

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

**IN THE MATTER OF:** )  
 )  
**NOTICE OF ADJUSTMENT OF THE RATES OF** ) **CASE NO. 2004-00103**  
**KENTUCKY AMERICAN WATER COMPANY** )  
**EFFECTIVE ON AND AFTER MAY 30, 2004** )

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**DIRECT TESTIMONY OF  
COLEMAN D. BUSH**

**April 30, 2004**

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**KENTUCKY-AMERICAN WATER COMPANY**  
**CASE NO. 2004-00103**  
**Direct Testimony**  
**Coleman D. Bush**

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**1. Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.**

A. My name is Coleman D. Bush and my business address is 2300 Richmond Road, Lexington, KY 40502.

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

A. I am currently employed as Director of Business Development by the Southeastern Region of American Water Service Company, Inc. After a career of 27 years with American Water, I will be retiring on June 1, 2004. I spent the majority of my career at Kentucky-American Water Company ("Kentucky American Water") in management positions, which involved the direction of the accounting, customer service, finance and information systems areas of the Company. Due to my background and experience with Kentucky American Water, I have been asked to continue my relationship with the Company under a consulting agreement to provide accounting exhibits and testimony in this case.

**3. Q. HAVE YOU PREVIOUSLY PARTICIPATED IN REGULATORY MATTERS?**

A. Yes, I have assisted in the preparation of a number of rate cases filed with this Commission and have presented testimony before this Commission. I have also testified before the Tennessee Regulatory Authority in the matter of the purchase of a water utility by Tennessee American Water.

**4. Q. WOULD YOU PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE?**

A. In December 1972, I earned a Bachelor of Science Degree in Accounting from the University of Kentucky. From January 1973 to June 1977 I was employed as a cost accountant by manufacturing firms in North Carolina and Kentucky. I began my career with Kentucky American Water on June 1, 1977 as Accounting

1 Superintendent. In this position, I was responsible for receipts and disbursements  
2 accounting, payroll, property accounting, cash control and budget preparation.

3  
4 In 1982, I was promoted to Business Manager and my scope of responsibility was  
5 expanded to include customer service, finance and information systems. In this  
6 position and in the former position, I assisted in the preparation of accounting  
7 exhibits and responded to information requests in cases before this Commission.  
8 As Business Manager, I presented testimony in regulatory proceedings before this  
9 Commission.

10  
11 On January 1, 1998, I was promoted to Vice President and Treasurer of the  
12 Company. Through reorganization in May 2000, this position was eliminated and  
13 I was selected to assist with the transition of each American Water operating  
14 company into a National Customer Service Center. In this position, I had two  
15 areas of focus: 1) guide the process of standardization to a common set of  
16 business practices and 2) assist each operating company in making the transition  
17 from a stand-alone customer service operation to being part of a national  
18 customer service center.

19  
20 This assignment ended on October 1, 2002 when I returned to Kentucky in the  
21 position of Director of Business Development for the Southeastern Region of  
22 American Water Works Service Company, Inc. My responsibilities included new  
23 business development activities for both Kentucky American Water and  
24 Tennessee American Water.

25  
26 I am a Certified Public Accountant licensed to practice in Kentucky.

27  
28 **5. Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?**

29 A. The purpose of my testimony is to support the Company's forecasted test year  
30 labor expense and to also address the areas of 1) Cost allocation among  
31 Kentucky American Water's regulated and non-regulated businesses; 2)  
32 Development of an Activation Fee; and 3) Development of an Emergency Pricing  
33 Tariff, which is filed in this case as Appendix H to the Demand Management Plan  
34 filed with the Commission on June 15, 2001 and made effective July 15, 2001.

1 Finally, my testimony will provide support for the service improvements in the  
2 former Tri-Village Water District as a result of Kentucky American Water's  
3 involvement in the operation of the water system and its subsequent acquisition of  
4 the water system assets, which make the acquisition adjustment for that system  
5 appropriate.  
6

7 **LABOR EXPENSE**

8 **6. Q. WOULD YOU PLEASE DISCUSS THE DEVELOPMENT OF THE COMPANY'S**  
9 **FORECASTED LEVEL OF LABOR EXPENSE?**

10 A. The Company has adjusted its base period labor expense by calculating a  
11 forecasted level of labor expense. This forecast is based on a level of 133 full-  
12 time equivalent employees. Each full-time associate is scheduled to work 2,088  
13 regular hours with some employees working overtime. The amount of overtime  
14 hours is based on actual levels experienced in the past with adjustments made  
15 based on judgment and forecasted operational needs. For salaried employees  
16 the wage rate in effect as of April 1, 2003 was increased by 3% to become  
17 effective April 1, 2004 and by another 3% to become effective April 1, 2005.  
18 The non-union hourly employees' actual pay rate as of April 1, 2003 was also  
19 increased by 3% to become effective April 1, 2004 and by another 3% to  
20 become effective April 1, 2005. For union employees, the actual pay rate per  
21 the union contract was used or if the rates were subject to negotiation, the last  
22 negotiated rate was increased by 3% on each subsequent anniversary. The  
23 Company's total forecasted payroll, excluding payroll forecasted for Pineville  
24 and Bluegrass Station Division (not included in this case), but including  
25 construction and other, is \$6,640,682. This includes \$229,146 for incentive plan  
26 expense.  
27

