Exhibit No.: 111 NP
Issues: Cost Allocation/Rate Design
Witness: Paul R. Herbert
Exhibit Type: Rebuttal NON PROPRIETARY
Sponsoring Party: Missouri-American Water Company
Case No.: WR-2010-0131
Date: April 15, 2010

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. WR-2010-0131

REBUTTAL 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-2010-0131 CASE NO. SR-2010-0135

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 "Rebuttal 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 14th **day of** April **2010.**

Notary Public

My commission expires:

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

TABLE OF CONTENTS

Exhibit No.: ____________
Issues: Cost Allocation/Rate Design
Witness: Paul R. Herbert
Exhibit Type: Rebuttal NON PROPRIETARY
Sponsoring Party: Missouri-American Water Company
Case No.: WR-2010-0131
Date: April 15, 2010

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. WR-2010-0131

REBUTTAL TESTIMONY

OF

PAUL R. HERBERT

ON BEHALF OF

MISSOURI-AMERICAN WATER COMPANY

JEFFERSON CITY, MISSOURI

TABLE OF CONTENTS

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 testimony in this proceeding?

A. Yes, I am. My direct testimony and exhibits were submitted with the Company's filing on October 29, 2009.

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

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

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

A. First, I will discuss and explain key differences between the cost allocation studies I prepared and those of Staff and Public Counsel and certain allocations presented by MIEC. Then I will address the rate design issues proposed by Staff and AGP.

REBUTTAL OF COST OF SERVICE ISSUES

6. Q. Please address the cost allocation issues presented by MIEC witness Mr. Gorman.

A. Mr. Gorman suggests that the demand charge portion of the Company's electric bills be allocated on an extra capacity basis, using my Factor 6 instead of Factor 1, which is based on average daily sales. The result of his revision would allocate less purchased power costs to the Rate J class (i.e., large, industrial customers) and more to the remaining classes. The reduction to the Rate J would be $170,894 or approximately 2.5% of the total costs allocated to Rate J - a relatively minor adjustment.

7. Q. Do you agree with Mr. Gorman's revision?

A. I would agree with the concept of this refinement, but not to the extent that Mr. Gorman suggests.

8. Q. Please explain.

A. I have conducted an analysis of a sample of the Company's power bills in St. Louis County and determined that the bills include a monthly demand charge regardless of the level of service. Generally, electric rates are structured with a customer charge, a demand charge and commodity charges. Depending on the rate schedule, there will be a monthly demand charge even if power is taken at a steady rate, 24 hours a day, 7 days a week. To the extent that the demand charge fluctuates from month to month, I would consider that to be the extra capacity portion of the Company's power purchases. In my analysis, the difference between the minimum demand charge for the lowest demand month and the demand charges for the remaining months result in approximately 6.0% of the total purchased power expense attributable to extra capacity. Therefore, I would support a refinement to my cost allocation that would allocate 6.0% of purchased power costs to the extra capacity function; however, as I will demonstrate, this refinement results in a very minor revision.

9. Q. Does the AWWA Manual M1 support your method of allocating purchased power in this manner?

A. Yes, it does. It states that "the demand portion of power costs should be allocated to extra capacity ***to the degree that it <u>varies</u> with the demand pumping requirements."*** (emphasis added). It does not suggest that the total demand portion of power costs should be allocated to extra capacity, only to the degree that it varies with pumping requirements.

10. Q. What is the result of allocating power costs using your alternative method?

A. As shown on Exhibit No. PRH-R1, the result of allocating 6.0% of the power costs on an extra capacity basis reduces the industrial cost of service by $19,857 or about 0.28% of the total Rate J costs - a small and insignificant amount.

11. Q. Please discuss the similarities and differences among the cost of service studies prepared by you and the studies submitted by Mr. Russo of the Staff and Ms. Meisenheimer of the OPC.

A. The similarities include the use of the base-extra capacity method of allocation and the use of district specific cost of service. The differences are numerous – some significant, many others not so significant. I will try to focus on the significant differences.

