.15	Nov	9.76	Nov	9.00	Nov	6.96	Nov	7.31	Nov	5.82		
Dec	13.55	Dec	8.96	Dec	9.57	Dec	8.79	Dec	6.84	Dec	7.20	Dec	5.83		
Jan 1983	13.46	Jan 1987	8.77	Jan 1991	9.56	Jan 1995	8.77	Jan 1999	6.87	Jan 2003	7.13	Jan 2007	5.96		
Feb	13.60	Feb	8.81	Feb	9.31	Feb	8.56	Feb	7.00	Feb	6.92	Feb	5.91		
Mar	13.28	Mar	8.75	Mar	9.39	Mar	8.41	Mar	7.18	Mar	6.80	Mar	5.87		
Apr	13.03	Apr	9.30	Apr	9.30	Apr	8.30	Apr	7.16	Apr	6.68	Apr	6.01		
May	13.00	May	9.82	May	9.29	May	7.93	May	7.42	May	6.35	May	6.03		
Jun	13.17	Jun	9.87	Jun	9.44	Jun	7.62	Jun	7.70	Jun	6.21	June	6.34		
Jul	13.28	Jul	10.01	Jul	9.40	Jul	7.73	Jul	7.66	Jul	6.54	July	6.28		
Aug	13.50	Aug	10.33	Aug	9.16	Aug	7.86	Aug	7.86	Aug	6.78	Aug	6.28		
Sep	13.35	Sep	11.00	Sep	9.03	Sep	7.62	Sep	7.87	Sep	6.58	Sep	6.24		
Oct	13.19	Oct	11.32	Oct	8.99	Oct	7.46	Oct	8.02	Oct	6.50	Oct	6.17		
Nov	13.33	Nov	10.82	Nov	8.93	Nov	7.40	Nov	7.86	Nov	6.44	Nov	6.04		
Dec	13.48	Dec	10.99	Dec	8.76	Dec	7.21	Dec	8.04	Dec	6.36	Dec	6.23		

Source:

Mergent Bond Record - January 1980 through September 2010  
BondsOnline October 2010

Union Electric Company d/b/a AmerenUE  
CASE NO. GR-2010-0363

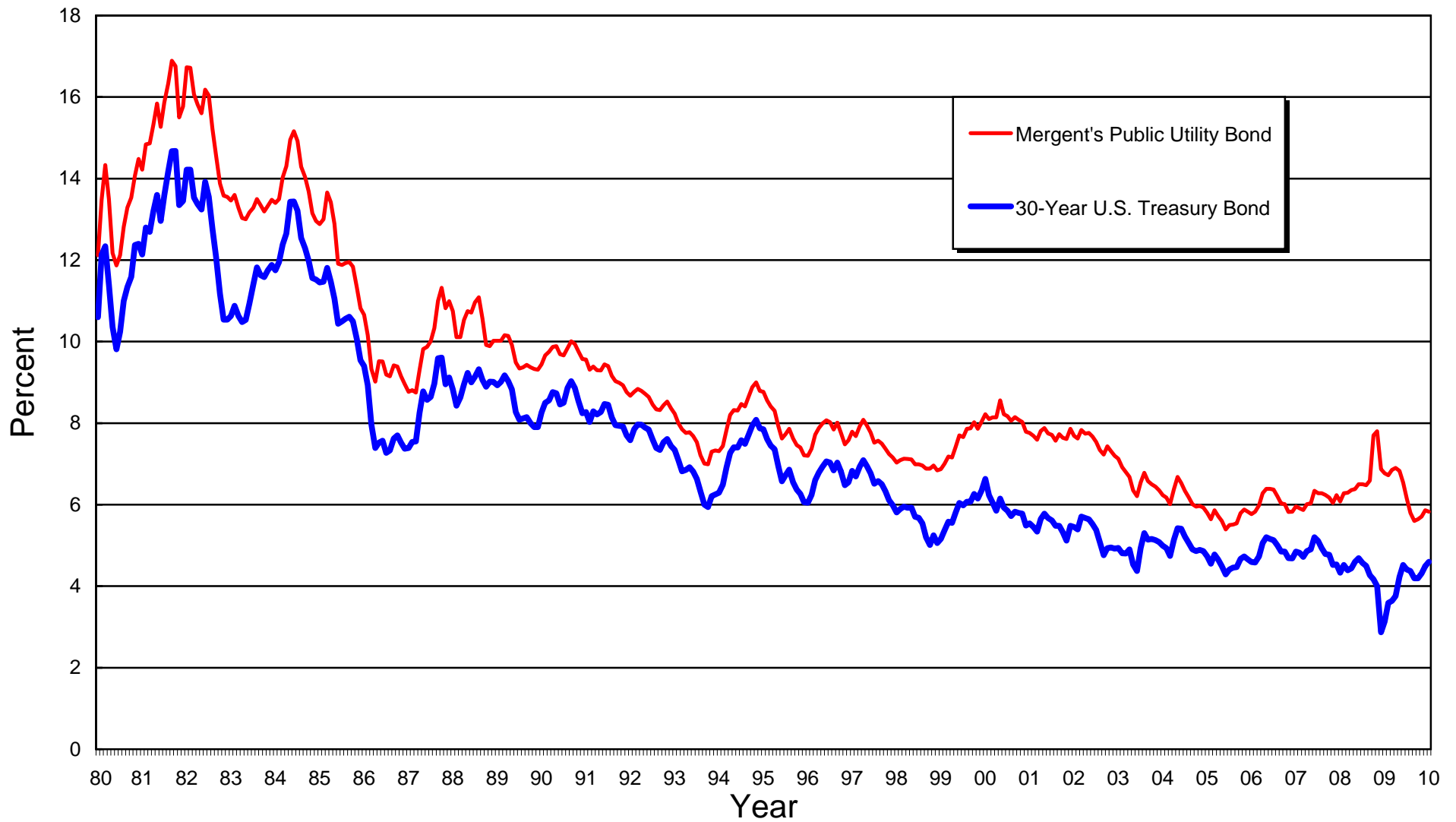
**Average Yields on Thirty-Year U.S. Treasury Bonds**

Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1980	10.60	Jan 1984	11.75	Jan 1988	8.83	Jan 1992	7.58	Jan 1996	6.05	Jan 2000	6.63	Jan 2004	4.99	Jan 2008	4.33
Feb	12.13	Feb	11.95	Feb	8.43	Feb	7.85	Feb	6.24	Feb	6.23	Feb	4.93	Feb	4.52
Mar	12.34	Mar	12.38	Mar	8.63	Mar	7.97	Mar	6.60	Mar	6.05	Mar	4.74	Mar	4.39
Apr	11.40	Apr	12.65	Apr	8.95	Apr	7.96	Apr	6.79	Apr	5.85	Apr	5.14	Apr	4.44
May	10.36	May	13.43	May	9.23	May	7.89	May	6.93	May	6.15	May	5.42	May	4.60
Jun	9.81	Jun	13.44	Jun	9.00	Jun	7.84	Jun	7.06	Jun	5.93	Jun	5.41	Jun	4.69
Jul	10.24	Jul	13.21	Jul	9.14	Jul	7.60	Jul	7.03	Jul	5.85	Jul	5.22	Jul	4.57
Aug	11.00	Aug	12.54	Aug	9.32	Aug	7.39	Aug	6.84	Aug	5.72	Aug	5.06	Aug	4.50
Sep	11.34	Sep	12.29	Sep	9.06	Sep	7.34	Sep	7.03	Sep	5.83	Sep	4.90	Sep	4.27
Oct	11.59	Oct	11.98	Oct	8.89	Oct	7.53	Oct	6.81	Oct	5.80	Oct	4.86	Oct	4.17
Nov	12.37	Nov	11.56	Nov	9.02	Nov	7.61	Nov	6.48	Nov	5.78	Nov	4.89	Nov	4.00
Dec	12.40	Dec	11.52	Dec	9.01	Dec	7.44	Dec	6.55	Dec	5.49	Dec	4.86	Dec	2.87
Jan 1981	12.14	Jan 1985	11.45	Jan 1989	8.93	Jan 1993	7.34	Jan 1997	6.83	Jan 2001	5.54	Jan 2005	4.73	Jan 2009	3.13
Feb	12.80	Feb	11.47	Feb	9.01	Feb	7.09	Feb	6.69	Feb	5.45	Feb	4.55	Feb	3.59
Mar	12.69	Mar	11.81	Mar	9.17	Mar	6.82	Mar	6.93	Mar	5.34	Mar	4.78	Mar	3.64
Apr	13.20	Apr	11.47	Apr	9.03	Apr	6.85	Apr	7.09	Apr	5.65	Apr	4.65	Apr	3.76
May	13.60	May	11.05	May	8.83	May	6.92	May	6.94	May	5.78	May	4.49	May	4.23
Jun	12.96	Jun	10.44	Jun	8.27	Jun	6.81	Jun	6.77	Jun	5.67	Jun	4.29	June	4.52
Jul	13.59	Jul	10.50	Jul	8.08	Jul	6.63	Jul	6.51	Jul	5.61	Jul	4.41	July	4.41
Aug	14.17	Aug	10.56	Aug	8.12	Aug	6.32	Aug	6.58	Aug	5.48	Aug	4.46	Aug	4.37
Sep	14.67	Sep	10.61	Sep	8.15	Sep	6.00	Sep	6.50	Sep	5.48	Sep	4.47	Sept	4.19
Oct	14.68	Oct	10.50	Oct	8.00	Oct	5.94	Oct	6.33	Oct	5.32	Oct	4.67	Oct	4.19
Nov	13.35	Nov	10.06	Nov	7.90	Nov	6.21	Nov	6.11	Nov	5.12	Nov	4.73	Nov	4.31
Dec	13.45	Dec	9.54	Dec	7.90	Dec	6.25	Dec	5.99	Dec	5.48	Dec	4.66	Dec	4.49
Jan 1982	14.22	Jan 1986	9.40	Jan 1990	8.26	Jan 1994	6.29	Jan 1998	5.81	Jan 2002	5.44	Jan 2006	4.59	Jan 2010	4.60
Feb	14.22	Feb	8.93	Feb	8.50	Feb	6.49	Feb	5.89	Feb	5.39	Feb	4.58	Feb	4.62
Mar	13.53	Mar	7.96	Mar	8.56	Mar	6.91	Mar	5.95	Mar	5.71	Mar	4.73	Mar	4.64
Apr	13.37	Apr	7.39	Apr	8.76	Apr	7.27	Apr	5.92	Apr	5.67	Apr	5.06	Apr	4.69
May	13.24	May	7.52	May	8.73	May	7.41	May	5.93	May	5.64	May	5.20	May	4.29
Jun	13.92	Jun	7.57	Jun	8.46	Jun	7.40	Jun	5.70	Jun	5.52	Jun	5.16	Jun	4.13
Jul	13.55	Jul	7.27	Jul	8.50	Jul	7.58	Jul	5.68	Jul	5.38	July	5.13	Jul	3.99
Aug	12.77	Aug	7.33	Aug	8.86	Aug	7.49	Aug	5.54	Aug	5.08	Aug	5.00	Aug	3.80
Sep	12.07	Sep	7.62	Sep	9.03	Sep	7.71	Sep	5.20	Sep	4.76	Sep	4.85	Sep	3.77
Oct	11.17	Oct	7.70	Oct	8.86	Oct	7.94	Oct	5.01	Oct	4.93	Oct	4.85	Oct	3.87
Nov	10.54	Nov	7.52	Nov	8.54	Nov	8.08	Nov	5.25	Nov	4.95	Nov	4.69		
Dec	10.54	Dec	7.37	Dec	8.24	Dec	7.87	Dec	5.06	Dec	4.92	Dec	4.68		
Jan 1983	10.63	Jan 1987	7.39	Jan 1991	8.27	Jan 1995	7.85	Jan 1999	5.16	Jan 2003	4.94	Jan 2007	4.85		
Feb	10.88	Feb	7.54	Feb	8.03	Feb	7.61	Feb	5.37	Feb	4.81	Feb	4.82		
Mar	10.63	Mar	7.55	Mar	8.29	Mar	7.45	Mar	5.58	Mar	4.80	Mar	4.72		
Apr	10.48	Apr	8.25	Apr	8.21	Apr	7.36	Apr	5.55	Apr	4.90	Apr	4.86		
May	10.53	May	8.78	May	8.27	May	6.95	May	5.81	May	4.53	May	4.90		
Jun	10.93	Jun	8.57	Jun	8.47	Jun	6.57	Jun	6.04	Jun	4.37	Jun	5.20		
Jul	11.40	Jul	8.64	Jul	8.45	Jul	6.72	Jul	5.98	Jul	4.93	July	5.11		
Aug	11.82	Aug	8.97	Aug	8.14	Aug	6.86	Aug	6.07	Aug	5.30	Aug	4.93		
Sep	11.63	Sep	9.59	Sep	7.95	Sep	6.55	Sep	6.07	Sep	5.14	Sep	4.79		
Oct	11.58	Oct	9.61	Oct	7.93	Oct	6.37	Oct	6.26	Oct	5.16	Oct	4.77		
Nov	11.75	Nov	8.95	Nov	7.92	Nov	6.26	Nov	6.15	Nov	5.13	Nov	4.52		
Dec	11.88	Dec	9.12	Dec	7.70	Dec	6.06	Dec	6.35	Dec	5.08	Dec	4.53		

