

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF: :
NOTICE OF ADJUSTMENT OF THE RATES OF :
KENTUCKY-AMERICAN WATER COMPANY : CASE NO. 2007-00143
EFFECTIVE ON AND AFTER MAY 30, 2007 :

Direct Testimony of
Scott J. Rubin

on Behalf of
the Office of the Attorney General

July 30, 2007

Introduction

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Q. Please state your name and business address.

A. My name is Scott J. Rubin. My business address is 333 Oak Lane, Bloomsburg PA.

Q. By whom are you employed and in what capacity?

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

Q. What is the purpose of your testimony in this case?

A. I have been asked by the Office of the Attorney General (“AG”) to review the cost of service study and proposed rate design filed by Kentucky-American Water Company (“KAWC” or “Company”).

Q. What are your qualifications to provide this testimony in this case?

A. I have testified as an expert witness before utility commissions or courts in the District of Columbia and in the states of Arizona, Delaware, Kentucky, Illinois, Maine, Maryland, New Jersey, New York, Ohio, Pennsylvania, and West Virginia. I also have testified as an expert witness before two committees of the U.S. House of Representatives and one committee of the Pennsylvania House of Representatives. I also have served as a consultant to the staffs of the Connecticut Department of Public Utility Control and the Delaware Public Service Commission, as well as to several national utility trade associations, and state and local governments throughout the country. Prior to establishing my own consulting and law practice, I was employed by the Pennsylvania Office of Consumer Advocate from 1983 through January 1994 in increasingly responsible positions. From 1990 until I left state government, I was one of two senior

1 attorneys in that Office. Among my other responsibilities in that position, I had a major
2 role in setting its policy positions on water and electric matters. In addition, I was
3 responsible for supervising the technical staff of that Office. I also testified as an expert
4 witness for that Office on rate design and cost of service issues.

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

13 **Q. Do you have any experience that is particularly relevant to the issues in this case?**

14 A. Yes, I do. I have testified on numerous occasions as a rate design and cost of service
15 expert. I also have worked as a consultant to local government entities on rate design
16 issues – both to assist government-owned utilities in designing rates and to help
17 government agencies obtain reasonable rates from their utility. I also served on the
18 editorial committee for the preparation of the major rate design manual for the water
19 utility industry, the American Water Works Association’s Manual M1: *Principles of*
20 *Water Rates, Fees, and Charges*, published in 2000. In addition, during 2004 I provided
21 technical assistance, training, and analysis for the staff of the Connecticut Department of
22 Public Utility Control on rate design, cost allocation, and related issues.

- 1 • I conclude that the Company's revised cost of service study (KAWC
2 Exhibit 36, revised) is appropriate for use in designing rates, with one
3 exception. That exception concerns the manner in which the Company
4 allocates miscellaneous revenues among the customer classes. I
5 recommend a change so that the revenue is allocated to the customer
6 classes that actually pay these miscellaneous charges. The effect of that
7 change is to decrease the amount of revenue that needs to be collected
8 through meter and consumption charges from the Residential class by
9 approximately \$53,000, with offsetting increases in revenue responsibility
10 from the other customer classes.
- 11 • In attempting to move each customer class closer to its cost of providing
12 service, without having an undue impact on any one class, I recommend
13 that no class should receive a rate increase that is more than 150% of the
14 system-average increase.
- 15 • KAWC should be permitted to move toward a consolidation of the rates
16 for the Central Division and Northern Division onto a single set of rate
17 schedules. The Company's proposal to accomplish this consolidation
18 immediately, however, is not reasonable because it would result in the
19 transfer of more than \$450,000 of revenue responsibility from the
20 Northern Division to Central Division customers. I recommend an interim
21 step in this case that would redesign Northern Division rates to match the
22 design of Central Division rates, and that would reduce Northern Division
23 rates by a modest amount in this case. Future rate cases should consider
24 the reasonableness of taking further steps toward rate consolidation.
- 25 • I agree with KAWC's revised position that there should be no increase in
26 customer (meter) charges in this case. The cost of service study shows
27 that the existing customer charges are higher than is needed to recover
28 KAWC's customer-related costs. I recommend, therefore, that any rate
29 increase found to be necessary for the water-consuming classes (that is,
30 excluding fire protection service) should be recovered through increases in
31 consumption charges only. Of course, any increases in fire protection
32 rates need to be recovered through the fixed charges for that service.

