No.:
Witness: Brian C. Collins
Type of Exhibit: Surrebuttal Testimony
Issues: Revenue Requirement
Sponsoring Party: Missouri Industrial Energy Consumers
Case No.: WR-2011-0337

**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 Services Provided in Missouri Service Areas** | ) ) ) ) ) ) ) ) | **Case No. WR-2011-0337** |

Surrebuttal Testimony and Schedule of

**Brian C. Collins**

On behalf of

**Missouri Industrial Energy Consumers**

February 2, 2012

BRUBAKER & ASSOCIATES, INC.
CHESTERFIELD, MO 63017

Project 9498

**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 Services Provided in Missouri Service Areas** | **Case No. WR-2011-0337** |

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

## Affidavit of Brian C. Collins

Brian C. Collins, being first duly sworn, on his oath states:

1. My name is Brian C. Collins. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. 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 surrebuttal testimony and schedule which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. WR-2011-0337.

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

Brian C. Collins

Subscribed and sworn to before me this 2nd day of February, 2012.

Maria E. Decker
Notary Public

MARIA E. DECKER
Notary Public - Notary Seal
STATE OF MISSOURI
St. Louis City
My Commission Expires: May 5, 2013
Commission # 09706793

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

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| **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** |

## Surrebuttal Testimony of Brian C. Collins

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

A Brian C. Collins. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

**Q ARE YOU THE SAME BRIAN C. COLLINS WHO PREVIOUSLY FILED DIRECT TESTIMONY IN THIS CASE?**

A Yes.

**Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

A This information is included in Appendix A to my direct testimony regarding revenue requirement issues, filed on November 17, 2011.

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

A This testimony is presented on behalf of the Missouri Industrial Energy Consumers ("MIEC"). These companies purchase substantial amounts of water from Missouri-American Water Company ("Missouri-American" or "Company").

**Q WHAT IS THE PURPOSE OF THIS SURREBUTTAL TESTIMONY?**

A The purpose of my surrebuttal testimony is to respond to the rebuttal testimonies of Staff witness Jerry Scheible and Company witnesses Edward Spitznagel and Gary Naumick with respect to normalized customer water usage, and to respond to the rebuttal testimony of Staff witness James Merciel and Company witness Greg Weeks with respect to water loss on the Company's system. I will also respond to the rebuttal testimony of Company witness Regina Tierney regarding fuel and power expense. Finally, I will respond to Company witness Peter Thakadiyil regarding chemical expense.

## Normalized Customer Water Usage

**Q HOW DOES STAFF PROPOSE TO NORMALIZE CUSTOMER WATER USAGE?**

A At page 3 of Mr. Scheible's rebuttal testimony, he proposes to normalize customer water usage over the four-year period 2007-2010. Mr. Scheible states that Staff's method is the most reliable method since it accounts for varying rainfall amounts and temperatures.

**Q DO YOU AGREE THAT STAFF'S METHOD IS THE MOST RELIABLE METHOD?**

A No. Staff's method understates the normalized level of customer water usage. For example, although Mr. Scheible opines that his method accounts for varying levels of

rainfall, it should be noted that rainfall for 2008 and 2009 in St. Louis was the wettest and the fifth wettest years, respectively, since 1870. High levels of rainfall in a year tend to reduce customers' demand for water. Since Mr. Scheible's four-year average contains two years that are two of the wettest years in the last 143 years, his four-year average would understate the normalized level of residential water usage. In St. Louis, the four-year average of rainfall for the 2007-2010 period is 44.63 inches of rainfall. This compares to the 30-year average (1981-2010) of 40.92 inches of rainfall. Mr. Scheible's four-year average is more than 9% above average rainfall for the last 30 years.

The six-year average of precipitation for the period 2005-2010 I recommend to normalize revenues is 41.05 inches. This is within 0.33% of the 30-year average.

**Q AT PAGE 5 OF HIS REBUTTAL TESTIMONY, MR. SPITZNAGEL STATES THAT YOUR NORMALIZATION METHOD IS LIKELY TO RESULT IN INACCURATE ESTIMATES. HOW DO YOU RESPOND?**

A My six-year average for normalization is being proposed only to normalize revenues in this case. Since the average precipitation for the six-year period 2005-2010 approximates the 30-year average, it is my testimony that a six-year average is appropriate and reasonable in the current case.

