Exhibit No.: _____
Issues: Cost Allocation/Rate Design
Witness: Paul R. Herbert
Exhibit Type: Surrebuttal – NON-PROPRIETARY
Sponsoring Party: Missouri-American Water Company
Case No.: WR-2008-0311
Date: October 16, 2008

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. WR-2008-0311

SURREBUTTAL TESTIMONY

OF

PAUL R. HERBERT

ON BEHALF OF

MISSOURI-AMERICAN WATER COMPANY

JEFFERSON CITY, MISSOURI

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

IN THE MATTER OF MISSOURI-AMERICAN WATER COMPANY FOR AUTHORITY TO FILE TARIFFS REFLECTING INCREASED RATES FOR WATER AND SEWER SERVICE	)))))	**CASE NO. WR-2008-0311 CASE NO. SR-2008-0312**

AFFIDAVIT OF PAUL R. HERBERT

Paul R. Herbert, being first duly sworn, deposes and says that he is the witness who sponsors the accompanying testimony entitled "Surrebuttal Testimony of Paul R. Herbert"; that said testimony and schedules were prepared by him and/or under his direction and supervision; that if inquires were made as to the facts in said testimony and schedules, he would respond as therein set forth; and that the aforesaid testimony and schedules are true and correct to the best of his knowledge.

Paul R Herbert

Paul R. Herbert

Commonwealth of Pennsylvania
County of Cumberland
SUBSCRIBED and sworn to
Before me this 9th **day of** October **2008.**

Notary Public

My commission expires: February 20, 2011

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Cheryl Ann Rutter, Notary Public
East Pennsboro Twp., Cumberland County
My Commission Expires Feb. 20, 2011
Member, Pennsylvania Association of Notaries

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WITNESS INTRODUCTION

1. Q. Please state your name and address.

A. My name is Paul R. Herbert. My business address is 207 Senate Avenue, Camp Hill, Pennsylvania.

2. Q. By whom are you employed?

A. I am employed by Gannett Fleming, Inc. as President of the Valuation and Rate division.

3. Q. Are you the same Paul Herbert that submitted direct and rebuttal testimony in this proceeding?

A. Yes, I am. My direct testimony and exhibits were submitted with the Company's filing on March 31, 2008. My rebuttal testimony and exhibits were filed on September 30, 2008.

4. Q. What is the purpose of your surrebuttal testimony in this proceeding?

A. The purpose of my surrebuttal testimony is to address the cost of service allocation and rate design issues raised in the rebuttal testimonies of Staff witness James Russo, Office of Public Counsel (OPC) witness Barbara Meisenheimer, AGP witness Donald Johnstone and Joplin witness Michael Ileo.

5. Q. How have you structured your surrebuttal testimony?

A. First, I will discuss the revenue imputation for the St. Joseph District proposed by Ms. Meisenheimer. Then I will address the cost allocation and rate design issues set forth in Mr. Russo's, Ms. Meisenheimer's, Dr. Ileo's and Mr. Johnstone's testimonies.

SURREBUTTAL OF OPC WITNESS MEISENHEIMER REGARDING REVENUE IMPUTATION

6. Q. Please address the revenue imputation issue presented by OPC witness Ms. Meisenheimer.

A. Ms. Meisenheimer recommends that revenues be imputed in the St. Joseph's District in the amount of **_____** representing the additional revenues that would be generated from Triumph Foods under the Industrial tariff rather than the Economic Development Tariff under which Triumph Foods presently takes service as approved by the Commission at Docket No. WT-2004-0192.

7. Q. Why does she make such a recommendation? Is Triumph Foods violating the provisions of the Economic Development Tariff?

A. No, not at all. She seems to believe that the discounted rate provided to Triumph adversely affects the other customers in the St. Joseph District. But the opposite is true. Since the rates charged to Triumph recover more than the incremental or variable costs to serve it, the revenues received from Triumph provide a contribution to the fixed costs of the system which benefits all other customers in the St. Joseph District.

8. Q. How do you know that Triumph is providing revenues is excess of variable costs?

A. I have previously prepared a calculation of the variable costs for the St. Joseph system in response to AGP Data Request 045 (attached as Exhibit No. PRH-SR-1). Variable costs include power, chemicals and waste disposal

and are commonly considered as the expenses that vary directly with the amount of water produced. As shown on Exhibit No. PRH-SR-1, the total variable costs of $1,743,547 is divided by the total water consumption of 5,527,638 thousand gallons for a variable unit cost of $0.315 per thousand gallons.