28 **7. Q. THE NUMBER OF EMPLOYEES INCLUDED IN THIS CASE IS**  
29 **SIGNIFICANTLY LESS THAN THAT FILED IN CASE NO. 2000-120. CAN YOU**  
30 **EXPLAIN THE REDUCTION IN THE NUMBER OF EMPLOYEES?**

31 A. This reduction is primarily attributable to the consolidation of the Company's  
32 accounting and finance functions into the American Water Shared Services  
33 Center in Mt. Laurel, New Jersey and the consolidation of its billing and customer  
34 service functions into the American Water Customer Service Center in Alton,

1 Illinois. Mr. Miller, in his direct testimony, will explain the operation of the Shared  
2 Services Center and the Customer Service Center in more detail.

3  
4 **COST ALLOCATION**

5 **8. Q. WOULD YOU PLEASE EXPLAIN THE REASONING FOR DISTRIBUTING**  
6 **COSTS AMONG KENTUCKY AMERICAN WATER'S REGULATED AND NON-**  
7 **REGULATED BUSINESSES?**

8 A. Kentucky American Water includes the following regulated and non-regulated  
9 businesses. There are no affiliates; rather the Company segregates its costs by  
10 the use of business units.

- 11 ▪ Central Division (Bourbon, Clark, Harrison, Fayette, Jessamine, Scott and  
12 Woodford Counties) – regulated and operating under a single tariff
- 13 ▪ Rockwell Village Sewer – regulated and operating in Clark County under a  
14 under a single tariff in the Central Division
- 15 ▪ Northern Division - Tri-Village – regulated and operating in Owen County  
16 under a unique rate tariff, but has adopted Kentucky American Water's  
17 general tariff
- 18 ▪ Northern Division - Elk Lake – regulated and operating in Owen County  
19 under a unique rate tariff, but has adopted Kentucky American Water's  
20 general tariff
- 21 ▪ City of Pineville, Kentucky Operations, Maintenance and Management  
22 Services Agreement – non-regulated
- 23 ▪ Bluegrass Station Division Operations and Maintenance Contract – non-  
24 regulated
- 25 ▪ Kentucky River Authority Leak Detection Services – treated as regular  
26 Merchandising and Jobbing work – employees involved in this service  
27 have a portion of their time allocated to capital and other, which includes  
28 some part for this service; this is an annual contract with no guarantee of  
29 renewal; no direct or indirect costs allocated – non-regulated
- 30 ▪ City of Jackson, Kentucky – Advisory Services Agreement – all services  
31 provided by a contractor – no direct or indirect costs allocated – non –  
32 regulated; Kentucky American Water has not yet billed for any services  
33 under this agreement and this agreement is subject to immediate  
34 termination by either party

1  
2 The Agreement with the City of Pineville (operating as Pineville Utilities  
3 Commission) is a five-year agreement with a term from January 1, 2002 to  
4 December 31, 2006. This agreement covers both water and wastewater  
5 systems. Kentucky American Water filed this Agreement with the Commission on  
6 January 25, 2002.

7  
8 The Bluegrass Station Division Operations and Maintenance Contract is a  
9 contract entered into with the Commonwealth of Kentucky for the operation and  
10 maintenance of the water distribution system, the wastewater collection/treatment  
11 system and the storm water system for the Bluegrass Station Division. Located  
12 in northeastern Fayette County, Bluegrass Station is a development with five  
13 major organizations that employ over 1,350 people. This development is part of  
14 the former Bluegrass Army Depot at Avon. Under the contract, systems repairs  
15 and improvements are reimbursable by Bluegrass Station Division. The  
16 Bluegrass Station Division Operations and Maintenance Contract is a two-year  
17 contract with a term from February 1, 2003 to January 31, 2005. This contract  
18 may be extended on an annual basis at the completion of the initial contract term  
19 for four additional one-year periods. The annual renewal of the contract is  
20 subject to the approval of the Commonwealth of Kentucky Division of Material  
21 and Procurement Services and the Commonwealth of Kentucky Department of  
22 Military Affairs. Kentucky American Water intends to renew the contract at the  
23 expiration of the initial term of the contract. This contract was filed with the  
24 Commission on February 20, 2003.

25  
26 Kentucky American Water's corporate business units include Administration &  
27 General, Business Development, Communications, Legal, Customer Service,  
28 Engineering, Government Relations, Human Resources, Information Systems,  
29 Loss Control, Rates & Revenues and Water Quality. Business Development,  
30 Legal, Information Systems and Rates & Revenues services are provided by the  
31 Service Company and as such, are included in the management fees forecast  
32 included in this filing. Costs assigned to these business units, including  
33 management fees allocated by the Service Company, are the common and in  
34 some cases direct costs of Kentucky American Water. In most cases, these

1 costs are either not identifiable with a particular business unit or are of joint  
2 benefit between two or more business units. It is appropriate, therefore, to  
3 distribute these costs among the regulated and non-regulated businesses so that  
4 for purposes of ratemaking, each will bear, as nearly as practicable, its own  
5 costs.

