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January 4, 2011

Via Hand-Delivery

Chairman Mary W. Freeman
c/o Sharla Dillon
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, Tennessee 37243

filed electronically in docket office on 01/04/11

**Re: *Petition Of Tennessee American Water Company To Change And Increase
Certain Rates And Charges So As To Permit It To Earn A Fair And Adequate
Rate Of Return On Its Property Used And Useful In Furnishing Water Service
To Its Customers***
Docket No. 10-00189

Dear Chairman Freeman:

Enclosed you will find an original and five (5) copies of Tennessee American Water Company's Response to the CAPD's First Discovery Requests, Question 123. This material is also being filed today by way of email to the Tennessee Regulatory Authority Docket Manager, Sharla Dillon.

Please file the original and four copies of this material and stamp the additional copy as "filed". Then please return the stamped copies to me by way of our courier.

Should you have any questions concerning this matter, please do not hesitate to contact me at the email address or telephone number listed above.

With kindest regards, I remain

Very truly yours,



R. Dale Grimes

RDG:smb
Enclosures

Chairman Mary Freeman

January 4, 2011

Page 2

cc: Hon. Sara Kyle (*w/o enclosure*)
Hon. Eddie Roberson (*w/o enclosure*)
Mr. David Foster, Chief of Utilities Division (*w/o enclosure*)
Richard Collier, Esq. (*w/o enclosure*)
Mr. Jerry Kettles, Chief of Economic Analysis & Policy Division (*w/o enclosure*)
Ryan McGehee, Esq. (*w/enclosure*)
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Donald L. Scholes, Esq. (*w/enclosure*)

**TENNESSEE AMERICAN WATER COMPANY
DOCKET NO. 10-00189
SUPPLEMENTAL DISCOVERY REQUEST OF THE
CONSUMER ADVOCATE AND PROTECTION DIVISION**

Responsible Witness:

Question:

123. In testimony before the Kentucky Public Service Commission, Mr. Mike Miller testified that weather normalization had been used in Tennessee since 1989. In TAWC's appeal of Docket 08-00039, the Company utilizes pre-filed testimony from a 1991 Tennessee Public Service Commission ("TPSC") in support of its position on Dr. Spitznagel's weather normalization adjustment. The TRA does not maintain public records of TPSC dockets. Provide copies of all testimony and final orders of the rate cases, from 1985 through 1995, filed by TAWC before the TPSC that are in the company's possession.

Response:

The Company objects to this request on the grounds that it is overly broad, unduly burdensome and seeks information that is neither relevant nor reasonably calculated to lead to the discovery of admissible evidence. In addition, most of the pertinent data was in the working papers and accounting exhibits which are not part of the case files maintained by the Company for each TAWC rate case.

Without waiving these objections, the Company has reviewed the orders and testimony in its rate case files and provides the testimony of Mr. Edwin Oxley and Mr. Edward Grubb, employees of AWWSC who provided testimony concerning the weather normalization issue in the Company's 1991 and 1996 rate cases which both ended in settlement. In Mr. Oxley's testimony in the 1991 case, (beginning on page 3, question and answer 10) he indicates the Company used the weather normalization approach used by the Staff in the Company's previous rate case (case number TPSC U-89-15388). In Mr. Grubb's testimony from the 1996 rate case (Case number U-96-00959) he again describes (beginning on page 3-line 15 and continuing to page 6 line 9) that the Company utilized the regression model developed by the Tennessee Public Service Commission Staff and has been used by the Staff in the last three rates cases.

Copies of the testimony of Mr. Oxley and Mr. Grubb are attached to this response and identified as TN-CAPD-SUPPLEMENTAL-Q123-ATTACHMENT. The Company could find no other mention of WNA because its historical TAWC rate case records are limited and presumably because the cases ended in settlement with no dispute or issue regarding the WNA approach.

December 8, 2010 Supplemental Response:

As stated during the December 2, 2010 meet and confer, the Company will make its copy of all rate case testimony and final orders from 1985 through 1995 available at the offices of Bass, Berry & Sims, PLC for inspection and copying.

January 4, 2010 Supplemental Response:

See the attached documents, labeled as TN-CAPD-SUPPLEMENTAL-Q123-SUPPLEMENTAL ATTACHMENT, for the materials selected for copying by the Consumer Advocate.

BEFORE THE TENNESSEE PUBLIC SERVICE COMMISSION

Nashville, Tennessee

IN RE: PETITION OF TENNESSEE-AMERICAN WATER
COMPANY TO PLACE INTO EFFECT A REVISED
TARIFF

DOCKET NO. U-83-7226

ON REMAND

PETITION OF TENNESSEE-AMERICAN WATER
COMPANY TO PLACE INTO EFFECT A
REVISED TARIFF

DOCKET NO. U-85-7338

O R D E R

These matters are before the Tennessee Public Service Commission upon the petition filed by Tennessee-American Water Company (hereinafter Tennessee-American or Company) on January 8, 1985 to increase its rates and charges to produce \$2,807,901 in additional annual revenues.

The Commission held service hearings on May 2 and May 20, 1985 in Chattanooga to permit the customers of the Company to comment on the Company's quality of service. The financial hearing was held on June 3, 1985 before Chairman Jane G. Eskin, Commissioner Frank D. Cochran and Commissioner Keith Bissell in Chattanooga, Tennessee. The following appearances were entered:

APPEARANCES:

MR. WILLIAM L. TAYLOR, JR., MR. WILLIAM D. SPEARS, and
MR. J. DUANE CANTRELL, Attorneys, 8th Floor, Blue Cross
Building, Chattanooga, Tennessee 37402, appearing
on behalf of Petitioner, Tennessee-American Water
Company.

MR. DANIEL R. LOFTUS, Attorney, 18th Floor, First

American Center, Nashville, Tennessee 37239; MR. W. LEE MADDUX, 400 Pioneer Bank Building, Chattanooga, Tennessee 37402; and MR. ROBERT KIRK WALKER and MR. WILLIAM C. CARRIGER, Attorneys, 1200 Maclellan Building, Chattanooga, Tennessee 37402, appearing on behalf of intervenors, City of Chattanooga; City of Signal Mountain; and Chattanooga Manufacturers Association.

MR. DON SCHOLLES, Assistant General Counsel, Tennessee Public Service Commission, C-1-103 Cordell Hull Building, Nashville, Tennessee 37219, appearing on behalf of the Commission Staff.

The Commission considered these matters at its Commission Conference on June 18, 1985. Upon consideration of the record in these proceedings, the Commission concludes that the Company is entitled to a rate increase which will produce \$1,340,796 in additional annual revenues. In support of its decision, the Commission makes the following findings and conclusions.

REMAND

On April 11, 1985 the Tennessee Court of Appeals remanded the Company's previous rate case, Docket No. U-83-7226, to the Commission to either reconvene hearings on the Company's cost of equity or issue a new order based on the record in that case. Because the Company had a pending rate case before the Commission, a hearing on the Company's need for additional revenues, which includes a consideration of the cost of equity for the Company, was already scheduled for June of 1985. Because the Commission has set new rates for the Company in this case which replace the rates set in Docket No. U-83-7226, no further action on the remand of Docket No. U-83-7226 is necessary.

DESCRIPTION OF PETITIONER

Tennessee-American is a water distribution company which serves substantially all of the City of Chattanooga and adjacent territory in the states of Tennessee and Georgia. The Company is a wholly-owned subsidiary of American Water Works Company, Inc. (hereinafter AWWC). The Company presently serves approximately 63,000 customers.

CRITERIA FOR ESTABLISHING JUST AND REASONABLE RATES

To establish just and reasonable rates for the Company, the Commission has selected a test period and made findings in the following areas to test the Company's earnings under its current rate structure:

- (1) The investment or rate base upon which the utility should be permitted to earn a fair rate of return.
- (2) The proper level of revenues for the utility.
- (3) The proper level of expenses for the utility.
- (4) The rate of return the utility should earn.

Both the Company and the Staff have used as a test period the twelve months ending June 30, 1986. At the beginning of the hearing, the Company and the Staff entered a stipulation in which the Company accepted the rate base, level of revenues, and all expense levels of the Staff for the test year except for (1) fuel and power, (2) customer accounting, and (3) federal income tax. We find that the test year, rate base, revenues, and expenses upon which the Staff and the Company agree should be adopted for setting rates in this case. In addition to the disputed expense issues, the Company's capital structure and rate of return are also disputed issues in this case.

FUEL AND POWER EXPENSE

The Company has included a 5% increase in electricity rates in its level of fuel and power expense for the test year. The Staff adjusted this 5% increase out of its level of fuel and power expense for the test year.

Company witness, Mr. Edwin Oxley, testified that the Company had included a 5% increase in electricity rates in its fuel and power expense because the Manager of the Chattanooga Electric Power Board had informed the Company that the Board projected a 5% increase for October 1, 1985. Tr. 134. Staff witness Ms. Robyn Yazdian testified that the Manager of the Power Board informed her that the proposed 5% increase is to be a direct pass-through from TVA to the Company by the Power Board. Tr. 338. Ms. Yazdian further testified that Mr. Victor Villa of TVA had informed her that no final decision had been made concerning the 5% increase in electricity rates for the Chattanooga Electric Power Board. Tr. 338.

We find that the level of fuel and power expense projected by the Company, which includes the 5% increase in electricity rates, should be adopted in this case. The Company's supplier of electricity, Chattanooga Power Electric Board, has told the Company to expect a 5% increase in electricity costs during the test year. The Company must make its future expense projections using the 5% increase. Therefore, the Commission should include the 5% increase in the Company's expenses and for setting rates in this case.

CUSTOMER ACCOUNTING EXPENSE

The Staff has reduced the customer accounting expense projected by the Company for the test year by making two adjustments. First, the Staff reduced the Company's Purolator Courier expenses by \$10,527. Second, the Staff reduced the Company's billing computer services costs by \$147, 748.

We find that the Staff's adjustment for reduced Purolator Courier expense should be adopted. During the Staff's investigation the Company revised its estimate of Purolator Courier expense for the test year downward from \$18,327 to \$7,800. The Staff used the Company's new estimate of Purolator Courier expense for the test year.

The Company argued at the hearing that the projected level of Purolator Courier expense originally estimated by the Company is the appropriate level for the test year. Mr. Edgemon testified that the Company did revise its estimate of Purolator Courier expense during the Staff's investigation. He further stated, however, that the Company failed to inform the Staff that Purolator Courier expense would increase because of the conversion from bi-monthly to monthly meter reading. With monthly meter reading, meter reading documents must be sent to the data center on a monthly rather than bi-monthly basis. The Company contends that the original projection of Purolator Courier expense was sufficient to cover the cost of the new expense.

Staff has used the latest estimate of Purolator Courier expense for the test year provided by the Company. In an attempt to support its original projection, the Company has reviewed its expenses since the Staff

closed its investigation and found that the Purolator Courier expense would probably increase. The Company was aware of the change from bi-monthly to monthly meter reading when the Staff was conducting its investigation and failed to include any increase for Purolator Courier expense. Staff argues that the Commission should not permit the Company to select one expense which has increased since the end of the Staff's investigation and include this expense in the test year without reviewing all other expenses. We agree. If the Staff had another opportunity to review the Company's expenses since the close of its investigation, expenses which may have decreased may have also been found. An examination of the Company's revenues since the close of the Staff's investigation might have produced a different level of revenues. To preserve the match between revenues and expenses, we accept the Staff's level of Purolator Courier expense.

The Staff's reduction of computer billing services expense involves a dispute over a change in the method of allocating these costs. Before 1984 each of the American Water Works Service Company's (hereinafter Service Company) data processing centers functioned independent of each other with coordination from a general office. Each center was treated as a separate cost center allocating costs to each subsidiary water distribution company based on the number of bills rendered for that company. In 1984 all three centers were brought under the direct supervision of the general office. Services are now provided system-wide, and work for any company can be done at any center. The Service Company also changed its method of allocating the costs of its three data centers. The Service Company now combines the costs of all three billing

centers and bills out the cost on a per bill basis system-wide.

Company witness Mr. Dillard Edgemon testified that the Service Company's change in the method of allocating costs caused some of the subsidiaries of AWWC to realize increases and some decreases in their current computer billing services costs. Tr. 83. Tennessee-American realized an increase in computer billing services cost per bill under the new procedure. Mr. Gaines testified that the average computer billing services cost per bill increased from 18.6 cents in 1983 to 23.8 cents in 1984. The Company's original computer billing services costs for the test year would increase the average cost per bill to 41.2 cents. Tr. 291.

Staff contends that the new allocation procedure shifts a disproportionate amount of computer billing services costs to Tennessee-American. Therefore, Staff used a historical trend to project computer billing services costs for the test year. The Staff's level of expense results in an average cost of 21.6 cents per bill for the test year.

At the hearing Mr. Edgemon testified that the computer billing services costs for the first four months of 1985 were below budget and that the cost per bill to Tennessee-American was actually 31.3 cents per bill. To reflect this decrease the Company revised its estimate of computer billing services costs for the test year to \$236,624 which exceeds the Staff's projection by \$74,294.

The Commission finds that the Company's revised level of computer billing services expense should be adopted in this case. The

new billing allocation procedure results in a more accurate distribution of computer billing costs to the operating companies of AWWC. Tr. 83. Mr. Edgemon testified that an overall cost savings has been realized with the 1985 budget being only .6% higher than 1984. Tr. 83. The Staff's level of computer billing services expense is less than the expense actually incurred in 1984. Tennessee-American will continue to be billed by the Service Company for computer billing service costs at the increased level under the new allocation method. The higher cost is an expense which is presently being incurred and will continue to be incurred. Rates must be set to cover this expense.

By bringing the management of all three data processing centers under the supervision of the general office, the Company receives benefits from the entire data processing department of the Service Company not available before. Programming resources can be shared which allows for program development to be accomplished at any center. Large implementation efforts of new systems can be developed by in-house personnel which might be cost prohibitive if each center continued as an independent management and cost center. Centralization of data processing resources provides for a better system of disaster planning and backup. Standardized security procedures for all three data centers provide better protection against unauthorized entry. Centralization permits the coordinated purchasing of hardware, software, and supplies which results in lower costs and better vendor support. These benefits which result from centralization will benefit the Company's ratepayers now and in the future. The Company's projected computer billing services expense is reasonable and will be adopted.

INTEREST EXPENSE

The Staff has calculated the Company's interest expense to be used in computing its federal income taxes by multiplying the weighted cost of debt recommended by Dr. Westfield by the Staff's rate base. The Company contends that the appropriate interest expense for the test year is the actual interest expense reported on the books of the Company. The Staff's method of computing interest expense takes into account the tax savings which result from the Company filing a consolidated tax return with its parent, American Water Works Company, and includes the assignment of an interest component to that portion of the Company's rate base financed by accumulated deferred investment tax credit (ADITC).

The Staff's computation of interest expense recognizes the tax savings which result from the Company filing a consolidated tax return with its parent, AWWC. Consolidated tax savings adjustments have been made for a number of utilities in Tennessee which participate in filing a consolidated tax return with their parent holding companies. The recognition of consolidated tax savings in a utility's cost of service recognizes that the utility actually pays less tax as a result of the consolidated filing than it would pay if it filed a separate return. The Commission made this same consolidated tax savings adjustment for the Company in its last rate case. The Commission's use of a tax savings adjustment has been expressly upheld by the Tennessee Supreme Court. United Inter-Mountain Telephone Co. v. Public Service Commission, 555 S.W. 2d 389, 392-93 (Tenn. 1977).

In computing the Company's interest expense, the Staff has assigned an interest component to that portion of the Company's rate base which is

financed by ADITC. This adjustment is commonly known as interest synchronization. ADITC permits a utility to generate capital without the Company incurring additional debt or its investors supplying funds. The tax credit reduces the utility's tax liability to the Internal Revenue Service (IRS) by a percentage of the cost of eligible property purchased during the tax year. At the same time, the utility's tax liability for ratemaking purposes is not reduced. Therefore, funds collected from ratepayers to cover the utility's tax liability for rate-making purposes, which will never be paid to the IRS because of the tax credit, are used by the utility to finance plant and equipment. The capital financed by ADITC is not financed by debt or investor supplied funds but is generated by tax benefits under the Internal Revenue Code.

In calculating the Company's overall cost of service, the Commission must include a debt cost for that portion of the rate base financed by ADITC. The Staff contends that in calculating the Company's interest expense for federal income taxes the Commission should include interest expense for that portion of the Company's rate base financed by ADITC. The Staff's calculation thereby synchronizes the interest expense used to determine the Company's overall cost of service with the interest expense used to determine the Company's federal income tax expense.

The Company argues that no interest expense associated with ADITC should be included in the Company's federal income tax calculation. The Company points out that it will not be able to use this interest expense to reduce its federal income tax expense. In addition, the Company contends that the Staff's computation of interest expense may make the Company ineligible for the ADITC under I.R.C. § 46 (f)(2) and regulations

promulgated thereunder. Section 46 (f)(2) of the Internal Revenue Code and the accompanying regulations provide that a utility remains eligible for the credit as long as cost of service is reduced by no more than "a ratable portion of the credit" and as long as no reduction is made in the rate base.

The Commission has addressed this issue in several recent rate cases. In each case the Commission has adopted the interest synchronization method to compute interest expense. In each case the Commission has found that interest synchronization does not violate section 46 (f)(2). The interest synchronization method does not result in more than ratable reduction in cost of service in violation of section 46 (f)(2). The Staff's method assumes that cost of service would remain exactly the same if ADITC did not exist because the Company would finance its plant by a combination of debt and equity in the same proportion as in the capital structure. No change in the percentage of debt would occur, and therefore no change would occur in the tax liability used to compute cost of service. Accordingly, cost of service remains unaffected by using the interest synchronization method to calculate the Company's interest deduction in computing its federal income tax. See New England Telephone & Telegraph Co. v. Public Utilities Commission, 448 A. 2d 272 (Me 1982).

Moreover, the legislative history of section 46 (f) clearly demonstrates that Congress intended both the ratepayers and investors of a utility to share the benefits of the investment tax credit. The House Report to the Revenue Act of 1971, the statute which added section 46 (f) states:

In restoring the investment credit for public utility property of regulated companies, the committee has given careful consideration to the impact of this credit on

ratemaking decisions. Although there are many different ways of treating the credit for ratemaking purposes, your committee, in general, believes that it is appropriate to divide the benefits of the credit between the customers of the regulated industries and the investors in the regulated industries.

H.R. Rep. No. 533, 92d Cong., 1st Sess. 24, (1971)

U. S. Code Cong. & Ad. News 1971, 1839.

Under the Staff's interest synchronization method, both the investors and ratepayers benefit from the credit. The utility obtains interest-free capital, and the ratepayers receive lower rates as a result of the lower cost of service from the interest deduction.

The Commission used the interest synchronization method to compute the Company's interest expense in its last rate case. The Company challenged the use of interest synchronization on the appeal of its last rate case to the Chancery Court of Davidson County. The Court affirmed the Commission's use of interest synchronization. Tennessee-American Co. v. Tennessee Public Service Commission, No. 83-1887-I (Tenn. Ch. Ct. July 27, 1984).^{1/}

^{1/} Courts and state commissions adopting interest synchronization. Union Electric Co. v. FERC, 668 F. 2d 389, 393-95, (8th Cir. 1981); Nepco Municipal Rate Committee v. FERC, 668 F. 2d 1327, 1337-38 (D.C. Cir. 1981), cert. denied, 102 S. Ct. 2929 (1982); New England Telephone & Telegraph Co. v. Public Utilities Commission, 448 A. 2d 272, 304-09 (Me. 1982); Narragansett Electric Co. v. Burke, 475 A. 2d 1379, 1384-86 (R. I. 1984); Re Continental Telephone Co. of the South - Alabama, 62 P.U.R. 4th 61, 107-09 (Ala. PSC 1984); Re Oklahoma Gas & Electric Co., 61 P.U.R. 4th 113, 114-15 (Ark. PSC 1984); Re Iowa Power & Light Co., 59 P.U.R. 4th 599, 613 (Iowa St. Commerce Commission 1984); Re Kansas City Power & Light Co. 38 P.U.R. 4th 1, 25-27, (Mo PSC 1980); Re Ohio Bell Telephone Co. 58 P.U.R. 4th 423, 460-62 (Ohio PUC 1984); Pennsylvania Public Utility Commission v. Pennsylvania Power Co., 60 P.U.R. 4th 593, 635-38 (Pa. PUC 1984).

Courts and state commissions rejecting interest synchronization. Commonwealth of Kentucky ex rel. Beshear v. Continental Telephone Co. No. 82-CA-2649-MR (Ky. Ct. App. July 22, 1983); North Carolina ex rel. Utilities Commission v. Carolina Telephone & Telegraph Co. 61 N.C. App. 42, 300 S.E. 2d 395, 398-401 (1983); Re Commonwealth Edison Co., 61 PUR 4th 1, 19-20 (Ill. Commerce Commission 1984); Re Southwestern Bell Telephone Co. 42 P.U.R. 4th 89, 124-25 (Kansas State Corp. Commission 1981); Re Consumers Power Co., 63 PUR 4th

We find that both the consolidated tax savings adjustment and interest synchronization adjustment are appropriate. Therefore, the interest expense developed by the Staff for the test year will be adopted in this case.

