COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

NOTICE OF ADJUSTMENT OF THE RATES OF KENTUCKY-AMERICAN WATER COMPANY EFFECTIVE ON DECEMBER 27, 1990	)))	CASE NO. 90-321

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O R D E R

On November 27, 1990, Kentucky-American Water Company ("Kentucky-American") filed its notice with the Commission seeking to increase its rates and charges effective December 27, 1990. The proposed rates would produce an annual increase in revenue of $2,285,354, an increase of approximately 9.19 percent over existing revenues.[1] Throughout this proceeding Kentucky-American has revised its pro forma adjustments and reduced its requested return on equity from 13.05 percent to 12.7 percent. These changes would produce an annual increase in revenue of $1,948,250.

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 conducted a public hearing on April 9, 1991 at the Commission's offices in Frankfort, Kentucky. The Utility and Rate Intervention Division of the Attorney General's Office ("AG"), the Lexington-Fayette Urban County Government ("LFUCG"), and the city of Midway intervened in this matter. The AG and LFUCG participated in the hearings.

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1 Notice, page 2.

Witnesses for Kentucky-American prefiling testimony and appearing at the hearing were Robert A. Edens, Vice President and General Manager of Kentucky-American; Chris E. Jarrett, Vice President and Treasurer of Kentucky-American; Edward J. Grubb, Assistant Director - Rates and Revenues, American Water Works Service Company, Inc. ("Service Company"); Edwin L. Oxley, Revenue Requirements Specialist for the Southern Region, Service Company; John D. Ober, Associate in the firm of Burgess & Niple, Limited, Engineers; and Charles F. Phillips, Jr., Professor of Economics at Washington and Lee University.

This Order addresses the Commission's findings and determinations on the issues presented and disclosed in the hearing and investigation of Kentucky-American's revenue requirements. The Commission has approved rates and charges to produce an annual increase of $1,359,635.

ANALYSIS AND DETERMINATION

Test Period

Kentucky-American proposed and the Commission has accepted the 12-month period ending September 30, 1990 as the test period in this proceeding.

Valuation Method

Kentucky-American has proposed a net investment rate base at September 30, 1990 of $81,560,281.[2] The Commission has accepted this rate base with the following exceptions:

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2 Exhibit No. 3, Schedule 2.

System 36 Computer. During the test period, Kentucky-American sold its existing IBM 36 computer, which had 3 disk drives, to an affiliate, Virginia-American Water Company. Kentucky-American then purchased an IBM 36 computer with 4 disk drives from another affiliate, West Virginia-American Water Company ("West Virginia-American"). The computer sale and purchase resulted in a net cost to Kentucky-American of $42,720.[3]

The AG contends that an upgrade to Kentucky-American's existing computer would have cost approximately $32,083 and that this should be the cap placed on the computer purchase. The AG further stated that Kentucky-American should have explored the possibility of leasing rather than purchasing a computer since it knew that the computer would become obsolete in a relatively short period of time.[4] The AG has proposed to reduce rate base by $10,637,[5] based on its suggested cap on computer expenditures and Kentucky-American's failure to explore the possibility of leasing its computer.

Kentucky-American stated that its decision to purchase the West Virginia-American computer was cost effective because the expected useful life of the West Virginia-American computer was 2

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3 AG/LFUCG Information Request No. 2, Item 15.

4 Brief of the AG, pages 13 and 14.

5 Supplemental Request for Information, filed April 19, 1991, Item No. 2, Cost of Additional Disk Drive.

Cost of Computer Swap	$42,720
Additional Disk Drive	32,083
Amount of Savings	$10,637

years longer than that of its old computer. Kentucky-American contends that, when the cost of adding a third disk drive is considered as well, the computer replacement was worth $65,307 and exceeded the actual cost by $22,587.[6]

The AG has pointed to the fact that equipment does not necessarily become useless at the end of its depreciable life and that any additional use will benefit the ratepayers but not the shareholders. Thus, the AG argues, there is a tendency to prematurely dispose of equipment.[7] Kentucky-American has estimated the useful life of a computer to be 7.6 years[8] but plans to have the West Virginia-American computer in service for only 4 years.[9]

Transactions between related parties, such as Kentucky-American's computer sale/purchase, are less than arms-length and are closely scrutinized for rate-making purposes. Kentucky-American has failed to show that it equally considered all options before purchasing the computer from West Virginia-American and that purchasing this computer was the best alternative. Kentucky-American admitted that it did not explore the option of leasing.[10]

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6 Brief of Kentucky-American, pages 8 and 9.

7 Reply Brief of the AG, page 3.

8 Brief of Kentucky-American, page 9.

9 Transcript of Evidence ("T.E."), page 88.

10 T.E., page 90.

The Commission finds that Kentucky-American has failed to justify any cost in excess of the $32,083 to upgrade its existing computer. To properly reflect the $10,637 reduction, rate base will be reduced by $9,237,[11] operating expenses decreased by $1,400, and net operating income increased by $848.

