No.:

Witness:

Type of Exhibit:

Issues:

Sponsoring Party: Case No.:

Brian C. Collins

Surrebuttal Testimony

Data Center Missouri Public Revenue Requirement Service Commission

Missouri Industrial Energy Consumers

**FILED** 

March 8, 2012

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

MIEC Exhibit No. 6
Date 2-21-12 Reporter Ju
File No. WR - 2011 - 033



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 - Notary Seal
STATE OF MISSOURI
St. Louls City
My Commission Expires: May 5, 2013
Commission # 09706793

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
Services Provided in Missouri
Service Areas

Case No. WR-2011-0337

#### Surrebuttal Testimony of Brian C. Collins

- 1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- 2 A Brian C. Collins. My business address is 16690 Swingley Ridge Road, Suite 140,
- 3 Chesterfield, MO 63017.
- 4 Q ARE YOU THE SAME BRIAN C. COLLINS WHO PREVIOUSLY FILED DIRECT
- 5 TESTIMONY IN THIS CASE?
- 6 A Yes.
- 7 Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.
- 8 A This information is included in Appendix A to my direct testimony regarding revenue
- 9 requirement issues, filed on November 17, 2011.

#### 1 Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

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

#### 5 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

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- 15 Q HOW DOES STAFF PROPOSE TO NORMALIZE CUSTOMER WATER USAGE?
- 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.
- 20 Q DO YOU AGREE THAT STAFF'S METHOD IS THE MOST RELIABLE METHOD?
- 21 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

1		rainfall, it should be noted that rainfall for 2008 and 2009 in St. Louis was the wettest
2		and the fifth wettest years, respectively, since 1870. High levels of rainfall in a year
3		tend to reduce customers' demand for water. Since Mr. Scheible's four-year average
4		contains two years that are two of the wettest years in the last 143 years, his
5		four-year average would understate the normalized level of residential water usage.
6		In St. Louis, the four-year average of rainfall for the 2007-2010 period is 44.63 inches
7		of rainfall. This compares to the 30-year average (1981-2010) of 40.92 inches of
8		rainfall. Mr. Scheible's four-year average is more than 9% above average rainfall for
9		the last 30 years.
10		The six-year average of precipitation for the period 2005-2010 I recommend to
11		normalize revenues is 41.05 inches. This is within 0.33% of the 30-year average.
12	Q	AT PAGE 5 OF HIS REBUTTAL TESTIMONY, MR. SPITZNAGEL STATES THAT
12 13	Q	AT PAGE 5 OF HIS REBUTTAL TESTIMONY, MR. SPITZNAGEL STATES THAT YOUR NORMALIZATION METHOD IS LIKELY TO RESULT IN INACCURATE
	Q	
13	Q A	YOUR NORMALIZATION METHOD IS LIKELY TO RESULT IN INACCURATE
13 14		YOUR NORMALIZATION METHOD IS LIKELY TO RESULT IN INACCURATE ESTIMATES. HOW DO YOU RESPOND?
13 14 15		YOUR NORMALIZATION METHOD IS LIKELY TO RESULT IN INACCURATE ESTIMATES. HOW DO YOU RESPOND?  My six-year average for normalization is being proposed only to normalize revenues
13 14 15 16		YOUR NORMALIZATION METHOD IS LIKELY TO RESULT IN INACCURATE ESTIMATES. HOW DO YOU RESPOND?  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
13 14 15 16 17		YOUR NORMALIZATION METHOD IS LIKELY TO RESULT IN INACCURATE ESTIMATES. HOW DO YOU RESPOND?  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
13 14 15 16 17		YOUR NORMALIZATION METHOD IS LIKELY TO RESULT IN INACCURATE ESTIMATES. HOW DO YOU RESPOND?  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
13 14 15 16 17 18	Α	YOUR NORMALIZATION METHOD IS LIKELY TO RESULT IN INACCURATE ESTIMATES. HOW DO YOU RESPOND?  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.
13 14 15 16 17 18	Α	YOUR NORMALIZATION METHOD IS LIKELY TO RESULT IN INACCURATE ESTIMATES. HOW DO YOU RESPOND?  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.  IS MR. SPITZNAGEL'S RECOMMENDED AVERAGE DAILY CUSTOMER USAGE

