

CITY OF AUSTIN WATER UTILITY
2008 COST OF SERVICE AND RATE STUDY

RESIDENTIAL RATE ADVOCATE REPORT

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INTRODUCTION

Ms Rubottom was engaged as the residential rate advocate in October, 2007 to participate in the Public Involvement Committee Process as a rate expert representing the City's residential rate class. Austin Water Utility (AWU) hired Ms. Rubottom to participate in the 2008 Cost of Service and Rate Study review and discussion. AWU also hired Red Oak Consulting to prepare the cost of service study and recommend methodologies to allocate AWU's water and wastewater cost of service to rate classes and design rates.

Ms. Rubottom attended the Public Involvement Committee (PIC) meetings held by AWU and provided written comments to Red Oak Consultant's recommended cost of service and rate design methodologies both for the water and wastewater utilities. She met with Ms. Lanetta Cooper, the representative of the residential rate class, on several occasions to discuss her concerns and to formulate ideas of cost allocation methods that reflected her views of the shortcomings of current methodologies. Ms. Cooper and Ms. Rubottom met with Mr. Randy Chapman concerning residential rate affordability for lower income residences. Ms Rubottom also met with the AWU staff and Red Oak Consultants to review more technical aspects of the studies.

As a part of the Residential Rate Advocate's scope of services, the following report summarizes the advocate's review of the final proposed cost of service allocation and rate design methodologies recommended by the Executive Team of the AWU. The report includes discussion sections on the Public Utility Involvement process, the Water and Wastewater cost of service and rate proposals. Appendix A includes all written comments filed in the PIC process by the Advocate on behalf of the residential class. Appendix B summarizes existing and proposed overall water and wastewater revenues. It provides an overview of the change in AWU costs during the study period and the sharing of the cost burden by major customer type. Appendix C summarizes the existing and proposed water rates and revenues by customer class annualized for a full year of billing each. Appendix D calculates monthly residential water and wastewater bills and totals them for various levels of water use. Appendix E summarizes the same information as Appendix C for the wastewater rates and revenues.

As a representative of all residential customers, the Residential Rate Advocate must look to the appropriateness of an overall concept for pricing. The residential rate design recovers costs unequally from the residential customers within the rate class depending on how much water they use. As such, the best way to represent each and every residential customer in the class is to seek out the best pricing approach within the residential class based on an appropriate pricing philosophy consistently applied, confident that differences in water bills to the customers of varying levels of consumption within the class are in the long term best interest of the public in general. With a philosophy of cost as a basis for fair and equitable

rates that promote the efficient utilization of society's resources, one does not fall prey to merely seeking methods that minimize the bills of one customer group over another in the short-run. The cost basis of rates must capture significant drivers of system costs as closely to reality as possible. To the extent that a compromise method is used which does not recognize critical aspects of system cost incurrence, then strict adherence to average cost of service may not necessarily lead to the most appropriate rates. In that case, a concern of gradualism in changing rates is important.

The PIC process was an exemplary process of what participating in utility rate setting with staff of a public entity can and should be like. Both the staff and the consultant were helpful and seemed committed to having all PIC members feel heard and understood and to have their questions answered. The customer participants on the PIC were clearly interested in doing what was in keeping with the cost and rate policies that they believed in, even if it meant on occasion accepting a higher rate as a result of doing the right thing. They were cordial and respectful of one another and the staff and consultants. The AWU staff diligently responded to requests for information that obviously required their efforts well outside normal working hours. Ms. Rubottom commends them for their dedication and professionalism.

In general, Ms. Rubottom agrees with many of the recommendations made by the Executive Team. However, she disagrees with the Executive Team's recommendations in a few areas and suggests several future studies to enhance AWU's rate setting. One area of disagreement is the recommendation to continue using the Base /Extra Capacity allocation method in the water cost of service study. Another is the Executive Team recommendation to move away from the 10% cost of service adjustment mechanism which has historically been used to set residential water and wastewater rates to produce less revenue than the calculated cost of service by setting commercial and industrial rates higher than their respective calculated cost of service amounts. A third area of disagreement is the proposed rate design within the residential class.

The future study areas Ms. Rubottom will recommend involve water seasonal and marginal cost analyses and studying the relationship of family income to water use among residential customers.

Lastly, the Advocate recommends minor changes to the Public Involvement Committee process.

