

Exhibit No.
Witness: Michael Gorman
Type of Exhibit: Rebuttal Testimony
Sponsoring Party: MIEC
Subjects: Cost of Service and Rate Design
Date: October 10, 2003

**BEFORE THE
PUBLIC SERVICE COMMISSION OF MISSOURI**

In the Matter of Missouri-American Water)
Company for Authority to File Tariffs) Case No. WR-2003-0500
Reflecting Increased Rates for Water and)
Sewer Service.)

Rebuttal Testimony and Schedules of

Michael Gorman

On behalf of

Missouri Industrial Energy Consumers

October 10, 2003
Project 8027

BAI
BRUBAKER & ASSOCIATES, INC.
ST. LOUIS, MO 63141-2000

FILED²
OCT 10 2003

Missouri Public
Service Commission

FILED³
JAN 23 2004

Missouri Public
Service Commission

Ex 31

Exhibit No. 31
Date Case No. WR-2003-0500
Reporter

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In the Matter of Missouri-American Water)
Company for Authority to File Tariffs) Case No. WR-2003-0500
Reflecting Increased Rates for Water and)
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Affidavit of Michael Gorman

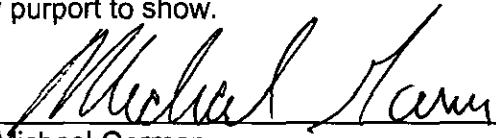
STATE OF MISSOURI)
) SS
COUNTY OF ST. LOUIS)

Michael Gorman, being first duly sworn, on his oath states:

1. My name is Michael Gorman. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 1215 Fern Ridge Parkway, Suite 208, St. Louis, MO 63141-2000. We have been retained by the Missouri Industrial Energy Consumers in this proceeding on their behalf.

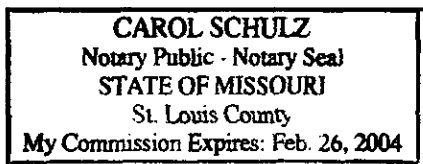
2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony and schedule which was prepared in written form for introduction into evidence in the WR-2003-0500 Proceeding.

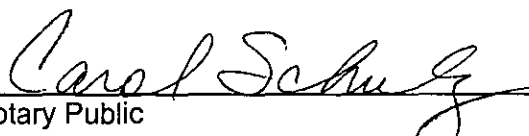
3. I hereby swear and affirm that the rebuttal testimony and schedule are true and correct and show the matters and things they purport to show.



Michael Gorman

Subscribed and sworn before this 9th day of October, 2003.





Notary Public

My Commission expires on February 26, 2004.

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In the Matter of Missouri-American Water)	
Company for Authority to File Tariffs)	Case No. WR-2003-0500
Reflecting Increased Rates for Water and)	
Sewer Service.)	

Rebuttal Testimony of Michael Gorman

1 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A My name is Michael Gorman and my business address is 1215 Fern Ridge Parkway,
3 Suite 208, St. Louis, MO 63141-2000.

4 **Q WHAT IS YOUR OCCUPATION?**

5 A I am a consultant in the field of public utility regulation and a principal in the firm of
6 Brubaker & Associates, Inc., energy, economic and regulatory consultants.

7 **Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

8 A These are set forth in Appendix A to my testimony.

9 **Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

10 A I am appearing on behalf of the Missouri Industrial Energy Consumers (MIEC). Member
11 companies of MIEC take large amounts of water from Missouri-American Water
12 Company (MAWC or Company), and their costs of water will be significantly increased
13 by MAWC's proposed rate increase.

**Michael Gorman
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1 **Q WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

2 **A I will recommend adjustments to MAWC's cost of service and proposed rate design.**

3 **Q PLEASE SUMMARIZE YOUR RECOMMENDATIONS IN THIS PROCEEDING.**

4 **A My recommendations are summarized as follows:**

5 1. MAWC's rates must be competitive to attract and retain high volume customers.
6 As such, MAWC's service quality and competitive pricing are key factors to the
7 MAWC service area's business infrastructure and economic development
8 initiatives.

9 2. To keep MAWC's rates competitive, it must minimize its revenue requirement
10 through assertive and aggressive cost management, and it must allocate its cost
11 of service (COS) among its customers in accordance with how it incurs costs for
12 providing service to each customer. Efficiency in cost management and cost
13 allocation and rate design will help ensure that MAWC's prices are competitive
14 and that it is able to successfully contribute to the economic development of its
15 service territory.