ADDITIONAL EXPENSE FOR MONTHLY METER READING

In their brief the Intervenors requested that the Commission disallow the increased costs for monthly meter reading of \$206,082.19 for the test year. Intervenors contended that the Company had not demonstrated a clear need to return to the policy of monthly meter readings.

In 1978 the Company instituted a policy of reading meters every other month. In the interim month the Company issued a bill for service based on an estimated reading. The change to a bi-monthly reading of meters was instituted to reduce the costs accompanying monthly meter readings. Since the implementation of the bi-monthly meter reading, the Company has experienced a continual increase in the number of customer contacts concerning their bills. Tr. 46-47. Many of these contacts are attributed to the estimated billings under the bi-monthly reading policy. Tr. 47. In 1978 the Company received approximately 46,000 telephone calls; in 1984 the Company received 80,203 telephone calls. Tr. 34.

73, 114-15 (Mich. PSC 1984); Re New England Telephone & Telegraph Co. 55 P.U.R. 4th 296, 308-10 (Vt. Public Service Board 1983); Washington Utilities & Transportation Commission v. Continental Telephone Co. of the Northwest, Inc., 55 P.U.R. 4th 11, 22 (Wash. Util. & Trans. Commission (1983)).

The Company has returned to a monthly meter reading program to reduce the number of phone calls and office visits prompted by the Company's customer dissatisfaction with estimated bills. Tr. 17. The monthly meter reading program will also serve to make customers aware of plumbing problems on a more timely basis, and thereby customers may avoid the receipt of a large bill for water that has been lost through leakage. Tr. 47.

To implement the monthly meter reading program, the Company had to add seven meter readers to its work force. Before implementing the program, however, the Company was able to modify its operations to eliminate seven existing positions. Tr. 48. Therefore, no increase in the Company's work force was required to change from bi-monthly to monthly meter reading.

The Commission finds that the expenses associated with the new monthly meter program should be allowed. The monthly meter reader program will probably reduce the overwhelming number of inquiries made to the Company and improve the Company's customer service.

The rate base and revenues and expenses adopted by the Commission for setting rates in this case are attached as appendices to this Order.

CAPITAL STRUCTURE

The Company has recommended that the Commission adopt a "stand alone" approach in determining the Company's cost of capital. The "stand alone" approach ignores the parent-subsidiary relationship between AWWC and Tennessee-American and uses Tennessee-American's own

capital structure. Company witness Dr. Roger Morin recommends the following "stand alone" capital structure for Tennessee-American projected for the year ending June 30, 1986.

<u>Class of Capital</u>	<u>% of Total</u>	<u>% Cost</u>	<u>Weighted Cost (%)</u>
Long-term debt	53.61%	9.66%	5.18%
Short Term debt	.97	10.00	.10
Preferred Stock	7.88	7.32	.58
Accumulated deferred investment tax credit	5.02	11.64	.58
Common Equity	<u>32.52</u>	15.75	<u>5.12</u>
Total Capital	100.00%		11.56%

Intervenors' witness Dr. Fred Westfield has recommended that the Commission adopt a double leverage approach to determine the Company's cost of capital. The double leverage approach recognizes that the common equity investment in Tennessee-American is provided in part by the common stock investors of AWWC and in part borrowed by AWWC or provided by owners of AWWC's preferred stock. Dr. Westfield recommends the following capital structure for Tennessee-American determined as of December 31, 1984.

	<u>Percent Total</u>	<u>Cost Rate</u>	<u>Weighted Cost</u>
Long Term Debt			
-Tennessee-American	57.65%	9.66%	5.57%
American Water Works Co.	5.04	7.65	0.39
Short Term Debt			
Tennessee American	0.15	9.99	0.01
Preferred Stock			
Tennessee American	8.62	7.36	0.63
American Water Works	1.78	5.10	0.09
Common Stock	<u>26.75</u>	14.50	<u>3.88</u>
Total	100.0%		10.57%

The Commission adopts the double leverage capital structure advocated by Dr. Westfield for setting rates in this case. Dr. Westfield has used the double leverage capital structure for the Company as of December 31, 1984 because this capital structure contains the latest balance sheet data based on the actual accounts of the Company. Tr. 354-55. He did not use the Company's projected capital structure for the year ending June 30, 1986 because this projected capital structure was based on a projection of the Company's future earnings and dividends. Tr. 355. Future earnings are not known until the Commission makes a decision in this case. The parent company's desire for dividends as opposed to retained earnings may also affect the projected capital structure. Dr. Westfield testified that the capitalization ratios of a company the size of Tennessee-American may fluctuate over time because of major new financing, especially bonds and preferred stock. Tr. 355. Therefore, we conclude that the December 31, 1984 capital structure of Dr. Westfield based on the latest balance sheet data available will serve as an appropriate target capitalization ratio for setting rates in this case.

The Company argues that the Commission should reject double leverage and ignore the parent-subsidiary relationship between AWWC and the Company. Dr. Morin testified that the Commission should pretend that Tennessee-American's equity capital is raised in the marketplace, and using AWWC and other comparable companies as surrogates for the Company, try to guess what the market cost of the Company's equity capital would be if its stock were publicly traded.

The double leverage approach rejects this fiction. The Company does not sell its stock to the public; all of its stock is financed by its parent corporation, AWWC. Thus, the Company's cost of equity is not determined by "the impersonal forces of the financial market" but by "board room decisions made by a parent corporation which controls, to a great extent, the ultimate cost of a subsidiary's equity." General Telephone Co. of the Southwest v. Public Utility Commission of Texas, No. 13, 491 (Ct. App. 1982). The double leverage approach recognizes the financial benefits of the Company's leveraged capital structure and allows the ratepayers to share in the advantages of the Company's parent-subsidary relationship.

To ignore the effect of leverage at the parent level would result in the regulated utility's earning more than its cost of capital and would produce a windfall return for AWWC's stockholders in excess of the authorized return set by this Commission. All of the benefits of leverage would flow to the shareholders and none to the ratepayers.

As Dr. Westfield testified:

If Dr. Morin were to account for the amount of common equity investment for each of AWWC's subsidiaries using his method, he would end up with a total equity investment by AWWC's stockholders in the assets of the operating subsidiaries that is far greater than is their actual investment in these assets. The difference is accounted for by the assets financed with parent company debt and preferred stock. Furthermore, he would conclude that the cost of the common equity of all the subsidiaries, when priced at the cost of equity to AWWC, is substantially greater than it actually is. The amount is the difference between cost to the parent of common equity and the embedded cost of its debt and preferred stock that is actually incurred. With Dr. Morin's theory the rate payers of AWWC's subsidiaries are asked to pay for the cost of AWWC common stock that doesn't even exist. Tr. 359.

We adopt the double leverage approach in this case to insure that shareholders of AWWC do not earn more on their investment than the market cost of equity.

The Commission has consistently recognized the effect of double leverage in a parent-subsidary relationship in every case in which the issue has been raised. In the Company's last rate case, the Commission adopted a double leverage capital structure for the Company like the double leverage capital structure recommended by Dr. Westfield in this case. On appeal to the Chancery Court of Davidson County, the Company challenged the Commission's use of double leverage. The Chancellor affirmed the Commission's adoption of a double leverage capital structure concluding that the adoption of a double leverage capital structure was within the Commission's discretion. Tennessee-American Water Company v. Tennessee Public Service Commission No. 83-1887-I (Tenn. Ch. Ct. July 27, 1984). Although the Company appealed the Chancellor's decision to the Court of Appeals, the double leverage issue was not appealed to that court. We adopt the same double leverage approach in this case.

RATE OF RETURN

No real dispute exists between the Company and Dr. Westfield over the appropriate cost of long-term debt, short-term debt, and preferred stock of AWWC and Tennessee-American. Dr. Westfield used the embedded cost rates supplied by the Company for AWWC's and Tennessee-American's long-term debt and preferred stock. Dr. Westfield used a 9.99% cost rate for short-term debt; the Company recommended a 10% cost rate for short-term debt on the day of the hearing. Therefore, we adopt the cost

of long-term debt, short-term debt, and preferred stock recommended by Dr. Westfield for setting rates in this case. Dr. Westfield and the Company's expert witness Dr. Morin do not agree on the appropriate cost of equity. Dr. Westfield has recommended a return on equity of 14.5%. Dr. Morin recommended a return on equity of 15.75%.

In selecting an appropriate return on common equity, the Commission must determine what investors in the marketplace require to invest in the Company. This determination is not subject to exact measurement but requires the exercise of judgment to estimate an appropriate return. Both Dr. Morin and Dr. Westfield used the DCF methodology, a comparable earnings analysis, and risk premium methodology to arrive at a reasonable return on equity.

Dr. Morin and Dr. Westfield used the standard DCF model to estimate the Company's cost of equity by estimating the cost of equity of the Company's parent, AWWC. The DCF model states the return on common equity is equal to the dividend yield that an investor expects plus the expected capital appreciation that an investor requires in the investment.

Dr. Westfield and Dr. Morin agreed that the expected dividend which should be used in calculating the dividend yield should be \$1.025. Dr. Morin testified that the stock price which should be used in calculating the dividend yield is the most current price of the Company's stock. He used the price of AWWC's stock on May 29, 1985, \$26.00. Dr. Westfield testified that he preferred to use a range of stock prices. He used the high and low price of AWWC's stock for the three months ending on April 30, 1985, \$27.75 and \$20.00. We find that the range of stock

prices used by Dr. Westfield is appropriate. Dr. Westfield testified that a range should be used because "markets are subject to random fluctuations and...prices at any moment may be in a transition state." Tr. 363. He further indicated that he used a range because the market is having some difficulty in determining the value of AWWC's stock at the present time. Tr. 407.

The most difficult part of implementing the DCF model is estimating the growth rate which is in the mind of investors. To ascertain the growth rate to be used in the DCF calculation, Dr. Morin used four different approaches. First, he calculated a growth rate of 11.28% based upon AWWC's historical dividends per share. Second, he used a growth rate of 12% based on security analysts' growth forecasts for AWWC. Third, he calculated a growth rate of 11.2% using the retention ratio method. Under this method the growth rate is calculated by multiplying the fraction of earnings expected to be retained by the Company (expected retention ratio) by the expected return on book equity (expected return). Dr. Morin used 70% for the expected retention ratio. For the expected return he used 15%, which is the weighted authorized rate of return on book equity for AWWC subsidiaries in all of their jurisdictions. The last method used by Dr. Morin to estimate the growth rate was his "extended DCF analysis." In this analysis he calculated two growth rates, an intermediate growth rate of 11.5% to allow achieved returns to recover the authorized 15% return over a ten-year period, and a long term growth rate of 10.74%.

Dr. Westfield also examined AWWC's historical dividends per share to estimate a growth rate for the DCF calculation. He concluded that the

11.28% growth rate used by Dr. Morin was reasonable and used it as the upper limit of a reasonable range of growth rates for AWWC. Dr. Westfield also used the retention ratio method to find the appropriate growth rate for AWWC. He used an expected retention ratio of 68.5%, which is the historical average for the years 1979-1984 and is the average between the retention ratio estimated by Value Line for 1985 of 69% and for 1987-1989 of 68%. Dr. Westfield used an expected return of 12.75%. He arrived at 12.75% by taking the average of the Value Line projected return of 14.0% for 1985 and for the 1987-1989 period and averaging that figure with the experienced five-year average rate of return of 11.5% for AWWC. Dr. Westfield's retention ratio analysis yields a growth rate of 8.73% which he uses as the lower limit of his reasonable range for growth rates.

Both Dr. Morin and Dr. Westfield agree that the appropriate growth rate for the DCF model using a historical dividend growth rate is 11.28%. We find that the growth rate calculated by Dr. Westfield using the retention ratio method is more appropriate than Dr. Morin's. Dr. Morin simply uses 15% as the expected return because 15% is the current weighted authorized return on equity for AWWC subsidiaries in all their jurisdictions. Dr. Westfield begins with the projected return of 14% by Value Line for 1985 and for the 1987-1989 period. He states that such a high projection does not take into account the appropriate regulatory response to the excess of market value to book value of AWWC's stock. Tr. 366. To make an allowance for a market-to-book value ratio substantially greater than one, Dr. Westfield takes the average of the 14% return projected by Value Line and the experienced five year average rate of return for AWWC of 11.5%. Tr. 366. Dr. Westfield's average produces an

estimate of 12.75% for an expected return on book equity. Dr. Westfield's growth rates and dividend yields produce a return on equity for AWWC in the range of 13.9% to 15.0%.

The Company criticizes Dr. Westfield for not using the forecasted growth rate of 12.5% published by Value Line as the appropriate growth rate for the DCF model. The 12.5% projected growth rate is for the period of 1982-1984 to 1987-1989. Tr. 413. The DCF model assumes a rate of growth which can be sustained into perpetuity, not a rate of growth over the next three or four years. Tr. 415. Dr. Westfield testified that Value Line does not expect earnings to grow at the same speed as the 12.5% dividend growth rate over the long run. Tr. 414. Therefore, 12.5% is not a sustainable long-term rate of growth which can be used in the DCF model. Tr. 414. We find that the 12.5% growth rate forecasted by Value Line is not an appropriate growth rate to be used in the DCF model in this case.

We further find that the growth rates developed by Dr. Morin in his "extended DCF analysis" are not appropriate in this case. The "extended DCF analysis" of Dr. Morin is based on the faulty hypothesis that dividend growth rate will for ten years exceed the long run growth rate. This hypothesis is inappropriate when the market-to-book value of the stock exceeds one like AWWC's stock. Tr. 369. Moreover, the growth rate calculated by Dr. Morin for the ten year period assumes that authorized returns for AWWC subsidiaries will remain at 15% for the ten year period. Tennessee-American's current authorized return is 14%. No one can predict the authorized returns which state regulatory commissions will grant over the next ten years. Therefore, the Commission will not rely upon Dr. Morin's "extended DCF analysis" to estimate the appropriate cost of equity.

Both Dr. Morin and Dr. Westfield performed a comparable earnings analysis to estimate the cost of equity in this case. Dr. Morin used a group of 23 A-rated electric utilities whose average risk as a group was comparable to the Company. He also used as a comparable group the seven regulated Bell regional operating companies whose average risk as a group was as risky as the Company. Dr. Morin's DCF analysis of the group of electric utilities using a historical growth rate resulted in a 16.75% return on equity for the group. The same DCF analysis using security analysts' growth forecasts resulted in a 15.10% return on equity for the group. The DCF analysis performed on the group of telephone companies using security analysts' growth forecasts resulted in a 15.34% return on equity.

Dr. Westfield used a group of eight water utilities for his comparable earnings analysis. He applied the DCF formula to this group of water companies and obtained a range of expected rate of returns on common stock between 14.5% and 14.9%.

Dr. Westfield testified that Dr. Morin's comparisons are not useful. Tr. 371. We agree. Dr. Westfield testified that electric utilities are exposed to a greater magnitude of business risks from unexpected changes in fuel prices and from cost overruns on new plants than water utilities. Tr. 371. Dr. Westfield further explained that ~~the~~ group of telephone companies used by Dr. Morin was not a useful group of comparables. Investors had great difficulty in assessing the correct value of these stocks, particularly during 1984. No historical data was available for these companies. There was little market experience. Confusion existed concerning how regulation would influence

the new regional companies' net incomes. Tr. 371. Moreover, Dr. Morin's dividend yields were out of date because of the decline in interest rates and increase in utility stock prices since Dr. Morin's calculations for November 27, 1984. Tr. 371.

Dr. Westfield's group of eight water utilities, on the other hand, provides a useful group of comparables. Dr. Westfield's eight companies taken as a whole have water utility operating revenues and total invested capital not much different from AWWC. Tr. 371. Their average common equity ratio of 39% compares favorably to AWWC's 32 to 35%. Tr. 371. The average quality of common stock in the group as rated by Standard and Poor's is A-. AWWC's common stock is rated A+. Tr. 371. We find that Dr. Westfield's comparable earnings analysis provides a better estimate of AWWC's cost of equity under this method than the analysis performed by Dr. Morin.

In estimating a return on equity, Dr. Morin makes a 5% adjustment to his returns on equity for flotation costs. Dr. Westfield does not make an adjustment for flotation costs. Dr. Westfield testified that since the Company is not anticipating any new external financing before the end of the test year, no flotation adjustment is necessary. Tr. 368. The Commission found that no adjustment for flotation costs was necessary for United Inter-Mountain Telephone Company in its last rate case because United Inter-Mountain did not anticipate any new financing until after the end of the test year. In Re: Petition of United Inter-Mountain Telephone Co., Docket No. U-83-7273 (June 15, 1984) at 18.

We find that no flotation cost adjustment should be made in this case. When the Company does not anticipate any new financing, the Company's ratepayers should not be required to supply an additional return to cover the costs of issuing new stock and the effects of market pressure which will not occur.^{2/}

Both Dr. Morin and Dr. Westfield used the risk premium method to estimate AWWC's cost of equity. Although Dr. Morin and Dr. Westfield used different approaches to arrive at a risk premium for the Company, the risk premiums recommended by these expert witnesses were very close. Dr. Morin testified that the appropriate risk premium was 3.3%; Dr. Westfield testified that the appropriate risk premium was 3.5%. Dr. Morin recommends a higher cost of equity using the risk premium method than Dr. Westfield because he uses long-term A-rated bond yields of 12.5% in his approach. Dr. Westfield uses rates of return on riskless securities in the 10.4% to 11.5% range.

We conclude that risk premium determined by both expert witnesses should be added to the rates of return on riskless securities recommended by Dr. Westfield. Using yields on long-term A-rated bonds in the risk premium approach overstates the Company's cost of equity. In United

^{2/} Other state commissions have rejected a flotation cost adjustment using the same rationale. Re Potomac Electric Power Company, 36 P.U.R. 4th 139, 159-163 (D.C. P.S.C. 1980); Re Narragansett Electric Company, 52 P.U.R. 4th 271, 284-85 (R.I. P.U.C. 1983); Re New England Telephone & Telegraph Co., 62 P.U.R. 4th 503, 521 (Vt. Pub. Serv. Bd. 1984).

Inter-Mountain Telephone Company's last rate case, we recognized:

Because of the large deficits of the United States Government, yields on bonds are extraordinarily high relative to inflation rates. Government bonds crowd out utility bonds and other high grade bonds much more so than they crowd out stocks.

Common stocks of a regulated utility have a dividend that can be expected to rise faster if inflation unexpectedly rises. A long-term bond has a constant interest payment even if inflation rates increase by a factor of ten. As a result, stocks of regulated utilities provide better protection against unanticipated inflation than do long-term bonds.

In Re: Petition of United Inter-Mountain Telephone Co. Docket No. U-83-7273 (June 15, 1984) at 18.

We conclude that the return on riskless securities rather than the return on long-term bonds is more appropriate for estimating the Company's cost of equity under the risk premium approach. Dr. Westfield's results under the risk premium approach are in the 13.9% to 15% range.

Based upon the evidence introduced in this proceeding, we conclude that a return on equity of 14.5% should be adopted in this case.

RATE DESIGN

The Company's tariff filed with the petition reduces the number of rate blocks from nine to four, combines the general water and industrial classifications into one general water service rate schedule, and establishes an optional special use tariff for large industrial customers. The tariff also increased the rate for the billing and-collecting services performed by the Company for certain municipalities from \$.388 to \$.429 per bill. The Company's rates represent the first step in implementing cost based rates under a cost of service study performed by the Company.

During the course of the hearing, the Company proposed a fifth rate block for usage over 5,000 CCF. This fifth rate block would give an alternative to large industrial customers who do not want to commit to the Company's proposed Special Use Tariff. Under the Special Use Tariff industrial customers must commit to pay for a certain minimal level of water usage monthly.

We conclude that the Company's rate design should be adopted including the proposed fifth rate block for usage over 5,000 CCF. However, by adopting the Company's rate design in this proceeding, we reserve judgment on further implementation of the Company's cost of service study in future proceedings before the Commission. The Company's proposed rates in each rate block should be adjusted proportionally to reflect the revenue award we have granted.

The Company filed tariffs with the Commission on June 21, 1985, which conform to the directives set forth in this order. Therefore, these tariffs filed June 21, 1985 are hereby approved to become effective as of the date of this order.

IT IS THEREFORE ORDERED:

1. That the Company's proposed tariffs filed on January 8, 1985 are hereby denied.
2. That the Company's proposed tariffs filed on June 21, 1985 designed to produce \$1,340,796 in additional annual revenues are hereby approved to become effective as of the date of this order.

3. That any party aggrieved with the Commission's decision in this matter has a right of judicial review by filing a Petition for Review in the Chancery Court of Davidson County within sixty (60) days from and after the date of this order.

CHAIRMAN

COMMISSIONER

COMMISSIONER

ATTEST

EXECUTIVE DIRECTOR

CERTIFICATE OF SERVICE

I certify that a copy of the attached proposed order has been mailed to all parties in this proceeding and a copy has been placed in the Commission files this 26th day of June, 1985.

Ronald L. Scholes

APPENDIX

TENNESSEE-AMERICAN WATER COMPANY
RATE BASE
For the 12 Months Ending June 30, 1986

Line
No.