**Q IS MR. SPITZNAGEL'S RECOMMENDED AVERAGE DAILY CUSTOMER USAGE FOR THE ST LOUIS METRO DISTRICT REASONABLE?**

A No. Mr. Spitznagel recommends normalizing revenues for the St. Louis Metro District using an average daily customer usage of 232.32 gallons per day. His recommended usage is within 5 gallons (or 2%) of the actual average daily customer usage for

2008, which is the wettest year in terms of precipitation since 1870. This is simply unreasonable.

**Q MR. NAUMICK'S TESTIMONY CRITICIZES YOUR USE OF A SIX-YEAR AVERAGE TO NORMALIZE CUSTOMER USAGE. HOW DO YOU RESPOND?**

A Mr. Naumick's main criticism is that my method of normalization neglects to account for a declining trend in customer usage. Although he states that this trend will continue in the future, analysis of the historical average customer usage in the St. Louis District puts doubt on whether there is an actual declining trend in the first place.

**Q PLEASE EXPLAIN.**

A For the period 1990-2010, a period of 21 years, the average customer usage in the St. Louis District has been above the Company's recommended normalized average usage (232.19 gallons per day) 18 out of 21 years. For two of those years, precipitation was the highest and fifth highest ever since **1870**. In addition, there were nine years in which the average usage increased over the previous year's average. As a result of this review of historical data, I do not recommend including an adjustment for a declining trend in customer water usage.

**Q ARE THERE ANY OTHER ISSUES IN MR. NAUMICK'S TESTIMONY YOU WISH TO ADDRESS?**

A Yes. Mr. Naumick criticizes my use of the period 2001-2007 to normalize commercial usages. The most recent commercial usage was not in the Company's workpapers. MIEC asked for the most recent commercial usage in discovery. However, this

information was not provided. Therefore, my normalized usage for commercial customers is based on the most recent information MIEC has available.

**Q WHAT IS YOUR RECOMMENDATION WITH RESPECT TO NORMALIZED CUSTOMER WATER USAGE?**

A I continue to recommend that normalized residential and commercial customer water usages be normalized based on the methods described in my direct testimony.

## Water Losses

**Q WHAT IS STAFF'S RESPONSE TO YOUR PROPOSAL TO LIMIT WATER LOSSES IN THE ST. LOUIS METRO DISTRICT?**

A At page 5 of Mr. Merciel's rebuttal testimony, he states that Staff does not agree that a 15% loss limit is reasonable.

**Q HAS STAFF HISTORICALLY LIMITED WATER LOSSES AT 15%?**

A Yes. As shown in Schedule BCC-SR-1, in both WR-2010-0131 and WR-2008-0311, the Staff reports state that it is an unwritten policy to limit water losses to 15%.

**Q DID STAFF PROVIDE ANY DIRECT TESTIMONY AS TO WHY IT HAS ABANDONED ITS UNWRITTEN POLICY TO LIMIT WATER LOSSES TO 15%?**

A No.

**Q WHAT IS YOUR RECOMMENDATION FOR WATER LOSSES?**

A I continue to recommend that water losses be limited to 15%. This is consistent with Staff's position in the last two Missouri-American water rate cases.

**Q HAVE YOU REVIEWED THE TESTIMONY OF COMPANY WITNESS MR. WEEKS REGARDING WATER LOSSES?**

A Yes, I have.

**Q DO YOU HAVE ANY COMMENTS REGARDING THE TESTIMONY OF MR. WEEKS?**

A Yes. Mr. Weeks asserts that my use of a 15% water loss factor is arbitrary. Mr. Weeks recommends the application of the Infrastructure Leakage Index ("ILI") performance indicator.

First, I do not believe the use of a 15% water loss factor is arbitrary. As I have previously testified, the Staff used the same standard for the previous two rate cases.

Second, the index that Mr. Weeks claims is superior was developed during the period 1997-2000 and was published in 2000. I relied on a survey of state agencies for water loss reporting practices. The study I relied on was published in 2002. The study I relied on is more recent.

