Exhibit No.:

Issue: Depreciation

Witness: Guy C. Gilbert, PE, RG

Sponsoring Party: MoPSC Staff
Type of Exhibit: Rebuttal Testimony
Case No.: ER-2008-0318
Date Testimony Prepared: October14, 2008

## MISSOURI PUBLIC SERVICE COMMISSION **UTILITY SERVICES DIVISION**

## **REBUTTAL TESTIMONY**

**OF** 

GUY C. GILBERT, MS, PE, RG

# UNION ELECTRIC COMPANY d/b/a **AMERENUE CASE NO. ER-2008-0318**

Jefferson City, Missouri October 2008

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1		REBUTTAL TESTIMONY
2		OF
3		GUY C. GILBERT, MS, PE, RG
4		UNION ELECTRIC COMPANY d/b/a
5		AMERENUE
6		CASE NO. ER-20087-0318
7	Q.	Would you please state your name and business address?
8	A.	Guy C. Gilbert, 200 Madison Street, Jefferson City, Missouri, 65102.
9	Q.	By whom are you employed and in what capacity?
10	A.	I am employed by the Missouri Public Service Commission (PSC or
11	Commission)	as a Utility Regulatory Engineer II in the Engineering and Management
12	Services Depa	rtment.
13	Q.	Have you previously testified before the Commission?
14	A.	Yes. The cases in which I have filed testimony before the Commission are
15	listed in Sched	lule GCG 1 attached to this testimony.
16	Q.	Would you please describe your work experience and educational background?
17	A.	A copy of my work and educational experience is provided at the end of this
18	testimony as	Schedule GCG 2. I am a licensed professional engineer (# EN 026908) and
19	a licensed prof	fessional geologist (# RG 0976) in the State of Missouri.
20	EXECUTIVE	<u> SUMMARY</u>
21	Q.	Please state the purpose of your testimony?
22	A.	The purpose of my rebuttal testimony is to give the Staff's response to the
23	Office of the	Public Council's (OPC) position stated by William W. Dunkel in his direct

testimony filed on behalf of OPC that AmerenUE's current depreciation rates for its nuclear production plant accounts should be reduced to account for a postulated overaccrual of depreciation reserve attributable to those accounts.

That postulated overaccrual is based on the Commission's determination in AmerenUE's last rate case, Case No. ER-2007-0002, to use, for depreciation purposes, a sixty-year life for AmerenUE's Callaway Nuclear Power Station Unit 1 rather than the forty-year life that had been used until then. Mr. William W. Dunkel proposes the Commission adjust downward the current depreciation rates for AmerenUE's nuclear production plant accounts on the premise that there is now an excess in AmerenUE's depreciation reserve because in the past depreciation reserve attributable to AmerenUE's nuclear production plant accounts was based on a forty-year life rather than a sixty-year life and, therefore, AmerenUE's depreciation reserve is now too high. The difference between OPC and the current annual depreciation accrual in the present case is a reduction in the nuclear plant accounts depreciation accruals of approximately \$7,063,093. Although this difference is material in itself from a stand-alone rate case adjustment perspective, it amounts to much less than what is even remotely close to a significant minority of the total annual accrual amount.

- Q. What is the Staff's response?
- A. It is the Staff's recommendation that a change in depreciation accrual of this magnitude should only be made in the context of a complete depreciation study when the over or under accrual of the depreciation reserve can be examined for all of the plant accounts. The Staff does not believe a change in depreciation rates for one type of plant that results in a reduction of \$7 million out of an annual depreciation accrual of over \$300 million for all plant

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accounts is appropriate without the full review that occurs during a complete depreciation study.

Q. What is Staff's recommendation in the current case?

A. Without having conducted a depreciation study of all the accounts of AmerenUE's investment, it is premature to make any changes to depreciation. Staff is concerned that a reduction in depreciation accrual now as proposed by OPC may be premature given the risk of reducing the accrual for nuclear plant accounts now to only discover in the near future in the context of a full depreciation study that depreciation rates need to be increased.

## **POSITION**

- Q. When does the Staff believe it would be appropriate to conduct a complete depreciation study?
- A. A complete depreciation study requiring an actuarial analysis of the complete mortality records for all plant account assets owned by the company was performed in AmerenUE's last rate case, ER-2007-0002. The depreciation rates that resulted from that case have only been in affect since June 1, 2007, less than 17 months. The total amount of plant in service exceeds \$11.6 billion of which the nuclear plant accounts are \$2.7 billion, or only about 23%. An analysis of only 23% of Ameren's plant accounts and 19% of the annual depreciation accrual does not yield a complete picture of the Company's net depreciation requirements.