ADDITIONS:

1	Plant in Service	\$71,007,262
2	CWIP	174,162
3	Leased Utility Plant	725,000
4	Materials & Supplies	290,138
5	Cash	-362,979
6	Total Additions	<u>\$71,833,583</u>

DEDUCTIONS:

7	Accum. Depreciation	14,187,609
8	Accum. Deferred FIT	1,326,082
9	Amortization of Leased Plant	274,896
10	Unpaid For Mat. & Supplies	47,852
11	Cash Advanced Through Oper.	-98,089
12	Unamortized ITC - Pre 71'	103,330
13	Cont. in Aid of Construction	2,264,518
14	Customer Advances	1,263,680
15	Customer Deposits	-40,947
16	Accts. Payable - CWIP & Plant	42,228
17	Acquisition Adjustment	672,445
18	Total Deductions	<u>\$20,125,498</u>
19	Rate Base	<u><u>\$51,708,085</u></u>

APPENDIX

TENNESSEE-AMERICAN WATER COMPANY
INCOME STATEMENT
For the 12 Months Ending June 30, 1986

Line
No.

1	OPERATING REVENUES	\$18,031,623
	<u>OPERATING EXPENSES</u>	
2	Labor	\$ 3,762,396
3	Purchased Water	3,269
4	Fuel and Power	1,171,907
5	Chemicals	243,664
6	Waste Disposal	141,753
7	Management Fees	631,270
8	Group Insurance	472,114
9	Pensions	284,721
10	Regulatory Expense	103,077
11	Insurance Other Than Group	176,781
12	Customer Accounting	641,276
13	Uncollectible Expense	174,726
14	Rents	19,996
15	General Office Expense	153,867
16	Miscellaneous	476,183
17	Other Maintenance Expense	545,574
18	Tank Painting	56,957
19	Preliminary Survey and Investment Charges	10,424
20	Interest on Customer Deposits	2,457
21	Depreciation	1,215,926
22	Amortization	-19,833
23	Other Taxes	2,223,105
24	Federal Income Tax	748,459
25	Total Operating Expenses	<u>\$13,240,069</u>
26	Net Operating Income	<u><u>\$ 4,791,554</u></u>

TENNESSEE-AMERICAN WATER COMPANY
DIRECT TESTIMONY
EDWIN L. OXLEY

REC'D TN. PUBLIC
SERVICE COMM.

1989 DEC 15 PM 2:00

OFFICE OF THE
EXECUTIVE DIRECTOR

1. Q. Will you please state your name and business address?

A. My name is Edwin L. Oxley, and my business address is 1325 Virginia Street, East, Charleston, West Virginia, 25322.

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

A. I am employed by the American Water Works Service Co., Inc., as a Revenue Requirement Specialist for the Southern Region.

3. Q. What is the American Water Works Service Co., Inc.?

A. The American Water Works Service Company provides financial, accounting, engineering and management services to the various subsidiaries of American Water Works Company, Inc., including the Tennessee-American Water Company, under the terms of a contract with the Service Company.

4. Q. What are your responsibilities as a Revenue Requirement Specialist?

A. My responsibilities include the preparation and presentation of rate filings requested by the six (6) operating companies which comprise the Southern Region of American Water Works. In addition to Tennessee, these Companies are located in the States of West Virginia, Virginia, Kentucky and Maryland.

5. Q. Would you describe your educational background and business experience?

Direct Testimony
Edwin L. Oxley
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A. A brief summary of my educational background and business experience is attached to this testimony as Appendix I.

6. Q. Have you previously participated in regulatory matters?

A. Yes. I have prepared rate case filings and presented testimony before State Regulatory Commissions in Tennessee, Kentucky, West Virginia, Virginia and Maryland. While employed by the West Virginia Public Service Commission, I performed audits and presented testimony in numerous electric, gas, motor carrier, water and sewer companies' rate proceedings.

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

A. The purpose of my testimony is to sponsor the accounting exhibits which have been filed by Tennessee-American Water Company with its petition for increased rates.

8. Q. Do you intend to testify on all aspects of the accounting information?

A. I will testify on all areas with the following exceptions. Mr. Chris Jarrett will testify to the Company's Capitalization, Service Company charges and Pension Expense. Ms. Phyllis Monk will testify to the Company's provision for Taxes Other Than Income as shown on Exhibit 2, Schedule 5.

Direct Testimony
Edwin L. Oxley
Page Three

9. Q. Who prepared the accounting exhibits?

A. They were prepared either by me or under my direct supervision.

10. Q. Mr. Oxley, what is the basis for the rate increase sought by the Company in this case?

A. The rate request of \$2,608,933 is based upon a test year of the twelve months ended July 31, 1989, adjusted for an attrition year of the twelve months ended April 30, 1991. The attrition year is the first twelve month period that rates generated from this case will be in effect.

11. Q. Do you feel that the use of an attrition test year concept is an appropriate method to use in order to set rates for Tennessee-American Water Company?

A. Yes, I do. A change in revenues resulting from this rate case will be effective some time during the second quarter of 1990. For this Company to have an opportunity to achieve its authorized rate of return, it is imperative that the Commission recognize the future operating costs to be incurred.

12. Q. What is the source of the information contained in the exhibits?

A. The information contained in the exhibits have been prepared from financial records of Tennessee-American Water Company. In addition, information contained therein has been furnished by management of Tennessee-American Water Company.

Direct Testimony
Edwin L. Oxley
Page Four

13. Q. Could you please summarize what is contained in the exhibits.

A. The Exhibit Nos. 1, 2, 3 and 4 support the level of increased revenues requested. Exhibit No. 1 shows the calculation of the amount of the Company's request for increased revenues. Support schedules detail the net investment on which the Company feels it is entitled to base its return. Exhibit No. 2 shows the projected financial operating conditions of the Company at both present and proposed rates. Exhibit No. 3 shows the calculation of the Company's proposed Rate of Return for this case. Exhibit No. 4 contains the Company's current tariff, proposed tariff and a bill analysis which applies these rates to projected billing units.

14. Q. What is shown on Exhibit No. 1, Schedule 1?

A. This schedule summarizes the financial information detailed in the exhibits. Shown here is the Company's requested rate base, operating income projected at current rate levels for the test year and the return on investment. It further indicates the rate of return required to enable the Company to pay its fixed capital obligations and provide for a reasonable return to its shareholders. The difference between the dollar return requested and that projected at current rate levels represents an operating income deficiency of \$1,607,680, when adjusted for the effects of increased taxes and uncollectibles, a current rate revenue deficiency of \$2,609,365 results.

Direct Testimony
Edwin L. Oxley
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15. Q. Please describe Exhibit No. 1, Schedule 2.

A. This schedule details the calculation of the Company's requested rate base in this proceeding. Adjustments have been made to each item of the historical rate base at July 31, 1989 to project the balances at October 31, 1990 or the mid-point of the attrition year. It is the Company's contention that this mid-point is representative of the average balances that will result during the attrition period and thus, will provide for a proper matching of investment to revenues, operating expenses and resulting income. Page 2 of this schedule labeled Attrition Year Rate Base Footnotes, lists the adjustments referred to above. Page 3 of this schedule provides an itemized breakdown by account of the additions and retirements to Utility Plant in Service as projected by the Company from August 1, 1989 through October 31, 1990.

16. Q. What is the basis for these projections?

A. The projections have been prepared by the operating personnel of Tennessee-American Water Company and are based upon the 1990 Investment Budget. Each and every year, the Company prepares detailed Operating and Investment budgets for the ensuing calendar year. This information is submitted for approval to the Company's Board of Directors in December and once approved, is adhered to by the Company's management. Mr. Sullivan (Vice President and Manager) of Tennessee-American Water Company describes the Company's recent and projected construction programs in his testimony.

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Edwin L. Oxley
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17. Q. What is shown on Exhibit No. 1, Schedule 3?

A. This schedule details the Working Capital component of Rate Base. The Company has utilized an updated Lead/Lag Study in the determination of the working cash allowance. This study was prepared during the interim period between rate cases and has previously been submitted to the Commission's Accounting Staff for their review. The lag for payment of Management Fees has been changed from that appearing in the Lead/Lag Study due to the implementation of a new Service Company Agreement. Under this Agreement effective October 1, 1989, an estimate of the charges for services to be rendered are now due and payable in advance. Also, the Company has provided for the effects of performing sewer billing and collecting services for various municipalities in and around Chattanooga by including the average funds held as incidental collections. This procedure is consistent with that advocated by the Staff in prior Company rate cases.

18. Q. Please continue with Exhibit No. 2.

A. Exhibit No. 2, Schedule 1 is the Statement of Income. Shown here in the first column is the actual operating revenues and itemized operating expenses for the twelve months ended July 31, 1989. The next column indicates adjustments made to reflect a normalized test year. Normalization adjustments have been made to correct for abnormal water sales experienced and annualize the effects of cost

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increases occurring in the test year. Adjustments were then made to represent the anticipated revenues and operating costs for the attrition year under present rates. The sixth column is the result of calculations made in the final columns to compute the Company's revenue requirement. The final column sets forth the Company's utility operating income which was computed on Exhibit No. 1, Schedule 1. This income, when added to the forecasted level of expenses, produces the required level of revenues. All other schedules in Exhibit No. 2 are supporting schedules which provide an itemized breakdown of the components of the Statement of Income.

19. Q. Would you continue with Exhibit No. 2, Schedule 2.

A. This schedule itemizes the adjustments required from the test year to arrive at revenues which will be realized in the attrition year under present and proposed rates. These adjustments are derived by pricing the attrition year billing determinants. I will explain the development of these later in this testimony.

20. Q. What is shown on Exhibit No. 2, Schedule 3?

A. This schedule details the Company's operating and maintenance expenses for the same test periods previously mentioned.

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21. Q. How has the Company derived its operating expense amounts?

A. They were determined as follows:

Operation and Maintenance Labor

Labor Expense was calculated by individual employee for the attrition year. For union employees, the actual wages paid during the year ended July 31, 1989 have been adjusted for the anticipated contract wage rates to be in effect. Recent contract negotiations resulted in a wage increase of 4-1/4% effective October 24, 1989. Thus, a corresponding increase of 4-1/4% to be effective October 24, 1990 has been incorporated into our adjustment. For non-union employees, current wage levels effective July 1, 1989 have been adjusted for an annual increase of 5% on July 1, 1990.

Purchased Water

No adjustment was made to the purchased water expense for the twelve months ended July 31, 1989.

Fuel and Power

The adjustment for fuel and power has been calculated in the same manner as the Company's 1990 operating budget. A ratio of historical kilowatt hours (kwh) to historical system delivery has been applied to the projected system delivery to produce projected kwh usage. System delivery refers to the total water treated by the Company and made available for use. The kwh usage is then repriced at the anticipated electric rates to be in effect during the test year. The Company is a power customer of the Chattanooga Electric

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Power Board and has been informed that a power rate increase of approximately 4% can be expected in 1990.

Chemicals

The adjustment for chemical costs has been calculated in a similar manner to fuel and power. Itemized chemical usages were developed by utilizing historical ratios of actual usage to volumes of raw water pumpage. The chemical usage has been priced at the anticipated chemical costs to be in effect during the attrition year. The Company uses a sufficient quantity of chemicals that it can save expenses by bidding for chemical contracts through the Southern Region of American Water Works Service Co., Inc. which takes advantage of significant economies of scale by pooling the Company's chemical purchases with those of its affiliates. The Southern Region invites bids for its chemical supplies in September of each year to be effective October 1. Current chemical prices will thus be in effect until September 30, 1990. An additional 4% inflationary increase has been included on all chemical prices after this date throughout the remainder of the attrition year.

Waste Disposal

Waste disposal expense reflects the cost of removing waste material which results from the filtration of raw water. An adjustment has been based upon historical usage ratios from the 1990 budget whereby

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average monthly suspended solids and volumes discharged were developed to be repriced. The averages are considered representative of the amounts to be realized during the attrition year. Each of the respective monthly averages were then repriced at the current sewer rates and adjusted where applicable for a rate increase anticipated July 1, 1990. This anticipated increase was provided the Company through discussions with the Chattanooga Municipal Sewer Department.

Group Insurance

This expense item is for the cost of Company sponsored employee insurance and includes life, health and disability coverage. In recent years, the Company has experienced substantial increases in these costs, including an increase of approximately 15% in 1989. Steps have been taken to minimize costs through the use of larger deductibles and prescribed procedures for medical treatment.

The attrition year cost has been calculated utilizing the anticipated employees and payroll level at the current insurance premium rates.

Regulatory Expense

Regulatory Expense includes Service Company fees, legal expenses, miscellaneous rate case costs, and specific regulatory study costs, all of which are incurred in the preparation and presentation of rate cases. The cost of this rate proceeding has been estimated based upon the actual cost of prior cases and has been amortized over a two-year period. The expenses incurred in the preparation

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of the Lead/Lag Study utilized in this case have been amortized over a three-year period.

Insurance Other Than Group

This expense pertains to all Insurance costs with the exception of employee insurance and was obtained from the 1990 Budget. Tennessee-American Water Company is able to acquire favorable property and liability insurance coverage and premiums through affiliation with its sister companies in the American Water Works System.

Customer Accounting

Customer Accounting costs include expenses incurred for computer billing, meter reading, customer records and bill collection (other than labor). Actual costs for the year ended July 31, 1989 have been adjusted for an inflationary increase with the following two exceptions. Computer billing service costs will decrease due to the recent implementation of the new Service Company Contract. For this reason, the 1990 budgeted computer billing costs have been used. Postage costs are not expected to increase through the attrition period and have been eliminated from inflation considerations. The inflation factor used for the attrition period has been calculated from the quarterly forecasts of the G.N.P. Implicit Price Deflator.

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Uncollectibles

The provisions for Uncollectible accounts under present rates and proposed rates are based on a three-year average ratio of actual net write-offs to operating revenues. The effective ratio utilized is .69%.

Rents

Actual rent expense from the year ended July 31, 1989 has been adjusted to include the annual lease cost of a gas chromatograph used in the laboratory testing of water.

General Office

This item consisting of the costs incurred in the running and maintaining of the Company's office has been calculated in the same manner as customer accounting expenses.

Miscellaneous, Other Maintenance

Actual costs for these two categories during the year ended July 31, 1989 were abnormally high. Because this level of expense is not expected to continue, the 1990 budget has been used as a base and adjusted for inflation.

Tank Painting

This item pertains to the unamortized balance of the costs of Company water tank paintings incurred prior to 1984. Tank paintings occurring after December 31, 1983 have been capitalized in accordance with Case No. U-85-7338.

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Interest on Customer Deposits

An adjustment for \$6,299 has been made to provide for the interest cost on Customer Deposits as an operating expense.

Legal Costs Amortization

An amortization of the unrecovered legal costs expended due to the Walker County lawsuit has been included in accordance with the Company's previous rate Case No. U-87-7534.

AFUDC

An adjustment for \$33,467 has been made to transfer Allowance for Funds Used During Construction as an above-the-line item. This amount is based upon a three-year average of AFUDC accrued.

22. Q. What is shown on Exhibit No. 2, Schedule 4?

A. This is a summary of the Company's depreciation and amortization expenses included in its Cost of Service. Page 2 of this schedule is the calculation of depreciation expense based on depreciable property at October 31, 1990. Amortization expenses previously approved by the Commission for the Utility Plant Acquisition Adjustment, Capital Lease and Leased Alteration Expense is also shown on the summary. Amortizations for the current amount and accumulated reserve for depreciation on Contributions in Aid of Construction have been included in the Cost of Service based upon the NARUC treatment of this item initiated by the Commission Staff.

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23. Q. Please explain Exhibit No. 2, Schedule 6.

A. This two-page schedule is the provision for Federal and State Income Taxes. Taxable income for Federal and State purposes is derived by subtracting operating expenses and statutory deductions (additions) from taxable revenues. The statutory Federal and State tax rates have been applied to the resulting income to yield current taxes. Deferred Federal Income taxes, consisting of the normalization requirements due to ACRS tax depreciation and the ratable flow-back of excess Deferred Federal Income Tax ACRS and investment tax credits, is added to provide for total Federal Income taxes.

24. Q. Would you explain what is detailed on Exhibit No. 3, Schedules 1 through 3?

A. Schedule 1 entitled, Rate of Return Summary, shows the various components of the Company's capitalization which will be addressed by Mr. Jarrett. Schedule 2 details the calculation of the costs of long-term debt as of October 31, 1990. Schedule 3 details the calculation of the costs of preferred stock to be outstanding at October 31, 1990. Common equity has been projected to October 31, 1990 and assigned a cost rate of 11.96%.

25. Q. What changes have been made on the proposed tariff?

Direct Testimony
Edwin L. Oxley
Page Fifteen

A. All water rates have been increased by an across-the-board increase of approximately 12%. Also, the proposed rate per bill for sewer billing services has been increased from 37.4¢ per bill to 40.5¢ per bill. The rate calculation is based upon the attrition year billing and collecting expenses.

26. Q. What do you show on Exhibit No. 4, Schedule 1?

A. This schedule is a summary of the application of current and proposed rates, the detail of which is found on Exhibit No. 4, Schedule 2. The summary shows projected sales volume and revenue totals by customer class.

27. Q. How was this information developed?

A. Revenues at present and proposed rates have been calculated in two basic steps. The first step is to determine a proper level of water sales expected to occur during the period when new rates will be in effect. Sales volumes from the 1990 Operating Budget serve as the basis for attrition year sales. Additional sales attributed to customer growth has been calculated for the Residential and Commercial classes to provide for the first four months of 1991. Water sales to the Industrial, Other Public Authority and Other Water Utility classes from the 1990 Budget are considered representative of the levels anticipated for the attrition year and are used in total.

Direct Testimony
Edwin L. Oxley
Page Sixteen

The second step is allocate the attrition year water sales and meter billing determinants to the respective tariff rate blocks and minimum allowance charges reasonably expected to result. In past cases, the Company has utilized an allocation of the usage within rate blocks from the test year in developing the bill analysis. This methodology would not be proper in this proceeding. The Company experienced a substantial decline in water sales during the twelve months ended July 31, 1989 due to the heavy rainfall this year. Since water sales are expected to increase in the attrition year, the test year allocation would force an excessive level of billing determinants into the lower priced rate blocks. In contrast, water sales during 1988 were extraordinarily high because of the hot, dry weather during that year. Recognizing this, the Company has allocated attrition year water sales based upon the ratio's from the Company's previous rate case (U-87-7534). The level of water sales during the test year in that case (twelve months ended June 30, 1987) was considered by both the Company and Staff to be relatively normal. It is believed that this methodology will provide for a more realistic determination of present and proposed rate revenues during the attrition period.

28. Q. How has private and public fire service revenues been calculated?

A. Private and public fire service revenues were calculated by using the projected number of fire service facilities and hydrants at October 31, 1990 and pricing them at present rates.

Direct Testimony
Edwin L. Oxley
Page Seventeen

29. Q. What is the basis for other Operating Revenues?

A. Miscellaneous service revenues consist mostly of reconnection charges. Sewer billing revenues were computed by applying the applicable rate per bill to the attrition year's sewer bills. As previously mentioned, the current rate is 37.4¢ per bill and the proposed rate is 40.5¢ per bill. Rents and Miscellaneous revenues amounting to \$13,302 are the actual amount received during the year ended July 31, 1989.

30. Q. Does this complete your prepared testimony?

A. Yes, it does.

APPENDIX I

May 1978 - I received a Bachelor of Business Administration degree from Marshall University (major in Accounting with a minor in Finance).

October 1978 - March 1984 - I was employed by the West Virginia Public Service Commission as a Rate Analyst and Senior Rate Analyst.

August 1981 - I attended the NARUC regulatory course held at Michigan State University.

March 1984 - I was hired by the American Water Works Southern Division Office as a Revenue Requirement Specialist.

May 1985 - I attended the NARUC Water Utility Rate Seminar in Salt Lake City, Utah.

TENNESSEE PUBLIC SERVICE COMMISSION

STATE OF WEST VIRGINIA

COUNTY OF KANAWHA

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Edwin L. Oxley, who, being by me first duly sworn deposed and said that:

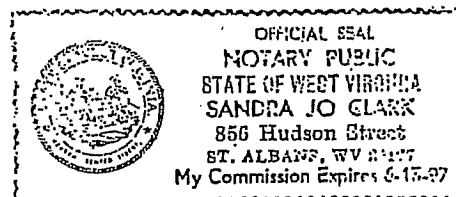
He is appearing as a witness on behalf of Tennessee-American Water Company before the Tennessee Public Service Commission, and if present before the Commission and duly sworn, his testimony would set forth in the annexed transcript consisting of seventeen pages.

Edwin L. Oxley
Edwin L. Oxley

Sworn to and subscribed before me
this 13th day of December, 1989.

Sandra Jo Clark

My Commission expires June 13, 1997.