12. Q. Please continue.

A. The major differences include:

- The use of a much lower revenue requirement by Staff and OPC – a total of $15 million increase as opposed to the Company's $48.7 million increase.
- Differences in the distribution of the revenue requirements to the various districts.
- Differences in the billing determinants in some districts used for allocation purposes as a result of different projected revenues.
- Differences in the allocation of distribution mains in certain districts.
- Differences in the allocation of costs to contract customers.
- Differences in the use of certain peak factors.

The issues dealing with revenue requirements, the distribution of revenue requirements to the districts and the proper level of billing determinants will be addressed in other Company rebuttal testimony.

13. Q. Please address some of the specific errors contained in Staff's study.

A. The Staff report includes several errors that I discovered and are listed below. The list shows only the items uncovered and may not represent all the errors in Staff's study.

- Joplin – Staff used the same consumption for Sales for Resale as is used for OPA (Other Public Authority). Usage for Sales for Resale should be 322,906 thousand gallons rather than 143,250 thousand gallons (OPA usage).
- St. Joseph – Staff did not include sales or revenues for Triumph or deducted their revenues from cost of service. Staff also included 548 additional 5/8-inch bills for OPA which is more than twice the number of bills in the Company's data. I cannot reconcile Staff's data from what I received from the Company.
- All Districts – Staff added, rather than subtracted, costs associated with Contributions in Aid of Construction, Deferred Taxes and Pensions to determine rate base. Staff excluded the Sales for Resale class from the small mains adjustment. And Staff deducted other revenues from only the Residential class instead of all classes.

14. Q. Please address the allocation of distribution mains.

A. One distinct difference that affected the results in the St. Louis Metro, Joplin, and St. Joseph districts was that Staff only used a small mains adjustment for the industrial class and excluded the Sales for Resale class from the adjustment. However, this was an improvement from the last case where Staff did not include a small mains adjustment for any class. OPC witness Ms. Meisenheimer employed a modified small mains adjustment but not to the extent necessary. My studies reflect that many of the large users, including sales for resale, in those districts are served primarily from large transmission mains (generally larger than 10-inch) and thus, large users do not benefit from the smaller mains in the distribution system. A more detailed explanation of my small mains adjustment is provided in my direct testimony.

15. Q. Why is a small mains adjustment appropriate?

A. Generally, water flows from treatment facilities in large mains often referred to as transmission mains. The primary purpose of transmission mains is to transfer water from the treatment facilities to the distribution system and costs associated with transmission mains are allocated on a maximum day basis. The distribution system consists of many miles of smaller mains which deliver water to customers' service lines and are designed to meet maximum hour demands. In larger systems, large users such as industrial and sales for resale customers are located on transmission mains and take water before it reaches the distribution system. My study recognizes this fact and excludes certain large users from the allocation of costs associated with small mains.

16. Q. What is the effect of Staff using only a small mains adjustment for certain industrial customers?

A. By not using a small mains adjustment in the same manner as the Company, Staff's and, to a lesser extent, OPC's cost allocations result in higher costs being allocated to industrial and sales for resale customers in St. Louis Metro and St. Joseph Districts and to the industrial customers in Joplin, than would have been allocated if they had fully recognized a small-mains adjustment. This will have an adverse impact on industry and will make it more difficult for the Company to meet competitive pressures. For example, as a result of

Staff's allocations in the St. Louis County district, the Rate J class (industrial) would require a 35.4% increase and the Rate B class (Sales for Resale) would require a 69% increase on Staff's overall St. Louis County increase of 6.6%. This compares to increases of 16% and 5.3% for the Rate J and Rate B classes, respectively, on an overall increase of 23% as a result of my study.

Furthermore, Staff's allocation of operation and maintenance expenses for mains is inconsistent with how Staff allocated rate base and depreciation expense for mains. For rate base and depreciation expense, Staff allocated smaller mains (distribution) using the max hour factor (4) and the larger mains (transmission) using the max day factor (3), which is appropriate. However, for the allocation of operation and maintenance expenses for all mains, Staff did not classify any of these costs as transmission and allocated all operation and maintenance for mains based on distribution alone, using the max hour factor. This assumes that all operation and maintenance expenses are performed only on small mains and none on the larger mains, which is not logical. For these reasons, Staff and OPC allocation of costs associated with mains are in error and should be rejected.

