

COMMONWEALTH OF KENTUCKY  
PUBLIC SERVICE COMMISSION

Kentucky-American Water Company

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Case No. 2004-00103

Direct Testimony of  
**Scott J. Rubin**

on Behalf of  
the Office of Attorney General

August 27, 2004

1 **Introduction and Qualifications**

2 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

3 A. My name is Scott J. Rubin. My business address is 3 Lost Creek Drive, Selinsgrove, PA.

4 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

5 A. I am an independent consultant and an attorney. My practice is limited to matters  
6 affecting the public utility industry.

7 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?

8 A. I have been asked by the Office of Attorney General (AG) to review the tariff changes  
9 and rate design proposed by Kentucky-American Water Company (KAWC or Company)  
10 in this case, and to make recommendations concerning the way in which rates should be  
11 designed to recover any rate increase granted to the Company.

12 Q. WHAT ARE YOUR QUALIFICATIONS TO PROVIDE THIS TESTIMONY IN THIS CASE?

13 A. I have testified as an expert witness before utility commissions or courts in the District of  
14 Columbia and in the states of Arizona, Delaware, Kentucky, Illinois, Maine, New Jersey,  
15 New York, Ohio, Pennsylvania, and West Virginia. I also have testified as an expert  
16 witness before committees of the U.S. Congress and the Pennsylvania House of  
17 Representatives. I also have served as a consultant to several national utility trade  
18 associations and to state and local governments throughout the country. Prior to  
19 establishing my own consulting and law practice, I was employed by the Pennsylvania  
20 Office of Consumer Advocate (OCA) from 1983 through January 1994 in increasingly  
21 responsible positions. From 1990 until I left the OCA, I was one of two senior attorneys  
22 in that Office. Among my other responsibilities in that position, I had a major role in

1 setting the OCA's policy positions on water and electric matters. In addition, I was  
2 responsible for supervising the technical staff of that Office. I also testified as an expert  
3 witness for that Office on water rate design and cost of service issues.

4 Throughout my career, I developed substantial expertise in matters relating to the  
5 economic regulation of public utilities. I have published articles, contributed to books,  
6 written speeches, and delivered numerous presentations, on both the national and state  
7 level, relating to regulatory issues. I have attended numerous continuing education  
8 courses involving the utility industry. I also periodically participate as a faculty member  
9 in utility-related educational programs for the Institute for Public Utilities at Michigan  
10 State University, the American Water Works Association, and the Pennsylvania Bar  
11 Institute.

12 Q. DOES ANY OF YOUR EXPERIENCE SPECIFICALLY INVOLVE RATE DESIGN AND/OR COST OF  
13 SERVICE ANALYSES FOR LARGE WATER UTILITIES?

14 A. Yes, it does. I have testified as an expert witness on rate design and/or cost of service  
15 analyses in cases involving several large water utilities on behalf of public advocates in  
16 Arizona, Kentucky, Illinois, Pennsylvania, and West Virginia. These assignments  
17 include, among others, recent rate cases for Illinois-American Water Company,  
18 Pennsylvania-American Water Company, and West Virginia-American Water Company.  
19 In addition, I am currently serving as a water rate design and cost of service consultant to  
20 the staff of the Connecticut Department of Public Utility Control in a rate case involving  
21 Aquarion Water Company's operations in that state.

22 In addition, from 1988 through 2001, I served as a member of the Rates and  
23 Charges Subcommittee of the American Water Works Association (AWWA). During my

1 tenure on that committee, we were responsible for preparing the current version (the Fifth  
2 Edition, published in 2000) of AWWA's Manual M1: *Principles of Water Rates, Fees,*  
3 *and Charges* (AWWA Manual M1). AWWA Manual M1 is generally considered to be  
4 the major reference work within the water industry for the establishment of rates,  
5 including revenue requirements, rate design, and cost of service. I served on the Editorial  
6 Committee that prepared the manual. My responsibilities included being primarily  
7 responsible for the production of six chapters, assisting in the production of two  
8 additional chapters, reviewing the entire book prior to publication, and helping to present  
9 a seminar for the industry on the new Manual at AWWA's annual conference.

#### 10 **Summary of Issues**

11 Q. PLEASE SUMMARIZE THE SPECIFIC SUBJECT AREAS OF YOUR TESTIMONY.

12 A. My testimony will address the following issues:

- 13 • KAWC's proposed Emergency Pricing Tariff
- 14 • KAWC's proposed Low Income Discount
- 15 • KAWC's anticipated Economic Development Tariff
- 16 • KAWC's proposed Activation Charge
- 17 • My proposal to allocate any rate increase granted in this case, including
- 18 the calculation of rates to collect the AG's proposed revenue requirement.
- 19

1 **Emergency Pricing Tariff**

2 Q. PLEASE DESCRIBE YOUR UNDERSTANDING OF THE COMPANY'S PROPOSED EMERGENCY  
3 PRICING TARIFF.

4 A. KAWC is seeking approval of a new tariff that would implement pricing penalties for use  
5 above a baseline level in the event of a severe drought. This type of rate structure is often  
6 called a "water budget."

7 Q. DO YOU HAVE CONCERNS WITH THE COMPANY'S PROPOSAL?

8 A. Yes, I do. My concerns can be summarized in one sentence: It does not appear that the  
9 Company has fully thought through the very complex implementation and public policy  
10 issues presented by its proposal.

11 Q. CAN YOU ILLUSTRATE WHAT YOU MEAN?

12 A. Yes, I can. The Company does not have the billing systems or personnel currently in  
13 place to implement a water budget type of rate. It also does not have the capability to  
14 allow customers to challenge the water budget that the Company would determine for  
15 them. In AG 1-25, we asked KAWC if a customer would be able to challenge the water  
16 budget set by the Company because, for instance, the size of the customer's household  
17 changed between the winter and summer (due to the birth of a baby, a child returning  
18 home from college, a parent coming to live with them, etc.). The Company's response is  
19 that it "is not the intent of the Emergency Pricing Tariff to do so." Rather, KAWC thinks  
20 that these types of issues would be resolved by the Water Conservation Appeals Board  
21 (Board) created by the Lexington-Fayette Urban County Government.