Before The
PUBLIC SERVICE COMMISSION
Of The
STATE OF TENNESSEE

in re:
TENNESSEE-AMERICAN WATER COMPANY
(Docket No. 89-15388)

Testimony
of
William H. Novak

April, 1990

1 Q. State your name for the record, please?

2 A. My name is William H. Novak.

3 Q. By whom are you employed, Mr. Novak, and what is your
4 position?

5 A. I am an Accounting Division Manager for the Tennessee
6 Public Service Commission.

7 Q. How long have you been employed by the Commission?

8 A. Approximately seven years. Prior to my employment by
9 this Commission, I was employed as an auditor with the
10 Tennessee Department of Audit.

11 Q. What is your educational background and what degrees
12 and licenses do you hold?

13 A. I have a Bachelors degree in Business Administration
14 from Middle Tennessee State University with a major in
15 Accounting. I am licensed to practice as a Certified
16 Public Accountant and as a Certified Managerial
17 Accountant in Tennessee. I am also a member of the
18 American Institute of Certified Public Accountants and
19 the National Association of Accountants.

20 Q. Mr. Novak, have you ever testified in a case involving
21 Tennessee-American Water Company?

22 A. Yes. I previously presented testimony before this
23 Commission in dockets U-86-7402 and U-87-7534.

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

25 A. The purpose of my testimony is to present information
26 to the Commission on what the Staff considers to be the
27 appropriate test period and test period adjustment

1 methodology. I will present testimony regarding the
2 Company's income, rate base, and results of operations.
3 I will also present testimony regarding rate design and
4 depreciation rates.

5 Q. Would you please explain the overall procedures used by
6 the Staff in this case?

7 A. Yes. We first reviewed the Company's financial
8 exhibits and underlying workpapers. In addition, we
9 prepared information requests for data that was not
10 included in the Company's exhibits or workpapers. We
11 also conducted on-site audits at the Company's regional
12 corporate offices in Charleston, West Virginia, and the
13 local office in Chattanooga, during which we reviewed
14 the Company's financial records. Our normal approach
15 is to adjust the historical test period to compensate
16 for the net effects of all known and reasonably
17 anticipated changes which might occur.
18 The primary concern of the Commission in setting rates
19 is to set rates which are just and reasonable, i.e.,
20 rates which are sufficient to cover the operating
21 expenses of a utility and to allow a reasonable return
22 on its investments used in providing services to its
23 customers. The Staff normally analyzes a twelve month
24 historical period of operations called a "test period."
25 This test period is based on the Company's books, to
26 determine a utility's earnings under present rates.
27 The revenues, expenses, and rate base may then be

adjusted as necessary to properly reflect the Company's historical earnings. Since rates are set for the future, the Staff then attempts to determine what future events are likely to transpire which will change or alter the historical test year results. Changes can occur which cause either an increase or a decrease in earnings. Changes can also occur which cause the Company's investment to increase or decrease. The historical test period is therefore adjusted to compensate for the net effects of all known and reasonably anticipated changes which might occur.

Q. What test period and adjusted test period have you adopted for this case?

A. We have accepted the Company's proposed test period for the 12 months ended July 31, 1989, and have made adjustments for changes through April 30, 1991, since this is the first year any new rates granted by the Commission would be in effect.

Q. Have you caused to be filed a multi-page document consisting of 7 schedules?

A. Yes. (Introduce Exhibit #-- with 6 schedules).

Q. Would you please explain Schedule 1 of the Staff's Exhibit and summarize the Staff's findings in this case?

A. The Company filed its petition for an increase of \$2,609,365 in revenues. The Staff has examined the Company's filing as described above. From our

1 investigation, the Company's filing appears reasonable
 2 and we recommend that the Company's request be granted
 3 in full. We have included Schedule 1 in our Exhibit
 4 only to document that the Staff is recommending the
 5 Company's case be granted in full.

6 Q. Why is a rate increase of approximately \$2.6 million
 7 necessary at this time?

8 A. The Staff believes that a material piece of the
 9 Company's rate request is due to the construction of
 10 several non-revenue producing projects. For example,
 11 the Company has spent approximately \$2,000,000 on the
 12 construction or expansion of a water quality
 13 laboratory, chlorine room relocation, chemical feed
 14 changes, and chlorine scrubbers. In addition, the
 15 Company plans to spend approximately \$1,300,000 to
 16 replace small diameter mains, eliminate private
 17 domestic service lines, and construct additional
 18 pumping stations. While all of these projects have
 19 been reviewed by the Commission in the Company's
 20 comprehensive planning study, they will produce almost
 21 no immediate incremental revenue.

22 Another reason for the need to increase rates is the
 23 low growth in customer additions in the Chattanooga
 24 area. The Staff has forecasted attrition year customer
 25 growth to be an increase of approximately 0.8% of
 26 existing residential and commercial customers.
 27 Inflation however, is expected to float between 4% and

5% during the attrition period. This increase in operating expenses which is not offset by gains in revenues has also produced a need for increased rates.

Q. Have you reviewed the Company's proposed rate design?

A. Yes. The Company has proposed to increase water tariff rates "across-the-board" or evenly for whatever rate increase the Commission approves. The Staff agrees with this; however, we would also propose to establish a late payment charge and adjust the current bad check charge.

Q. Could you please describe a late payment charge for the Commission?

A. Yes. A late payment charge recognizes the time value of the service the customer receives by charging a penalty for customers who pay after a specified number of days. Staff Exhibit, Schedule 2 provides a comparison of late payment charges, bad check charges and billing lag days for each of the major electric, gas and water utilities that the Commission regulates. The billing lag days in the schedule represent the average number of days that a customer takes from the time they first receive their bill until it is paid. While a late payment penalty does not necessarily result in a lower billing lag, Schedule 2 shows Tennessee-American's billing lag to be well above the other utilities in this comparison.

Q. What rate of late payment charge are you recommending

1 that the Commission approve for Tennessee-American?

2 A. I would propose to institute a late payment charge of
3 5% for bills that remain unpaid 15 days after they are
4 first rendered. I believe that this charge will have a
5 revenue effect of \$170,252 as detailed on Staff
6 Exhibit, Schedules 3 and 4.

7 Although Tennessee-American has never had a late
8 payment charge, they are commonplace throughout the
9 utility industry. Chattanooga Gas currently has a late
10 payment charge as does the Chattanooga Electric Power
11 Board, so these charges are nothing new to the
12 Company's rate payers. The Staff believes that they do
13 correctly assign costs to those customers who cause the
14 Company to incur it.

15 Q. How would you propose to change the Company's Bad Check
16 Charge?

17 A. As shown on Staff Exhibit, Schedule 2, the Company's
18 current Bad Check Charge is \$5.50, which is below the
19 average of the other utilities on this schedule. The
20 Staff doubts that \$5.50 is sufficient to cover the
21 incremental costs incurred by the Company associated
22 with handling bad checks. The Staff would therefore
23 propose to implement a Bad Check Charge of \$12.50. As
24 shown on Staff Exhibit, Schedule 5 this would generate
25 an additional \$6,776 in added revenues.

26 Q. How would the Staff's proposed Late Payment and Bad
27 Check Charges affect the Company's rate increase?

1 A. As shown on Staff Exhibit, Schedule 6 the increase to
2 water tariff rates would be reduced from 12.13% to
3 11.30% as a result of implementing the Staff's proposed
4 changes to Late Payment and Bad Check Charges.

5 Q. Are there any other issues in this case which need
6 further clarification?

7 A. Yes. The Staff has become concerned about the
8 Company's current depreciation rates. These rates were
9 placed into effect based on a study completed in 1983.
10 Although the Staff has no proposal for new depreciation
11 rates, we feel the Commission should direct the Company
12 to conduct a depreciation study, and to present the
13 results to this Commission within 1 year. I would also
14 propose that the cost of this study be deferred until
15 the Company's next rate filing.

16 Q. Does this conclude your testimony?

17 A. Yes, it does.
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Before The
PUBLIC SERVICE COMMISSION
Of The
STATE OF TENNESSEE

in re:
TENNESSEE-AMERICAN WATER COMPANY
(Docket No. 89-15388)

Staff Accounting Exhibit

April, 1990

TENNESSEE-AMERICAN WATER COMPANY
Results Of Operations
For The 12 Months Ending July 31, 1989

	Amount
Rate Base	\$ 64,072,525
Operating Income At Present Rates	5,184,008
Earned Rate Of Return	8.09%
Fair Rate Of Return	10.60%
Required Operating Income	6,791,688
Operating Income Deficiency	1,607,680
Gross Revenue Conversion Factor	1.62306244
Revenue Deficiency	\$ 2,609,365

SOURCE: Company Exhibit 1, Schedule 1.

TENNESSEE-AMERICAN WATER COMPANY
Comparison Of Late Payment Percentages, Bad Check Charges, and Billing Lag Days
For The 12 Months Ending July 31, 1989

	Late Payment %	Bad Check Charge	Billing Lag Days
Kingsport Power Company	1.50%	\$ 7.50	11.27
Chattanooga Gas Company	5.00%	10.00	13.48
Nashville Gas Company	5.00%	0.00	15.80
United Cities Gas Company	5.00%	15.00	17.00
Tennessee-American Water Company	0.00%	5.50	20.39

SOURCE: Commission Tariffs And Previous Rate Cases.

TENNESSEE-AMERICAN WATER COMPANY
Projected Late Payment Charges
For The 12 Months Ending July 31, 1989

	Amount
CGC 1989 Late Payment Charges	\$ 274,661 A/
NGC 1989 Late Payment Charges	640,317 A/
UGC 1989 Late Payment Charges	358,592 A/
Total	\$ 1,273,570
CGC 1989 Residential & Commercial Revenues	\$ 33,548,235 A/
NGC 1989 Residential & Commercial Revenues	66,291,650 A/
UGC 1989 Residential & Commercial Revenues	46,348,606 A/
Total	\$ 146,188,491
Ratio	0.008712
TAWC Attrition Period Residential & Commercial Revenues	\$ 14,880,782 B/
TAWC Attrition Year Late Payment Charges	\$ 129,639
Working Capital Effect	40,613 C/
Total Revenue Effect Of Late Payment Charges	\$ 170,252

- A/ Utility Reports Filed With Commission.
B/ Company Exhibit 2, Schedule 2.
C/ Staff Exhibit, Schedule 5.

TENNESSEE-AMERICAN WATER COMPANY
Working Capital Effect Of Late Payment Charges
For The 12 Months Ending July 31, 1989

	Amount
CGC Billing Lag Days	13.48 A/
NGC Billing Lag Days	15.80 A/
UCG Billing Lag Days	17.00 A/
Average Billing Lag Days	15.43
TAWC Billing Lag Days	20.39 B/
Reduction In Lag Days	-4.96
Daily Cost Of Service	\$ 59,846 C/
Working Capital Effect Of Late Payment Charges	\$ (297,036)
Fair Rate Of Return	10.60% D/
NOI Effect Of Late Payment Charges	\$ (31,486)
Revenue Conversion Factor	1.289860 D/
Revenue Effect Of Late Payment Charges	\$ (40,613)

- A/ Previous Rate Case Workpapers.
B/ Company Exhibit 1, Schedule 3, Page 4.
C/ Company Exhibit 1, Schedule 3, Page 2.
D/ Effective Rate Base Conversion Factor.

TENNESSEE-AMERICAN WATER COMPANY
Revenue Effect Of Bad Check Charges
For The 12 Months Ending July 31, 1989

	Present	Proposed	Adjustment
	-----	-----	-----
Number Of Bad Checks	968 A/	968 A/	968 A/
Rate	\$ 5.50	\$ 12.50	\$ 7.00
Bad Check Charge Revenue	\$ 5,324	\$ 12,100	\$ 6,776
	=====	=====	=====

TENNESSEE-AMERICAN WATER COMPANY
Total Effect Of Proposed Miscellaneous Revenue Changes
For The 12 Months Ending July 31, 1989

	Amount
Late Payment Charge	\$ 170,252 A/
Bad Check Charge	6,776 B/
Total Increased Revenues	\$ 177,028 =====
Total Revenue Increase	\$ 2,609,365 C/
Total Current Water Tariff Revenues	21,517,536 D/
Percent Increase	12.13% =====
Total Revenue Increase	\$ 2,609,365
Less Miscellaneous Revenue Increase	177,028
Total Tariff Revenue Increase	\$ 2,432,337
Total Current Water Tariff Revenues	21,517,536
Percent Increase	11.30% =====

- A/ Staff Exhibit, Schedule 4.
B/ Staff Exhibit, Schedule 6.
C/ Staff Exhibit, Schedule 1.
D/ Company Exhibit 2, Schedule 2.

REC'D TN. PUBLIC
SERVICE COMM.

1989 DEC 15 PM 2:00

OFFICE OF THE
EXECUTIVE DIRECTOR

OVERALL FINANCIAL SUMMARY

TENNESSEE PUBLIC SERVICE COMMISSION

COMPANY: TENNESSEE-AMERICAN WATER COMPANY

CASE NO:

TEST YEAR: TWELVE MONTHS ENDED 7-31-89

EXHIBIT NO. 1 SCHEDULE 1

PAGE 1 OF 1

LINE
NO.

DESCRIPTION	REFERENCE TO SUPPORTING EXHIBIT	PROPOSED TEST YEAR
RATE BASE	EXH 1, SCH 2	\$64,072,525
OPERATING INCOME AT ATTRITION YEAR PRESENT RATES	EXH 2, SCH 1	5,184,008
EARNED RATE OF RETURN		8.05%
RATE OF RETURN	EXH 3, SCH 1	10.50%
REQUIRED OPERATING INCOME		6,791,688
OPERATING INCOME DEFICIENCY		1,607,680
GROSS REVENUE DEFICIENCY FACTOR		1.62306244
REVENUE DEFICIENCY		\$2,609,365

COMPUTATION OF ATTRITION YEAR RATE BASE

TENNESSEE PUBLIC SERVICE COMMISSION

COMPANY: TENNESSEE-AMERICAN WATER COMPANY

CASE NO:

LINE NO.

TEST YEAR: TWELVE MONTHS ENDED 7-31-89
 EXHIBIT NO. 1 SCHEDULE 2
 PAGE 1 OF 3

DESCRIPTION	PER BOOKS RATE BASE 7/31/89	ADJUSTMENTS	RATE BASE AT MID-POINT OF ATTRITION YEAR
UTILITY PLANT IN SERVICE (UPIS)	\$81,947,333	\$8,640,280	\$90,587,613
CONSTRUCTION WORK IN PROGRESS	2,095,945	(1,753,753)	342,192
UTILITY PLANT CAPITAL LEASE	725,000	0	725,000
UNAMORTIZED TANK PAINTING COSTS, NET	83,448	(44,093)	39,356
LIMITED-TERM UTILITY PLANT - NET	95,642	(13,447)	82,195
WORKING CAPITAL	(480,147)	0	(480,147)

TOTAL ADDITIONS

84,467,221	6,828,988	91,296,209
------------	-----------	------------

ACCUMULATED PROVISION FOR DEPRECIATION UPIS
 ACCUMULATED AMORTIZATION OF UTILITY PLANT CAPITAL LEASE
 DEFERRED FEDERAL INCOME TAXES
 CUSTOMER ADVANCES FOR CONSTRUCTION
 CONTRIBUTIONS IN AID OF CONSTRUCTION
 UNAMORTIZED INVESTMENT TAX CREDIT
 UTILITY PLANT ACQUISITION ADJUSTMENT

(5)	16,940,205	792,595	17,732,800
(6)	404,792	45,300	450,092
(7)	2,588,765	479,180	3,067,945
(8)	1,887,247	441,918	2,429,165
(9)	2,955,412	105,072	3,061,484
(10)	93,550	(3,300)	90,350
(11)	464,418	(72,570)	391,848

TOTAL DEDUCTIONS

25,434,489	1,789,195	27,223,684
------------	-----------	------------

RATE BASE

59,032,732	5,039,793	64,072,525
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ATTRITION YEAR RATE BASE
FOOTNOTES

TENNESSEE PUBLIC SERVICE COMMISSION

COMPANY: TENNESSEE-AMERICAN WATER COMPANY

CASE NO:

TEST YEAR: TWELVE MONTHS ENDED 7-31-89

EXHIBIT NO. 1 SCHEDULE 2

PAGE 2 OF 3

LINE
NO.

FOOTNOTE
REFERENCE

DESCRIPTION

AMOUNT

(1)	NET ADDITIONS TO UPIS THROUGH OCTOBER 31, 1990	\$8,640,280
(2)	ADJUSTMENT TO CHIP THROUGH OCTOBER 31, 1990	(1,753,753)
(3)	ADJUSTMENT TO CAPITALIZED TANK PAINTING, NET	(44,083)
(4)	ADJUSTMENT TO LIMITED-TERM UTILITY PLANT - NET	(13,447)
(5)	ADJUSTMENT TO ACCUMULATED PROVISION FOR DEPRECIATION OF UPIS	792,595
(6)	ADJUSTMENT TO ACCUMULATED AMORTIZATION OF UTILITY PLANT - CAPITAL LEASE	45,300
(7)	ADJUSTMENT TO DEFERRED INCOME TAXES	479,180
(8)	CHANGE IN CUSTOMER ADVANCES	441,918
(9)	CHANGE IN CONTRIBUTIONS IN AID OF CONSTRUCTION	106,072
(10)	CHANGE IN UNAMORTIZED INVESTMENT TAX CREDIT	(3,300)
(11)	ADJUSTMENT TO UTILITY PLANT ACQUISITION ADJUSTMENT	(72,570)

NET ADDITIONS TO UTILITY PLANT IN SERVICE
FROM END OF TEST YEAR TO MID-POINT OF ATTRITION YEAR

TENNESSEE PUBLIC SERVICE COMMISSION

COMPANY: TENNESSEE-AMERICAN WATER COMPANY

CASE NO: _____

TEST YEAR: TWELVE MONTHS ENDED 7-31-89

EXHIBIT NO. 1 SCHEDULE 2

PAGE 3 OF 3

LINE

NO.

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ACCOUNT
NUMBER

ACCOUNT
DESCRIPTION

8/1/89 to
12/31/89
ADDITIONS

1/1/90 to
10/31/90
ADDITIONS

7/1/89 to
12/31/89
RETIREMENTS

1/1/90 to
10/31/90
RETIREMENTS

NET
ADDITIONS TO
UTILITY PLANT
IN SERVICE
8/1/89-10/31/90

321

PUMPING PLANT
STRUCTURES & IMPROVEMENTS

4,398

237,900

0

1,000

241,298

325

WATER TREATMENT PLANT (HT)

11,941

268,300

2,741

500

277,000

326

ELECTRIC PUMPING EQUIPMENT

0

100,000

0

0

100,000

331

DIESEL PUMPING EQUIPMENT

872,536

40,950

171,000

0

742,486

332

HT STRUC & IMPROV

882,331

0

242,200

0

640,131

334

WT EQUIPMENT

183,000

180,000

83,713

72,658

206,629

GAC

1,949,808

589,250

499,654

73,158

1,966,246

TOTAL HT PLANT

TRANS & DIST PLANT (T&D)

9,775

0

0

0

9,775

340

T & D LAND

0

3,300

0

0

3,300

341

T & D STRUC & IMPROV

0

16,500

0

0

16,500

342

T & D RESERVOIRS & STANDPIPES

0

0

0

0

342.99

DISTRIBUTION RESERVOIRS
& STANDPIPES - PAINTING

106,000

12,864

3,675

4,900

110,289

343

T&D MAINS

1,554,976

2,697,250

65,234

67,990

4,124,982

344

SERVICES

180,635

365,552

2,353

2,500

541,334

345

METER SERVICES

157,969

266,541

81,393

135,000

208,117

346

METER INSTALLATIONS

111,456

217,215

1,000

326,671

347

HYDRANTS

72,597

59,250

11,341

5,400

155,106

348

TOTAL T&D PLANT

2,193,400

3,678,472

185,016

211,190

5,495,674

GENERAL PLANT

STRUC & IMPROV

289,139

2,650

0

1,000

290,789

390

OFFICE FURNITURE & EQUIP

54,262

170,440

3,790

15,727

205,185

391

TRANSPORTATION EQUIP

135,609

125,500

32,876

78,797

149,636

392

TOOLS, SHOP & GARAGE EQUIP

1,192

32,940

0

9,000

25,132

393

LABORATORY EQUIP

204,511

18,100

0

4,000

170,511

394

POWER OPERATED EQUIP

0

0

0

0

395

COMMUNICATION EQUIP

44,919

48,850

0

5,000

88,769

396

MISCELLANEOUS EQUIP

2,950

4,090

0

0

7,040

397

TOTAL GENERAL PLANT

732,882

402,570

84,866

113,524

937,062

398

TOTAL PLANT IN SERVICE

4,880,496

4,908,192

749,536

398,872

8,640,280

COMPUTATION OF WORKING CAPITAL
LEAD-LAG STUDY

TENNESSEE PUBLIC SERVICE COMMISSION

COMPANY: TENNESSEE-AMERICAN WATER COMPANY

CASE NO: _____

TEST YEAR: TWELVE MONTHS ENDED 7-31-89

EXHIBIT NO. 1 SCHEDULE 3

PAGE 2 OF 6

LINE NO.	DESCRIPTION	DAYS	AMOUNT
1			
2			
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9	NET OPERATING FUNDS		\$21,843,776
10	AVERAGE DAILY OPERATING FUNDS		\$59,846
11	COMPOSITE AVERAGE DAYS INTERVAL BETWEEN:		
12	(A) DATE SERVICE FURNISHED AND DATE COLLECTIONS DEPOSITED	40.86	
13	(B) DATE EXPENSES INCURRED AND DATE OF PAYMENT	37.49	
14	(C) NET INTERVAL	3.37	
15			
16			
17			
18	OPERATING FUNDS ADVANCED		201,681
19			
20			
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24	LEAD-LAG STUDY CAPITAL		\$201,681
25	USE		\$202,000
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COMPOSITE AVERAGE DAYS INTERVAL BETWEEN DATE EXPENSES
ARE INCURRED AND DATE OF PAYMENT

