

Exhibit No.:
Witness: Michael Gorman
Type of Exhibit: Direct Testimony
Issues: Cost of Service and Rate Design
Sponsoring Parties: Missouri Industrial Energy Consumers
Case No.: WR-2008-0311

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

<u>In the Matter of Missouri-American</u>)	
<u>Water Company's Request for</u>)	
<u>Authority to Implement a General Rate</u>)	Case No. WR-2008-0311
<u>Increase for Water and Sewer Service</u>)	
<u>Provided in Missouri Service Areas</u>)	

Direct Testimony and Schedules of

**Michael Gorman
on Cost of Service and Rate Design Issues**

On Behalf of

Missouri Industrial Energy Consumers



September 3, 2008
Project 8980

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI


In the Matter of Missouri-American)	
Water Company's Request for)	
Authority to Implement a General Rate)	Case No. WR-2008-0311
Increase for Water and Sewer Service)	
Provided in Missouri Service Areas)	

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

Affidavit of Michael Gorman

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

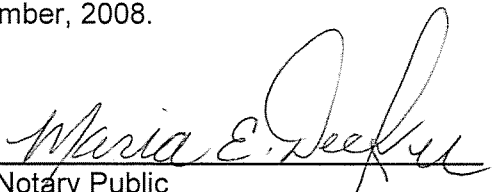
1. My name is Michael Gorman. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141. We have been retained by the Missouri Industrial Energy Consumers in this proceeding on their behalf.
2. Attached hereto and made a part hereof for all purposes are my direct testimony and schedules on cost of service and rate design issues, which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. WR-2008-0311.
3. I hereby swear and affirm that the testimony and schedules are true and correct and that they show the matters and things they purport to show.



Michael Gorman

Subscribed and sworn to before me this 2nd day of September, 2008.





Notary Public

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of Missouri-American Water Company's Request for Authority to Implement a General Rate Increase for Water and Sewer Service Provided in Missouri Service Areas))))))	Case No. WR-2008-0311
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Direct 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.

4 **Q ARE YOU THE SAME MICHAEL GORMAN WHO PREVIOUSLY FILED**
5 **TESTIMONY IN THIS PROCEEDING?**

6 A Yes, I filed direct testimony on revenue requirement issues on August 18, 2008.

7 **Q WHAT IS THE PURPOSE OF YOUR COST OF SERVICE TESTIMONY IN THIS**
8 **PROCEEDING?**

9 A I will propose two corrections to the St. Louis Metro District's cost of service study
10 sponsored by Missouri-American Water Company (Missouri-American or Company)
11 witness Paul R. Herbert.

12 **Q PLEASE SUMMARIZE YOUR RECOMMENDATIONS AND FINDINGS.**

13 A I am proposing two corrections to Mr. Herbert's cost of service study for the St. Louis
14 Metro District. These corrections are necessary to properly allocate cost between

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1 customer classes in the St. Louis Metro District. First, Mr. Herbert used an incorrect
2 allocation factor to allocate purchased power expense between classes. I proposed
3 to correct the St. Louis Metro District cost of service study to properly allocate
4 purchased power expense.

5 Second, Mr. Herbert's Factor 4 for the St. Louis Metro District was incorrectly
6 developed and over-allocates small main costs to large customers that do not use
7 small distribution mains. Therefore, I propose a correction to the Factor 4 used in
8 Mr. Herbert's cost of service study for the St. Louis Metro District.

9 **Q HOW DID MR. HERBERT ALLOCATE PURCHASED POWER COSTS IN HIS**
10 **ST. LOUIS METRO DISTRICT COST OF SERVICE STUDY?**

11 A Mr. Herbert used Factor 1 to allocate purchased power costs between customer
12 classes. Mr. Herbert's Factor 1 allocates purchased power costs between customers
13 based on each class's average daily consumption. Mr. Herbert describes this Factor
14 as one that "allocates costs that vary with the amount of water consumed" (Schedule
15 C-SLM, at SLM-10).

16 **Q WHY IS IT NOT CORRECT TO USE FACTOR 1 TO ALLOCATE PURCHASED**
17 **POWER COSTS BETWEEN CUSTOMER CLASSES?**

18 A Mr. Herbert's use of Factor 1 does not recognize how Missouri-American incurs
19 purchased power expense. Purchased power expense is based on demand and
20 energy consumption. Demand costs are based on the highest power demand usage
21 in a month. Demand charges are not based on average daily usage. Therefore, the
22 demand component of purchased power expenses does not "vary with the amount of
23 water consumed," but rather varies with peak day and peak hour power consumption.

1 Further, the energy consumption portion of purchased power also varies with
2 time and seasonal use and, therefore, does not vary evenly with the daily amount of
3 water consumed. Indeed, AmerenUE's commercial rates in the St. Louis Metro
4 District have energy charges that vary by summer and winter period, and have
5 optional time-of-day adjustments to reflect the variation of energy prices based on
6 when energy is actually consumed, and the variability of energy costs across peak
7 and non-peak periods.¹ As such, Missouri-American's cost of energy within its
8 purchased power adjustment does not evenly vary across all water consumed, but
9 rather the price increases during peak periods and summer season, and is lower
10 during the off-peak periods and winter season.