Environmental Audit. The AG has proposed to reduce rate base by $10,702 to eliminate the cost of Phase I of Kentucky-American's environmental audit. The AG stated that as the environmental audit was necessitated by Kentucky-American's negligence in allowing treated water to overflow a clearwell, the ratepayers should not have to bear this expense.[12]

Kentucky-American stated that its environmental audit was performed in conjunction with its 1991 Comprehensive Planning Study. The audit's purpose was to determine whether: 1) Kentucky-American is complying with existing laws and regulations, as well as its own environmental policies and procedures; and 2) there are exposures or other potential liabilities outside of the regulatory requirements.[13]

Kentucky-American was cited for an illegal discharge at its Kentucky River Station in 1989 and entered into an Agreed Order

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11 $10,637 + 7.6 Years = $1,400 Depreciation Adjustment.
$10,637 - $1,400 = $9,237.

12 Brief of the AG, page 16.

13 AG Data Request, dated January 30, 1991, Item 16(c).

with the Commonwealth of Kentucky which required Kentucky-American to comply with all discharge regulations at its facility.[14] Kentucky-American admits that complying with this Order is one reason for performing the environmental audit.[15]

Based on a review of all the evidence, the Commission finds that Kentucky-American's environmental audit was not conducted solely as a result of its negligence and that the audit's cost should be allowed for rate-making purposes. However, the environmental audit is a non-recurring expenditure that should be shared by Kentucky-American's ratepayers and shareholders. Accordingly, the environmental audit's cost should be deducted from rate base and amortized over 3 years. This results in a reduction to rate base of $10,702, an increase to operating expenses of $3,567, and decrease to net operating income of $2,160.

Management Audit. Kentucky-American proposed to include the unamortized cost of its management audit of $171,333 in rate base. Kentucky-American stated that to deny it the opportunity to include the unamortized portion of this cost in rate base would be to deny the fact that it has a cost of money.[16]

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14 Id.

15 T.E., page 24.

16 Brief of Kentucky-American, page 21.

It is the Commission's practice not to allow the recovery of the unamortized cost of management audits in rate base.[17] While the Commission recognizes that Kentucky-American has a cost of money, there must also be a recognition that the shareholders will receive material benefits from the management audit. Excluding the unamortized cost from rate base will recognize the shareholder benefits while allowing full recovery of the cost from ratepayers. Kentucky-American's adjustment should be denied and rate base has been reduced by $171,333.

Depreciation Study. Kentucky-American proposed to include the unamortized cost of its depreciation study of $40,714 in rate base. The depreciation study will benefit both the ratepayers and shareholders, by ensuring that Kentucky-American's plant investment is depreciated on a timely basis. The cost of the depreciation study should be shared between the shareholders and ratepayers. Since a sharing of costs can be accomplished by allowing Kentucky-American to amortize the cost of the study while excluding any return on the unamortized portion, rate base has been reduced by $40,714.

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17 Case No. 10064, Adjustment of Gas and Electric Rates of Louisville Gas and Electric Company, Order dated July 1, 1988; Case No. 10201, An Adjustment of Rates of Columbia Gas of Kentucky, Inc., Order dated October 21, 1988; and Case No. 90-013, Rate Adjustment of Western Kentucky Gas Company, Order dated September 13, 1990.

Design Costs. Kentucky-American proposed to include design costs of $488,849 in rate base. The design costs were expended by Kentucky-American relative to its expansion of the Richmond Road Station.[18]

In Kentucky-American's previous rate case,[19] the design costs were included in rate base as Construction Work In Progress ("CWIP") and in the calculation of Allowance for Funds Used During Construction ("AFUDC"). Kentucky-American has transferred the completed design costs to a deferred debit account where they no longer accrue AFUDC.[20] Once the construction has begun, the design costs will be transferred back to CWIP and will resume accruing AFUDC.[21]

In Case No. 89-348, Kentucky-American stated that the design costs were for the current proposed expansion of the Richmond Road Station. Kentucky-American now admits, however, that the construction at the Richmond Road Station will not begin until the late 1990s.[22] Based on Kentucky-American's construction plans, the design costs should be excluded from rate base since Kentucky-

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18 Direct Testimony of Edward J. Grubb, page 6.

19 Case No. 89-348, Notice of Adjustment of the Rates of Kentucky-American Water Company Effective on January 28, 1990, Order dated June 28, 1990.

20 Response to Commission's Order of January 9, 1991, Item 21(b).

21 Response to Commission's Order of January 30, 1991, Item 12(d).

22 Id.

American's ratepayers are not currently receiving a benefit, no Certificate of Public Convenience and Necessity has been granted for this project, and there is no certainty that the construction will ever take place. Until the Richmond Road expansion is actually under construction and included in rate base as either CWIP or Utility Plant in Service, carrying costs related to design should not be recovered from Kentucky-American's ratepayers.

Deferred Income Taxes. Kentucky-American has included in its rate base deferred income taxes of $8,688,305. The elimination of the unamortized costs of the management audit and depreciation study from rate base will result in a decrease to deferred taxes of $83,842[23] and an increase to deferred tax expense of $37,807.[24] The increase to deferred income tax expense will result in a dollar-for-dollar decrease in net operating income.