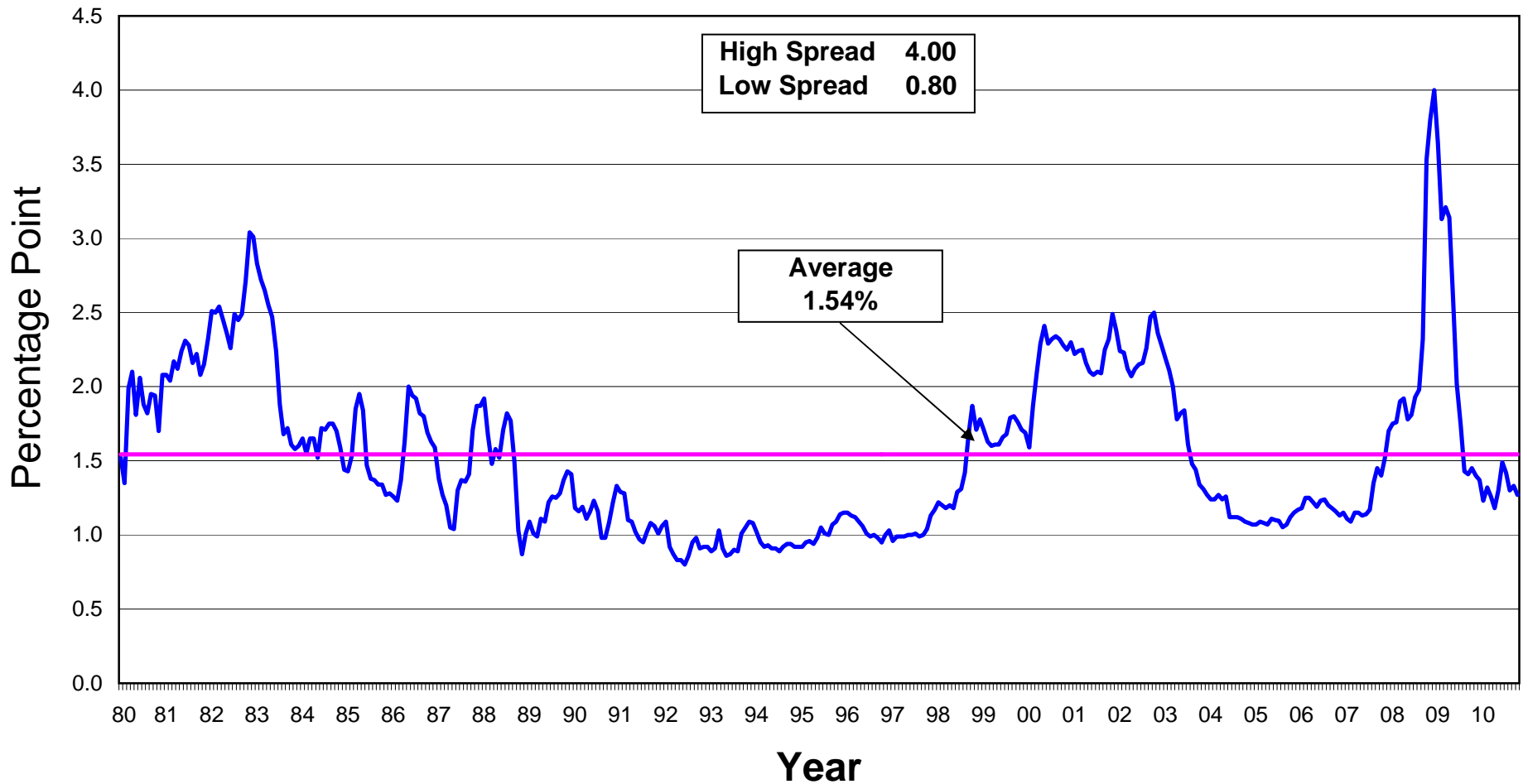
Sources:  
<http://finance.yahoo.com/q/hp?s=^TYX>  
<http://research.stlouisfed.org/fred2/data/GS30.txt>

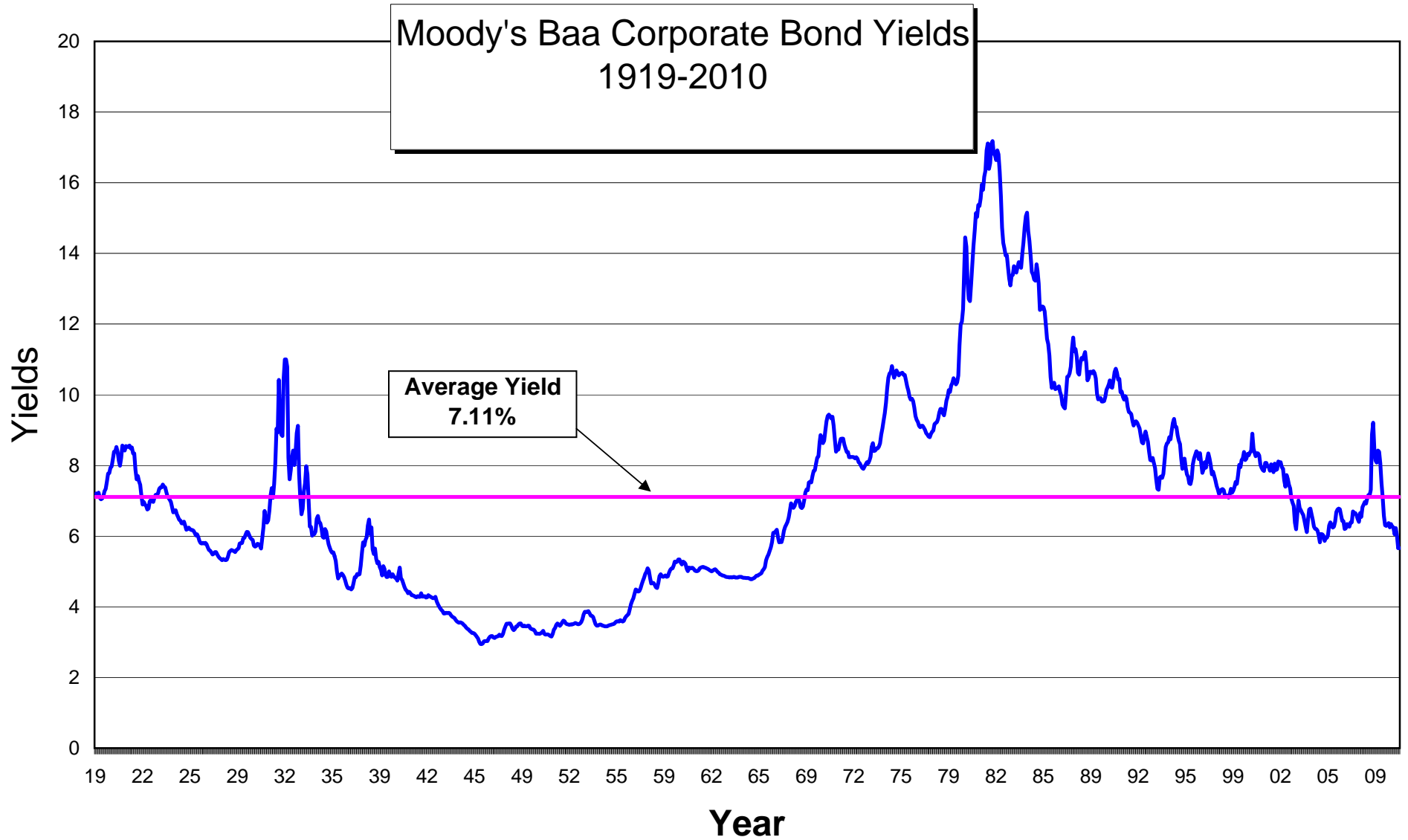
Union Electric Company d/b/a AmerenUE  
CASE NO. GR-2010-0363