33

Cost of Service Issues

34 **Q. Did you review KAWC's cost of service study (KAWC Exhibit 36 revised)?**

35 A. Yes, I did.

36 **Q. Do you have any concerns with the way in which any items are allocated within that**
37 **study?**

1 A. Yes. While I examined numerous aspects of the Company's cost of service study, in
2 order to simplify the issues presented in this case, I am proposing only one adjustment to
3 the study. The adjustment is necessary in order to accurately reflect the actual source of
4 miscellaneous revenues to the Company.. At the outset, I should note that all of my
5 adjustments to the cost of service are made assuming the Company's proposed revenue
6 requirement. This is a standard practice because it allows different parties' cost of
7 service and rate design adjustments to be compared on an "apples-to-apples" basis. This
8 should not be taken, however, as an endorsement of the Company's proposed revenue
9 requirement.

10 **Q. With that understanding, please describe your adjustment to the cost of service**
11 **study?**

12 A. My adjustment allocates miscellaneous revenues in a manner that is more closely related
13 to the reasons why the Company receives those revenues. There are three types of
14 miscellaneous revenues: activation fees, charges for returned checks (known as "NSF
15 check fees"), and reconnection fees. All of these charges are tariffed, and the tariff
16 describes when the Company is permitted to levy the charge. The Company shows total
17 revenues from these three charges of \$986,550. KAWC Exh. 36 revised, p. 25 of 45.

18 The Company's cost of service study treats miscellaneous revenues as a credit to
19 billing and collecting costs. The effect of treating these tariffed revenues in this fashion
20 is to credit 90.5% of the revenues to the Residential class, 7.5% to the Commercial class,
21 1.3% to the Private Fire Protection class, and smaller amounts to the other customer
22 classes. KAWC Exh. 36 revised, p. 16 of 45 (allocation factor F).

1 **Q. Do you agree that these charges are related to the Company's billing and collecting**
2 **costs?**

3 A. I agree that the miscellaneous charges help to recover some of the Company's billing and
4 collecting costs, but I disagree with the way in which the Company reflects these
5 revenues in its cost of service study.

6 In particular, these revenues should not be "allocated" among the customer
7 classes. The revenues should be directly assigned to each customer class based on the
8 amount of these revenues that are actually billed to each class. For example, activation
9 fees and reconnection fees generally are not paid by sales for resale or fire protection
10 customers. Similarly, while any customer could pay an NSF check fee, in practice most
11 such fees are paid by residential customers.

12 **Q. Does KAWC have data showing the amount of these revenues that are billed to each**
13 **customer class?**

14 A. Yes, it does. In response to AG data requests 1-39(c) and 2-2, the Company provided
15 actual data for the six months ending January 2007. These data show that Residential
16 customers provide approximately 96% of these miscellaneous revenues, with
17 Commercial customers providing approximately 4% of these revenues. The remaining
18 customer classes pay either none or an extremely small amount (well less than one-half of
19 one percent) of these revenues.

20 **Q. What do you recommend?**

21 A. I recommend that miscellaneous revenues should be directly assigned to the customer
22 classes that actually pay the revenues. The effect of this adjustment is to decrease the

1 cost of serving the Residential and Public Fire classes by approximately \$53,000 and
2 \$400 respectively, as shown on Schedule SJR-1. The cost of serving the other customer
3 classes increases by between \$100 (Sales for Resale) and \$35,000 (Commercial).