16 3. MAWC's cost of service appears to be generally reasonable, but I am
17 recommending several adjustments to more accurately assign MAWC's cost of
18 purchased power, to credit contract revenue among its customer classes, and to
19 eliminate the proposed St. Louis District's revenue contribution to MAWC's other
20 districts.

21 4. Based on all of my proposed adjustments to MAWC's allocated cost of service
22 study, I recommend MAWC increase its rates to its customer groups as shown
23 on the attached Schedule 1, Page 1.

24 5. The revenue requirement adjustments I proposed in my October 3, 2003
25 testimony are not reflected in my Schedule 1, except for the elimination of the St.
26 Louis District's revenue contribution to MAWC's other districts. Schedule 1 is
27 shown only as an illustration of how to allocate MAWC's costs among its
28 customers in the St. Louis District. The amount of the increase shown should not
29 be interpreted as my recommendation on the appropriate revenue increase for
30 the St. Louis District.
31

32 **Q PLEASE EXPLAIN WHY MAWC SHOULD PROVIDE HIGH QUALITY, RELIABLE**
33 **SERVICE AT COMPETITIVE PRICES.**

34 **A MAWC must offer high quality, competitively priced services because many of its large**
35 **volume users have alternative sources of supply that compete with MAWC. For**

Michael Gorman
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1 example, industrial companies will have no choice but to explore competitive alternatives
2 if MAWC's prices are rendered non-competitive due to the Company's poor cost
3 management practices, or if rates designed for large industrial companies subsidize
4 other customer classes.

5 Large industrial companies would not do this out of spite, but rather are forced to
6 aggressively manage production costs in order to remain competitive in their own
7 marketplaces. Indeed, wholesale prices have been increasing by less than 1.6% per
8 year over the last three years. With minimal wholesale price increases for their
9 products, industrial companies have tremendous difficulty absorbing increases to their
10 costs of production while continuing to meet required margins. Because of the industrial
11 companies' competitive requirement to successfully control production costs, MAWC
12 must be successful in managing its costs, and its rates must be adjusted to ensure that
13 each customer pays only its fair share of MAWC's cost of service.

14 **Q BEFORE YOU DESCRIBE YOUR ADJUSTMENTS TO THE COMPANY'S COST**
15 **STUDY, PLEASE EXPLAIN HOW YOU MADE YOUR PROPOSED ALTERNATIVE**
16 **COST ALLOCATIONS IN YOUR SCHEDULE 1 AND SCHEDULE 2 ATTACHED TO**
17 **YOUR TESTIMONY.**

18 **A** These schedules were derived by starting with MAWC witness Herbert's St. Louis
19 District's cost of service model provided by MAWC in response to MIEC Data Request 1-
20 3. In my Schedule 1, I adjust Mr. Herbert's cost study to reflect all my proposed
21 adjustments to it, including:

- 22 1. Adjustment to the allocation of purchased power costs.
- 23 2. Adjustment to the allocation of contract revenue credit among customers.
- 24 3. Removal of the cost to the St. Louis District of MAWC's proposed revenue
25 subsidy to its other districts.

PURCHASED POWER EXPENSE ALLOCATION

Q HOW DID MAWC ALLOCATE ITS PURCHASED POWER EXPENSES AMONG ITS CLASSES?

A MAWC allocated its purchased power expense using Factor No. 1 as derived in MAWC witness Herbert's cost of service study. Factor No. 1 allocates this cost among customer classes on the basis of average daily consumption.

Q PLEASE DESCRIBE WHY MR. HERBERT'S USE OF FACTOR NO. 1 TO ALLOCATE PURCHASED POWER EXPENSE IS UNREASONABLE.

A MAWC should allocate its purchased power expense in a manner that reasonably resembles how it procures purchased power. Power is procured under rates that include both demand and energy charges. Demand costs are tied to billing demand and demand charges. Energy costs are based on the amount of energy consumed, and the energy charge.

MAWC's purchased power demand charges are closely aligned with its maximum hour customer demand. In contrast, MAWC's purchased power energy costs are closely tied with its average annual consumption. This can be illustrated by an evaluation of MAWC's purchased power tariff rate. For example, consider Ameren Union Electric Company's (AmerenUE) tariff charges. AmerenUE charges for power based on a customer charge, demand charge and an energy charge. AmerenUE's demand and energy charges are differentiated by summer usage (June-September) and winter usage (October-May). The customer charge is based on monthly charges tied to the number of services the Company incurs. The demand charge is based on a billing demand unit described as "maximum kW in peak hours or 50% of maximum kW in off-

1 peak hours, which ever is higher . . ." Off-peak hours are defined as 10 PM to 10 AM,
2 plus weekend and specified holidays. Consequently, demand during on-peak hours is
3 more expensive than demand during off-peak hours. Both demand and energy charges
4 are lower during winter periods, compared to summer periods. The energy charge is
5 based on the amount of energy consumed each hour.