1 Q. IS IT CLEAR THAT THE BOARD WOULD, IN FACT, BE ABLE TO ADDRESS THESE TYPES OF  
2 PROBLEMS?

3 A. No, it is not. I reviewed the ordinance that established the Board (Ordinance No. 221-  
4 2000, provided in KAWC's workpapers beginning at W/P-2-5, page 24). The ordinance  
5 specifically states: "The Board shall not consider the appeal of a drought tariff or other  
6 restrictive measure imposed on a customer by Kentucky-American Water Company or  
7 any other Fayette County water purveyor." (W/P-2-5, page 30). As I read these  
8 provisions, it does not appear that a customer who is aggrieved by KAWC's application  
9 of the emergency pricing tariff would be able to appeal to the Board. This would mean,  
10 contrary to KAWC's expectation, that customer requests for changes in their water  
11 budgets would need to be resolved either by KAWC or by the Public Service  
12 Commission.

13 Q. OTHER THAN ISSUES INVOLVING CUSTOMER-SPECIFIC CHANGES IN WATER BUDGETS, DO  
14 YOU HAVE OTHER CONCERNS WITH KAWC'S PROPOSAL?

15 A. Yes, I do. Water budgets are a relatively new phenomenon in the water utility industry,  
16 particularly as a drought response measure. There are a few utilities in arid and semi-arid  
17 climates that use them routinely to try to price summer consumption closer to the  
18 marginal cost of providing supplemental, seasonal sources of water. As far as I know,  
19 there are few, if any, utilities that have attempted to use a water budget as an emergency  
20 response measure to a drought.

1 Q. WHY MIGHT UTILITIES BE RELUCTANT TO USE WATER BUDGETS AS A DROUGHT RESPONSE  
2 MEASURE?

3 A. One of the biggest drawbacks is the administrative cost of implementing a water budget.  
4 There would be substantial increased costs for computer programming, customer  
5 communication, meter reading, billing, establishing an appeals process, and so on.

6 Moreover, because water budgets have been used so infrequently, there is no real  
7 data concerning their ability to cost-effectively accomplish the goal of decreasing water  
8 consumption during an emergency. At the present time, a study has been proposed to  
9 evaluate the effectiveness of existing water budget programs, including their potential use  
10 as a drought response measure. The study is seeking funding from the American Water  
11 Works Association Research Foundation (AwwaRF), the U.S. Environmental Protection  
12 Agency, and several utilities. I am serving on AwwaRF's advisory committee for the  
13 study and, as such, I am subject to a confidentiality agreement that prohibits me from  
14 disclosing any detailed information about the study until it is completed (assuming that it  
15 receives the necessary funding). It is fair to say, however, that this study would be the  
16 first comprehensive study of the costs and benefits of water budgets, and it probably will  
17 not be complete until 2006 or 2007.

18 Q. BUT OTHER UTILITIES ARE USING WATER BUDGETS, WHY SHOULDN'T KAWC JUST FOLLOW  
19 THEIR LEAD?

20 A. As I mentioned, there are a few utilities that use water budgets, but as far as I know, all of  
21 them are government-owned utilities. As part of local government, these utilities can  
22 deal with any legal, policy, or property rights issues that may arise from a water budget  
23 program. In addition, the concern with over- or under-collecting revenue is somewhat

1 minimized with a government utility. First, a government utility usually can change its  
2 rates without seeking approval from an outside entity; thus, it can adjust its rates fairly  
3 quickly if it is in a serious over- or under-collection situation because of the water budget.

4 Second, no one is going to receive a windfall if a government utility recovers  
5 more revenue than it expected. In contrast, with an investor-owned utility like KAWC  
6 over-collections can result in windfall profits to the utility's investors, may trigger  
7 executive bonuses, and have other unintended consequences. Similarly, under-  
8 collections could result in serious financial difficulties for an investor-owned utility that  
9 might be difficult to remedy due to legal restrictions on retroactive ratemaking.

10 Third, with most government utilities facing an emergency, there usually is little  
11 concern about the motivation behind the utility's decision making. While I certainly do  
12 not believe that KAWC is proposing an emergency water budget in order to enrich itself,  
13 there is the risk that the public will perceive it in that way and may react negatively to the  
14 implementation of the emergency provisions.

15 Fourth, many investor-owned utilities including KAWC are subject to specific,  
16 legal restrictions on their rates; for example, that rates cannot be discriminatory. Water  
17 budgets effectively establish each customer as a separate class with its own rates. Two  
18 neighbors with similar characteristics might have different water budgets established (for  
19 example, because one has older plumbing fixtures than the other or because one has a  
20 child in college during the winter), resulting in similar customers with similar  
21 consumption paying very different prices for service. It is not at all clear to me that such  
22 a pricing mechanism would meet legal requirements for ratemaking by KAWC or any  
23 other investor-owned utility.



1 Q. DOES THIS MEAN THAT AN INVESTOR-OWNED UTILITY SHOULD NEVER BE ALLOWED TO USE  
2 A WATER BUDGET?

3 A. Frankly, I don't know the answer to that question. To the best of my knowledge, no  
4 investor-owned utility – even in arid and semi-arid climates like California and Arizona –  
5 is using a water budget. While I don't know the reasons why water budgets are not being  
6 used by those utilities, I expect it has a lot to do with the kinds of legal, policy, and cost  
7 issues that I raise. I have not fully thought through these issues, and I don't believe that  
8 KAWC has either.

9 Q. EARLIER YOU TALKED ABOUT THE COST-EFFECTIVENESS OF WATER BUDGETS AS A  
10 DROUGHT RESPONSE MEASURE. DO YOU BELIEVE THAT WATER BUDGETS ARE A COST-  
11 EFFECTIVE WAY TO RESPOND TO A DROUGHT EMERGENCY?