Accumulated Depreciation. Kentucky-American originally included in its proposed rate base accumulated depreciation of

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Management Audit:		
Deferred FIT	KAWC W/P-A-9-1	$53,447
Deferred SIT	KAWC W/P-A-9-1	14,135
Depreciation Study:		
Deferred FIT	KAWC W/P-A-9-1	12,701
Deferred SIT	KAWC W/P-A-9-1	3,559
Deferred Income Tax Adjustment		$83,842

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Management Audit:		
Deferred FIT Exp	KAWC W/P-F-2-1	$26,724
Deferred SIT Exp	KAWC W/P-F-2-2	7,068
Depreciation Study:		
Deferred FIT Exp	KAWC W/P-F-2-1	3,175
Deferred SIT Exp	KAWC W/P-F-2-2	840
Deferred Income Tax Exp Adjustment		$37,807

$14,630,357 based on the amount recorded at the end of the test period, adjusted to reflect the annualized depreciation expense based on current depreciation rates.[25] No challenge was raised to this adjustment and the Commission finds that it is reasonable.

Kentucky-American has made a pro forma adjustment to increase depreciation expense by $673,862 based on the results of its depreciation study. The AG contends that the matching principal would be violated if a similar adjustment is not made to accumulated depreciation and therefore has proposed to increase accumulated depreciation by $673,862.[26]

Kentucky-American proposed to increase accumulated depreciation by $336,916, approximately one-half of its proposed adjustment to depreciation expense. Kentucky-American stated that since its increase in depreciation expense and offsetting revenues will not become effective until May 26, 1991, then accumulated depreciation should only be increased by the average amount collected during the 12-month period beginning May 26, 1991.[27]

The adjustment as proposed by Kentucky-American would be a violation of the matching principal. Kentucky-American is aware of the Commission's past practice to match adjustments to depreciation expense with those to accumulated depreciation.[28]

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25 Direct Testimony of Edward J. Grubb, pages 6 and 7.

26 Reply Brief of the AG, page 4.

27 Brief of Kentucky-American, page 18.

28 T.E., pages 129 and 143.

Kentucky-American's adjustment as proposed would allow a double recovery from the ratepayers by including depreciation expense in its operations while providing a return on one-half of the associated plant investment. Accumulated depreciation has been increased by $673,862.

Working Capital. Kentucky-American has proposed a cash working capital allowance of $1,645,000 based on 1/7 of its pro forma operations and maintenance expenses. The AG stated that Kentucky-American's formula method on its own cannot support a determination of working capital and has proposed to exclude working capital from Kentucky-American's rate base.

The AG stated that the 1/7 formula is based on a lead/lag study performed in Case No. 10069[29] and is not in the record in this case. The AG also argues that since the Franklin Circuit Court overturned the Commission's decision in Case No. 10069 all components of that case, including the lead/lag study, are invalid.[30]

Kentucky-American argues that there is no requirement that its lead/lag study initially performed in Case No. 10069 be filed in this proceeding to support the 1/7 formula and that the AG misperceives the relationship of the lead/lag study to Kentucky-American's request in this case. Kentucky-American

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29 Case No. 10069, Notice of Adjustment of the Rates of Kentucky-American Water Company Effective on January 1, 1988.

30 Brief of the AG, pages 7 and 8.

states it has simply requested 1/7 of its pro forma operation and maintenance expenses as an appropriate cash working allowance.[31]

In Case Nos. 10481[32] and 89-348, the Commission based Kentucky-American's working capital on the 1/7 formula. A lead/lag study, which was filed in Case No. 10069, is a matter of public record and has been available during the course of this case. However, the Commission's decision on this issue is based solely on the record evidence in this case. Kentucky-American has monitored its payment patterns and those of its ratepayers and has determined that no material changes have occurred to warrant a revision of the 1/7 formula.[33] Based on the evidence presented by Kentucky-American and the AG's failure to show why the 1/7 formula is inappropriate, the Commission finds that the 1/7 formula should be accepted. However, Kentucky-American's cash working capital allowance has been reduced by $28,840 to reflect the Commission's adjustments to the proposed operations and maintenance expenses.

Other Adjustments. Adjustments to increase deferred debits and deferred income taxes have been included herein and discussed in subsequent sections. The net effect of these adjustments is to increase net investment rate base by $12,317.

The Commission therefore has determined Kentucky-American's net investment rate base at September 30, 1990 to be as follows:

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31 Reply Brief of Kentucky-American, page 9.

32 Case No. 10481, Notice of Adjustment of Rates of Kentucky-American Water Company Effective on February 2, 1989.

33 Response to Commission's Order of January 9, 1991, Item 22.

Utility Plant in Service	$120,355,250
Construction Work in Progress	1,709,321
Deferred Maintenance	884,146
Deferred Debits	505,661
Prepayments	126,845
Materials and Supplies	373,504
Working Capital	1,616,160
Subtotal	$125,570,887
Less:	
Reserve for Accumulated Depreciation	$ 15,302,819
Reserve for Accumulated Amortizations	(6,564)
Utility Plant Acquisition Adjustment	1,096,154
Contributions in Aid of Construction	7,691,322
Customer Advances for Construction	12,409,999
Deferred Income Taxes	8,612,486
Unamortized Investment Tax Credit	231,768
Subtotal	$ 45,337,984
Net Investment Rate Base	$ 80,232,903

Revenues and Expenses

Kentucky-American reported test-period utility operating income of $7,119,035.[34] Kentucky-American proposed several adjustments to test-period revenues and expenses which resulted in adjusted utility operating income of $7,800,037.[35] The proposed adjustments are reasonable and acceptable for rate-making purposes with the following exceptions:

Gain on Sale of Land. In December of 1990, Kentucky-American disposed of property that had previously been included in its rate base. This disposition netted a realized gain of $28,933 to Kentucky-American. The AG argues that the gain resulting from the sale of land should be applied for the benefit of the ratepayer.[36]

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34 Exhibit No. 4, Schedule 1.