6 MAWC's purchased power demand charges are tied to its consumers' demand
7 for water. When water demand goes up, MAWC's pumping increases, thus increasing
8 its purchased power demand costs. It is reasonable to expect that MAWC's maximum
9 hour demands generally occur during AmerenUE's on-peak power periods, and its
10 electric demand charges are highly correlated with its maximum hour customer
11 demands. This occurs because the pumping units' electric demands increase as
12 demand for water increases, and this increase in demand for electrical consumption to
13 run its pumps drives its demand charges to AmerenUE.

14 Therefore, MAWC's cost of purchased power is based not only on its flow of
15 water, but is also highly correlated with both the variation of its customers' maximum
16 hour demands and water flow. That is, the maximum hour demand drives the purchased
17 power demand billing units, and the average flow drives purchased power energy
18 consumption.

19 **Q DID MAWC WITNESS HERBERT DERIVE ALLOCATION FACTORS WHICH WOULD**
20 **EXPLICITLY ALLOCATE PURCHASED POWER DEMAND COSTS AND**
21 **PURCHASED POWER ENERGY COSTS SEPARATELY BETWEEN THE CLASSES?**

22 **A** No. Nor did Mr. Herbert's cost study did not break out the Company's purchased power
23 costs by demand and energy components. Therefore, a correct allocation of purchased
24 power demand costs between customer classes is not possible. Considering this lack of

1 data, for purposes of this case I propose to use an allocation factor derived by Mr.
2 Herbert that most reasonably allocates purchased power costs (demand and energy)
3 among customer classes.

4 **Q WHICH FACTOR THEN WOULD BE MOST APPROPRIATE FOR ALLOCATING**
5 **MAWC'S PURCHASED POWER EXPENSE BETWEEN CLASSES?**

6 **A** Purchased power expense is more appropriately allocated using Mr. Herbert's allocation
7 Factor 5, rather than his Factor 1, which he used for this purpose. Mr. Herbert's Factor 5
8 considers average hourly consumption, maximum hour consumption, and fire service.
9 Average hourly consumption is an appropriate means of allocating energy charges.
10 Maximum hour consumption is an appropriate means of allocating purchased power
11 demand charges. MAWC's purchased power customer charge is a small portion of its
12 total purchased power cost and is not a material issue in the selection of an appropriate
13 allocation factor. Also, Factor 5 allocates an appropriate amount of the purchased
14 power expense to fire protection service, which also impacts MAWC's purchased power
15 demand and energy costs. While Factor 5 is not a perfect allocation of purchased power
16 costs, it is the best allocation factor of those developed by Mr. Herbert to allocate
17 purchased power costs.

18 For these reasons, I recommend using Factor 5 to allocate purchased power
19 expense, rather than Factor 1 as used by Mr. Herbert.

20 **Q ARE THERE OTHER REASONS THAT SUPPORT YOUR PROPOSAL TO**
21 **ALLOCATE PURCHASED POWER COSTS USING FACTOR 5?**

22 **A** Yes. Mr. Herbert classifies balances in Accounts 325, Electric Pumping Equipment, to
23 Factor 6. Factor 6 is appropriate for the capital investment in electric pumping, because

1 pumping costs are sized for maximum hour demands. Similarly, the purchased power
2 cost that is derived predominately for running pumping equipment, is based on hourly
3 consumption and maximum hour demands, as described above. Accordingly, Mr.
4 Herbert's proposed use of Factor 6 to allocate the capital costs for electric pumping
5 equipment contradicts his recommendation to allocate purchased power costs using
6 Factor 1. To be internally consistent, Factor 5 should be used to classify purchased
7 power costs in the Company's cost of service study.

8 **CONTRACT WATER REVENUES**

9 **Q HOW DID MR. HERBERT ALLOCATE CONTRACT WATER REVENUES IN HIS ST.**
10 **LOUIS COUNTY DISTRICT COST OF SERVICE STUDY?**

11 **A** Mr. Herbert used Allocation Factor No. 19. Allocation Factor No. 19 allocates other
12 revenues among the classes as a percentage of total revenues for these classes.