4 **Q. You refer to changing the allocation of revenues as affecting the “cost of service.”**
5 **Why does a revenue allocation affect cost?**

6 A. The Company’s cost of service study is not strictly a study of costs. It is designed to
7 determine the amount of revenue from meter and consumption charges that each
8 customer class should be responsible for paying. Thus, revenues that the Company
9 receives for items other than meter and consumption charges are treated as credits (or
10 negative costs) in the study. In actuality, of course, these are revenues that the Company
11 receives from its customers pursuant to the Company’s tariffs. But as long as we
12 recognize that the purpose of the cost of service study is to develop revenue targets for
13 meter and consumption charges only (as well as for fire protection charges), then the
14 methodology used by KAWC is appropriate.

15 **Q. After reflecting your change to miscellaneous revenues, what is the cost of service,**
16 **or revenue target, for each customer class?**

17 A. I show the resulting cost of service for each customer class, under the Company’s study
18 and with my revision, on Schedule SJR-2. The net effect is slightly different than the
19 figures shown on Schedule SJR-1 because of composite allocation factors in the cost of
20 service model that are affected by the change in allocation of miscellaneous revenues.

Appropriate Limits on Class Rate Increases

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Q. Has the Company proposed any limits on the amount by which the rates to any customer class should be increased in this case.

A. Yes, KAWC witness Herbert states that one of his guidelines was to avoid “excessive increases to any one class.” Herbert direct testimony, p. 10, lines 6-7. Reviewing the Company’s proposed rates, the effect of the Company’s proposal is to limit the percentage increase to a customer class to no more than 134% of the system average increase. Specifically, the highest customer class increases proposed by the Company are to the Industrial and Sales for Resale classes, with percentage increase of 29.7%. This is 134% of the system-average increase of 22.2%. KAWC Exh. 36 revised, Schedule A.

Q. Did the Company explain how it chose this percentage?

A. No, it did not. In fact, the Company did not even acknowledge that it chose a maximum percentage increase. When asked how it determined if an increase to a class was excessive, Mr. Herbert responded, “The witness determined that the rate changes would not result in excessive increases by reviewing comparative bill analysis.” Response to AG 1-35.

Q. Do you support establishing a maximum class percentage increase as being a reasonable way to ensure that no class receives an excessive rate increase?

A. Yes, I do. I have frequently recommended establishing a limit on the maximum percentage increase that a class, or individual customer, would be required to pay. This ensures that no customer or group of customers is being asked to bear an unusually large portion of the proposed rate increase.

1 **Q. Do you agree with the Company's apparent use of a 134% of the system average as**
2 **a threshold for class rate increases in this case?**

3 A. No, I do not. Under present rates, the Industrial class of customers is providing revenue
4 equal to just 63% of the cost of service. The next lowest class (Sales for Resale) is
5 providing 77% of its costs. At the other extreme, the Public Fire and Residential classes
6 are already paying 89% and 85% of the cost of serving them. I show these figures on
7 Schedule SJR-3, under the Company's cost of service study and with my recommended
8 change to the cost of service study.

9 **Q. What do you recommend?**

10 A. Given the magnitude of the under-recovery of revenue by the Industrial class, I believe it
11 is appropriate to establish a higher threshold for the maximum rate increase to a class. I
12 recommend that the threshold should be set at 150% of the system-average increase.
13 Under the Company's proposed revenue requirement, the system-average increase is
14 22.2%. Applying the 150% limit on a class rate increase would result in no class
15 receiving an increase of more than 33.3%. Of course, if the Commission finds that
16 KAWC's revenue requirement is lower than the Company projects, then the maximum
17 increase to any customer class would be lowered in proportion to the system average
18 increase.

19 **Moving Toward Single-Tariff Pricing**

20 **Q. Does KAWC have more than one rate area?**

21 A. Yes, it does. Most KAWC customers are located in the Central Division, which is
22 KAWC's main system. Over the last several years, KAWC also has acquired three water

1 systems that make up what the Company calls its Northern Division. These are the Tri-
2 Village, Owenton, and Elk Lake Shores systems. Each of these three systems in the
3 Northern Division has different rates at the present time. Most Northern Division
4 customers pay rates that are significantly higher than Central Division customers for the
5 same type of service.

