

STAFF-2

FILED  
August 27, 2007  
Data Center  
Missouri Public  
Service Commission

Issue: Bad Debt Expense  
Chemical Expense,  
Fuel & Power Expense,  
Unaccounted for Water  
Witness: Roberta A. Grissum  
Sponsoring Party: MoPSC Staff  
Type of Exhibit: Surrebuttal Testimony  
Case No.: WR-2007-0216  
Date Testimony Prepared: July 31, 2007

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

SURREBUTTAL TESTIMONY

OF

ROBERTA A. GRISSUM

MISSOURI-AMERICAN WATER COMPANY

CASE NO. WR-2007-0216

Jefferson City, Missouri  
July 2007

SMK Exhibit No. 2  
Case No(s) WR-2007-0216  
Date 8-14-07 Rptr PR

**BEFORE THE PUBLIC SERVICE COMMISSION**

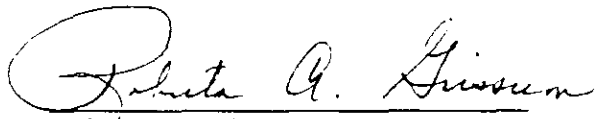
**OF THE STATE OF MISSOURI**

In the Matter of Missouri-American Water )  
Company's request for Authority to Implement a ) Case No. WR-2007-0216  
General Rate Increase for Water Service provided )  
in Missouri Service Areas )

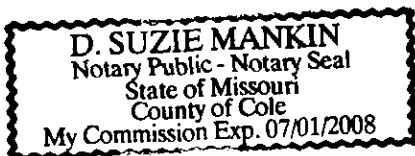
**AFFIDAVIT OF ROBERTA A. GRISSUM**

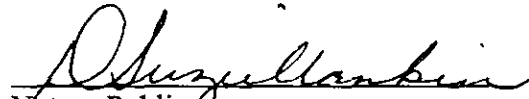
STATE OF MISSOURI )  
 ) ss.  
COUNTY OF COLE )

Roberta A. Grissum, of lawful age, on her oath states: that she has participated in the preparation of the following Surrebuttal Testimony in question and answer form, consisting of 7 pages to be presented in the above case; that the answers in the foregoing Surrebuttal Testimony were given by her; that she has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of her knowledge and belief.

  
Roberta A. Grissum

Subscribed and sworn to before me this 31<sup>st</sup> day of July 2007.



  
Notary Public

1  
2  
3  
4  
5  
6  
7  
8

**TABLE OF CONTENTS**  
**SURREBUTTAL TESTIMONY**  
**OF**  
**ROBERTA A. GRISSUM**  
**MISSOURI-AMERICAN WATER COMPANY**  
**CASE NO. WR-2007-0216**

BAD DEBT EXPENSE (I.E, UNCOLLECTIBLES)..... 1  
CHEMICALS, FUEL AND POWER – UNACCOUNTED FOR WATER ..... 4

## 1

2

3

4

5

6

7

9

11

12

13

## 1:

1.

2

1           A.     Yes, with the exception of the Warren County and Cedar Hill districts. Since  
2 only two years of data was available, the Staff used a two-year average to determine the  
3 normal ongoing level of bad debt expense in those districts.

4           Q.     Company believes a two-year average should be used for the calculation of bad  
5 debt expense in all districts. Does Staff agree with this methodology?

6           A.     No. Staff believes a two-year average is not a sufficient basis on which to  
7 determine a normal ongoing level of bad debt expense for Missouri-American Water  
8 Company (MAWC).

9           Q.     Please explain.

10          A.     Staff believes that two years is an insufficient period of time to use to  
11 normalize fluctuating costs and/or identify trends. For this reason, the Staff examined five-  
12 years of data where available. Based on this examination, the Staff was able to identify trends  
13 in the St. Joseph and St. Louis operating districts and fluctuations that required normalization  
14 in the remaining districts, except for Cedar Hill and Warren County. The St. Joseph operating  
15 district shows a three-year downward trend while the St. Louis operating district shows a  
16 three-year upward trend in bad debt expense. As a result, the actual net write-offs in these  
17 two districts for the twelve-months ending December 2006 are more reflective of the ongoing  
18 levels of bad debt expense. This trend could not have been identified using Mr. Petry's  
19 method of only using two years of data. The remaining districts showed fluctuating levels of  
20 bad debt write-offs during the five-year period making the average of this period the best  
21 indicator of the ongoing level of bad debt expense. In the Warren County and the Cedar Hill  
22 operating districts, Staff simply used an average of the data available to determine the  
23 ongoing levels of bad debt expense.

