

*Exhibit No.:*  
*Issue(s):* Metropolitan St. Louis Sewer  
District Contract  
*Witness:* Keith D. Barber  
*Sponsoring Party:* Intervenor Metropolitan  
St. Louis Sewer District  
*Type of Exhibit:* Rebuttal Testimony  
*Case No.:* WR -2011-0337  
*Date:* January 18, 2012

**MISSOURI PUBLIC SERVICE COMMISSION**  
**REBUTTAL TESTIMONY**  
**OF**  
**KEITH D. BARBER**  
**ON BEHALF OF**  
**METROPOLITAN ST. LOUIS SEWER DISTRICT**

**IN THE MATTER OF MISSOURI-AMERICAN WATER COMPANY'S  
REQUEST FOR AUTHORITY TO IMPLEMENT A GENERAL RATE  
INCREASE FOR WATER AND SEWER SERVICES PROVIDED IN MISSOURI  
SERVICE AREAS**

**CASE NO. WR-2011-0337**

*Jefferson City, Missouri*  
*January 2012*

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

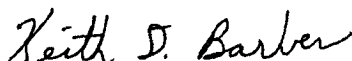
In the Matter of Missouri-American )  
Water Company's Request for Authority to )  
Implement a General Rate Increase for ) Case No. WR-2011-0337  
Water and Sewer Service Provided in )  
Missouri Service Areas. )

**AFFIDAVIT OF KEITH D. BARBER**

STATE OF KANSAS )  
 ) SS  
COUNTY OF JOHNSON )

COMES NOW Keith D. Barber, of lawful age, and being first duly sworn upon his oath,  
deposes and states as follows:

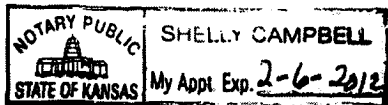
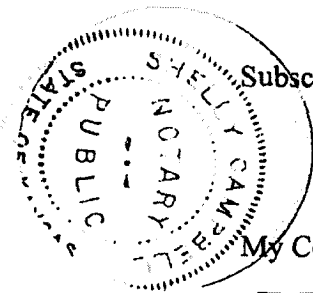
1. I am the witness who sponsors the accompanying testimony entitled "Rebuttal  
Testimony of Keith D. Barber."
2. That said testimony was prepared by me and that if inquiries were made as to the  
facts set in said testimony, I would respond as therein set forth.
3. That the aforesaid testimony is true and correct to the best of my knowledge,  
information, and belief.

  
\_\_\_\_\_  
KEITH D. BARBER  
Principal Consultant  
Management Consulting Division  
Black & Veatch Corporation

Subscribed and sworn to before me, a Notary Public, on this 19<sup>th</sup> day of January, 2012.

  
\_\_\_\_\_  
Notary Public

My Commission Expires: 2-6-2012



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**Witness Background and Experience**

1 Q. Please state your name, business address, and telephone number.

2 A. Keith D. Barber, 11401 Lamar Avenue, Overland Park, Kansas 66211-1508,  
3 (913) 458-3675.  
4

5 Q. What is your occupation?

6 A. I am a Principal Consultant in the Management Consulting Division of Black & Veatch.

7 Q. How long have you been associated with the firm of Black & Veatch?

8 A. I have been with Black & Veatch continuously since 1975.

9 Q. What is your educational background?

10 A. I am a graduate of the University of Missouri-Rolla (currently known as Missouri  
11 University of Science and Technology) with an undergraduate degree in Civil  
12 Engineering. I received my Master of Science degree in Civil Engineering from the  
13 University of Kansas.

14 Q. Are you registered as a Professional Engineer?

15 A. Yes, I am a registered Professional Engineer in the state of Missouri.

16 Q. What is your professional experience?

17 A. My initial assignments with Black & Veatch were on projects involving the design of  
18 water and wastewater systems. Subsequently, I became associated with the Management  
19 Consulting Division of Black & Veatch, where I have served clients in utility rate matters  
20 for approximately 35 years. During this time, I have been involved in numerous costs of  
21 service, rate design, bond feasibility, and financial consulting studies. Projects to which I  
22 have been assigned as project engineer or project manager include water and wastewater  
23 utility related projects in St. Louis and Kansas City, Missouri; Los Angeles, and

1 Coachella, California; Tulsa, Oklahoma; Topeka, Lawrence, Emporia, and Johnson  
2 County, Kansas; Cincinnati and Columbus, Ohio; Little Rock, and Pine Bluff, Arkansas;  
3 Tucson, and Pima County, Arizona; Austin, San Antonio, and Grand Prairie, Texas; and  
4 Baton Rouge, Louisiana. I have developed water and wastewater rates for Kansas City,  
5 Missouri, including water and wastewater rates being proposed for fiscal year 2013,  
6 assisted the St. Louis Water Department with their water rates, and developed the  
7 wastewater rates for the Metropolitan St. Louis Sewer District that are currently in effect  
8 and proposed to be in effect over the next four years.