12 A. Again, I have to answer that I don't know. As far as I know, this issue has not been  
13 studied. Cost effectiveness is an extremely important question. We know that customers  
14 respond to calls for conservation as part of a drought emergency. For example, they tend  
15 to comply pretty readily to odd-even lawn watering, or even outright bans on outdoor  
16 water use, if they perceive a real emergency, particularly when restrictions are coupled  
17 with penalties for non-compliance. While enforcement and communication are not cost-  
18 free, these types of measures have a relatively low implementation cost when compared  
19 to establishing an emergency water budget for each customer. So the question becomes  
20 whether a water budget is a cost-effective way to achieve a further reduction in water  
21 consumption, over and above these other measures. I don't know the answer to that, and  
22 neither does KAWC (or anyone else for that matter).

1 Q. WHAT DO YOU RECOMMEND?

2 A. I recommend that the Commission not approve KAWC's Emergency Pricing Tariff at the  
3 present time. I do not believe that the emergency water budget the Company is proposing  
4 has been shown to be a cost-effective method to reduce consumption during emergency  
5 conditions. I am very concerned about the implementation of such a program by an  
6 investor-owned utility, not only because of its cost, but also because of the legal and  
7 policy issues associated with this type of pricing method.

8 **Low Income Discount**

9 Q. KAWC HAS PROPOSED TO REDUCE ITS METER CHARGE BY 25% FOR LOW-INCOME  
10 CUSTOMERS. DO YOU SUPPORT THE COMPANY'S PROPOSAL?

11 A. I am advised by counsel that it is not lawful for KAWC to adopt a special rate for a  
12 customer because of the customer's income. Based on this legal advice, I cannot  
13 recommend that the Commission adopt KAWC's proposed low-income discount.

14 Q. DOES THIS MEAN THAT THERE IS NOTHING THE COMPANY CAN DO TO HELP ITS LOW-INCOME  
15 CUSTOMERS AFFORD WATER SERVICE?

16 A. No, it certainly does not mean that. Since late last year, I have been working with the  
17 American Water Works Association on a study to determine, among other things, how  
18 water utilities can help ensure that low-income customers remain able to afford water  
19 service. We have found that relatively few water utilities (probably fewer than 10%)  
20 have any type of special rate for low-income customers, but more than two-thirds of  
21 utilities have some type of program to help their low-income customers. For example,  
22 some utilities have conservation programs that are specifically targeted to the needs of

1 low-income customers (they don't require an up-front investment, for example, and may  
2 even provide no-cost leak repairs through partnerships with local plumbers and trade  
3 unions). Other utilities have on-going partnerships with community-based organizations  
4 that work with, and provide assistance to, low-income residents of the community. Even  
5 if the utility cannot provide direct funding to the organization through its rates, the utility  
6 often can find other ways to assist the organization – such as through fund-raising, bill  
7 stuffers, public service announcements, voluntary contributions on utility bills,  
8 contributions from utility stockholders, and so on.

9 In addition, I have recommended that water utilities can expand this type of  
10 assistance by helping to increase the level of participation in government-sponsored  
11 assistance programs, such as the Low Income Home Energy Assistance Program, the  
12 telephone Lifeline program, and the Earned Income Tax Credit. The utility might be able  
13 to work with local organizations, again at little or not cost to the utility, to promote these  
14 programs (such as through bill stuffers, volunteer activities, or by training call center  
15 personnel to inquire about program participation when it appears that a customer might  
16 qualify for assistance).

17 In short, I believe there are many ways KAWC could assist its low-income  
18 customers without running afoul of the law. Based on the legal interpretation that I  
19 received from counsel, it does not appear that a special rate for low-income customers is  
20 a method that KAWC can use to provide such assistance.

1 **Economic Development Tariff**

2 Q. HAVE YOU REVIEWED KAWC'S TESTIMONY CONCERNING THE POSSIBILITY OF PROPOSING  
3 AN ECONOMIC DEVELOPMENT TARIFF IN THE FUTURE?

4 A. Yes, I have reviewed that testimony. As is the case with a special rate for low-income  
5 customers, I am advised by counsel that it is not lawful for KAWC to adopt a special rate  
6 for a customer to support economic development, particularly because it could result in  
7 providing the customer with an undue preference when compared to other similarly  
8 situated customers. Based on this legal advice, I would recommend that the Company  
9 cease expending its resources on the development of an economic development tariff.

10 **Activation Charge**

11 Q. ARE YOU FAMILIAR WITH THE COMPANY'S PROPOSAL TO CHARGE AN ACTIVATION CHARGE  
12 OF \$24 TO NEW CUSTOMERS AND TO EXISTING CUSTOMERS WHO MOVE?

13 A. Yes, I have reviewed the Company's proposal.

14 Q. DO YOU SUPPORT THE IMPOSITION OF AN ACTIVATION CHARGE?

15 A. No, I do not. While I recognize that some water utilities charge activation fees, I do not  
16 believe that this is the preferred practice. AWWA Manual M1 contains a chapter on  
17 Miscellaneous and Special Charges. At the outset, the chapter lists the following six  
18 general principles for establishing these types of charges:

- 19
- Beneficiaries of a service should pay for that service.
  - Services provided for the benefit of a specific individual, group, or  
20 business should not be paid from general utility revenues.  
21

- 1           • Services provided to persons or entities that are not customers of the utility  
2           should not be paid from water rate revenues or other general utility  
3           revenues.
- 4           • Services for which there are charges are generally voluntary.
- 5           • The price of services may be used to change user behavior and demand for  
6           the good or service.
- 7           • The level of service charges should be related to the cost of providing  
8           service.

9           AWWA Manual M1, page 246.

10           In my opinion, the activation fee proposed by KAWC does not meet at least two  
11           of these principles. First, and most importantly, the service is not voluntary. The  
12           prospective customer does not have a choice in whether to request the service – the  
13           customer must have water and does not have the ability to choose a different water  
14           supplier.

