

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

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In the Matter of:

NOTICE OF ADJUSTMENT OF )  
THE RATES OF KENTUCKY- )  
AMERICAN WATER COMPANY ) CASE NO. 8571  
EFFECTIVE ON AND AFTER )  
SEPTEMBER 17, 1982 )

O R D E R

PROCEDURAL BACKGROUND

On August 27, 1982, Kentucky-American Water Company ("Kentucky-American") filed its notice with this Commission seeking to increase its rates and charges effective September 17, 1982, to produce an annual increase in revenue of \$2,496,754, an increase of approximately 19.66 percent.

In order to determine the reasonableness of the request, the Commission suspended the proposed rates and charges for 5 months after the effective date and scheduled a public hearing for December 16, 1982.

On November 10, 1982, Kentucky-American amended its application to reflect changes that had occurred subsequent to its filing date. As a result of these changes Kentucky-American reduced its requested annual increase in revenue to \$2,099,895.

On November 18, 1982, Kentucky-American held a public meeting at its offices in Lexington, Kentucky, to receive public comments on its requested rate increase. The Commission commends

Kentucky-American for holding this meeting to explain its requested rate increase to its consumers.

Hearings were held on December 16, 17 and 22, 1982, in the Commission's offices in Frankfort, Kentucky, following notice given pursuant to the Commission's regulations. The Consumer Protection Division of the Attorney General's Office ("AG"), the Lexington-Fayette Urban County Government ("Urban County Government") and the Board of Education of Fayette County ("Board of Education") intervened in this matter and participated in the hearings. Members of the public making statements in the hearing of December 16, 1982, included Mr. Don Wiggins, President of Concerned Citizens and Businessmen of Central Kentucky, and Mr. Edward Norman Wilson of Lexington, Kentucky.

Also testifying before the Commission was Dr. Richard A. Rosen, a consultant for the Commission. Dr. Rosen, Executive Vice President of Energy Systems Research Group, Inc., ("ESRG") was co-author of a report entitled Review Of The Kentucky-American Water Company Capacity Expansion Program, a study required by the Commission in Kentucky-American's last rate case, Case No. 8314, and made a part of the record of evidence in this proceeding.

Briefs were filed with the Commission by January 14, 1982, and all requested information has been received.

This Order addresses the Commission's findings and determinations on issues presented and disclosed in the hearings and investigation of Kentucky-American's revenue requirements and rate design and provides rates and charges that will produce an increase in annual revenues of \$855,158.

## ANALYSIS AND DETERMINATION

### Test Period

Kentucky-American proposed and the Commission has accepted the 12-month period ending May 31, 1982, as the test period in this matter.

### KENTUCKY RIVER STATION

In 1980, Kentucky-American had two water treatment plants, the Richmond Road Station with a capacity of 20 million gallons per day ("MGD") and the Kentucky River Station with a capacity of 28 MGD. On February 27, 1980, Kentucky-American filed an application for a certificate of convenience and necessity, Case No. 7757, to increase the treatment capacity at the Kentucky River Station in two phases. Phase One of the expansion consisted of replacing the conventional media in four of the purification units with high-rate filtration media and resulted in increasing the capacity from 28 MGD to 32 MGD. Phase Two consisted of constructing two additional purification units to increase capacity an additional 8 MGD to 40 MGD. Phase One was completed in mid-1981, at a cost of \$4,238,800, and Phase Two was completed in mid-1982, at a cost of \$2,408,100.<sup>(1)</sup>

The Commission has had a continuing concern about the need for this expansion, in particular for Phase Two. In granting the certificate, the Commission warned Kentucky-American that "the cost of unreasonable, excessive plant capacity may be excluded from consideration in the Utility's future applications for rate adjustments."<sup>(2)</sup> Prior to completion of Phase Two, in Kentucky-American's last rate case, Case No. 8314, the Commission

ordered "a thorough review [of the capacity expansion] by an independent consulting firm to be selected by the Commission and compensated by Kentucky-American."<sup>(3)</sup> The study was performed by ESRG.

The Order in Case 7757 raised the issue of the timeliness of the capacity expansion.<sup>(4)</sup> The Commission was concerned about the variance in the alternative population projections available at the time. The projections used by Kentucky-American were considerably higher than those of the University of Louisville's Urban Studies Center, the official agency in the state for population information. In early 1981, the 1980 census results became available. The Urban Studies Center's projections were below the 1980 census figures but fairly close to them. Kentucky-American's population projections were substantially higher than the census figures.

In 1980, Kentucky-American's total water treatment capacity was 48 MGD (20 MGD at Richmond Road and 28 MGD at Kentucky River). The maximum day demand experienced that year was 48.01 MGD. The maximum day demand decreased to 44.8 MGD in 1981 and was 46.03 MGD in May 1982.<sup>(5)</sup> If Kentucky-American had deferred Phase Two of the expansion at the Kentucky River Station, it could have reviewed its needs in light of the more recent and reliable census figures. Kentucky-American's management chose not to defer and proceeded to complete Phase Two.

Since completion of Phase Two, the Kentucky River Station is able to treat 40 MGD but can only transmit 34 MGD.<sup>(6)</sup> In Case No. 7757, when Mr. Edens, Vice President and General Manager,

was asked if Kentucky-American had the transmission and distribution capacity to transport the additional water treatment capacity, he responded that it did not.<sup>(7)</sup> He stated that the plans were "in 1981 to include a 36 inch transmission main from the plant to the central distribution system."<sup>(8)</sup> An application for a certificate to build the transmission line was to be considered in a separate proceeding.<sup>(9)</sup> Due to lower growth in demand for water, the current plan is for this transmission line to be constructed "around 1987,"<sup>(10)</sup> a 6-year deferral. The ESRC report states that its forecast "indicates that the new transmission line or alternatives to it may not be needed until after 1990."<sup>(11)</sup>

The Commission has spent considerable time and effort on its analysis of the Kentucky River Station expansion. The Commission finds that Phase Two of the capacity expansion cannot be fully utilized without the additional transmission capacity. Kentucky-American's decision to defer construction of the transmission line until at least 1987 is reasonable and appropriate based upon recent maximum day demands. Therefore, the Commission finds that the portion of the Kentucky River Station treatment capacity which exceeds the transmission capacity is excessive. This excessive treatment capacity is 6 MGD (40 MGD treatment capacity less 34 MGD transmission capacity). The consequence of Kentucky-American's untimely investment will be additional costs to the ratepayers unless the Commission takes remedial action.