**Average Yields on Mergent's Public Utility Bonds and  
Thirty-Year U.S. Treasury Bonds (1980 - 2010)**



Monthly Spreads Between Yields on Mergent's Public Utility Bonds  
and  
Thirty-Year U.S. Treasury Bonds (1980 - 2010)





**Historical Capital Structures for Ameren Corporation  
and Union Electric Company dba AmerenUE**

<b>Historical Consolidated Capital Structure for Union Electric Company dba AmerenUE</b>					
Capital Components	2005	2006	2007	2008	2009
Common Equity	\$2,903,000,000	\$3,040,000,000	\$3,488,000,000	\$3,449,000,000	\$4,057,000,000
Preferred Stock	\$113,000,000	\$113,000,000	\$113,000,000	\$113,000,000	\$113,000,000
Long-Term Debt	\$2,702,000,000 <sup>1</sup>	\$2,939,000,000 <sup>1</sup>	\$3,360,000,000 <sup>1</sup>	\$3,677,000,000 <sup>1</sup>	\$4,018,000,000 <sup>1</sup>
Short-Term Debt	\$80,000,000 <sup>2</sup>	\$311,000,000 <sup>2</sup>	\$82,000,000 <sup>2</sup>	\$343,000,000 <sup>2</sup>	\$0 <sup>2</sup>
Total	<u>\$5,798,000,000</u>	<u>\$6,403,000,000</u>	<u>\$7,043,000,000</u>	<u>\$7,582,000,000</u>	<u>\$8,188,000,000</u>

Historical Consolidated Capital Structure for Union Electric Company dba AmerenUE in Percentages						
Capital Structure	2005	2006	2007	2008	2009	5-Year Average
Common Equity	50.07%	47.48%	49.52%	45.49%	49.55%	48.42%
Preferred Stock	1.95%	1.76%	1.60%	1.49%	1.38%	1.64%
Long-Term Debt	46.60%	45.90%	47.71%	48.50%	49.07%	47.56%
Short-Term Debt	1.38%	4.86%	1.16%	4.52%	0.00%	2.39%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

<b>Historical Consolidated Capital Structure for Ameren Corporation</b>					
Capital Components	2005	2006	2007	2008	2009
Common Equity	\$6,381,000,000	\$6,599,000,000	\$6,774,000,000	\$6,984,000,000	\$7,865,000,000
Preferred Stock	\$214,000,000 <sup>1</sup>	\$212,000,000 <sup>1</sup>	\$211,000,000 <sup>1</sup>	\$195,000,000 <sup>1</sup>	\$195,000,000 <sup>1</sup>
Long-term Debt	\$5,450,000,000 <sup>2</sup>	\$5,741,000,000 <sup>2</sup>	\$5,912,000,000 <sup>2</sup>	\$6,934,000,000 <sup>2</sup>	\$7,317,000,000 <sup>2</sup>
Short-Term Debt	\$193,000,000	\$612,000,000	\$1,472,000,000	\$1,174,000,000	\$850,000,000
Total	<u>\$12,238,000,000</u>	<u>\$13,164,000,000</u>	<u>\$14,369,000,000</u>	<u>\$15,287,000,000</u>	<u>\$16,227,000,000</u>

Historical Consolidated Capital Structure for Ameren Corporation in Percentages						
Capital Structure	2005	2006	2007	2008	2009	5-Year Average
Common Equity	52.14%	50.13%	47.14%	45.69%	48.47%	48.71%
Preferred Stock	1.75%	1.61%	1.47%	1.28%	1.20%	1.46%
Long-Term Debt	44.53%	43.61%	41.14%	45.36%	45.09%	43.95%
Short-Term Debt	1.58%	4.65%	10.24%	7.68%	5.24%	5.88%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Note:

1. Long-term debt includes current maturities

2. Short-term debt excludes current maturities of long-term debt

Sources: Form 10-K SEC filings (Fiscal year ended September 30, 2005, 2006, 2007, 2008 and 2010)

Union Electric Company d/b/a AmerenUE  
CASE NO. GR-2010-0363

**Capital Structure as of December 31, 2009**  
**Union Electric Company d/b/a AmerenUE**

<b>Capital Component</b>	<b>Dollar Amount</b>	<b>Percentage of Capital</b>
Common Stock Equity	\$ 3,965,502,596	51.26%
Preferred Stock	\$ 114,502,040	1.48%
Long-Term Debt	\$ 3,656,370,998	47.26%
Short-Term Debt	\$ -	0.00%
<b>Total Capitalization</b>	<b>\$ 7,736,375,634</b>	<b>100.00%</b>

Source: Company Witness Michael O'Bryan's Schedule MGO-G1 attached to his Direct Testimony.

Union Electric Company d/b/a AmerenUE  
CASE NO. GR-2010-0363

**Criteria for Selecting Comparable Natural Gas Distribution Companies**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Natural Gas Distribution Companies	Stock Publicly Traded	Information Printed In Value Line	10-Year Value Line Historical Growth Available	No Reduced Dividend since 2007	Projected Growth Available from Value Line and Reuters	At Least Investment Grade Credit Rating	<b>Comparable Company Met All Criteria</b>
<b>AGL Resources, Inc.</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
<b>Atmos Energy Corporation</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Delta Natural Gas Company, Inc.	Yes	Yes	Yes	Yes	No		
Energy West	Yes	Yes	Yes	No			
Laclede Group	Yes	Yes	Yes	Yes	No		
<b>New Jersey Resources Corp.</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
<b>Northwest Natural Gas Company</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
<b>Piedmont Natural Gas Company, Inc.</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
RGC Resources, Inc.	Yes	Yes	Yes	Yes	No		
<b>South Jersey Industries, Inc.</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
<b>WGL Holdings, Inc.</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>

Sources: Column 1 = Edward Jones' Natural Gas Industry Summary, June 30, 2010.

Columns 2, 3, 4, and 5 = The Value Line Investment Survey: Ratings & Reports, September 10, 2010.

Column 6 = Reuters Estimates, September 15, 2010

Column 7 = Standard & Poor's Ratings Direct



Union Electric Company d/b/a AmerenUE  
CASE NO. GR-2010-0363

**Seven Comparable Natural Gas Distribution Companies  
For Union Electric Company d/b/a AmerenUE**

Number	Ticker Symbol	Company Name	Bond Rating
1	AGL	AGL Resources, Inc.	BBB+
2	ATO	Atmos Energy Corporation.	BBB+
3	NJR	New Jersey Resources Corporation	A
4	NWN	Northwest Natural Gas	A+
5	PNY	Piedmont Natural Gas Company, Inc.	A
6	SJI	South Jersey Industries, Inc.	BBB+
7	WGL	WGL Holdings, Inc.	AA-
		<b>Average</b>	<b>A</b>
	AEE	Ameren Corporation	BBB-

Union Electric Company d/b/a AmerenUE  
CASE NO. GR-2010-0363

**Ten-Year Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates  
for the Seven Comparable Natural Gas Distribution Companies**

----- 10-Year Annual Compound Growth Rates -----				
Company Name	DPS	EPS	BVPS	Average of Annual Compound Growth Rates
AGL Resources, Inc.	4.50%	8.50%	7.00%	6.67%
Atmos Energy Corporation	2.00%	4.00%	7.00%	4.33%
New Jersey Resources Corp.	4.50%	8.00%	8.50%	7.00%
Northwest Natural Gas Co.	2.00%	6.00%	3.50%	3.83%
Piedmont Natural Gas Co.	5.00%	5.00%	5.00%	5.00%
South Jersey Industries, Inc.	3.50%	11.50%	9.00%	8.00%
WGL Holdings, Inc.	<u>1.50%</u>	<u>4.00%</u>	<u>4.00%</u>	<u>3.17%</u>
<b>Average</b>	<b><u>3.29%</u></b>	<b><u>6.71%</u></b>	<b><u>6.29%</u></b>	<b><u>5.43%</u></b>

Source: The Value Line Investment Survey: Ratings & Reports, Septmber 10, 2010.

