

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF KENTUCKY-AMERICAN WATER ) CASE NO.  
COMPANY TO INCREASE ITS RATES ) 97-034

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O R D E R

On February 28, 1997, Kentucky-American Water Company ("Kentucky-American") filed a rate application with the Commission using a forecasted test period, pursuant to 807 KAR 5:001, Section 10(1)(b). Kentucky-American proposed an increase to its rates effective March 30, 1997 to generate additional annual revenues of \$2,687,190, an overall increase of approximately 7.61 percent over existing revenues.

To determine the reasonableness of the request, the Commission suspended the proposed rates for 6 months from their effective date pursuant to KRS 278.190(2). The Attorney General's office, Utility and Rate Intervention Division ("AG"), the Lexington-Fayette Urban County Government ("LFUCG"), Chetan Talwalkar ("Talwalkar"), and Toyota Motor Manufacturing North America intervened. A procedural schedule was established, the parties engaged in extensive discovery, intervenors filed testimony and briefs were filed. A public hearing was held on July 1 and 2, 1997 to receive evidence relating to Kentucky-American's rate application.

This Order addresses the Commission's findings and determinations on the issues presented and disclosed upon the investigation of Kentucky-American's revenue requirement. Based on those findings, the Commission approves herein new rates to produce an increase in annual operating revenue of \$1,049,884, an overall increase of approximately 2.97 percent.

Due to the voluminous nature of a rate application based on a forecasted test year, the Commission requested the parties to file as much information as possible in electronic form to reduce the number of copies otherwise needed. This was the first case in which the Commission experimented with an electronic case filing and we appreciate the cooperation of the parties in this effort.

### ANALYSIS AND DETERMINATION

#### Forecasted Test Period

As authorized by KRS 278.192(1), the forecasted test period is the 12 months ending September 30, 1998. The base period upon which the reasonableness of the forecasted period is to be determined is the 12 months ended May 31, 1997.

#### Valuation Method

Kentucky-American has proposed a forecasted net investment rate base of \$130,570,800.<sup>1</sup> This forecasted rate base is accepted with the following exceptions:

Utility Plant In Service ("Utility Plant"). Kentucky-American adjusted its actual November 30, 1996 level of utility plant of \$176,792,717<sup>2</sup> by the forecasted monthly utility plant additions and retirements for the period December 1, 1996 through September 30, 1998. A 13-month average of the forecasted utility plant balances for the period September 1, 1997 through September 30, 1998 was used to arrive at Kentucky-American's forecasted utility plant of \$192,758,194.<sup>3</sup>

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<sup>1</sup> Rate Base Summary as of September 30, 1998, Schedule B-1, page 2 of 2.

<sup>2</sup> Workpaper W/P-1-1, page 3.

<sup>3</sup> Direct Testimony of Douglas G. Fuller, pages 2 and 3.

Kentucky-American's construction budget is segregated into two categories: (1) investment projects, normal recurring plant investment; and (2) special budget projects, non-recurring plant investment.<sup>4</sup> Between 1987 and 1996, the ratio of Kentucky-American's actual to budgeted construction spending, labeled "the slippage factor," was 82.813 percent for special budget projects and 96.993 percent for investment projects.<sup>5</sup> The slippage factors are a historical indicator of Kentucky-American's inability to accurately predict the cost of its utility plant additions and date that plant will be placed into service.

In Case No. 92-452,<sup>6</sup> the Commission determined that because budgeting is an inexact science, the historical relationship between budgets and actual results should be reviewed to determine which construction projects will be in service or under construction in the forecasted period. Based on the historical relationship demonstrated by the slippage factor, the Commission concluded Kentucky-American's "very best estimate(s)" of construction spending was inaccurate and showed a pervasive pattern of over-budgeting for construction. To eliminate Kentucky-American's historical overestimation, the Commission reduced the forecasted recurring and specific budget projects by the respective slippage factors.

According to the AG, the historical data and trends show that Kentucky-American's budget forecasting remains unreliable in that the forecasts do not bear a

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<sup>4</sup> Id., page 3.

<sup>5</sup> Item 7 of the Commission's April 4, 1997 Order.

<sup>6</sup> Case No. 92-452, Notice of the Adjustment of Rates of Kentucky-American Water Company, Order issued May 4, 1994.

reasonable relationship to the amounts completed. The AG argues that the unreliable forecasts result in a rate base that permits a return on utility plant not yet placed in service. Based on the Commission's past precedent, and the historical trends, the AG proposes that Kentucky-American's forecasted utility plant in service be reduced by the "rolling 10-year average" slippage factors.<sup>7</sup>

Kentucky-American believes that if a slippage factor is used to disallow some forecasted capital expenditures from rate base, a 4-year average is more appropriate because it would reflect the time period under which Kentucky-American has filed rate cases using the forecasted test-period concept.<sup>8</sup> Since filing its first forecasted rate case, Kentucky-American claims that it has instituted a series of controls and changes to the budgeting methodology and the monitoring of expenditures to increase the reliability of its budgeting. According to Kentucky-American the utilization of a 4-year historical period is logical, recognizes the efforts it has made, and provides a realistic incentive for continued improvement in its budgeting of capital expenditures.<sup>9</sup>

The AG, in support of his argument that slippage factors are sensitive to the time frame analyzed, points to the evidence that a 5-year analysis would dramatically differ from the 4-year analysis proposed by Kentucky-American. The AG believes that the use of a consistent time frame trend would eliminate the picking and choosing between different lengths of time from rate case to rate case. For this reason, the AG requests

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<sup>7</sup> Brief of the AG, pages 3 and 4.

<sup>8</sup> Item 7 of the Commission's April 4, 1997 Order, Scenario C.

<sup>9</sup> Brief of Kentucky-American, pages 9 and 10.

that Kentucky-American's 4-year slippage factors be rejected by this Commission as arbitrary.<sup>10</sup>

Kentucky-American proposed a similar adjustment to the slippage factors in Case No. 95-554.<sup>11</sup> In that proceeding Kentucky-American requested the Commission to use the slippage factors for the period April 1, 1994 to January 31, 1996, because: "the exclusive emphasis should be placed on its most recent history as that is the best indicator of the future." The Commission rejected Kentucky-American's proposed adjustment in that case because an analysis of the 10 year historical data used to develop the slippage factors did not demonstrate that the improvement that occurred between April 1994 and January 1996 would continue into the future.

In Case No. 95-554, the Commission found that: "The 10 year slippage factor is an average of the highs and lows that have occurred over time and it produces a more reliable estimate of the construction projects Kentucky-American will have in service or under construction in the forecasted period." To support this finding the Commission pointed to Case No. 92-452, where Kentucky-American's forecasted rate base exceeded its actual results by \$2,902,120, while the Commission's rate base including the slippage factors exceeded Kentucky-American's actual results by only \$231,459.

Kentucky-American's claim that the changes in its budgeting methodology and the monitoring of expenditures has resulted in a more reliable budget is not supported by the

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<sup>10</sup> Brief of the AG, page 4.

<sup>11</sup> Case No. 95-554, Notice of the Adjustment of Rates of Kentucky-American Water Company, Order issued September 11, 1996.

analysis of the actual to budgeted capital expenditures for the months of January 1, 1997 through June 30, 1997. During this 6-month period, the monthly special budget project slippage factors fluctuated from a (21.9) percent to 131.8 percent and the 6-month slippage factor was 84.2 percent. Furthermore, a comparison of Kentucky-American's 1996 special budget project slippage factor with the factor for the 12-month period ending March 1997 shows that there was a decrease of 46.8 percent. This lends credence to the AG's argument concerning the time sensitivity of slippage factors.

The evidence clearly demonstrates that the Commission's finding in Case No. 95-554, that Kentucky-American's recent history of budget forecasting is not a precise indicator of its future construction expenditures, continues to be accurate. Therefore, the Commission will reduce Kentucky-American's forecasted utility plant in service by the "rolling 10-year average" slippage factors.

Kentucky-American presented Scenario B to show the elimination of the Ohio River pipeline costs from the calculation of the 10-year special budget project slippage factor. Since the Commission has disallowed the recovery of the Ohio River pipeline costs in rate base, Kentucky-American proposed to remove these costs from the slippage factors. If this adjustment is not made, Kentucky-American claims that it would experience a "double" adjustment to its revenue requirement, one for slippage and one for the elimination of the Ohio River pipeline costs from rate base.<sup>12</sup>

The AG recommended acceptance of the proposed Scenario B slippage factor adjustment to reflect the removal of all investment related to the Ohio River pipeline

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<sup>12</sup> Item 7 of the Commission's April 4, 1997 Order, Scenario C.



project from the rate-making process.<sup>13</sup> The Commission agrees with the AG's recommendation and proposed Scenario B slippage factors will be used in this case.

Reducing Kentucky-American's construction budget by the Scenario B slippage factors applicable to investment projects and special budget projects yields a forecasted utility plant of \$191,667,129. This results in a reduction of \$1,091,065 to Kentucky-American's utility plant balance.