17. Q. Please describe how you treated the allocation of costs to contract sales customers.

A. As a result of the Stipulation in the last case, I treated Triumph Foods in this case differently than in prior cases. In prior cases, I did not allocate any costs to Triumph and instead, deducted their revenues from the total cost of service of all other classes. This was to recognize that having Triumph on the system was beneficial to the remaining classes because they are covering their marginal costs and contributing revenues toward fixed costs.

For this case, I set Triumph in a Large Industrial classification and allocated costs to them *"to determine whether the alternative rate continues to be in the best interest of all customers in the Company's St. Joseph service area".* Although the cost allocation study shows that Triumph is not covering its fully allocated costs, the rate charged to Triumph of **$______** per thousand gallons exceeds the incremental cost to produce water of **_________** per thousand. Incremental production costs include power, chemicals and waste disposal. The result is a contribution toward fixed costs of **_________** per thousand gallons **________**).

In my cost allocation study for St. Louis Metro, I excluded the volumes associated with contract sales and deducted the contract sales revenue from the cost of service from all classes in proportion to the result of each class's cost of service. (Contract customers include Rate G and H classes in the St. Louis Metro District) This recognizes that contract customers have been retained on the system to the benefit of the remaining tariff customers and should offset the cost of service in proportion to each class's cost of service. Staff and OPC did not make this refinement and they effectively allocate the entire difference between the costs allocated to contract customers and the actual contract revenue to the remaining tariff customers in that classification rather than to all tariff customers.

Furthermore, Staff's study for St. Joseph District excludes the volumes and revenues for the contract customer and omitted the consumption from the basis of their allocation factors. This produces erroneous results and does not properly match revenues with the allocated cost of service.

18. Q. What other cost allocation differences exist among the studies?

A. There are differences in the estimated system-wide peak hour ratios used in the studies. It appears that Staff and OPC used non-coincident demands to estimate the system peak hour factor rather than an estimated coincident peak hour. My approach uses the method described in the AWWA Manual M1 which uses a coincident peak hour factor to determine base and maximum hour allocations and then uses class non-coincident factors to allocate the maximum hour extra capacity costs. A factor based on non-coincident demands would produce a higher ratio than what would actually be experienced based on coincident demands. Generally, the use of higher coincident maximum hour peak ratios will allocate more costs to the residential class. Typically, if no actual system peak hour data is available, a factor of 1.3 to 1.5 times the maximum day ratio is used to estimate the coincident peak hour ratio.

19. Q. What are your conclusions with regard to the cost of service studies submitted in this case?

A. Each of the witnesses supports the use of the base-extra capacity method. However, only the Company's studies have applied the principles consistent with proper rate making and reflect the proper allocation of small mains, the operation and maintenance expenses for mains, the costs associated with contract customers and the allocation of peak hour demands. It is important that the Company's studies are used for the purposes of designing rates in this case to ensure an appropriate allocation of costs to the various customer classes and proper revenue distribution among the classes.

REBUTTAL CONCERNING RATE DESIGN ISSUES

20. Q. Please outline the rate design issues you will address.

A. I will address customer charges, the rate design proposed by Mr. Russo and certain rate design issues presented by Mr. Johnstone.

21. Q. What did the Company propose for customer charges?

A. The Company proposed uniform customer charges for all districts except for St. Louis Metro, based on the customer costs properly allocated for each district. The customer costs include the operation and maintenance costs associated with meters and services, the depreciation, return and taxes on meters and services, billing and collecting costs including meter reading, and the reallocated costs of public fire service which are not recovered through hydrant charges. Customer costs also include a portion of administrative and general costs allocated to the customer cost components as explained and supported in the AWWA Manual M1.

22. Q. Why are public fire service costs included in customer costs?

A. In the districts other than St. Louis Metro, there are no public fire hydrant charges, therefore public fire costs must be recovered from the other customer classifications. In my study, the costs of public fire service are reallocated to the classes based on meter equivalents. This is to recognize that costs associated with providing fire service are almost entirely fixed and that fire costs vary with the number and relative size of the customers. Since these costs are fixed costs, it is appropriate to recover such costs in fixed charges rather than volumetric charges.