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usage is within 5 gallons (or 2%) of the actual average daily customer usage for

1		2008 which is the wettest year in terms of procinitation since 1970. This is simply			
		2008, which is the wettest year in terms of precipitation since 1870. This is simply			
2		unreasonable.			
3	Q	MR. NAUMICK'S TESTIMONY CRITICIZES YOUR USE OF A SIX-YEAR			
4		AVERAGE TO NORMALIZE CUSTOMER USAGE. HOW DO YOU RESPOND?			
5	Α	Mr. Naumick's main criticism is that my method of normalization neglects to account			
6		for a declining trend in customer usage. Although he states that this trend will			
7		continue in the future, analysis of the historical average customer usage in the			
8		St. Louis District puts doubt on whether there is an actual declining trend in the first			
9		place.			
10	Q	PLEASE EXPLAIN.			
11	Α	For the period 1990-2010, a period of 21 years, the average customer usage in the			
12		St. Louis District has been above the Company's recommended normalized average			
13		usage (232.19 gallons per day) 18 out of 21 years. For two of those years,			
14		precipitation was the highest and fifth highest ever since 1870. In addition, there			
15		were nine years in which the average usage increased over the previous year's			
16		average. As a result of this review of historical data, I do not recommend including an			
17	•	adjustment for a declining trend in customer water usage.			
18	Q	ARE THERE ANY OTHER ISSUES IN MR. NAUMICK'S TESTIMONY YOU WISH			
19		TO ADDRESS?			
20	Α	Yes. Mr. Naumick criticizes my use of the period 2001-2007 to normalize commercial			
21		usages. The most recent commercial usage was not in the Company's workpapers.			
22		MIEC asked for the most recent commercial usage in discovery. However, this			

1		information was not provided. Therefore, my normalized usage for commercial		
2		customers is based on the most recent information MIEC has available.		
3	Q	WHAT IS YOUR RECOMMENDATION WITH RESPECT TO NORMALIZED		
4		CUSTOMER WATER USAGE?		
5	Α	I continue to recommend that normalized residential and commercial customer water		
6		usages be normalized based on the methods described in my direct testimony.		
7	<u>Wat</u>	er Losses		
8	Q	WHAT IS STAFF'S RESPONSE TO YOUR PROPOSAL TO LIMIT WATER		
9		LOSSES IN THE ST. LOUIS METRO DISTRICT?		
10	Α	At page 5 of Mr. Merciel's rebuttal testimony, he states that Staff does not agree that		
11		a 15% loss limit is reasonable.		
12	Q	HAS STAFF HISTORICALLY LIMITED WATER LOSSES AT 15%?		
13	Α	Yes. As shown in Schedule BCC-SR-1, in both WR-2010-0131 and WR-2008-0311,		
14		the Staff reports state that it is an unwritten policy to limit water losses to 15%.		
15	Q	DID STAFF PROVIDE ANY DIRECT TESTIMONY AS TO WHY IT HAS		
16		ABANDONED ITS UNWRITTEN POLICY TO LIMIT WATER LOSSES TO 15%?		
17	Α	No.		
18	Q	WHAT IS YOUR RECOMMENDATION FOR WATER LOSSES?		
19	Α	I continue to recommend that water losses be limited to 15%. This is consistent with		
20		Staff's position in the last two Missouri-American water rate cases.		