The Commission has estimated that the annual revenue required on the 6 MGD excess capacity is approximately \$326,188.<sup>(12)</sup>

Kentucky-American did identify some cost savings that result from the availability of the 6 MGD excess. These include economies associated with operating a 40 MGD treatment plant at only 75 percent of its capacity<sup>(13)</sup> and a 50 percent reduction in wash water. Kentucky-American was unable to place any dollar value on these cost savings.<sup>(14)</sup> The Commission finds that Kentucky-American could meet its average demand of 32.61 MGD<sup>(15)</sup> by operating its treatment plant at a 75 percent level even if it had not undertaken the Phase Two expansion (75 percent of 20 MGD at Richmond Road is 15 MGD, and 75 percent of 32 MGD at Kentucky River prior to Phase Two is 24 MGD, for a total of 39 MGD). Therefore, the cost savings which could result from the availability of the 6 MGD excess capacity would occur only during times of peak demand, and such periods represent a small fraction of the 8,760 hours of demand in a year.

Kentucky-American also argues that the Phase Two capacity is needed for standby in case of failure of one of the purification units. Each of these units at the Kentucky River Station has a treatment capacity of 4 MGD. Considering Kentucky-American's maximum day demand in the range of 46-48 MGD, and adopting Kentucky-American's rule of thumb that "you must be able to operate with your largest unit out of service,"<sup>(16)</sup> the total capacity needed would be 50-52 MGD, not the 60 MGD that presently exists.

It is inconceivable that the cost savings due to the ability to operate the treatment plant at a 75 percent level

during periods of peak demand would offset the annual cost of carrying this 6 MGD excess plant in rate base. A utility's rate base should include only those items of plant that are used and useful, i.e., reasonably necessary to provide adequate and efficient service [See e.g. San Diego Land and Town Company V. Jasper et. al., 189 U.S. 439 (1902)]. Since the 6 MGD excess capacity does provide some cost saving, the Commission finds it reasonable to require Kentucky-American's ratepayers to share the costs of excess capacity with the stockholders.

To determine the cost of the 6 MGD excess capacity, the Commission has started with the \$2,408,100 cost to construct the 8 MGD Phase Two expansion. Since this equates to a cost of \$301,013 per MGD, the cost of the 6 MGD excess capacity was determined to be \$1,806,075. For stockholders and ratepayers to share this cost equally, \$903,037 must be removed from Kentucky-American's rate base. The Commission will consider including this amount in the rate base when Kentucky-American demonstrates that the cost savings from the availability of this excess capacity exceed the carrying costs or that the 6 MGD capacity is reasonably necessary to provide adequate and efficient service.

The Commission recognizes that in recent years planning and forecasting has become more difficult. It is the increases in interest rates and construction costs that have made the need for good planning and forecasting more crucial. Obviously there are some incremental costs associated with obtaining better information now, but these costs will be offset by cost efficiencies that result from better planning and more accurate forecasting.

The Commission is encouraged to see that Kentucky-American is continuing to evaluate alternative demand forecasting methodologies.<sup>(17)</sup> These times warrant a continuing evaluation of the planning and forecasting methods of all the utilities in Kentucky.

In the subsequent sections of this Order, adjustments to net investment, capital, associated expenses and revenue requirements reflect the reduction of the specific costs related to the sharing of excess capacity between the ratepayers and stockholders.

#### VALUATION METHODS

##### Net Investment

Kentucky-American proposed a net investment rate base at May 31, 1982, of \$42,834,002.<sup>(18)</sup> On November 10, 1982, Kentucky-American increased its proposed rate base by \$44,000 to \$42,878,002<sup>(19)</sup> to reflect a higher cash working capital allowance due to revisions in its operation and maintenance expenses. The Commission has accepted the revised rate base, with the exception of the reduction of net investment associated with the Kentucky River Station Plant and two other minor exceptions. The cash working capital allowance has been reduced by \$62,574<sup>(20)</sup> to reflect the Commission's adjustments to Kentucky-American's proposed operation and maintenance expenses. Moreover, the Commission has increased the rate base by \$18,174 to reflect the amortization of surplus accumulated deferred federal income taxes. This issue is discussed in greater detail in subsequent sections of this Order.



Therefore, the Commission has determined Kentucky-American's net investment rate base at May 31, 1982, to be as follows:

Utility Plant in Service	\$ 60,263,454
Construction Work in Progress	404,645
Prepayments	20,206
Materials and Supplies	219,292
Cash Working Capital	<u>1,075,426</u>

Sub-total	\$ <u>61,983,023</u>
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Less:

Reserve for Depreciation and Amortization	\$ 8,176,378
Customer Advances for Construction	2,213,865
Contributions in Aid of Construction	3,533,584
Deferred Federal and State Taxes	3,438,799
Unamortized Investment Tax Credit	<u>274,859</u>

Sub-total	\$ 17,637,485
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Less:

Adjustment for Excess Capacity in the Kentucky River Station less Reserve for Depreciation	<u>\$ 887,957</u> (21)
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Net Original Cost Rate Base	\$ 43,457,581
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Less:

Plant Acquisition Adjustment	<u>\$ 1,511,936</u>
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Net Investment	<u>\$ 41,945,645</u>
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### Capital

Kentucky-American is a wholly-owned subsidiary of American Water Works Company, Inc., ("American"). Kentucky-American proposed to use its actual end-of-test-year capital structure adjusted for issues of common equity and long-term debt. American purchased \$3,000,000 of common equity from Kentucky-American after the end of the test period. <sup>(22)</sup> Teachers Insurance and Annuity Association purchased a \$6,000,000 bond issue from

Kentucky-American after the end of the test period. (23) Kentucky-American planned to use the proceeds from the sale of common equity and long-term debt to repay short-term bank loans in the amount of \$7,344,000. (24) These adjustments to Kentucky-American's end-of-test-period capital structure result in an adjusted structure containing 60.97 percent long-term debt, 9.17 percent preferred stock and 29.86 percent common equity. (25)

Mr. Sam F. Rhodes, witness for the Urban County Government, recommended using an adjusted capital structure for Kentucky-American which recognizes the mix of financing by American. (26) He stated that the double leveraged capital structure recognizes the fact that Kentucky-American does not raise equity capital in the marketplace because it is a wholly-owned subsidiary of American. (27) Adjusting the company's capital structure, as of June 30, 1982, for double leverage, Mr. Rhodes arrived at the capital structure shown on his schedule 11. (28)

In its brief, the AG proposed that the Commission reject Kentucky-American's proposed capital structure and adopt the double leverage approach proposed by Mr. Rhodes. (29)

The Commission is of the opinion that the adjustments proposed by Kentucky-American to its end-of-test-period capital structure are reasonable because they are known and measurable. The amount of financial risk inherent in this capital structure is considered in the return of equity allowed. Further, the Commission is of the opinion that an adjustment for double leverage is unnecessary in this case. The Commission does

recognize the benefits to Kentucky-American from its subsidiary relationship with American and these benefits will be considered in the determination of an allowed rate of return. Therefore, the Commission is of the opinion that Kentucky-American's proposed capital structure is fair, just and reasonable and will be adopted for rate-making purposes.