9. Q. What is the current rate charged to Triumph?

A. Triumph's volumetric rate is **_____** per thousand gallons or **_____** per thousand gallons greater than the variable costs. Based on Triumph's consumption of **_____** thousand gallons the contribution to fixed costs from Triumph equals **_____.** In addition to this amount, Triumph pays total customer charges of **_____**, annually, under existing rates for the two 8-inch meters used to receive service for a total fixed cost contribution of **_____.**

10. Q. What does this amount represent?

A. This amount represents the direct benefit that Triumph Foods provides to all other customers that would not be realized if Triumph was not a customer. In other words, all other customers' rates would have to recover **_____** more in fixed costs to make up for the contribution that is provided by Triumph.

SURREBUTTAL OF STAFF'S CLASS COST OF SERVICE STUDY ISSUES

11. Q. Please address Mr. Russo's issue regarding the small mains adjustment.

A. Mr. Russo does not support a small mains adjustment because he believes that if there are industrial customers that have different service characteristics, then they should be broken out into a separate class so that specific allocations such as a small mains adjustment can be made to this subgroup.

12. Q. Is this necessary?

A. No. That's the benefit of having a declining block rate structure for industrial customers. A declining block structure will provide the larger use customers within the industrial class, that take service from larger transmission mains and have better load factors, a lower volumetric rate in the tail block to recognize such lower costs to serve larger customers. The lower tail block rate is applicable for usage over the initial blocks that are priced higher. Large customers must first pay the higher rates in the initial blocks before they pay the lower tail-block rate.

Mr. Russo does not propose a declining block structure so all customers, large or small, would pay the same volumetric rate. Under his single block rate structure, a separate large customer industrial group may make sense, however as I have explained earlier, a declining block structure takes care of these inequities by providing a lower rate to those customers with lower cost of service within a certain customer classification.

13. Q. Mr. Russo disagrees with your weighting of Factor 7, allocating operation and maintenance expenses associated with Transmission and Distribution (T&D) mains. Please comment.

A. First, it's important to note that in his study Mr. Russo did not weight his factor

at all which would assume that all T&D operation and maintenance costs are related only to distribution mains and allocated on maximum hour basis rather than a blend of maximum day and hour. This is not logical or consistent with his allocation of T&D rate base.

Mr. Russo claims that my weighting based on the length of T&D mains is not correct and that the net investment in T&D mains would be a better method. While his approach is certainly a better method than no weighting at all, it is not as appropriate as the weighting I use. I use length of mains rather than net investment for two reasons. First, the length of mains is directly proportional to the amount of effort required to operate and maintain those mains. All else equal, a distribution grid that is greater in length than the length of another grid will require more cost to operate and maintain. I account for the difference in cost for the size of mains by considering that the occurrence of main breaks is greater for smaller mains.

Second, the use of net investment to weight the factor is inversely proportional to the amount of maintenance required. That is, an older main installed in 1970 for example will have considerably less original cost than a similar main placed in 2000. However, the older main will likely require more maintenance. Furthermore, by using net investment, the accumulated depreciation on the 1970 main will also be much greater resulting in even lower net investment for the older mains than for mains in later vintages. For these reasons, I choose to use length of mains to allocate operation and maintenance costs between transmission and distribution mains.

14. Q. Please comment on Mr. Russo's claim that your extra capacity factors

for the Sales for Resale class are significantly understated.

A. Mr. Russo states that the demand factors for the Sales for Resale class should be similar to the residential class because the customers that the Sales for Resale customers resell the water to are predominantly residential users. Therefore, the demands would be similar to residential demands.

However, Mr. Russo fails to recognize significant differences in providing service to another water utility (such as a water district) that resells water to its own customers. All of the Company's Sales for Resale customers have their own storage facilities and some also have their own source of supply. The existence of storage facilities allows the Sales for Resale customer to shave the peak demands placed on the Company's system by taking the Company's supply on a more steady basis and using their own storage to meet the peak requirements of their customers. The same is true for those resale customers that have their own source of supply that can take the Company's supply as a base load and use their own sources to meet peak demands.

My experience with Sales for Resale customers that either have their own storage facilities and/or have their own source of supply have peak demands significantly lower than Sales for Resale customers that rely on the Company's facilities to meet peaking requirements. Therefore, the peak demand factors I used in my study are more in line with customers with similar demand characteristics and should be accepted.