6  
7 **9. Q. HOW WERE THESE COSTS ALLOCATED?**

8 Where applicable, costs for the forecasted test year were distributed among the  
9 various businesses within Kentucky American Water on the basis of the average  
10 number of customers within each business to the total average number of  
11 customers of all businesses during the forecasted test year. This method of  
12 allocation is easily understandable and reasonable. A similar methodology is  
13 used by American Water Service Company, Inc. to allocate its costs to the  
14 individual operating units that it serves, including Kentucky American Water.  
15 However, certain costs were not allocated to all businesses.

16  
17 Each cost or cost group to be allocated was analyzed and assigned to prevent, to  
18 the extent practicable, redundancy or overlap. As mentioned earlier, Kentucky  
19 American Water accounts for expenses using a series of business units. These  
20 business units are incorporated in the G/L number. Most expenses are directly  
21 charged to these business units and generally need no further allocation. It is  
22 largely the Kentucky American Water Corporate business unit costs that are  
23 allocated.

24  
25 The first step that I took in preparing my allocation schedule was to conduct a  
26 review of Company employees and select for allocation those employees whose  
27 efforts benefited more than just the customers of the Central Division of Kentucky  
28 American Water.

29  
30 Those employees selected for allocation include:

- 31  
32
  - Roy Mundy – President  
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  - Pat Ballard – Executive Secretary to the President

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- Barbara Brown – Director of Communications
- David Whitehouse – Director of Governmental Affairs
- Donna Braxton – Manager of Human Resources
- Frank Ross – Manager of Loss Control
- Bryan Siler – Financial Analyst - Intermediate
- Rachel Cole – Financial Analyst – Intermediate
- David Shehee – Water Quality Specialist
- Shana Carr – Lab Analyst
- Dillard Griffin – Operations Superintendent (Provides oversight for Pineville and Bluegrass Station Division in addition to the Central Division of Kentucky American Water)
- Stan Stockton – Operations Superintendent (Provides oversight for Tri-Village and Elk Lake in addition to the Central Division of Kentucky American Water)
- Jan Routt – Director of Water Quality
- Mary Ellen Pugh – Senior Secretary for Water Quality and Production Departments
- Mitzi Combs – Lab Technician



1 Along with the labor forecasted to be charged to operations and maintenance by  
2 each of these employees, I allocated the cost of office space, payroll overheads  
3 including group insurance, pensions, payroll taxes, etc. and incentive pay where  
4 applicable.

5  
6 Next, I analyzed other operations and maintenance expenses and selected for  
7 allocation those that benefited more than the Central Division of Kentucky  
8 American Water. These expenses include:

9  
10 Customer accounting expenses including postage, forms, collection expenses,  
11 etc. - These are actually direct costs, but accounted for in a corporate business  
12 unit and fairly allocated on the basis of customers.

13  
14 Management fees allocated by American Water Service Company – Management  
15 fees include: Belleville Lab, Customer Service Center, Corporate, ITS, Shared  
16 Services Center (Finance and Accounting) and Southeastern Region.

17  
18 Other operations and maintenance expenses allocated include regulatory  
19 expense, Company dues and memberships, employee travel, telephone expense,  
20 software licensing, training, insurance other than group, customer education  
21 expense, customer confidence reports and other miscellaneous and general  
22 expenses. A detailed list of the expenses allocated can be found on attached  
23 Exhibit KAW\_DT\_CDB\_EX1\_043004.

24  
25 **10. Q. DID YOU USE YOUR JUDGEMENT IN ANY CASE TO ALLOCATE LESS**  
26 **THAN THE FULL COST OF ANY EMPLOYEE OR EXPENSE ITEM?**

27 A. Yes, due to the source of supply and condemnation issues that face the Central  
28 Division, I know from experience that Barbara Brown, Director of  
29 Communications and David Whitehouse, Director of Governmental Affairs, will  
30 have almost no time available to devote to Kentucky American Water's other  
31 businesses. Based on an interview with Barbara Brown, I reduced the amount of  
32 her labor and other expenses available for allocation to 10% (ten percent) of the  
33 total. I also made this same adjustment in the case of David Whitehouse.

1 **11. Q. PLEASE EXPLAIN THE DESIGN AND FUNCTIONALITY OF THE**  
2 **SPREADSHEET THAT IS EXHIBIT KAW\_DT\_CDB\_EX1\_043004.**

3 A. This Excel spreadsheet is designed to allocate a series of forecasted test year  
4 common and direct expense totals among the individual businesses within  
5 Kentucky American Water that derive a benefit from those expenses. These  
6 expense totals are contained in the column headed "Test Year Amount."  
7 Through the use of "IF" statements in formulas, these expenses are allocated  
8 among 2 or more businesses. For example, Pineville and Bluegrass Station  
9 Division do not derive a benefit from the Customer Service Center. Pineville  
10 handles its own billing, collections and customer service. We provide only  
11 operations and maintenance services for the water, wastewater and storm water  
12 systems at Bluegrass Station Division. Bluegrass Station Division personnel  
13 handle all customer relationships within the development. Accordingly, these  
14 expenses are allocated to the Central Division, Tri-Village and Elk Lake  
15 respectively, all of which derive a direct benefit from the Customer Service  
16 Center. An example of an expense that is allocated to all businesses within  
17 Kentucky American Water is the payroll expense and related cost of Kentucky  
18 American Water Financial Analyst Rachel Cole, who is involved in accounting  
19 and finance activities for all businesses.  
20