TENNESSEE PUBLIC SERVICE COMMISSION

COMPANY: TENNESSEE-AMERICAN WATER COMPANY

CASE NO:

TEST YEAR: TWELVE MONTHS ENDED 7-31-89

EXHIBIT NO. 1 SCHEDULE 3

PAGE 3 OF 6

LINE NO.	DESCRIPTION	AMOUNT	POST PAYMENT OR (LEAD) DAYS	DOLLAR DAYS
1	PAYROLLS CHARGED TO EXPENSE - HOURLY	\$3,606,984	4.50	\$16,231,430
2				
3	PAYROLLS CHARGED TO EXPENSE - SALARY	1,607,662	6.50	10,449,930
4	FUEL AND POWER	1,497,625	53.43	80,018,104
5				
6	CHEMICALS	545,273	26.53	14,466,093
7				
8	WASTE DISPOSAL	109,260	172.65	18,691,089
9				
10	AMHS CHARGES	1,055,608	(2.90)	(3,061,263)
11				
12	GROUP INSURANCE	798,996	(14.24)	(11,377,703)
13				
14	PENSIONS	51,948	180.00	9,350,640
15				
16	INSURANCE OTHER THAN GROUP	539,847	(57.26)	(30,922,436)
17				
18	RENTS	40,362	4.18	171,221
19				
20	TELEPHONE EXPENSE	83,514	15.58	1,301,148
21				
22	POSTAGE EXPENSE	168,970	26.32	4,447,290
23				
24	PURCHASED WATER	3,478	42.29	147,085
25				
26	MAINTENANCE EXPENSE	689,311	25.91	17,860,048
27				
28	TRANSPORTATION EXPENSE	250,129	23.26	5,818,001
29				
30	AMORTIZATIONS	24,192	0.00	0
31				
32	STOCK E	87,691	35.08	3,076,200
33				
34	EMPLOYEE EXPENSES	37,086	27.03	1,002,435
35				
36	REGULATORY EXPENSE	53,164	(266.03)	(14,143,219)
37				
38	OTHER OPERATING EXPENSES	886,196	26.94	23,874,120
39				
40	TOTAL O & M EXPENSES	12,136,916		
41		1,645,007		
42	DEPRECIATION AND AMORTIZATION		0.00	0
43				
44	TAXES, OTHER THAN INCOME			
45				
46	PAYROLL	401,968	10.61	4,264,880
47				
48	OTHER	1,997,435	184.62	368,766,450
49				
50	INCOME TAXES - CURRENT	65,308	58.95	3,849,907
51				
52	DEFERRED TAXES	450,278	0.00	0
53				
54	INTEREST EXPENSE	3,493,827	84.32	294,599,493
55				
56	NET EARNINGS	1,653,037	0.00	0
57				
58	NET OPERATING FUNDS	\$21,843,776		\$818,880,943
59				
60				
61				
62	AVERAGE DAYS INTERVAL BETWEEN DATE EXPENSES ARE INCURRED AND DATE OF PAYMENT		37.49	
63				

COMPUTATION OF AVERAGE MATERIALS AND SUPPLIES PAID FOR

TEST YEAR: TWELVE MONTHS ENDED 7-31-89
 EXHIBIT NO. 1 SCHEDULE 3
 PAGE 5 OF 6

TENNESSEE PUBLIC SERVICE COMMISSION
 COMPANY: TENNESSEE-AMERICAN WATER COMPANY

CASE NO:

LINE
 NO.

DATE	END OF MONTH	AMOUNT
Aug-88		312,536
Sep-88		361,957
Oct-88		339,297
Nov-88		364,681
Dec-88		351,455
Jan-89		341,855
Feb-89		373,803
Mar-89		388,036
Apr-89		379,205
May-89		362,397
Jun-89		353,396
Jul-89		353,674
TOTAL		\$4,282,292

AVERAGE BALANCE \$356,858

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TEST YEAR: TWELVE MONTHS ENDED 7-31-89
 EXHIBIT NO. 1 SCHEDULE 3
 PAGE 6 OF 6

COMPUTATION OF AVERAGE MATERIALS AND SUPPLIES UNPAID FOR

TENNESSEE PUBLIC SERVICE COMMISSION
 COMPANY: TENNESSEE-AMERICAN WATER COMPANY

CASE NO:

LINE NO.

END OF MONTH	
DATE	AMOUNT
Aug-88	124,247
Sep-88	152,935
Oct-88	95,832
Nov-88	54,479
Dec-88	57,213
Jan-89	40,777
Feb-89	90,640
Mar-89	98,072
Apr-89	143,703
May-89	149,095
Jun-89	145,265
Jul-89	74,700
TOTAL	\$1,226,958

AVERAGE BALANCE \$102,247

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STATEMENT OF INCOME PER BOOKS FOR THE TEST YEAR AND
FOR THE ATTRITION YEAR UNDER BOTH PRESENT AND PROPOSED RATES

TENNESSEE PUBLIC SERVICE COMMISSION

COMPANY: TENNESSEE-AMERICAN WATER COMPANY

CASE NO:

LINE

TEST YEAR: TWELVE MONTHS ENDED 7/31/89

EXHIBIT NO. 2 SCHEDULE 1

PAGE 1 OF 1

ADJUSTMENT SHOWN ON SCHEDULE NO.	PER BOOKS 12 MONTHS ENDED 7/31/89	TEST YEAR ADJUSTMENTS PRESENT RATES	NORMALIZED TEST YEAR	ATTRITION YEAR ADJUSTMENTS	ATTRITION YEAR AT PRESENT RATES	ADJUSTMENTS FOR PROPOSED RATES	ATTRITION YEAR AT PROPOSED RATES
DESCRIPTION							
OPERATING REVENUES	2	\$21,185,565	\$503,498	\$191,757	\$21,880,920	\$2,609,365	\$24,490,285
OPERATION AND MAINTENANCE EXPENSES	3	11,097,900	377,036	561,980	12,135,916	18,005	12,154,921
DEPRECIATION AND AMORTIZATION	4	1,504,100	22,382	118,525	1,645,007	0	1,645,007
TAXES, OTHER THAN INCOME	5	2,323,406	(50,489)	126,486	2,399,403	0	2,399,403
INCOME TAXES	6	945,254	101,888	(531,556)	515,586	983,680	1,499,266
TOTAL OPERATING EXPENSES		15,870,660	450,817	375,435	16,695,912	1,001,685	17,698,597
UTILITY OPERATING INCOME		5,315,005	52,681	(183,678)	5,184,008	1,607,680	6,791,688
OTHER INCOME		77,846	(77,846)	0	0	0	0
AFUDC		8,550	(8,550)	0	0	0	0
INCOME FROM M & J AND CONTRACT WORK		38,456	(38,456)	0	0	0	0
INTEREST INCOME							
TOTAL OTHER INCOME		124,852	(124,852)	0	0	0	0
OTHER DEDUCTIONS		37,144	0	37,144	37,144	0	37,144
MISCELLANEOUS AMORTIZATION		43,759	(43,759)	0	0	0	0
MISCELLANEOUS OTHER DEDUCTIONS		80,903	(43,759)	37,144	37,144	0	37,144
TOTAL OTHER DEDUCTIONS							
TAXES APPLICABLE TO OTHER INC AND DEB		4,598	(4,598)	0	0	0	0
STATE INCOME TAXES		24,040	(24,040)	0	0	0	0
FEDERAL INCOME TAXES							
TOTAL TAXES APPLICABLE TO OTHER INC AND DEB		28,638	(28,638)	0	0	0	0
INCOME BEFORE INTEREST CHARGES		5,330,316	226	(183,678)	5,146,864	1,607,680	6,754,544
INTEREST CHARGES		2,984,385	0	432,704	3,398,090		3,398,090
INTEREST ON LONG-TERM DEBT		29,392	0	6,257	35,649		35,649
AMORTIZATION OF DEBT AND DISCOUNT EXPENSE		117,851	110,561	(236,412)	0		0
INTEREST ON SHORT-TERM DEBT		46	(80)	13,504	13,504		13,504
OTHER INTEREST		51,953	(51,953)	45,984	45,984		45,984
INTEREST ON LONG-TERM CAPITAL LEASE							
TOTAL INTEREST CHARGES		3,177,766	66,528	249,534	3,493,827	0	3,493,827
NET INCOME		\$2,152,550	(\$66,302)	(\$433,211)	\$1,653,037	\$1,607,680	\$3,260,717

SUMMARY OF ADJUSTMENTS TO OPERATION AND MAINTENANCE EXPENSES

TENNESSEE PUBLIC SERVICE COMMISSION

COMPANY: TENNESSEE-AMERICAN WATER COMPANY

CASE NO: _____

LINE

NO.

TEST YEAR: TWELVE MONTHS ENDED 7/31/89

EXHIBIT NO. 2 SCHEDULE 3

PAGE 1 OF 1

ADJUSTMENT NUMBER REFERENCE	DESCRIPTION	PER BOOKS 12 MONTHS ENDED 7/31/89	TEST YEAR ADJUSTMENTS PRESENT RATES	NORMALIZED TEST YEAR	ATTRITION YEAR ADJUSTMENTS	ATTRITION YEAR AT PRESENT RATES	ADJUSTMENTS FOR PROPOSED RATES	ATTRITION YEAR AT PROPOSED RATES
1	OPERATION AND MAINTENANCE LABOR	\$4,708,706	\$162,696	4,871,402	343,264	5,214,666		5,214,666
2	PURCHASED WATER	3,478	0	3,478	0	3,478		3,478
3	FUEL AND POWER	1,327,686	32,165	1,359,851	46,054	1,405,905		1,405,905
4	CHEMICALS	567,082	29,925	597,007	(51,734)	545,273		545,273
5	WASTE DISPOSAL	85,373	2,959	88,332	19,928	108,260		108,260
6	MANAGEMENT FEES	711,167	32,390	743,557	166,309	909,866		909,866
7	GROUP INSURANCE	635,371	54,566	689,937	109,059	798,996		798,996
8	PENSIONS	(275)	275	0	51,948	51,948		51,948
9	REGULATORY EXPENSE	30,807	0	30,807	22,357	53,164		53,164
10	INSURANCE, OTHER THAN GROUP	509,600	16,923	526,523	13,324	539,847		539,847
11	CUSTOMER ACCOUNTING	626,808	0	626,808	(39,548)	587,260		587,260
12	UNCOLLECTIBLE EXPENSE	(3,991)	153,646	149,655	1,323	150,978	18,005	168,983
13	RENTS	21,762	0	21,762	19,200	40,962		40,962
14	GENERAL OFFICE EXPENSE	236,360	0	236,360	15,490	251,850		251,850
15	MISCELLANEOUS EXPENSE	843,398	(46,873)	796,525	(17,599)	778,926		778,926
16	OTHER MAINTENANCE EXPENSE	738,982	(914)	738,068	(48,757)	689,311		689,311
17	TANK PAINTING	55,586	0	55,586	(34,208)	21,378		21,378
18	INTEREST ON CUSTOMER DEPOSITS		5,108	5,108	1,191	6,299		6,299
19	LEGAL COSTS AMORTIZATION		12,016	12,016	0	12,016		12,016
20	AFUDC		(77,846)	(77,846)	44,379	(33,467)		(33,467)
TOTAL OPERATION AND MAINTENANCE EXPENSES		\$11,097,900	\$377,036	\$11,474,936	\$661,980	\$12,136,916	\$18,005	\$12,154,921

SUMMARY OF ADJUSTMENTS TO DEPRECIATION AND AMORTIZATION EXPENSES

TENNESSEE PUBLIC SERVICE COMMISSION

COMPANY: TENNESSEE-AMERICAN WATER COMPANY

CASE NO: _____

LINE
NO.ADJUSTMENT
NUMBER
REFERENCE

DESCRIPTION

PER BOOKS
12 MONTHS
ENDED
7/31/89TEST YEAR
ADJUSTMENTS
PRESENT RATESNORMALIZED
TEST YEARATTRITION YEAR
ADJUSTMENTSATTRITION
YEAR AT
PRESENT RATESADJUSTMENTS
FOR
PROPOSED RATESATTRITION
YEAR AT
PROPOSED RATES

\$1,753,318

DEPRECIATION EXPENSE

AMORTIZATION OF UTILITY PLANT ACQUISITION ADJUSTMENT

AMORTIZATION OF UTILITY CAPITAL LEASE

AMORTIZATION OF LEASED ALTERATION EXPENSE

AMORTIZATION OF C.I.A.C.

AMORTIZATION OF ACCUMULATED DEPRECIATION ON C.I.A.C.

TEST YEAR: TWELVE MONTHS ENDED 7/31/89

EXHIBIT NO. - 2 SCHEDULE 4

PAGE 1 OF 2

	\$1,512,609	\$21,294	\$1,534,103	\$219,215	\$1,753,318	\$1,753,318
	(59,054)	0	(59,054)	0	(59,054)	(59,054)
	36,335	(85)	36,250	0	36,250	36,250
	13,010	1,173	14,183	619	14,802	14,802
				(41,309)	(41,309)	(41,309)
				(60,000)	(60,000)	(60,000)
	\$1,504,100	\$22,382	\$1,526,482	\$118,525	\$1,645,007	\$1,645,007

SUMMARY OF ADJUSTMENTS TO TAXES OTHER THAN INCOME

TENNESSEE PUBLIC SERVICE COMMISSION

COMPANY: TENNESSEE-AMERICAN WATER COMPANY

CASE NO: _____

LINE
NO.

TEST YEAR: TWELVE MONTHS ENDED 7/31/89
 EXHIBIT NO. 2 SCHEDULE 5
 PAGE 1 OF 1

ADJUSTMENT NUMBER REFERENCE	DESCRIPTION	PER BOOKS 12 MONTHS ENDED 7/31/89	TEST YEAR ADJUSTMENTS PRESENT RATES	NORMALIZED TEST YEAR	ATTRITION YEAR ADJUSTMENTS	ATTRITION YEAR AT PRESENT RATES	ADJUSTMENTS FOR PROPOSED RATES	ATTRITION YEAR AT PROPOSED RATES
1	PROPERTY TAXES	\$1,489,682	(\$58,094)	1,431,588	\$92,998	1,524,586		\$1,524,586
2	OTHER GENERAL TAXES	472,122	0	472,122	727	472,849		472,849
3	FEDERAL UNEMPLOYMENT TAXES	8,105	820	8,925	167	9,092		9,092
4	F. I. C. A. TAXES	350,256	6,456	356,712	32,527	389,239		389,239
5	STATE UNEMPLOYMENT TAXES	3,241	329	3,570	67	3,637		3,637
		\$2,323,406	(\$50,489)	\$2,272,917	\$126,486	\$2,399,403	\$0	\$2,399,403

SUMMARY OF ADJUSTMENTS TO INCOME TAXES

TEST YEAR: TWELVE MONTHS ENDED 7/31/89
 EXHIBIT NO. 2 SCHEDULE 5
 PAGE 1 OF 2

TENNESSEE PUBLIC SERVICE COMMISSION

COMPANY: TENNESSEE-AMERICAN WATER COMPANY

CASE NO:

LINE NO.	ADJUSTMENT NUMBER REFERENCE	DESCRIPTION	PER BOOKS 12 MONTHS ENDED 7/31/89	TEST YEAR ADJUSTMENTS PRESENT RATES	NORMALIZED TEST YEAR	ATTRITION YEAR ADJUSTMENTS	ATTRITION YEAR AT PRESENT RATES	ADJUSTMENTS FOR PROPOSED RATES	ATTRITION YEAR AT PROPOSED RATES
1		FEDERAL INCOME TAX - CURRENT	\$503,145	(\$22,518)	\$580,527	(\$525,642)	\$54,985	\$828,199	\$883,184
2		STATE INCOME TAX - CURRENT	116,178	(35,610)	80,568	(70,245)	\$10,323	155,481	165,804
3		DEFERRED FIT - LIBERALIZED DEPRECIATION	450,927	0	450,927	64,331	515,258		515,258
4		DEFERRED FIT - PROGRAMMED MAINTENANCE	12,016	(12,016)	0	0	0	0	0
5		DEFERRED SIT - PROGRAMMED MAINTENANCE	5,571	(5,571)	0	0	0	0	0
6		DEFERRED FEDERAL INCOME TAX - OTHER	(79,523)	79,523	0	0	0	0	0
7		DEFERRED STATE INCOME TAX - OTHER	(19,437)	19,437	0	0	0	0	0
8		AMORTIZATION OF I.T.C.	(67,277)	2,297	(64,980)	0	(64,980)		(64,980)
9		ADJUSTMENT OF PRIOR YEARS - F.I.T.	(74,257)	74,257	0	0	0	0	0
10		ADJUSTMENT OF PRIOR YEARS - S.I.T.	(3,089)	3,089	0	0	0	0	0
		TOTAL	\$945,254	\$101,888	\$1,047,142	(\$531,556)	\$515,586	\$903,680	\$1,499,266

DATE OF RETURN SUMMARY

TEST YEAR: TWELVE MONTHS ENDED 7/31/09
 EXHIBIT NO. 3 SCHEDULE 1
 PAGE 1 OF 1

TEST YEAR: TWELVE MONTHS ENDED 7/31/09
 EXHIBIT NO. 3 SCHEDULE 1
 PAGE 1 OF 1

LINE NO.	CLASS OF CAPITAL	REFERENCE	AMOUNT	PERCENT OF TOTAL	COST RATE	WEIGHTED COST RATE
1	LONG-TERM DEBT	SCHEDULE 2	\$34,563,691	57.00%	10.07%	5.74%
2	SHORT-TERM DEBT			0.00%		0.00%
3	PREFERRED STOCK	SCHEDULE 3	3,491,149	5.76%	7.11%	0.41%
4	COMMON EQUITY		22,581,013	37.24%	11.96%	4.45%
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16						
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19			\$60,635,853	100.00%		10.60%
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 OFFICE OF THE
 EXECUTIVE DIRECTOR

TEST YEAR. TWELVE MONTHS ENDED 7/31/89

EXHIBIT NO. 3 SCHEDULE 2

PAGE 1 OF 1

TENNESSEE PUBLIC SERVICE COMMISSION
 COMPANY: TENNESSEE-AMERICAN WATER COMPANY
 CASE NO:

LINE NO.	DEBT ISSUE, TYPE COUPON RATE	DATE ISSUED	MATURITY DATE	PRINCIPAL AMOUNT	FACE AMOUNT OUTSTANDING	UNAMORTIZED DEBT EXPENSE	CARRYING VALUE	ANNUAL INTEREST COST	ANNUAL AMORT. OF ISSUE EXPENSE	TOTAL ANNUAL COST
1	BONDS:									
2	FIRST MORTGAGE BONDS:									
3	SERIES 4 7/8%	10////55	10////90	\$3,900,000	2,500,000	1,309	2,498,691	146,875	826	147,701
4	SERIES F, 5 7/8%	6//1/67	6//1/92	2,500,000						
5	GENERAL MORTGAGE BONDS:									
6	SERIES 7 3/8%	7//1/68	7//1/93	1,300,000	1,300,000	1,425	1,298,575	95,875	535	96,410
7	SERIES 8 1/4%	2//1/71	2//1/96	1,800,000	882,000	8,735	1,673,265	89,200	1,664	89,864
8	SERIES 10 1/4%	8//1/72	8//1/97	1,700,000	1,700,000	4,011	1,695,989	144,500	1,595	145,095
9	SERIES 8 1/2%	11////75	11////95	5,000,000	2,900,000	14,922	2,885,078	319,000	2,984	321,984
10	SERIES 11%	3//1/76	3//1/96	3,500,000	2,730,000	22,930	2,885,078	248,724	3,024	248,724
11	SERIES 9 7/8%	9//1/78	9//1/98	5,000,000	4,000,000	21,031	3,978,969	397,359	2,359	397,359
12	SERIES 9 7/8%	10//1/79	10//1/99	3,000,000	3,000,000	5,704	2,994,296	165,000	4,026	169,026
13	SERIES 12 1/2%	3//16/82	4//1/92	2,500,000	2,500,000	7,387	2,492,613	135,000	3,723	138,723
14	SERIES 12 1/2%	1//1/93	1//1/93	5,200,000	5,200,000	71,682	5,228,318	409,190	9,453	418,643
15	SERIES 9 23/32%	6//1/98	6//1/98	2,500,000	2,500,000	221,708	2,477,292	231,250	2,500	233,750
16	PROPOSED SERIES 9.25%	-	-	5,000,000	5,000,000	49,583	4,950,417	462,500	5,000	467,500
17	OBLIGATION - CAPITAL LEASE									
18				725,000	483,124		483,124	45,984		45,984
19	TOTAL									
20				\$43,725,000	\$34,795,124	\$231,433	\$34,563,691	\$3,444,074	\$36,219	\$3,480,293
21	EMBEDDED COST OF LONG-TERM DEBT									
22				10.07%						