1           Q.     Mr. Petry states in his direct testimony at page 2, lines 9-10, that "Staff used a  
2 three year average" in Case Nos. WR-2003-0500 and WC-2004-0168. Do you agree with this  
3 characterization of Staff's methodology for those two cases?

4           A.     Yes. Staff did utilize a three-year average of net write-offs to estimate bad  
5 debt expense in Case Nos. WR 2003 0500 and WC-2004-0168. However, Staff utilized a  
6 three-year average due to a lack of available data necessary to perform a five-year  
7 examination of the merged entities of MAWC, United Missouri Water (UMW) and St. Louis  
8 County Water Company (SLCWC). The Jefferson City water operating district, formerly  
9 UMW, and St. Louis County water operating district, formerly SLCWC, were purchased in  
10 2000 and 2001, respectively.

11          Q.     Does Staff believe an increase in bad debt expense should be recognized for  
12 the change in revenues associated with the new rates in this case as proposed by Mr. Petry?

13          A.     No. Staff does not believe there is a linear relationship between an increase in  
14 revenues and an increase in the level of bad debt expense. As such, Staff believes its method  
15 is superior and recognizes the actual experience of the Company.

16          Q.     Mr. Petry states at page 5, lines 30-33, and page 6, lines 1, that:

17          A.     In a Report and Order issued on December 21, 2006, in Case  
18 No. ER-2006-0314 (Kansas City Power & Light), the Commission found it 'more probable,  
19 and therefore just and reasonable, that an increase in the amount of revenue that KCPL is  
20 allowed to collect from its Missouri retail ratepayers will result in a corresponding increase in  
21 bad debt expense.'

22          Q.     How do you respond to this statement?

1           A.     Staff has reviewed the Report and Order (R&O) identified in Mr. Petry's  
2     rebuttal testimony and agrees that this in part is the Commission's finding. But, the R&O also  
3     states at page 63, paragraph 3:

4           The Commission finds that the competent and substantial evidence supports KCPL's  
5     position and finds this issue in favor of KCPL. The Commission understands Staff's  
6     argument that there is not a perfect positive correlation between retail sales and the percentage  
7     of bad debts. [Emphasis Added]

8           MAWC has not provided competent and substantial evidence in this proceeding that  
9     shows a linear relationship between a rate increase and an increase in bad debt expense.  
10    Therefore, Staff believes utilization of its method, which is based on an examination of the  
11    actual experience of the Company, is more reliable for establishing the ongoing level of bad  
12    debt expense.

13          Q.     Has the Staff compiled data that shows there is not a linear relationship  
14    between an increase in revenues and an increase in bad debt expense?

15          A.     Yes. Schedule 1 attached to this testimony illustrates that bad debt expense  
16    does not always rise in a linear relationship with total company revenues. In fact, in 2004,  
17    bad debts increased while revenues declined. As such, Staff believes it is inappropriate to  
18    apply a bad debt write-off factor to revenues to determine the ongoing level of bad debt  
19    expense.

20    **CHEMICALS, FUEL AND POWER – UNACCOUNTED FOR WATER**

21          Q.     MAWC witness Greg Weeks states at page 4, lines 10 through 12 of his  
22    rebuttal testimony that "The Staff disallowed a portion of MAWC's fuel & power and

1 chemical expenses because Staff arbitrarily assigned a 15% loss factor cap in its calculation of  
2 system delivery.” How do you respond to this statement?

3 A. Staff has taken the position that water losses in excess of 15 % are abnormal.  
4 This standard has been used as a benchmark in prior cases when examining water losses.  
5 Schedule 2 attached to this testimony illustrates the water loss percentages reported by the  
6 Company at Test Year 12-months Ending June 30, 2006, Update 12-months Ending  
7 December 31, 2006 and True-Up 12-months Ending May 31, 2007.