1 Q HAVE YOU REVIEWED THE TESTIMONY OF COMPANY WITNESS MR. WEEKS			
2 REGARDING WATER LOSSES?			
3 A Yes, I have.			
4 Q DO YOU HAVE ANY COMMENTS REGARDING THE TESTIMONY OF			
5 MR. WEEKS?			
6 A Yes. Mr. Weeks asserts that my use of a 15% water loss factor is arbitrary			
7 Mr. Weeks recommends the application of the Infrastructure Leakage Index ("ILI"			
8 performance indicator.			
9 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			
14 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			
17 with my revenue adjustments claiming that I have ignored continued water			
18 conservation for several reasons. One of the reasons Mr. Naumick cites for declining			
19 usage is:			
20conservation ethic – reducing discretionary outdoor water use is a 21 primary opportunity for residents wishing to improve their 22 environmental sustainability and reduce their impact on natural 23 resources (Naumick Rebuttal Testimony at 8).			
24 I would contend that conservation of water losses should also be a priority of			
25 Missouri-American. In one instance, Missouri-American wants the Commission to			
26 recognize claimed water conservation by the residential class for annualizing			
Brian C. Collins Page 6			

1		revenues. However, when it comes to managing water losses, Missouri-American
2		seeks to disregard a survey of several states.
3		This level of water losses I have proposed is supported by state agencies
4		across the United States. I recommend that the Commission utilize a 15% loss factor
5		for Missouri-American districts.
6	<u>Fuel</u>	and Power Expense
7	Q	HAVE YOU READ MS. TIERNEY'S REBUTTAL TESTIMONY AS IT RELATES TO
8		MISSOURI-AMERICAN'S FUEL AND POWER ADJUSTMENT?
9	Α	Yes, I have.
10	Q	DO YOU AGREE WITH MS. TIERNEY?
11	Α	Generally, I agree with Ms. Tierney. I support the fuel and power calculation that
12		includes the actual increase in fuel and power costs as a result of Ameren's last rate
13		case. I also support the inclusion of the fuel adjustment charges ("FAC") that were
14		effective in June and September 2011.
15	Q	WITH WHICH PORTIONS OF MS. TIERNEY'S REBUTTAL TESTIMONY DO YOU
16		DISAGREE?
17	Α	I disagree with Ms. Tierney's attempt to include the October 2010 and February 2011
18		FAC charges.
19		First, these changes in fuel costs were included in Ameren's most recently
20		approved permanent rate case. Second, the collection of these charges has already
21		expired as of the filing of this surrebuttal testimony. The collection of the October

1		2010 FAC charges expired on September 2011 and the February 2011 FAC charges
2		expired on January 2012.
3		Requesting ratemaking recognition of these costs will result in double
4		recovery of fuel expense and collection of costs for which the recovery period has
5		expired. These adjustments proposed by Missouri-American should be disallowed by
6		the Commission.
7	<u>Che</u>	mical Expense
8	Q	DID YOU REVIEW THE TESTIMONY OF COMPANY WITNESS MR. THAKADIYIL
9		REGARDING CHEMICAL EXPENSE?
10	Α	Yes, I did.
11	Q	PLEASE DISCUSS YOUR CONCERNS WITH MR. THAKADIYIL'S TESTIMONY.
12	Α	I was somewhat surprised by Mr. Thakadiyil's surrebuttal testimony. In his rebuttal
13		testimony, Mr. Thakadiyil for the first time in this case provides justification for the use
14		of a three-year average of chemical quantities. In his direct testimony, Mr. Thakadiyil
15		provided four lines of testimony describing his adjustment. It was not until 1
16		challenged the chemical adjustment did Missouri-American provide any rationale for
17		the use of three years for quantities.
18		Mr. Thakadiyil argues that turbidity will cause fluctuations in the amount of
19		chemical expense from one year to another. Albeit this may be a reason for using a
20		multi-year average, Mr. Thakadiyil has not produced any evidence which suggests
21		the water treated during the test year was more turbid than normal.
22		Furthermore, Mr. Thakadiyil offers no opinion on the possibility that chemical
23		quantities may actually decrease in a year given a greater concentration of the
		Brian C. Collins

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.

#### 7 Q DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

8 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

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#### 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.

#### 12. Electricity

Staff Expert: Jermaine Green

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:

		Effective	Percent
Supplier	Rate Case	Date	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%

<sup>\*\*</sup> 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