23. Q. Please describe the costs that are included in public fire service.

A. Public fire service costs include the investment (depreciation, return and taxes) in the extra capacity to meet fire demands for mains, pumps and storage facilities as well as the investment in public fire hydrants. Only a very small portion of the costs are related to actual water usage because the usage related to putting out fires is very small compared to the usage of all other classes.

24. Q. Why did the Company propose uniform customer charges?

A. All customers regardless of the service area have a service line and a meter. In all Districts, except the St. Louis Metro District, each customer has their meter read each month and receives a bill for payment. These customer services are provided by a common workforce and are billed from a central billing function. The only cost difference that may exist among the districts is the original cost of the services lines and/or meters and some minor differences in wage rates. However, I do not believe that this should prevent uniform customer charges because everyone has a meter and service line adequate to provide service, regardless of the original cost of those facilities.

25. Q. Did you prepare a schedule that shows the customer costs for each

district?

A. Yes. The attached schedule PRH-2R shows the customer costs by component for each district and computes the appropriate cost for a 5/8-inch meter which is typical for residential and small commercial usage. The fire costs discussed earlier are included in the meter costs in line 1. The schedule shows that the customer costs vary from $11.61 in Parkville to $20.43 in Brunswick. The last column shows the customer costs aggregated for all the districts and results in an overall cost of $15.35 per month for a 5/8-inch meter. The Company's proposal is to charge $15.00 per month for a 5/8-inch meter for all districts except St. Louis Metro.

26. Q. What was proposed for St. Louis Metro?

A. Due to the fact that a majority of the customers in the St. Louis Metro District are billed quarterly, the customer charges were set at $16.70 per quarter and $11.40 per month for a 5/8-inch meter.

27. Q. How did Staff and OCA calculate customer charges?

A. Staff used my methodology except that public fire costs were not included resulting in lower customer costs. OPC, in addition to excluding public fire costs, also excluded any portion of administrative and general costs which, as I stated earlier, are appropriate and supported by the AWWA methods. OPC's cost analysis results in much lower customer costs and should not be relied upon in the calculation of an appropriate customer charge.

28. Q. Please compare the Company's rate design with Staff's proposal.

A. The Company's proposed rate design is explained in more detail in my direct testimony however I will list the major points below:

- Maintained district specific pricing for all districts with the exception of Brunswick, Warren County, and Parkville Water districts and two small sewer districts which receive a subsidy.
- Proposed a uniform set of customer charges for the seven districts other than St. Louis Metro. An exception are the customer charges for meter sizes greater than 5/8-inch for Jefferson City which have charges less than the other districts in order to avoid large increases there.
- Proposed a single volumetric block for residential customers and a declining block structure for non-residential customers for the seven districts other than St. Louis Metro.
- Maintained St. Louis Metro basic structure with district specific monthly and quarterly customer charges and single block structure for each class.

29. Q. Please summarize Staff's proposal.

A. Staff proposed district specific pricing but recommends that subsidies continue only for Brunswick and Warren County Water. All districts have specific (and different) customer charges and single block rates for each class within each district.

30. Q. Please discuss the advantages of your proposed volumetric rates.

A. The Company is proposing single block rates for residential customers and declining block rates for non-residential classes. This allows for larger customers who generally experience better load factors to pay a lower tail block rate to reflect the lower cost to serve them. Staff proposed single block rates for all classes that do not reflect this benefit and results in extreme increases in certain districts for larger users.

31. Q. Mr. Russo indicates on page 7 of his class cost of service report that *"the existing declining block rates result in the small users in a customer class paying much more of the costs to provide their water than large customers pay."* Do you agree?

A. No, I do not. Mr. Russo ignores the fact that large customers must first pay for the all the usage at the initial block rates <u>before</u> they pay the lower rates at the tail block. This is the basic idea of the declining block rate structure. Large customers will pay for all the extra capacity costs in the initial blocks which allows for the payment of base costs in the tail block. It is appropriate and justified from a cost standpoint for larger customers with favorable load factors to pay less per unit as their volumes increase.