6 **Q. What has KAWC proposed?**

7 A. The Company proposes to place all Northern Division customers on the Central Division
8 rate schedule at the conclusion of this case.

9 **Q. What would be the impact of the Company's proposal?**

10 A. Under the Company's proposed rates (as revised), I calculate that total revenues collected
11 from the three Northern Division systems would decline by approximately \$452,000.
12 I show this calculation on Schedule SJR-4.¹

13 **Q. In your opinion, is it reasonable to reduce rates by more than \$450,000 for Northern
14 Division customers at this time?**

15 A. No, it is not reasonable to implement that type of rate decrease at this time. The
16 Company's proposal represents a 34.5% decrease for Tri-Village, a 4.5% decrease for
17 Elk Lake, and a 10.2% decrease for Owenton, as shown on my schedule. The decrease
18 for Elk Lake is not unreasonable, but I consider the other decreases to be excessive,

¹ There appears to be an error on KAWC Exh. 37M (revised), so I had to rely on my own calculation of the difference. The exhibit shows a proposed 5/8-inch customer charge of \$8.34 per month, which was the Company's original proposal. But revised Exhibit 36 shows that there should be no increase in customer charges, and the rate schedules in revised Exhibit 36 show the 5/8-inch customer charge remaining at \$7.95 per month. Revised Exhibit 36 also shows the remaining customer charges in the Central Division remaining at the current levels. Further, Exhibit 36 shows the customer charges in the Northern Division being set equal to the Central Division charges.

1 particularly when other customers (Central Division customers) are being asked to pay
2 higher rates to pay for these decreases.

3 **Q. But the Company says that eliminating the Northern Division would result in cost**
4 **savings and simplified administration. Do you disagree?**

5 A. I do not disagree with the Company about the potential administrative benefits of single-
6 tariff pricing. I recommend, therefore, that the Commission permit KAWC to
7 consolidate all accounting records for the two rate areas and not require KAWC to keep
8 any separate records for the Northern Division. All record keeping and other
9 administrative and operational functions for the two divisions should be combined.

10 I disagree, however, with the Company's proposal to immediately lower the
11 Northern Division rates to the level of the Central Division. I recommend instead a
12 phased approach to combining the rates of the two divisions.

13 Specifically, I recommend the following:

- 14 • The Central Division rate structure (a customer charge plus a flat
15 consumption charge that differs for each customer class) should be
16 adopted for all Northern Division rate areas.
- 17 • I accept the Company's proposal to set rates for Elk Lake equal to Central
18 Division rates. When the effects of my recommendations are flowed
19 through, this results in a rate decrease of approximately 6% for Elk Lake
20 customers. This is also shown on Schedule SJR-4.
- 21 • Rates for Tri-Village should be set so that the 5/8- and 3/4-inch customer
22 charges are equal to 150% of Central Division rates. Customer charges
23 from 1 inches to 4 inches should be equal to Central Division rates, and
24 customer charges larger than 4 inches should be equal to 50% of Central
25 Division rates. I also recommend that the consumption charges in Tri-
26 Village should equal 150% of Central Division rates. Under my rate
27 design proposal, this results in a rate decrease of approximately 4% for
28 Tri-Village customers.

- 1 • In Owenton, I recommend that the customer charges should be the same
2 as those in Tri-Village, but the consumption charges should be the same as
3 Central Division rates. Under my rate design proposal, this results in
4 approximately a 5% rate decrease for Owenton customers.