Union Electric Company d/b/a AmerenUE  
CASE NO. GR-2010-0363

**Five-Year Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates  
for the Seven Comparable Natural Gas Distribution Companies**

----- 5-Year Annual Compound Growth Rates -----				
Company Name	DPS	EPS	BVPS	Average of 5 Year Annual Compound Growth Rates
AGL Resources, Inc.	8.50%	6.00%	8.00%	7.50%
Atmos Energy Corp.	1.50%	4.50%	7.00%	4.33%
New Jersey Resources Corp.	6.00%	7.50%	10.50%	8.00%
Northwest Natural Gas Co.	3.50%	9.50%	4.00%	5.67%
Piedmont Natural Gas Co.	4.50%	6.50%	4.50%	5.17%
South Jersey Industries, Inc.	6.00%	13.00%	11.00%	10.00%
WGL Holdings, Inc.	<u>2.00%</u>	<u>5.50%</u>	<u>5.00%</u>	<u>4.17%</u>
<b>Average</b>	<b><u>4.57%</u></b>	<b><u>7.50%</u></b>	<b><u>7.14%</u></b>	<b><u>6.40%</u></b>

Source: The Value Line Investment Survey: Ratings & Reports, September 10, 2010.

Union Electric Company d/b/a AmerenUE  
CASE NO. GR-2010-0363

**Average of Ten and Five-Year Dividends Per Share, Earnings Per Share  
& Book Value Per Share Growth Rates for the Seven Comparable  
Natural Gas Distribution Companies**

Company Name	10-Year Average DPS, EPS & BVPS	5-Year Average DPS, EPS & BVPS	Average of 5-Year & 10-Year Averages
AGL Resources, Inc.	6.67%	7.50%	7.08%
Atmos Energy Corp.	4.33%	4.33%	4.33%
New Jersey Resources Corporation	7.00%	8.00%	7.50%
Northwest Natural Gas	3.83%	5.67%	4.75%
Piedmont Natural Gas Company, Inc.	5.00%	5.17%	5.08%
South Jersey Industries, Inc.	8.00%	10.00%	9.00%
WGL Holdings, Inc.	<u>3.17%</u>	<u>4.17%</u>	<u>3.67%</u>
<b>Average</b>	<b><u>5.43%</u></b>	<b><u>6.40%</u></b>	<b><u>5.92%</u></b>

Union Electric Company d/b/a AmerenUE  
CASE NO. GR-2010-0363

**Five-Year Projected Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates  
for the Seven Comparable Natural Gas Distribution Utility Companies**

----- 5-Year Projected Compound Growth Rates -----				
Company Name	DPS	EPS	BVPS	Average of 5 Year Annual Compound Growth Rates
AGL Resources, Inc.	1.00%	5.00%	5.00%	3.67%
Atmos Energy Corp.	2.00%	5.50%	4.50%	4.00%
New Jersey Resources Corporation	5.50%	5.00%	4.50%	5.00%
Northwest Natural Gas	4.00%	4.50%	4.00%	4.17%
Piedmont Natural Gas Company, Inc.	3.50%	3.50%	3.00%	3.33%
South Jersey Industries, Inc.	6.00%	7.00%	5.50%	6.17%
WGL Holdings, Inc.	3.00%	2.50%	4.00%	3.17%
<b>Average</b>	<b><u>3.57%</u></b>	<b><u>4.71%</u></b>	<b><u>4.36%</u></b>	<b><u>4.21%</u></b>
Standard Deviation	1.66%	1.33%	0.74%	0.97%

Source: The Value Line Investment Survey: Ratings & Reports, September 10, 2010.

Union Electric Company d/b/a AmerenUE  
CASE NO. GR-2010-0363

**Historical and Projected Growth Rates for the  
Seven Comparable Natural Gas Distribution Companies**

Company Name	1 Historical 10-Year Average Growth Rate (DPS, EPS and BVPS)	2 Historical 5-Year Average Growth Rate (DPS, EPS and BVPS)	3 Projected Growth Rate (DPS, EPS and BVPS)	4 Projected 5-Year EPS Growth Reuters (Mean)	5 Projected 3-5 Year EPS Growth Value Line
AGL Resources, Inc.	6.67%	7.50%	3.67%	5.86%	5.00%
Atmos Energy Corp.	4.33%	4.33%	4.00%	4.18%	5.50%
New Jersey Resources Corporation	7.00%	8.00%	5.00%	3.75%	5.00%
Northwest Natural Gas	3.83%	5.67%	4.17%	4.12%	4.50%
Piedmont Natural Gas Company, Inc.	5.00%	5.17%	3.33%	3.76%	3.50%
South Jersey Industries, Inc.	8.00%	10.00%	6.17%	6.33%	7.00%
WGL Holdings, Inc.	3.17%	4.17%	3.17%	6.25%	2.50%
	<u><b>5.43%</b></u>	<u><b>6.40%</b></u>	<u><b>4.21%</b></u>	<u><b>4.89%</b></u>	<u><b>4.71%</b></u>

**Proposed Range of Growth: 4.00%-5.00%**

Sources:

Column 1& 2 = Schedule 9-3

Column 3 = Schedule 10.

Column 4 = Reuters Website, September 15, 2010

Column 5 = The Value Line Investment Survey: Ratings and Reports, September 10, 2010.

Union Electric Company d/b/a AmerenUE  
CASE NO. GR-2010-0363

**Average High / Low Stock Price for July 2010 through September 2010  
for the Seven Comparable Natural Gas Distribution Companies**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	-- July 2010 --		-- August 2010 --		-- September 2010 --		<b>Average</b>
	High	Low	High	Low	High	Low	<b>High/Low</b>
Company Name	Stock	Stock	Stock	Stock	Stock	Stock	<b>Stock</b>
	Price	Price	Price	Price	Price	Price	<b>Price</b>
							<b>(07/10 - 09/10)</b>
AGL Resources, Inc.	\$40.000	\$35.290	\$39.370	\$35.780	\$38.810	\$37.060	<b>\$37.718</b>
Atmos Energy Corp.	\$29.910	\$26.670	\$29.660	\$28.010	\$29.490	\$28.350	<b>\$28.682</b>
New Jersey Resources Corp.	\$38.480	\$34.420	\$38.840	\$36.090	\$39.680	\$37.140	<b>\$37.442</b>
Northwest Natural Gas Co.	\$48.800	\$42.630	\$49.000	\$43.680	\$47.890	\$45.360	<b>\$46.227</b>
Piedmont Natural Gas Co.	\$27.750	\$24.850	\$28.170	\$26.150	\$29.380	\$27.310	<b>\$27.268</b>
South Jersey Industries, Inc.	\$49.050	\$41.970	\$48.670	\$44.550	\$49.790	\$46.520	<b>\$46.758</b>
WGL Holdings, Inc.	\$37.280	\$33.320	\$37.220	\$34.850	\$38.080	\$35.630	<b>\$36.063</b>

Notes:

Column 7 = [ ( Column 1 + Column 2 + Column 3 + Column 4 + Column 5 + Column 6 ) / 6 ].

Union Electric Company d/b/a AmerenUE  
CASE NO. GR-2010-0363

**Constant-Growth Discounted Cash Flow (DCF) Estimated Costs of Common Equity  
for the Seven Comparable Natural Gas Distribution Companies,**

	1	2	3
Company Name	Expected Annual Dividend	Average High/Low Stock Price	Projected Dividend Yield
AGL Resources, Inc.	\$1.79	\$37.718	4.75%
Atmos Energy Corp.	\$1.36	\$28.682	4.72%
New Jersey Resources Corp.	\$1.42	\$37.442	3.79%
Northwest Natural Gas Co.	\$1.71	\$46.227	3.69%
Piedmont Natural Gas Co.	\$1.14	\$27.268	4.18%
South Jersey Industries, Inc.	\$1.39	\$46.758	2.96%
WGL Holdings, Inc.	\$1.54	\$36.063	4.27%
<b>Average</b>			<b><u>4.05%</u></b>

**Proposed Dividend Yield: 4.10%**

**Proposed Range of Growth: 4.00% - 5.00%**

**Estimated Proxy Cost of Common Equity 8.10%-9.10%**

**Recommended Cost of Common Equity 8.10%-9.10%**

**Midpoint 8.60%**

Notes: Column 1 = Estimated Dividends Declared per share based on 25% weight given to 2010 and 75% to 2011.

Column 3 = ( Column 1 / Column 2 ).

Sources: Column 1 = The Value Line Investment Survey: Ratings and Reports, September 10, 2010.

Column 2 = Schedule 12.



**Capital Asset Pricing Model (CAPM) Costs of Common Equity Estimates  
Based on Historical Return Differences Between Common Stocks and Long-Term U.S. Treasuries  
for the Seven Comparable Natural Gas Distribution Companies**

	(1)	(2)	(3)	(4)	(5)	(6)
			Arithmetic Average Market Risk Premium (1926-2009)	Geometric Average Market Risk Premium (1926-2009)	Arithmetic CAPM Cost of Common Equity (1926-2009)	Geometric CAPM Cost of Common Equity (1926-2009)
Company Name	Risk Free Rate	Company's Value Line Beta				
AGL Resources, Inc.	3.77%	0.75	6.00%	4.40%	8.27%	7.07%
Atmos Energy Corp.	3.77%	0.65	6.00%	4.40%	7.67%	6.63%
New Jersey Resources Corp.	3.77%	0.65	6.00%	4.40%	7.67%	6.63%
Northwest Natural Gas Co.	3.77%	0.60	6.00%	4.40%	7.37%	6.41%
Piedmont Natural Gas Co.	3.77%	0.65	6.00%	4.40%	7.67%	6.63%
South Jersey Industries, Inc.	3.77%	0.65	6.00%	4.40%	7.67%	6.63%
WGL Holdings, Inc.	3.77%	0.65	6.00%	4.40%	7.67%	6.63%
<b>Average</b>		<b>0.66</b>			<b>7.71%</b>	<b>6.66%</b>

Sources:

Column 1 = The appropriate yield is equal to the average 30-year U.S. Treasury Bond yield for September 2010 which was obtained from the St. Louis Federal Reserve website at <http://research.stlouisfed.org/fred2/series/GS30/22>.