21 **12. Q. AS A RESULT OF YOUR ANALYSIS REDARDING COSTS ALLOCATONS,**  
22 **HOW MUCH OF THE TOTAL DIRECT AND COMMON COSTS WERE**  
23 **ALLOCATED TO EACH BUSINESS WITHIN KENTUCKY AMERICAN**  
24 **WATER?**

25 A. The results are included on Exhibit KAW\_DT\_CDB\_EX1\_043004, but I will  
26 provide a summary here. Total costs allocated were \$6,582,819. These costs  
27 have been allocated to the various businesses within Kentucky American Water  
28 as follows:

- 29
- 30 • Central Division (Bourbon, Clark, Harrison, Fayette, Jessamine, Scott and  
31 Woodford Counties) - \$6,430,787 or 97.7%
- 32
- 33 • Tri-Village - \$109,920 or 1.7%
- 34

- 1 • Elk Lake - \$19,592 or .3%
- 2
- 3 • Bluegrass Station Division - \$909
- 4
- 5 • Pineville - \$21,611 or .3%
- 6

7 **ACTIVATION FEE**

8 **13. Q. PLEASE EXPLAIN THE ACCOUNT ACTIVATION FEE.**

9 A. The Account Activation Fee of \$24 is similar to a reconnection charge for  
10 restoring service to an account that has been disconnected for nonpayment of a  
11 bill, however this charge is generally for the initiation of new service or for  
12 reconnection of existing service previously turned off or disconnected. The costs  
13 associated with account activation include field charges to turn on service and  
14 office charges to set up the account. A large number of the service orders  
15 worked by Kentucky American Water personnel are to connect new service or  
16 restore existing service previously disconnected at the request of the customer.  
17 The implementation of an activation fee will more fairly allocate the cost of that  
18 service since the costs are easily quantifiable and can be specifically identified  
19 with the delivery of service. Kentucky American is requesting an activation fee in  
20 both the Central and Northern Divisions. The fee is the same and is based on  
21 the results of an analysis of costs in the Central Division due to a consistent level  
22 of service between the divisions and the more comprehensive quantification of  
23 costs for this service using Central Division data.

24

25 **14. Q. DO OTHER UTILITIES CHARGE ACCOUNT ACTIVATION FEES?**

26 A. Yes. Other American Water subsidiaries have such a fee included in their  
27 tariffs. I am also aware that this fee is common to the communications industry.

28

29 **15. Q. HOW WAS THE ACTIVATION FEE CALCULATED?**

30 A. The basis for the fee is Kentucky American Water's projected average cost for  
31 each service order to be worked during the forecasted test year. EXHIBIT  
32 KAW\_DT\_CDB\_EX2\_043004 is filed along with my direct testimony and shows  
33 in greater detail the development of the Account Activation Fee.

1 **16. Q. HOW DID THE COMPANY PROJECT THE ESTIMATED REVENUES**  
2 **ASSOCIATED WITH THE ACCOUNT ACTIVATION FEE?**

3 A. Based on Company experience, the number of account activations, either for new  
4 service or to reconnect service at an existing location, is estimated to be 28,000  
5 for the forecasted test year resulting in total annual revenues from the Account  
6 Activation Fee of \$672,000 for both divisions.  
7

8 **EMERGENCY PRICING TARIFF**

9 **17. Q. MR. BUSH, YOU ARE PROPOSING THE IMPLEMENTATION OF AN**  
10 **EMERGENCY PRICING TARIFF. PLEASE PROVIDE AN OVERVIEW ON THE**  
11 **REASONING BEHIND THIS TARIFF.**

12 A. For years, Central Kentucky has faced a significant water shortage. Kentucky  
13 American Water's water shortage response plan ("Demand Management Plan")  
14 dated June 14, 2001, as filed with the Division of Water, Natural Resources and  
15 Environmental Protection Cabinet and incorporated as part of our withdrawal  
16 permit, was filed with the Commission on June 15, 2001. The Commission  
17 accepted the Demand Management Plan on July 15, 2001. In its May 16, 2001  
18 communication to all jurisdictional water utilities, the Commission encouraged  
19 Kentucky American Water and other jurisdictional water utilities to file water  
20 shortage response plans to 1) better inform the Commission concerning the  
21 readiness of water utilities for dealing with water shortages, and 2) to ensure that  
22 any water rate impacts of such plans be made a part of each utility's approved  
23 tariff.  
24

25 The sample water shortage plan developed several years ago by the Division of  
26 Water and the Commission and included with the Commission's May 16, 2001  
27 communication, envisions, as does Kentucky American Water, the need for  
28 drought-related pricing as a means to reduce customer demand during water  
29 shortage emergencies. As such, a drought pricing tariff is intended to carry  
30 significant economic consequences for use above a base amount or  
31 "entitlement." The obvious intended result of a drought pricing tariff is not to  
32 increase revenues, but rather, to decrease the demand for water by encouraging  
33 extreme conservation measures. As an example of such pricing measures, the  
34 sample water shortage plan developed by the Division of Water and the

1 Commission includes excess usage charges of \$3.00 per thousand gallons at the  
2 Alert stage; \$7.00 per thousand gallons at the Emergency stage; and \$15.00 per  
3 thousand gallons at the Rationing stage. Kentucky American Water has taken a  
4 similar approach except that it has chosen to implement a notification of drought  
5 pricing in the Emergency phase with implementation of the Emergency Pricing  
6 Tariff in the Rationing phase. In recent times of drought, Kentucky American  
7 Water's customers have willingly responded to its requests for demand  
8 reductions. Kentucky American Water is of the firm belief that this spirit of  
9 cooperation will continue during future droughts and for that reason, we see the  
10 need to implement emergency pricing only as a last resort.