EMBEDED COST OF PREFERRED STOCK
AT THE MID-POINT OF THE ATTRITION YEAR
10-31-90

TEST YEAR: TWELVE MONTHS ENDED 1/31/89
EXHIBIT NO. 3 SCHEDULE 3
PAGE 1 OF 1

COMPANY: TENNESSEE-PUBLIC SERVICE COMMISSION
CASE NO: TENNESSEE-AMERICAN WATER COMPANY

LINE NO.	DIVIDEND RATE, TYPE, PAR VALUE	DATE AUTHORIZED	DOLLAR AMOUNT OUTSTANDING	PREMIUM OR DISCOUNT	UNAMORTIZED DEBT EXPENSE	NET PROCEEDS	ANNUAL DIVIDENDS	ANNUAL AMORT. OF ISSUE EXPENSE	TOTAL ANNUAL COST
1	4 1/2% SERIES, \$100 PAR	1/20/54	382,500		5,279	\$377,221	\$17,213	352	\$17,565
2	5% SERIES, \$100 PAR	12/20/40	1,400,000	7,692		1,407,692	70,000		70,000
3	9% SERIES, \$100 PAR	3/31/80	1,406,000		13,349	1,392,651	126,540	607	127,147
4	10 1/4% SERIES, \$100 PAR	2/10/71	320,000		6,415	313,585	32,800	801	33,601
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TOTAL			\$3,508,500	\$1,692	\$25,043	\$3,491,149	\$246,553	\$1,760	\$248,313
EMBEDED COST OF PREFERRED STOCK									7.11%

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1989 DEC 15 PM 2:00

OFFICE OF THE
EXECUTIVE DIRECTOR

ATTRITION YEAR REVENUES AT CURRENT RATES VS. PROPOSED RATES

TENNESSEE PUBLIC SERVICE COMMISSION

COMPANY: TENNESSEE-AMERICAN WATER COMPANY

CASE NO: _____

TEST YEAR: TWELVE MONTHS ENDED JULY 31, 1989

EXHIBIT 4, SCHEDULE 1

PAGE 1 OF 1

LINE NO.	CLASS/DESCRIPTION	CURRENT RATES		PROPOSED RATES		TOTAL REVENUES & CHANGE	
		SALES (100 CCF)	TOTAL REVENUE (C)	SALES (100 CCF)	TOTAL REVENUE (E)	DOLLAR CHANGE (F)	(G)
1	(A)						
2							
3							
4							
5							
6							
7							
8							
9	RESIDENTIAL	4,859,505	9,145,174	4,859,505	10,244,600	1,099,426	12.02%
10	COMMERCIAL	3,788,851	5,735,608	3,788,851	6,426,459	630,851	12.04%
11	INDUSTRIAL	3,192,449	2,774,549	3,192,449	3,107,743	333,194	12.01%
12	OPA	1,360,180	1,540,742	1,360,180	1,726,240	185,498	12.04%
13	OWU	406,434	311,060	406,434	348,295	37,236	11.97%
14	PRIVATE FIRE SERVICE		629,525		705,248	75,723	12.03%
15	PUBLIC FIRE SERVICE		855,257		958,144	102,887	12.03%
16	SPECIAL TARIFF	772,872	525,621	772,872	588,773	63,152	12.01%
17							
18	TOTAL WATER REVENUES	14,380,291	21,517,536	14,380,291	24,105,503	2,587,967	12.03%
19							
20	OTHER REVENUES		363,384		384,350	20,966	5.77%
21							
22	TOTAL OPERATING REVENUES	14,380,291	21,880,920	14,380,291	24,489,853	2,508,933	11.92%
23							

TEST YEAR: TWELVE MONTHS ENDED JULY 31, 1989

EXHIBIT 4, SCHEDULE 2

PAGE 2 OF 14

MISSISSIPPI PUBLIC SERVICE COMMISSION

COMPANY: TENNESSEE-AMERICAN WATER COMPANY

CASE NO:

[illegible]

TENNESSEE PUBLIC SERVICE COMMISSION

COMPANY, TENNESSEE-AMERICAN WATER COMPANY

CASE NO:

[illegible]

ATTRITION YEAR REVENUES AT CURRENT RATES VS. PROPOSED RATES

TEST YEAR: TWELVE MONTHS ENDED JULY 31, 1989

EXHIBIT 4, SCHEDULE 2

PAGE 6 OF 14

TENNESSEE PUBLIC SERVICE COMMISSION

COMPANY: TENNESSEE-AMERICAN WATER COMPANY

CASE NO:

[illegible]

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TENNESSEE PUBLIC SERVICE COMMISSION

COMPANY: TENNESSEE-AMERICAN WATER COMPANY

CASE NO:

LINE NO.	CLASS/DESCRIPTION	CURRENT RATES					PROPOSED RATES					TOTAL REVENUES \$	CHARGE
		CUSTOMER METER BILLINGS	SALES (100 CCF)	CURRENT RATE	TOTAL REVENUE	% OF REVENUE TO TOTAL	SALES (100 CCF)	PROPOSED RATE	TOTAL REVENUE	% OF REVENUE TO TOTAL	DOLLAR CHANGE		
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)		
9	OPA: REGULAR												
10	SERVICE CHARGE:												
11	5/8" METER	1,086		6.53	7,157	0.48%		7.38	8,015	0.48%	858	11.99%	
12	3/4" METER	121		11.05	1,337	0.09%		12.38	1,498	0.09%	161	12.04%	
13	1" METER	1,040		19.41	19,146	1.27%		20.62	21,445	1.27%	2,299	12.01%	
14	1 1/2" METER	487		36.83	17,936	1.19%		41.26	20,094	1.19%	2,158	12.03%	
15	2" METER	2,054		58.92	121,022	8.04%		66.01	135,585	8.04%	14,563	12.03%	
16	3" METER	75		110.48	8,286	0.55%		123.77	9,283	0.55%	997	12.03%	
17	4" METER	168		184.13	30,934	2.06%		206.28	34,655	2.06%	3,721	12.03%	
18	5" METER	24		368.24	8,838	0.59%		412.54	9,901	0.59%	1,063	12.03%	
19	8" METER			589.19	0	0.00%		660.07	0	0.00%	0	0.00%	
20	BLOCK CONSUMPTION:												
21	0-4 CCF		16,756	NIN			16,756	NIN				12.05%	
22	4-65 CCF		138,762		244,118	16.22%		1,971	273,539	16.22%	29,421	12.06%	
23	65-500 CCF		326,372	1,111	352,599	24.09%		1,245	406,333	24.10%	43,734	12.04%	
24	500-5,000 CCF		709,726	0.822	583,395	38.76%		0.921	653,658	38.76%	70,263	11.93%	
25	500-5,000 CCF		151,421	0.662	100,241	6.66%		0.741	112,203	6.65%	11,962		
26	ALL OVER 5,000 CCF												
27	TOTAL	5,055	1,343,057		1,505,009	100.00%			1,686,209	100.00%	181,200	12.04%	

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TENNESSEE PUBLIC SERVICE COMMISSION
 COMPANY: TENNESSEE-AMERICAN WATER COMPANY
 CASE NO:

[illegible]

ATTRITION YEAR REVENUES AT CURRENT RATES VS. PROPOSED RATES

TEST YEAR: TWELVE MONTHS ENDED JULY 31, 1989
 EXHIBIT 4, SCHEDULE 2
 PAGE 13 OF 14

TENNESSEE PUBLIC SERVICE COMMISSION
 COMPANY: TENNESSEE-AMERICAN WATER COMPANY
 CASE NO: _____

LINE NO.	CLASS/DESCRIPTION	CUSTOMER METER BILLINGS (B)	CURRENT RATES		PROPOSED RATES		TOTAL REVENUES \$
			CURRENT RATE (C)	TOTAL REVENUE TO TOTAL % OF REVENUE (D) (E)	PROPOSED RATE (F)	TOTAL REVENUE TO TOTAL % OF REVENUE (G) (H)	
1							
2							
3							
4							
5							
6							
7	(A)						
8							
9	PUBLIC FIRE SERVICE	1	1346.28	1,346	1508.23	1,508	12.04%
10	RIDGESIDE	3,897	219.12	853,911	245.48	955,636	12.03%
11	PUBLIC FIRE						
12							
13	TOT PUBLIC FIRE SERVICE	3,898		855,257		958,144	12.03%
14							

EXHIBIT 4, SCHEDULE 2

PAGE 14 OF 14

TENNESSEE PUBLIC SERVICE COMMISSION

COMPANY: TENNESSEE-AMERICAN WATER COMPANY

CASE NO:

[illegible]

Before The
PUBLIC SERVICE COMMISSION
Of The
STATE OF TENNESSEE

in re:
TENNESSEE-AMERICAN WATER COMPANY
(Docket No. 91-05224)

Testimony
of
John L. Baugh

November, 1991

1 Q. Would you state your name for the record, please?

2 A. My name is John L. Baugh.

3 Q. By whom are you employed, Mr. Baugh, and what is your
4 position?

5 A. I am employed by the Tennessee Public Service Commission
6 as a Senior Financial Analyst.

7 Q. How long have you been employed by the Commission?

8 A. Approximately four years.

9 Q. What degrees and licences do you hold?

10 A. I received a Bachelor of Science degree with a major in
11 accounting from David Lipscomb College in June, 1987. I
12 am licensed to practice as a Certified Public Accountant
13 in the state of Tennessee.

14 Q. Would you briefly describe your duties as a Financial
15 Analyst since your employment with the Commission?

16 A. I have participated in several rate case audits of
17 utilities subject to the Commission's jurisdiction. In
18 addition I have prepared and assisted in the preparation
19 of testimony and exhibits presented in Commission
20 hearings. I have also been involved with the audit and
21 analysis of the various financial reports filed by the
22 utilities with the Commission.

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

24 A. The purpose of my testimony is to present to the
25 Commission information regarding what the Staff
26 considers to be appropriate test period and test period
27 adjustment methodology. I will present testimony

1 regarding the Company's income, rate base, and rate
2 design.

3 Q. Would you please explain the overall procedures used by
4 the Staff in this case?

5 A. Yes. We first reviewed the Company's financial exhibits
6 and underlying workpapers. In addition, we prepared
7 information requests for data that was not included in
8 the Company's exhibits or workpapers. We also conducted
9 an on-site audit at the Company's office in Chattanooga,
10 during which we reviewed the Company's financial
11 records. Our normal approach is to adjust the
12 historical test period to compensate for the net effects
13 of all known and reasonably anticipated changes which
14 might occur.

15 The primary concern of the Commission in setting rates
16 is to set rates which are just and reasonable, i.e.,
17 rates which are sufficient to cover the operating
18 expenses of a utility and to allow a reasonable return
19 on its investments used in providing services to its
20 customers. The Staff normally analyzes a twelve month
21 historical period of operations called a "test period."
22 This test period, which is based on the Company's books,
23 determines a utility's earnings under present rates.
24 The revenues, expenses, and rate base may then be
25 adjusted as necessary to properly reflect the Company's
26 historical earnings. Since rates are set for the
27 future, the Staff then attempts to determine what future

1 events are likely to transpire which will change or
2 alter the historical test year results. Changes can
3 occur which cause either an increase or a decrease in
4 earnings. Changes can also occur which cause the
5 Company's investment to increase or decrease. The
6 historical test period is therefore adjusted to
7 compensate for the net effect of all known and
8 reasonably anticipated changes which might occur.

9 Q. What test period and adjusted test period have you
10 adopted for this case?

11 A. We have accepted the Company's proposed test period of
12 the twelve months ended March 31, 1991, and have made
13 adjustments for changes through December 31, 1992, since
14 this is the first year any new rates granted by the
15 Commission would be in effect.

16 Q. Have you caused to be filed a multi-page document
17 consisting of 4 schedules?

18 A. Yes. (Introduce Exhibit #-- with 4 schedules.)

19 Q. Would you please explain Schedule 1 of the Staff's
20 Exhibit and summarize the Staff's findings in this case?

21 A. The Company filed its petition for an increase of
22 \$2,398,813 in revenues. This increase is based on an
23 overall rate of return of 10.42% and a return on equity
24 of 11.84% both of which the Company and the Staff
25 Economist, Dr. Klein, have agreed to. The Staff has
26 examined the Company's filing as described above. From
27 our investigation, the Company's filing appears to be

1 reasonable, and we recommend that the Company's request
2 for additional revenues be granted in full. We have
3 included Schedule 1 in our Exhibit only to document that
4 the Staff is recommending the Company's case be granted
5 in full.

6 Q. Why is a rate increase of approximately \$2.4 million
7 necessary at this time?

8 A. There are primarily four reasons for the need for
9 additional revenues: (1) In its last rate case (Docket
10 No. 89-15388), the Company requested approximately
11 \$500,000 less in additional revenues than the amount
12 needed to achieve the authorized rate of return, (2) the
13 Company will implement new depreciation rates on January
14 1, 1992 (Docket No. 91-00183), which will cause
15 depreciation expense to increase approximately \$700,000,
16 (3) the Company will add approximately \$3.5 million of
17 utility plant in service during the attrition period,
18 which will have a revenue requirement of approximately
19 \$600,000, and (4) the Staff has forecasted no attrition
20 year customer growth, based on historical trends, while
21 inflation is expected to be somewhere between 3% and 4%
22 during the attrition period, which will have a revenue
23 requirement of approximately \$500,000. These four items
24 represent \$2.3 million of the \$2.4 million that the
25 Company has requested.

26 Q. Have you reviewed the Company's proposed rate design?

27 A. Yes. The Company has proposed to implement a charge of

1 \$0.21 per CCF (\$.484 per CCF for customers in Lookout
2 Mountain) for the first four CCF that are currently
3 included in the monthly customer charge. The Company
4 also has proposed the establishment of a service
5 activation charge of \$12.50. This charge would be
6 imposed upon customers requesting new or changed service
7 accounts. The Company then has proposed to increase
8 other water tariff rates "across-the-board" or evenly
9 for any additional rate increase that the Commission may
10 approve.

11 Q. Does the Staff propose any changes to the Company's
12 proposed rate design?

13 Yes. The Staff proposes to change the Company's special
14 use tariff. This tariff allows specific customers to
15 pay a flat monthly service charge that allows the
16 customer to use a certain volume of water. The customer
17 currently pays \$0.438 per CCF for any water purchased
18 above its volume allowed under the monthly service
19 charge.

20 The special use tariff was established in Docket No.
21 U-85-7338 in order to help stabilize the revenues of the
22 Company. At that time the rates for these customers
23 were designed to be revenue neutral, and the minimum
24 bill volumes were to be recalculated in each rate case.
25 This has not been done; as a result these customers
26 have not received the same rate increase as the other
27 customers. The goal of using this tariff to stabilize

1 the Company's revenue is not being achieved as
2 originally intended since only two of the fourteen
3 eligible customers are on the special used tariff today.
4 If the minimum bill volumes are adjusted as intended,
5 these customer would have no advantage by purchasing
6 water under the special use tariff. Therefore, the
7 Staff recommends elimination of the special use tariff.
8 If the Commission decides not to eliminate the special
9 use tariff, the Staff would recommend that the
10 Commission restate the minimum bill volumes to those
11 shown on Staff Exhibit, Schedule 2. This would more
12 closely reflect the stabilization that was originally
13 intended.

14 Q. Does the Staff propose any other changes to the
15 Company's proposed rate design?

16 A. Yes. The first change is the amount of the Company's
17 proposed service activation charge of \$12.50. The Staff
18 proposes that the Company charge an activity fee of
19 \$15.00 to a customer wishing to establish a new account
20 where a service currently exists and a new service fee
21 of \$25.00 where a new service must be installed. These
22 charges will help offset the one-time cost of
23 establishing a customer's account, and it is more proper
24 to place the cost on the customer who causes the cost.
25 The second change is to increase the Company's bad check
26 charge from \$12.50 to \$20.00. It should be noted that
27 these two changes are the same that the Commission

1 recently approved in the latest Chattanooga Gas Company
2 rate case (Docket No. 91-03765).

3 The third change is to increase the disconnect/reconnect
4 fee, which is currently \$12.50, to \$15.00. These three
5 changes are summarized in Staff Exhibit, Schedule 4.

6 The fourth and final change is to decrease the Company's
7 proposed \$0.21 per CCF charge on the customer's first
8 four CCF to \$0.116 per CCF (\$0.37 per CCF for customers
9 in Lookout Mountain). This decrease is due to the
10 additional revenue that will be generated through the
11 previous three changes. A decrease in this step is
12 recommended because this will have the greatest impact
13 on minimum-bill customers, such as residential
14 customers.

15 The Staff recommends that the Commission approve the
16 Company's proposed rate design with the changes
17 mentioned above.

18 Q. Does this conclude your testimony?

19 A. Yes, it does.
20
21
22
23
24
25
26
27

Affidavit

State of Tennessee)
)
County of Davidson)

John L. Baugh, being first duly sworn, deposes and says that he is the same John L. Baugh whose prepared testimony accompanies this affidavit.

John L. Baugh further states that, to the best of his knowledge and belief, his answers to the questions contained in such prepared testimony are true and accurate to the best of his knowledge and belief.

John L. Baugh
John L. Baugh

Sworn to and subscribed before me,
a Notary Public, on this the 7th
day of November, 1991.

Linda Votel

My Commission Expires:

Sept. 25, 1993

BEFORE THE TENNESSEE PUBLIC SERVICE COMMISSION

Nashville, Tennessee

December 17, 1991

IN RE: PETITION OF TENNESSEE AMERICAN WATER)
 COMPANY TO CHANGE AND INCREASE)
 CERTAIN RATES AND CHARGES SO AS TO)
 PERMIT IT TO EARN A FAIR AND ADEQUATE)
 RATE OF RETURN ON ITS PROPERTY USED)
 AND USEFUL IN FURNISHING WATER)
 SERVICE TO ITS CUSTOMERS)

Docket No. 91-05224

O R D E R

This matter is before the Tennessee Public Service Commission (Commission) upon the Petition of Tennessee American Water Company (Company) to increase its rates and charges to produce additional gross revenues of approximately \$2,400,000. The Company's petition, the testimony of its witnesses and exhibits, together with its tariffs, were filed on June 28, 1991. The tariffs were to become effective July 29, 1991. The tariffs as filed by the Company have been suspended by the Commission's two Orders, the last of which, dated October 25, 1991, suspended the tariffs for an additional ninety (90) days or until January 23, 1992.

PRELIMINARY MATTERS

The Commission designated Mack H. Cherry, Administrative Judge (AJ), to conduct a pre-hearing conference pursuant to T.C.A. § 4-5-306 in Nashville, Tennessee and to preside over any pre-trial matter raised to be resolved. A pre-hearing conference was held in Nashville, Tennessee on November 18, 1991 at 10:00 a.m. at which hearing counsel for the Company, the Commission

Staff (Staff) and the Chattanooga Manufacturers Association Water Intervention Group (CMA) were present and participated. A copy of the Pre-Hearing Conference Order dated November 20, 1991 approved by counsel for the parties participating was presented to the Commission at its hearing on November 20, 1991 at Chattanooga, Tennessee. The salient parts of the pre-hearing order are as follows:

In its petition the Company has sought a revenue increase of \$2,398,813.00. The Commission Staff has investigated the matter and concurred with this request. In addition, the Staff and Company have agreed to a rate of return of 10.42%. The rate design to accomplish this proposed rate increase has been accepted by the Company and the Commission Staff along with modifications proposed by the Staff.

The intervenor, Chattanooga Manufacturers Association Water Intervention Group, does not contest the Company's rate case as filed with the Commission. This intervenor does, however, object to one rate design modification proposed by the Commission Staff. The Staff has proposed elimination of a special use tariff established for large volume water users in 1985. This special tariff is at present utilized by only two concerns, Buster Brown Apparel, Inc. and Seaboard Farms of Chattanooga, Inc., members of the intervenor group.

This rate design issue relative to this special use tariff is the only issue in dispute to be resolved at the hearing before the Commission scheduled for November 20, 1991, in Chattanooga.

The parties have agreed that the pre-filed testimony and exhibits of all Company witnesses and the staff witness relative to this Company's rate case with the exception of any testimony relating to the disputed special use tariff may be entered into the record of this proceeding. The right to cross-examine with respect to such pre-filed testimony and exhibits is waived with the exception of that testimony concerning the disputed issue.

HEARING

This matter then came on to be heard pursuant to notice dated October 25, 1991 before the Commission on November 20, 1991 at 1:30 p.m. EST at the Hamilton County School Board Building, 2nd and Broad Streets, Chattanooga, Tennessee at which time the following appearances were entered:

T. G. PAPPAS, Bass, Berry & Sims, 27th Floor, First American Center, Nashville, Tennessee, 37237, appearing on behalf of Tennessee American Water Company.

WILLIAM C. CARRIGER, Strang, Fletcher, Carriger, Walker, Hodge & Smith, 400 Krystal Building, One Union Square, Chattanooga, Tennessee 37402, appearing in behalf of The Chattanooga Manufacturers Association Water Intervention Group.