Third, I cannot reconcile the different positions of the Company in this case as they relate to the usage of water. Missouri-American witness Mr. Naumick disagrees with my revenue adjustments claiming that I have ignored continued water conservation for several reasons. One of the reasons Mr. Naumick cites for declining usage is:

> …conservation ethic – reducing discretionary outdoor water use is a primary opportunity for residents wishing to improve their environmental sustainability and reduce their impact on natural resources… (Naumick Rebuttal Testimony at 8).

I would contend that conservation of water losses should also be a priority of Missouri-American. In one instance, Missouri-American wants the Commission to recognize claimed water conservation by the residential class for annualizing

revenues. However, when it comes to managing water losses, Missouri-American seeks to disregard a survey of several states.

This level of water losses I have proposed is supported by state agencies across the United States. I recommend that the Commission utilize a 15% loss factor for Missouri-American districts.

## Fuel and Power Expense

**Q HAVE YOU READ MS. TIERNEY'S REBUTTAL TESTIMONY AS IT RELATES TO MISSOURI-AMERICAN'S FUEL AND POWER ADJUSTMENT?**

A Yes, I have.

**Q DO YOU AGREE WITH MS. TIERNEY?**

A Generally, I agree with Ms. Tierney. I support the fuel and power calculation that includes the actual increase in fuel and power costs as a result of Ameren's last rate case. I also support the inclusion of the fuel adjustment charges ("FAC") that were effective in June and September 2011.

**Q WITH WHICH PORTIONS OF MS. TIERNEY'S REBUTTAL TESTIMONY DO YOU DISAGREE?**

A I disagree with Ms. Tierney's attempt to include the October 2010 and February 2011 FAC charges.

First, these changes in fuel costs were included in Ameren's most recently approved permanent rate case. Second, the collection of these charges has already expired as of the filing of this surrebuttal testimony. The collection of the October

2010 FAC charges expired on September 2011 and the February 2011 FAC charges expired on January 2012.

Requesting ratemaking recognition of these costs will result in double recovery of fuel expense and collection of costs for which the recovery period has expired. These adjustments proposed by Missouri-American should be disallowed by the Commission.

## Chemical Expense

**Q DID YOU REVIEW THE TESTIMONY OF COMPANY WITNESS MR. THAKADIYIL REGARDING CHEMICAL EXPENSE?**

A Yes, I did.

**Q PLEASE DISCUSS YOUR CONCERNS WITH MR. THAKADIYIL'S TESTIMONY.**

A I was somewhat surprised by Mr. Thakadiyil's surrebuttal testimony. In his rebuttal testimony, Mr. Thakadiyil for the first time in this case provides justification for the use of a three-year average of chemical quantities. In his direct testimony, Mr. Thakadiyil provided four lines of testimony describing his adjustment. It was not until I challenged the chemical adjustment did Missouri-American provide any rationale for the use of three years for quantities.

Mr. Thakadiyil argues that turbidity will cause fluctuations in the amount of chemical expense from one year to another. Albeit this may be a reason for using a multi-year average, Mr. Thakadiyil has not produced any evidence which suggests the water treated during the test year was more turbid than normal.

Furthermore, Mr. Thakadiyil offers no opinion on the possibility that chemical quantities may actually decrease in a year given a greater concentration of the

chemical or other water treatment enhancements. Missouri-American has clearly not supported the use of a multiple-year average.

I contend that Missouri-American's arguments in rebuttal should have been included in its direct testimony. However, Missouri-American has failed to adequately justify the use of a three-year average for quantities of chemicals and therefore the test year level should be utilized.

**Q DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

A Yes, it does.

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# MISSOURI PUBLIC SERVICE COMMISSION

# STAFF REPORT

# COST OF SERVICE

## MISSOURI-AMERICAN WATER COMPANY

**CASE NO. WR-2010-0131**

*Jefferson City, Missouri*
*March 9, 2010*

## 11. Chemical Expense

Staff's annualized chemical expense for each district was based on a computation that involved a number of factors, such as current cost of chemicals per gallon, an average chemical usage, test year actual water sales and average system delivery reported by the Company, as well as the normalized and annualized system delivery determined by the Staff. All of these factors were combined to produce the annualized costs of chemicals that Staff believes the Company is required to utilize in the water treatment process for the provision of water service to customers.