35 Reflects Kentucky-American's revised adjustments.

36 Brief of the AG, page 15.

Kentucky-American maintains the gain on non-depreciable land in determining rates is to be excluded.

The Kentucky Supreme Court has held: "Profit made from the sale of non-depreciable land no longer used in serving customers is not an ingredient to be considered in fixing rates. The customers had no interest in the profit realized on the sale - it belonged to the stockholder."[37] This holding is dispositive of the issue.

AFUDC. Kentucky-American proposed to include AFUDC of $96,583 in test-period operating revenues. The Commission has calculated AFUDC of $95,266 based on CWIP available for AFUDC and the rate of return found reasonable herein. This results in a decrease to operating revenue of $1,844 and a decrease to net operating income of $1,109.

Cost of Gasoline. Kentucky-American proposed a pro forma level of gasoline expense of $91,827, which it later revised to $65,364.[38] Its adjustment is based on the price Kentucky-American paid for gasoline on March 28, 1991. During the test period, Kentucky-American spent $69,660 for 79,766 gallons of gasoline and expensed 82.88 percent or $57,734 of its purchases. The price Kentucky-American paid during the test period fluctuated from $0.81 to $1.26 per gallon.[39] The original adjustment proposed by

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37 City of Lexington v. Lexington Water Company, Ky., 458 S.W. 2d 778 (1970).

38 Revisal/Additional Information, filed April 4, 1991, Item 5.

39 Response to Commission's Order of January 30, 1991, Item 19(a).

Kentucky-American was based on $1.389 per gallon which represented the price paid for gasoline on October 18, 1990 and included the $.09 per gallon tax implemented after that date. The revised adjustment is based on $1.049 per gallon. The average test-period price was $0.873 per gallon.

Given the volatile nature of gasoline prices, basing a pro forma adjustment on the price paid on any given date does not provide a sufficient degree of reliability to warrant acceptance as a known and measurable adjustment. The pro forma adjustment is denied, resulting in a decrease to operating expenses of $7,630 and an increase to net operating income of $4,620.

Management Audit. Kentucky-American proposed an adjustment to reflect the recovery of its management audit expenses over a 3 year period, which would increase operating expenses by $75,000.[40] KRS 278.255 mandates that the cost of a Commission conducted management audit be included for rate-making purposes, notwithstanding the AG's argument that, due to the Commission's failure to promulgate the regulations mandated by KRS 278.255(4), the audits conducted to date or in progress are not audits authorized by this statute.[41]

The lack of a regulation setting out more specific procedures for conduct of the audits does not nullify that statutory mandate. Indeed, KRS 13A.120(1)(i) prohibits an administrative agency from adopting regulations which "modify or vitiate a statute or its

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40 $225,000 (W/P-C-7-11) ÷ 3 Years = $75,000.

41 Brief of the AG, page 3.

intent." Thus, a regulation implementing KRS 278.255 could not serve to modify or vitiate the requirement that the Commission include the cost of conducting management audits in the utility's cost of service for ratemaking purposes, anymore than the absence of a regulation could modify or vitiate that clear requirement of the statute.[42]

Secondly, the Commission has the authority to direct a management audit even without the authority of KRS 278.255.[43]

Finally, the Commission strongly disagrees with the AG on philosophical grounds. The management audit process is intended to encourage utilities to adopt recommendations for improved operations which will ultimately benefit customers through cost savings or improved service. We believe that ratepayers of audited utilities have in fact benefitted from the implementation of audit recommendations, and that management audits are an essential tool of a regulatory agency seeking to protect the interests of utility customers. The AG's claims that the audits conducted to date are merely an "otherwise unnecessary expense" that should not be needed ignores the many benefits achieved by those audits.

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42 See also: Equitable Life Mortgage and Realty Investors v. New Jersey Division of Taxation, 376 A.2d 966 (New Jersey 1977).

43 Case No. 6499, Big Rivers Electric Corporation's Notice to (1) Change its Rates for Electric Service; (2) Revise its Fuel Adjustment Clause; (3) Revise the 'Term' Paragraph of its Tariff; and (4) Borrow $8,250,000 from the Louisville Bank for Cooperatives and Issue Notes or Other Evidences of such Debts and Instruments Securing such Debts, Order dated September 10, 1976; page 4.

The AG's claim that due process was violated when the Commission upheld Kentucky-American's refusal to provide all information it supplied to the management auditor, Schumaker & Company,[44] is without merit. The concluding sentence of KRS 278.255 states as follows: "The results of all audits shall be filed with the commission and shall be open to public inspection." The word "results" is pivotal here, and clearly does not apply to information provided in the course of an on-going audit. This interpretation is consistent with that provision of the Kentucky Open Records Act, KRS 61.870, et seq., which exempts from public inspection preliminary correspondence between a public agency and private individuals "other than correspondence which is intended to give notice of final action of a public agency."[45]

Pre-Management Audit. Kentucky-American retained the services of Utility and Economic Consulting, Inc. to provide consulting services in preparation for the management audit. Kentucky-American has proposed to amortize this cost over 3 years, for an increase to operating expenses of $10,667.[46] The AG proposed that these charges should not be allowed under any circumstances, stating that "such preparation compromises the integrity of the management audit by presenting a sugar-coated picture for the consultants."[47]

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44 Brief of the AG, page 4.