Accumulated Depreciation. Kentucky-American's forecast of accumulated depreciation was developed in the same manner as forecasted utility plant. The actual accumulated depreciation balance on November 30, 1996 was adjusted by the monthly forecasted depreciation expense, the forecasted retirements, and the projected cost of removal net of salvage value. A 13-month average of the forecasted accumulated depreciation balances for the period September 1, 1997 through September 31, 1998 was used to arrive at Kentucky-American's forecasted accumulated depreciation of \$32,510,781.<sup>14</sup>

Given that accumulated depreciation depends on the level of utility plant, a reduction to utility plant has a correlative effect on the balance of accumulated depreciation. To be consistent, forecasted accumulated depreciation has been reduced by \$15,524, to reflect the slippage factor adjustment to utility plant.

Construction Work In Progress ("CWIP"). A 13-month average of the forecasted CWIP balances for the period September 1, 1997 through September 31, 1998 was used

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<sup>13</sup> Brief of the AG, page 4.

<sup>14</sup> Direct Testimony of Douglas G. Fuller, page 3.

to arrive at Kentucky-American's forecasted CWIP of \$6,400,363.<sup>15</sup> This amount includes approximately \$1,895,439<sup>16</sup> in design and development costs associated with the Ohio River supply line.

In Case No. 92-452, Kentucky-American requested rate recovery of the preliminary planning and design costs for the Ohio River supply line. The Commission denied that recovery based on the nature of the supply line costs, the requirements of the Uniform System of Accounts for Class A and B Water Utilities ("USoA"), and the uncertainty surrounding the construction of the supply line. Based on a request by the AG, the Commission initiated Case No. 93-434<sup>17</sup> to investigate Kentucky-American's future demand and its sources of supply.

The Commission's March 14, 1995 Order in Case No. 93-434 found that the three previous safe-yield analyses of the Kentucky River did not consider the impacts of leak repairs or the planned addition of valves to facilitate the mining of river pools. Consequently, the Commission concluded that it was impossible to reach a definitive conclusion as to Kentucky-American's need to develop a supplemental source of supply until a conclusive safe-yield analysis of the Kentucky River is performed. Kentucky-

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<sup>15</sup> Id., page 4.

<sup>16</sup>	90-13 Kentucky Aquatic Study	\$ 412,005
	90-14 Source of Supply Evaluation	319,623
	92-12 Source of Supply	419,545
	92-12 Source of Supply	534,080
	92-12 Source of Supply	+ 210,186
	Total Ohio River Supply Line Costs	<u>\$ 1,895,439</u>

<sup>17</sup> Case No. 93-434, An Investigation of the Sources of Supply and Future Demand of Kentucky-American Water Company.

American's petition for rehearing was granted to the limited extent that the investigation would remain open until the Kentucky River Authority concluded its new safe-yield analysis of the Kentucky River.

In Case No. 95-554, Kentucky-American renewed its request for rate recovery of the preliminary planning and design costs for the Ohio River supply line. In that proceeding the Commission found that until Case No. 93-434 is concluded and a subsequent decision is made on the need for a Certificate of Public Convenience and Necessity ("Certificate"), construction of the Ohio Pipeline is uncertain, and Kentucky-American's request for rate recovery was denied.

On October 7, 1996, the Kentucky River Authority filed a copy of the final draft of the Kentucky River Basin Water Supply Assessment Study ("1996 Kentucky River Study") compiled by the Kentucky Water Research Institute. After receiving the completed 1996 Kentucky River Study, the Commission found that further proceedings were appropriate and limited the scope of the hearing to the issues of the adequacy of Kentucky-American's water supply and the magnitude of any deficiency.

In its August 21, 1997 Order in Case No. 93-434, the Commission determined that a reasonable estimate of Kentucky-American's total annual water supply deficit for planning purposes through the year 2020 was 3.489 billion gallons. The Commission then ordered Kentucky-American to obtain sufficient sources of supply so that it can adequately, dependably, and safely distribute water to satisfy the total reasonable requirements of its customers under maximum consumption through the year 2020.

The AG, citing the findings in Case Nos. 92-452 and 95-554 that the construction of the Ohio River pipeline is uncertain, requests the Commission to continue to exclude the Ohio River pipeline from rate base until a decision is rendered in a Certificate proceeding.<sup>18</sup>

Kentucky-American believes that all of its expenditures incurred to develop an additional source of supply should be included in rate base and not collected in Account 183 - Preliminary Survey and Investigation Charges. According to Kentucky-American, the construction of a water supply line from Louisville to Lexington is feasible. Based on the assumption that Case No. 93-434 will conclude that there is a need for an additional source of supply, Kentucky-American argues that to deny rate base recovery of the Ohio River pipeline costs until a Certificate is granted is inappropriate and a disservice to its ratepayers.<sup>19</sup>

The USoA requires that any preliminary construction costs be recorded in Account 183 until actual construction begins. In Case No. 92-452, Kentucky-American stated that, "construction does not begin until a contract is signed, the pipe is purchased, and the pipe is placed in the ground."<sup>20</sup> In Kentucky-American's past two rate cases the Commission found that until a Certificate is granted approving the construction of the Ohio River pipeline, all of the pipeline costs are preliminary construction costs that should be excluded from rate base. The earliest Kentucky-American intends to apply

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<sup>18</sup> Brief of the AG, page 5.

<sup>19</sup> Brief of Kentucky-American, page 11.

<sup>20</sup> Final Order, page 13.

for a Certificate to construct the Ohio River pipeline is February 1998, 6 months from the date the Order in Case No. 93-434 was issued.<sup>21</sup>

Kentucky-American has the responsibility to propose a solution to eliminate its water supply deficit. Based on the evidence in Case No. 93-434, it is apparent that there are conflicting views as to how the supply deficit should be eliminated, with the Ohio River pipeline being but one solution. Given the controversy surrounding the pipeline, there is still no certainty that it will be constructed.

Kentucky-American claims that Budget Project 90-13, the Kentucky River Aquatic Study, is not related to Budget Project 92-12, the Source of Supply. According to Kentucky-American, the sole purpose of the aquatic study was to determine the impact on the aquatic habitat and downstream users of water withdrawals from the Kentucky River during low flows. Because the study is complete and is providing benefits to ratepayers, Kentucky-American requests that these expenditures be included in rate base.<sup>22</sup>

Kentucky-American stated that the cost of Budget Project 90-13, the Kentucky River Aquatic Study, will be included in the construction cost of any water supply project that is completed.<sup>23</sup> Given this statement, the Commission finds that the aquatic study costs are sufficiently related to the water supply deficit and the proposed Ohio River pipeline project. Therefore, the Commission will accept the AG's adjustment to remove

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<sup>21</sup> Transcript of Evidence ("T.E."), Volume I, page 179.

<sup>22</sup> Brief of Kentucky-American, page 11.

<sup>23</sup> T.E., Volume I, page 167.

all of the cost associated with the Ohio River pipeline from rate base, thereby reducing rate base by \$1,895,439.

As Kentucky-American's utility plant is dependent upon its construction forecasts and budgets, its CWIP is dependent upon its construction forecasts and budgets. Therefore, Kentucky-American's forecasted level of CWIP should be reduced by the slippage factors, thereby resulting in a further reduction of CWIP of \$673,577.

Customer Advances. Kentucky-American forecasted the receipts, refunds, and transfers of customer advances to the Contributions In Aid of Construction ("CIAC") account by month through the end of the forecasted test period, thus resulting in an average balance of \$5,321,568 for the forecasted test period.<sup>24</sup> The receipt of customer advances is dependent on the level of construction. A reduction in the construction budget has a correlative effect on the balance of customer advances. To be consistent, forecasted customer advances has been reduced by \$283,641, to reflect the slippage factor adjustment made to utility plant and CWIP.

CIAC. This element was developed by starting with the actual CIAC balance as of November 30, 1996 adjusted for forecasted increases in CIAC from either direct contributions or transfers from customer advances. The 13-month balance was developed by analyzing the forecasted activity in the CIAC accounts beginning with December 1996 through September 30, 1998 and developed a forecasted 13-month average balance of \$18,100,645.<sup>25</sup>

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<sup>24</sup> Direct Testimony of Stephen J. Hopkins, page 5.

<sup>25</sup> Id.

The transfers to CIAC are dependent on the amount of construction and the level of customer advances. A reduction in the construction budget or the level of customer advances has a correlative effect on the balance of CIAC. To be consistent, forecasted customer advances has been reduced by \$5,333, to reflect the slippage factor adjustment made to utility plant, CWIP, and customer advances.

Deferred Maintenance. Kentucky-American developed a 13-month average of deferred maintenance projects based upon both actual projects deferred and projects forecasted to be deferred. These projects include the painting of system water tanks, the cleaning of mains, overhauling of hydrotreaters, maintenance on the intake traveling screens, roof repairs, and hydrant painting. Based upon these actual and forecasted expenditures for 1997 and 1998, Kentucky-American developed a 13-month average of \$3,007,935 for these deferred maintenance items.<sup>26</sup>

In Case No. 95-554, the Commission noted that from 1986 through 1995, Kentucky-American's actual programmed maintenance was 82.74 percent of its budgeted level. Based upon this historic relationship and evidence that the forecasted budget amount is as reliable as the 10-year average, the Commission reduced programmed maintenance expense to 82.74 percent of the forecasted amount.

