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Witness: Guy C. Gilbert, PE, RG
Sponsoring Party: MoPSC Staff
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MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

SURREBUTTAL TESTIMONY

OF

GUY C. GILBERT, PE, RG

MISSOURI-AMERICAN WATER COMPANY

CASE NO. WR-2007-0216

Jefferson City, Missouri
July 2007

STAFF
Exhibit No. 14
Case No(s). WR-2007-0216
Date 8-14-07 **Rptr** RF

STAFF-14

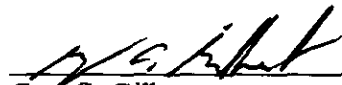
BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Missouri-American Water)
Company's request for Authority to) Case No. WR-2007-0216
Implement a General Rate Increase for)
Water Service provided in Missouri)
Service Areas)

AFFIDAVIT OF GUY C. GILBERT, PE, RG

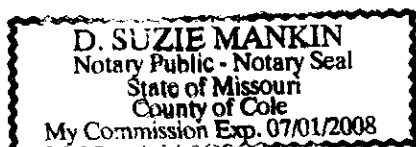
STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Guy C. Gilbert, being of lawful age, on his oath states: that he has participated in the preparation of the following Surrebuttal Testimony in question and answer form, consisting of 6 pages to be presented in the above case; that the answers in the following Surrebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.



Guy C. Gilbert

Subscribed and sworn to before me this 30th day of July, 2007.





Notary Public

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SURREBUTTAL TESTIMONY
OF
GUY C. GILBERT, PE, RG
MISSOURI-AMERICAN WATER COMPANY
CASE NO. WR-2007-0216**

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Guy C. Gilbert, PE, RG

1 witness that are in disagreement with policy directives provided previously by the
2 Commission. The Commission recently gave direction in Case No. ER-2004-0570 (Empire
3 District Electric Company) regarding the parameters that should be part of the computation
4 of depreciation for utilities. The parameters delineated by the Commission included the
5 value of an asset, average service life and net salvage. The Commission further stated in its
6 order in Case No. ER-2004-0570 why lifespan and terminal net salvage estimates were not
7 appropriate variables to be included in the depreciation computation.

8 Mr. John J. Spanos, disagrees with the Commission's previous order and seeks to
9 introduce additional parameters and alternative methods that result in the Company
10 appearing to require additional depreciation accruals. The Company then seeks to mitigate
11 the necessity of an increase in depreciation expense by stating a phased increase in
12 depreciation rates starting with estimated depreciation rates (representing less than \$600,000
13 increase) that would transition to calculated depreciation rates (nearly a \$4 million increase)
14 based on their recommended parameters and methods. Mr. Spanos, disagrees with the
15 Commission's previous order and seeks to introduce a lifespan component to the
16 computation of depreciation rates. Use of lifespan minimizes the time ratepayers have to
17 return the Company's investment and net salvage. Mr. Spanos also includes amortization of
18 the General Plant accounts in direct contradiction to the Commission rules. The rules
19 address the depreciation of plant accounts, not the amortization of plant accounts. Another
20 contradiction of the Commission's rules arises from the fact that the Company has adopted a
21 numerical system of accounts that is different from that stated in the Commission's rules.
22 This has caused some confusion regarding what the various depreciation accounts actually
23 represent.

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Guy C. Gilbert, PE, RG

1 Q. What is the difference between the Company and Staff's positions?

2 A. The difference between the Staff and the Company's depreciation annual
3 accrual in the present case is approximately \$3.25 million. The Company believes it needs
4 \$3.25 million more depreciation expense included in rates than Staff has determined.

5 **LIFESPAN**

6 Q. What retirement date(s) is MO-AM proposing for all its major facilities?

7 A. That all major facilities will be in service at least 65 years before retirement.

8 Q. How did the Company make this determination of final retirement date?

9 A. The Company does not provide any discussion in its filed testimony regarding
10 how these decisions were made. However, the Company does state in response to document
11 request number 0264, "All probable retirement dates are at least 65 years from initial
12 installation."

13 Q. Is it reasonable to expect that MO-AM will replace the vast majority, if not
14 all, of its major structures in within the next sixty five years?

15 A. That would be unprecedented for a water utility company of MO-AM's size.
16 For example MO-AM acquired the St. Joseph water treatment facility that had provided
17 service for approximately 100 years. This treatment facility was later sold prior to green or
18 brown fielding of the site. Water treatment facilities in St. Louis and Springfield are near a
19 similar vintage. Often a determination involving the replacement of a water works may
20 consider real estate value and system growth or expansion, resulting in economies of scale
21 that an entirely new water treatment facility may take advantage of, as was the case with the
22 St. Joseph water works.

**ADDITIONAL ADJUSTMENTS TO THE COMPUTATION OF DEPRECIATION
RATES**

Q. Does the Company propose additional methods and techniques to the computation of the depreciation rates based upon estimated amounts resulting from estimated parameters?