32. Q. Please address the issues presented in Mr. Johnstone's testimony.

A. Mr. Johnstone recommends that if the Commission finds that the contract rates for Triumph are reasonable, then the proper way to reflect the cost of service is to deduct the revenue generated from Triumph's contract from the cost to serve all other classes.

33. Q. Do you agree with that assessment?

A. Yes, I do. As I stated earlier, Mr. Johnstone's suggestion is exactly the way I presented the cost of service for St. Joseph's in prior cases. I set them out separately in this case in as a result of the Stipulation from the last case which addressed assessing the reasonableness of the contract rate.

34. Q. What other cost allocation issues did Mr. Johnstone address?

A. First, I'd like to correct Mr. Johnstone's testimony that this is the first time that I reflected a small mains adjustment in the St. Joseph cost allocation study. His statement is simply not correct. In all previous studies, I provided a small mains adjustment in a similar manner as I did in this case.

He also criticizes my use of judgment to estimate extra capacity factors.

35. Q. Did Mr. Johnstone use judgment to produce his studies?

A. Yes, he did. Staff and OPC witnesses did as well. It's part of conducting cost of service studies.

36. Q. Please address Mr. Johnstone's criticism of the allocation of corporate costs.

A. Mr. Johnstone allocates corporate costs on the basis of number of customers. This is not supported by the AWWA Manual M1. The manual states that such costs, which are really administrative and general costs, should be allocated based on the allocation of all other O&M expenses, excluding power and chemicals. This is the method I used to properly allocate corporate costs.

37. Q. What does Mr. Johnstone recommend for rate design in St. Joseph's?

A. Mr. Johnstone does not oppose the Company's customer charges and recommends equal percentage increases to the industrial consumption rates.

38. Q. On what basis does he support equal percentage increases to the industrial consumption charges?

A. He presumes that the existing rates are fair and reasonable. However, his presumption is simply not correct.

39. Q. Please explain.

A. The existing industrial first block rate in St. Joseph's is $6.065 per thousand gallons. This rate is about 47% higher than the same first block rate for residential ($4.1288) and commercial ($4.1374) customers. There is absolutely no cost of service basis for this discrepancy and Mr. Johnstone cannot explain it either. I have proposed (as in prior cases) to correct this problem by lowering the first block rate to a level that is more consistent with the other classes. This problem exists in other districts as well and I have proposed similar adjustments. Furthermore, his equal percentage increase to the tail-block rate will not be sufficient to cover the base cost of water.

40. Q. What do you mean by the base cost of water?

A. In the base-extra capacity method, the base cost of water represents the costs required to supply and deliver water at average load conditions without the costs necessary to meet extra capacity demands.

41. Q. Did you conduct such an analysis?

A. Yes, I did. It shows that the base cost of water is $2.205 per thousand gallons. Mr. Johnstone's recommended industrial rate increase, even at the 10.8% increase in his Study 2, would only produce $1.855 for the tail block which would be significantly below base costs. The AWWA Manual M1 on water rates suggests that the rates in a declining block structure should at least recover the base cost of water. The language comes from page 59 of the Manual and states as follows:

> *". . . Therefore, the unit base cost provides a measure of the lowest potential charge in a schedule of rates for delivery of uniform service. As such, the unit base cost is an important guide in preventing utilities from establishing a charge that could result in the sale of water below cost."*

42. Q. What do you conclude from your analysis of base costs with respect to Mr. Johnstone's recommended rate?

A. Mr. Johnstone's rate design is not cost based and results in rates that are significantly higher for the first-block rate and significantly below the unit base cost of water for the tail-block rate. Therefore, his rate design must be rejected.

43. Q. What is your view regarding other witnesses who are recommending across-the-board increases in this case?

A. My view is that cost of service allocation studies are conducted to assess the relative cost responsibilities with the proposed distribution of revenues. Generally, the proposed rate design should move revenues toward or equal to the cost allocation results. Across-the-board increases only perpetuate the inequities that may exist under the current rate structure. Therefore, I recommend the design of proposed rates that moves revenue toward the indicated cost of service.