11 **Q WHAT FACTOR SHOULD BE USED TO ALLOCATE PURCHASED POWER**
12 **COSTS IN MR. HERBERT'S COST OF SERVICE STUDY?**

13 **A** The use of Factor 6 is more appropriate and more accurately allocates purchased
14 power expense between customer classes. Factor 6 allocates costs between
15 customers based on average flow and peak day and peak hour demand. Average
16 daily usage reasonably allocates a portion of the energy component of purchased
17 power, and peak day and peak hour factors properly correspond to the demand
18 component and higher on-peak energy prices that correspond to Missouri-American's
19 purchased power expense during peak consumption periods.

¹ Union Electric Company, 11th Revised Sheet No. 67.1 and 68, PSC Case ER-2007-0002, July 6, 2007.

1 As such, Factor 6 more accurately allocates purchased power expense
2 between customer classes based on how Missouri-American incurs purchased power
3 expense to meet customer seasonal, monthly and daily consumption demands.

4 **Q WHAT ALLOCATION FACTOR DID MR. HERBERT USE TO ALLOCATE SMALL**
5 **MAIN COSTS BETWEEN CUSTOMER CLASSES?**

6 A Mr. Herbert characterized mains of 10 inches and larger to be primarily transmission
7 mains. He found that mains smaller than 10 inches should be classified as serving a
8 distribution function and be classified as distribution mains. (Herbert Direct
9 Testimony at 6-7).

10 Mr. Herbert developed a Factor 4 to allocate small mains between customer
11 classes. Mr. Herbert's Factor 4 was designed to recognize that larger customers are
12 predominately served by transmission mains and should not be allocated a significant
13 amount of costs associated with smaller distribution mains. Based on his assessment
14 of Joplin, St. Joseph and the St. Louis Metro area, Mr. Herbert proposed to allocate
15 no (zero) small main costs to large customers in the districts of Joplin and St. Joseph.
16 However, he proposed to allocate 10% of the distribution main costs to large
17 customers in the St. Louis Metro District served under Rate J.

18 In support of this recommendation, Mr. Herbert estimated that Rate J
19 customers in St. Louis are largely served by transmission mains, but a small portion
20 of Rate J customers do take service from distribution mains. Based on his analysis,
21 Mr. Herbert estimated that 1.3% of total distribution mains on a length of pipe basis
22 are used to serve Rate J customers. Based on this analysis, Mr. Herbert arbitrarily
23 proposed to allocate 10% of small distribution main costs to Rate J customers.

1 **Q PLEASE DESCRIBE WHY YOU BELIEVE MR. HERBERT HAS IMPROPERLY**
2 **DEVELOPED THE FACTOR 4 HE USED IN HIS COST OF SERVICE STUDY FOR**
3 **THE ST. LOUIS METRO DISTRICT.**

4 **A Mr. Herbert allocated 10% of small distribution main costs to Rate J customers**
5 **despite his own finding that only 1.3% of the distribution main investment serves**
6 **Rate J customers (Herbert Direct Testimony at 10). As such, Mr. Herbert's own**
7 **testimony clearly illustrates he biased Factor 4 for the St. Louis Metro District by**
8 **over-allocating small main costs to Rate J customers. Mr. Herbert's recommendation**
9 **for the St. Louis Metro District is in stark contrast to his proper allocation of small**
10 **main costs to customers in the Joplin and St. Joseph Districts.**

11 **Q HOW DO YOU PROPOSE TO CORRECT FACTOR 4?**

12 **A I propose to use the correct Factor 4 for the St. Louis Metro District by a more**
13 **accurate allocation of small main costs to Rate J customers. Mr. Herbert states at**
14 **page 10 of his testimony that 1.3% of small mains are attributable to Rate J**
15 **customers. Hence, I modified Factor 4 to use a 1.3% allocation of small main costs to**
16 **Rate J customers, rather than Mr. Herbert's arbitrary use of a 10% allocation of a**
17 **small main cost to Rate J customers.**

18 **As shown on Schedule MPG-COS-1, I revised Factor 4 to use a 1.3% small**
19 **main cost allocation to Rate J customers.**

1 **Q PLEASE DESCRIBE THE IMPACT ON THE ST. LOUIS METRO DISTRICT'S COST**
2 **OF SERVICE STUDY BY USE OF FACTOR 6 FOR ALLOCATION OF**
3 **PURCHASED POWER COSTS, AND CORRECTING THE FACTOR 4 TO**
4 **PROPERLY ALLOCATE SMALL MAIN COSTS TO RATE J CUSTOMERS.**

5 A This is shown on Schedule MPG-COS-2. Based on only these two adjustments to
6 Mr. Herbert's cost of service study, Rate J customers move significantly closer to cost
7 of service. Indeed, with these two corrections to Mr. Herbert's cost of service study,
8 Rate J customers should get a below system average increase in order to adjust their
9 rates up to cost of service at the Company's claimed revenue deficiency. Specifically,
10 based on a system average increase of 29.9%, Rate J customers should get
11 approximately a 16.9% increase, or 58% of the system average increase in order to
12 move Rate J up to cost of service.

