



P.O. Box 927
Madison, WI 53701-0927
Telephone (608) 283-1788
Facsimile (608) 283-1709

Public Service Commission of Wisconsin
RECEIVED: 05/19/16, 4:11:04 PM

May 19, 2016

Mr. Steve Kemna, PE
Public Service Commission of Wisconsin
Division of Water, Telecommunications and Consumer Affairs
610 North Whitney Way
P.O. Box 7854
Madison, WI 53707-7854

RE: PSC Docket No: 5-WI-104 - Investigation into the Methods Used by Wisconsin's Water Utilities in Allocating Public Fire Protection Costs

Dear Mr. Kemna:

Thank you for the opportunity to comment on Commission Staff's Report prepared on its Investigation into the Methods Used by Wisconsin's Water Utilities in Allocating Public Fire Protection Costs in PSC Docket No. 5-WI-104. These comments are submitted on behalf of the Municipal Environmental Group - Water Division (MEG - Water), an association of 60 municipal water systems that advocates on issues involving water supply.

In PSC Docket 3720-WR-108, the Commission directed that a generic investigation be undertaken to study the methods of all water utilities in allocating public fire protection costs. Section 1 of the Report describes the purpose of the Report as follows:

The following report addresses Part A [of Order Point No. 14 from the Final Decision in PSC Docket 3720-WR-108] by describing how the Commission currently computes the PFP charge, comparing that method with best practices used by other states, identifying the assumptions that underlie the Commission's cost-of-service model (PSC model), and determining if those assumptions are reasonable or not. The goal of this study is to provide information to the Commission on changes that could be made to the PSC model to ensure that the Commission's methods reflect reasonable assumptions and produce accurate PFP costs allocations. Also, it is hoped that this study will reduce the number of contested issues encountered in water rate cases.

MEG - Water has four primary concerns with the Report.

- First, the Report does not accurately and consistently describe the assumptions underlying the Commission's proportional allocation of costs between general water service and fire protection.
- Second, the Report does not sufficiently evaluate other proportional methods of allocating costs between general water service and fire protection.

- Third, Commission Staff's recommendations to use the class absorption method for large utilities and to allow Option #1 for smaller utilities are contrary to a proportional allocation of costs and would result in general water service customers subsidizing public fire protection customers.
- Fourth, MEG - Water disagrees with Commission Staff's view that private fire protection charges should be eliminated.

The Report Fails to Accurately and Consistently Describe the Assumptions Underlying the Commission's Proportional Allocation of Costs between General Water Service and Fire Protection

MEG - Water is concerned that certain parts of the Report reflect a view of public fire protection that is inconsistent with the Commission's current cost-of-service model and with the most widely used and accepted approach for allocating fire protection costs. The American Water Works Association's, *Principles of Water Rates, Fees, and Charges*, M1 Manual of Water Supply Practices ("M1 Manual") at pages 142-144, discusses the different approaches that have been taken with respect to fire protection service charges:

In general, three approaches have historically been used in allocating costs to fire protection. They include

1. Allocating primary cost to general water service, with incremental costs allocated to fire protection service;
2. Allocating primary cost to fire protection service, with incremental costs allocated to general water service; and
3. Allocating costs to general water service and fire protection service on a basis proportional to the system design and usage.

The first two approaches presume that the system was primarily built to provide either general water service or fire protection. A review of these methodologies and additional historical publications was published in 1982 in *Journal AWWA*. The use of each approach results in a significantly different allocation to fire protection service. Since the mid-1900s, and continuing through the present, the third approach – allocating costs proportionately to system design and usage between general water service and fire service – has been most widely used and accepted. Section III of this manual illustrates the use of this third approach. Both the base-extra capacity and the commodity-demand methods of cost ***This [third] approach recognizes that the dual functions of water systems, to provide basic water service and to provide a readiness-to-service capacity for fire protection, are equally important. This is the rationale used in this manual to develop cost-based rates that avoid subsidization of users.*** allocation adhere to the principle of proportional allocations.

(emphasis added.)

The Commission's base-extra capacity cost-of-service model is based on a proportional allocation of costs between general water service and fire protection service (the third approach discussed above). As M1 states, this proportional allocation method reflects the dual functions of water systems and avoids the subsidization of users of the different services. Under the first approach described in M1, general water customers would be subsidizing fire protection customers because general water customers would bear the brunt of costs related to the water system while fire protection customers would only pay for incremental costs. Under the second approach, fire protection customers would be subsidizing general water customers because fire protection customer would bear the brunt of costs related to the water system while general water customers would only pay for incremental costs. Only under the third approach -- the approach currently followed by the Commission -- is there no subsidization of costs between users of the different services. Systems costs are proportionately allocated between the two different services and users of each service pay the costs allocated to the service they use.