Kentucky-American's investor-supplied capital at May 31, 1982, was \$40,816,421.<sup>(30)</sup> The Commission has increased capital by \$1,733,060<sup>(31)</sup> to recognize Job Development Investment Tax Credit ("JDIC") at May 31, 1982. Moreover, the Commission has reduced capital by \$887,957 to eliminate capital for excess capacity in the Kentucky River Station Plant and by \$68,054<sup>(32)</sup> to eliminate capital for property held for future use which Kentucky-American did not include as a part of its net investment in utility operations. Those adjustments result in adjusted capitalization at May 31, 1982, of \$41,593,470. Thus, the Commission has determined Kentucky-American's capital structure to be as follows:

	<u>\$</u>	<u>%</u>
Long-Term Debt	\$25,359,539	60.97
Preferred Stock	3,814,121	9.17
Common Equity	<u>12,419,810</u>	<u>29.86</u>
	<u>\$41,593,470</u>	<u>100.00</u>

The Commission in further calculations assigns the overall cost of capital to JDIC as required by Section 46 of the Internal Revenue Code.

### REVENUES AND EXPENSES

For the 12 months ending May 31, 1982, Kentucky-American had operating income of \$3,641,261.<sup>(33)</sup> Kentucky-American proposed numerous pro forma adjustments to revenues and expenses which increased its test period operating income to \$3,840,451.<sup>(34)</sup> The Commission finds the appropriate level of adjusted test period operating income from utility operations to be \$4,048,260, including an allowance for funds used during construction of \$15,000.

In its analysis of Kentucky-American's operations, the Commission has accepted the majority of the proposed pro forma adjustments, including increases in wages, salaries, related employee benefits, and normalized revenue. Moreover, the Commission has made the following adjustments to Kentucky-American's net operating income:

#### End-of-Period Expense Adjustment

Kentucky-American proposed an adjustment to revenues and expenses to reflect the costs associated with the increase in the number of customers served at the end of the test period. Kentucky-American based its adjustment to expenses on the test period operating ratio which is the percentage of operation and maintenance expenses to operating revenue. For the test period the operating ratio was 53.62 percent, and Kentucky-American's adjustment to operating expenses to reflect the cost of serving the additional customers was \$29,537.<sup>(35)</sup>

Kentucky-American further adjusted its test period wages and wage-related expenses to reflect the costs associated with

the number of employees at the end of the test period. Because wages and wage-related expenses are included in Kentucky-American's adjustment to reflect additional expenses associated with serving the end-of-period number of customers, the adjustment for wages and wage-related expenses was duplicated.

Therefore, the Commission has reduced Kentucky-American's proposed adjustment to reflect the additional costs of serving the number of customers at the end of the test period by \$11,584. This adjustment is based on an operating ratio of 32.59 percent, which excludes wages and wage-related expenses from the computation.<sup>(36)</sup> Thus, the Commission has increased Kentucky-American's proposed operating income by \$5,880.<sup>(37)</sup>

#### Rate Case Expenses

Kentucky-American included estimated rate case expenses of \$120,000<sup>(38)</sup> for this case. This amount included legal fees of \$40,000, American Water Works Service Company, Inc., ("Service Company") fees of \$40,000, cost of service study expenses of \$32,500 and miscellaneous fees and charges of \$7,500.

The estimated rate case expense for work performed by the Service Company was originally estimated at \$25,000, but later increased by an additional \$15,000. In reviewing the estimated fee for this affiliated Service Company, the Commission found that it was paid \$21,339<sup>(39)</sup> for work performed in Kentucky-American's last rate case, Case No. 8314. The application and exhibits in the current case and Case No. 8314 do not differ substantially except that Case No. 8314 included a comprehensive

and time-consuming lead-lag study of cash working capital requirements. This study was not performed in the present case.

In Case No. 8314, Kentucky-American overestimated the Service Company fee by 30 percent. When asked about the estimated Service Company fee, Kentucky-American's witness, Mr. Edens, responded that "any" estimate could be off.<sup>(40)</sup> The Commission agrees with Mr. Edens and finds nothing in the record of evidence to conclude that the fee for the Service Company's work in this case should exceed the actual cost charged Kentucky-American in Case No. 8314 adjusted for inflation or \$22,566.<sup>(41)</sup>

In Case No. 8314 the Commission required Kentucky-American to have a cost of service study performed for its next general rate case. This study was presented in the current case and cost \$32,500, which Kentucky-American proposes to include in its test period expenses. Kentucky-American's last cost of service study was performed in 1967. Mr. Edens stated that he saw no need to repeat the study annually.<sup>(42)</sup> The Commission agrees. Since the cost of service study will provide benefit for several years, its cost should be amortized to properly match the period of benefit. Therefore, the Commission has amortized the expenses of the cost of service study over 5 years for an annual cost of \$6,500.

Based on the foregoing analysis, the Commission finds that the reasonable level of estimated rate case expenses is \$76,566. This results in an increase to Kentucky-American's proposed operating income of \$22,047.<sup>(43)</sup>

### Tank Painting Expenditures

Consistent with prior cases, Kentucky-American proposed to increase its operation and maintenance expenses by \$29,791<sup>(44)</sup> to reflect the current estimated annual cost of painting its distribution system and water treatment steel storage vessels. Kentucky-American's witness, Mr. James E. Harrison, Assistant Treasurer and Director of Rates for the Midwestern Division of the Service Company, stated that the test period's booked expense for storage tank painting was one year's amortization of the accumulated total cost of storage tank painting, recorded for accounting purposes as a deferred debit, and amortized over the expected useful life of the painting. He further stated that tank painting, as reflected in the accounting treatment, is a capital expenditure and not an ordinary expense.<sup>(45)</sup>

In past cases, the Commission has accepted Kentucky-American's adjustment to operation and maintenance expenses for tank painting costs. In this case the Commission has reconsidered this adjustment and is of the opinion that its past rate-making treatment was in error and should be changed.

The effect of Kentucky-American's adjustment is to increase the deferred expenditure to reflect current cost and to then amortize this balance to operation and maintenance expenses. This calculation assumes that each tank is to be painted in the current year. This is not correct. A hypothetical example to illustrate this adjustment would be to write up the historical cost of plant in service to reflect today's prices and to provide depreciation expense on this amount, which clearly produces

unfair rates. Therefore, the Commission has rejected this adjustment and increased Kentucky-American's proposed operating income by \$15,122.<sup>(46)</sup>

#### Fuel and Power Cost

Kentucky-American proposed to adjust its fuel and power cost by \$294,967<sup>(47)</sup> to reflect normalization of the end-of-period rates and charges of its supplier Kentucky Utilities ("KU") and to reflect the proposed rates and charges of KU in its pending application (Case No. 8624) before this Commission. Although fuel and power costs represent a substantial portion of Kentucky-American's expenses, the Commission has not made a final determination in KU's rate case. Since the increase to Kentucky-American is neither known nor measurable at this time, the Commission has reduced Kentucky-American's proposed expenses by \$215,196. However, the Commission will allow Kentucky-American, as a part of this proceeding, to file new tariffs to recover any increased power expenses based on test period usage following the issuance of the final Order in Case No. 8624.