Public Involvement Process

As mentioned above, the AWU PIC process was extraordinary. The AWU staff and consultant were helpful, cordial, patient and attentive to concerns expressed by all PIC members and the public. The members of the PIC themselves sought to understand the issues and to find the "right" answer, not just that which would yield the lowest rate to their class to the detriment

of other classes. The members came to realize the mutual dependence and identity that most everyone had with the other classes. Commercial and industrial representatives were themselves residential customers. Residential customers are employed by industrial and commercial customers. Multifamily customers house people just as people populate residences. Representatives did not seek to arbitrarily push or shove costs on to other classes. All did their best to understand water and wastewater system costs in an effort to find the most rational means of recovering AWU's needed revenue requirement fairly from all customers.

Ms. Rubottom would like to make a few suggestions for future PIC processes. The commercial class representatives need to have some form of expert assistance as they were the only class not represented by a utility rate professional, or in the case of the large industrial customers, engineers qualified to quickly comprehend the issues presented. Either the residential rate advocate expert should represent both customer classes or the commercial class should be otherwise provided with rate expertise. In this process, the small commercial representatives were frequently frustrated by not having the time to understand the utility industry ratemaking vocabulary and concepts in order to best represent their point of view. At least one commercial representative discontinued attending the PIC meetings perhaps due to this frustration. Many of the small commercial customers are busy with their businesses and do not have time to become utility rate experts on the side. If all customers in the process were only represented by themselves and did not have rate expertise, the commercial customers would not be so disadvantaged; however, that is not the case. The AWU staff and rate consultants went out of their way to be helpful and explain in as many ways and as straightforwardly as they could the various issues that were covered, but the process is inherently complex and involves, engineering, accounting, regulatory, finance and economic concepts that are not common knowledge even among educated professionals.

Also, there was a need to clarify the role of the PIC group as voting or non-voting in the beginning of the process. In the future it would be better for the roles of the group to be defined at the outset to decrease confusion and misunderstandings. Once again, the staff and consultants artfully lead the group through a process to come to the understanding that the group would not be "voting" on the issues, but would be providing input both collectively and individually to the Executive Team of decision makers.

Appendix A includes all of the written comments Ms. Rubottom provided to the Public Involvement Committee in the process. While the report which follows touches on the issues raised by the residential rate advocate in the process, the written comments included in Appendix A provide more in depth discussion of the issues described below.

WATER COST OF SERVICE AND RATE DESIGN

COST OF SERVICE

AWU Proposal

AWU's water cost of service includes its ongoing operating expenses, payments on debt borrowed to build water utility plant and ensure future water supply, transfers to the general fund of the City, and an additional amount of revenue to partially fund future utility plant construction. These costs are allocated to customer classes using historical metered water use and estimates of each class's water usage on the peak day and during the peak hour of the water system. The only actual measured customer class data used in the cost allocation is how much water each customer and customer class used monthly and the number of customers by type and meter size. All other peak day and peak hour amounts used in the cost allocation process are estimates based on assumptions applied to the monthly water uses of all classes that are then summed and compared to the measured system parameter – either peak day water production or peak hour water production. This is critical to note, because the differing peaking factor assumptions drive the different costs of service per gallon of water used for the different classes of service. For instance, the residential rate class has assumed higher daily and hourly peaking factors that drive the allocation of water costs. The result of these assumptions is that the residential cost of water service per 1000 gallons is a higher amount than that for the commercial, industrial and multifamily rate classes. The degree of this difference is in large part the result of the assumptions used to estimate peak day and peak hour water demands.

The most critical issue in setting water rates is the allocation method applied to the costs of the water infrastructure, both initial construction cost and ongoing operation and maintenance cost. These costs include the operating and capital costs of the water treatment, storage, transmission and distribution portions of water plant in service. For perspective, the total AWU Water Cost of Service to be recovered from rates is \$195 million of that \$135 million are affected by the Base/Excess Capacity Method of allocating. So, the choice of that method over others drives to a large degree the results of the cost of service between the customer classes.

Recommendations

Ms. Rubottom recommended that the AWU staff and consultants develop a new cost allocation method that allocated costs to seasons and then within seasons to customer classes in order to provide cost support for peak and off peak rates and the higher rates in the residential inverted block rate. Also she recommended that the allocation method consider some of the cost causal aspects of system planning and design such as the need for an off-peak demand time to be able to take some of the plant off line for maintenance and the reality that additional investment is made in plant to reduce annual operating costs beyond what would be needed just to serve peak water demands.

In lieu of the staff and consultants developing a seasonal cost allocation model, Ms. Rubottom recommended a change to the Base and Extra Capacity Non Coincidental Peak calculation which would provide more recognition of the role of total annual consumption in incurring plant costs. Ms. Rubottom's comments and concerns about the Base and Extra Capacity method as proposed are included in Appendix A in her written filed comments to the January 27, 2008 PIC meeting.