45 KRS 61.878(1)(g).

46 Reply Brief of the AG, page 4.

47 Id.

This issue was explored in a recent rate case of Western Kentucky Gas.[48] As in that case, the Commission finds that a utility is not incurring an unnecessary expense in retaining the benefit of experts to assist it with the management audit. Nor is the fee found to be excessive.

Service Company Charges. During the test period, Kentucky-American recorded charges from the Service Company of $1,196,029,[49] an increase of 36.2 percent[50] over the previous year's charges. Kentucky-American attributed this increase to: (1) the consummation of the 1989 Service Company Agreement ("1989 Agreement"); (2) an increase in direct billed charges; and (3) salary increases for Service Company personnel of approximately 6 percent and increased Service Company expenses.[51] The Service Company provides financial, accounting, and engineering services to each operating subsidiary of the American Water Works Company.

On January 1, 1971, Kentucky-American entered into a written agreement with the Service Company ("1971 Agreement"). The 1971 Agreement provided eight different bases for allocating Service

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48 Case No. 90-013.

49 Direct Testimony of Chris Jarrett, Exhibit CJ-2. $1,108,118 (Account 923.1) + $87,911 = $1,196,029.

50 Direct Testimony of Chris Jarrett, Exhibit CJ-2. $811,585 (Account 923.1) + $66,358 = $877,943. ($1,196,029 - $877,943) + $877,943 = 36.2%.

51 Direct Testimony of Chris Jarrett, pages 12 through 20.

Company costs that could not be identified and attributed exclusively to any one water company.[52] Kentucky-American stated that the use of the 1971 Agreement provided for cumbersome, time consuming, and complicated allocation formulas and methodologies that caused confusion and sometimes a disproportionate allocation to one subsidiary over another.[53]

In developing the 1989 Agreement the Service Company used the philosophy that "all service rendered is for one purpose and that is to assist the operating company in providing service to its customers."[54] Based on this philosophy, the Service Company concluded that an appropriate allocation factor is the number of customers served by the operating company.[55]

The Commission recognizes at the outset that the cost allocation agreements among the Service Company and the operating subsidiaries are less-than-arms-length transactions. Of specific concern to the Commission is that in the Service Company's attempt to rid itself of the 1971 Agreement's "cumbersome, time consuming, and complicated allocation formulas," an oversimplified allocation has been selected which does not accurately track costs. In developing the 1989 Agreement, the only alternative methods of

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52 Brief of Kentucky-American, page 12.

53 Direct Testimony of Chris Jarrett, page 14.

54 Response to Commission's Order of January 9, 1991, Item 14(d).

55 Id.

allocating cost considered were those methods contained in the 1971 Agreement.[56] The major flaw is that the Service Company was interested in a simpler allocation process and as a result looked at the overall impact on the operating subsidiaries in toto without considering the effect on Kentucky-American. The Service Company's view was expressed at the hearing when a Kentucky-American witness stated that:

> You can challenge any particular area or field and say, well, shouldn't this be a little better than that one, and over here shouldn't that be a little better than this, but when you look at it in total, we are here to serve the customers and we made a -- the company made a decision that was the most appropriate allocator to use.[57]

The problem with the Service Company's approach is that it has allocated all costs in the same manner without looking at the underlying characteristics of each cost separately. Discussing this problem in its Order of May 8, 1989, the Virginia Corporation Commission stated the following:

> Some indirect costs could be properly allocated based on the number of customers. However, Company should analyze indirect costs as to the cost causative characteristics and allocate such costs based on direct cost factors such as labor, floor space, and number of customers. Number of customers should not be the sole basis for allocating all indirect costs.[58]

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56 Response to Commission's Order dated January 30, 1991, Item 7.

57 T.E., page 112.

58 Case No. PUA880055, Application of Virginia-American Water Company for Authority to Enter Into Service Agreement with Affiliate, Order dated May 8, 1989, page 2.

The Commission is also concerned with the manner in which the 1989 Agreement was developed and ratified by Kentucky-American. Kentucky-American's evidence was that the same Service Company employees who developed the 1989 Agreement were also the ones who advised Kentucky-American's Board of Directors to approve the agreement.[59] And some members of Kentucky-American's Board of Directors are also directors of other operating subsidiaries and the Service Company.[60] No Lexington-based employee of Kentucky-American reviewed the 1989 Service Agreement before it was implemented or was involved in the negotiation of the contract.[61]

Kentucky-American has failed to persuade this Commission that allocating all indirect costs based on the number of customers, as used in the 1989 Agreement, is the most appropriate allocation method or that it results in just and reasonable costs to Kentucky-American. Based on this, as well as the less-than-arms-length nature of the transaction, the Commission finds that the 1971 Agreement should be used for rate-making purposes. Therefore, operating expense have been decreased by $132,707, for an increase in net operating income of $80,361.

Relative to increases in direct billed charges, Kentucky-American pointed to the following as contributing to the increase:

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59 T.E., pages 32 and 33.