9 Q. What is your professional experience before the Missouri Public Service Commission?

10 A. Almost all of my professional rate design experience has dealt with municipal water and  
11 wastewater utilities that are not regulated by a public service commission. Therefore, I  
12 have never personally appeared before the Missouri Public Service Commission but I did  
13 file testimony on this issue for Case No. WR-2007-0216 and WR-2010-0131. I have  
14 been involved as an expert witness before the Rate Commission of the Metropolitan St.  
15 Louis Sewer District during the 2002/2003; 2007/2008 and most recent 2010/2011  
16 proceedings. The Rate Commission was established by the voters through their approval  
17 of the November 2000 Charter amendments and operates similar to a public service  
18 commission. I was also involved in proceedings before the Illinois Commerce  
19 Commission (ICC) in 2008, 2009 and 2011 (Docket Nos. 08-0463, 09-0319 and 11-0058)  
20 in support of demand studies Black & Veatch performed on behalf of the Illinois  
21 American Water Company. These studies are related to an ICC order to update  
22 maximum day and maximum hour capacity factors by customer class for each IAWC rate  
23 area in Illinois.

1 **Summary of Testimony**

2 Q. What is the purpose of your testimony in this case?

3 A. The purpose of my testimony is to rebut the testimony of Ted Robinson, who filed  
4 testimony on behalf of Missouri Office of Public Counsel ("OPC") proposing a rejection  
5 of MSD's current agreement with MAWC which imposes a \$350,000 per year fee for  
6 water data access and, in its place, an imposition of a \$535,433 charge for the provision  
7 of water usage data to MSD. This represents a 53 percent increase in costs currently  
8 charged to MSD.

9 Q. Does this represent the cost of service for providing the billing information to MSD?

10 A. Absolutely not. MAWC would incur the cost of meter reading and other water billing  
11 data development costs regardless of whether or not MSD required the information for  
12 their separate billing activities. The cost of service actually incurred by MAWC on  
13 behalf of MSD is related to providing MSD access to the data via their secured web site  
14 and any related administration costs. Such identical services are currently being offered  
15 to the wastewater utilities in Kansas City and St. Joseph Missouri for a flat rate of \$3,000  
16 per year.

17 Q. Does the proposed 53 percent increase in water usage data serve the public interest?

18 A. No. Any increase to MSD for County water usage data could lower costs to MAWC rate  
19 payers but would also result in a rate increase to MSD customers, most of which are  
20 served by each utility resulting in little change in total combined water and wastewater  
21 costs. County water customers not served by MSD could see a decrease in their rates  
22 while less affluent City customers served by MSD but not by MAWC could see an  
23 increase in their rates.

1 Q. Do you believe Mr. Robinson provided adequate support for an increase in the current fee  
2 to provide St. Louis County water usage data to MSD?

3 A. No. Section 249.615 of the Missouri Revised Statutes requires private water companies  
4 to provide data necessary to calculate charges for sewer service but does not specify how  
5 costs to provide such data should be determined by a water utility. OPC based its support  
6 for equal sharing of total data collection and maintenance cost based on a 2007 report  
7 which also included consideration of data access based on the incremental cost of  
8 providing such data. OPC also did not reference any industrial guidelines for equal  
9 sharing of billing related costs between independently managed water and wastewater  
10 utilities nor any costs actually incurred by other Missouri wastewater utilities for similar  
11 information.

12 **Industry Guidelines**

13 Q. Are you familiar with the fifth edition of the AWWA publication titled “Principles of  
14 Water Rates, Fees, and Charges”?

15 A. Yes, this manual is also commonly referred to as the M1 manual.

16 Q. Are the principles discussed in this manual widely used as a water industry standard  
17 guide in the development of water rates?

18 A. Yes.

19 Q. To your knowledge, does this manual discuss cost sharing between water and wastewater  
20 utilities for billing information?

21 A. No, the only relative reference I found was in a single sentence on Page 12 which stated:  
22 “Other water revenues may include billings for outside agencies....or any other sources  
23 not covered by published rates.” I have not found any other information related

1 specifically to cost sharing between water and wastewater utilities for the provision of  
2 billing data in this manual. The manual does discuss using cost of service principles in  
3 the development of miscellaneous and special charges.