From 1987 through 1996, the ratio of Kentucky-American's actual to budgeted programmed maintenance was approximately 80 percent. Consistent with the decision in Case No. 95-554, the AG recommended that programmed maintenance expense be

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<sup>26</sup> Id., page 6.

reduced to 80 percent of Kentucky-American's projections.<sup>27</sup> As discussed below, the AG's adjustment to this expense will be adopted. However, since this expense reflects the amortization of deferred maintenance projects, a reduction to programmed maintenance expense will impact the unamortized balance of deferred maintenance included in rate base.

Reducing the deferred maintenance projects to approximately 80 percent of the amount forecasted and reflecting the actual cost incurred to complete Project No. M1015, KRS hydro # 6, results in a \$56,539 reduction to deferred maintenance included in rate base.

Deferred Income Taxes. Kentucky-American analyzed thirteen separate deferred tax items. Each item has been included by the Commission in rate base in prior rate cases except the Automated Meter Reading ("AMR") Study and the meter deviation application. Kentucky-American calculated 13-month averages for each tax separately and then combined them to arrive at a forecasted deferred income tax balance of \$18,068,070.<sup>28</sup> The Commission finds all of these items appropriate for inclusion in this case. Reflecting the aforementioned reductions to utility plant and deferred maintenance, and including in rate base the Kentucky Utilities Company ("KU") Refund as discussed below, decreases deferred income taxes by \$47,942 and results in a reduction to deferred income tax expense of \$45,101. The increase to deferred income tax expense results in a dollar-for-dollar decrease to net operating income.

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<sup>27</sup> Brief of the AG, page 27.

<sup>28</sup> Direct Testimony of Edward J. Grubb, page 7.



Source of Supply Investigation. The Commission, on motion of the AG, initiated a formal investigation of Kentucky-American's demand forecasting, demand side management, and source of supply options. The investigation was docketed as Case No. 93-434 and as of December 31, 1996, Kentucky-American had incurred costs of \$369,811 related to the case. In addition, Kentucky-American forecasted a 13-month average of these costs to be \$969,811 and requested that amount be included in rate base.<sup>29</sup>

The AG pointed to the Commission's decision in Case No. 95-554, that the costs of Case No. 93-434 should be afforded the same rate-making treatment as the other Ohio River pipeline costs. Because Kentucky-American has not demonstrated a sound basis to deviate from that prior decision, these costs should continue to be excluded from rate base.<sup>30</sup>

It is Kentucky-American's contention that the information provided by the supply analysis of the Kentucky River and the insight gained through the processing of Case No. 93-434 is valuable to both the ratepayer and Kentucky-American. It is also Kentucky-American's belief that its water supply pipeline project will be recognized by the Commission in Case No. 93-434 as the most feasible solution to the source of supply deficit. For these reasons, Kentucky-American disagrees with the AG's proposed exclusion of the costs associated with Case No. 93-434 from rate base.<sup>31</sup>

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<sup>29</sup> Direct Testimony of Stephen J. Hopkins, page 7.

<sup>30</sup> Brief of the AG, page 11.

<sup>31</sup> Rebuttal testimony of Stephen J. Hopkins, page 6.

Until a final decision is rendered on the need for the Ohio River pipeline or an alternative project, the Commission finds that all costs associated with the source of supply are preliminary costs of construction. Therefore, rate base has been reduced by \$969,811 to reflect the transfer of these costs to Account 183 until the source of supply issue is concluded.

The Commission also notes that a portion of Kentucky-American's expenses on this project are for the services of a lobbyist, who was retained to convince the executive and legislative branches of Kentucky's government that the Ohio River pipeline is the most reasonable solution to Kentucky-American's source of supply issue.<sup>32</sup> Kentucky-American included in its forecasted source of supply investigation costs a 13-month average of payments to its lobbyist in the amount of \$24,000; however as of June 1997 the lobbyist had been paid \$36,216.

Commission Regulation 807 KAR 5:016 prohibits the inclusion for rate-making purposes of any expenditures for political advertising. As defined in 807 KAR 5:016, Section 4(2)(a), political advertising is intended to influence "public opinion with respect to legislative, administrative, or electoral matters, or with respect to any controversial issue of public importance." Kentucky-American has acknowledged that there is ample Commission precedent to justify excluding lobbying expenses from rates.<sup>33</sup>

The Commission finds that Kentucky-American's proposed Ohio River pipeline is a controversial issue of public importance. Therefore, any costs that are incurred to

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<sup>32</sup> T.E., pages 14, 22 and 23.

<sup>33</sup> T.E., page 18.

influence public opinion or to educate the executive and legislative branches of government on this issue appear to fall squarely within prohibition of 807 KAR 5:016. The Commission places Kentucky-American on notice that such costs will not be allowed for rate-making purposes.

AMR Study. The AG pointed to the Commission's finding in Case No. 95-554 that Kentucky-American's ratepayers are not currently receiving any benefit from the AMR Study; therefore, the carrying costs should be borne by the stockholders. Because there has been no demonstration that this expenditure will ever provide any material benefit to Kentucky-American's ratepayers, the AG submits the original ruling in Case No. 95-554 properly determines this matter, and the unamortized AMR Study costs of \$83,502 should be excluded from rate base.<sup>34</sup>

In its Order on rehearing in Case No. 95-554, the Commission included the unamortized AMR Study costs in Kentucky-American's rate base based on the following findings:

- (1) Kentucky-American performed the AMR Study in response to a recommendation made in a Commission-mandated management audit.
- (2) Kentucky-American provided sufficient evidence to show that its AMR Study benefitted its ratepayers by postponing a capital project that is not currently cost beneficial.
- (3) A periodical AMR Study review will be performed as verification of Kentucky-American's intent to implement the AMR program as soon as the benefits outweigh the costs.

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<sup>34</sup> Brief of the AG, pages 10 and 11.

The Commission now reaffirms these findings and will therefore include the unamortized AMR Study costs in rate base.

Contract Retentions. Kentucky-American reduced rate base by \$144,286 to reflect the 25-month average of contract retentions for November 1994 through November 1996.<sup>35</sup> According to the AG, Kentucky-American's actual contract retention balances have recently experienced significant increases. To reflect this current trend, the AG proposed to increase the contract retention balance by \$29,506 based on the average balance for the 24-month period ending March 1997.<sup>36</sup>

Kentucky-American states that it used the most current information available at the time the application was prepared when it developed the average balance of contract retentions. Because the Commission's rate filing regulation does not allow Kentucky-American to update its application, Kentucky-American argues that the AG should not be permitted to do so, especially for a highly volatile expense like contract retentions.<sup>37</sup>

While Kentucky-American is precluded from updating its application to reflect more current information, it did at the hearing present various adjustments to rate base, cost of capital, revenues, and expenses based on more current information. It is within the Commission's discretion to accept or reject such adjustments. In prior forecasted rate case proceedings, the Commission has generally accepted adjustments based on more

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<sup>35</sup> Direct Testimony of Stephen J. Hopkins, page 7.

<sup>36</sup> Brief of the AG, pages 11 and 12.

<sup>37</sup> Brief of Kentucky-American, pages 15 and 16.

current information. Therefore, the Commission agrees with the AG's proposed adjustment and has increased contract retentions by \$29,506.

Customer Deposits and Unclaimed Extension Deposit Refunds. According to the AG, at any point in time Kentucky-American will have available a certain known and measurable level of customer deposits and unclaimed extension deposit refunds. The AG claims that these balances represent semi-permanent customer supplied funds that are available to Kentucky-American for general working capital purposes on a continuous basis and, therefore, should be used as rate base reductions. Thus, the AG proposed to reduce Kentucky-American's forecasted rate base by \$57,091 for customer deposits and \$74,882 for unclaimed extension deposit refunds.<sup>38</sup>

Kentucky-American argues that if it is prudent to reduce rate base by customer deposits and unclaimed extension deposit refunds, it is appropriate to evaluate all miscellaneous items for possible rate base inclusion. Kentucky-American pointed to miscellaneous accounts receivable, undistributed items, deferred tax management software license, and deferred municipal acquisition expense which would collectively increase its forecasted rate base by \$304,888.

Under certain conditions, Kentucky-American requires its customers to pay a security deposit to mitigate the potential losses that would result if the customers fail to pay for service. Under 807 KAR 5:076, Section 7(6), Kentucky-American is required to accrue interest on all customer deposits and that interest is to be refunded to the customer or credited to the customer's bill on an annual basis. Customer deposits

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<sup>38</sup> Direct Testimony of Robert J. Henkes, page 30.

represent a liability to Kentucky-American because of the requirement that they be returned to the customer either after a specified period of time or upon satisfaction of certain requirements.

Since customer deposits represent a liability to be repaid to the customer with interest, the Commission generally has not recognized the deposits as readily available cost free capital. However, unclaimed extension deposit refunds are a source of cost free capital to Kentucky-American because there is no statutory requirement for Kentucky-American to pay interest on any extension deposits refunded to the contributor.

Due to this difference between the two accounts, the Commission is not persuaded to adopt the AG's proposed customer deposit adjustment. However, the adjustment to reduce rate base by \$74,882 to reflect the unclaimed extension deposit refunds adjustment is reasonable and accepted.