SURREBUTTAL CONCERNING CUSTOMER CHARGES

15. Q. Please address OPC's testimony regarding customer charges.

A. OPC witness Meisenheimer recommends that the customer charges proposed by the Company and Staff be rejected and that the existing customer charges remain unchanged.

16. Q. What basis does Ms. Meisenheimer rely upon to keep the existing customer charges unchanged?

A. Her recommendation is based on an average customer cost of $8.71 per month.

17. Q. Does OPC witness Ms. Meisenheimer provide any support for her cost analysis?

A. Yes, however her analysis is inadequate. She omits many cost items associated with customer costs that should be included in a customer charge, such as a proportionate share of administrative and general costs, the costs associated with the call center and public fire costs.

18. Q. What cost analysis did you provide to support your customer charges?

A. For each district in my study, I have prepared a cost analysis presented in Schedule F. The cost analysis shows the cost of service related to meters, services and customer billing and collecting which also includes meter reading. Each of the cost components are divided by the number of meter or service equivalents or the number of customers and then divided by 12 to determine the monthly customer cost for a 5/8-inch meter. The results of my cost analysis are summarized below:

District	5/8-inch Cost Per Month	Existing Rate
Brunswick	$ 14.65	$ 11.48
Jefferson City	15.22	10.41
Joplin	13.49	11.62
Mexico	19.32	9.42
Parkville	17.25	8.55
St. Joseph	12.93	9.14
Warrensburg	13.73	8.73

Based on the above cost analysis, I recommended a $13.00 per month customer charge for 5/8-inch meters in all districts except for St. Louis Metro and a $10.00 per month charge for the St. Louis Metro District.

19. Q. Why are you recommending a common customer charge for all districts other than St. Louis Metro?

A. As stated in my rebuttal testimony, uniform or common customer charges make sense because all customers have a service line and meter. All customers have their meter read each month (except for St. Louis County quarterly billed customers) and are billed from a common billing center. Furthermore, common customer charges are easier to administer and explain to customers.

20. Q. If the Commission rejects common customer charges among districts in favor of district specific customer charges, what would you recommend?

A. For those districts where I proposed a common 5/8-inch charge, I would recommend that such district specific customer charges be based on my cost analysis by district shown above except for Mexico and Parkville which would require increases over 100%. For those districts I would recommend moving halfway toward the indicated costs.

21. Q. Dr. Ileo proposes that customer charges be based on revenue stability and predictability (RSP) goals rather than costs. Do you agree?

A. No, I do not. The cost analysis that I have conducted and the customer charges I proposed are consistent with AWWA cost of service and rate design principles and are consistent with methods used to determine customer charges in prior cases. The AWWA Water Rates Manual makes no mention of RSP as a rate design consideration. Dr. Ileo loses sight of cost causation principles which is a primary basis of rate design in the water industry. Therefore, I recommend that Dr. Ileo's proposals be rejected.

22. Q. Dr. Ileo points out that your customer cost analysis for Joplin differs from that of Staff's. Can you explain the difference?

A. Yes. Staff's calculation first of all is based on Staff's revenue requirements before true-up. However, the primary reason for the difference is that Staff excluded costs from their customer cost analysis that should have been included. These include costs associated with the call center which is a direct customer cost and the reallocation of public fire. Staff considered costs associated with the call center as a general expense, so only a portion of these costs were classified as customer costs. Public fire costs are fixed costs that do not vary with the amount of water used and are not recovered through fixed fire hydrant rates, so these costs must be recovered in fixed charges from all customers. These exclusions account for most of the difference in our customer cost analysis.

OTHER COST ALLOCATION AND RATE DESIGN ISSUES

23. Q. What other comments do you have regarding Dr. Ileo's testimony?

A. Dr. Ileo offers many criticisms of certain allocations in my study but has not provided any specific allocations of his own. He has not demonstrated a thorough knowledge of the base extra capacity method or an understanding of the results of my study. For example, he criticizes my allocation of Utility Regulatory Assessments, stating that these costs should be allocated based on revenues. If he fully understood my study, he would have determined that my allocation based on total cost of service achieves this desired result. Furthermore, his specific criticisms deal with many minor costs such as the example above that represents only $91,000 out of nearly $18 million of costs for the Joplin District. He further criticizes allocations regarding Belleville Labs ($31,000) and Uncollectible Accounts (169,000) which collectively are a little over 1% of the total cost of service. Dr. Ileo's revisions do not amount to any meaningful changes and would not have any material affect on the results of my study.