15           Second, the account activation fee is not designed to change customer behavior or  
16           reduce the incidence of requests for the service. In fact, the existence of the fee would  
17           have nothing to do with the number of people who ask to be new customers. Moreover,  
18           the Company does not want to reduce the incidence of people requesting the service. The  
19           Company wants to encourage people to become customers, particularly if it involves  
20           building new structures or occupying vacant structures.

21   Q.   OTHER THAN THE PRINCIPLES SET OUT IN AWWA MANUAL M1, ARE THERE OTHER  
22           REASONS WHY KAWC SHOULD NOT IMPLEMENT ITS PROPOSED ACTIVATION FEE?

23   A.   Yes, there is another very important reason why the activation fee should not be  
24           approved. It is highly likely that the proposed activation fee would be borne most heavily  
25           by those who can least afford to pay it: low-income customers. A study by the U.S.

1 Census Bureau shows that the lower a household's income, the more likely it is to move.\*  
2 Specifically, the study finds that households with incomes less than \$25,000 per year  
3 have lived in their current home an average of 3.6 years. At each higher income level,  
4 the household is likely to stay in its home longer: 4.3 years for incomes between \$25,000  
5 and \$50,000; 5.4 years for incomes between \$50,000 and \$75,000; and 6.3 years for  
6 incomes of \$75,000 or more.

7 Indeed, low-income households were almost twice as likely to move during a year  
8 than higher-income households. Specifically, the study found that of the households with  
9 incomes less than \$25,000 per year, 23.3% had moved within the previous year, while in  
10 the highest-income households (\$75,000 or more) only 12.7% had moved within that  
11 same period.

12 Q. WHAT DO YOU RECOMMEND ABOUT KAWC'S PROPOSED ACTIVATION FEE?

13 A. I recommend that the Commission deny the Company's request to establish this new fee.  
14 The fee does not meet the basic principles in the AWWA manual, in that it is not optional  
15 and it would not serve to discourage undesirable behavior. Moreover, it appears that the  
16 fee would fall most heavily on those who can least afford to pay it, while higher-income  
17 households would be least likely to pay it. Census data indicates that it is likely that the  
18 lowest-income households served by the Company would be nearly twice as likely to pay  
19 this fee as higher-income households. For all of these reasons, I recommend that the  
20 Commission deny the Company's request.

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\* Jason P. Schachter and Jeffrey J. Kuenzi, *Seasonality of Moves and the Duration and Tenure of Residence: 1996*, Population Division Working Paper Series No. 69 (Dec. 2002), <<http://www.census.gov/population/www/documentation/twps0069/twps0069.html>>.

1 Q. IF THE COMMISSION DISAGREES WITH YOUR RECOMMENDATION AND APPROVES THE  
2 ACTIVATION FEE, DOES THAT HAVE ANY RATE DESIGN IMPLICATIONS?

3 A. Yes, it does. The costs that would be recovered through the account activation fee are  
4 now recovered almost exclusively through the 5/8-inch meter charge. The Company  
5 projects that nearly all of its new customers will be 5/8-inch meter customers. Further,  
6 the types of costs recovered through the charge – customer service, billing, and field  
7 service costs – would be recovered primarily through the meter charges under the  
8 Company's typical cost of service study methodology. If the Commission approves the  
9 activation fee, therefore, I recommend that the Commission use that additional revenue to  
10 offset any increase in the 5/8-inch customer charge.

11 With this type of new fee, it is important to try to match the new revenues with  
12 the expenses that are trying to be recovered. This type of approach helps to keep the  
13 Company's various charges from moving out of alignment with the cost of service. It  
14 also helps to ensure that the customers who are paying the activation fee would at least  
15 receive some, minimal benefit through reductions in the customer charge portion of their  
16 bill.

17 Q. YOU SAID THAT THE COMPANY WOULD ALLOCATE MOST OF THE COSTS BEING COLLECTED  
18 UNDER THE ACTIVATION FEE TO COSTS RECOVERED THROUGH THE METER CHARGE. CAN  
19 YOU BE MORE SPECIFIC?

20 A. Yes, I reviewed the Company's cost of service study from its last rate case, a copy of  
21 which is provided in KAWC Exhibit 36 in this case. The major costs being recovered  
22 through the proposed activation fee are field service labor, customer service labor, and  
23 associated overheads and expenses (such as telephone service, computers, office space,

1 and transportation). In AG 1-8, the Company further described the process involved in  
2 performing an account activation. From that description, essentially all of the work  
3 involves a customer service representative, a customer service supervisor, and a field  
4 service person who opens a valve and/or reads the meter. Under the Company's cost of  
5 service study, all of these functions – customer service and metering – are allocated to the  
6 cost categories that are included in the metering and billing functions.

7 Specifically, metering costs are allocated using factors 9 and 12, which allocate  
8 100% of the costs to the metering function, and customer accounts costs other than meter  
9 reading are allocated using factor 11 which allocates 100% of the cost to the billing and  
10 collecting function. In turn, metering, billing, and collection costs are recovered through  
11 the meter charge.

12 Q. WHAT DO YOU RECOMMEND?

13 A. I recommend that if the Commission rejects my recommendation and approves the  
14 account activation fee, then the increased revenue resulting from that fee should be used  
15 to reduce or eliminate any increase in the 5/8-inch meter charge. In this way, the revenue  
16 from the activation fee would be offsetting the elements of cost that it is designed to  
17 recover, rather than just being used to reduce consumption charges and other rate  
18 elements to which the activation fee has no relationship.

19 If the overall level of rate increase allowed by the Commission is less than the  
20 \$672,000 that would be generated from the activation fee, then I recommend that all  
21 Central Division charges should be reduced by an equal percentage.