KU Refund. The AG points to the Commission determination in Case No. 92-452 that Kentucky-American's ratepayers are entitled to the full benefit of the refund resulting from the litigation between KU and the South East Coal Company. If the unamortized balance of the KU refund is not used as an offset to rate base, the AG argues that Kentucky-American's shareholders will receive the benefit. Therefore, the AG proposed to reduce Kentucky-American's forecasted rate base by \$47,562 to flow the benefit of the refund to the customer.<sup>39</sup>

Kentucky-American opposes this rate base reduction because during the 6 years it paid the expense to KU, Kentucky-American did not earn its authorized return on

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<sup>39</sup> Brief of the AG, page 13.

equity. The Commission ordered that the refund be credited to ratepayers over 6 years, which Kentucky-American claims it is doing.<sup>40</sup>

Kentucky-American is allowed to include in rate base the unamortized balances of deferred debits and maintenance projects that benefit the ratepayers, but are supported by stockholder-provided capital. In this instance, the source of capital for the KU overpayment was the rates paid by Kentucky-American's customers since those rates had been designed to recover all of KU's charges. The Commission finds that ratepayers should receive 100 percent of the benefit and, therefore, we accept the AG's proposed reduction to rate base of \$47,562.

Accrued Pension Expense. The difference between Kentucky-American's annual FASB 87 pension expenses and its annual ERISA pension plan contribution cash payments is being recorded in a liability reserve account entitled "Accrued Pensions." The AG describes this accrued pension balance as funds provided through rates paid by ratepayers, which are available to Kentucky-American for general working capital until the payments exceed the amounts accrued. For this reason the AG recommended that rate base be reduced by the \$242,540 balance in this account.<sup>41</sup>

Kentucky-American agrees with the AG's adjustment providing the Commission also finds that if the accrued balance reverses in the future and a pension asset is created, then the asset should be included as a rate base addition.<sup>42</sup> The Commission

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<sup>40</sup> Rebuttal Testimony of Edward J. Grubb, page 10.

<sup>41</sup> Direct Testimony of Robert J. Henkes, page 22.

<sup>42</sup> Rebuttal Testimony of Edward J. Grubb, page 10.

agrees with Kentucky-American because it would be unfair to its stockholders to recognize the accrued pension balance only when it results in a rate base reduction. Therefore, rate base has been decreased by \$242,540 to recognize the accrued pension liability.

Unamortized Rate Case Expense. The AG argues that the current method of allowing amortization of all rate case costs while excluding the unamortized balance from rate base places a majority of the cost burden on ratepayers. For this reason the AG recommends a 50/50 sharing between ratepayers and shareholders for consulting fees, legal fees, and Service Company charges associated with this rate case proceeding.<sup>43</sup>

The AG claims a 50/50 sharing does not penalize Kentucky-American for exercising its statutory right to seek rate relief but does provide an incentive for Kentucky-American to follow the Commission's mandate to do "everything possible to minimize" its regulatory costs. Because Kentucky-American's rate case expenses have been increasing at a staggering rate, the AG believes a 50/50 sharing provides a fairer allocation of these costs to the shareholder thereby providing additional incentive to keep regulatory costs down. To accomplish the proposed sharing, the AG eliminated 50 percent of rate case costs and proposed to increase rate base by \$148,913 to reflect the unamortized balance of the 50 percent to be paid by ratepayers.<sup>44</sup>

Kentucky-American asserts that since the Commission has a statutory obligation to ensure that rates are fair, just, and reasonable, Kentucky-American's reasonable rate

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<sup>43</sup> Brief of the AG, pages 25 and 26.

<sup>44</sup> Id.



case costs are legitimate rate-making expenses to be paid by ratepayers. Any allocation of rate case expenses to the shareholders, Kentucky-American claims, would act as a disincentive for a utility to exercise its statutory right and obligation to seek rate relief.<sup>45</sup>

The AG claimed that Kentucky-American's rate case expenses have increased at a staggering rate, but has presented no evidence to suggest that these expenses are unreasonable or imprudent. The staggering increases noted by the AG can be attributed to the additional work necessitated by the use of a future test year. Budgeting a forecasted test period is an inexact science that requires an extensive review of the historical relationship between budgets and actual results to determine if the chosen budgeting methodology is accurate. This review requires a significantly greater amount of information which translates into increased rate case cost.

In Case No. 95-554, the Commission determined that: "Pursuant to KRS 278.180, a utility has the discretion to choose the timing of its rate case applications. There is nothing in KRS 278 that authorizes the Commission to adopt a disincentive to, in effect, penalize a utility for exercising its right to seek rate relief." It would be a disincentive to Kentucky-American if its shareholders are denied the opportunity to recover all prudent and reasonable rate case costs. Therefore, the Commission declines to accept the AG's proposal to share rate case costs.

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<sup>45</sup> Brief of Kentucky-American, page 14.

Meter Deviation - Net Plant Savings. On November 26, 1996, Kentucky-American filed an application, which was docketed as Case No. 96-569,<sup>46</sup> requesting authority to deviate from the periodic meter testing regulation. Commission Regulation 807 KAR 5:066, Section 16(1), requires Kentucky-American to test its 5/8 x 3/4 inch meters at least once every 10 years. The requested deviation is to allow for a less frequent test interval which the AG claims will allow Kentucky-American to defer the capital costs associated with replacing the meters at the time they are tested. According to the AG, this will result in a capital cost saving that Kentucky-American has not reflected in its rate case application.<sup>47</sup>

The AG determined that if the requested deviation is granted, it will result in an average capital cost savings of \$63,940. Since the unamortized cost of Case No. 96-569 is included in rate base, to properly match the recovery of the cost of the case with the projected saving, the AG requests that rate base be reduced by \$63,940.<sup>48</sup> Kentucky-American contends that since the Commission has not entered an Order approving the requested deviation, and especially since there has been no determination that meters may have a useful life beyond 10 years, the AG's proposed adjustment should be denied.<sup>49</sup>

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<sup>46</sup> Case No. 96-569, Application of Kentucky-American Water Company for Permission to Deviate from the Requirements of 807 KAR 5:066, Section 16(1), of the Commission's Rules.

<sup>47</sup> Brief of the AG, pages 13 and 14.

<sup>48</sup> Direct Testimony of Robert J. Henkes, page 34.

<sup>49</sup> Brief of Kentucky-American, page 15.

On September 30, 1997, the Commission granted Kentucky-American a deviation from the meter testing requirements. Thus, the meter testing deviation will be in effect during the forecasted period and any projected savings should be reflected in Kentucky-American's forecasted operations. Therefore, the Commission accepts the AG's proposed reduction to rate base of \$63,940.

Working Capital. Kentucky-American defined working capital as a rate base element that recognizes the amount of investor-supplied capital used to fund the utility's day-to-day operations and to compensate shareholders for the delay in recovery of certain expenses from ratepayers. Kentucky-American's proposed working capital of \$986,000 is based upon a lead/lag study performed on the historical data for the 12-month period ending June 30, 1996.<sup>50</sup>

The AG proposed to reduce cash working capital by \$358,722 to reflect four proposed adjustments to Kentucky-American's lead/lag study. Those adjustments and the basis to support them are as follows:

(1) Remove depreciation expense associated with utility plant funded by customer advances. Because the plant is funded by customer advances, the depreciation on this portion of plant does not require a stockholder recovery from ratepayers.<sup>51</sup>

(2) Remove deferred income tax expense. Deferred taxes are made possible by certain Internal Revenue Service rules advantageous to Kentucky-American and

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<sup>50</sup> Direct Testimony of Edward J. Grubb, pages 7 through 9.

<sup>51</sup> Brief of the AG, page 8.

represent ratepayer-supplied funds available to Kentucky-American on a cost free basis. The removal of deferred taxes from the lead/lag study is consistent with a long standing policy of the New Jersey Board of Public Utilities.<sup>52</sup>

(3) Correct the composite revenue lag from the 35.88 days proposed by Kentucky-American to 35.84 days.<sup>53</sup>

(4) Reduce the cash working capital requirement by \$21,200 to reflect Kentucky-American's updated revised position that all pension expenses should be removed from the lead/lag study.<sup>54</sup>

According to Kentucky-American, depreciation is included in the lead/lag study at zero days to reflect the fact that there is a 36-day lag between the recording of depreciation expense and the receipt of the depreciation from the ratepayers. Because depreciation expense on customer advances is recorded to the accumulated reserve and used to reduce rate base, the AG's proposed adjustment to remove depreciation expense from the lead/lag study should be denied.<sup>55</sup>

Kentucky-American claims that the fact that there was or was not an outlay of investor capital to fund deferred taxes is irrelevant. The important point stressed by Kentucky-American is that rate base is being reduced by the unamortized balance of deferred taxes, and it must wait 36 days before this expense is recovered from

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<sup>52</sup> Direct Testimony of Robert J. Henkes, pages 16 and 17.

<sup>53</sup> Id., pages 18 and 19.

<sup>54</sup> Id., page 19.