5 **Q. Why are you proposing differing treatment for different meter sizes in Tri-Village**
6 **and Owenton?**

7 A. At the present time, customer charges in these rate areas do not vary with meter size.
8 This is not reasonable and not consistent with standard industry practice, where it is
9 recognized that the increased cost and capacity of larger meters should result in
10 customers paying higher customer charges for larger meters. To immediately begin
11 charging those higher rates, however, could cause dramatic rate increases for some
12 customers. For example, Owenton has four customers with 6-inch meters. KAWC's
13 customer charge for a 6-inch meter is \$397.73 per month, but these customers are
14 currently paying a customer charge of only \$39.35 per month. I do not consider a 10-fold
15 increase in the rate, in one step, to be reasonable, even if consumption charges are
16 declining. Indeed, according to the Company's bill frequency analysis (AG 1-26), more
17 than 50% of the bills rendered to these customers showed consumption of less than 55 ccf
18 per month. At 55 ccf, a customer with a 6-inch meter in Owenton would pay about \$230
19 per month today. Under existing Central Division rates, the charge to the customer
20 would be over \$490 per month. And, of course, if Central Division rates are increased
21 further in this case, such a customer would face an even steeper rate increase.

22 In my opinion, therefore, it is reasonable and necessary to phase in the rate
23 changes for larger meter sizes in Owenton and Tri-Village.

1 In contrast, most customers with 5/8-inch meters still would have their rates
2 reduced if their meter charges were reduced to a level equal to 150% of Central Division
3 charges. I consider this to be a reasonable interim measure on the road to eventually
4 having the entire service area served under a common set of rate schedules.

5 **Q. What is the effect of your proposals for Northern Division customers?**

6 A. The effect of my proposals is that rates would decrease by between 4% and 6% for each
7 of the Northern Division rate areas, as summarized on Schedule SJR-4. I would
8 eliminate the current, out-dated rate structures that include minimum consumption
9 allowances and decreasing charges as customers use more water. Instead, the rates would
10 have the same structure as the Central Division tariffs, but with some differences in the
11 charges. I consider this to be a reasonable and significant step toward achieving single-
12 tariff pricing without imposing a large burden on Central Division customers.

13 **Q. You mentioned that the Company's proposal would result in rate reductions of**
14 **more than \$450,000 to the Northern Division that would be paid by Central Division**
15 **customers. What is the effect of your proposal?**

16 A. My proposal results in rate reductions of approximately \$74,000 for the Northern
17 Division. I consider this to be a much more reasonable result than the Company's
18 proposal. This figure also is shown on Schedule SJR-4.

19 **Rate Design Under Company Proposed Revenue Requirement**

20 **Q. Have you designed rates to reflect the effect of your proposals?**

21 A. Yes, I have. On Schedule SJR-5, I show the rates I would recommend to collect the
22 Company's proposed revenue requirement. I would reiterate that I do not support

1 KAWC's proposed revenue requirement; I am simply using it so that the effect of my
2 cost of service and rate design proposals can be compared with the Company's proposals
3 on an "apples-to-apples" basis.

4 My rate design includes (1) increasing the threshold increase for customer classes
5 to 150% of the system average; (2) phasing in the lowering of Northern Division rates,
6 while still moving all customer classes closer to the class cost of service; and
7 (3) increasing only the consumption charges for these water-consuming customer classes.

8 These rates collect approximately the same revenue as the Company's proposed
9 rates (the difference is approximately \$228 out of total proposed revenue of more than
10 \$56 million from the non-fire customer classes), as I show on Schedule SJR-6.² But that
11 revenue is collected in a way that is more equitable. The revenue collected from the
12 Commercial, Other Public Authority, and Sales for Resale classes is approximately equal
13 to the cost of serving those classes (the difference is less than \$100 for each class), as
14 shown on that schedule.

15 Residential customers will continue to subsidize Industrial customers, but the
16 amount of the subsidy will decline. Specifically, under the Company's proposed rates,
17 Residential customers would subsidize all other customer classes, including subsidies of
18 \$115,000 to Commercial customers and \$435,000 to Industrial customers. In contrast,
19 my proposal eliminates the subsidies to all but the Industrial class, whose subsidy is
20 reduced by \$55,000 to \$380,000. These figures also are shown on Schedule SJR-6.