Column 2 = Beta is a measure of the movement and relative risk of an individual stock to the market as a whole as reported by the Value Line Investment Survey: Ratings & Reports, September 10, 2010.

Column 3 = The Market Risk Premium represents the expected return from holding the entire market portfolio less the expected return from holding a risk free investment. The appropriate Market Risk Premium for the period 1926 - 2009 was determined to be 6.00% based on an arithmetic average as calculated in Ibbotson Associates, Inc.'s Stocks, Bonds, Bills, and Inflation: 2010 Yearbook.

Column 4 = The Market Risk Premium represents the expected return from holding the entire market portfolio less the expected return from holding a risk free investment. The appropriate Market Risk Premium for the period 1926 - 2009 was determined to be 4.40% based on a geometric average as calculated in Ibbotson Associates, Inc.'s Stocks, Bonds, Bills, and Inflation: 2010 Yearbook.

Column 5 = (Column 1 + (Column 2 \* Column 3)).

Column 6 = (Column 1 + (Column 2 \* Column 4)).

**Public Utility Revenue Requirement  
or  
Cost of Service**

The formula for the revenue requirement of a public utility may be stated as follows :

Equation 1 : **Revenue Requirement = Cost of Service**

or

Equation 2 :  **$RR = O + (V - D)R$**

The symbols in the second equation are represented by the following factors :

RR	=	Revenue Requirement
O	=	Prudent Operating Costs, including Depreciation and Taxes
V	=	Gross Valuation of the Property Serving the Public
D	=	Accumulated Depreciation
(V - D)	=	Rate Base (Net Valuation)
(V - D)R	=	Return Amount (\$\$) or Earnings Allowed on Rate Base
R	=	$iL + dP + kE$ or Overall Rate of Return (%)
i	=	Embedded Cost of Debt
L	=	Proportion of Debt in the Capital Structure
d	=	Embedded Cost of Preferred Stock
P	=	Proportion of Preferred Stock in the Capital Structure
k	=	Required Return on Common Equity (ROE)
E	=	Proportion of Common Equity in the Capital Structure

Union Electric Company d/b/a AmerenUE  
CASE NO. GR-2010-0363

**Weighted Cost of Capital  
for Union Electric Company d/b/a AmerenUE**

Capital Component	Percentage of Capital	Embedded Cost	Weighted Cost of Capital Using Common Equity Return of:		
			<b>8.10%</b>	<b>8.60%</b>	<b>9.10%</b>
Common Stock Equity	51.26%	-----	4.15%	4.41%	4.66%
Preferred Stock	1.48%	5.19%	0.08%	0.08%	0.08%
Long-Term Debt	47.26%	5.95%	2.81%	2.81%	2.81%
	<b><u>100.00%</u></b>		<b><u>7.04%</u></b>	<b><u>7.29%</u></b>	<b><u>7.55%</u></b>

Sources:

See Schedule 6 for the Capital Structure Ratios.

**MISSOURI PUBLIC SERVICE COMMISSION**

**STAFF REPORT**

**COST OF SERVICE**

**APPENDIX 3**

**Weather Normal Variables Used  
for Weather Normalization**

**UNION ELECTRIC COMPANY  
d/b/a AMERENUE**

**CASE NO. GR-2010-0363**

**STATION: CAPE\_GIRARDEAU\_FAA\_AIRP, MO (Station ID: 231289)**  
**Actual Heating Degree-Days (HDD) and Normal Heating Degree-Days (NHDD)**  
**For The 12 Calendar Months Beginning January 01, 2009 And Ending December 31, 2009**

		TOTAL HDD BY MONTH			PEAK DAY HDD		
		OBSERVED TOTALS HDD	NORMAL TOTALS NHDD	ADJUSTMENT, ACTUAL TO NORMAL	OBSERVED COLDEST DAY HDD	NORMAL COLDEST DAY NHDD	ADJUSTMENT, ACTUAL TO NORMAL
YEAR	MONTH						
2009	1	1060	1009	(51)	55.50	60.17	4.67
2009	2	701	761	60	46.50	53.46	6.96
2009	3	446	546	100	38.00	40.68	2.68
2009	4	284	257	(27)	25.50	26.84	1.34
2009	5	60	65	5	9.50	13.42	3.92
2009	6	1	3	2	1.00	2.88	1.88
2009	7	0	0	0	0.00	0.10	0.10
2009	8	3	1	(2)	2.50	0.72	(1.78)
2009	9	23	45	22	9.00	12.92	3.92
2009	10	330	239	(91)	21.50	24.88	3.38
2009	11	415	548	134	24.50	38.20	13.70
2009	12	910	883	(27)	42.00	55.68	13.68
12 MONTHS		4232	4358	126	55.50	60.17	4.67

**STATION: COLUMBIA\_WSO\_AP, MO (Station ID: 231791)**  
**Actual Heating Degree-Days (HDD) and Normal Heating Degree-Days (NHDD)**  
**For The 12 Calendar Months Beginning January 01, 2009 And Ending December 31, 2009**

		TOTAL HDD BY MONTH			PEAK DAY HDD		
		OBSERVED TOTALS HDD	NORMAL TOTALS NHDD	ADJUSTMENT, ACTUAL TO NORMAL	OBSERVED COLDEST DAY HDD	NORMAL COLDEST DAY NHDD	ADJUSTMENT, ACTUAL TO NORMAL
YEAR	MONTH						
2009	1	1178	1153	(25)	61.50	65.59	4.09
2009	2	791	879	88	49.00	60.89	11.89
2009	3	575	653	78	40.00	46.69	6.69
2009	4	395	338	(57)	30.50	29.89	(0.61)
2009	5	95	114	19	12.00	17.24	5.24
2009	6	8	11	3	3.50	6.67	3.17
2009	7	1	1	1	0.50	1.16	0.66
2009	8	12	2	(9)	7.50	2.46	(5.04)
2009	9	37	76	39	9.50	16.59	7.09
2009	10	444	296	(148)	23.50	27.96	4.46
2009	11	452	654	202	29.50	43.88	14.38
2009	12	1064	1022	(42)	48.00	63.58	15.58
12 MONTHS		5050	5198	149	61.50	65.59	4.09

**MISSOURI PUBLIC SERVICE COMMISSION**

**STAFF REPORT**  
**COST OF SERVICE**

**APPENDIX 4**  
**Weather Normalization of Sales**

**UNION ELECTRIC COMPANY**  
**d/b/a AMERENUE**

**CASE NO. GR-2010-0363**

**AMEREN**  
**CASE NO. GR-2010-0363**  
**WEATHER & DAYS NORMALIZATION**

SYSTEM: PE		CLASS : Residential			
Normalized Sales per Customer					
Billing Month	Ccf Actual	Ccf Adjustment	Ccf Normal	Customers	Normal Usage per Customer
Jan	13,185,985	182,920	13,368,905	95,966	139.3088
Feb	11,852,543	288,606	12,141,149	96,168	126.2494
Mar	8,511,101	479,452	8,990,553	96,379	93.2833
Apr	5,742,275	-242,551	5,499,724	95,677	57.4822
May	3,088,802	109,974	3,198,776	94,892	33.7097
Jun	1,541,987	141,272	1,683,259	94,194	17.8701
Jul	1,247,367	19,931	1,267,298	93,488	13.5557
Aug	1,171,004	9,425	1,180,429	93,546	12.6187
Sep	1,218,283	21,648	1,239,931	93,516	13.2590
Oct	2,063,336	-526,563	1,536,773	94,021	16.3450
Nov	4,164,631	158,237	4,322,868	95,230	45.3940
Dec	7,909,320	837,394	8,746,714	95,639	91.4555
	61,696,636	1,479,744	63,176,380	1,138,716	665.7644
		2.40%			

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Jan	0	182,920	182,920
Feb	0	288,606	288,606
Mar	0	479,452	479,452
Apr	0	-242,551	-242,551
May	0	109,974	109,974
Jun	-7,168	148,440	141,272
Jul	-2,155	22,085	19,931
Aug	0	9,425	9,425
Sep	0	21,648	21,648
Oct	0	-526,563	-526,563
Nov	0	158,237	158,237
Dec	0	837,394	837,394
	-9,322	1,489,066	1,479,744
	-0.02%	2.41%	2.40%



**AMEREN**  
**CASE NO. GR-2010-0363**  
**WEATHER & DAYS NORMALIZATION**

**SYSTEM: SE**

**CLASS : Residential**

**Normalized Sales per Customer**

Billing Month	Ccf Actual	Ccf Adjustment	Ccf Normal	Customers	Normal Usage per Customer
Jan	2,299,775	102,303	2,402,078	17,964	<b>133.7162</b>
Feb	2,122,811	-20,861	2,101,949	18,059	<b>116.3934</b>
Mar	1,518,276	83,351	1,601,627	18,098	<b>88.4975</b>
Apr	876,481	22,842	899,323	17,938	<b>50.1351</b>
May	448,932	39,853	488,785	17,830	<b>27.4136</b>
Jun	258,305	7,317	265,623	17,734	<b>14.9782</b>
Jul	216,051	843	216,894	17,730	<b>12.2332</b>
Aug	201,620	288	201,908	17,664	<b>11.4305</b>
Sep	211,201	10,787	221,988	17,647	<b>12.5794</b>
Oct	308,912	-74,384	234,528	17,651	<b>13.2869</b>
Nov	664,938	36,365	701,303	17,776	<b>39.4523</b>
Dec	1,418,549	63,280	1,481,830	17,883	<b>82.8625</b>
	10,545,850	271,985	10,817,835	213,974	606.6813
		2.58%			