Furthermore, I do not believe it is a timely use of resources to conduct a complete depreciation study in the current rate case. By Commission Rule the Company is required to submit a depreciation study within at least three years of the filing of a rate case or at a

minimum every five years. In the absence of an event that would significantly change the annual depreciation accrual, the Staff believes the frequency required by the Commission Rule is sufficient. During my tenure as a Commission Staff member, I am not aware of the Commission having changed depreciation rates out side the context of a full and comprehensive depreciation study unless so mandated by law.

## **OBSERVATIONS**

- Q. Are there any other observations that you would like to make at this time?
- A. AmerenUE is engaged in investing (in aggregate) hundreds of millions of dollars for new and enhancement upgrades across its production fleet, and transmission and distribution systems. Part of this capital investment is AmerenUE's Project Power On. This single project (currently underway) will increase AmerenUE's depreciable plant by nearly \$800 million. This amount of plant investment alone, based on a current composite depreciation rate of 2.7% for all plant accounts, will soon result in a requirement of some \$21.6 million of additional annual depreciation accrual. This emerging requirement for additional depreciation accruals is roughly treble the reduction in depreciation accruals proposed by OPC in the current case. The Staff sees this continuing significant investment by the Company and the resulting affect on the annual depreciation accrual as further evidence that only a complete review of all the plant accounts is appropriate.

## **SUMMARY**

- Q. Would you summarize your testimony for the record?
- A. Yes, it is my testimony that it is premature to only adjust depreciation rates for some accounts based on a partial analysis without benefit of a complete depreciation study,

- particularly given the knowledge that there will soon be very significant plant additions to
   other plant accounts.
  - Q. Does this conclude your prepared rebuttal testimony?
  - A. Yes, it does.

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## BEFORE THE PUBLIC SERVICE COMMISSION

## **OF THE STATE OF MISSOURI**

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	) Case No. ER-2008-0318 )
AFFIDAVIT OF GUY C	. GILBERT, MS, PE, RG
STATE OF MISSOURI ) ss. COUNTY OF COLE )	
Guy C. Gilbert, of lawful age, on his oath s of the foregoing Rebuttal Testimony in question be presented in the above case; that the answers by him; that he has knowledge of the matters se true and correct to the best of his knowledge and	in the foregoing Rebuttal Testimony were given t forth in such answers; and that such matters are
	Guy C. Gilbert, MS, PE, RG
Subscribed and sworn to before me this/_	day of October, 2008.
NIKKI SENN Notary Public - Notary Seal State of Missouri Commissioned for Osage County My Commission Expires: October 01, 2011 Commission Number: 07287016	Notary Public

# CASE PARTICIPATION GUY C. GILBERT,

## MS, PE, RG

Date Filed	Issue	Case Number	Exhibit	Case Name
17-Jun-94	Modernization	TO-93-309		Farber Telephone
17-Nov-95	Certificate (Sewer) - Case dismissed	SA-94-54		Osage County Water (sewer)
01-Oct-94	Certificate	GA-94-127		Southern MO Gas Company
12-Oct-94	Transfer of assets	GM-94-252		Missouri Public Service
30-Aug-94	HB 360 & extr. ret.	TAO 992		Holway Telephone
30-Aug-94	Extraordinary retirement amortization	TAO 993		New Florence Telephone
03-Jan-95	Waiver from Rule	GO-95-104		Fidelity Natural Gas
11-Jul-95	Purchase of GTE exchanges	TM-95-134		Ozark Telephone
11-Jul-95	Purchase of GTE exchanges	TM-95-135		BPS Telephone
11-Jul-95	Purchase of GTE exchanges	TM-95-142		Modern Telecommunications
19-Sep-95	General rate case	WR-95-145		St. Louis County Water
11-Jul-95	Purchase of GTE exchanges	TM-95-163		Cass County Telephone
22-Mar-96	Certificate	SA-96-40		Taneycomo Highlands (Sewer)
14-Feb-96	Certificate	SA-96-91		S.T. Ventures (Sewer)
09-May-96	Certificate (Water & Sewer)	WA-96-96		Emerald Pointe Utilities
24-Sep-96	Certificate	GA-96-264		Ozark Natural Gas
31-Jul-96	General rate case (Water)	WR-96-407		Taney County
16-Jan-96	Depreciation rates & amortization	TAO 998		Fidelity Telephone
16-Jan-96	Depreciation rates & amortization	TAO 999		Bourbeuse Telephone
31-Jan-96	Depreciation rates	TAO 1001		Northeast Missouri Rural Tel