<sup>55</sup> Rebuttal Testimony of Edward J. Grubb, page 7.

ratepayers. To compensate for the mismatch between the recording of deferred taxes (rate base reduction) and the 36-day lag of the recovery of the deferred tax expense, Kentucky-American claims that the inclusion of deferred taxes in the lead/lag study is appropriate.<sup>56</sup>

The Commission finds that the source of the funding of depreciation expense or deferred taxes is not relevant to the inclusion of these non-cash items in rate base. In past proceedings, the Commission has recognized the lag that exists between the time rate base is reduced by the unamortized balance of deferred taxes and accumulated depreciation and the recovery of the expenses from ratepayers. In Case No. 92-452, the AG proposed to remove the entire amount of depreciation expense from Kentucky-American's lead/lag study. The Commission denied that adjustment based on the finding that: "[I]ncluding the depreciation expense in the lead/lag study recognizes the reduction in rate base and the receipt of funds applicable to these depreciation expenses."

The fact that the New Jersey Board of Public Utilities does not include deferred taxes in a lead/lag study does not persuade the Commission to change its position. It is not uncommon for different regulatory agencies to take different positions on similar rate-making issues. As our courts have recognized over the years, the reasonableness of a rate order is not judged by the methodology employed but the overall end result of the order.

The Commission is not persuaded by the AG's arguments to exclude from the lead/lag study depreciation expense funded by customer advances and deferred taxes,

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<sup>56</sup> Id., page 8.

and these adjustments are rejected. Kentucky-American did agree to a revenue lag of 35.84 days and a reduction of \$21,000 to remove all pension expenses from the lead/lag study, and these adjustments are accepted.

Using Kentucky-American's adjusted lead/lag study and the adjustments to Kentucky-American's forecasted operations made herein, the Commission has reduced Kentucky-American's forecasted cash working capital by \$28,000.

Other Working Capital. The AG recommended that the forecasted other working capital balance be reduced by \$1,024 to reflect the actual average plant and materials, and chemical stock balances for the 24-month period ending March 1997.<sup>57</sup> In prior forecasted rate case proceedings, the Commission has generally accepted adjustments based on updated information. The AG's adjustment to decrease other working capital by \$1,024 is reasonable and will be accepted.

The Commission has determined Kentucky-American's net investment rate base to be as follows:

Utility Plant	\$ 191,667,129
Utility Plant Acquisitions Adjustment	(5,814)
Accumulated Depreciation	(32,495,257)
Accumulated Amortization	(7,674)
Net Utility Plant Investment	<u>\$ 159,158,384</u>
CWIP	3,831,347
Working Capital Allowance	958,000
Other Working Capital Allowance	405,004
Contributions In Aid Of Construction	(18,095,312)
Customer Advances	(5,037,927)
Deferred Income Taxes	(18,020,128)
Deferred Investment Tax Credits	(179,264)
Deferred Maintenance	2,951,396

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<sup>57</sup> Brief of the AG, page 10.

Deferred Debits	380,571
Contract Retention	(173,792)
Accrued Pension Expense	(242,540)
Unclaimed Extension Deposit Refunds	(74,882)
Unamortized KU Refund	(47,562)
Meter Deviation - Net Plant Savings	(63,940)
Net Investment Rate Base	<u>\$ 125,749,355</u>

Income Statement

Kentucky-American reported base period and forecasted period net utility operating income of \$10,408,700 and \$10,899,642, respectively.<sup>58</sup> Kentucky-American's forecast is reasonable and has been accepted for rate-making purposes with the following exceptions:

Weather Normalization. In Kentucky-American's last rate case, Case No. 95-554, it used a two step weather normalization procedure to adjust test period operating revenues. The Commission found that, for short-term use, Kentucky-American's model was sufficient, but if the time between rate cases should lengthen, the reliability of Kentucky-American's forecasts could erode quickly. Therefore, the Commission ordered Kentucky-American to develop a more rigorous single model based upon all the reliable data available.

In the instant case, Kentucky-American constructed and utilized a statistical weather normalization model which uses actual and historical meteorological data and other known predictor variables to predict customer water utilization or sales levels. These weather-normalized sales levels are then applied to forecasted number of bills for the various customer classes to determine projected test period operating revenues.

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<sup>58</sup> Exhibit 38, Schedule C-2, page 1.

Following preliminary tests on its new model, Kentucky-American found that the significant predictor variables are a drought severity index, calendar month, and calendar year. Kentucky-American modified its weather normalization model to include only these variables. Furthermore, preliminary tests proved that the water utilization levels of only four customer classes proved to be sensitive to weather, namely, the residential, commercial quarterly, commercial monthly, and Other Public Authority ("OPA") monthly classes. Kentucky-American's final weather normalization model was then used to predict sales levels for these four customer classes.

The Commission is satisfied that Kentucky-American has constructed a reasonable and appropriate weather normalization model which will reliably predict water utilization or sales levels for customer classes whose water usage is sensitive to changes in weather conditions. The Commission accepts Kentucky-American's weather normalization model for use in this case.

Monthly OPA Sales. Kentucky-American's projected weather normalized monthly OPA sales included sales to the Bluegrass Army Depot ("Depot"). According to Kentucky-American, the Depot had abnormally high usage from January 1992 through February 1994 apparently due to numerous water leaks. Therefore, Kentucky-American used operational judgment to forecast a realistic sales level.<sup>59</sup> The AG maintains that forecasted weather normalized sales data for the OPA class should exclude sales to the Depot. Kentucky-American agreed and proposed to increase its net revenue amount by

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<sup>59</sup> Kentucky-American Response to Item 16 of the AG's Second Data Request.



\$8,030. The Commission accepts this adjustment to monthly OPA sales, which increases net operating income by \$4,789.

Conservation Adjustments. The AG recommended that Kentucky-American's conservation adjusted forecasted sales for industrial customers be set at 982,013 gallons and that the adjustments for residential and quarterly commercial sales be rejected as unreliable, or reduced by 50 percent.<sup>60</sup> Kentucky-American argued that no adjustment should be made to its conservation projections because it has budgeted for a landscape/turf program, a residential audit program and a commercial and industrial water audit program in the forecasted test year.<sup>61</sup> While Kentucky-American has not historically expended all of its budgeted conservation funds, it has been a leader in conservation measures within the water industry in this state. Kentucky-American states that its new programs will undoubtedly induce conservation,<sup>62</sup> and the AG does not challenge that statement. The Commission strongly supports all cost effective water conservation programs and fully expects Kentucky-American to fund conservation at the budgeted level. Considering Kentucky-American's source of supply deficit as determined in Case No. 93-434, conservation must be a top priority for Kentucky-American. Therefore, the AG's proposal to adjust conservation sales is denied.

Quarterly OPA Sales. Kentucky-American based its forecasted quarterly OPA sales on a 4-year average based on 1991, 1992, 1993, and 1995. The AG maintains

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<sup>60</sup> Brief of the AG, page 16.

<sup>61</sup> Brief of Kentucky-American, page 18.

<sup>62</sup> Id., page 18.

that by omitting the sales data from 1990 and 1994 the Company's selection is arbitrary and should not be accepted.<sup>63</sup> Kentucky-American maintains that there were significant aberrations in sales for July through October 1990, August 1994 and August 1996.<sup>64</sup> Kentucky-American testified that the aberrations were most likely caused by water leaks and concluded that forecasted test-year sales would not likely include such aberrations. Based on Kentucky-American's past record of accurately forecasting revenues, the Commission accepts its forecasted quarterly OPA sales.

Spears Water Company. Kentucky-American proposed using 1995 sales of 47,276 ccf to Spears Water Company ("Spears") as the basis for its forecasted sales. The AG maintained that the projected sales for Spears should be based on the actual sales during 1996 of 65,744 ccf. Kentucky-American maintains that due to a dispute with Spears regarding service territory, the 1995 sales amount should be used because Spears may take less water from Kentucky-American in the future. The amount of sales to Spears has decreased each year in the past 5 years, but increased significantly in 1996.<sup>65</sup> Due to the abnormal level of sales to Spears in 1996, the Commission finds it reasonable to use a 5-year average, based on sales from 1992 through 1996, to forecast Kentucky-American's sales to Spears. This results in forecasted sales of 59,251 ccf and a revenue increase of \$13,668. The increase in water sales to Spears results in a \$8,151 increase to net operating income.

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<sup>63</sup> Brief of the AG, page 16.

<sup>64</sup> Brief of Kentucky-American, page 16.

<sup>65</sup> Id., page 17.

Rental Income. Kentucky-American included in its forecasted other revenues \$24,000 to reflect projected rental income of \$2,000 per month for the lease of its property for the construction of a cellular tower.<sup>66</sup> At the hearing, Kentucky-American informed the Commission that it was unlikely that it would reach an agreement on the cellular tower lease. At the time its brief was filed, Kentucky-American had not signed a lease and there was no indication that a lease would be signed. For these reasons, Kentucky-American requested that other revenues be decreased by \$24,000 to reflect removal of forecasted cellular tower rental fees. Since there is no evidence to dispute Kentucky-American's claim that a cellular tower lease will not be entered into, the Commission accepts the proposed adjustment to reduce other revenues by \$24,000, which results in a reduction to net operating income of \$14,314.