In its fuel and power adjustment, Kentucky-American used the fuel adjustment clause ("FAC") rate for the last month of the test period or .525 cents per KWH. The FAC rate is subject to wide variances during any given period due to factors such as changing fuel costs, fluctuating load factors, and generating units in use. The average FAC rate for the test period was .312 cents per KWH, with a low of .081 cents per KWH in July 1981 and a high of .525 cents per KWH in May 1982. The most recent 12-month average FAC rate is .376 cents per KWH.<sup>(48)</sup>



The Commission therefore concludes that because of the variability of the FAC rate, an average calculation is more representative of the expected FAC rate than the rate at a particular point in time. Thus, the Commission has adjusted Kentucky-American's fuel and power adjustment to reflect the latest 12-month average FAC rate of .376 cents per KWH which decreases Kentucky American's adjustment by \$57,618.

The net effect of the two adjustments to fuel and power costs is a net increase to operating income of \$138,480.<sup>(49)</sup>

#### Trihalomethane Costs

In November 1981 federal standards regarding trihalomethane levels in water supplies became effective. In a request for information the AG asked Kentucky-American to identify the costs incurred in meeting the new standards during the test period. Kentucky-American responded that \$25,258 in various expenses was attributable to the trihalomethane problem. This amount was for interpreting the Safe Drinking Water Act, determining the method for requesting variance from the proper regulatory enforcement agency and analyzing additional trihalomethane samples. Kentucky-American further stated in its response that there may be other costs which could not be readily identified.<sup>(50)</sup> During cross-examination, Kentucky-American's witness, Mr. Edens, stated that he did not consider this expense to be extraordinary in that the trihalomethane problem would continue as long as its water supply is polluted.<sup>(51)</sup> The Commission does not disagree that the trihalomethane standards may impose costs on Kentucky-American for several years, but it rejects Kentucky-American's

contention that the initial and identifiable costs of \$25,258 will be recurring. From the description of these costs it is clear to the Commission that they are nonrecurring. Thus, the Commission is of the opinion that these costs of \$25,258 should properly be amortized over 5 years which results in an increase to Kentucky-American's proposed operating income of \$10,257.<sup>(52)</sup>

#### ESRG Report Expenses

Kentucky-American's witness, Mr. Edens, stated that the \$22,940 cost of the ESRG report required by the Commission was not known until the first week of December 1982.<sup>(53)</sup> Therefore, the Commission is of the opinion that this cost should be included in Kentucky-American's adjusted expenses. Because of the nonrecurring nature of the report, the Commission has amortized this cost over 5 years, which results in a decrease in Kentucky-American's proposed operating income by \$2,329.<sup>(54)</sup>

#### Associated Expense of the Kentucky River Station Excess Capacity

In previous sections of this Order the Commission reduced investment and capital associated with the shared excess capacity of the Kentucky River Station facilities. Annual depreciation expense and property taxes on this plant are \$30,161<sup>(55)</sup> and \$16,726,<sup>(56)</sup> respectively. Consistent with its previous findings, the Commission has reduced Kentucky-American's test period operating expenses by 50 per cent of these expenditures for a net increase in Kentucky-American's proposed net operating income of \$11,900.<sup>(57)</sup>

### Income Tax Expense

In each of the previous adjustments, the income tax effect has been reflected in the adjustment. However, the tax effect of below the line adjustments to fixed charges, amortization of debt expenses and pensions and benefits capitalized have not been reflected and are as follows:

a) Kentucky-American proposed fixed charges of \$2,499,150<sup>(58)</sup> based on pro forma long-term debt. The amount of fixed charges provided for herein is \$2,447,328, a decrease of \$51,822. The tax effect is \$25,517.

b) Kentucky-American included \$23,405<sup>(59)</sup> for pro forma amortization of debt expenses. This was later amended to \$22,691,<sup>(60)</sup> a decrease of \$714. The tax effect of this adjustment is \$352.

c) Kentucky-American used actual pensions and benefits capitalized of \$78,881<sup>(61)</sup> in determining its pro forma income tax expense. The Commission is of the opinion that it is more appropriate to use the pro forma level of pensions and benefits capitalized of \$81,127,<sup>(62)</sup> an increase of \$2,246. The tax effect of this adjustment is \$1,106.

Thus, the Commission has increased Kentucky-American's proposed operating income by \$24,763<sup>(63)</sup> to reflect these changes in income taxes.

### Accelerated Recovery of Excess Tax Deferrals

Effective January 1, 1979, the maximum corporate tax rate was reduced from 48 to 46 percent. This tax rate reduction poses the question of proper accounting for the taxes deferred prior to 1979 at 48 percent which are no longer a future liability.

The AG in its brief recommended that the Commission credit surplus deferred taxes to the cost of service over a 5-year period. Kentucky-American objected to the AG's proposal on the basis that accumulated deferred income taxes were not overstated. Moreover, Kentucky-American stated that it could not readily determine the difference from the change in tax rates because its records were not maintained on this basis.

As it has done in other recent cases, <sup>(64)</sup> the Commission will amortize excess deferred taxes over 5 years for rate-making purposes to better insure that the surplus is credited to the ratepayers who originally paid the taxes at 48 percent.

Kentucky-American reported the balance of deferred federal income taxes at December 31, 1978, to be \$2,312,174. <sup>(65)</sup> As requested by the AG, Kentucky-American estimated the difference in liability due to the reduction in tax rates to be \$46,243 which was based on multiplying the 1978 balance times 2 percent. The Commission is of the opinion that a more appropriate difference in liability is \$96,341 calculated by dividing the 1978 balance by 48 percent and multiplying this product by 2 percent. The Commission has further reduced this amount to \$90,869 to recognize reductions subsequent to 1978 on the basis of Kentucky-American's current composite rate of depreciation of 1.42 percent. <sup>(66)</sup>

Amortizing the resulting difference in liability of \$90,869 over 5 years results in an annual reduction in income tax expense of \$18,174. A corollary adjustment has been made to reduce accumulated deferred taxes to recognize the first year's amorti-

zation, which increased the rate base as noted previously. In lieu of adjusting Kentucky-American's end-of-period capital, the Commission has increased net operating income requirements by \$1,959<sup>(67)</sup> to reflect the overall cost of capital found reasonable in this Order. Thus, the net effect of this rate-making adjustment for surplus deferred taxes is an increase to operating income of \$16,215.

The Commission notes that if the tax rate is increased in the future, equity will demand that any deficiency in the deferred tax reserve resulting from the increase in the tax rate will have to be provided through rates and charges at that time.