11  
12 When Kentucky American Water filed its Demand Management Plan on June 15,  
13 2001, the Emergency Pricing Tariff was still in development and in order to  
14 complete its Demand Management Plan, Kentucky American Water is herewith  
15 filing its Emergency Pricing Tariff for approval by the Commission.

16  
17 **18. Q. WAS THIS TARIFF DEVELOPED BY KENTUCKY AMERICAN WATER IN**  
18 **ISOLATION OR DID THE COMPANY SEEK INPUT FROM THOSE IMPACTED**  
19 **BY THE TARIFF?**

20 A. Meetings were held at the Commission offices on August 26, 1999; September 3,  
21 1999 and September 17, 1999 including, at times, members of the Commission  
22 staff, Mr. David Spenard and Mr. Dennis Howard of the Office of the Attorney  
23 General and representatives from the Lexington-Fayette Urban County  
24 Government. In addition, Kentucky American Water also conducted meetings at  
25 its office on September 2, 1999; October 14, 1999 and June 16, 2000, which  
26 included, at times, representatives from the GE Kentucky Glass Plant, Central  
27 Kentucky Processing, Jessamine South Elkhorn Water District, LexMark,  
28 Aramark, Spears Water Company (now owned by the city of Nicholasville),  
29 University of Kentucky, Eastern State Hospital, Trane Company, Georgetown  
30 Municipal Water And Sewer Service, Bluegrass Station Division, Square D, the  
31 City of Midway, Toyota, Community Action Council and the then Lexington  
32 Chamber of Commerce.

1 **19. Q. WHAT KEY ISSUES REGARDING THE IMPLEMENTATION OF THE**  
2 **EMERGENCY PRICING TARIFF WERE RAISED DURING THESE MEETINGS?**

3 A. The following is a list of key issues raised by the participants:  
4

- 5       ▪ Failure to comply with general restrictions including continued excessive  
6       use over the base established by the Emergency Pricing Tariff is  
7       sufficient reason for termination of service.  
8
- 9       ▪ Announcement of the impending implementation of the Emergency  
10      Pricing Tariff during the Emergency phase with implementation of the  
11      Emergency Pricing Tariff in the Rationing phase is the appropriate  
12      action.  
13
- 14     ▪ Implementation of the Emergency Pricing Tariff should be preceded by a  
15      meeting of all County Judge Executives in the Central Division counties  
16      and a representative(s) of the Lexington Fayette Urban County  
17      Government.  
18
- 19     ▪ For residential users, the group generally agreed that the use of the  
20      previous Fall/Winter (November – December) period to develop an  
21      average for base usage was appropriate.  
22
- 23     ▪ As long as essential uses are met, an overarching goal of the  
24      Emergency Pricing Tariff is to preserve business. Essential use is  
25      defined as follows:  
26
- 27         • Domestic – water necessary to sustain human life and the lives of  
28         domestic pets, and to maintain minimum standards of hygiene  
29         and sanitation.  
30
- 31         • Health Care Facilities – patient care and rehabilitation  
32
- 33         • Water Hauling – sales for domestic use where not reasonably  
34         available elsewhere.

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- Public Use – firefighting; health and public protection purposes, as specifically approved by health officials and the municipal governing body.

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- The establishment of base usage by classification is appropriate due to the different demand characteristics of each class.

8

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- The establishment of base usage below which there would be no increased rate.

11

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- The participants generally agreed that the first step of the tariff should include a rate that is approximately 5 (five) times the current rate and that the second and final step should include a rate that is approximately 10 (ten) times the current rate.

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- The Emergency Pricing Tariff needs to account for the seasonal nature of industry in establishing base usage as well as the fact that many industries have already spent considerable sums to effect conservation measures. Customers should not be penalized for successful conservation actions in the past.

22

23

24

- There was considerable discussion about what to do with any excess revenues generated by the tariff, but no consensus reached.

25

26

27

**20. Q. HAVE ALL OF THESE ISSUES BEEN CONSIDERED IN THE DEVELOPMENT OF THE EMERGENCY PRICING TARIFF?**

28

29

A. Yes, and to the extent practicable and where they have been consistent with the goals of the Demand Management Plan, they have been included in the tariff.