1 **Rate Design**

2 Q. HOW HAS THE COMPANY PROPOSED TO RECOVER ANY RATE INCREASE THAT IT RECEIVES IN  
3 THIS CASE?

4 A. KAWC proposes to recover the first \$672,000 of any rate increase through its proposed  
5 activation fee. It also proposes to increase the rates in its Northern Division by either  
6 40% (Tri-Village) or 42% (Elk Lake), which raises approximately \$371,000 in additional  
7 revenue. The Company then proposes to recover any remaining rate increase by  
8 changing all meter, consumption, and fire charges in the Central Division by an equal  
9 percentage. Under the Company's proposed revenue requirement, that equal percentage  
10 is approximately 15.3%.

11 Q. DO YOU AGREE WITH THE COMPANY'S PROPOSED RATE DESIGN?

12 A. No, not entirely. I already have discussed my opposition to the proposed activation fee.  
13 In addition, I do not agree that it is appropriate to increase the rates paid by Northern  
14 Division customers at this time. The Northern Division rates already are significantly  
15 higher than the Central Division rates. Moreover, KAWC anticipates moving toward  
16 single-tariff pricing in its next case, when it will have the benefit of a cost of service  
17 study that includes the Northern Division. Any movement toward single-tariff pricing  
18 likely would involve reducing the rates in the Northern Division. It is not consistent with  
19 long-standing rate-design principles, including gradualism and rate continuity, to  
20 significantly increase a set of rates in this case when the expectation is that the rates  
21 would be reduced within two or three years.

22 In addition, a substantial portion of the "costs" of the Northern Division are costs  
23 that are paid in the Central Division and allocated to the Northern Division. That

1 allocation, however, has not been performed in the context of a cost of service study and  
2 so may not accurately represent the appropriate level of costs to be allocated.

3 Q. WHAT DO YOU RECOMMEND CONCERNING THE NORTHERN DIVISION RATES IN THIS CASE?

4 A. I recommend that there should be no change in the Northern Division rates in this case.  
5 Keeping the existing rates in effect still would result in Northern Division customers  
6 paying significantly more than Central Division customers. For example, at the present  
7 time, a 5/8-inch meter residential customer using 7 ccf per month would pay \$19.04 per  
8 month in the Central Division and either \$27.77 (Elk Lake) or \$39.60 (Tri-Village) per  
9 month in the Northern Division. Under KAWC's proposed rates, the Central Division  
10 charge would increase to \$21.95 per month.

11 Q. DOES THAT MEAN THAT YOU AND THE AG WILL SUPPORT THE MOVEMENT TOWARD SINGLE-  
12 TARIFF PRICING FOR THE NORTHERN DIVISION IN THE NEXT CASE?

13 A. No, not necessarily. KAWC appropriately states that it is important to have the benefit of  
14 a cost of service study when making decisions above when, how, and to what extent (if  
15 any) to move toward single-tariff pricing. I agree with the Company that it is reasonable  
16 to make such a decision with the benefit of a current, fully allocated cost of service study.  
17 While I am generally supportive of single-tariff pricing, I would reserve judgment on its  
18 appropriateness for this utility until the next case. I am also advised that the AG would  
19 reserve judgment on this issue until a case when the Company has made a specific  
20 proposal, supported by a cost of service study, concerning the movement toward single-  
21 tariff pricing.

1 Q. PLEASE SUMMARIZE YOUR RATE DESIGN RECOMMENDATIONS.

2 A. I recommend that the Commission reject KAWC's proposed activation fee. As I testified  
3 earlier, however, if the Commission does adopt that fee, then the revenue generated by  
4 that charge should be used to offset any increase in the 5/8-inch meter charge. If the  
5 Commission approves the activation fee but finds that the overall level of rate increase is  
6 less than the \$672,000 that would be generated from the activation fee, then I recommend  
7 that all Central Division charges should be reduced by an equal percentage.

8 I also recommend that the Commission freeze the Northern Division rates until  
9 KAWC's next case. In the next case, the Commission can consider whether and how to  
10 move toward single-tariff pricing.

11 I recommend, therefore, that any rate increase granted in this case should be  
12 collected by increasing the Central Division meter, consumption, and fire service charges  
13 by the same percentage, with the exception of the 5/8-inch meter charge if the activation  
14 fee is approved.

15 Q. HAVE YOU APPLIED THESE PRINCIPLES TO DESIGN RATES TO RECOVER THE AG'S PROPOSED  
16 REVENUE REQUIREMENT.

17 A. Yes, I have. AG witness Crane recommends a revenue requirement of \$45,851,072,  
18 which is \$111,933 higher than her calculation of pro forma revenues under existing rates.  
19 On Schedule SJR-1, I show the rates that result from applying all of my rate design  
20 recommendations, including Ms. Crane's elimination of AFUDC from above-the-line  
21 revenues. The schedule also includes a summary comparison of the Company's proposed  
22 rate increase and the AG's proposed rate increase, by customer class and Division.

1           Schedule SJR-2 contains the same information using my recommendations, but with the  
2           assumption that the Company is allowed to charge the activation fee.

3    Q.     BY WAY OF ILLUSTRATION, WHAT IS THE EFFECT OF THE AG'S PROPOSALS ON A CENTRAL  
4           DIVISION RESIDENTIAL CUSTOMER WITH A 5/8-INCH METER WHO USES 7 CCF PER MONTH?

5    A.     A residential customer with a 5/8-inch meter using 7 ccf per month pays \$19.04 under  
6           KAWC's existing rates. KAWC has proposed to increase that charge to \$21.95 per  
7           month. Under the AG's recommendations with no activation fee, the charge would be  
8           \$19.30. Using those same recommendations, but adopting the activation fee, the charge  
9           would be \$19.00 per month.