4 Q. What is an example of a special service by a water utility that would have a separate  
5 charge?

6 A. Water utilities will generally provide copies of reports or plans for potential projects to  
7 the public and contractors at the cost incurred in printing those documents.

8 Q. Are the engineering design costs or other development costs for the reports and plans  
9 typically included in the cost of those documents?

10 A. No, only the incremental cost incurred in producing the documents, not a share of the  
11 actual costs required to prepare the plans or documents. The M1 manual suggests on  
12 Page 260 that costs for public documents “be limited to production costs, although an  
13 allowance for the administrative cost of stocking and selling documents could be  
14 included.” Likewise for construction plans, drawings and maps, the manual states that  
15 charges for “these prints should include copying and administrative costs.”

16 Q. Could the cost of supplying the electronic billing information to MSD be considered a  
17 special service cost much like the cost of a public document?

18 A. Yes, because the production of a public document is typically based on extensive data  
19 collection and engineering analyses to continue normal utility operations and planning,  
20 only the incremental cost of producing the documents is billed to parties that require or  
21 could benefit from the compiled information. Water usage information is essentially a  
22 special report prepared for MSD and other wastewater utilities based on data collected  
23 and maintained by MWAC for its own billing purposes.



1 Q. Can MSD bill its customers in the county without this data?

2 A. No. Due to the Hancock Amendment and resulting rate litigation, MSD can no longer  
3 bill its residential customers on a flat rate basis and must now use water use information  
4 in its billing process. Prior to 1993, Missouri American and other water providers in the  
5 areas served by MSD incurred all costs related to collecting water usage data for  
6 residential customers billed on a flat rate basis by MSD.

7 Q. Does the M1 manual provide any guidance for the development of charges for special  
8 services?

9 A. Yes, Chapter 32 of the M1 manual discusses the steps required to determine the cost for a  
10 special service. The process generally involves a time and material study to identify the  
11 cost of the actual service provided to those benefiting from the service. Basically this  
12 procedure requires that the direct and indirect cost of a special service be paid by those  
13 that require the special service.

14 Q. Are the incremental cost for providing the billing information to MSD known?

15 A. Based on the Water Usage Data Agreement dated November 29, 2007 between MAWC  
16 and MSD, MAWC was required to develop the incremental costs of providing this data  
17 prior to its then next rate proceeding. As a result, MAWC issued a study entitled  
18 "Analysis of Costs for Water Usage Data Services Provided to Metropolitan St. Louis  
19 Sewer District; 12 Months Ending December 31, 2007" (Study). The incremental costs  
20 which are included within that study are **\*\*highly confidential information removed\*\***  
21 annually or about **\*\*high confidential information removed\*\*** per customer account.

## 22 Industry Practice

23 Q. Are you familiar with instances where costs to obtain water usage data are shared

1 between water and wastewater utilities?

2 A. Yes, this is a common practice for municipal utilities that are controlled by the same  
3 governing body. The actual amount of the cost sharing, if any, is set by policy  
4 considerations and agreements between the two utilities or by city managers. Cost  
5 sharing may include meter reading, billing of a combined water/wastewater bill,  
6 collection, and customer services related costs.

7 Q. What is different about the cost sharing practices of some municipal controlled water and  
8 wastewater utilities and the MSD water usage data agreement with MAWC?

9 A. The primary difference is that the two utilities are not controlled by the same governing  
10 body and some water customers do not receive wastewater services from MSD nor do  
11 some MSD customers receive water service from MAWC. Another difference is that  
12 MAWC is a private for profit entity while MSD is a public not for profit entity. Any  
13 meter reading or other cost absorbed by MSD reduces the service charges of all  
14 customers in the Company's St. Louis District even though some water customers are not  
15 served by MSD. Another difference is that MSD bills its customers separately from the  
16 area water providers and provides its own customer service support. Therefore, the only  
17 MAWC billing related service required by MSD to bill its county customers is the  
18 electronic billing data compiled by MAWC in the course of its regular business activities.

19 Q. Are you familiar with instances where different political bodies control the two respective  
20 water and wastewater utilities and water billing information is provided to the wastewater  
21 utility based on the actual incremental cost of providing this service?

22 A. Yes, Johnson County Wastewater serves a large portion of Johnson County, Kansas,  
23 which is within the metropolitan Kansas City, Missouri area and operates independently

1 from Water District No. 1 of Johnson County, Kansas (WaterOne). The wastewater  
2 utility is controlled by the Johnson County Board of County Commissioners while  
3 WaterOne is controlled by a separate board elected by county voters.