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15-Nov-96	Variance from prior order	GO-97-30		Southern Missouri Gas
12-Dec-96	HB360 rates	TAO 1004		Kingdom Telephone
31-Jan-97	Extraordinary retirement of COE	TAO 1005		Iamo Telephone
28-Mar-97	Depreciation of Plant	EC97362	Direct	UtiliCorp United, Inc. d/b/a MO Public Service
28-Mar-97	Depreciation of Plant	EO97144	Direct	UtiliCorp United, Inc. d/b/a MO Public Service
16-Sept-97	Depreciation of Plant	ER97394	Direct	Missouri Public Service, A Division of UtiliCorp United, Inc.
30-Sept-97	Sale of Plant	GM97435	Rebuttal	Missouri Public Service, A Division of UtiliCorp United, Inc.
17-Oct-97	Depreciation of Plant	ER97394	Rebuttal	UtiliCorp United, Inc. d/b/a MO Public Service
21-Nov-97	Amortization of accounts, Depreciation, Depreciation Recommendations	ER97394	Surrebuttal	UtiliCorp United, Inc. d/b/a MO Public Service
15-May-98	Depreciation	GA98227	Rebuttal	Ozark Natural Gas Company, Inc.
8-Oct-98	Depreciation of Plant	EC98573	Direct	St. Joseph Light and Power Company
30-Nov-98	Depreciation of Plant	WA97410	Rebuttal	George Hoesch
13-May-99	Depreciation of Plant	ER99247	Direct	St. Joseph Light & Power Company
13-May-99	Depreciation of Plant	EC98573	Direct	St. Joseph Light & Power Company
8-Aug-2000	Depreciation of Plant	GR2000512	Direct	Union Electric Company d/b/a AmerenUE
4-Nov-04	Depreciation of Plant	ER-2004- 0570	Rebuttal	The Empire District Electric Company
18-May-05	Minimum Depreciation Rates	TU-2005- 0358	Staff Recommendation	Alma Telephone Company
5-Jan-06	Minimum Depreciation Rates	TO-2006- 0239	Staff Recommendation	Miller Telephone Company
11-Sept-06	Depreciation of Plant	GR-2005- 0387	Direct	Atmos Energy Company

11-Dec-06	Depreciation of Plant	GR-2005- 0422	Rebuttal	Missouri Gas Energy
31-July-07	Depreciation of Plant	WR-2007-	Surrebuttal	Missouri-American
		0216		Water Company
11-Sept-08	Depreciation of Plant	IO-2009-	Recommendation	Citizens Telephone
		0032		Company

## GUY C. GILBERT, MS, PE, RG

### PROFESSIONAL EXPERIENCE

State of Missouri, Public Service Commission Utility Regulatory Engineer I, 1994 -2000, 2004-present

Prepare depreciation studies, cost studies, valuations and engineering analysis of utility assets.

Conduct special projects in conjunction with the FCC and the FERC.

Linn State Technical College Chair, Civil / Construction Engineering Management Technology Department Director, Material and Safety Institute 2000 - 2004

Department Chair and faculty instructor for courses in civil engineering technology, construction methods and techniques, surveying, engineering economics, materials, material testing, estimating, scheduling and project management.

Directed and managed activities of the Material and Safety Institute that provides resources and training for business and industry in the areas of quarry/materials acceptance certification as mandated by the Federal Highway Administration and OSHA/MSHA safety training.

State of Illinois, Department of Energy and Natural Resources Project Engineer 1991 - 1994

Managed Clean Coal Technology Demonstration projects; often in concert with U.S.DOE projects. Represented Illinois in over \$1.1 billion of projects ranging from precombustion technologies to combustion and post combustion technologies. Performed cost benefit analysis of the environmental and economic impacts and procured benefits to the state.

CW3M Company, Inc.
Consulting Project Engineer 1993 –1994 (part time contract)

Conducted geotechnical evaluation of leaking underground storage tank sites. Designed equipment for containment and treatment of contaminated ground water.

Illinois Commerce Commission Management Analyst 1988 – 1991

Managed consultant conducted comprehensive management audits of operational aspects of public utilities. Assessed least cost planning programs of public utilities and provided recommendations on risk assessment and cost estimating of various externalities. Have reviewed and provided recommendations to utilities within the management function

areas of Operations, Operations Planning, Power Production (fossil and nuclear), Fuels Management (fossil and nuclear), Transmission and Distribution (electric and gas), Engineering and Construction (electric, gas, and telephone), Gas Supply, Network Operations Planning, Network Operations and Information Services.