Allowance for Funds Used During Construction ("AFUDC"). Kentucky-American included AFUDC of \$392,478 in its forecasted operating revenues. The Commission has calculated AFUDC of \$255,466 on adjusted CWIP available for AFUDC and the overall rate of return found reasonable herein. This results in a decrease to operating revenue of \$137,012 and a decrease to net operating income of \$81,711.

Labor. Kentucky-American's forecasted labor expense of \$5,119,861 reflects a level of 148 full-time employees, and 3 percent pay raises to become effective July 1, 1997 and July 1, 1998 for salaried, non-union hourly, and union employees. The estimated employee level includes the personnel necessary to facilitate monthly meter reading and customer billing and the elimination of two employee positions. As a result

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<sup>66</sup> Direct Testimony of Coleman Bush, page 9.

of the resignation of two employees, Kentucky-American combined the job duties to eliminate the need for the two positions.<sup>67</sup>

The AG contends that an analysis of the historical relationships between operation and maintenance labor and total payroll costs ("O&M ratio") indicates that Kentucky-American's ratio of 87.21 percent is too high. Based upon its analysis of the O&M ratios for the years 1992 through 1996, the AG recommends that an operating ratio of 86.3 percent be used to calculate forecasted labor expense.<sup>68</sup>

Kentucky-American argues that the AG's effort to "slip" the O&M ratio should be rejected because of the detail used by Kentucky-American in the presentation of its labor budget and because there is no constant relationship in Kentucky-American's labor expense. The changes that have occurred in its labor force absolutely preclude the validity of the use of historical comparisons as suggested by the AG.<sup>69</sup>

Based upon a review of the evidence presented, the Commission finds that the AG's proposed adjustment is flawed because it did not take into account the recent changes that have occurred in Kentucky-American's labor force. These changes render the historical O&M ratios unreliable for gauging the accuracy of Kentucky-American's forecast/budget labor expense. A more reliable indicator would be an analysis of the budgeted to forecasted labor expense. In Case No. 95-554, the Commission determined that when all labor costs are combined, there is no material difference between

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<sup>67</sup> Id., page 10.

<sup>68</sup> Brief of the AG, page 20.

<sup>69</sup> Brief of Kentucky-American, page 25.

Kentucky-American's actual and budgeted labor expense. For these reasons the AG's proposed O&M ratio adjustment should be denied.

The AG states that the evidence demonstrates that Kentucky-American consistently overestimates its level of employees, and this overestimation results in over-budgeting. According to the AG, it is unreasonable to expect Kentucky-American will have its full complement of employees throughout the test period. Therefore, the AG recommends that forecasted labor expense be reduced to reflect 142 employees rather than Kentucky-American's proposed level of 148.<sup>70</sup> Kentucky-American contends that the AG's suggested employee level of 142 does not include any provision for the use of temporary employees.<sup>71</sup>

The AG's proposed employee adjustment is similar to the adjustment he proposed in Case No. 95-554. In that proceeding the Commission determined that the AG's adjustment did not take into account the total labor cost, which includes temporary labor. The AG has failed to provide any new evidence to demonstrate that his adjustment accurately reflects the use of temporary employees. Therefore, the Commission will not accept the AG's proposed adjustment.

The AG proposed to decrease Kentucky-American's payroll overhead and OPEB expenses to reflect the proposed employee reduction. Since the AG's employee reduction has not been accepted, neither are the associated adjustments.

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<sup>70</sup> Brief of the AG, page 21.

<sup>71</sup> Brief of Kentucky-American, page 25.

The third labor adjustment proposed by the AG is to reduce Kentucky-American's forecasted level of employees to reflect the retirement of two employees. Since the position of office supervisor will be eliminated December 1997 and the distribution superintendent will retire on July 1, 1998 and not be replaced, Kentucky-American did not contest the AG's adjustment.

Since both reductions will become effective during the forecasted test period, the Commission accepts the AG's proposed adjustment. Eliminating the two employee positions will result in a decrease to labor expense of \$58,851 and an associated decrease in payroll overhead expense of \$22,309. The combined effect of the two labor expense adjustments is an increase to net operating income of \$48,402.

Fuel and Power. The AG's initial adjustment to Kentucky-American's forecasted fuel and power expense was based on flawed information. The AG subsequently revised his adjustment factor from 94.3 percent to 97 percent based on corrected information.<sup>72</sup>

At the hearing the AG acknowledged that his adjustment, as corrected, "may not look as convincing any more."<sup>73</sup> The Commission finds that a fuel and power slippage factor of 97 percent demonstrates that Kentucky-American's current forecasting method for this expense is highly reliable. Therefore, the Commission is not persuaded to adopt the AG's proposed adjustment.

Incentive Compensation. In Case No. 95-554 the Commission found that the incentive bonus program adopted by Kentucky-American reviewed financial goals that

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<sup>72</sup> Brief of the AG, pages 23 and 24.

<sup>73</sup> T.E., Volume II, page 176.

are beneficial to stockholders and operational goals beneficial to ratepayers. Because the incentive program provides a benefit to both the ratepayers and stockholders, the AG recommends that the costs of these programs should be shared.<sup>74</sup>

Kentucky-American argues that its incentive compensation program is in conformity with the Schumaker & Company's recommendations in the 1991 management and operations audit prepared for the Commission, and the cost thereof is offset by the savings incurred through the retention of experienced, valuable employees, and the elimination of costs required to recruit, hire, and train senior level employees.<sup>75</sup>

Kentucky-American has shown that it implemented the incentive package in response to a recommendation made in a Commission-mandated management audit. Furthermore, the Commission determined in Case No. 95-554 that Kentucky-American had met its burden of proof by showing the cost of its incentive bonus plan is appropriate for rate-making purposes. Based upon a review of the evidence presented in this proceeding, the Commission finds that the cost of the incentive bonus plan is an appropriate expense for rate-making purposes.

Service Company Charges. For the forecasted test period, Kentucky-American projects that it will be billed \$1,347,174<sup>76</sup> for services rendered by its affiliate, the American Water Works Service Company ("Service Company"). The Service Company provides the following services as required to affiliated companies: accounting,

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<sup>74</sup> Brief of the AG, page 22.

<sup>75</sup> Brief of Kentucky-American, page 27.

<sup>76</sup> Response to Item 32(a) of the Commission's March 7, 1997 Order.

engineering, operations, finance, water quality, information systems, personnel administration and training, purchasing, insurance, safety, and community relations. These costs are billed to the operating subsidiaries based on the agreement effective January 1, 1989 ("1989 Agreement").<sup>77</sup>

The 1989 Agreement uses the number of customers served by the operating subsidiaries as the sole basis to allocate all Service Company costs not directly billed to the operating subsidiaries. The 1989 Agreement replaced the 1971 Service Company agreement ("1971 Agreement") which used multiple factors for allocating services, depending upon the nature of the service.<sup>78</sup>

Kentucky-American argued that a single allocator is not an over-simplification and that Kentucky-American's level of customers is tied very closely to many of the allocations used under the 1971 Agreement. Kentucky-American believes that customers more accurately track cost causing factors because most, if not all, of those factors vary directly with the number of customers. As in Case No. 95-554, Kentucky-American tried to show the discontinued use of vouchers in the accounting department as proof that the 1971 Agreement is obsolete.

As in Case No. 95-554, Kentucky-American has focused all of its attention on proving the 1971 Agreement's allocation methodology is inappropriate. However, it has again failed to provide any study or analysis to support the 1989 Agreement's use of customers as the allocation methodology for all costs. In Case No. 90-321, the

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<sup>77</sup> Direct Testimony of James E. Salser, page 4.

<sup>78</sup> Case No. 95-554, Final Order, page 38.



Commission found that the 1989 Agreement was a less-than-arms-length-transaction and that Kentucky-American had failed to consider the underlying characteristics of each cost. Since Kentucky-American has presented no additional evidence in this case to justify the allocation basis used in the 1989 Agreement, the Commission finds no basis to depart from its prior decision that the 1971 Agreement should be used for rate-making purposes. Therefore, operating expenses have been decreased by \$89,066, for an increase in net operating income of \$53,117.

General Office Expense. Kentucky-American based its forecasted general office expense of \$393,733 upon a detailed analysis of its needs. The conversion to monthly billing resulted in a projected increase of \$37,879 in Kentucky-American's bank service charges.<sup>79</sup> According to the AG, Kentucky-American's forecasted bank service charges are substantially higher than the actual amounts incurred for almost every month since November 1996. Based on its analysis of these months, the AG determined that the average monthly bank service charge should be set at \$5,000, which results in a reduction of \$28,862 in the amount proposed by Kentucky-American.<sup>80</sup>

Kentucky-American argues that to single out for adjustment those expenses that are under budget while ignoring those expenses that are over budget is unfair and confiscatory. For the 6-month period ending May 31, 1997, Kentucky-American agrees that budgeted bank service charges exceeded the actual expense by \$7,925. However,

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<sup>79</sup> Direct Testimony of Rosemary G. Wilkins, pages 3 and 4.