13 **Q WHY IS MR. HERBERT'S PROPOSAL TO USE FACTOR 19 TO ALLOCATE**
14 **CONTRACT REVENUE AMONG CLASSES UNREASONABLE?**

15 **A** Contract revenue does not appear to incorporate sales derived from small distribution
16 mains, and likely only minimally impact MAWC's cost of serving a customer. Therefore,
17 these costs are better allocated using a factor that describes its cost of production and
18 transmission. Contract sales normally involve high volume customers that do not use
19 small mains, and have de minimus customer costs as a percentage of total bills.
20 Therefore, allocating this cost based on Factor 19 does not properly assign this cost
21 between customer classes in a way that proportionally offsets the cost of water
22 treatment and transmission mains cost that has been allocated among MAWC's retail
23 customer classes.

1 **Q WHAT FACTOR DO YOU RECOMMEND BE USED TO ALLOCATE CONTRACT**
2 **WATER REVENUE AMONG CUSTOMER CLASSES?**

3 **A I recommend using Factor 2. Factor 2 allocates these costs on the basis of average**
4 consumption and maximum daily consumption. Factor 2 is what Mr. Herbert has used
5 for allocating most water treatment facilities and therefore is a reasonable proxy for
6 allocating the cost of contract revenue.

7 **REVENUE CONTRIBUTION**

8 **Q PLEASE DESCRIBE YOUR PROPOSED ADJUSTMENT TO THE COMPANY'S COST**
9 **OF SERVICE STUDY TO REMOVE THE REVENUE CONTRIBUTION.**

10 **A As I discussed in my revenue requirement testimony filed on October 3, 2003, the**
11 Company is proposing to charge the St. Louis District an additional \$880,000 to
12 subsidize its other operating districts. Under the Company's proposal, St. Louis District's
13 customers' rates will increase approximately 13.5% rather than 12.5%, in order to
14 contribute revenues that will lower the percentage increase in other districts.

15 **Q WHY DO YOU PROPOSE THIS REVENUE CONTRIBUTION BE REMOVED?**

16 **A I address this in my original direct testimony filed in the revenue requirement phase in**
17 this proceeding. For the reasons stated in that testimony, I recommend that the
18 Company's proposal for a revenue contribution from the St. Louis District to its other
19 operating districts be rejected. This proposal simply would result in rates charge to
20 customers in the St. Louis District that are not just and reasonable and, therefore, the
21 revenue contribution concept should be eliminated.

1 **Q HOW WOULD MR. HERBERT'S COST OF SERVICE STUDY BE IMPACTED, IF ALL**
2 **OF YOUR RECOMMENDATIONS ADJUSTMENTS ARE MADE TO IT?**

3 **A I have made all of the adjustments I am recommending to Mr. Herbert's class cost of**
4 **service study and attached them to my testimony on Schedule 1.**

5 **Q DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

6 **A Yes.**

Qualifications of Michael Gorman

1 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 **A Michael P. Gorman. My business mailing address is P. O. Box 412000, 1215 Fern**
3 **Ridge Parkway, Suite 208, St. Louis, Missouri 63141-2000.**

4 **Q PLEASE STATE YOUR OCCUPATION.**

5 **A I am a consultant in the field of public utility regulation and a principal at Brubaker &**
6 **Associates, Inc., energy, economic and regulatory consultants.**

7 **Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK**
8 **EXPERIENCE.**

9 **A In 1983 I received a Bachelors of Science Degree in Electrical Engineering from**
10 **Southern Illinois University, and in 1986, I received a Masters Degree in Business**
11 **Administration with a concentration in Finance from the University of Illinois at**
12 **Springfield. I have also completed several graduate level economics courses.**

13 In August of 1983, I accepted an analyst position with the Illinois Commerce
14 Commission (ICC). In this position, I performed a variety of analyses for both formal and
15 informal investigations before the ICC, including: marginal cost of energy, central
16 dispatch, avoided cost of energy, annual system production costs, and working capital.
17 In October of 1986, I was promoted to the position of Senior Analyst. In this position, I
18 assumed the additional responsibilities of technical leader on projects, and my areas of
19 responsibility were expanded to include utility financial modeling and financial analyses.

20 In 1987, I was promoted to Director of the Financial Analysis Department. In this
21 position, I was responsible for all financial analyses conducted by the staff. Among other
22 things, I conducted analyses and sponsored testimony before the ICC on rate of return,

1 financial integrity, financial modeling and related issues. I also supervised the
2 development of all Staff analyses and testimony on these same issues. In addition, I
3 supervised the Staff's review and recommendations to the Commission concerning utility
4 plans to issue debt and equity securities.