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Jan	0	102,303	102,303
Feb	0	-20,861	-20,861
Mar	0	83,351	83,351
Apr	0	22,842	22,842
May	0	39,853	39,853
Jun	-1,393	8,710	7,317
Jul	-440	1,284	843
Aug	0	288	288
Sep	0	10,787	10,787
Oct	0	-74,384	-74,384
Nov	0	36,365	36,365
Dec	0	63,280	63,280
	-1,833	273,818	271,985
	-0.02%	2.60%	2.58%

**AMEREN**  
**Case No. GR-2010-0363**  
**WEATHER and DAYS NORMALIZATION**

SYSTEM: ALL		CLASS : Residential (RSM)			
Normalized Sales per Customer					
Billing Month	Ccf Actual	Ccf Adjustment	Ccf Normal	Customers	Normal Usage per Customer
Jan	15,485,759	285,223	15,770,983	113,930	138.4270
Feb	13,975,353	267,745	14,243,098	114,227	124.6912
Mar	10,029,378	562,803	10,592,180	114,477	92.5267
Apr	6,618,756	-219,709	6,399,047	113,615	56.3222
May	3,537,734	149,827	3,687,561	112,722	32.7138
Jun	1,800,293	148,589	1,948,882	111,928	17.4119
Jul	1,463,418	20,774	1,484,192	111,218	13.3449
Aug	1,372,624	9,713	1,382,337	111,210	12.4300
Sep	1,429,485	32,434	1,461,919	111,163	13.1511
Oct	2,372,248	-600,947	1,771,301	111,672	15.8616
Nov	4,829,569	194,602	5,024,171	113,006	44.4593
Dec	9,327,869	900,675	10,228,544	113,522	90.1019
	72,242,487	1,751,728	73,994,215	112,724	656.4184
		2.42%			

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Jan	0	285,223	285,223
Feb	0	267,745	267,745
Mar	0	562,803	562,803
Apr	0	-219,709	-219,709
May	0	149,827	149,827
Jun	-8,561	157,150	148,589
Jul	-2,595	23,369	20,774
Aug	0	9,713	9,713
Sep	0	32,434	32,434
Oct	0	-600,947	-600,947
Nov	0	194,602	194,602
Dec	0	900,675	900,675
	-11,155	1,762,884	1,751,728
	-0.02%	2.44%	2.42%

**AMEREN**  
**CASE NO. GR-2010-0363**  
**WEATHER & DAYS NORMALIZATION**

SYSTEM: PE		CLASS : SGS			
Normalized Sales per Customer					
Billing Month	Ccf Actual	Ccf Adjustment	Ccf Normal	Customers	Normal Usage per Customer
Jan	1,756,367	27,264	1,783,631	7,581	235.2765
Feb	1,549,924	47,396	1,597,320	7,621	209.5946
Mar	1,038,155	61,414	1,099,569	7,586	144.9472
Apr	634,016	-40,344	593,672	7,514	79.0088
May	286,949	18,628	305,577	7,441	41.0667
Jun	142,032	19,809	161,841	7,421	21.8085
Jul	133,083	2,662	135,745	7,370	18.4186
Aug	119,985	1,283	121,268	7,334	16.5350
Sep	129,105	3,977	133,082	7,346	18.1163
Oct	202,682	-75,595	127,087	7,336	17.3237
Nov	400,665	33,074	433,739	7,434	58.3453
Dec	943,361	101,501	1,044,862	7,461	140.0432
	7,336,324	201,070	7,537,394	89,445	1011.2217
		2.74%			

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Jan	0	27,264	27,264
Feb	0	47,396	47,396
Mar	0	61,414	61,414
Apr	0	-40,344	-40,344
May	0	18,628	18,628
Jun	-232	20,041	19,809
Jul	-139	2,801	2,662
Aug	0	1,283	1,283
Sep	0	3,977	3,977
Oct	0	-75,595	-75,595
Nov	0	33,074	33,074
Dec	0	101,501	101,501
	-371	201,441	201,070
	-0.01%	2.75%	2.74%

**AMEREN**  
**CASE NO. GR-2010-0363**  
**WEATHER & DAYS NORMALIZATION**

**SYSTEM: SE**

**CLASS : SGS**

***Normalized Sales per Customer***

Billing Month	Ccf Actual	Ccf Adjustment	Ccf Normal	Customers	Normal Usage per Customer
Jan	484,054	18,149	502,203	2,143	<b>234.3458</b>
Feb	448,895	-6,173	442,722	2,160	<b>204.9638</b>
Mar	289,725	24,204	313,929	2,148	<b>146.1492</b>
Apr	141,738	4,763	146,501	2,136	<b>68.5866</b>
May	70,105	6,721	76,826	2,116	<b>36.3070</b>
Jun	41,783	2,019	43,802	2,108	<b>20.7791</b>
Jul	36,254	234	36,488	2,096	<b>17.4086</b>
Aug	35,138	69	35,207	2,089	<b>16.8535</b>
Sep	35,531	3,327	38,858	2,088	<b>18.6099</b>
Oct	50,250	-17,899	32,351	2,083	<b>15.5308</b>
Nov	94,238	10,935	105,173	2,087	<b>50.3942</b>
Dec	270,772	12,368	283,140	2,114	<b>133.9356</b>
	1,998,483	58,716	2,057,199	25,368	973.1310
		2.94%			

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Jan	0	18,149	18,149
Feb	0	-6,173	-6,173
Mar	0	24,204	24,204
Apr	0	4,763	4,763
May	0	6,721	6,721
Jun	-88	2,108	2,019
Jul	-15	250	234
Aug	0	69	69
Sep	0	3,327	3,327
Oct	0	-17,899	-17,899
Nov	0	10,935	10,935
Dec	0	12,368	12,368
	-104	58,819	58,716
	-0.01%	2.94%	2.94%

**AMEREN**  
**Case No. GR-2010-0363**  
**WEATHER and DAYS NORMALIZATION**

SYSTEM: ALL		CLASS : SGS			
Normalized Sales per Customer					
Billing Month	Ccf Actual	Ccf Adjustment	Ccf Normal	Customers	Normal Usage per Customer
Jan	2,240,421	45,413	2,285,834	9,724	235.0714
Feb	1,998,819	41,223	2,040,042	9,781	208.5719
Mar	1,327,880	85,618	1,413,498	9,734	145.2124
Apr	775,754	-35,581	740,173	9,650	76.7019
May	357,054	25,349	382,403	9,557	40.0129
Jun	183,815	21,828	205,643	9,529	21.5808
Jul	169,337	2,896	172,233	9,466	18.1949
Aug	155,123	1,352	156,475	9,423	16.6056
Sep	164,636	7,304	171,940	9,434	18.2256
Oct	252,932	-93,494	159,438	9,419	16.9272
Nov	494,903	44,009	538,912	9,521	56.6024
Dec	1,214,133	113,869	1,328,002	9,575	138.6947
	9,334,807	259,786	9,594,593	9,568	1002.8056
		2.78%			

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Jan	0	45,413	45,413
Feb	0	41,223	41,223
Mar	0	85,618	85,618
Apr	0	-35,581	-35,581
May	0	25,349	25,349
Jun	-320	22,149	21,828
Jul	-154	3,050	2,896
Aug	0	1,352	1,352
Sep	0	7,304	7,304
Oct	0	-93,494	-93,494
Nov	0	44,009	44,009
Dec	0	113,869	113,869
	-474	260,260	259,786
	-0.01%	2.79%	2.78%

**AMEREN**  
**CASE NO. GR-2010-0363**  
**WEATHER & DAYS NORMALIZATION**

SYSTEM: PE		CLASS : LG GS			
Normalized Sales per Customer					
Billing Month	Ccf Actual	Ccf Adjustment	Ccf Normal	Customers	Normal Usage per Customer
Jan	4,529,921	58,227	4,588,148	2,685	1708.8076
Feb	4,136,088	107,491	4,243,579	2,707	1567.6317
Mar	3,001,709	139,400	3,141,109	2,699	1163.8049
Apr	2,090,667	-86,616	2,004,051	2,683	746.9440
May	1,251,860	41,042	1,292,902	2,679	482.6062
Jun	904,993	41,209	946,202	2,671	354.2500
Jul	799,281	4,501	803,782	2,676	300.3671
Aug	799,832	3,015	802,847	2,678	299.7937
Sep	838,546	8,212	846,758	2,674	316.6636
Oct	1,053,776	-168,766	885,010	2,656	333.2118
Nov	1,609,092	66,491	1,675,583	2,715	617.1575
Dec	2,751,943	244,967	2,996,910	2,681	1117.8330
	23,767,708	459,175	24,226,883	32,204	9027.5305
		1.93%			

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Jan	0	58,227	58,227
Feb	0	107,491	107,491
Mar	0	139,400	139,400
Apr	0	-86,616	-86,616
May	0	41,042	41,042
Jun	-5,168	46,377	41,209
Jul	-2,235	6,737	4,501
Aug	0	3,015	3,015
Sep	0	8,212	8,212
Oct	0	-168,766	-168,766
Nov	0	66,491	66,491
Dec	0	244,967	244,967
	-7,403	466,578	459,175
	-0.03%	1.96%	1.93%