<sup>80</sup> Direct Testimony of Robert J. Henkes, page 74.

for the same period the actual lock box expense, which is also included in general office expense, exceeded the budgeted amount by \$12,689.<sup>81</sup>

Kentucky-American's criticism of the AG appears to be well taken since an adjustment was proposed to reduce bank service charges, but no adjustment was proposed to increase lock box expense. It would be unreasonable to expect Kentucky-American to forecast each component of every expense category with 100 percent accuracy. The process of budgeting and forecasting is an inexact science. Therefore, any analysis of the historical relationship between budgets and actual results must focus on the expense category and not on the individual expense components.

The AG's adjustment focuses on one expense item which is under budget without considering the combined affect of all the items that comprise forecasted general office expense. The AG did not dispute the accuracy of Kentucky-American's forecast of general office expense, but only adjusted bank service fees. The Commission's treatment of this expense is similar to its treatment of plant in service. Adjustments are not made for individual construction projects; adjustments are made only when Kentucky-American's forecast of the total account is shown to be unreliable.

The Commission is not persuaded by the evidence that Kentucky-American's forecast of general office expense is unreasonable or inaccurate. Therefore, the AG's isolated adjustment to bank service charges will not be accepted.

Miscellaneous Expense. Kentucky-American's forecasted miscellaneous expense of \$1,597,321 represents an increase of \$202,443 over the base period. The forecasted

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<sup>81</sup> Rebuttal Testimony of Coleman D. Bush, pages 11 and 12.

amount is based on a detailed analysis of actual prior expenses and future needs. Kentucky-American is continuing its commitment to water conservation and has increased its base period level by \$105,550 to a forecasted amount of \$145,791.<sup>82</sup>

The AG claims that Kentucky-American's spending on conservation-related programs is the primary factor for the forecasted increase in the miscellaneous expense. According to the AG, the evidence demonstrates that Kentucky-American's historic spending for conservation expenses is well below the amount budgeted. Because customer response to past conservation efforts has not been overwhelming, the AG believes this trend should be incorporated into the rate-making process. Thus, the AG proposes to reduce miscellaneous expense by \$54,273.<sup>83</sup>

As with general office expense, the AG has singled out one expense item where the amount budgeted exceeded the actual amount incurred without analyzing the combined affect of all the items that comprise forecasted miscellaneous expense. The AG did not dispute the accuracy of Kentucky-American's forecast of miscellaneous expense, he only challenged conservation expenses.

The evidence of record does not show that Kentucky-American's forecast of miscellaneous expense is unreasonable or inaccurate. Therefore, the Commission finds that the AG's proposed conservation adjustment should not be accepted.

Employee Related and Lobbying Expenses. The AG proposed to exclude \$10,219 of employee-related and lobbying expenses. The employee-related expenses are for

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<sup>82</sup> Direct Testimony of Rosemary G. Wilkins, page 4.

<sup>83</sup> Brief of the AG, page 29.

employee parties, award banquets, and club dues. The AG also proposed to exclude \$43,681 for employee recognition expenses, community organization expenses, service awards and membership dues in various business organizations.<sup>84</sup>

The Commission agrees with the AG's assessment that the following employee-related, lobbying expenses, and community organization expenses are inappropriate to include for rate-making purposes: \$3,800 for employee Christmas Gifts; \$3,030 for lobbying expenses; \$3,389 for the Service Company recognition banquet and gifts; \$5,650 for community organization expenses; and \$694 for club dues. In prior rate cases the Commission determined that while employee-related expenses may benefit employer/employee relations, Kentucky-American's ratepayers should not bear their costs. The community organization expenses benefit utility community relations and are a form of charity contributions, which the Commission does not allow for rate-making purposes. Kentucky-American has failed to provide any evidence in this proceeding to persuade the Commission that these expenses should be included in rates.

The Commission finds the remaining items identified by the AG are reasonable, rationally related to providing water service and should be allowed. Based on the Commission's decision to eliminate several employee-related expenses, lobbying costs, and community organization expenses, an adjustment has been made to decrease forecasted operating expenses by \$16,563. This results in an increase to net operating income of \$9,878.

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<sup>84</sup> Direct Testimony of Robert J. Henkes, pages 75 and 76.

Maintenance. Kentucky-American categorizes its maintenance as either non-programmed, which is non-specific maintenance forecasted on historical trends, or programmed, which is specific projects outlined as part of the American System's Operational Manual. For the forecasted test period, Kentucky-American budgeted non-programmed and programmed maintenance of \$1,150,407 and \$797,695, respectively.<sup>85</sup>

In Case No. 95-554, the Commission determined that from 1986 through 1995, Kentucky-American's actual programmed maintenance was 83.74 percent of its budgeted level. Based upon the evidence that Kentucky-American's budgeted forecast was as reliable as the 10-year average, the Commission reduced programmed maintenance expense to 82.74 percent of the forecasted amount.

In this case, the evidence demonstrates that from 1987 through 1996, actual programmed maintenance has decreased to approximately 80 percent of budgeted. Kentucky-American has presented no evidence to convince the Commission that there has been any improvement in the accuracy of the forecast of programmed maintenance. Therefore, the Commission has reduced programmed maintenance, including deferred maintenance projects, to 80 percent of the forecasted amount. This results in a reduction to maintenance expense of \$92,723, for an increase in net operating income of \$55,298.

Depreciation Expense - Book. To arrive at its forecasted depreciation expense of \$4,443,216, Kentucky-American multiplied the 13-month average utility plant by its depreciation rates.

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<sup>85</sup> Direct Testimony of Stan Stockton, page 11.

As with accumulated depreciation, depreciation expense is directly dependent on the level of utility plant. The reduction in utility plant and the cost savings resulting in the meter testing deviation will result in a decrease to forecasted depreciation expense of \$28,269, for an increase in net operating income of \$16,859.

Uncontested Issues. The AG proposed, and Kentucky-American accepted, the following adjustments to forecasted operations.<sup>86</sup>

- (1) 401(k) Expenses - Kentucky-American used \$0.45 per dollar as the employer contribution. After January 1, 1998 the matching contribution increases to \$0.50 per dollar, resulting in an increase to forecasted operating expenses of \$7,218.<sup>87</sup>
- (2) Chemical Expense - Kentucky-American made a mathematical error in calculating the average annual increase in the cost of chemicals. Correcting the error results in an increase to forecasted operating expenses of \$14,115.<sup>88</sup>
- (3) OPEB Costs - After filing its application, Kentucky-American received updated information on its 1997 post-retirement benefit costs. As a result, OPEB costs were reduced by \$75,579.<sup>89</sup>
- (4) Pension Costs - After filing its application, Kentucky-American received updated information on its 1997 pension costs. As a result, pension costs were reduced by \$40,088.<sup>90</sup>

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<sup>86</sup> Brief of Kentucky-American, pages 4 through 8.

<sup>87</sup> Id., page 4.

<sup>88</sup> Id.

<sup>89</sup> Id., page 6.

<sup>90</sup> Response to the AG's Data Request No. 1, Item 47.

- (5) OPEB Costs/Employee Level - OPEB costs should be reduced to reflect the employee level as of July 1997. The reduction in employee level results in a \$8,741 reduction to forecasted operating expenses.<sup>91</sup>
- (6) Income Tax - Addbacks - Kentucky-American overstated its income tax addbacks by \$37,503. Correcting this error results in a decrease to income tax expense of \$15,137.<sup>92</sup>
- (7) Waste Disposal - Kentucky-American agreed that this expense was overstated and proposed a \$7,000 reduction to forecasted operating expenses.<sup>93</sup>

Upon review of the evidence of record, the Commission finds that the uncontested adjustments are reasonable and should be accepted. This results in a total reduction to Kentucky-American's forecasted operating expenses of \$110,075, and an increase in net operating income of \$80,782.

Property Tax. Kentucky-American proposed a forecasted level of property tax expense of \$1,116,886, based on the ratio of actual 1996 tax payments to the applicable total tax base as of December 31, 1995. The resulting rate was applied to the December 31, 1996 and December 31, 1997 projected tax basis to arrive at the forecasted property taxes.<sup>94</sup>

Several of the Commission's rate base adjustments affect the calculation of property taxes, which the Commission has determined to be \$1,107,475. Therefore,

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<sup>91</sup> T. E., Kentucky-American Exhibit No. 2.

<sup>92</sup> Direct Testimony of Stephen J. Hopkins, pages 82 and 83.

<sup>93</sup> Brief of the AG, page 24.

<sup>94</sup> Direct Testimony of Stephen J. Hopkins, page 8.

operating expenses have been decreased by \$9,411 and net operating income increased by \$5,612.

Tax Depreciation. As with accumulated depreciation, tax depreciation is directly related to utility plant. A reduction in utility plant results in a corresponding reduction in both state and federal tax depreciation. The decision herein to reduce utility plant necessitates corresponding adjustments to tax depreciation. This results in a reduction to net operating income of \$4,696.

Deferred Taxes - CIAC. At the hearing, Kentucky-American stated that its calculation of deferred taxes for CIAC was incorrect. The AG did not challenge Kentucky-American's revised calculation which increases income tax expense by \$7,055.<sup>95</sup> The Commission finds the revised calculation to be correct and will increase income tax expense by \$7,055 and a dollar-for-dollar reduction to net operating income.