13 Also, with these adjustments, Rate A customers should get a slightly higher
14 increase relative to Mr. Herbert's proposal in order to bring this rate class closer to
15 cost of service. However, Rate A will still receive a below system average increase.
16 On the other hand, the resale class and Rate J customers should get a slightly lower
17 increase relative to Mr. Herbert's proposal. In this schedule, I am not proposing a
18 change to the fire service rates proposed by Mr. Herbert.

19 **Q DOES THIS COST OF SERVICE DEMONSTRATION INDICATE THAT YOU**
20 **ENDORSED THE COMPANY'S CLAIMED REVENUE DEFICIENCY FOR THE**
21 **ST. LOUIS METRO DISTRICT?**

22 A No. The increase for Rate J customers will decline as proper adjustments are made
23 to the Company's claimed revenue deficiencies. MIEC offered several reasonable
24 and appropriate adjustments to the Company's claimed revenue deficiency in this

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1 proceeding. Other parties may also make appropriate revenue requirement
2 adjustments that MIEC did not propose. As such, I recommend my proposed
3 adjustments to Mr. Herbert's St. Louis Metro District cost of service study be adopted,
4 and be used to allocate the Commission-approved revenue deficiency for the
5 St. Louis Metro District.

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MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS METRO AREA DISTRICT (ST. LOUIS COUNTY, ST. CHARLES AND WARREN COUNTY WATER DISTRICTS)
ADJUSTED FACTOR 4

FACTOR 4. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND MAXIMUM HOUR EXTRA CAPACITY FUNCTIONS.

Factors are based on the weighting of the average daily consumption, the maximum day extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification	Average Hourly Consumption			Maximum Hour Extra Capacity		Fire Protection		Allocation Factor
	Adjusted Thousand Gallons	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	
	(1)	(2)	(3)=(2) X	(4)	(5)=(4) X	(6)	(7)=(6) X	
	0.013		0.3780		0.5671		0.0549	
Res/Com/Ind/OPA - Rate A	4,895.6	0.9899	0.3741	0.9992	0.5666			0.9407
Sales for Resale - Rate B	0.0	0.0000	0.0000	0.0000	0.0000			0.0000
Large Industrial - Rate J ¹	8.7	0.0018	0.0007	0.0008	0.0005			0.0012
Private Fire - Rate F	8.9	0.0018	0.0007			0.2204	0.0121	0.0128
Public Fire - Rate E	32.5	0.0066	0.0025			0.7796	0.0428	0.0453
Total	4,945.7	1.0000	0.3780	1.0000	0.5671	1.0000	0.0549	1.0000

Note: ¹ Replaced Company proposed 10% of Large Industrial - Rate J volumes with 1.3% of Large Industrial - Rate J volumes.

Source: Direct Testimony of Paul Herbert on Behalf of Missouri-American Water Company, pg 10.

MISSOURI-AMERICAN WATER COMPANY

CORRECTED ST. LOUIS METRO AREA DISTRICT (ST. LOUIS COUNTY, ST. CHARLES AND WARREN COUNTY WATER DISTRICTS) COST OF SERVICE STUDY

Customer Classification (1)	Cost of Service**		Revenues, Present Rates		Revenues, Proposed Rates		Proposed Increase	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
	(Schedule B)		(4)	(5)	(6)	(7)	(8)	Increase
	(2)	(3)						(9)
Res/Com/Ind/OPA - Rate A	\$ 149,611,708	86.4%	\$ 116,500,747	87.5%	\$ 149,519,930	86.3%	\$ 33,019,183	28.3%
Sales for Resale - Rate B	2,622,611	1.5%	2,341,267	1.8%	2,622,611	1.5%	281,344	12.0%
Large Industrial - Rate J	7,389,463	4.3%	6,320,529	4.7%	7,389,463	4.3%	1,068,934	16.9%
Private Fire - Rate F	1,512,601	0.9%	1,634,891	1.2%	1,634,891	0.9%	-	0.0%
Public Fire - Rate E	12,040,290	7.0%	6,537,318	4.8%	\$12,011,857	6.9%	5,474,539	83.7%
Total Sales	173,176,674	<u>100.0%</u>	133,334,752	<u>100.0%</u>	173,178,752	<u>100.0%</u>	39,844,000	29.9%
Other Revenues*	4,587,717		4,587,717		4,587,717		-	0.0%
Total	<u>\$ 177,764,391</u>		<u>\$ 137,922,469</u>		<u>\$ 177,766,469</u>		<u>\$ 39,844,000</u>	28.9%

* Includes Rate G and H Contract Sales.

** Cost of Service includes a revenue contribution to the Brunswick, Parkville Water, Warren County Sewer and Cedar Hill Sewer Districts.

Includes an adjustment of Purch Fuel / Power for Pump from Factor 1 to Factor 6 and allocating a small mains adjustment of 1.3% to the Large Industrial - Rate J consumption for Factor 4.