KENNETH O. FRITZ, Special Counsel for Randall L. Nelson, City Attorney, 400 Pioneer Bank Building, Chattanooga, Tennessee, 37402, appearing in behalf of The City of Chattanooga, Tennessee, Intervenor.

JEANNE MORAN, Assistant General Counsel, Tennessee Public Service Commission, 460 James Robertson Parkway, Nashville, Tennessee 37219, appearing on behalf of the Commission staff (Staff).

At the beginning of the hearing in response to the Commission's inquiry as to preliminary matters, the Company's counsel introduced a Letter dated November 19, 1991 addressed to Paul Allen, Executive Director of the Commission that was filed with him on that date setting out the Company's compliance with Commission Rule 1220.4-1.05 as to Publication of Notice. This was identified and marked as Exhibit 1. The Company's counsel then stated that, as set out in the pre-hearing order, there were no unresolved issues between the Company and the Staff. That the

Company had reviewed the pre-filed testimony and exhibits of the Staff's witness, John L. Baugh, and that his testimony, conclusions and recommendations were consistent with the Company's testimony and proof that it had a revenue deficiency of approximately \$2,400,000 (\$2,398,813). He further stated that the Company had proposed and the Staff had agreed to adopt an overall return of 10.42%, using the Commission's methodology, found to be fair, just and reasonable in Docket Nos. U-87-7534 and 89-15388 as proposed by the Commission's economist Dr. Christopher Klein in the prior cases and agreed upon for this case.

The Company's counsel then stated that all other matters proposed by the Staff including Staff recommendations as to the rate design were not opposed by the Company and therefore the Company did not file rebuttal testimony to the testimony of the Staff's witnesses recommendations. These recommendations from the Staff include (a) increasing the proposed services activation charge from \$12.50 to \$15.00 for a new account where service exists and a new account service fee of \$25.00 where a new service must be installed; (b) increase the Company's bad check charge from \$12.50 to \$20.00; (c) increase the disconnect/reconnect fee from \$12.50 to \$15.00; and, (d) decrease the Company's proposed \$.21 per CCF charge on the customer's first four CCF to \$0.116 per CCF (\$0.37 per CCF for customers in Lookout Mountain).

Staff counsel then stated that the only remaining rate design issue not agreed upon was the Staff's recommendation as to the continuation of the special use tariff. The Staff's position is that when the special use tariff was adopted in Docket No. U-85-7338 it was for the purpose of stabilizing the revenues of the Company and at that time the special use tariff rates for the fourteen listed customers were designed to be revenue neutral. It was intended that the minimum bill volumes would be calculated in each subsequent rate case, although the order in that case did not so specify, and such re-calculation had not been done in the subsequent cases. The Staff proposed to eliminate the special use tariff that was now only used by two customers or in the alternative to restate the minimum bill volumes to reflect the volumes actually used during the prior twelve (12) month period.

Counsel for CMA stated that his clients did not oppose the Company's request but that they did take issue with the Staff's proposal as to the special use tariff and that rebuttal testimony had been filed by officials of the two companies that had adopted the special use tariff and that they would testify as to the economic impact the Staff proposals would have on their operations in Chattanooga. Counsel for the City of Chattanooga stated that the City endorsed the position of CMA.

Counsel for each party then moved that the pre-filed sworn testimony of their witness and their exhibits be admitted and received as if the questions were asked and answers given and exhibits produced. The Commission received such testimony, and

the exhibits were identified for the record. The testimony of the Company's witnesses, Richard T. Sullivan, Chris E. Jarrett, Dr. John L. O'Donnell, Edwin L. Oxley, J. L. Ware and Roy L. Ferrell, the Staff's witnesses, John L. Baugh and the witnesses of CMA, Glen Foreman and Les H. Wagner were entered as if orally presented.

The witnesses who were to be called to testify on the sole issue remaining to be adjudicated, the Staff's proposal as to the special use tariff, were then identified, John L. Baugh, Roy L. Ferrell, Glen Foreman and Les H. Wagner. They were duly sworn and counsel for the Staff, having the burden of proof or persuasion, presented its proposals and testimony in support thereof.

The testimony of the witnesses, both in support of and in opposition to the Staff's proposals concerning the special use tariffs was informative, well presented and assisted the Commission in its determination. The Staff witness, Baugh, explained the structure of the special use tariff that was filed by the Company in the 1985 rate case and adopted by the Commission in that docket. There are fourteen named customers listed in the special use tariff who can avail themselves of its provisions and they are all large volume users of water in the Chattanooga area. Only two customers, Buster Brown Apparel, Inc. and Seaboard Farms of Chattanooga, are currently availing themselves of this special use tariff. The volumetric factor in the special use tariff was based on 1985 data and has not been

changed since that date even though the Company has filed three rate cases since this tariff was first filed in 1985.

The Staff's two proposals, the elimination of the special use tariff or the increase of the volumetric factor using current data would result in the customers having practically the same increase in their overall water cost. The increase to these customers by the Staff proposals would be approximately \$24,000 per year for Buster Brown, Apparel, Inc. and approximately \$20,000 for Seaboard Farms of Chattanooga. This increase would be in addition to the approximately 10 1/2% increase on the Company's rates for all customers that has been agreed to by all parties as being just and reasonable. It was further developed in this testimony that the Commission has had a policy for a long period of time of approving and in fact encouraging utilities to provide special contracts for customers in order to encourage usage and retention of such large customers, to attract customers to a particular area, or to encourage customers to stay aligned with the utility furnishing the service. These public policy considerations not only encourage industrial development but are successful in helping to keep the residential customers' rates lower than they would be without the industrial or large customer usage.

The Company witness, Roy L. Ferrell, called by the Staff, stated that while he was with the Company in 1985 he was not a witness in the 1985 rate case. He stated that the special use tariff had a dual purpose, the stability of revenues and the

stability of customers. The Company had never proposed an adjustment of the volumetric component but that in every case the Company had adjusted the dollar amount, both in the monthly service charge and also as to the unit cost. He further testified that there were special use contracts in other jurisdictions served by water companies that were part of the American Water Works Company system. It was further developed from the testimony of Mr. Ferrell that the volumetric rate for these two customers provided for revenue over and above the cost of production.

CMA presented Glen Foreman, the general manager of Seaboard Farms who stated that his company was basically a producer and processor of poultry products employing approximately 1,000 people with a plant located in the downtown Chattanooga area. He testified that his company used 286 million gallons of water annually. It was the second largest customer of the Company and that the 1985 special use tariff permitted them to have an efficient operation and to cease seeking alternative sources of water. He testified that a new plant in Mayfield, Kentucky had its own wells and was a more efficient operation and had a capacity to increase production that could replace the Chattanooga plant production. He further testified that if the special use tariff were eliminated or changed that his company, by necessity, would have to seek alternatives. The plant last year operated at a loss of approximately \$100,000, and that the increase that would come about by this rate case and the

elimination or change of the special use tariff would cost his company approximately \$55,000 for the coming year.

CMA finally presented Les H. Wagner, Vice President, Secretary and Treasurer of Buster Brown Apparel, Inc. who testified that his company was founded in Chattanooga in 1904 and that in 1984 they were looking at their water consumption. Because of the proposed increase in rates they had investigated alternative sources of supply. That after the special use tariff was adopted their business has increased, in fact it has tripled. In his direct testimony he testified that Buster Brown Apparel, Inc. had approximately 860 employees in the Chattanooga facility and is a profitable operation.

The Commission then heard from the only public witness present, Mr. Ed Markum, who made several observations concerning the proposed service charges and other matters. He thought the time for the hearing at 1:30 p.m. would discourage working people from attending. Also that the owners of apartments where the tenants changed from time to time should not be required to pay a turn on fee each time a tenant left and the apartment had to be cleaned. He discussed summertime watering and garden meter tariffs and suggested that consideration should be given to eliminating or reducing the activation fees. He also commented concerning management techniques and Commission review of operations. The comments of Mr. Markum were appreciated, and the Chairman stated that a service hearing had been held on November 12, 1991 at Chattanooga in the evening so that people

could be heard at a convenient time and noted that only one person from the public attended that hearing. As to the issue involving the two tariff matters, the Commission stated that the Staff would look into these and see what could be done. The Chairman further stated that as to the planning processes of Tennessee American Water Company that the Commission was very aware of this Company's program, that it was a forward-thinking company, and that the Company was concerned not only with its own profitability but also with providing affordable rates and a safe supply of pure water for its customers. The Chairman further stated that the Commission now had a Staff person who does management audits and that there were specialists on the Staff who looked into all management issues. Mr. Markum was commended for taking the time to appear and share his thoughts with the Commission. The Chairman stated that the Commission's decision would be announced at the next regular deliberative session in Nashville, Tennessee and the hearing was adjourned.

**CRITERIA FOR ESTABLISHING
JUST AND REASONABLE RATES**

The Commission has traditionally considered petitions such as this one, filed pursuant to T.C.A. § 65-5-203, in light of the following considerations:

1. The investment or rate base upon which the utility should be permitted to earn a fair rate of return;
2. The proper level of revenues for the utility;
3. The proper level of expenses for the utility; and

4. The rate of return the utility should earn.

FINDINGS AND CONCLUSIONS

The following findings and conclusions as to the above criteria were agreed to by the Company and the Staff in this action and are as herein set out. The Intervenor stated they were not opposing the Company and Staff's resolution of these issues but they were opposing the Staff's proposals as to the special use tariffs.

TEST PERIOD

The objective of selecting a test period is to obtain financial data and adjust it as necessary to reflect the inter-relationship of revenues, expenses and investment expected to occur in the immediate future. In this case the Company proposed the twelve months ended March 31, 1991 as a proper test period and has made adjustments through December 31, 1992. The Staff accepted this test period since it provides a proper analysis of the results of operations for the first year any new rates would be in effect.

RATE BASE

The Company developed an attrition year rate base of \$65,524,904. The Staff agreed, for the purpose of this proceeding, that the rate base developed by the Company reflected adjustments that were likely to occur during the attrition year and therefore the rate base as developed by the Company is acceptable to the Staff. In Docket No. 89-15388 the Staff recommended and the Company had agreed to conduct a depreciation

study for the purpose of establishing new depreciation rates and to present the results to the Commission within one year. This was done by the Company filing a petition, Docket No. 91-00183 for approval of the study and the depreciation rates it developed. The Commission by its order in Docket No. 91-00183 dated July 18, 1991 approved the new depreciation rates that are used in this case..

REVENUES AND EXPENSES

The Company and Staff have agreed that for the purposes of this case that the net operating income at present rates of the Company, for the test period was \$5,371,240. They have further agreed that the revenue deficiency for the attrition year is \$2,398,813 based upon a fair rate of return of 10.42%. The calculation of the revenue deficiency and the components used are found in Staff Exhibit, Schedule 1 entitled Results of Operations for the Twelve Months Ending December 31, 1992, which is as follows:

TENNESSEE-AMERICAN WATER COMPANY
Results of Operations
for the Twelve Months Ending December 31, 1992

	<u>Amount</u>
1 Rate Base	\$65,524,904
2 Operating Income at Present Rates	5,371,240
3 Earned Rate of Return	8.20%
4 Fair Rate of Return	10.42%
5 Required Operating Income	6,827,695
6 Operating Income Deficiency	1,456,455
7 Gross Revenue Conversion Factor	<u>1.647022</u>
8 Revenue Deficiency	<u>\$ 2,398,813</u>

FAIR RATE OF RETURN

In a contested case a finding on fair rate of return is one of the most subjective determinations that a Commission must make in arriving at a decision concerning the proper level of rates a Company charges its customers. The decision on a rate of return must be given in-depth analysis and consideration because of the impact that a small change in rate of return has on revenue requirements and the rates that customers must pay. This consideration must be weighed in conjunction with the controlling legal standards established by statute and case law. The Commission has the obligation to make this determination based upon the controlling legal standard laid down in the landmark Bluefield and Hope cases. In the Bluefield case the Supreme Court stated:

"A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional rights to profits such as are realized or anticipated in highly profitable or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility, and should be adequate, under efficient and economical management to maintain and support its credit and able it to raise the money necessary for the proper discharge of its public duties."

Bluefield Water Works and Improvement Company v. Public Service Commission of the State of West Virginia, 262 U.S. 679, 692-93 (1923).

Later, in the Hope case, the Supreme Court refined these guidelines, holding that:

"From the investor or company points of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the return on the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise so as to maintain its credit and to attract capital."

Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591, 603 (1944).

In this case the Company and the Staff have agreed that an overall return of 10.42% as presented by the Company and as shown in the following table is fair and reasonable and meets the tests of the Bluefield and Hope cases. The intervenors did not disagree with this stipulation. This weighted cost of capital has an assigned cost rate for the common equity component of the capital structure of 11.84% which rate approximates the current authorized return for equity in the Company's last rate case, Docket No. U-89-15388. The capital structure and the weighted cost of each component for the Company as agreed to by the Company and the Staff for this case and this case only is as shown on Jerry Ware Exhibit 3, Schedule 1, which is as follows:

RATE OF RETURN SUMMARY

<u>CLASS OF CAPITAL</u>	<u>REFERENCE</u>	<u>AMOUNT</u>	<u>PERCENT OF TOTAL</u>	<u>COST RATE</u>	<u>WEIGHTED COST RATE</u>
Long Term Debt	Schedule 2	\$36,425.109	57.58%	9.81%	5.65%
Short Term Debt			0.00%		0.00%
Preferred Stock	Schedule 3	3,282.670	5.19%	6.95%	0.36%
Common Equity		23,547.898	37.23%	11.84%	4.41%
		<u>\$63,255.677</u>	<u>100.00%</u>		<u>10.42%</u>

It is agreed by the Company and the Staff that the overall rate of return shown above would provide the Company a fair, just and reasonable rate of return. Therefore, the Company needs additional gross annual revenues in the amount of \$2,398,813.

RATE DESIGN

The Company filed tariffs with its petition designed to produce an increase in annual revenues of \$2,398,813. Other than the special use tariff, the Staff had recommended four (4) changes to the filed tariffs and the Company did not oppose the changes. It is agreed that as part of the tariffs to be filed by the Company the following will be included: (a) increasing the proposed services activation charge from \$12.50 to \$15.00 for a new account where service exists and a new account service fee of \$25.00 where a new service must be installed; (b) increase the Company's bad check charge from \$12.50 to \$20.00; (c) increase the disconnect/reconnect fee from \$12.50 to \$15.00; and, (d) decrease the Company's proposed \$.21 per CCF charge on the customer's first four CCF to \$0.132 per CCF (\$0.386 per CCF for customers in Lookout Mountain). It has also been agreed that the remainder of the increased revenues shall be derived by an across the board equal increase for all classes of service.

CONCLUSION

This matter was further considered at the Commission's deliberative session on Tuesday, December 3, 1991 in Nashville,

Tennessee. After considering the pretrial testimony, the exhibits, the testimony of the witnesses as to the disputed issue, the pre-conference order and the stipulations announced at the November 20, 1991 hearing in Chattanooga, the Commission finds and concludes that: (a) the Company is entitled to place rates in effect that will permit it to earn its revenue deficiency of \$2,398,813.00 for the attrition year; (b) the overall return of 10.42% and the capital structure of the Company as agreed upon by the Staff is fair, just, reasonable and complies with the Hope and Bluefield cases; (c) the special use tariff as filed by the Company should remain in effect because it is consistent with our public policy to encourage businesses and industry to contribute to the economic welfare of this state; (d) the three Staff proposals as to the activation charge, the bad check charge, and the disconnect/reconnect fees are proper; and (e) the Company should establish for all customers a rate for the first four CCF's of \$0.132 per CCF (\$0.386 per CCF for customers in Lookout Mountain). All of these changes and additions are fair, just and reasonable and in the best interests of the Company and its customers and therefore they should all be approved by this Commission and placed into effect as soon as possible.

IT IS THEREFORE ORDERED:

1. That the tariffs heretofore filed by the Company on

June 28, 1991 with an effective date of July 29, 1991, which have been suspended by two orders of the Commission are hereby denied.

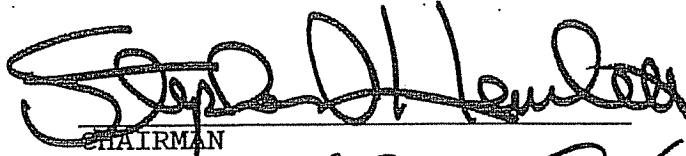
2. That the Order of the Administrative Judge dated November 20, 1991 is hereby adopted and ratified by the Commission and by reference is made a part of this order.

3. That the Company shall file tariffs in accordance with this order that are designed to produce additional gross annual revenues of approximately \$2,398,813.00. The tariffs shall contain the special use tariff, as filed by the Company on July 29, 1991 and shall incorporate the three changes proposed by the Staff and agreed to by the Company and the change in CCF rates for the first four CCF as set out herein. The Company having furnished the Staff a copy of the proposed tariffs for their review and since they have been approved, the tariffs shall become effective the date of this Order.

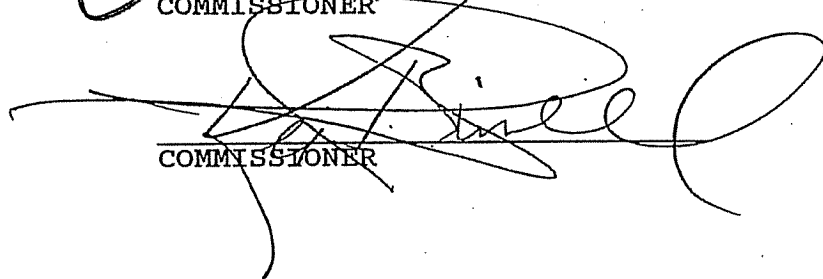
4. That any party aggrieved with the Commission's decision in this matter may file a Petition for Reconsideration with the Commission within ten (10) days from and after the date of this Order.

5. That any party aggrieved with the Commission's decision in this matter has the right of judicial review by filing a Petition for Review in the Tennessee Court of Appeals, Middle

Section, within thirty (30) days from and after the date of this
Order.