60 Id., page 33.

61 Id.

Source of Supply Options	$ 9,510
In-House Accounting System Update	$21,000
Administrative Case No. 313 - Refund	$ 6,000
Forecasted Test Year	$ 7,500

Kentucky-American agreed that these specific charges are non-recurring, but that other problems will occur that would require the attention of the Service Company.[62] Kentucky-American agreed that, if the items were to be amortized, the proper amortization period would be 3 years with the unamortized cost in rate base.[63]

These expenses, which total $44,010, are infrequent in nature and should be amortized over a 3-year period resulting in a decrease to operating expenses of $29,340 and an increase to net operating income of $17,767.

The Commission has previously allowed Kentucky-American the unamortized balances of numerous non-recurring expenditures in rate base. However, in this case not all of the items warrant inclusion in rate base. Because regulatory proceedings benefit both the ratepayers and shareholders, the cost of these proceedings should be shared between the two beneficiaries. This can be accomplished by allowing the cost to be amortized while excluding the unamortized amount from rate base. Rate base should

62 Response to Commission's Order of January 9, 1991, Item 19(b).

63 Response to Commission's Order of January 30, 1991, Item 10(a).

be increased by $20,340,[64] which includes the unamortized cost of the source of supply options and the in-house accounting system update.

The inclusion of these expenditures in rate base will result in an increase in deferred taxes of $8,032[65] and a decrease to deferred income tax expense of $4,012.[66] The decrease to deferred income tax expense will result in a dollar-for-dollar increase in net operating income.

The AG questioned the reasonableness of some of the costs allocated by the Service Company to Kentucky-American. The AG contends that many of the costs that would not be allowable for rate-making purposes are being concealed in the Service Company allocations.[67] The AG has proposed to eliminate the following expenditures:

Dillard Edgemon's Moving Expenses ($20,000 x 24%)	$4,800
Broadmoor Trip No Dollar Amount Provided	N/A

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64 ($9,510 + $21,000) = $30,510 + 3 Years = $10,170.
$30,510 - $10,170 = $20,340.

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$20,340 x 8.25% (State)	$1,678
($20,340 + $1,678) x 34% (Federal)	6,354
Deferred Tax Expense	$8,032

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$10,170 x 8.25% (State	$ 839
($10,170 + $839) x 34% (Federal)	$3,173
Deferred Tax Expense	$4,012

67 Brief of the AG.

Greenbrier Expenses ($10,000 x 24%)	$2,400
California Seminar No Dollar Amount Provided	N/A
Christmas Banquet ($3,085 x 24%)	$ 740

It has been the Commission's past practice to exclude from test-period operating expenses those moving expenses considered non-recurring or excessive. In Kentucky-American's previous rate case, Case No. 89-348, the Commission determined that the cost of employee Christmas gifts should not be recovered from the ratepayer.[68]

The moving expenses and the cost of the Christmas Banquet should be deducted from Kentucky-American's operating expenses. The Commission recognizes that the amount of these two expenses is a function of the allocators in the 1989 Agreement which has been rejected. While reverting to the allocators in the 1971 Agreement would probably change the amount of these expenses, there is nothing in the record to support such a calculation. However, based on a review of the allocators in the 1971 Agreement, the Commission finds that the changes would be minimal. Accordingly, the adjustment to eliminate the $4,800 moving expenses and $740 Christmas Banquet is accepted. This results in a decrease to operating expenses of $5,540 and an increase to net operating income of $3,355.

68 Case No. 89-348, pages 14 and 15.

Future Test Period. The AG contends that the legal expenses and Service Company charges incurred by Kentucky-American in Administrative Case 331[69] should not be recovered. The AG points to the First Amendment to the United States Constitution and Sections One and Eight of the Kentucky Constitution that grant freedom of speech, expression, etc. to all citizens, which includes Kentucky-American's ratepayers. According to the AG, legal expenses and Service Company charges, "were incurred to advocate Kentucky-American's position, which is a political opinion on a Commission action."[70] The AG equates these charges to lobbying or charitable contributions, items that the Commission has not allowed for rate-making purposes.

The AG's argument is totally without merit. Kentucky-American's involvement in Administrative Case No. 331 is no different than its involvement in any other administrative procedure or rate case. Kentucky-American was defending what it reasonably perceived to be in the best interests of itself, its ratepayers, and shareholders.[71]

Depreciation Study. Kentucky-American proposed to increase depreciation expense by $673,862 based on the results of its depreciation study. Kentucky-American's depreciation study used

69 Administrative Case No. 331, An Investigation of Appropriate Guidelines for Filing Forecasted Test Periods.

70 Brief of the AG, page 5.

71 Reply Brief of Kentucky-American, page 8.

the remaining life technique and modified the service lives of a number of plant accounts.

In Case No. 9093,[72] the Commission allowed Kentucky-American to use the remaining life technique in calculating depreciation expense. In this proceeding, the Commission accepts Kentucky-American's continued use of the remaining life technique and its proposed modified service lives. The changes allowed result in a composite accrual rate of 2.486 percent or an increase of $673,862 in Kentucky-American's annual depreciation expense.

Toyota Main Depreciation. The AG proposed to exclude the depreciation expense associated with plant supported by the Toyota advance. The AG argues that if the recovery of the depreciation is permitted, ratepayers would never be able to recover those amounts. The AG also argues that virtually none of the advance has been refunded.[73]

The AG proposed a similar adjustment in Kentucky-American's previous two rate cases, Case Nos. 89-348 and 10481. In those cases, the Commission found that for a 10-year period a liability existed to refund the advance to the customer and therefore depreciation expense on customer advances was included in determining Kentucky-American's revenue requirement. The fact that Kentucky-American has refunded only a small portion of the

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72 Case No. 9093, Application of Kentucky-American Water Company for Certification of Depreciation, Order dated March 12, 1985.