² I have not included the fire protection classes on Schedules SJR-5 and SJR-6 because I am not proposing any changes in the Company's proposed rates to those classes.

1 **Q. Why does Schedule SJR-6 show both the Company's rates and your rates**
2 **recovering between \$25,000 and \$26,000 less than the cost of service?**

3 A. Schedule SJR-6 does not show all customer classes or all charges. I have not included
4 the fire protection classes or miscellaneous revenue sources, because I am not proposing
5 any changes in those rates. The revenue difference is reflected in those other charges, so
6 both my rates and the Company's rates would result in the Company collecting its full
7 revenue requirement.

8 **Q. What do you conclude about your proposed rates?**

9 A. I conclude that my proposed rates would enable the Company to recover its revenue
10 requirement in a way that is equitable to all classes of customers and all rate areas. In my
11 opinion, my proposal is superior to KAWC's proposal in that I have eliminated or greatly
12 reduced the cross-subsidies present in the Company's proposal. Moreover, I have done
13 so without imposing an undue burden on any particular customer or class of customers.

14 **Rate Design Under AG Proposed Revenue Requirement**

15 **Q. How do you propose to design rates if KAWC is awarded a lower revenue**
16 **requirement than it requested?**

17 A. I propose to scale back each of the rates that I propose on Schedule SJR-5, with a
18 limitation that no rates in the Central Division should be decreased below existing rates
19 unless there is a decrease in the overall revenue requirement.

20 **Q. Can you provide an example of how this would work?**

21 A. Yes, as an example I have designed rates to recover the revenue requirement proposed by
22 AG witness Majoros. Mr. Majoros is recommending a revenue requirement for KAWC

1 of no more than \$57,844,021, which is an increase of \$4,840,724, as opposed to the
2 Company's proposed increase of \$11,005,465. On Schedule SJR-7, I show how this
3 lower revenue requirement translates into revenue that needs to be collected from the
4 water-consuming classes of customers. As I show on that schedule, out of the total
5 revenue requirement of \$57,844,021, the water-consuming classes are responsible for
6 \$50,547,398 in meter and consumption charge revenue.

7 **Q. How would you propose to design rates to collect that \$50,547,398 from the water-**
8 **consuming customer classes?**

9 A. I propose to design rates to collect a lower revenue requirement by following the same
10 basic methodology I did in designing rates under the Company's revenue requirement. I
11 first determine the revenue target for each customer class by looking at the cost of service
12 (reduced for each class in proportion to that class's contribution to the total cost of
13 service). The revenue target is then reduced further if it would require an rate increase
14 that is more than 150% of the system average increase. Using Mr. Majoros's proposed
15 revenue requirement, the system-average increase for the consumption classes is 10.39%,
16 so the maximum increase is 15.59%.

17 Because the Company's existing customer charges already exceed the customer-
18 related costs, I then adjust the consumption charge for each class so that the total revenue
19 from the class is approximately equal to the class's revenue target. The resulting rates are
20 shown on Schedule SJR-8. Schedule SJR-9 shows a summary of the revenues that would
21 be received from each class under these rates.

1 **Q. Please summarize the rates that would collect the AG's proposed revenue**
2 **requirement.**

3 A. The proposed rates enable the Commercial and Other Public Authority classes to cover
4 their full cost of service with increases of between roughly 13.4 and 14.4 percent. With
5 the limit of a 15.59% increase, the Industrial and Sales for Resale classes cannot fully
6 recover their costs of service. The Industrial shortfall is approximately \$403,000; the
7 Sales for Resale shortfall is approximately \$11,000. These shortfalls are made up by
8 having the Residential class continue to subsidize these large users, so Residential rates
9 are approximately \$414,000 higher than the class cost of service.

10 **Conclusion**

11 **Q. Does this conclude your direct testimony?**

12 A. Yes, it does.