43. Q. What do you conclude with regard to rate design?

A. The Commission should adopt the Company's rate design. It is cost based and reflects the proper allocation of costs presented in the Company's cost of service studies. It appropriately uses a uniform set of customer charges for the six districts plus the 5/8-inch charge in Jefferson City. It includes a single block volumetric rate for residential customers and a declining block rate structure for non-residential customers. Finally, it maintains the basic rate structure for the St. Louis Metro District which has been in existence for many years.

44. Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS METRO DISTRICT

Exhibit PRH-R1

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED JUNE 30, 2009

Customer Classification	Cost of Service** Amount (Schedule B)	Cost of Service** Percent	Revenues, Present Rates Amount	Revenues, Present Rates Percent	Revenues, Proposed Rates Amount	Revenues, Proposed Rates Percent	Proposed Increase Amount	Proposed Increase Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Rate A - Res/Com/Ind/OPA	$ 166,098,481	87.0%	$ 136,795,310	88.2%	$ 166,030,744	87.0%	$ 29,235,434	21.4%
Rate B - Sales for Resale	2,547,324	1.3%	2,418,389	1.6%	2,545,425	1.3%	127,036	5.3%
Rate J - Manufacturing	6,950,720	3.6%	5,928,260	3.8%	6,877,224	3.6%	948,964	16.0%
Rate F - Private Fire	1,918,040	1.0%	2,070,724	1.3%	2,070,724	1.1%	-	0.0%
Rate E - Public Fire	13,300,116	7.0%	8,001,215	5.1%	13,290,207	7.0%	5,288,992	66.1%
Total Sales	190,814,680	99.9%	155,213,898	100.0%	190,814,324	100.0%	35,600,426	22.9%
Other Revenues*	5,309,208		4,361,115		5,309,208		948,093	21.7%
Total	$ 196,123,889		$ 159,575,013		$ 196,123,532		$ 36,548,519	22.9%

* Includes Rate G and H Contract Sales.
** Cost of Service inculdes a revenue contribution to the Brunswick, Parkville Water, Warren County Water, Warren County Sewer and Cedar Hill Sewer Districts.

Exhibit PRH-R2

MISSOURI-AMERICAN WATER COMPANY
CALCULATION OF CUSTOMER CHARGE

ALL DISTRICTS EXCEPT ST. LOUIS METRO

	Brunswick	Jefferson City	Joplin	Mexico	Parkville Water	St. Joseph	Warren County Water	Warrensburg	Total	Customer Charge
(1) Cost Related to Meters	$ 68,124	$ 772,701	$ 2,278,023	$ 452,417	$ 329,888	$ 2,793,793	$ 82,244	$ 851,336	$ 7,628,526	
(2) Meter Equivalents X 12	5,736	155,796	361,704	69,444	81,480	446,064	5,376	99,132	1,224,732	
(3) Cost per Bill - Meter related	$ 11.88	$ 4.96	$ 6.30	$ 6.51	$ 4.05	$ 6.26	$ 15.30	$ 8.59		$ 6.23
(4) Cost Related to Services	22,061	605,843	1,035,940	361,760	139,256	784,046	12,947	285,584	3,247,438	
(5) Service Equivalents X 12	5,460	139,728	321,672	64,656	72,564	415,152	5,292	90,276	1,114,800	
(6) Cost per Bill - Services related	$ 4.04	$ 4.34	$ 3.22	$ 5.60	$ 1.92	$ 1.89	$ 2.45	$ 3.16		$ 2.91
(7) Cost Related to Billing and Collecting	24,121	947,426	1,864,518	388,215	380,818	2,371,213	12,538	390,847	6,379,698	
(8) Number of Customers X 12	5,340	129,766	290,376	58,740	67,530	385,840	5,256	84,180	1,027,027	
(9) Cost per Bill - Billing and Collecting	$ 4.52	$ 7.30	$ 6.42	$ 6.61	$ 5.64	$ 6.15	$ 2.39	$ 4.64		$ 6.21
(10) Total Customer Charge (3)+(6)+(9)	$ 20.43	$ 16.60	$ 15.94	$ 18.72	$ 11.61	$ 14.30	$ 20.13	$ 16.39		$ 15.35