73 Brief of the AG, page 15.

advance has no bearing on this past determination. The AG has presented no new evidence to support its position. The Commission, having thoroughly reviewed this issue, affirms its past decisions and finds that the adjustment should be denied.

Amortize the Deficiency of Deferred State Income Taxes. The AG proposed to deduct $20,164 in the calculation of federal income taxes, which would result in a $6,856 decrease to federal income tax expense. The AG proposed a similar adjustment in Kentucky-American's last rate case, Case No. 89-348. In that case it was determined that the deficiency affected deferred federal income taxes rather than current federal taxes. The Tax Reform Act of 1986 mandates that the deficiency be amortized over the remaining life of the assets. The adjustment is denied.

Interest Synchronization. Kentucky-American proposed interest expense for tax purposes of $4,738,652 based on the proposed rate base and weighted cost of debt. The Commission has recalculated this expense to be $4,661,502 based on the rate base and weighted cost of debt found appropriate herein. This results in a decrease to net operating income of $30,420.

Capital Structure

Kentucky-American proposed a capital structure consisting of 57.31 percent long-term debt, 4.26 percent preferred stock and 38.43 percent common equity based on an adjusted end-of-test-year capital structure. Kentucky-American adjusted the actual end-of-test year capital structure to include the issuance of $4,000,000 in long-term debt and $2,800,000 in common equity in November 1990; to remove all short-term debt in the amount of

$2,870,039 which was refinanced in November 1990; and to recognize the maturing of $4,000,000 in First Mortgage Bonds, Series F, 5 percent on January 1, 1991. The adjusted capital structure is reasonable. For rate-making purposes, the capital structure for Kentucky-American should be as follows:

	Percent
Long-Term Debt	57.31
Preferred Stock	4.26
Common Equity	38.43
	100.00

Cost of Debt

Kentucky-American's proposed costs for long-term debt of 10.13 percent and for preferred stock of 7.20 percent are reasonable.

RATE OF RETURN

Return on Equity

Kentucky-American proposed a return on equity ("ROE") of 13.05 percent and later recommended that it be authorized an ROE of 12.7 percent. LFUCG recommended that the return for Kentucky-American be 11.5 percent and in no event greater than 11.88 percent. The AG adopted the position of LFUCG.

Kentucky-American performed a discounted cash flow ("DCF") analysis using three water utilities as a proxy for estimating its cost of common equity. The utilities selected were limited to those privately-owned and publicly-traded operating water companies with a stock rating of A- or better and with at least 85 percent of annual revenues being derived from water sales.

Kentucky-American calculated a dividend yield for the comparison group of 7.33 percent based on the average high/low stock market prices for the 12 months ended September 30, 1990 and a dividend yield of 7.63 percent based on the average high/low stock prices for the month of September 1990. Applying a growth rate of 5.42 percent, calculated for the 5-year period 1984-1989, yielded DCF cost of equity estimates of 12.75 percent and 13.05 percent.[74]

Kentucky-American determined that 13.05 percent was its cost of equity capital because (1) it is smaller in terms of capitalization than 2 of its 3 proxy companies, (2) it has a lower equity ratio than the average of the comparison group, (3) its projected capital needs make it important to maintain its financial integrity, and (4) it is the DCF estimate based upon the latest available data.[75]

LFUCG provided exhibits to update Kentucky-American's DCF analysis.[76] The exhibits were in the same format as those used by Kentucky-American in its analysis. The exhibits indicated DCF cost of equity estimates of 12.15 percent, calculated using data from the 52 weeks ending March 1991, and 11.88 percent, calculated using data from the month of March 1991.[77]

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74 Phillips Direct Testimony, pages 14 and 15.

75 Id., pages 15 and 16.

76 T.E., pages 171 - 202.

77 Id., pages 201 - 202.

Following LFUCG's introduction of exhibits, Kentucky-American opined that its current best guess cost of equity would be very close to what it currently has.[78] Kentucky-American now recommends that it be authorized an ROE of 12.7 percent.[79]

LFUCG believes the results of the updated DCF analysis yielding cost of equity estimates of 12.15 percent and 11.88 percent are too high. According to LFUCG, the companies used by Kentucky-American for comparison are more risky than Kentucky-American due to water rationing and water purchases.[80] Therefore, Kentucky-American's allowed return should be less than the comparison group. Further, LFUCG observed that Kentucky-American may have overstated the growth rate.[81] In its final analysis, LFUCG reasoned that in no event should the Commission grant Kentucky-American an ROE greater than 11.88 percent. LFUCG concluded that based on the relative risk of the proxy utilities, Kentucky-American's rate of return should be significantly less, that is, at or near 11.5 percent.[82] The AG adopts the position of LFUCG.[83]

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78 Id., page 209.