30

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33

**21. Q. DO YOU AGREE THAT IF EMERGENCY PRICING IS IMPLEMENTED THAT EXCESSIVE ADDITIONAL FEES WILL RESULT IN THE FORM OF REVENUES TO THE COMPANY?**

1 A. Not necessarily. According to the Demand Management Plan, the desired  
2 maximum demand level during the Emergency phase shall be defined at less  
3 than 35 MGD, far less than any demand on which normal rates would be set.  
4 While some volumetric costs such as chemicals and power will decrease, there  
5 will be significant increases in labor costs to read meters, provide customer  
6 notices, and implementation of the new tariff. This level of demand will require  
7 significant lifestyle changes that will not be pleasant for most customers, but, it is  
8 achievable in the short run and I believe that the very enactment of an  
9 Emergency Pricing Tariff dictates that we operate on the assumption that the  
10 implementation of the Emergency Pricing Tariff will have the desired impact. In  
11 fact, in my opinion, due to this reduced demand and the related loss of revenue  
12 along with a dramatic increase in costs including enhanced communication and  
13 community education and more frequent meter readings, it is equally as likely, if  
14 not more likely, that the Company will suffer a severe negative economic impact  
15 related to a drought that prompts the implementation of the Emergency Pricing  
16 Tariff. In fact, it is my recommendation that the implementation of the  
17 Emergency Pricing Tariff be accompanied by frequent formal meetings with the  
18 Commission while the Emergency Pricing Tariff is in effect to closely measure  
19 the economic impact to the Company and related service issues. Consideration  
20 needs to be given to the enactment of a Drought Emergency Surcharge in the  
21 event that the Company does enter the Water Rationing Phase of the Demand  
22 Management Plan.

23  
24 **22. Q. HOW DO YOU SUGGEST THAT THE COMPANY ACCOUNT FOR THE FEES**  
25 **FROM AND COSTS OF IMPLEMENTING THE EMERGENCY PRICING TARIFF**  
26 **AND HOW DO YOU RECOMMEND THAT THE COMMISSION TREAT THESE**  
27 **FEES AND COSTS?**

28 A. I recommend that the Company be given approval in the order in this case to  
29 begin deferring charges associated with a drought at the introduction of the Water  
30 Shortage Emergency Phase. Any billings as a result of the implementation of the  
31 Emergency Pricing Tariff should be separately accounted for on the books of the  
32 Company. 60 (sixty) days after the official lifting of the Advisory Phase, the  
33 Commission should initiate a formal proceeding on the matter to determine the  
34 economic impact of the implementation of the Demand Management Plan. Any



1 excess fees collected could be refunded or allocated specifically to conservation  
2 initiatives. Any shortfall as a result of fees collected minus additional expenditures  
3 could be collected over the succeeding year through a surcharge.  
4

5 **23. Q. WOULD YOU EXPLAIN IN SUMMARY FORM HOW THE TARIFF WOULD**  
6 **WORK FOR EACH CLASS OF SERVICE?**

7 A. Residential – Base usage is defined as average monthly usage for the  
8 immediately preceding non-drought Fall/Winter (November – April) period. On an  
9 individual customer basis, usage in excess of the base by up to 25% (twenty-five  
10 percent) will be billed at 5 (five) times the regular tariff rate. Usage exceeding  
11 25% (twenty-five percent) above the base will be billed at 10 (ten) times the  
12 regular tariff rate.  
13

14 Commercial – Base usage is defined as average monthly usage for the  
15 immediately preceding non-drought twelve-month (12-month) period. On an  
16 individual customer basis, usage in excess of the base by up to 15% (fifteen  
17 percent) will be billed at 5 (five) times the regular tariff rate. Usage exceeding  
18 15% (fifteen percent) above the base will be billed at 10 (ten) times the regular  
19 tariff rate.  
20

21 Industrial – Base usage is defined as the average monthly usage for the  
22 immediately preceding non-drought Spring/Summer (May – October) period. On  
23 an individual customer basis, usage in excess of the base by up to 15% (fifteen  
24 percent) will be billed at 5 (five) times the regular tariff rate. Usage exceeding  
25 15% (fifteen percent) above the base will be billed at 10 (ten) times the regular  
26 tariff rate. The tariff for this class includes a provision for adjustment to base  
27 usage where significant changes in industrial output or design changes have  
28 occurred after the period on which the base was established.  
29

30 Other Public Authority - Base usage is defined as average monthly usage for the  
31 immediately preceding non-drought twelve-month (12-month) period. On an  
32 individual customer basis, usage in excess of the base by up to 15% (fifteen  
33 percent) will be billed at 5 (five) times the regular tariff rate. Usage exceeding

1 15% (fifteen percent) above the base will be billed at 10 (ten) times the regular  
2 tariff rate.

3  
4 Sales for Resale - Base usage is defined as average monthly usage for the  
5 immediately preceding non-drought twelve-month (12-month) period. On an  
6 individual customer basis, usage in excess of the base by up to 15% (fifteen  
7 percent) will be billed at 5 (five) times the regular tariff rate. Usage exceeding  
8 15% (fifteen percent) above the base will be billed at 10 (ten) times the regular  
9 tariff rate.