#### RATE OF RETURN

##### Cost of Capital

In Kentucky-American's original filing, it proposed to use 10.59 percent as the cost of long-term debt and 7.16 percent as the cost of preferred stock.<sup>(68)</sup> In his supplemental testimony, Mr. Harrison, witness for Kentucky-American, updated those two cost rates. Mr. Harrison changed the embedded cost of preferred stock to 7.32 percent because the cost should be based on the net proceeds of the issue rather than the amount outstanding.<sup>(69)</sup> Mr. Rhodes recommended a 7.33 percent embedded cost rate for Kentucky-American's preferred stock based on net proceeds.<sup>(70)</sup> However, Kentucky-American included the amount of preferred stock outstanding in its capital structure while basing its cost on net proceeds.<sup>(71)</sup> If the cost is based on net proceeds then net proceeds should be included in the capital structure. By applying a cost rate based on net proceeds to the amount outstanding,

the cost of preferred stock is overstated. Since the amount of preferred stock outstanding is included in the capital structure, the cost should also be based on this amount. Therefore, the Commission is of the opinion that a cost rate of 7.16 percent is reasonable and should be applied to the preferred stock component of the capital structure.

The 10.59 percent cost of long-term debt was based on the embedded cost of debt at the end of the test period plus two adjustments. First, Kentucky-American adjusted the embedded cost of long-term debt to reflect the proposed sale of \$6,000,000 of securities at a 16.375 percent cost rate.<sup>(72)</sup> Second, Kentucky-American adjusted for the refinancing in May 1983 of a \$3,200,000 bond issue at a 4.5 percent cost rate with a new bond issue at a 16.375 percent cost rate.<sup>(73)</sup> The Commission did not allow the \$6,000,000 bond sale at the 16.375 percent cost rate. Kentucky-American renegotiated the sale of the bonds to Teachers Insurance and Annuity Association at a 14 percent cost rate.<sup>(74)</sup> Therefore, Kentucky-American is now using a 14 percent cost rate for both adjustments. This produces an embedded cost of long-term debt of 9.82 percent.<sup>(75)</sup> Mr. Rhodes also recommended a 9.82 percent embedded cost rate for Kentucky-American's long-term debt.<sup>(76)</sup>

In its brief, the AG argued that the adjustment for the replacement of long-term debt which matures in May 1983 with a new issue at a projected interest rate of 14 percent was inappropriate.<sup>(77)</sup> The AG opposed assigning a 14 percent rate when all economic signs point to a further reduction in interest rates.<sup>(78)</sup>

The 9.82 percent cost rate is based upon the carrying value of Kentucky-American's long-term debt.<sup>(79)</sup> However, Kentucky-American included the face amount outstanding in its capital structure.<sup>(80)</sup> Applying a cost rate based on the carrying value to the face amount outstanding overstates the cost of long-term debt. Since the face amount outstanding is included in the capital structure, the cost should also be based on this amount. Therefore, the Commission is of the opinion that a cost rate of 9.74 percent, calculated by dividing the total annual cost by the face amount outstanding, is reasonable and should be applied to the long-term debt component of the capital structure. This cost rate includes the adjustment for the refinancing of \$3,200,000 of long-term debt at a 14 percent cost rate. The Commission is of the opinion that this adjustment is reasonable because the \$3,200,000 bond issue at a 4.5 percent cost rate will mature soon after this Order is issued, and the projected cost rate is within a reasonable range.

In his original testimony, Kentucky-American's witness, Mr. Dillard L. Edgemon, Vice President and Treasurer of company, proposed an 18 percent return on equity and performed a risk premium analysis to support the request.<sup>(81)</sup> Mr. Edgemon selected seven investor-owned water utilities and developed a composite percentage return on market value of common equity for each year from 1969 to 1981.<sup>(82)</sup> He began with the year 1981 and worked back until he found a year when the market value of stock equaled or very nearly equaled book value.<sup>(83)</sup> He then subtracted the

composite Baa and A rated bond yields from the composite return on common equity to arrive at a spread between the return on common equity and the bond yields.<sup>(84)</sup> The spread for A rated bonds varied from 1.32 percentage points in 1981 to 6.37 percentage points in 1973 while the average spread from 1969 to 1981 was 3.02 percentage points.<sup>(85)</sup> Mr. Edgemon considered 3 percentage points to be the minimum spread which should be authorized for the common equity holder of Kentucky-American.<sup>(86)</sup> At the time Mr. Edgemon filed his testimony, A rated bonds were yielding approximately 16 percent; therefore the return on common equity should be 19 percent.<sup>(87)</sup> Mr. Edgemon reduced this to the proposed 18 percent return on equity. In his supplemental testimony, Mr. Edgemon reduced the requested return on equity to 16 percent because the yield on A rated bonds dropped from 16 percent to 13 percent while the risk premium remained at 3 percentage points.<sup>(88)</sup>

Mr. Edgemon selected the seven comparison companies because to his knowledge, they were the only investor-owned, publicly traded water utilities that had readily available financial data.<sup>(89)</sup> Mr. Edgemon did not use any other criteria for selection,<sup>(90)</sup> yet six of the seven companies are substantially larger than Kentucky-American in such areas as water produced, operating revenues and total utility plant.<sup>(91)</sup> Mr. Edgemon did not consider the beta coefficient or any other measures of risk.<sup>(92)</sup> He also did not perform any other specific cost of equity analysis such as a comparable earnings analysis.<sup>(93)</sup> Mr. Edgemon made no allowances for the risk of Kentucky-American relative to the



seven water utilities included in his Appendix 1. The spread he added to the yield on A rated bonds was a 13-year average, and over those 13 years the spread fluctuated greatly. <sup>(94)</sup> Also, the composite return on common equity for the seven water utilities was developed without consideration for size and risk differences among the seven companies and Kentucky-American.

Mr. Rhodes did not develop a return on equity. Instead, he included Kentucky-American's proposed 16 percent cost of equity in his cost of capital calculation. <sup>(95)</sup> In its brief, the Urban County Government recommended a return on equity of substantially less than 14 percent because market conditions had improved since the Commission allowed Kentucky-American a 14 percent return on equity in February 1982. <sup>(96)</sup>

The AG did not sponsor a rate of return witness. However, in its brief, the AG proposed that the return on common equity be no higher than 14 percent given current economic conditions. <sup>(97)</sup> The AG criticized Mr. Edgemon's risk premium analysis because he compared Kentucky-American, a wholly-owned subsidiary, with investor-owned companies rather than companies in similar circumstances. <sup>(98)</sup> Also, six of the seven firms Mr. Edgemon considered in his analysis were two to four times larger than Kentucky-American. <sup>(99)</sup> The AG considered the downward trend in interest rates to be an important factor in determining a rate of return on common equity. <sup>(100)</sup>

Mr. Don Wiggins, witness for Concerned Citizens and Businessmen of Central Kentucky, proposed a net profit margin formula to

determine the required rate of return for Kentucky-American. The Commission addressed this issue in its South Central Bell Order, Case No. 8467, pages 24 through 26 and finds that this methodology would not adequately serve the ratepayers or the utility.