8 Schedule 2 further illustrates, with the exception of the Brunswick and St. Louis  
9 districts, all other operating districts have been able to meet or exceed the standard of 15%  
10 recommended by the Staff. Therefore, the Staff believes its reliance of the 15% limit is  
11 appropriate.

12 Q. Do you have any documentation to support the 15% benchmark?

13 A. Yes. Information obtained from the American Water Works Association  
14 (<http://www.awwa.org/WaterWiser/waterloss/>) states the following:

15 Many drinking water utilities around the world respond to leaks  
16 only after they have received a report of water erupting from a  
17 street or a complaint from a customer about a damp basement.  
18 Utilities that employ this type of reactive leakage response most  
19 likely have excessive leakage that will never be reliably  
20 contained. Controlling leakage effectively relies upon a  
21 proactive leakage management program that includes a means  
22 to identify hidden leaks, optimize repair functions and upgrade  
23 piping infrastructure before its useful life ends. Effective  
24 technologies have been developed in recent years including  
25 nightflow analysis to quantify leakage amounts, leak noise  
26 correlators and loggers to pinpoint leaks and pressure  
27 management to reduce leakage systematically under the right  
28 conditions. Many effective strategies now exist to allow water  
29 utilities to identify, measure, reduce or eliminate leaks in a  
30 manner that is consistent with their cost of doing business.



1 Q. Does MAWC employ any of the practices described above for controlling  
2 leaks?

3 A. Based on my discussions with individuals in the Staff's Water and Sewer  
4 Department, MAWC does not use any of these practices proactively. The Company employs  
5 leak noise correlators, but only in a reactive manner once a lead has been identified.

6 Q. Has Mr. Weeks identified what he considers appropriate loss factors?

7 A. Mr. Weeks states in his rebuttal testimony that "Unbilled water can be less  
8 than 10% in a relatively new, well-managed system. It is not uncommon to find unbilled  
9 water to be over 20% in an older system." The benchmark used by the Staff regarding water  
10 losses reflects an average of those two levels.

11 Q. The City of Joplin's witness, Ms. Leslie Jones, states in her rebuttal testimony  
12 that:

13 The test year was a heavy water usage year, due to the drought  
14 in the Joplin area. As a result, the chemical usage for water  
15 treatment in the test year should have been above the average  
16 for a "normal year". Therefore, if any normalization is required  
17 of the chemicals used for treatment, the amount should be  
18 reduced thus resulting in lower costs after normalization and  
19 annualization.

20 Q. How do you respond to this statement?

21 A. Staff's calculation of chemical expense for the Joplin operating district is based  
22 on 3,969,981 Mgallons of water usage, which reflects normalized and annualized water usage  
23 for the Joplin operating district for the twelve-months ending May 31, 2007 as determined  
24 through Staff's normalized and annualized revenues calculation. The Company reported that  
25 the Joplin operating district experienced a water loss of 15.09% during the test year.  
26 Applying this water loss percentage to the normalized and annualized water usage referenced  
27 above, Staff determined the *pro forma* system delivery to be 4,675,516 Mgallons.

Surrebuttal Testimony of  
Roberta A. Grissum

1 Multiplying the *pro forma* system delivery by a cost per one thousand gallons of \$0.09824,  
2 representing the current price of chemicals necessary to treat one thousand gallons of water,  
3 the chemical expense for the Joplin operating calculated to be \$459,323 for the twelve-months  
4 ending May 31, 2007. Staff derived its adjustment of chemical expense in the Joplin  
5 operating district by subtracting the test year level of chemical expense of \$234,636 from the  
6 normalized and annualized chemical expense of \$459,323 calculated by Staff to arrive at  
7 Staff's adjustment of an additional \$224,687 of chemical expense to treat the normalized and  
8 annualized water usage for the Joplin operating district for the twelve-months ending  
9 May 31, 2007. The Company has experienced significant price increases in chemical costs.