**AMEREN**  
**CASE NO. GR-2010-0363**  
**WEATHER & DAYS NORMALIZATION**

**SYSTEM: SE**

**CLASS : LG GS**

***Normalized Sales per Customer***

Billing Month	Ccf Actual	Ccf Adjustment	Ccf Normal	Customers	Normal Usage per Customer
Jan	929,374	20,469	949,843	608	<b>1562.2424</b>
Feb	858,322	-6,529	851,793	623	<b>1367.2446</b>
Mar	643,106	38,513	681,619	618	<b>1102.9433</b>
Apr	423,297	11,128	434,425	616	<b>705.2355</b>
May	307,836	8,315	316,151	614	<b>514.9043</b>
Jun	242,245	2,323	244,568	613	<b>398.9690</b>
Jul	215,856	4	215,860	614	<b>351.5635</b>
Aug	216,905	118	217,023	614	<b>353.4575</b>
Sep	260,850	6,148	266,998	614	<b>434.8501</b>
Oct	344,727	-29,436	315,291	613	<b>514.3404</b>
Nov	475,584	19,001	494,585	610	<b>810.7944</b>
Dec	713,712	19,782	733,494	613	<b>1196.5652</b>
	5,631,814	89,837	5,721,651	7,370	9316.1204
		1.60%			

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Jan	0	20,469	20,469
Feb	0	-6,529	-6,529
Mar	0	38,513	38,513
Apr	0	11,128	11,128
May	0	8,315	8,315
Jun	-1,091	3,414	2,323
Jul	-388	392	4
Aug	0	118	118
Sep	0	6,148	6,148
Oct	0	-29,436	-29,436
Nov	0	19,001	19,001
Dec	0	19,782	19,782
	-1,479	91,316	89,837
	-0.03%	1.62%	1.60%

**AMEREN**  
**Case No. GR-2010-0363**  
**WEATHER and DAYS NORMALIZATION**

SYSTEM: ALL		CLASS : LG GS			
Normalized Sales per Customer					
Billing Month	Ccf Actual	Ccf Adjustment	Ccf Normal	Customers	Normal Usage per Customer
Jan	5,459,295	78,697	5,537,992	3,293	1681.7467
Feb	4,994,410	100,962	5,095,372	3,330	1530.1418
Mar	3,644,815	177,913	3,822,728	3,317	1152.4656
Apr	2,513,964	-75,488	2,438,476	3,299	739.1560
May	1,559,696	49,357	1,609,053	3,293	488.6284
Jun	1,147,238	43,532	1,190,770	3,284	362.5974
Jul	1,015,137	4,505	1,019,642	3,290	309.9217
Aug	1,016,737	3,133	1,019,870	3,292	309.8026
Sep	1,099,396	14,360	1,113,756	3,288	338.7337
Oct	1,398,503	-198,202	1,200,301	3,269	367.1768
Nov	2,084,676	85,491	2,170,167	3,325	652.6819
Dec	3,465,655	264,750	3,730,405	3,294	1132.4847
	29,399,522	549,011	29,948,533	3,298	9081.2756
		1.87%			

Billing Month	DAYS Adjustment	HDD Adjustment	SUMMED Adjustment
Jan	0	78,697	78,697
Feb	0	100,962	100,962
Mar	0	177,913	177,913
Apr	0	-75,488	-75,488
May	0	49,357	49,357
Jun	-6,259	49,791	43,532
Jul	-2,623	7,129	4,505
Aug	0	3,133	3,133
Sep	0	14,360	14,360
Oct	0	-198,202	-198,202
Nov	0	85,491	85,491
Dec	0	264,750	264,750
	-8,883	557,894	549,011
	-0.03%	1.90%	1.87%



AMEREN  
CASE NO. GR-2010-0363

PE DIVISION  
2009

Large General Service  
Actual Volumes

Large General Service				
Month	Customer Meters	1st Block <7000 Ccf	Tail Block >7000 Ccf	Total Ccf
Jan	2,685	3,970,760	559,161	4,529,921
Feb	2,707	3,667,479	468,609	4,136,088
Mar	2,699	2,774,316	227,393	3,001,709
Apr	2,683	1,971,810	118,857	2,090,667
May	2,679	1,206,978	44,882	1,251,860
Jun	2,671	852,241	52,752	904,993
Jul	2,676	756,377	42,904	799,281
Aug	2,678	747,538	52,294	799,832
Sep	2,674	791,689	46,857	838,546
Oct	2,656	1,001,292	52,484	1,053,776
Nov	2,715	1,536,300	72,792	1,609,092
Dec	2,681	2,542,729	209,214	2,751,943
ANNUAL	32,204	21,819,509	1,948,199	23,767,708
%		92%	8%	

AMEREN  
CASE NO. GR-2010-0363

PE DIVISION  
2009

Large General Service  
NORMAL VOLUMES

Large General Service				
Month	Customer Meters	1st Block <7000 Ccf	Tail Block >7000 Ccf	Total Ccf
Jan	2,685	4,014,171	573,977	4,588,148
Feb	2,707	3,750,050	493,529	4,243,579
Mar	2,699	2,890,000	251,110	3,141,109
Apr	2,683	1,895,041	109,010	2,004,051
May	2,679	1,245,839	47,063	1,292,902
Jun	2,671	891,260	54,942	946,202
Jul	2,676	760,639	43,143	803,782
Aug	2,678	750,393	52,454	802,847
Sep	2,674	799,465	47,293	846,758
Oct	2,656	841,496	43,515	885,010
Nov	2,715	1,599,257	76,326	1,675,583
Dec	2,681	2,748,447	248,463	2,996,910
ANNUAL	32,204	22,186,057	2,040,826	24,226,883
%		92%	8%	

AMEREN  
CASE NO. GR-2010-0363

PE DIVISION  
2009

Large General Service  
ADJUSTMENTS TO VOLUMES

Large Gene				
Month	Customer Meters	1st Block <7000 Ccf	Tail Block >7000 Ccf	Total Ccf
Jan	2,685	43,411	14,816	58,227
Feb	2,707	82,571	24,920	107,491
Mar	2,699	115,684	23,717	139,400
Apr	2,683	(76,769)	(9,847)	(86,616)
May	2,679	38,861	2,181	41,042
Jun	2,671	39,019	2,190	41,209
Jul	2,676	4,262	239	4,501
Aug	2,678	2,855	160	3,015
Sep	2,674	7,776	436	8,212
Oct	2,656	(159,796)	(8,969)	(168,766)
Nov	2,715	62,957	3,534	66,491
Dec	2,681	205,718	39,249	244,967
ANNUAL	32,204	366,548	92,627	459,175
%		80%	20%	

AMEREN  
CASE NO. GR-2010-0363

SE DIVISION  
2009

Large General Service  
ACTUAL VOLUMES

Large General Service				
Month	Customer Meters	1st Block <7000 Ccf	Tail Block >7000 Ccf	Total Ccf
Jan	608	827,403	101,971	929,374
Feb	623	775,268	83,054	858,322
Mar	618	591,812	51,294	643,106
Apr	616	392,831	30,466	423,297
May	614	281,191	26,645	307,836
Jun	613	206,702	35,543	242,245
Jul	614	185,147	30,709	215,856
Aug	614	177,602	39,303	216,905
Sep	614	214,727	46,123	260,850
Oct	613	272,364	72,363	344,727
Nov	610	355,154	120,430	475,584
Dec	613	603,162	110,550	713,712
ANNUAL	7,370	4,883,363	748,451	5,631,814
%		87%	13%	

AMEREN  
CASE NO. GR-2010-0363

SE DIVISION  
2009

Large General Service  
NORMAL VOLUMES

Large General Service				
Month	Customer Meters	1st Block <7000 Ccf	Tail Block >7000 Ccf	Total Ccf
Jan	608	845,258	104,585	949,843
Feb	623	769,573	82,220	851,793
Mar	618	625,406	56,213	681,619
Apr	616	402,538	31,887	434,425
May	614	288,444	27,707	316,151
Jun	613	208,728	35,840	244,568
Jul	614	185,150	30,710	215,860
Aug	614	177,705	39,318	217,023
Sep	614	220,090	46,908	266,998
Oct	613	246,687	68,603	315,291
Nov	610	371,728	122,857	494,585
Dec	613	620,418	113,077	733,494
ANNUAL	7,370	4,961,725	759,925	5,721,651
%		87%	13%	

AMEREN  
CASE NO. GR-2010-0363

SE DIVISION  
2009

Large General Service  
ADJUSTMENTS TO VOLUMES

Large General Service				
Month	Customer Meters	1st Block <7000 Ccf	Tail Block >7000 Ccf	Total Ccf
Jan	608	17,855	2,614	20,469
Feb	623	(5,695)	(834)	(6,529)
Mar	618	33,594	4,919	38,513
Apr	616	9,707	1,421	11,128
May	614	7,253	1,062	8,315
Jun	613	2,026	297	2,323
Jul	614	3	1	4
Aug	614	103	15	118
Sep	614	5,363	785	6,148
Oct	613	(25,677)	(3,760)	(29,436)
Nov	610	16,574	2,427	19,001
Dec	613	17,256	2,527	19,782
ANNUAL	7,370	78,362	11,474	89,837
%		87%	13%	

AMEREN  
CASE NO. GR-2010-0363

**ALL DIVISION**  
2009

Large General Service  
**Actual Volumes**

Large General Service				
Month	Customer Meters	1st Block <7000 Ccf	Tail Block >7000 Ccf	Total Ccf
Jan	3,293	4,798,163	661,132	5,459,295
Feb	3,330	4,442,747	551,663	4,994,410
Mar	3,317	3,366,128	278,687	3,644,815
Apr	3,299	2,364,641	149,323	2,513,964
May	3,293	1,488,169	71,527	1,559,696
Jun	3,284	1,058,943	88,295	1,147,238
Jul	3,290	941,524	73,613	1,015,137
Aug	3,292	925,140	91,597	1,016,737
Sep	3,288	1,006,416	92,980	1,099,396
Oct	3,269	1,273,656	124,847	1,398,503
Nov	3,325	1,891,454	193,222	2,084,676
Dec	3,294	3,145,891	319,764	3,465,655
ANNUAL	39,574	26,702,872	2,696,650	29,399,522
%		91%	9%	