4 Q. What is the general basis of charge for billing information supplied by WaterOne to  
5 Johnson County Wastewater?

6 A. WaterOne charges Johnson County Wastewater only for the costs directly required to  
7 produce the billing information needed by the wastewater utility. The costs are  
8 determined based on a set of hourly billing rates for the services and time required to  
9 produce the billing information as set forth in Exhibit B of the Intergovernmental Data  
10 Transfer and Use Agreement.

11 Q. Does Johnson County Wastewater have data transfer agreements with other regional  
12 water utilities?

13 A. Yes, they also have an agreement with the City of Olathe, Kansas for city water  
14 customers in areas of the city that are served and directly billed by Johnson County  
15 Wastewater

16 Q. What is the general basis of charge for billing information supplied by the City of Olathe  
17 to Johnson County Wastewater?

18 A. A small annual maintenance and support fee is charged for the ongoing support and  
19 transfer of the water use data.

20 Q. Are you familiar with any other water / wastewater billing arrangements?

21 A. Yes, the City of Baton Rouge and Parish of East Baton Rouge have a billing contract  
22 with the Baton Rouge Water Works Company that generally indicates that billing  
23 services will be provided to the City/Parish at costs.

1 Q. What are the general terms of this contract?

2 A. The contract indicates that billing services will be provided to the City/Parish at costs.

3 There is a base charge for billing services rendered plus a much smaller incremental cost  
4 for "each additional fee billed".

5 **Unit Cost of Service**

6 Q. What would be the cost per meter read to MSD if the existing \$350,000 data access  
7 charge is increased to \$535,433 proposed by the OPC?

8 A. Based on information provided by MAWC in 2007, MSD required 745,200 water meter  
9 reads for its billing purposes. This number was based on 348,600 customers served by  
10 MAWC within MSD's service area which included 328,600 residential customers,  
11 19,000 commercial customers and 1,000 industrial customers. The 2007 estimated  
12 number of required meter reads included two reads of quarterly billed residential water  
13 customers to establish winter quarter billed wastewater volume, four reads of quarterly  
14 billed commercial water customers and twelve reads per year of monthly billed industrial  
15 water customers. Since 2007, customers served by MSD have decreased. The current  
16 number of MSD customers served by MAWC includes 309,159 residential customers and  
17 15,992 commercial/industrial or non-residential customers. Assuming industrial water  
18 meter reads remain at 1,000 and adding a 10 percent allowance for the remaining  
19 commercial customers that may be served by more than one water meter, the estimated  
20 current number of required meter reads is about 696,300 ( $309,159 \times 2 + (15,992 - 1,000)$   
21  $* 1.1 \times 4 + 1,000 \times 12$ ). Based on this number of required meter reads and the proposed  
22 OPC data access charge of \$535,433, the proposed unit cost for billing data access would  
23 be \$0.77 ( $\$535,433 / 696,300$ ) per meter read.

1 Q. How does this indicated unit cost compare with other wastewater utilities in Missouri that  
2 currently receive full wastewater billing services by MAWC?

3 A. MAWC charges the City of Kansas City Missouri \$0.68 per bill for full-service  
4 wastewater billing and collection services within the area served by MAWC. MAWC  
5 charges the City of St. Joseph, Missouri \$0.75 per bill for full-service billing and  
6 collection services. Both cities are currently provided more services for less cost than the  
7 MSD. However, both cities have been notified that MAWC will cease billing services on  
8 their behalf before the end of calendar year 2012. These cities have been offered a  
9 "Water Usage Data Agreement" to provide each city applicable billing data so that the  
10 two municipal wastewater utilities can bill their respective customers.

11 Q. What is the expected annual charge to Kansas City and St. Joseph for the proposed water  
12 usage data?

13 A. Both cities have been offered access to the required billing information at a \$3,000 per  
14 year flat rate. This rate appears to be independent of the number of customers served  
15 since St. Joseph currently serves about 27,000 customers versus approximately 650  
16 customers in Kansas City's wastewater service area provided water service by MAWC.

17 **Recommendations**

18 Q. What are your recommendations concerning this issue?

19 A. It is my understanding that, notwithstanding the incremental costs associated with  
20 providing this data to be **\*\*highly confidential information removed\*\***, MAWC and  
21 MSD's desire to continue with the agreement in place which obligates MSD to pay  
22 MAWC \$350,000 annually. In my opinion, if the existing agreement is discontinued, for  
23 any reason, the proper fee to be charged, if any, would be the actual annual incremental

1 costs associated with providing the requested billing data or the \$3,000 flat rate charge  
2 currently being offered to other Missouri wastewater utilities by MAWC.

3 Q. Does this conclude your direct testimony?

4 A. Yes it does.