The Commission has given due consideration to current market conditions in determining a fair rate of return on common equity. The analysis Kentucky-American used to determine a fair rate of return had serious limitations which were addressed earlier in the cost of capital portion of this Order. As was stated in the Order in Kentucky-American's last rate case, Case No. 8314, issued February 8, 1982, the Commission is not convinced that Kentucky-American is a relatively high risk utility. Therefore, the Commission is of the opinion that a return on common equity of 13.5 to 14.5 percent is fair, just and reasonable. A return on equity in this range would not only allow Kentucky-American to attract capital at reasonable costs to insure continued service and provide for necessary expansion to meet future requirements, but also would result in the lowest possible cost to the ratepayers. Within this range of returns, the Commission finds that a return on common equity of 14 percent will allow Kentucky-American to meet its operating expenses and best attain the above objectives.

#### Rate of Return Summary

The overall cost of capital in this case is 10.78 percent which provides a rate of return on net investment of 10.69 percent. The Commission finds this return to be fair, just and

reasonable in that it is sufficient to provide Kentucky-American reasonable compensation for the service it renders.

#### Authorized Increase

The required net operating income, based on the rate of return on net investment of 10.69 percent found fair, just and reasonable, is approximately \$4,481,884. To achieve this level of operating income, Kentucky American is entitled to increase its rates and charges to produce additional revenues on an annual basis of \$855,158 determined as follows:

#### Calculation of Increase

Adjusted Net Operating Income	\$4,048,260
Net Operating Income Found Reasonable	\$4,481,884
Deficiency	\$ 433,624
Deficiency Adjusted for Income Taxes and P.S.C. Fees	(101) \$ 855,158

#### Cost of Service

The Order in Case 8314 required Kentucky-American to file a cost of service study in this case. Mr. John Ober, Associate in the firm of Burgess and Niple, Limited, Engineers and Architects performed the study and testified about it. A base-extra demand method was used in the study.

Because all of a company's costs must be allocated in a cost of service study, there will always be the need to utilize certain assumptions. For example, Kentucky-American's study allocates a portion of the joint cost between fire protection and general water service by employing an incremental cost method. This method assumes that "the primary purpose of the water system is to provide general water service. Fire service is an added

benefit that can conveniently be provided." (102) The Urban County Government's witness, Mr. Rhodes, disagreed with this assumption, interpreting it to mean "that there was no amount of capacity in the system allocated to future growth and that original system design or current system design was not taken into account" (103) when certain costs were allocated. These disagreements will invariably arise. Thus, the final output from a cost of service study must be viewed in light of its assumptions.

A cost of service study can be an objective basis to deviate from the historical revenue allocation or to implement changes in rate design. However, before moving to strictly cost based rates, the Commission must recognize its other rate-making objectives, such as rate continuity and understandability. This will enable the Commission to mitigate any sudden adverse economic impacts from the new rates.

This certainly applies in this case. Kentucky-American's last study prior to the one filed in this case was performed in 1967. Over the years, the rates have deviated from costs. To suddenly move to strictly cost based rates would result in some customers paying much larger bills. The cost of service study and the billing analysis have made it possible to identify those affected most severely and the reasons for the change. Accordingly, the Commission has determined rates that recognize the costs to serve, as well as other rate-making objectives. The result is a more gradual implementation of cost based rates.

The Commission finds the cost of service study filed by Kentucky-American in this case to be a reasonable study. It provides an objective starting point for deviating from the historical allocation of revenue as well as designing rates. In addition, the Commission finds that cost of service studies should be performed on a more regular basis, such as every 5 years.

#### RATE DESIGN

As a result of the Burgess and Niple cost of service study, Kentucky-American proposed several changes in rate design.

First, Kentucky-American proposed to initiate service charges to recover various customer costs, such as meter reading and billing expenses, which are incurred irrespective of water use. This is a departure from traditional water utility rate design. Water utilities generally offer a minimum bill with a usage allowance. The service charge approach does not include a usage allowance.

The Commission endorses the service charge approach. Customer costs should be recovered through service charges and usage sensitive costs should be recovered through water rates.

Kentucky-American also proposed a change in the general water service rate schedule, reducing the number of rate steps from 4 to 3. The Commission believes this is reasonable and should be allowed. Indeed, the Commission is of the opinion that the number of rate steps could have been further decreased and would entertain such a proposal in the future.

However, at the same time, the Commission disagrees with Kentucky-American's proposed general water service rates. The Commission finds that rate steps 1 and 2 were priced substantially above relevant costs, while rate step 3 was priced below relevant costs. Therefore, the Commission has adjusted general water service rates to reflect base and demand costs, plus an income contribution.

In a related matter, Kentucky-American proposed to eliminate rate schedules applicable to customers of the former West Scott County Water District and certain municipal and county customers, and include these customers with its other general water service customers under the same rate schedule. The Commission finds that this is reasonable and will not cause undue prejudice to any customer.

In Case No. 8314, the Commission specifically referred to fire protection service in ordering a cost of service study. In this case, Burgess and Niple's approach to the cost of fire protection service is a residual allocation method, in which all elements of rate base, depreciation, operation and maintenance not allocated to general water service were allocated to fire protection service. The method can be viewed as arbitrary and is open to substantial criticism. For example, the method ignores the issue of reserve or excess distribution capacity. Moreover, the Commission is of the opinion that the method produces an excessive rate requirement that would place an immediate burden upon fire protection service. Therefore, the Commission has adjusted fire protection service rates to reflect

a more reasonable recovery of relevant costs and return on investment than proposed by Kentucky-American.

#### WAGE AND SALARY INCREASES

The Commission has accepted Kentucky-American's union wage increases and its non-union salary increases herein. The level of wages, salaries and fringe benefits of both groups of employees is not unreasonable and compares favorably with other utilities under our jurisdiction. However, we strongly urge Kentucky-American and all other utilities in the Commonwealth to exercise restraint in future salary and wage decisions. During this period of record unemployment and moderate inflation, it is imperative that utility employees not be overcompensated while their counterparts in competitive industries are forced to respond to the grim economic realities by foregoing increases in pay to assure job security. We have advocated self-restraint in other statements and decisions over the past 2 years and have seen some evidence of expanded efforts to cut costs and increase efficiencies. We again seek cooperation, not only from management, but also from the employees.

#### SUMMARY

The Commission, after consideration of the evidence of record and being advised, is of the opinion and finds that:

1. The rates in Appendix A produce gross operating revenues of \$13,551,756 for the adjusted test year ending May 31, 1982, and are the fair, just and reasonable rates to be charged for water service by Kentucky-American.

2. The returns allowed in this matter on a test period basis will permit Kentucky-American to cover its operating expenses, pay its interest and provide for a reasonable dividend and a reasonable amount of surplus for equity growth.

3. The rates proposed by Kentucky-American produce annual revenues in excess of those found reasonable herein and should be denied upon application of KRS 278.030.