Freeman United Coal Mining Company (General Dynamics) Assistant to the Superintendent 1982 - 1987

Produced annual mining plans and budget for 2+ million ton per year underground mining facility. Assessed geologic aspects of the mine environment to optimize safety and productivity. Prepared economic feasibility studies and justification for new and alternative capital expenditures. Developed and implemented microcomputer based on site operations information systems encompassing maintenance, materials, manpower, and costs. Administered UMWA-BCOA Labor Agreement: grievance procedures, attendance control and benefits programs. Special projects involving production methods, structures, ventilation, and materials engineering. Provided certification of operating compliance with Federal and State regulations as required.

Peabody Coal Company Coal Miner, UMWA 1976-1980

#### **EDUCATION**:

Bachelor of Science Economics, University of Missouri-Rolla Bachelor of Science Mining Engineering, University of Missouri-Rolla National Science Foundation Research Grant participant (NSF GY 9841) Master of Science, Career & Technology Education, Central Missouri State University Graduate Speaker, Central Missouri State University Outstanding Graduate Student Leadership Award, Central Missouri State University

Advisory Board Member, Economics & Finance Department, University of Missouri-Rolla

Facilities and Planning Committee for construction of Calvary Lutheran High School School Board Member Trinity Lutheran Grade School

Continuing Education

Management Analyst Training
Basic Depreciation Concepts
Models Used In Life and Salvage Studies
Forecasting Life and Salvage
Advanced Topics in Analysis and Forecasting
Business and Technical Writing
Communicating Effectively
Auditing in Telecommunications
Introduction to EDP Auditing

**Network Certification** 

Asbestos Training for Maintenance Employees, #40 CFR 763.92(a)(2)(i thru iv)

Red Cross First Aid Adult/AED/Child/Infant CPR Instructor, Expired

Redirecting Employee Performance

Basic Supervision

**Humboldt Radiation Safety Training Class** 

#### **CERTIFICATIONS:**

by United States Department of Labor

Noise Level Testing
Dust Sampling
Dust Sampling Equipment Calibration
Electricity Low/Medium/High Voltage, Expired
Dam and Refuse Impoundment Inspector
Dam and Refuse Impoundment Inspection Instructor
OSHA Safety Instructor (10 & 30 Hour), Expired

by State of Missouri

State Board of Geologist Registration, member
Registered Professional Engineer, No. EN 026908
Registered Professional Geologist, No. RG 0976
SAVE/SEMA Structural Inspector I
Vocational Teaching Certificate, No. 0238934
Department of Transportation, Trainer Certified Materials Technician Level 1
Department of Transportation, Trainer Certified Level 2 Aggregate
Department of Transportation, Trainer Certified Level 2 Soils

Department of Transportation, Trainer Certified Profilograph

Department of Transportation, Trainer Certified Level 2 Concrete

by State of Illinois

Mine Manager, No. 6634
Mine Examiner, No. 10324
Electrical Hoisting Engineer, No. 2427
Sewage Treatment Plant Operator, Class K
Industrial Wastewater Treatment Works Operator, Class K
State of Illinois Mine Rescue Team, Springfield Station, No. 2
Certified Benchman for Mine Rescue Equipment
Emergency Medical Technician-Ambulance, Expired

#### **Demonstration Projects**

- Energy & Environmental Research Corporation Hennepin Station (GR-SI)
- Energy & Environmental Research Corporation City Water Light and Power

- Pircon-Peck Process Western Illinois University
- Combustion Engineering Integrated Gasification Combined Cycle (IGCC) City Water, Light and Power Springfield
- Southern Illinois University Refurbishment Repowering Project
- Tecogen's Development and Testing of a Commercial Scale Coal-Fired Combustion System - Illinois Coal Development Park
- TCS Incorporated's Micronized Coal System at Rochelle Municipal Utilities
- IGT Kerr-McGee MildGas
- Radian's Characterization of Disposed Wastes from Advanced Coal Combustion Residues

### **Investigations**

- NovaCon Sorbent: U.S. DOE and EERC
- Sargent & Lundy Combustion 2000:
- Tecogen: moving bed copper oxide flue gas cleaning process
- Air Purification's RotorFilter Technology:
- Tampa Electric Company: Use of Illinois high sulfur coal

### **Management Audits**

Central Illinois Light Company, Peoria, Illinois Commonwealth Edison, Chicago, Illinois GTE Telephone Company, Dallas, Texas GTE Data Systems, Tampa Florida