24. Q. Please address the single-block and declining block structures discussed in Dr. Ileo's testimony.

A. Dr. Ileo proposes a single-block structure because the Company has not presented any load studies to support a declining block structure.

25. Q. Are load studies typically conducted for water companies?

A. Generally, no. The energy industry has been conducting load studies for many years because they have the sophisticated equipment and a power source available to facilitate the data gathering process. Also, the commodity cost for water is so much less than for energy that there hasn't been a strong

demand to have water load studies performed.

26. Q. Could load studies be conducted for the Company?

A. Yes, but it would be very expensive. Since the Company has district specific pricing, a load study would have to be conducted in each district on a representative sample of each customer classification. This would require numerous recording devices that range in cost between $1,400 and $2,400 each. Then, there would be costs incurred to place such devices, monitor the recording process, download the data periodically and analyze the data to determine the results. These costs could well exceed hundreds of thousands of dollars.

27. Q. In your view, are such expenditures necessary?

A. No, I don't believe the benefits received justify the costs required.

28. Q. Can cost of service studies and declining block rates be designed without load studies?

A. Absolutely, the water industry has been doing just that for many years. There have been enough studies performed to determine the general relative demand factors for each classification so that meaningful cost allocation results can be achieved. The AWWA Manual provides the guidance necessary to conduct appropriate and reasonable cost allocation studies even when specific demand data is unavailable. From these cost allocation results, a declining block rate structure can be designed that is fair and equitable for all classifications.

29. Q. Please summarize your review of Dr. Ileo's testimony.

A. Based on my review of Dr. Ileo's testimony, he has not offered any alternative

allocation study of his own and has not offered any meaningful or substantive criticisms of my study or rate design. For these reasons, I recommend that the Commission disregard Dr. Ileo's testimony with respect to cost allocation and rate design

30. Q. Please address Mr. Johnstone's testimony regarding customer classes and rate design.

A. Mr. Johnstone continues to ignore the customer class definitions provided to him on several occasions and he only seeks to confuse the issue by providing misleading information. For example, on page 6 of his rebuttal testimony he states the following:

> *"It is apparent that for most customers that are classified as residential, there would be little reason to question the classification. However, within the residential class there are not only customers that are served by the typically small meter, but there are also customers served with much larger meters and that consume much larger than average amounts of water. That calls into question whether or not the customers with larger meters share the same usage and cost characteristics as the other customers within the class."*

From reading Mr. Johnstone's testimony, one may conclude that this is a real problem. However, the facts show that for the St. Joseph's district, over 99.9% of the residential customers have meters that are 1-inch or less and that over 99% of the consumption falls into the first block rate. The facts show that residential customers are properly classified in the St. Joseph District. Furthermore, my proposed rate design that has a single block for the residential class would apply a uniform volumetric rate to all usage in the residential class.

As for commercial and industrial customers, the Company

acknowledges that there are small and large customers within each class. That's the advantage of having a declining block rate structure for these classes. The smaller customers that typically have lower load factors will pay the higher rates in the initial blocks while the larger customers with better load factors will pay the lower rates in the third and fourth (tail) blocks, as I explained earlier in my testimony. Furthermore, my declining block structure for non-residential customers in St. Joseph have the same rates for the first two blocks, so the first two million gallons per month is priced the same regardless of the specific customer class identified. This provides the consistency in rates that Mr. Johnstone supports.

34. Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

Exhibit No. PRH-SR-1
No. Ag Proc 045

DATA INFORMATION REQUEST
Missouri-American Water Company
WR-2008-0311 & SR-2008-0312

Requested From: Pete Thakadiyil
Date Requested: 9/5/08

Information Requested:

Please provide a computation of the variable cost of water production for the St. Joseph District.

Requested By: Stuart Conrad - stucon@fcplaw.com, - 816-753-1122
Finnegan, Conrad & Peterson, L.C. - Attorney for Ag Processing, Inc.

Information Provided:

	St. Joseph Variable Costs
Power	$706,901
Chemicals	739,670
Waste Disposal	296,976
Total	$1,743,547
Total Production, Thousand Gallons (Including Triumph)	5,527,638
Variable Costs per Thousand Gallons	$0.315

Hyperlink:

Date Response Provided: 9/ /08

Signed By: _____

Prepared By: Paul R. Herbert