"System delivery" means water sales to customers plus water or line losses, or water that is "unaccounted for." These water losses may result from leaky pipes, substandard metering or inaccurate recordkeeping. It is a general, but unwritten policy of the Commission Staff that utilities take corrective actions to control the amount of water losses in their systems and limit excess line loss to 15 percent, and that rate recovery of the impact of water losses be limited to a 15% loss factor. During the test year, the loss percentage among the Company's water districts varied from 6% to 29%. Therefore the Staff used a three-year average of district percentages in order to arrive at a normalized water loss percentage. This normalized water loss percentage was then used to calculate the annualized system delivery for the purpose of calculating chemical costs.

*Staff Expert: Jermaine Green*

## 12. Electricity

Staff's adjustment annualizes fuel and power costs for each district based on the current cost of electricity and the normalized system delivery. The test year electric cost was increased to reflect electric rate increases that occurred during, and subsequent to, the test year as follows:

| Supplier | Rate Case | Effective Date | Percent Increase** |
|---|---|---|---|
| AmerenUE | ER-2008-0318 | 3/1/2009 | 7.75% |
| KCP&L | ER-2009-0089 | 9/1/2009 | 16.16% |
| KCP&L-GMO(L&P) | ER-2009-0090 | 91/2009 | 11.85% |
| KCP&L – GMO (MPS) | | | 10.46% |
| Empire District Electric | ER-2008-0093 | 8/23/2008 | 6.7% |
| Empire/FAC | EO-2009-0349 | 6/1/2009 | 1.0% |

** Percentage increases were provided by the MoPSC's Energy – Economic Analysis Department.

# MISSOURI PUBLIC SERVICE COMMISSION

# STAFF REPORT

# COST OF SERVICE

**MISSOURI-AMERICAN WATER COMPANY**

**CASE NOS. WR-2008-0311 and SR-2008-0312**

***Jefferson City, Missouri***
***August 18, 2008***

"System delivery" means water sales to customers plus water or line losses or water that are "unaccounted for." These water losses may result from leaky pipes or substandard metering or inaccurate recordkeeping. It is a general, but unwritten policy of the Commission Staff that utilities take corrective actions to control the amount of water losses in their systems and limits excess line loss to 15 percent, and that rate recovery of the impact of water losses be limited to a 15% loss factor. During the test year, the loss percentage among the Company's water districts varied from 5.16% to 24.76%. The Staff increased its normalized and annualized water sales, by the lower of either the loss factor exhibited during the test year or 15% to determine the annualized system delivery for the purpose of calculating chemical costs. The Company is currently undertaking some changes to improve and increase the reliability of the water treatment process in its Joplin and St. Louis plant. These improvements are projected to be completed and become operational by the fall and at that time; the Staff will revise its calculations to include all necessary, known and measurable data related to chemical expense.

*Staff Expert: Kofi Boateng*

**12. Waste Disposal**

Waste disposal expense is a result of water or wastewater treatment. Certain byproducts are left behind from this activity and must be removed (hauled) or otherwise transported from the treatment facility. The amount, type and frequency of waste and the method of removal also varies by treatment facility. Therefore, the Staff analyzed each district individually and determined the appropriate level of expense. The Staff utilized a two-year average to normalize the waste disposal expense for the St. Louis and St. Joseph districts. A two-year average was used because information obtained from the Company in Case no. WR-2007-0217 indicated that these districts utilize a two-year cycle for waste disposal. Due to generally upward-trending costs, a test year level was used for the Mexico district. Warren County Sewer district only reported costs for the test year, and the amount in the test year appeared to be reasonable; therefore, the Staff chose to make no adjustment to this level of expense. A three-year average was used for Joplin's normalized level, because only three years of historical data was provided by the Company. A three-year average was utilized for Brunswick and for Parkville Sewer, because of the volatility of costs during these periods. In Case No. WR-2007-0216, the Staff received information from the Company that indicated the substantial removal of Cedar Hill