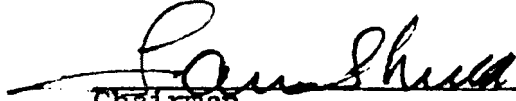
IT IS THEREFORE ORDERED that the proposed rates sought by Kentucky-American be and they hereby are denied upon application of KRS 278.030.

IT IS FURTHER ORDERED that the rates in Appendix A be and they hereby are approved as the fair, just and reasonable rates for water service provided by Kentucky-American effective with service rendered on and after February 17, 1983.

IT IS FURTHER ORDERED that within 30 days from the date of this Order, Kentucky-American shall file with this Commission its revised tariff sheets setting out the rates for water service approved herein.

Done at Frankfort, Kentucky, this 17th day of February, 1983.

PUBLIC SERVICE COMMISSION

  
Chairman

  
Vice Chairman

  
Commissioner

ATTEST:

\_\_\_\_\_  
Secretary



FOOTNOTES

1. Review of the Kentucky-American Water Company Capacity Expansion Program, Energy Systems Research Group, Inc., page 39.
2. Order, Case No. 7757, entered June 6, 1980, page 3.
3. Order, Case No. 8314, entered February 8, 1982, page 5.
4. Order, Case No. 7757, entered June 6, 1980, page 3.
5. Review of the Kentucky-American Water Company Capacity Expansion Program, Energy Systems Research Group, Inc., page 49 and Ober Exhibit 7, pages 28 and 29.
6. Transcript of Evidence, Volume III, December 22, 1982, page 116.
7. Transcript of Evidence, April 1, 1980, page 28.
8. Ibid., page 22.
9. Transcript of Evidence, April 16, 1980, page 26 and Order, Case 7757, entered June 6, 1980, page 2.
10. Transcript of Evidence, Volume I, December 16, 1982, page 126.
11. Review of the Kentucky-American Water Company Capacity Expansion Program, Energy Systems Research Group, Inc., page 49.
12. Return on Investment for Excess Capacity of 6 MGD      \$194,612  
Plus NOI Effect of Additional Depreciation Expense      15,310  
Plus NOI Effect of Additional Property Taxes              8,463  
Less NOI Effect of Additional Fixed Charges                52,812  
  
Total NOI Required    \$165,573  
  
Revenue Required    \$326,188
13. Transcript of Evidence, Volume III, December 22, 1982, page 124.
14. Ibid., page 128.
15. Ober Exhibit 7, pages 28 and 29.
16. Transcript of Evidence, April 16, 1980, page 22.
17. Transcript of Evidence, Volume III, December 22, 1982, page 109.
18. Exhibit 3, Schedule 2, page 1.
19. Updated Exhibit 3, Schedule 2, page 1 and Schedule 3.

20.  $\$6,452,553 \div 6 = \$1,075,426 - \$1,138,000 = \$62,574.$
21.  $\$1,806,075 - \$30,161 = \$1,775,914 \div 2 = \$887,957.$
22. Transcript of Evidence, Volume I, December 16, 1982, page 210.
23. Edgemon supplemental testimony, page 2.
24. Order, Case No. 8679, entered October 25, 1982, page 1.
25. Updated Exhibit No. 5, Schedule 1, page 1.
26. Rhodes testimony, page 6.
27. Ibid.
28. Rhodes Exhibit, Schedule 11.
29. Attorney General's brief, pages 13 and 16.
30. Exhibit 2, Schedule 4.
31. Response to Staff Request No. 1, Item 5, page 2.
32. Ibid.
33. Exhibit 4, Schedule 1, page 1.
34. Updated Exhibit 4, Schedule 1, page 1.
35. Exhibit 4, Schedule 4.
36.  $\$6,042,252 - (\$1,956,649 + \$194,616 + \$218,358) = \$3,672,629 \div \$11,269,104 = 32.59\%.$
37.  $\$55,086 \times .3259 = \$17,953 - \$29,537 = \$11,584 \times .5076 = \$5,880.$
38. Updated Exhibit 4, Schedule 6.
39. Response to Staff Request No. 1, Item 12 (Exhibit 4, Schedule 6).
40. Transcript of Evidence, Volume 1, December 16, 1982, page 67.
41.  $\$21,339 \times 1.0575 = \$22,566.$
42. Transcript of Evidence, Volume 1, December 16, 1982, page 104.
43.  $\$120,000 - \$76,566 = \$43,434 \times .5076 = \$22,047.$
44. Exhibit 4, Schedule 7.

45. Transcript of Evidence, Volume I, December 16, 1982, pages 183-184.

46.  $\$29,791 \times .5076 = \$15,122.$

47. Updated Exhibit 4, Schedule 12.

48. February 1982	.235 Cents/KWH	August 1982	.341 Cents/KWH
March 1982	.386 Cents/KWH	September 1982	.358 Cents/KWH
April 1982	.364 Cents/KWH	October 1982	.336 Cents/KWH
May 1982	.525 Cents/KWH	November 1982	.334 Cents/KWH
June 1982	.591 Cents/KWH	December 1982	.229 Cents/KWH
July 1982	.553 Cents/KWH	January 1983	.261 Cents/KWH

12-Month Total 4.513 Cents/KWH

Average .376 Cents/KWH

49.  $\$215,196 + \$57,618 = \$272,814 \times .5076 = \$138,480.$

50. Response to the AG's Request No. 1, Item 9.

51. Transcript of Evidence, Volume 1, December 16, 1982, page 58.

52.  $\$25,258 \div 5 = \$5,052 - \$25,258 = \$20,206 \times .5076 = \$10,257.$

53. Transcript of Evidence, Volume 1, December 16, 1982, page 67.

54.  $\$22,940 \div 5 = \$4,588 \times .5076 = \$2,329.$

55.  $\$1,806,075 \times .0167 = \$30,161.$

56.  $\$1,806,075 \times .009261 = \$16,726.$

57.  $\$30,161 + \$16,726 = \$46,887 \times .5076 = \$23,800 \times .5 = \$11,900.$