The Report does not consistently reflect the fact that the Commission currently follows the proportional (or third) approach described by M1 -- treating public fire protection as an equally important service provided by a water utility and proportionately allocating costs between general water service and public fire protection. In many places in the Report, Staff erroneously describes the first approach in M1 -- allocating costs primarily to general water service, with only incremental costs allocated to fire protection service -- as the basis for establishing fire protection charges. For example, on pages 2-3 of the Report, PFP is described as a charge that covers the costs to "augment" the utility's water system to provide the high flows and pressures needed to fight fires, implying that a PFP charge is only to recover the incremental costs required to provide fire protection. On pages 6-8 of the Report, the Report looks at whether the general service demand or the fire demand "*controls*" the design of the water system and it refers to the non-controlling feature as "redundant." Considering one service primary and the other redundant is contrary to the rationale underlying the Commission's proportional allocation of costs. It fails to recognize that the same facilities are being used to provide two different services and that both services benefit by being able to use shared facilities.

The Report should be revised to accurately reflect the assumptions that underlie the approach followed by the Commission -- that water systems provide two equally important services and that costs should be allocated proportionately between general water service and public fire protection. The ratemaking theory and assumptions underlying the proportional allocation approach currently followed by the Commission is the best approach to be used for dealing with fire protection charges and the Commission should continue to follow a proportional approach.

The Report does not Sufficiently Evaluate Other Proportional Methods of Allocating Costs between General Water Service and Fire Protection.

In the Report, Commission Staff identifies as an issue the fact that PFP charges increase with decreasing sales volume. (Report, p. 67.) Commission Staff then looks at methods to "separate customer water sales volumes from the PFP customer class, or to at least mitigate

the impact of water sales on the PFP customer class.” (*Id.*) While the Report discusses options that could be used to refine the Commission’s current allocation of costs between general water service and public fire protection, some of the options that follow a proportional allocation approach are disregarded because “unfortunately” they do not “significantly mitigate the impact that the volume of water sales has on the total amount allocated to the PFP customer class as compared to the standard PSC model.” (p. 67- 71.)

It appears that the focus of Commission Staff’s investigation is on providing recommendations to the Commission that will significantly mitigate or reduce PFP charges when there is declining water sales. If that is the case, there are alternative methods for decoupling the calculation of public fire protection charges from general water usage that would continue to use a proportional allocation method. For example, costs could be allocated proportionately between general water service and public fire protection on the basis of design instead of usage. Alternatively, costs could be allocated proportionately on the basis of pipe size instead of usage. Undoubtedly, there are still other proportionate allocation methods that could be used that would not be based on water sales. Commission Staff should more fully explore other proportionate methods of allocating costs between general water service and public fire protection.

Commission Staff’s Recommendations to Use the Class Absorption Method for Large Water Systems and to Allow the Use of Option #1 for Smaller Water Systems are Contrary to a Proportional Allocation of Costs and Would Result in General Water Service Customers Subsidizing Public Fire Protection Customers.

Commission Staff’s recommendations that large water systems use the class absorption method and that smaller system be allowed to use Option #1 is contrary to a proportional allocation of costs and would result in general water use customers subsidizing public fire protection customers.

Again MEG - Water points to the M1 Manual and its discussion of the three approaches that have historically been used in allocating costs to fire protection. Commission Staff’s recommendations follow the first approach described in the M1 Manual -- it allocates the primary cost to general water service, with incremental costs allocated to fire protection service. This is most evident in Commission Staff’s discussion of the class absorption method on page 80 of the Report.

The class absorption method addresses the issue discussed in Section 2, namely, how to allocate costs for very large community water systems, where the maximum hour demand for general service is larger than the fire demand. For these large water utilities the general service maximum hour demand *controls* the design of the water system. ***From a regulatory standpoint, it is Commission staff’s opinion that it does not make sense in these cases to allocate costs to the PFP customer class, since it represents a redundant demand that is already covered by the infrastructure needed to meet the general service maximum hour demand.*** The class absorption method is a cost-of-service model that assigns all system costs to the non-PFP cost functions for large utilities.

(emphasis added.) The highlighted comment by Commission Staff follows the first incremental approach described in the M1 Manual, and is completely contrary to the proportional method of allocating costs to both general water service and public fire protection that the Commission currently follows and that the M1 Manual recognizes as the most widely used and accepted approach for allocating fire protection costs.

The Report indicates that one of the potential benefits of using the class absorption method is to eliminate one of the more contentious issues that occur during large contested rate cases. However, this view is short-sighted. Moving away from a proportional allocation of costs that avoids subsidization of users towards a system where fire protection customers get free service at the expense of general service customers will be unlikely to eliminate contested rate cases in the long run. A downside of the class absorption method, as the Report acknowledges, is that customer classes pay for hydrants and other costs that would have been previously allocated to fire protection in proportion to their base and maximum hour water use which may have little to no relation to their fire demands.