10 Q. Does this conclude your surrebuttal testimony?

11 A. Yes, it does.

12

### Comparison of Bad Debt Expense to Total Company Revenues

District	2002	2003	2004	2005	2006	2-Yr Avg	5-Yr Avg
Brunswick	\$1,828.25	\$1,182.23	\$2,091.13	\$1,322.38	\$1,1726.91	\$1,525	\$1,630 <sup>1</sup>
Jeff City	\$45,682.99	\$46,774.98	\$36,657.79	\$38,947.29	\$40,312.20	\$39,630	\$41,675 <sup>1</sup>
Joplin	\$162,878.04	\$119,281.35	\$105,864.97	\$114,829.15	\$96,480.65	\$105,655	\$119,867 <sup>1</sup>
Mexico	\$32,661.92	\$21,167.56	\$24,504.59	\$23,351.46	\$19,530.48	\$21,441	\$24,243 <sup>1</sup>
Parkville Water & Sewer	\$12,598.85	\$13,283.21	\$11,751.12	\$15,243.04	\$14,959.51	\$15,101	\$13,567
St. Charles	\$26,937.53	\$25,037.78	\$25,468.72	\$24,985.16	\$28,717.17	\$26,851	\$26,229 <sup>1</sup>
St. Joseph	\$164,296.13	\$167,426.42	\$155,251.18	\$145,401.70	\$130,401 <sup>1</sup>	\$137,902	\$152,555
St. Louis	\$774,268.33	\$771,932.91	\$1,178,487.60	\$1,222,518.64	\$1,262,520 <sup>1</sup>	\$1,242,519	\$1,041,945
Warren County Water & Sewer	\$0	\$0	\$0	\$2,187.88	\$3,133.70	\$2,661 <sup>1</sup>	\$1,064
Warrensburg	\$24,005.06	\$20,326.41	\$15,775.77	\$21,309.22	\$13,189.46	\$17,249	\$18,921 <sup>1</sup>
Cedar Hill Sewer	\$0	\$0	\$0	\$775.80	\$1,682.77	\$1,229 <sup>1</sup>	\$491
<b>Total Bad Debt</b>	<b>\$1,245,157</b>	<b>\$1,186,413</b>	<b>\$1,555,853</b>	<b>\$1,610,872</b>	<b>\$1,612,654</b>	<b>\$1,611,763</b>	<b>\$1,642,944<sup>1</sup></b>
% Change		-4.72%	31.14%	3.54%	0.11%		
<b>Total Revenues</b>	<b>\$162,035,847</b>	<b>\$156,996,994</b>	<b>\$154,968,916</b>	<b>\$164,047,256</b>	<b>\$170,853,331</b>		
% Change		-3.11%	-1.29%	5.86%	4.15%		

Source: Bad Debt Expense obtained from Company's Response to Staff DR 74

Source: Total Revenues obtained from Company's Annual Report filings for 2002-2006

<sup>1</sup> Denotes Staff's filed position in Direct Testimony

### Water Loss Percentages of Missouri-American Water

<b>District</b>	<b>Test Year Ending 6/30/06<sup>1</sup></b>	<b>5-Year Average 12/31/06<sup>2</sup></b>	<b>5-Year Average 5/31/07<sup>3</sup></b>	<b>Calendar Year 2006</b>
Brunswick	26.69%	21.88%	22.18%	16.65%
Jefferson City	22.34%	15.22%	15.41%	17.58%
Joplin	15.09%	8.36%	9.31%	9.57%
Mexico	15.61%	10.87%	11.02%	19.48%
Parkville Water	10.66%	4.59%	4.39%	4.62%
St. Charles	8.51%	3.52%	3.65%	4.18%
St. Joseph	18.66%	15.52%	15.88%	13.81%
St. Louis	20.40%	18.08%	19.19%	16.48%
Warrensburg	13.23%	9.63%	9.76%	11.51%
Warren Co. Water	5.56%	9.00%	4.18%	15.27%
<b>System Average</b>	<b>15.68%</b>	<b>11.67%</b>	<b>11.50%</b>	<b>12.92%</b>

<sup>1</sup> Denotes Test Year Water Losses provided by Company on 2/7/07 in Filename: Cust Annual, Tab: Sys Del

<sup>2</sup> Denotes a 5-year average of Water Losses for CY2002-CY2006 provided by Company on 6/1/07 without credits

<sup>3</sup> Denotes a revised 5-year average of Water Losses for CY2002-CY2006 provided by Company on 7/1/07 with credits