AMEREN  
CASE NO. GR-2010-0363

**ALL DIVISION**  
2009

Large General Service  
**NORMAL VOLUMES**

Large General Service				
Month	Customer Meters	1st Block <7000 Ccf	Tail Block >7000 Ccf	Total Ccf
Jan	3,293	4,859,429	678,562	5,537,992
Feb	3,330	4,519,623	575,749	5,095,372
Mar	3,317	3,515,406	307,323	3,822,728
Apr	3,299	2,297,579	140,897	2,438,476
May	3,293	1,534,283	74,770	1,609,053
Jun	3,284	1,099,988	90,782	1,190,770
Jul	3,290	945,790	73,853	1,019,642
Aug	3,292	928,098	91,772	1,019,870
Sep	3,288	1,019,555	94,202	1,113,756
Oct	3,269	1,088,183	112,118	1,200,301
Nov	3,325	1,970,985	199,183	2,170,167
Dec	3,294	3,368,865	361,540	3,730,405
ANNUAL	39,574	27,147,782	2,800,751	29,948,533
%		91%	9%	

AMEREN  
CASE NO. GR-2010-0363

**ALL DIVISION**  
2009

Large General Service  
**ADJUSTMENTS TO VOLUMES**

Large Gene				
Month	Customer Meters	1st Block <7000 Ccf	Tail Block >7000 Ccf	Total Ccf
Jan	3,293	61,266	17,430	78,697
Feb	3,330	76,876	24,086	100,962
Mar	3,317	149,278	28,636	177,913
Apr	3,299	(67,062)	(8,426)	(75,488)
May	3,293	46,114	3,243	49,357
Jun	3,284	41,045	2,487	43,532
Jul	3,290	4,266	240	4,505
Aug	3,292	2,958	175	3,133
Sep	3,288	13,139	1,222	14,360
Oct	3,269	(185,473)	(12,729)	(198,202)
Nov	3,325	79,531	5,961	85,491
Dec	3,294	222,974	41,776	264,750
ANNUAL	39,574	444,910	104,101	549,011
%		81%	19%	

**MISSOURI PUBLIC SERVICE COMMISSION**

**STAFF REPORT**  
**COST OF SERVICE**

**APPENDIX 5**  
**Depreciation Rates**

**UNION ELECTRIC COMPANY**  
**d/b/a AMERENUE**

**CASE NO. GR-2010-0363**

**AmerenUE Gas  
Staff Calculated Annual Depreciation Rates**

<u>Account Number</u>	<u>Account Description</u>	<u>Whole Life Depreciation Rate (%)</u>	<u>Average Service Life (Years)</u>	<u>Iowa Curve</u>	<u>Net Salvage</u>
<b>Production Plant</b>					
305	Structures and improvements	1.67%	60	L0.5	0%
311	Liquified petroleum gas equipment	1.75%	57	L1	0%
<b>Transmission Plant</b>					
366	Structures and improvements	2.05%	49	R2	0%
367	Mains	2.27%	44	R4	0%
369	Measuring and regulating stations	2.22%	45	S0.5	0%
<b>Distribution Plant</b>					
375	Structures and improvements	2.04%	49	R2	0%
376	Mains	2.25%	44	R4	1%
378	Measuring and regulating station equip. (general)	2.29%	45	S0.5	-3%
379	Measuring and regulating station equip. (CGCS)	2.22%	45	S0	0%
380	Services	2.73%	37	R2.5	-1%
381	Meters	2.70%	36	R1.5	3%
383	House regulators	2.31%	51	L2.5	-18%
385	Industrial measuring and regulating equipment	2.28%	29	R0.5	34%
387	Other distribution equipment	3.36%	N.A.	N.A.	N.A.
<b>General Plant</b>					
390	Structures and improvements	2.20%	55	S1	-21%
391	Office furniture and equipment	4.76%	21	L0.5	0%
391.2	Personal computers	20.00%	5	L3	0%
392	Transportation equipment	7.69%	11	R1	15%
393	Stores equipment	3.70%	27	S1.5	0%
394	Tools, shop and garage equipment	3.70%	27	R1.5	0%
395	Laboratory equipment	4.17%	24	L0	0%
396	Power operated equipment	5.06%	18	S3	9%
397	Communication equipment	4.76%	21	R2	0%

**AmerenUE Gas**  
**Staff Calculated Annual Depreciation Accruals**

Account Number	Account Description	Current Staff Calculated Annual Accrual	Annual Accrual	Annual Difference
<b>Production Plant</b>				
305	Structures and improvements	10,771	10,771	0
311	Liquified petroleum gas equipment	22,925	22,043	(882)
<b>Transmission Plant</b>				
366	Structures and improvements	0	119	119
367	Mains	107,963	122,538	14,575
369	Measuring and regulating stations	971	971	0
<b>Distribution Plant</b>				
375	Structures and improvements	620	633	12
376	Mains	4,168,450	4,224,780	56,330
378	Measuring and regulating station equip. (general)	80,392	86,430	6,039
379	Measuring and regulating station equip. (CGCS)	9,681	9,681	0
380	Services	2,636,639	2,789,932	153,293
381	Meters	473,962	511,879	37,917
383	House regulators	241,188	248,725	7,537
385	Industrial measuring and regulating equipment	59,451	27,164	(32,287)
387	Other distribution equipment	0	253	253
<b>General Plant</b>				
390	Structures and improvements	17,701	23,319	5,618
391	Office furniture and equipment	8,461	4,835	(3,626)
391.2	Personal computers	37,014	51,804	14,790
392	Transportation equipment	375,030	417,364	42,333
393	Stores equipment	1,137	1,009	(128)
394	Tools, shop and garage equipment	106,751	87,192	(19,559)
395	Laboratory equipment	6,213	5,182	(1,031)
396	Power operated equipment	127,489	123,345	(4,144)
397	Communication equipment	31,488	34,456	2,968
<b>Total</b>		<b>8,524,300</b>	<b>8,804,427</b>	<b>280,127</b>

**AmerenUE Gas**  
**Previously Ordered Versus Staff Calculated Depreciation Rates**

<u>Account Number</u>	<u>Account Description</u>	<u>Currently Ordered Whole Life Depreciation Rate</u>	<u>Staff Calculated Whole Life Depreciation Rate</u>
<b>Production Plant</b>			
305	Structures and improvements	1.67%	1.67%
311	Liquified petroleum gas equipment	1.82%	1.75%
<b>Transmission Plant</b>			
366	Structures and improvements	0.00%	2.05%
367	Mains	2.00%	2.27%
369	Measuring and regulating stations	2.22%	2.22%
<b>Distribution Plant</b>			
375	Structures and improvements	2.00%	2.04%
376	Mains	2.22%	2.25%
378	Measuring and regulating station equip. (general)	2.13%	2.29%
379	Measuring and regulating station equip. (CGCS)	2.22%	2.22%
380	Services	2.58%	2.73%
381	Meters	2.50%	2.70%
383	House regulators	2.24%	2.31%
385	Industrial measuring and regulating equipment	4.99%	2.28%
387	Other distribution equipment	0.00%	3.36%
<b>General Plant</b>			
390	Structures and improvements	1.67%	2.20%
391	Office furniture and equipment	8.33%	4.76%
391.2	Personal computers	14.29%	20.00%
392	Transportation equipment	6.91%	7.69%
393	Stores equipment	4.17%	3.70%
394	Tools, shop and garage equipment	4.53%	3.70%
395	Laboratory equipment	5.00%	4.17%
396	Power operated equipment	5.23%	5.06%
397	Communication equipment	4.35%	4.76%

**AmerenUE Gas  
Depreciation Reserve Analysis**

		As of December 31, 2008			
Account Number	Account Description	Plant In Service	Theoretical Reserve Accrual	Actual Reserve Accrual	Theoretical Less Actual Difference
Manufactured Gas Plant - LPG					
305	Structures and improvements	\$ 644,985.72	66,054	61,363	4,691
311	Liquified petroleum gas equipment	1,259,626.52	388,769	404,165	(15,396)
Transmission Plant					
366	Structures and improvements	5,816.58	373	528	(155)
367	Mains	5,398,166.67	1,530,788	1,785,177	(254,389)
369	Measuring and regulating stations	43,733.10	16,785	25,577	(8,792)
Distribution Plant					
375	Structures and improvements	31,016.21	11,122	1,558	9,564
376	Mains	187,768,018.44	51,398,818	47,897,067	3,501,751
378	Measuring and regulating station equip. (general)	3,774,250.25	1,130,238	1,143,347	(13,109)
379	Measuring and regulating station equip. (CGCS)	436,077.59	90,509	117,275	(26,766)
380	Services	102,195,318.92	30,230,295	49,246,365	(19,016,070)
381	Meters	18,958,477.88	4,413,086	2,595,117	1,817,969
383	House regulators	10,767,337.01	3,074,980	3,163,345	(88,365)
385	Industrial measuring and regulating equipment	1,191,400.92	170,342	276,107	(105,765)
387	Other distribution equipment	7,535.00	253	435	(182)
General Plant					
390	Structures and improvements	1,059,946.14	362,764	372,768	(10,004)
391	Office furniture and equipment	101,576.85	35,519	7,786	27,733
391.2	Personal computers	259,021.25	166,362	124,257	42,105
392	Transportation equipment	5,427,356.98	1,747,320	2,602,307	(854,987)
393	Stores equipment	27,268.29	15,470	11,073	4,397
394	Tools, shop and garage equipment	2,356,542.97	832,659	1,157,762	(325,103)
395	Laboratory equipment	124,259.50	31,324	42,186	(10,862)
396	Power operated equipment	2,437,647.46	840,873	944,859	(103,986)
397	Communication equipment	723,869.26	285,891	424,044	(138,153)
Total		344,999,250	96,840,594	112,404,468	(15,563,874)