10  
11 **24. Q. WHAT EVIDENCE DO YOU HAVE THAT SUCH PUNITIVE PRICING IS**  
12 **EFFECTIVE IN CURTAILING DEMAND?**

13 A. The preponderance of information that I have been able to find regarding  
14 conservation pricing has to do with general conservation pricing such as use of a  
15 single rate block rather than declining rate blocks and not with the type of punitive  
16 pricing we are discussing here. The very fact that the Division of Water and the  
17 Commission have included penalty rates in their Water Shortage Response Plan  
18 example evidences the credibility of this method as a means to artificially reduce  
19 demand.

20  
21 I have included below excerpts regarding the use of such plans from other  
22 sources:

23  
24 Municipal Water Use and Water Rates Driven by Severe Drought: A Case Study  
25 by Hugo A. Loaiciga and Stephen Renehan

26  
27 “In March 1990, the block rate structure became much steeper. According to  
28 Figure 7 [not shown], in the period March 1990 to October 1990 a single-family  
29 residential customer using 20 HCF feet/month (56.63m<sup>3</sup>/month) was paying 1.09 x  
30 4 + 3.27 x 4 + 9.81 x 6 + 29.43 x 6 + 1.47 = \$253.35/month [sic]. The later [sic] is  
31 almost 12 times the monthly bill that would have applied in 1986 for the same  
32 amount of water used by a single-family residential customer.”  
33

1 Emergency Rate Surcharges in Response to Drought Conditions by John  
2 Ghilarducci

3  
4 ***“Enforcing Percentage Reduction in Usage.*** Under this method, varying  
5 surcharges are imposed upon utility customers according to their performance  
6 against conservation targets. The customers’ previous usage patterns provide a  
7 baseline for evaluating their performance against the target(s). Those customers  
8 who do not meet reduced usage targets, based on their own historical volumes,  
9 receive the highest surcharge.”

10  
11 Water Rates and Revenue Impacts of Severe Drought Response, City of Santa  
12 Barbara, 1990-1993 by Stephen F. Mack, Bill Ferguson

13  
14 “Rates increased by a multiple of 3 from one block to the next. Thus, while Block  
15 1 remained at \$1.09, the Block 2 rate became \$3.27, Block 3 was \$9.81, and  
16 Block 4 was \$29.43. Also, the blocks were shortened such that Block 1 had only  
17 4 units and Block 4 started at 17 units. Customers that had low water use before  
18 the drought (less than 5 units per month) saw no change to their bills, while those  
19 with higher usage had to drastically change their water use habits or see much  
20 higher water bills.”

21  
22 Measuring Overall Conservation Performance – Contra Costa Water District – A  
23 Case Study by Jack A. Weber, Principal Economist, Montgomery Watson  
24 Americas

25  
26 “In January of 1991 the District’s water allocation from the Bureau of  
27 Reclamation’s Central Valley Project was reduced such that retail water sales had  
28 to be cut back from 126,000 acre feet to a net 91,400 acre feet, a reduction of  
29 27.5 percent. The District reacted with a mandatory rationing program beginning  
30 April 1, 1991 designed to achieve an overall reduction of 26 percent for treated  
31 water customers by means of water allocation by customer groups. Single Family  
32 Residential customers were allocated 280 gpd for a family of four, with allowances  
33 for larger family sizes. The average water use at that time was 399 gpd. An

1 excess usage charge of 2 to 10 times the existing water volume rate of \$1.45 per  
2 hundred cubic feet was imposed for each 10 percent of water use in excess of the  
3 base allocation.”  
4

5 Finally, while we are fortunate that our community has not been tested on the  
6 effectiveness of penalty pricing, contained in Lexington-Fayette Urban County  
7 Government Ordinance No. 221-2000, an ordinance amending section 11-9 of the  
8 Code of Ordinances to change the Water Shortage Response Plan to a more  
9 detailed six-phase process in accordance with the Water Shortage Response  
10 Program of the Demand Management Plan of Kentucky-American Water  
11 Company, is the following language: “It is anticipated that during Phase IV  
12 Kentucky-American Water Company and all other Fayette County purveyors of  
13 water will implement additional measures necessary to force customers to further  
14 restrict water use. These additional measures, which are independent of those  
15 taken by the mayor or the urban county government, are required by and/or filed  
16 with the Kentucky Public Service Commission, and include but are not limited to  
17 the implementation of revised pricing structures specifically designed to  
18 monetarily penalize excessive water use within all customer classes, otherwise  
19 known as ‘drought tariffs’, and the temporary reduction or interruption of service to  
20 those customers not otherwise responding to reduction targets.”  
21

22 **25. Q. HAS THE NECESSARY PROGRAMMING BEEN DONE IN ORDER TO**  
23 **IMPLEMENT THE EMERGENCY PRICING TARIFF IN THE EVENT THAT IT**  
24 **BECOMES NECESSARY?**

25 A. No. While a great deal of public input has been sought and given in the  
26 development of the Emergency Pricing Tariff, we are proposing this tariff with the  
27 belief that it has been developed in the spirit of fairness and equity for all  
28 customers, but also with the realistic viewpoint that says it will not survive in its  
29 present form under the necessary public scrutiny that will be part of this case.  
30 Once we receive a final order from the Commission, we will begin the  
31 programming, which is estimated to cost between \$100,000 and \$200,000. We  
32 also ask that as part of the Commission’s final order regarding this tariff that  
33 approval be given for the deferral of the development and programming costs,  
34 such costs to be considered for recovery in a later rate filing.