Interest Synchronization. Kentucky-American proposed a forecasted interest expense of \$5,653,716 based on forecasted rate base and weighted cost of debt. The Commission has recalculated this expense to be \$5,444,947<sup>96</sup> based on the rate base and weighted cost of debt found reasonable herein. This results in a decrease to net operating income of \$84,264.

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<sup>95</sup> T.E., Volume II, page 12.

<sup>96</sup> Rate Base \$ 125,749,355  
Multiplied by: Weighted Cost of Debt x 4.33%  
Interest \$ 5,444,947



The Commission, after consideration of the forecasted revenues and expenses and applicable tax effects, has determined Kentucky-American's adjusted operating income to be as follows:

Operating Revenue	\$ 35,187,683
Operating Expenses	- <u>24,242,292</u>
Net Operating Income	<u>\$ 10,945,391</u>

#### RATE OF RETURN

##### Capital Structure

Kentucky-American proposed, and the AG adopted, a capital structure consisting of 50.750 percent long-term debt, 3.649 percent short-term debt, 5.493 percent preferred stock, and 40.108 percent common equity based on its projected average capital structure for the 13 months ended September 30, 1998. The long-term debt component includes an \$11 million issuance planned for September 1998, and the common equity component includes the projected sale of \$6 million in common stock.

Kentucky-American's use of a future test year justifies a capital structure based on its projected investment budget. Thus, Kentucky-American's proposed capital structure should be approved, but adjusted for the construction slippage factor adopted herein. With that adjustment the capital structure consists of 51.0666 percent long-term debt, 2.9984 percent short-term debt, 5.5505 percent preferred stock, and 40.3845 percent common equity.

### Cost of Debt and Preferred Stock

Kentucky-American initially proposed a short-term debt cost rate of 5.70 percent. Based on the subsequent 25 basis point increase in the federal funds rate to which Kentucky-American's short-term debt cost is contractually tied, Kentucky-American revised its projected short-term debt rate to 5.95 percent. Kentucky-American proposed a long-term debt cost rate of 8.12 percent, which includes the projected \$11 million issuance at 7.5 percent, and an embedded cost of preferred stock of 7.77 percent. The AG accepted these cost rates.

The cost of debt and preferred stock as proposed by Kentucky-American appear reasonable and should be accepted.

### Return on Common Equity

Kentucky-American proposed a return on equity ("ROE") of 12 percent, although its expert witness advocated that the cost of common equity should not be less than 12.25 percent. In his rebuttal testimony of June 13, 1997, he revised the recommended minimum cost of equity to 12.5 percent. Kentucky-American's recommendation is based on the use of four methodologies, including a comparable earnings analysis, a risk premium analysis, the capital asset pricing model ("CAPM"), and two discounted cash flow ("DCF") analyses.

The AG proposed an ROE of 10 percent for Kentucky-American based principally on a DCF analysis which relies on the "b x r" method of calculating the growth rate component of the DCF formula. The AG assessed the reasonableness of his 10 percent

recommendation using a complex version of the DCF method and the risk premium method.

The AG criticized Kentucky-American's 12 percent ROE recommendation as excessive, citing several perceived problems with Kentucky-American's analyses and conclusions. Specifically, the AG opposed Kentucky-American's position as set out in its DCF analysis that rates should be set to preserve market price and the market-to-book ratio, and challenged Kentucky-American's use of historic stock price growth as a component of its DCF model. The AG also argued that Kentucky-American's other methodologies overstate the cost of common equity as well.

Kentucky-American characterized the AG's 10 percent ROE recommendation as "disastrous,"<sup>97</sup> citing a drop in pre-tax interest coverage and increase in capital funds cost and cost to ratepayers if it is adopted. Kentucky-American criticized the AG's DCF methodology of setting the return on common equity at a level which will reduce the market value of the common stock to book value and noted the Commission's past rejection of the "b x r" method of deriving the growth rate for use in DCF analysis. Kentucky-American also indicated that Value Line for May 9, 1997 sets out an expectation that the water utility industry will earn 11 percent on common equity in 1997 and 1998.

Based on all the evidence, including current economic conditions, the Commission finds that an ROE in the range of 10.5-11.5 percent is fair, just, and reasonable. This will allow Kentucky-American to attract capital at a reasonable cost and maintain its

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<sup>97</sup> Brief of Kentucky-American, page 21.

financial integrity, ensuring continued service. It will provide for the necessary expansion to meet future requirements and result in the lowest possible cost to ratepayers. An ROE of 11 percent will best meet the above objectives.

#### Rate of Return Summary

Applying the rates of 8.12 percent for long-term debt, 7.77 percent for preferred stock, 5.95 percent for short-term debt, and 11.0 percent for common equity to the adjusted capital structure produces an overall cost of capital of 9.20 percent, which the Commission finds to be fair, just, and reasonable.

#### AUTHORIZED INCREASE

The net operating income found fair, just, and reasonable is \$11,568,941.<sup>98</sup> To achieve this level of income Kentucky-American would be entitled to increase its rates and charges to produce additional annual operating revenues of \$1,049,884 determined as follows:

Net Operating Income Found Reasonable	\$ 11,568,941
Less: Adjusted Net Operating Income	<u>- 10,945,391</u>
Operating Income Deficiency	\$ 623,550
Multiplied by: Gross-up Factor	<u>x 1.6837199</u>
Required Revenue Increase, Inclusive of Income Taxes, PSC Fee, and Uncollectible	<u>\$ 1,049,884</u>

#### RATE DESIGN

Kentucky-American proposed an increase of approximately 8 percent to be spread equally among its rate classifications. Kentucky-American did not propose to change its

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<sup>98</sup>  $\$125,749,355 \times 9.2\% = \$11,568,941.$

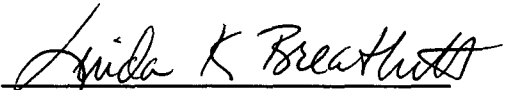
current rate design and the Commission agrees that no change is warranted at this time. This Order grants Kentucky-American an increase of approximately 3 percent to its customer charge, water rates and fire protection rates.


IT IS HEREBY ORDERED that:

1. The rates proposed by Kentucky-American are denied.
2. The rates set forth in Appendix A, which is attached hereto and incorporated herein, are approved for service rendered on and after September 30, 1997.
3. Within 20 days of the date of this Order, Kentucky-American shall file its revised tariff sheets setting forth the rates approved herein.

Done at Frankfort, Kentucky, this 30th day of September, 1997.

PUBLIC SERVICE COMMISSION

  
Chairman

  
Vice Chairman

  
Commissioner

ATTEST:

  
Executive Director

## APPENDIX A

### APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 97-034 DATED SEPTEMBER 30, 1997

The following rates and charges are prescribed for the customers in the area served by Kentucky-American Water Company. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to the effective date of this Order.

#### SERVICE CLASSIFICATION NO. 1

##### Meter Rates

The following shall be the rates for consumption, in addition to the service charges provided herein.

<u>Customer Category</u>	<u>Rate Per 1,000 Gallons All Consumption</u>	<u>Rate Per 100 Cubic Feet All Consumption</u>
Residential	\$2.07300	\$1.55475
Commercial	1.95617	1.46713
Industrial	1.56647	1.17485
Municipal and Other Public Authority	1.87389	1.40542
Sales for Resale	1.79267	1.34450

##### Service Charges

All metered general water service customers shall pay a service charge based on the size of meter installed. The service charge will not entitle the customer to any water.

<u>Size of Meter</u>	<u>Monthly Service Charge</u>
5/8 Inch	\$ 6.83
3/4 Inch	10.24
1 Inch	17.06
1-1/2 Inch	34.13
2 Inch	54.60
3 Inch	102.38
4 Inch	170.63
6 Inch	341.26
8 Inch	546.02

SERVICE CLASSIFICATION NO. 3

AVAILABILITY OF SERVICE

Available for municipal or private fire connections used exclusively for fire protection purposes.

Fire Service Rates

<u>Size of Service</u>	<u>Rate Per Month</u>	<u>Rate Per Annum</u>
2 Inch Diameter	\$ 4.00	\$ 48.00
4 Inch Diameter	16.00	192.00
6 Inch Diameter	35.96	431.52
8 Inch Diameter	63.92	767.04
10 Inch Diameter	99.88	1198.56
12 Inch Diameter	143.85	1726.20
14 Inch Diameter	195.82	2349.84
16 Inch Diameter	255.70	3068.40

SERVICE CLASSIFICATION NO. 4

Rates for Public Fire Service

	<u>Rate Per Month</u>	<u>Rate Per Annum</u>
For each public fire hydrant contracted for or ordered by urban county, county, state, or federal government agencies or institutions	\$23.96	\$287.52

Rates for Private Fire Service

	<u>Rate Per Month</u>	<u>Rate Per Annum</u>
For each private fire hydrant contracted for by industries or private institutions	\$35.96	\$431.52

**HIDDEN LEAK ADJUSTMENT:** A charge of twenty-five percent (25%) of the applicable tariffed rate will be applied to all water usage determined to be the result of a hidden underground leak.