58. Updated Exhibit 5, Schedule 2.

59. Exhibit 4, Schedule 22.

60. Updated Exhibit 5, Schedule 2.

61. Updated Exhibit 4, Schedule 2.

62. Response to requests at the December 16, 1982, hearing filed January 3, 1983, Exhibit F.

63.  $\$2,246 - \$714 - \$51,822 = (\$50,290) \times .4924 = \$24,763.$

64. Order, Case No. 8467, South Central Bell Telephone Company, entered October 13, 1982, pages 15 and 16.  
Order, Case No. 8429, Kentucky Power Company, entered June 18, 1982, pages 15-17.  
Order, Case No. 8428, Continental Telephone Company, entered June 18, 1982, pages 13-15.  
Order, Case No. 8509, Union Light, Heat and Power Company, entered November 15, 1982, pages 9 and 10.
65. Response to requests at the December 16, 1982, hearing filed January 3, 1983, Exhibit G.
66.  $\$2,312,174 \div 48 \times 2 = \$96,341 - [\$96,341 \times .0142 \times 4 \text{ years} (1979-1982)] = \$90,869.$
67.  $\$18,174 \times 10.78\% = \$1,959.$
68. Exhibit No. 5, Schedule 1, page 1.
69. Harrison supplemental testimony, page 6.
70. Rhodes testimony, Exhibit SFR, Schedule 10.
71. Updated Exhibit No. 5, Schedules 1 and 3.
72. Exhibit No. 5, Schedule 2.
73. Ibid.
74. Edgemon supplemental testimony, page 2.
75. Updated Exhibit No. 5, Schedule 2.
76. Rhodes testimony, Exhibit SFR, Schedule 9.
77. Attorney General's brief, page 13.
78. Ibid.
79. Updated Exhibit No. 5, Schedule 2.
80. Ibid., Schedule 1.
81. Edgemon testimony, page 11.
82. Ibid., Appendix I, page 1.
83. Ibid.
84. Edgemon testimony, page 12.

85. Ibid., Appendix I, page 1.
86. Edgemon testimony, page 13.
87. Ibid.
88. Edgemon supplemental testimony, page 3.
89. Transcript of Evidence, Volume I, December 16, 1982, page 211.
90. Ibid., page 212.
91. Staff Cross-Examination Exhibit 1.
92. Transcript of Evidence, Volume I, December 16, 1982, page 213.
93. Ibid., page 214.
94. Edgemon testimony, Appendix 1, page 1.
95. Rhodes testimony, Exhibit SFR, Schedule 11.
96. Lexington-Fayette Urban County Governments' brief, page 7.
97. Attorney General's brief, page 14.
98. Ibid., page 15.
99. Ibid.
100. Ibid., page 16.
101.  $\$433,624 \div .5076 \div (1 - .0010459) = \$855,158.$
102. Ober direct testimony, page 9.
103. Transcript of Evidence, Volume III, December 22, 1982, page 53.

APPENDIX A

APPENDIX TO AN ORDER OF THE PUBLIC SERVICE COMMISSION  
IN CASE NO. 8571 DATED February 17, 1983.

The following rates are prescribed for the customers 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 the Commission prior to the effective date of this Order.

SERVICE CLASSIFICATION NO. 1

APPLICABLE

Applicable to all customers in the City of Lexington, Fayette County, Kentucky, and contiguous territory thereto.

AVAILABILITY OF SERVICE

Available for Residential, Commercial, Industrial, Sales for Resale, Municipal and All Other Public Authority Metered Service.

METER RATES

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

	<u>1000 Gallons Per Month</u>	<u>Rate Per 1000 Gallons</u>	<u>100 Cubic Feet Per Month</u>	<u>Rate Per 100 Cubic Feet</u>
For the first	12	\$ 1.100	16	\$ 0.825
For the next	588	0.861	784	0.646
For all over	600	0.768	800	0.576

	<u>1000 Gallons Per Quarter</u>	<u>Rate Per 1000 Gallons</u>	<u>100 Cubic Feet Per Quarter</u>	<u>Rate Per 100 Cubic Feet</u>
For the first	36	\$ 1.100	48	\$ 0.825
For the next	1,764	0.861	2,352	0.646
For all over	1,800	0.768	2,400	0.576

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>Service Charge</u>	
	<u>Per Month</u>	<u>Per Quarter</u>
5/8"	\$ 3.80	\$ 11.40
3/4"	5.70	17.10
1"	9.50	28.50
1-1/2"	19.00	57.00
2"	30.40	91.20
3"	57.00	171.00
4"	95.00	285.00
6"	190.00	570.00
8"	304.00	912.00

SERVICE CLASSIFICATION NO. 2

Deleted

(See Service Classification No. 1)

SERVICE CLASSIFICATION NO. 3

APPLICABLE

Applicable to all customers in the City of Lexington, Fayette County, Kentucky, and contiguous territory thereto.

RATES

<u>Size of Service</u>	<u>Rate Per Month</u>	<u>Rate Per Annum</u>
4" Diameter	\$ 6.36	\$ 76.32
6" Diameter	14.33	171.96
8" Diameter	25.47	305.64
12" Diameter	57.36	688.32

SERVICE CLASSIFICATION NO. 4

APPLICABLE

Applicable to all customers in the City of Lexington, Fayette County, Kentucky, and contiguous territory thereto.

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 Governmental Agencies or Institutions.....	\$ 14.33	\$ 171.96

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.....	\$ 14.33	\$ 171.96

SERVICE CLASSIFICATION NO. 5

APPLICABLE

Applicable to all customers in the City of Lexington, Fayette County, Kentucky, and contiguous territory thereto.

AVAILABILITY OF SERVICE

Available for Water Used for Building and Construction Purposes.

RATES

Where a meter is installed on a fire hydrant or on a temporary service connection for construction purposes, the minimum payment for water shall be the monthly service charge for general water service, payable in advance based upon the size of the meter installed. If more than one fire hydrant or temporary service connection is used, the service charge is to apply to each such hydrant or temporary service connection so used.

The company may require an application to be signed and either the service charge paid in advance or, at the option of the Company, a meter deposit made, and the account handled in the same manner as any other metered account. The service charge will not entitle the Customer to any water and all water used shall be billed at the meter rate schedule. In addition to such charges the Customer shall pay all reasonable costs incurred in connection with the installation and removal of the meter.



SERVICE CLASSIFICATION NO. 6

APPLICABLE

Applicable to all customers in the City of Lexington, Fayette County, Kentucky, and contiguous territory thereto.

AVAILABILITY OF SERVICE

Available for Residential, Commercial, Industrial, Public Service and Sales for Resale customers.

RECONNECTION CHARGE

When it has been necessary to discontinue water service to any premises because of a violation of the Company's Rules and Regulations on account of nonpayments of any bill for water service, a charge of Fifteen Dollars (\$15.00) will be made to cover the expense of turning on the water service.

SERVICE CLASSIFICATION SCHEDULE C

West Scott County Division

Deleted

(See Service Classification No. 1)

SERVICE CLASSIFICATION SCHEDULE A

West Scott County Division

Deleted

(See Service Classification No. 1)

SERVICE CLASSIFICATION SCHEDULE D

West Scott County Division

Deleted

(See Service Classification No. 1)

SERVICE CLASSIFICATION SCHEDULE - MOBILE HOME COURTS

West Scott County Division

Deleted

(See Service Classification No. 1)

SERVICE CLASSIFICATION SCHEDULE - SCHOOLS

West Scott County Division

Deleted

(See Service Classification No. 1)

SERVICE CLASSIFICATION - PUBLIC, PRIVATE FIRE PROTECTION

West Scott County Division

Deleted

(See Service Classification Nos. 3 and 4)

SERVICE CLASSIFICATION - SPECIAL TAX

West Scott County Division

Deleted