1  
2 **26. Q. WOULD YOU PLEASE DESCRIBE YOUR REASONS FOR DEFINING THE**  
3 **FORMER TRI-VILLAGE WATER DISTRICT AS A TROUBLED SYSTEM**  
4 **BEFORE KENTUCKY AMERICAN WATER PURCHASED IT AND ALSO THE**  
5 **IMPROVEMENTS TO OPERATIONS AND SERVICE TO CUSTOMERS THAT**  
6 **HAVE RESULTED AS A RESULT OF KENTUCKY AMERICAN WATER'S**  
7 **OWNERSHIP OF THE SYSTEM?**

8 A. If you are not on a public water system, the most important issue often is to gain  
9 access to a public water system. If you are on a public water system, the most  
10 important issue is that the water be of good quality, which includes adequate  
11 system pressure in the supply of that water. By 1999, when the Tri-Village Water  
12 District ("Tri-Village") approached Kentucky American Water regarding the sale of  
13 its system to Kentucky American Water, the state had been requiring for several  
14 years that the Tri-Village and City of Owenton (the wholesale supplier of water to  
15 Tri-Village) systems conduct THM monitoring. Tri-Village regularly issued health-  
16 based public notices for elevated THMs. One obvious goal of any public water  
17 system with an algae-rich impoundment (In the case of Tri-Village, supplemented  
18 by a backwater river tributary) is to maintain good disinfection and overall water  
19 quality while lowering disinfection by-product ("DBP") levels.

20  
21 Customers and officials in these systems wanted immediate improvements;  
22 however, because major changes to the plant or the source water would require  
23 significant funding and state approval, a thorough look at all factors involved, from  
24 the source water through treatment and the distribution systems, was needed.  
25 Kentucky American Water agreed to help resolve the DBP issue, with a final  
26 purchase agreement contingent on resolving the DBP problems.

27  
28 As the leaders of an initiative to improve the overall operations and most  
29 important, the quality of water provided to Tri-Village customers, Kentucky  
30 American Water employees directed the efforts to enhance coagulation, convert  
31 to top-of-filter chlorination and optimize the distribution system. The Kentucky  
32 American Water team successfully combated a source manganese problem in the  
33 summer of 2001, just before the purchase of the Tri-Village system. As a result of  
34 its expertise, Kentucky American Water was able to lower DBPs in the system and

1 better prepare the system for the new Disinfection/Disinfection By-product  
2 regulations. Testing for study purposes supports that the changes made to  
3 improve THM levels have also lowered HAAs.

4  
5 Kentucky American Water's efforts to improve water quality in the Tri-Village  
6 system were so successful that they became the subject of an article written by  
7 Kentucky American Water's Jan Routt and appearing in the April 2004 edition of  
8 Opflow Magazine of the American Water Works Association. The full text of that  
9 article is included in EXHIBIT KAW\_DT\_CDB\_EX3\_043004.

10  
11 **27. Q. IN YOUR OPINION, DO THESE EFFORTS AND THESE RESULTS QUALIFY**  
12 **THE TRI-VILLAGE SYSTEM FOR DESIGNATION AS A TROUBLED WATER**  
13 **SYSTEM AND MAKE ELIGIBLE FOR RECOVERY IN RATES THE**  
14 **ACQUISTION ADJUSTMENT PAID BY KENTUCKY AMERICAN WATER?**

15 A. Yes. Case No. 9059, An Adjustment of Rates to Delta Natural Gas Co., provided  
16 that each instance where a plant acquisition adjustment is involved should be  
17 evaluated on its own merits and, if it is demonstrated that the acquisition at a cost  
18 above book value is in the public interest, the utility should be allowed to recover  
19 its investment.

20  
21 The Commission cited a number of factors in case No. 9059 for allowing a utility  
22 to recover its investment, including that 1) the purchase price was established  
23 upon arms-length negotiations; 2) the initial investment plus the cost of restoring  
24 the facilities to required standards will not adversely impact the overall costs and  
25 rates of the existing and new customers; 3) operational economies can be  
26 achieved through the acquisition; 4) the purchase price of the utility and non-utility  
27 property can be clearly identified; and 5) the purchase will result in overall benefits  
28 in the financial and service aspects of the utility's operations.

29  
30 When you combine the vital improvements in water quality with the expansion of  
31 service to the county through the construction of the New Columbus Project,  
32 these tests have been met. The new water lines, which make up the New  
33 Columbus Project, are capable of serving an additional 600 customers who  
34 otherwise would have to depend on failing or contaminated wells, water hauled by

1 truck or other means. The County Judge Executive of Owen County secured  
2 grant funds to make this project a possibility. With the additional financing  
3 provided by Kentucky American Water, the New Columbus Project became a  
4 reality. Ms. Bridwell addresses the actual construction of this project in her  
5 testimony. The importance to the region of the New Columbus Project was  
6 evidenced through a recent connection by the Peak's Mill system to the Kentucky  
7 American Water system via the mains made possible through the New Columbus  
8 Project allowing Peak's Mill to avoid a costly capital investment. In my opinion,  
9 the acquisition adjustment should be eligible for rate recovery.

10  
11 **28. Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

12 A. Yes.