Commission Staff's recommendation that smaller systems be allowed to use Option #1 is also concerning. Option #1 is an incremental approach to cost allocation that is also similar to the first incremental approach described in the M1 Manual but Option #1 does not even allocate all incremental fire protection costs to fire protection. It only allocates the cost of fire hydrants to public fire protection. Commission Staff suggests that "[i]f a water utility is experiencing significant reductions in water sales, then they may want to use Option #1 to eliminate the link between the declining general service sales and the subsequent increase in the PFP cost-of-service." (p. 90.)

This recommendation to allow use of Option #1 -- like the recommendation on the class absorption model -- is not based on sound ratemaking principles, but rather is based upon achieving a result which Commission Staff apparently believes is desirable. Both of these recommendations represent a step backwards from the Commission's current method of proportionally allocating costs between general water service and public fire protection. Both recommendations are inconsistent with the approach that according to the M1 Manual is the most widely used and accepted approach.

The Commission should not move away from allocating costs proportionately between general water service and public fire protection. It is important for the Commission to continue to recognize that water systems provide two different and equally important functions and that users of one service should not subsidize the users of the other service. Continuing to proportionately allocate costs between the two services provided by a water utility is the best way to ensure that there is no subsidization of users.

The Commission currently allocates costs proportionately between general water service and public fire protection on the basis of usage. If the Commission is concerned, as Commission Staff apparently is, that public fire protection charges increase as water sales decrease, Commission Staff should explore other *proportional allocation* methods for allocating costs that

are not based on usage, such as allocating on the basis of design or pipe size. The Commission should not have a way from using a proportional allocation method.

MEG - Water Disagrees with Commission Staff's View that the Private Fire Protection Charge Should be Eliminated.

MEG - Water disagrees with Commission Staff's recommendation that the private fire protection charge be eliminated. MEG - Water believes that utilities should continue to be able to individually determine whether to charge private fire protection charges. Private fire protection is a service provided by a water utility. A utility should be allowed to charge for the services it provides.

Commission Staff's view that the private fire protection charge should be eliminated appears to be based upon Staff's view of fire protection as an incremental service. As discussed above, Commission Staff's view is inconsistent with the view that the dual functions of water systems, to provide basic water service and to provide a readiness-to-service capacity for fire protection, are equally important, and that costs should be allocated proportionately in order to avoid subsidization of users.

It is undeniable that utilities provide private fire protection service. This service is described in the M1 Manual (at p. 144-145) as follows:

[P]rivate fire protection service is provided to individual customers that receive additional fire protection service through private hydrants, standpipes, or sprinkler connections. In this instance, the costs of private fire protection can be directly allocated to the user of the private service through separate fire line charges or other methods. These private fire protection connections provide a direct service to the individual customer's property that is not available to customers without such connection; these customers receive a service from the utility that others do not receive and should pay for the cost of the additional service.

MEG - Water members also indicate that utilities incur additional costs for private fire systems. Additional services done for private fire lines include:

- In new installations, utilities may have a detector meter that monitors the line for use because private fire lines should not have use unless there is a fire or testing on the line is done. The cost of the detector meter and the cost of reading the meter is included in the private fire line fee.
- In older installations where there is no detector meter, careful visual inspection must be made to assure that improper taps on the line are not done.
- Private fire lines are on the special list for cross-connection/backflow inspections.
- The utility provides information to the private fire system designer on what pressure and flow should be used to properly design the system.
- On newly installed private fire lines the local fire inspector requires a fire flow test be performed on the installed fire line prior to granting occupancy. Utility operators are on

Mr. Steve Kemna, PE
May 19, 2016
Page 7


site during the field testing to ensure proper operation of the test due to the high rate of flow that is required. Utilities have experienced problems in older distribution systems (water quality complaints, main breaks, reduced pressure) from private fire line testing that the utility did not know about.

Other water utility customers should not be required to subsidize private fire protection service provided to these customers.

Summary

MEG - Water commends Commission Staff on all its work on this Report. The Report contains a great deal of information that will be useful as the Commission considers this issue in the future. MEG - Water's concerns with the Report go to underlying principles regarding the appropriate view of water systems. MEG - Water believes that it is critical – and appropriate – for the Commission to recognize that the dual functions of water systems are equally important and that costs between these two services should be allocated fairly and proportionately. The Commission Staff's recommendations which are based on an incremental view of public fire protection service fail to do this.

MUNICIPAL ENVIRONMENTAL GROUP
-- WATER DIVISION



Lawrie J. Kobza
Legal Counsel

cc: MEG - Water Members (via e-mail)

F:\DOCS\WD\20211\4\A2457959.DOCX