79 Brief of Kentucky-American, page 28.

80 Brief of LFUCG, page 2.

81 Id., page 3.

82 Id., page 4.

83 Reply Brief of the AG, page 6.

Upon subsequent review of the exhibits of LFUCG, Kentucky-American determined that the analysis contained a conceptual error.[84] LFUCG used current quarterly dividends rather than expected dividends to compute dividend yields. Using an estimate of one-half the historical growth rate to calculate the expected dividends, the resulting dividend yields give cost of equity estimates of 12.3 percent and 12.03 percent.[85]

The Commission is obligated to allow Kentucky-American an opportunity to earn a rate of return which will allow it to continue to maintain its financial integrity. All parties agree that the state of the economy has changed dramatically over the past year and continued change is certain. Whether we are at the bottom of or coming out of a recession is not certain. Kentucky-American has made its intentions known that it will continue filing for rate increases annually. Hence, the short term is more relevant in determining its cost of equity.

The Commission affirms its traditional use of the DCF model to estimate ROE. However, the DCF model cannot be applied in a mechanistic manner without due regard for judgment in reaching a conclusion. The Commission, having considered all of the evidence, including current economic conditions, finds that the cost of common equity is within a range of 12.0 percent to 12.3 percent. Within this range, an ROE of 12.15 percent will best

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84 Reply Brief of Kentucky-American, page 1.

85 Id., page 2.

allow Kentucky-American to attract capital at a reasonable cost, maintain its financial integrity to ensure continued service, provide for necessary expansion to meet future requirements, and also result in the lowest possible cost to ratepayers.

Rate of Return Summary

Applying the rates of 10.13 percent for long-term debt, 7.20 percent for preferred stock, and 12.15 percent for common equity to the capital structure produces an overall cost of capital of 10.79 percent which is fair, just, and reasonable.

AUTHORIZED INCREASE

The required net operating income found fair, just, and reasonable is $8,657,130.[86] To achieve this level of income Kentucky-American is entitled to increase its rates and charges to produce additional revenues on an annual basis of $1,359,635 determined as follows:

Net Operating Income Found Reasonable	$ 8,657,130
Less Adjusted Net Operating Income	7,839,504
Operating Income Deficiency	$ 817,626
Gross-Up Factor	1.66290525
Revenue Increase Required, Inclusive of Income Taxes, PSC Fee, and Uncollectibles	$ 1,359,635

SUMMARY

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

86 $80,232,903 x 10.79% = $8,657,130.

1. The depreciation rates, set forth in Exhibit 4, Schedule 4, page 3 of 3, of the application are fair, just, and reasonable expense rates for Kentucky-American's plant accounts.

2. The rates proposed by Kentucky-American would produce revenues in excess of those found reasonable herein and should be denied.

3. The rates in Appendix A, which is attached hereto and incorporated herein, are the fair, just, and reasonable rates to be charged for water service by Kentucky-American on and after the date of this Order.

4. The rates approved herein will permit Kentucky-American to cover its operating expenses, pay its interest, and provide a reasonable dividend and surplus for equity growth.

IT IS THEREFORE ORDERED that:

1. The depreciation rates, set forth in Exhibit 4, Schedule 4, page 3 of 3, of the application, be and they hereby are prescribed effective on and after the date of this Order.

2. The rates proposed by Kentucky-American be and they hereby are denied.

3. The rates in Appendix A be and they hereby are approved for services rendered on and after the date of this Order.

4. Within 30 days from the date of this Order, Kentucky-American shall file with this Commission its revised tariff sheets setting out the rates approved herein.

Done at Frankfort, Kentucky, this 30th day of May, 1991.

PUBLIC SERVICE COMMISSION

Chairman

Vice Chairman

Commissioner

ATTEST:

Executive Director

CLASSIFICATION OF SERVICE
SERVICE CLASSIFICATION NO. 3

RATES

Size of Service	Rate Per Month	Rate Per Annum
2 inch diameter	$ 3.23	$ 38.75
4 inch diameter	12.91	154.86
6 inch diameter	29.04	348.47
8 inch diameter	51.63	619.57
12 inch diameter	116.18	1,394.13
14 inch diameter	158.12	1,897.46

CLASSIFICATION OF SERVICE
SERVICE CLASSIFICATION NO. 4

RATES FOR PUBLIC FIRE SERVICE	Rate Per Month	Rate Per Annum
For each public fire hydrant contracted for or ordered by Urban County, County, State or Federal Governmental Agencies or Institutions	$20.21	$242.50
RATES FOR PRIVATE FIRE SERVICE		
For each private fire hydrant contracted for by Industries or Private Institutions	29.04	348.47

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 90-321 DATED May 30, 1991.

The following rates and charges 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 this Commission prior to the effective date of this Order.

CLASSIFICATION OF SERVICE
SERVICE CLASSIFICATION NO. 1

METER RATES

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

	1000 Gallons Per Month	Rate Per 1000 Gallons	100 Cubic Feet Per Month	Rate Per 100 Cubic Feet
For the First	600	$1.739	800	$1.304
For all Over	600	1.360	800	1.020

	1000 Gallons Per Quarter	Rate Per 1000 Gallons	100 Cubic Feet Per Quarter	Rate Per 100 Cubic Feet
For the First	1,800	$1.739	2,400	$1.304
For all Over	1,800	1.360	2,400	1.020

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.

Size of Meter	Service Charge Per Month	Service Charge Per Quarter
5/8 inch	$ 5.19	$ 15.57
3/4 inch	7.77	23.30
1 inch	12.95	38.84
1-1/2 inch	25.89	77.68
2 inch	41.42	124.25
3 inch	77.66	232.99
4 inch	129.44	388.32
6 inch	258.89	776.68
8 inch	414.23	1,242.69