A. The Company uses the estimated lifespan and the resultant estimated amortization periods to determine an estimated rate for depreciation of certain General Plant accounts plus an adjustment for the remaining life technique.

Q. What is the Company's capitalization limit and why does it exist?

A. The Company's capitalization limit for non-routine general plant accounts is \$1,500 and was last revised January 1, 2003. The capitalization limit sets a threshold determined by the Company at which continuing property records will be maintained to a degree of detail that enables the individual continuing property items to be identified physically by location.

Q. How is this accounting policy implemented by the Company for PCs, fax machines and similar equipment that does not meet the capitalization threshold?

A. The Company has chosen to track PCs as stated in the previous answer, even though they are under the capitalization limit, and incorporate their values in depreciable amounts. However, the Company does not maintain the information at a detail suitable for the determination of depreciation rates.

Q. How does the Company derive its estimated adjustment for the depreciation reserve?

A. The actuarial analysis uses the same data sets, algorithms and software as Staff used, yielding results that are interpreted by the depreciation analyst, resulting in an

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Guy C. Gilbert, PE, RG

1 estimated average service life for that particular group or account of assets. This
2 interpretation is aided by engineering judgment and selection and interpretation of a survivor
3 curve. The Staff's analysis regarding depreciable life ends here. The Company however,
4 takes this estimated average service life and estimates a remaining life that is used to adjust
5 the period over which the future depreciation amount and accruals will need to be made
6 based upon the time available before everything in the account is retired.

7 Q. Does the Company make this additional adjustment for all depreciated plant
8 accounts?

9 A. Yes, for the non-lifespan accounts and all other accounts this period is called
10 the remaining life even when it is recommended that the account be simply amortized over a
11 pre-specified period.

12 Q. What is the result of these additional estimated amounts and periods?

13 A. It constrains and limits the amount of time that the ratepayers have available
14 to return the investment made by the Company for service to the ratepayer, as if at some date
15 certain time in the future the Company will be exiting the business of providing water
16 service.

17 Q. Are there any other estimated adjustments that the Company seeks to make
18 regarding depreciation?

19 A. Yes. The Company would like to redistribute the accrual of reserves for
20 depreciation between the two phases. The first of these phases is based on an unspecified
21 average and the second is based upon the Company's interpretation of depreciation policy,
22 procedures, methods, and techniques developed outside the Commission's policies and rules.

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1 Q. Does the Staff believe there is an estimated inadequacy of the reserve for
2 depreciation?

3 A. No, Staff believes the reserve to currently be over-accrued by over
4 \$30 million.

5 Q. Has the theoretical reserve over-accrual of \$30 million been addressed in this
6 case?

7 A. Yes, Mr. Gregory E. Macias has recommended in his direct testimony filed in
8 this case, that no action be taken regarding the reserve over-accrual of \$30 million, but that
9 Staff continue to monitor it. Meanwhile, Mr. Macias' recommended depreciation rates are
10 intended to be corrective to the depreciation reserve over-accrual on a going-forward basis.

11 Q. Does this conclude your prepared surrebuttal testimony?

12 A. Yes, it does.

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 Co
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
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

Date Filed	Issue	Case Number	Exhibit	Case Name
3/28/97	Depreciation of Plant	EC97362	Direct	UtiliCorp United Inc. d/b/a MO Public Service
3/28/97	Depreciation of Plant	EO97144	Direct	UtiliCorp United Inc. d/b/a MO Public Service
9/16/97	Depreciation of Plant	ER97394	Direct	Missouri Public Service, A Division of UtiliCorp United Inc.
9/30/97	Sale of Plant	GM97435	Rebuttal	Missouri Public Service, A Division of UtiliCorp United Inc.
10/17/97	Depreciation of Plant	ER97394	Rebuttal	UtiliCorp United Inc. d/b/a MO Public Service
11/21/97	Amortization of accounts, Depreciation, Depreciation Recommendations	ER97394	Surrebutt al	UtiliCorp United Inc. d/b/a MO Public Service
5/15/98	Depreciation	GA98227	Rebuttal	Ozark Natural Gas Company, Inc.
10/8/98	Depreciation of Plant	EC98573	Direct	St. Joseph Light and Power Company
11/30/98	Depreciation of Plant	WA97410	Rebuttal	George Hoesch
5/13/99	Depreciation of Plant	ER99247	Direct	St. Joseph Light & Power Company
5/13/99	Depreciation of Plant	EC98573	Direct	St. Joseph Light & Power Company
8/8/2000	Depreciation of Plant	GR2000512	Direct	Union Electric Company d/b/a AmerenUE
11/04/04	Depreciation of Plant	ER-2004-0570	Rebuttal	Empire District Electric Company
9/11/06	Depreciation of Plant	GR-2005-0387	Direct	Atmos Energy Company
12/11/06	Depreciation of Plant	GR-2005-0422	Rebuttal	Missouri Gas Energy

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.

Direct and manage 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 pre-combustion 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 Level 2 Concrete
Department of Transportation, Trainer Certified Profilograph

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