10   Q.     DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

11   A.     Yes, it does.

**Present, Company Proposed, and AG Proposed Rates - with No Activation Fee**

|                            | <u>Central Division</u> |           |          | <u>Northern Division: Tri-Village</u> |          |          | <u>Northern Division: Elk Lake</u> |          |          |
|----------------------------|-------------------------|-----------|----------|---------------------------------------|----------|----------|------------------------------------|----------|----------|
|                            | Company                 |           | AG       | Company                               |          | AG       | Company                            |          | AG       |
|                            | Present                 | Proposed  | Proposed | Present                               | Proposed | Proposed | Present                            | Proposed | Proposed |
| <u>Meter Charges</u>       |                         |           |          |                                       |          |          |                                    |          |          |
| 5/8" Monthly               | \$ 7.31                 | \$ 8.43   | \$ 7.41  | \$ 19.40                              | \$27.21  | 19.40    | \$ 20.95                           | \$ 29.74 | \$ 20.95 |
| 3/4" Monthly               | 10.97                   | 12.65     | 11.12    | 19.40                                 | 27.21    | 19.40    | 20.95                              | 29.74    | 20.95    |
| 1" Monthly                 | 18.28                   | 21.08     | 18.53    | 19.40                                 | 27.21    | 19.40    | 20.95                              | 29.74    | 20.95    |
| 1 1/2" Monthly             | 36.55                   | 42.14     | 37.04    | 19.40                                 | 27.21    | 19.40    |                                    |          |          |
| 2" Monthly                 | 58.48                   | 67.43     | 59.27    | 19.40                                 | 27.21    | 19.40    |                                    |          |          |
| 3" Monthly                 | 109.65                  | 126.43    | 111.13   | 19.40                                 | 27.21    | 19.40    |                                    |          |          |
| 4" Monthly                 | 182.75                  | 210.72    | 185.21   | 19.40                                 | 27.21    | 19.40    |                                    |          |          |
| 6" Monthly                 | 365.50                  | 421.43    | 370.43   | 19.40                                 | 27.21    | 19.40    |                                    |          |          |
| 8" Monthly                 | 584.80                  | 674.29    | 592.69   |                                       |          |          |                                    |          |          |
| <u>Consumption Charges</u> |                         |           |          |                                       |          |          |                                    |          |          |
| Residential                | 1.6758                  | 1.9323    | 1.6983   |                                       |          |          |                                    |          |          |
| Commercial                 | 1.5517                  | 1.7892    | 1.5726   |                                       |          |          |                                    |          |          |
| Industrial                 | 1.2662                  | 1.4600    | 1.2832   |                                       |          |          |                                    |          |          |
| Other Public Authority     | 1.4865                  | 1.7139    | 1.5064   |                                       |          |          |                                    |          |          |
| Sales for Resale           | 1.4865                  | 1.7139    | 1.5064   |                                       |          |          |                                    |          |          |
| Block 1                    |                         |           |          | \$ -                                  | \$ -     | \$ -     | \$ -                               | \$ -     | \$ -     |
| Block 2                    |                         |           |          | 4.6650                                | 6.5431   | 4.6650   | 1.7625                             | 2.5020   | 1.7625   |
| Block 3                    |                         |           |          | 4.5750                                | 6.4168   | 4.5750   | 1.2750                             | 1.8100   | 1.2750   |
| Block 4                    |                         |           |          | 4.4850                                | 6.2906   | 4.4850   |                                    |          |          |
| Block 5                    |                         |           |          | 4.3050                                | 6.0381   | 4.3050   |                                    |          |          |
| <u>Fire Charges</u>        |                         |           |          |                                       |          |          |                                    |          |          |
| <b>Private Fire</b>        |                         |           |          |                                       |          |          |                                    |          |          |
| 2" Connections             | \$ 48.00                | \$ 55.32  | 48.65    |                                       |          |          |                                    |          |          |
| 4" Connections             | 192.00                  | 221.40    | 194.59   |                                       |          |          |                                    |          |          |
| 6" Connections             | 431.52                  | 497.52    | 437.34   |                                       |          |          |                                    |          |          |
| 8" Connections             | 767.04                  | 884.40    | 777.38   |                                       |          |          |                                    |          |          |
| 10" Connections            | 1,198.56                | 1,381.92  | 1,214.72 |                                       |          |          |                                    |          |          |
| 12" Connections            | 1,726.20                | 1,990.32  | 1,749.48 |                                       |          |          |                                    |          |          |
| 14" Connections            | 2,349.84                | 2,709.48  | 2,381.53 |                                       |          |          |                                    |          |          |
| 16" Connections            | 3,068.40                | 3,537.96  | 3,109.78 |                                       |          |          |                                    |          |          |
| Hydrants                   | 431.52                  | 497.52    | 437.34   |                                       |          |          |                                    |          |          |
| <b>Public Fire</b>         |                         |           |          |                                       |          |          |                                    |          |          |
| Public Fire Hydrants       | \$ 287.52               | \$ 331.56 | 291.40   |                                       |          |          |                                    |          |          |