5 In August of 1989, I accepted a position with Merrill-Lynch as a financial
6 consultant. After receiving all required securities licenses, I worked with individual
7 investors and small businesses in evaluating and selecting investments suitable to their
8 requirements.

9 In September of 1990, I accepted a position with Drazen-Brubaker & Associates,
10 Inc. In April 1995 the firm of Brubaker & Associates, Inc. (BAI) was formed. It includes
11 most of the former DBA principals and Staff. Since 1990, I have performed various
12 analyses and sponsored testimony on cost of capital, cost/benefits of utility mergers and
13 acquisitions, utility reorganizations, level of operating expenses and rate base, cost of
14 service studies, and analyses relating industrial jobs and economic development. I also
15 participated in a study used to revise the financial policy for the municipal utility in
16 Kansas City, Kansas.

17 At BAI, I also have extensive experience working with large energy users to
18 distribute and critically evaluate responses to requests for proposals (RFPs) for electric,
19 steam, and gas energy supply from competitive energy suppliers. These analyses
20 include the evaluation of gas supply and delivery charges, cogeneration and/or
21 combined cycle unit feasibility studies, and the evaluation of third-party asset/supply
22 management agreements. I have also analyzed commodity pricing indices and forward
23 pricing methods for third party supply agreements. Continuing, I have also conducted
24 regional electric market price forecasts.

1 In addition to our main office in St. Louis, the firm also has branch offices in
2 Corpus Christi, Texas; Plano, Texas; Asheville, North Carolina; Denver, Colorado; and
3 Chicago, Illinois.

4 **Q HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?**

5 A Yes. I have sponsored testimony on cost of capital, revenue requirements, cost of
6 service and other issues before the regulatory commissions in Arizona, Delaware,
7 Florida, Georgia, Illinois, Indiana, Michigan, Missouri, New Mexico, Oklahoma,
8 Tennessee, Texas, Utah, Vermont, West Virginia, Wisconsin and Wyoming. I have also
9 sponsored testimony before the Board of Public Utilities in Kansas City, Kansas;
10 presented rate setting position reports to the regulatory board of the municipal utility in
11 Austin, Texas, and Salt River Project, Arizona, on behalf of industrial customers; and
12 negotiated rate disputes for industrial customers of the Municipal Electric Authority of
13 Georgia in the LaGrange, Georgia district.

14 **Q PLEASE DESCRIBE ANY PROFESSIONAL REGISTRATIONS OR ORGANIZATIONS**
15 **TO WHICH YOU BELONG.**

16 A I earned the designation of Chartered Financial Analyst (CFA) from the Association for
17 Investment Management and Research (AIMR). The CFA charter was awarded after
18 successfully completing three examinations which covered the subject areas of financial
19 accounting, economics, fixed income and equity valuation and professional and ethical
20 conduct. I am a member of AIMR's Financial Analyst Society.

MPG:cs/8027/40431

**MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT**

**COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2002**

Per Gorman's Adjustment to MAWC's COS

Customer Classification (1)	Cost of Service		Revenues, Present Rates		Costs at MAWC's Proposed Revenue less Contribution		Adjusted Increase	
	Amount (Schedule B) (2)	Percent (3)	Amount (4)	Percent (5)	Amount (6)	Percent (7)	Amount (8)	Percent Increase (9)
Rate A	\$ 109,824,455	84.4%	\$ 98,847,782	85.8%	\$ 109,629,187	84.4%	\$ 10,781,405	10.9%
Rate B	2,158,299	1.7%	1,981,833	1.7%	2,154,462	1.7%	172,629	8.7%
Rate J	7,463,457	5.7%	7,069,350	6.1%	7,450,187	5.7%	380,837	5.4%
Rate D	188,554	0.1%	183,425	0.2%	188,219	0.1%	4,794	2.6%
Other	-	0.0%	-	0.0%	-	0.0%	-	
Rate F	997,071	0.8%	1,226,254	1.1%	1,226,254	0.9%	-	0.0%
Rate E	9,264,648	7.1%	5,936,547	5.1%	9,248,175	7.1%	3,311,628	55.8%
Total Sales	129,896,484	99.8%	115,245,191	100.0%	129,896,484	99.9%	14,651,293	12.7%
Other Revenues	2,319,115		2,319,115		2,319,115		-	0.0%
Total	<u>\$ 132,215,599</u>		<u>\$ 117,564,306</u>		<u>\$ 132,215,599</u>		<u>\$ 14,651,293</u>	12.5%