**Proof of Revenue - Summary - with No Activation Fee**

|                         | Present Rates |                |                  | Company Proposed Rates |              |            | AG Proposed Rates |              |            |
|-------------------------|---------------|----------------|------------------|------------------------|--------------|------------|-------------------|--------------|------------|
|                         | As Filed      | AG Adjustments | Adjusted Present | Increase               | Revenue      | % Increase | Increase          | Revenue      | % Increase |
| <b>Central Division</b> |               |                |                  |                        |              |            |                   |              |            |
| Residential             | \$22,240,461  | \$ 1,246,548   | \$23,487,009     | \$ 3,594,137           | \$27,081,146 | 15.3%      | \$ 317,541        | \$23,804,550 | 1.4%       |
| Commercial              | 10,515,514    | 984,885        | 11,500,399       | 1,759,866              | 13,260,265   | 15.3%      | 154,870           | 11,655,269   | 1.3%       |
| Industrial              | 1,580,199     | -              | 1,580,199        | 241,813                | 1,822,012    | 15.3%      | 21,205            | 1,601,404    | 1.3%       |
| Other Public Authority  | 3,121,088     | -              | 3,121,088        | 477,612                | 3,598,700    | 15.3%      | 41,889            | 3,162,977    | 1.3%       |
| Sales for Resale        | 771,314       | -              | 771,314          | 118,031                | 889,345      | 15.3%      | 10,343            | 781,657      | 1.3%       |
| Private Fire            | 839,000       | 28,912         | 867,912          | 132,764                | 1,000,676    | 15.3%      | 11,706            | 879,618      | 1.3%       |
| Public Fire             | 1,802,175     | 89,132         | 1,891,307        | 289,695                | 2,181,002    | 15.3%      | 25,522            | 1,916,829    | 1.3%       |
| Miscellaneous           | 1,601,604     | -              | 1,601,604        | 665,280                | 2,266,884    | 41.5%      | (470,940)         | 1,130,664    | -29.4%     |
| Subtotal                | \$42,471,355  | \$ 2,349,477   | \$44,820,832     | \$ 7,279,198           | \$52,100,030 | 16.2%      | \$ 112,136        | \$44,932,968 | 0.3%       |
| <b>Tri-Village</b>      |               |                |                  |                        |              |            |                   |              |            |
| Residential             | \$ 782,356    | \$ -           | \$ 782,356       | \$ 314,969             | \$ 1,097,325 | 40.3%      | \$ -              | \$ 782,356   | 0.0%       |
| Commercial              | 30,012        | -              | 30,012           | 12,082                 | 42,094       | 40.3%      | -                 | 30,012       | 0.0%       |
| Other Public Authority  | 8,035         | -              | 8,035            | 3,234                  | 11,269       | 40.2%      | -                 | 8,035        | 0.0%       |
| Sales for Resale        | 4,656         | -              | 4,656            | 1,874                  | 6,530        | 40.2%      | -                 | 4,656        | 0.0%       |
| Miscellaneous           | -             | -              | -                | 6,480                  | 6,480        |            | -                 | -            |            |
| Subtotal                | \$ 825,059    | \$ -           | \$ 825,059       | \$ 338,639             | \$ 1,163,698 | 41.0%      | \$ -              | \$ 825,059   | 0.0%       |
| <b>Elk Lake</b>         |               |                |                  |                        |              |            |                   |              |            |
| Residential             | \$ 93,248     | \$ -           | \$ 93,248        | \$ 39,126              | \$ 132,374   | 42.0%      | \$ -              | \$ 93,248    | 0.0%       |
| Miscellaneous           | -             | -              | -                | 240                    | 240          |            | -                 | -            |            |
| Subtotal                | \$ 93,248     | \$ -           | \$ 93,248        | \$ 39,366              | \$ 132,614   | 42.2%      | \$ -              | \$ 93,248    | 0.0%       |
| Total Revenue           | \$43,389,662  | \$ 2,349,477   | \$45,739,139     | \$ 7,657,203           | \$53,396,342 | 16.7%      | \$ 112,136        | \$45,851,275 | 0.2%       |

**Present, Company Proposed, and AG Proposed Rates - with Activation Fee**

|                            | <u>Central Division</u> |           |          | <u>Northern Division: Tri-Village</u> |          |          | <u>Northern Division: Elk Lake</u> |          |          |
|----------------------------|-------------------------|-----------|----------|---------------------------------------|----------|----------|------------------------------------|----------|----------|
|                            | Company                 |           | AG       | Company                               |          | AG       | Company                            |          | AG       |
|                            | Present                 | Proposed  | Proposed | Present                               | Proposed | Proposed | Present                            | Proposed | Proposed |
| <u>Meter Charges</u>       |                         |           |          |                                       |          |          |                                    |          |          |
| 5/8" Monthly               | \$ 7.31                 | \$ 8.43   | \$ 7.29  | \$ 19.40                              | \$27.21  | 19.40    | \$ 20.95                           | \$ 29.74 | \$ 20.95 |
| 3/4" Monthly               | 10.97                   | 12.65     | 10.95    | 19.40                                 | 27.21    | 19.40    | 20.95                              | 29.74    | 20.95    |
| 1" Monthly                 | 18.28                   | 21.08     | 18.24    | 19.40                                 | 27.21    | 19.40    | 20.95                              | 29.74    | 20.95    |
| 1 1/2" Monthly             | 36.55                   | 42.14     | 36.47    | 19.40                                 | 27.21    | 19.40    |                                    |          |          |
| 2" Monthly                 | 58.48                   | 67.43     | 58.36    | 19.40                                 | 27.21    | 19.40    |                                    |          |          |
| 3" Monthly                 | 109.65                  | 126.43    | 109.42   | 19.40                                 | 27.21    | 19.40    |                                    |          |          |
| 4" Monthly                 | 182.75                  | 210.72    | 182.37   | 19.40                                 | 27.21    | 19.40    |                                    |          |          |
| 6" Monthly                 | 365.50                  | 421.43    | 364.75   | 19.40                                 | 27.21    | 19.40    |                                    |          |          |
| 8" Monthly                 | 584.80                  | 674.29    | 583.59   |                                       |          |          |                                    |          |          |
| <u>Consumption Charges</u> |                         |           |          |                                       |          |          |                                    |          |          |
| Residential                | 1.6758                  | 1.9323    | 1.6727   |                                       |          |          |                                    |          |          |
| Commercial                 | 1.5517                  | 1.7892    | 1.5488   |                                       |          |          |                                    |          |          |
| Industrial                 | 1.2662                  | 1.4600    | 1.2639   |                                       |          |          |                                    |          |          |
| Other Public Authority     | 1.4865                  | 1.7139    | 1.4837   |                                       |          |          |                                    |          |          |
| Sales for Resale           | 1.4865                  | 1.7139    | 1.4837   |                                       |          |          |                                    |          |          |
| Block 1                    |                         |           |          | \$ -                                  | \$ -     | \$ -     | \$ -                               | \$ -     | \$ -     |
| Block 2                    |                         |           |          | 4.6650                                | 6.5431   | 4.6650   | 1.7625                             | 2.5020   | 1.7625   |
| Block 3                    |                         |           |          | 4.5750                                | 6.4168   | 4.5750   | 1.2750                             | 1.8100   | 1.2750   |
| Block 4                    |                         |           |          | 4.4850                                | 6.2906   | 4.4850   |                                    |          |          |
| Block 5                    |                         |           |          | 4.3050                                | 6.0381   | 4.3050   |                                    |          |          |
| <u>Fire Charges</u>        |                         |           |          |                                       |          |          |                                    |          |          |
| <b>Private Fire</b>        |                         |           |          |                                       |          |          |                                    |          |          |
| 2" Connections             | \$ 48.00                | \$ 55.32  | 47.90    |                                       |          |          |                                    |          |          |
| 4" Connections             | 192.00                  | 221.40    | 191.60   |                                       |          |          |                                    |          |          |
| 6" Connections             | 431.52                  | 497.52    | 430.63   |                                       |          |          |                                    |          |          |
| 8" Connections             | 767.04                  | 884.40    | 765.46   |                                       |          |          |                                    |          |          |
| 10" Connections            | 1,198.56                | 1,381.92  | 1,196.09 |                                       |          |          |                                    |          |          |
| 12" Connections            | 1,726.20                | 1,990.32  | 1,722.64 |                                       |          |          |                                    |          |          |
| 14" Connections            | 2,349.84                | 2,709.48  | 2,344.99 |                                       |          |          |                                    |          |          |
| 16" Connections            | 3,068.40                | 3,537.96  | 3,062.07 |                                       |          |          |                                    |          |          |
| Hydrants                   | 431.52                  | 497.52    | 430.63   |                                       |          |          |                                    |          |          |
| <b>Public Fire</b>         |                         |           |          |                                       |          |          |                                    |          |          |
| Public Fire Hydrants       | \$ 287.52               | \$ 331.56 | 286.93   |                                       |          |          |                                    |          |          |

**Proof of Revenue - Summary - with Activation Fee**

|                         | Present Rates |                |                  | Company Proposed Rates |               |            | AG Proposed Rates |               |            |
|-------------------------|---------------|----------------|------------------|------------------------|---------------|------------|-------------------|---------------|------------|
|                         | As Filed      | AG Adjustments | Adjusted Present | Increase               | Revenue       | % Increase | Increase          | Revenue       | % Increase |
| <b>Central Division</b> |               |                |                  |                        |               |            |                   |               |            |
| Residential             | \$ 22,240,461 | \$ 1,246,548   | \$ 23,487,009    | \$ 3,594,137           | \$ 27,081,146 | 15.3%      | \$ (51,337)       | \$ 23,435,672 | -0.2%      |
| Commercial              | 10,515,514    | 984,885        | 11,500,399       | 1,759,866              | 13,260,265    | 15.3%      | (22,472)          | 11,477,927    | -0.2%      |
| Industrial              | 1,580,199     | -              | 1,580,199        | 241,813                | 1,822,012     | 15.3%      | (2,897)           | 1,577,302     | -0.2%      |
| Other Public Authority  | 3,121,088     | -              | 3,121,088        | 477,612                | 3,598,700     | 15.3%      | (5,905)           | 3,115,183     | -0.2%      |
| Sales for Resale        | 771,314       | -              | 771,314          | 118,031                | 889,345       | 15.3%      | (1,444)           | 769,870       | -0.2%      |
| Private Fire            | 839,000       | 28,912         | 867,912          | 132,764                | 1,000,676     | 15.3%      | (1,791)           | 866,121       | -0.2%      |
| Public Fire             | 1,802,175     | 89,132         | 1,891,307        | 289,695                | 2,181,002     | 15.3%      | (3,881)           | 1,887,426     | -0.2%      |
| Miscellaneous           | 1,601,604     | -              | 1,601,604        | 665,280                | 2,266,884     | 41.5%      | 194,340           | 1,795,944     | 12.1%      |
| Subtotal                | \$ 42,471,355 | \$ 2,349,477   | \$ 44,820,832    | \$ 7,279,198           | \$ 52,100,030 | 16.2%      | \$ 104,613        | \$ 44,925,445 | 0.2%       |
| <b>Tri-Village</b>      |               |                |                  |                        |               |            |                   |               |            |
| Residential             | \$ 782,356    | \$ -           | \$ 782,356       | \$ 314,969             | \$ 1,097,325  | 40.3%      | \$ -              | \$ 782,356    | 0.0%       |
| Commercial              | 30,012        | -              | 30,012           | 12,082                 | 42,094        | 40.3%      | -                 | 30,012        | 0.0%       |
| Other Public Authority  | 8,035         | -              | 8,035            | 3,234                  | 11,269        | 40.2%      | -                 | 8,035         | 0.0%       |
| Sales for Resale        | 4,656         | -              | 4,656            | 1,874                  | 6,530         | 40.2%      | -                 | 4,656         | 0.0%       |
| Miscellaneous           | -             | -              | -                | 6,480                  | 6,480         |            | 6,480             | 6,480         |            |
| Subtotal                | \$ 825,059    | \$ -           | \$ 825,059       | \$ 338,639             | \$ 1,163,698  | 41.0%      | \$ 6,480          | \$ 831,539    | 0.8%       |
| <b>Elk Lake</b>         |               |                |                  |                        |               |            |                   |               |            |
| Residential             | \$ 93,248     | \$ -           | \$ 93,248        | \$ 39,126              | \$ 132,374    | 42.0%      | \$ -              | \$ 93,248     | 0.0%       |
| Miscellaneous           | -             | -              | -                | 240                    | 240           |            | 240               | 240           |            |
| Subtotal                | \$ 93,248     | \$ -           | \$ 93,248        | \$ 39,366              | \$ 132,614    | 42.2%      | \$ 240            | \$ 93,488     | 0.3%       |
| Total Revenue           | \$ 43,389,662 | \$ 2,349,477   | \$ 45,739,139    | \$ 7,657,203           | \$ 53,396,342 | 16.7%      | \$ 111,333        | \$ 45,850,472 | 0.2%       |