CHAIRMAN


COMMISSIONER


COMMISSIONER

ATTEST:


EXECUTIVE DIRECTOR

Tennessee Public Service Commission
 Company: Tennessee-American Water Company
 Case No:

Overall Financial Summary

Test Year: Twelve Months Ended: December 31, 1995
 Exhibit No. 1, Schedule 1
 Page 1 of 1

Line No.	Description	Reference to Supporting Exhibit	Proposed Test Year
1			
2			
3			
4			
5			
6			
7			
8	Rate Base	Exhibit 1, Schedule 2	\$75,485,098
9			
10	Operating Income at Attrition Year Present Rates	Exhibit 2, Schedule 1	\$6,012,617
11			
12	Earned Rate of Return		7.97%
13			
14	Rate of Return	Exhibit 3, Schedule 1	9.881%
15			
16	Required Operating Income		\$7,458,683
17			
18	Operating Income, Deficiency		\$1,446,066
19			
20	Gross Revenue Deficiency Factor		1.69352154
21			
22	Revenue Deficiency		\$2,448,943
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Tennessee Public Service Commission
 Company: Tennessee-American Water Company
 Case No:

Computation of Attrition Year Rate Base

Test Year: Twelve Months Ended: December 31, 1995
 Exhibit No. 1, Schedule 2
 Page 1 of 3

Line No.	Additions	Footnote Reference	Per Books Rate Base @ 12/31/95	Adjustments	Rate Base at Mid-Point of Attrition Year
1	Utility Plant In Service (UPIS)	(1)	\$106,387,880	\$9,693,238	\$116,081,118
2	Construction Work in Progress	(2)	928,882	(401,882)	\$527,000
3	Utility Plant Capital Lease		725,000		725,000
4	Limited-Term Utility Plant - Net	(3)	17,572	(17,792)	(220)
5	Working Capital		323,385	0	323,385
6	Total Additions		\$108,382,719	\$9,273,564	\$117,656,283
7	Deductions				
8	Accumulated Provision for Depreciation UPIS	(4)	\$25,494,364	\$3,160,547	\$28,654,911
9	Accumulated Amortization of Utility Plant Capital Lease	(5)	637,396	48,336	685,732
10	Deferred Income Taxes	(6)	5,913,678	1,193,421	7,107,099
11	Customer Advances for Construction	(7)	2,502,205	(174,606)	2,327,599
12	Contributions in Aid of Construction	(8)	3,070,868	222,623	3,293,491
13	Unamortized Investment Tax Credit	(9)	74,886	(4,128)	70,758
14	Utility Plant Acquisition Adjustment	(10)	91,905	(60,310)	31,595
15	Total Deductions		\$37,785,302	\$4,385,863	\$42,171,165
16	Rate Base		\$70,597,417	\$4,887,681	\$75,485,098

Tennessee Public Service Commission
 Company: Tennessee-American Water Company
 Case No:

Attrition Year Rate Base
 Footnotes

Test Year: Twelve Months Ended: December 31, 1995
 Exhibit No. 1, Schedule 2
 Page 2 of 3

Line No.	FOOTNOTE REFERENCE	DESCRIPTION	AMOUNT
1			
2			
3			
4			
5			
6			
7	(1)	Net Additions to UPIS through April 30, 1997	\$9,693,238
8	(2)	Adjustment to CWIP through April 30, 1997	(401,882)
9			
10			
11			
12			
13			
14	(3)	Adjustment to Limited -Term Utility Plant - Net	(17,792)
15	(4)	Adjustment to Accumulated Provision for Depreciation of UPIS	3,160,547
16	(5)	Adjustment to Accumulated Amortization of Utility Plant - Capital Lease	48,336
17	(6)	Adjustment to Deferred Income Taxes	1,193,421
18			
19			
20	(7)	Change in Customer Advances	(174,606)
21			
22	(8)	Change in Contributions in Aid of Construction	222,823
23			
24	(9)	Change in Unamortized Investment Tax Credit	(4,128)
25			
26	(10)	Adjustment to Utility Plant Acquisition Adjustment	(60,310)
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Tennessee Public Service Commission
 Company: Tennessee-American Water Company
 Case No:

Net Additions to Utility Plant in Service
 From End of Test Year to Mid-Point of Attrition Year

Line No.	Account Number	Account Description	1/1/96 to 12/31/96 Additions	1/1/96 to 4/30/97 Additions	1/1/96 to 12/31/96 Retirement	1/1/97 to 4/30/97 Retirement	Net Additions to Utility Plant in Service 1/1/96-4/30/97
1	303	Land & Land Rights	\$23,700	\$0	\$0	\$0	\$23,700
2	304.1	Other Water Source Plant	0	0	0	0	0
3	304.22	Pumping Structures	9,500	0	0	0	9,500
4	304.31	Water Treatment Structures	11,000	0	0	0	11,000
5	304.32	Water Treatment Structures - Painting	0	0	0	0	0
6	304.4	T & D Structures	0	0	0	0	0
7	304.51	Office Structures	0	0	0	0	0
8	304.52	Stores, Shop & Garage Equipment	12,000	12,000	400	2,500	21,100
9	304.53	Miscellaneous Structures	0	0	0	0	0
10	306.2	Lake, Rivers & Other Intakes	0	0	0	0	0
11	310.2	Power Generation Equipment	0	0	0	0	0
12	311.22	Electric Pumping Equipment	660,000	0	23,460	0	636,540
13	311.23	Diesel Pumping Equipment	0	0	0	0	0
14	311.27	Other Pumping Equipment	0	0	0	0	0
15	320.31	Water Treatment Equipment	363,300	2,232,306	0	0	2,595,606
16	320.33	Granular Activated Carbon	0	0	0	0	0
17	330.41	T & D Reservoirs & Standpipes	1,570,000	0	24,500	0	1,545,500
18	330.42	T & D Reservoirs & Standpipes - Painting	847,932	0	160,904	0	687,028
19	331.41	T & D Mains - Mains (4" or Less)	43,010	4,825	19,144	3,769	24,922
20	331.42	T & D Mains - Mains (6" - 10")	1,406,859	203,839	7,880	1,517	1,601,301
21	331.43	T & D Mains - Mains (12" or More)	499,531	9,336	13,367	714	494,786
22	333.4	Services	469,302	140,000	25,772	5,096	578,434
23	334.42	Meters - Metal Case / Old Style	0	0	0	0	0
24	334.43	Meters - Plastic Case	0	0	0	0	0
25	334.44	Meters - Metal Case / New Style	271,000	108,100	94,416	2,800	281,884
26	334.45	Meter Installations	245,540	82,000	9,844	2,282	315,414
27	335.4	Hydrants	161,000	29,000	14,400	3,300	172,300
28	340.51	Office Furniture	0	0	0	0	0
29	340.53	Computer & Peripheral Equipment	27,800	112,516	26,092	22,977	91,247
30	340.54	Other Office Equipment	2,050	4,000	0	0	6,050
31	340.55	Computer Software	191,700	208,178	0	10,000	389,878
32	341.52	Light Trucks	100,000	80,000	65,589	52,742	81,669
33	341.53	Heavy Trucks	117,000	0	75,492	0	41,508
34	341.54	Automobiles	40,000	14,000	21,259	10,968	21,785
35	341.55	Transportation - Other	0	0	0	0	0
36	342.5	Stores Equipment	3,400	0	0	0	3,400
37	343.5	Tools, Shop & Garage Equipment	64,700	13,550	33,649	6,000	38,601
38	344.5	Laboratory Equipment	24,900	0	1,447	0	23,453
39	345.5	Power Operated Equipment	29,100	0	16,168	0	12,932
40	346.51	Communication Equipment	5,000	0	2,500	0	2,500
41	346.51	Communication Equipment - Telephone	0	0	0	0	0
42	347.51	Miscellaneous Equipment	1,200	0	0	0	1,200
43		Total Plant in Service	\$7,200,524	\$3,253,650	\$636,203	\$124,653	\$9,693,238

Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 1, Schedule 3
Page 1 of 6

Computation of Working Capital

Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:

Line No.	Item	Amount
1	Average Cash	\$229,741
2		
3	Materials & Supplies	271,690
4		
5	Deferred Regulatory Expenses	162,390
6		
7	Unamortized Debt Expense	279,222
8		
9	Other Deferred Debits	453,036
10		
11	Lead - Lag Study	383,000
12		
13	Total	<u>1,779,079</u>
14		
15	Less:	
16		
17	Customer Deposits	117,683
18		
19	Incidental Collections	<u>1,338,011</u>
20		
21	Total	<u>1,455,694</u>
22		
23	Working Capital Requirement	<u>\$323,385</u>
24		
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Computation of Working Capital
Lead/Lag Study

Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:

Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 1, Schedule 3
Page 2 of 6

Line No.	Description	Days	Amount
1			
2			
3			
4	Net Operating Funds		<u>\$28,437,145</u>
5			
6	Average Daily Operating Funds		\$77,910
7			
8	Composite Average Days Interval Between:		
9			
10	(A) Date Service Furnished and Date Collections Deposited	42.25	
11			
12	(B) Date Expenses Incurred and Date of Payment	37.34	
13			
14	(C) Net Interval	<u>4.91</u>	
15			
16	Operating Funds Advanced		382,538
17			
18	Lead/Lag Study Capital		<u>\$382,538</u>
19			
20	Use		<u>\$383,000</u>
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Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 1, Schedule 3
Page 3 of 6

are Incurred and Date of Payment

Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:

Line No.	Description	Amount	Post Payment or (Lead) Days	Dollar Days
1	Payrolls Charged to Expense - Hourly	\$4,131,673	5.50	\$22,724,202
2	Payrolls Charged to Expense - Salary	91,371	7.60	694,420
3	Fuel and Power	1,301,826	50.65	65,937,487
4	Chemicals	720,448	28.27	20,367,065
5	Waste Disposal	116,361	31.23	3,633,964
6	AWWS Charges	956,944	(4.46)	(4,267,970)
7	Group Insurance	1,578,027	(1.31)	(2,067,215)
8	Pensions	0	0.00	0
9	Insurance Other than Group	331,721	(21.72)	(7,204,980)
10	Rents	26,951	9.24	249,027
11	Telephone Expense	117,356	(2.73)	(320,367)
12	Postage Expense	256,172	24.77	6,346,380
13	Amortizations	0	0.00	0
14	Stock E	70,823	23.77	1,683,463
15				
16				
17				
18				
19				
20	Other Operating and Maintenance Expenses	4,698,372	20.51	96,363,610
21	Total O & M Expenses	14,398,047		
22				
23	Depreciation and Amortization	3,107,726	0.00	0
24	Taxes, Other than Income			
25	Payroll	462,977	10.61	4,912,186
26	Other	2,664,132	174.52	464,844,317
27	FIT-Current	990,409	37.00	36,845,133
28	SIT-Current	180,622	58.63	10,589,868
29	Deferred Taxes	485,108	0.00	0
30	Interest Expense	3,898,505	87.97	325,181,545
31	Preferred Dividends	171,351	89.48	15,332,487
32	Net Earnings	2,280,270	0.00	0
33	Net Operating Funds	\$28,437,145		\$1,061,743,592
34				
35				
36	Average Days Interval between Date Expenses are Incurred and Date of Payment		37.34	
37				
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Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 1, Schedule 3
Page 4 of 8

**Average Days Interval between Number of Days
From Date Services are Furnished to Date Collections are Received**

Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:

Line No.	Revenues Amount	Median Service Days	Dollar Days
1			
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Monthly	\$26,429,766	15.21	\$401,986,738
Quarterly	903,379	-45.63	(41,221,198)
Total	<u>\$27,333,145</u>		<u>\$360,775,540</u>
Average Median Service Days		13.20	
Number of Days between the Reading Date and the Date the Bills are Mailed		4.62	
Number of Days between the Reading Date and the Date the Bills are Mailed		24.43	
Total Average Days' Interval between Number of Days from Date Services are Furnished to Date Collections are Received		<u>42.25</u>	

Notes: private fire Quarterly is billed in advance
All monthly customers are billed in arrears

Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 1, Schedule 3
Page 5 of 6

Computation of Average Materials and Supplies Paid

Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:

Line No.	Date	End of Month	Amount
1	1/95		\$355,357
2	2/95		402,247
3	3/95		428,575
4	4/95		356,193
5	5/95		360,808
6	6/95		355,353
7	7/95		336,129
8	8/95		353,244
9	9/95		344,802
10	10/95		311,587
11	11/95		315,990
12	12/95		288,010
13	Total		<u>\$4,208,295</u>
14			
15			
16			
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Average Balance			<u>\$350,691</u>

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Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 1, Schedule 3
Page 6 of 6

Computation of Average Materials and Supplies Unpaid

Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:

Line No.	End of Month	
	Date	Amount
1	1/95	\$79,630
2	2/95	70,280
3	3/95	89,170
4	4/95	49,748
5	5/95	89,329
6	6/95	115,872
7	7/95	73,725
8	8/95	73,871
9	9/95	88,936
10	10/95	62,726
11	11/95	106,194
12	12/95	48,527
13	Total	<u>\$948,008</u>
14	Average Balance	<u>\$79,001</u>

Line No.	Description	Adjustment Shown on Schedule No.	Per Books 12 Months Ended 12/31/95	Test Year Adjustments Present Rates	Normalized Test Year	Attrition Year Adjustments	Attrition Year at Present Rates	Adjustments for Proposed Rates	Attrition Year at Proposed Rates
1	Operating Revenues	2	\$28,287,448	(\$184,137)	\$28,103,310	\$156,358	\$28,259,668	\$2,448,943	\$30,708,611
2									
3	Operation and Maintenance Expenses	3	14,154,251	35,734	14,189,985	166,095	14,356,080	13,959	14,370,039
4	Depreciation and Amortization	4	2,541,841	98,127	2,639,968	467,958	3,107,926	0	3,107,926
5	Taxes, Other than Income	5	3,182,755	(125,264)	3,057,491	69,617	3,127,108	68,265	3,195,373
6	Income Taxes	6	2,019,426	(64,965)	1,954,461	(298,324)	1,656,137	920,654	2,576,791
7									
8	Total Operating Expenses		21,898,073	(56,368)	21,841,705	405,346	22,247,051	1,002,878	23,249,929
9									
10	Utility Operating Income		\$6,389,375	(\$127,769)	\$6,261,605	(\$248,988)	\$6,012,617	\$1,446,065	\$7,458,682
11									
12	Other Income								
13	AFUDC		38,860	(38,860)	0	0	0	0	0
14	Income from M & J and Contract Work		8,275	(8,275)	0	0	0	0	0
15	Interest Income		31,818	(31,818)	0	0	0	0	0
16	Gain/Loss on Sale of Property		22,573	(22,573)	0	0	0	0	0
17									
18	Total Other Income		101,526	(101,526)	0	0	0	0	0
19									
20	Other Deductions								
21	Miscellaneous Amortization		35,843	0	35,843	0	35,843	0	35,843
22	Miscellaneous Other Deductions		39,006	(39,006)	0	0	0	0	0
23									
24	Total Other Deductions		74,849	(39,006)	35,843	0	35,843	0	35,843
25									
26	Taxes Applicable to Other Income and Deductions								
27	General Taxes		0	0	0	0	0	0	0
28	State Income Taxes		1,420	(1,420)	0	0	0	0	0
29	Federal Income Taxes		7,784	(7,784)	0	0	0	0	0
30									
31	Total Taxes Applicable to Other Income and Deductions		9,204	(9,204)	0	0	0	0	0
32									
33	Income before Interest Charges		\$6,408,848	(\$181,085)	\$6,225,763	(\$248,988)	\$5,976,775	\$1,446,065	\$7,422,840
34									
35	Interest Charges								
36	Interest on Long-Term Debt		2,693,240	0	2,893,240	631,914	3,525,154	0	3,525,154
37	Interest on Long-Term Capital Lease		22,622	(22,622)	0	0	0	0	0
38	Amortization of Debt and Discount Expense		39,395	(39,395)	0	0	0	0	0
39	Interest on Short-Term Debt		177,583	(177,583)	0	0	0	0	0
40	Other Interest		4,598	(4,598)	0	0	0	0	0
41	Allowance for Borrowed Funds Used During Construction		(25,232)	25,232	0	0	0	0	0
42	Total Interest Charges		3,112,206	(218,966)	2,893,240	631,914	3,525,154	0	3,525,154
43									
44	Net Income		\$3,294,642	\$37,881	\$3,332,523	(\$890,902)	\$2,441,621	\$1,446,065	\$3,887,686
45									

35

36

**Operating Revenues Per Books for the Test Year and
for the Attrition Year under both Present and Proposed Rates**

Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 2, Schedule 2
Page 1 of 1

Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:

Line No.	Description	Per Books 12 Months Ended 12/31/95	Test Year Adjustments Present Rates	Normalized Test Year	Attrition Year Adjustments	Attrition Year at Present Rates	Adjustments for Proposed Rates	Attrition Year at Proposed Rates
1	Sales of Water							
2								
3								
4								
5	Metered Sales to General Customers							
6	Residential	\$11,468,200	(\$103,933)	\$11,364,267	\$75,529	\$11,439,796	\$1,014,209	\$12,454,005
7								
8	Commercial	7,495,507	(85,960)	7,409,547	34,979	7,444,526	660,004	8,104,530
9								
10	Industrial	3,990,778	(61,179)	3,929,599	0	3,929,599	348,383	4,277,982
11								
12	Other Public Authorities	1,990,071	41,359	2,031,430	5,403	2,036,833	180,578	2,217,411
13								
14	Sales for Resale	350,107	(1,526)	348,581	0	348,581	30,904	379,485
15								
16	Private Fire Service	880,079	12,916	892,995	10,384	903,379	80,090	983,469
17								
18	Public Fire Service	1,188,528	15,833	1,204,361	26,069	1,230,430	109,085	1,339,515
19								
20	Total Sales of Water	27,363,270	(182,489)	27,180,781	152,364	27,333,145	2,423,253	29,756,398
21								
22	Other Operating Revenues							
23								
24	Activity / New Service Fees	217,979	0	217,979	0	217,979	0	217,979
25								
26	Late Payment Penalty	290,084	(1,935)	288,149	1,615	289,764	25,689	315,453
27								
28	Rents from Water Property	1,600	0	1,600	0	1,600	0	1,600
29								
30	Sewer Billing Revenues	287,337	287	287,624	2,379	290,003	0	290,003
31								
32	Miscellaneous	4,298	0	4,298	0	4,298	0	4,298
33								
34	Reconnection Fee	122,880	0	122,880	0	122,880	0	122,880
35								
36	Total Other Operating Revenues	924,177	(1,648)	922,529	3,994	926,523	25,689	952,212
37								
38								
39								
40	Total Operating Revenues	\$28,287,448	(\$184,137)	\$28,103,310	\$156,358	\$28,259,668	\$2,448,942	\$30,708,610
41								
42								
43								
44								
45								

Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 2, Schedule 3
Page 1 of 1

Summary of Adjustments to Operation and Maintenance Expenses

Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:

Line No.	Adjustment Number Reference	Description	Per Books 12 Months Ended 12/31/95	Test Year Adjustments Present Rates	Normalized Test Year	Attrition Year Adjustments	Attrition Year at Present Rates	Adjustments for Proposed Rates	Attrition Year at Proposed Rates
1	1	Operation and Maintenance Labor	\$5,749,808	\$165,915	\$5,905,723	\$72,935	\$5,978,658	\$0	\$5,978,658
2	2	Purchased Water	7,002	0	7,002	0	7,002	0	7,002
3	3	Fuel and Power	1,310,132	(11,260)	1,298,872	2,954	1,301,826	0	1,301,826
4	4	Chemicals	733,334	(38,412)	694,922	25,526	720,448	0	720,448
5	5	Waste Disposal	116,361	0	116,361	0	116,361	0	116,361
6	6	Service Company Charges	988,632	0	988,632	86,369	1,075,001	0	1,075,001
7	7	Group Insurance	1,644,233	(23,708)	1,620,525	(42,498)	1,578,027	0	1,578,027
8	8	Pensions	377,364	0	377,364	(377,364)	0	0	0
9	9	Regulatory Expense	63,955	0	63,955	134,176	198,131	0	198,131
10	10	Insurance Other than Group	325,867	0	325,867	5,854	331,721	0	331,721
11	11	Customer Accounting	501,445	(13,355)	488,090	23,020	511,110	0	511,110
12	12	Uncollectible Expense	132,120	(1,040)	131,080	868	131,948	13,859	145,907
13	13	Rents	26,951	0	26,951	0	26,951	0	26,951
14	14	General Office Expense	224,499	0	224,499	8,926	233,425	0	233,425
15	15	Miscellaneous Expense	1,277,812	(28,298)	1,249,514	180,068	1,429,582	0	1,429,582
16	16	Other Maintenance Expense	674,736	53,836	728,572	29,284	757,856	0	757,856
17	17	Interest on Customer Deposits	0	6,148	6,148	913	7,061	0	7,061
18	18	AFUDC	0	(64,092)	(64,092)	15,064	(49,028)	0	(49,028)
Total Operation and Maintenance Expenses			\$14,154,251	\$35,734	\$14,189,985	\$166,095	\$14,356,080	\$13,959	\$14,370,039

Service Company Charges represent Management Fees and Customer Billing - Computer

Summary of Adjustments to Depreciation and Amortization Expenses

Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:

Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 2, Schedule 4
Page 1 of 2

Line No.	Adjustment Number Reference	Description	Per Books 12 Months Ended 12/31/95	Test Year Adjustments Present Rates	Normalized Test Year	Attrition Year at Present Rates	Adjustments for Proposed Rates	Attrition Year at Proposed Rates
1	1	Depreciation Expense	\$2,609,696	\$98,127	\$2,707,723	\$3,133,412	\$0	\$3,133,412
2	2	Amortization of Utility Plant Acquisition Adjustment	(59,054)	0	(59,054)	(15,316)	0	(15,316)
3	3	Amortization of Utility Capital Lease	36,250	0	36,250	36,250	0	36,250
4	4	Amortization of Leased Alteration Expense	13,345	0	13,345	12,876	0	12,876
5	5	Amortization of Accumulated Depreciation on CIAC	(59,496)	0	(59,496)	(59,496)	0	(59,496)
			<u>\$2,541,641</u>	<u>\$98,127</u>	<u>\$2,639,768</u>	<u>\$3,107,726</u>	<u>\$0</u>	<u>\$3,107,726</u>

Normalized Attrition
\$100,140 \$168,843

Book Depreciation on Tank Painting

43
44
45

For Utility Plant in Service

Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 2, Schedule 4
Page 2 of 2

Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:

Line No.	Account Number	Account Description	Depreciable Property at 12/31/95	Normalized Test Year Depreciation Expense	ADDITIONS	RETIREMENTS	Depreciable Property at Mid-Point of Attilion Year	Depreciation Rate	Attilion Year Expense
1	303.99	Comprehensive Planning Study	\$152,569	30,514	0	0	\$152,569	20.00%	\$30,514
2	304.22	Pumping Structures	872,274	33,670	9,500	0	881,774	3.86%	34,038
3	304.31	Water Treatment Structures	1,676,791	76,629	11,000	0	1,687,791	4.57%	77,132
4	304.32	Water Treatment Structures - Painting	463,018	46,302	0	0	463,018	10.00%	46,302
5	304.4	T & D Structures	477,977	16,777	0	0	477,977	3.51%	16,777
6	304.51	Office Structures	65,984	2,626	0	0	65,984	3.98%	2,626
7	304.52	Stores, Shop & Garage Equipment	251,876	11,712	24,000	2,900	272,978	4.85%	12,693
8	304.53	Miscellaneous Structures	366,162	20,652	0	0	366,162	5.64%	20,652
9	305.2	Lake, Rivers & Other Intakes	234,002	7,958	0	0	234,002	3.40%	7,956
10	310.2	Power Generation Equipment	222,196	7,644	0	0	222,196	3.44%	7,644
11	311.22	Electric Pumping Equipment	3,116,432	53,914	860,000	23,460	3,752,972	1.73%	64,926
12	311.23	Diesel Pumping Equipment	119,296	2,350	0	0	119,296	1.97%	2,350
13	311.27	Other Pumping Equipment	2,164	85	0	0	2,164	3.94%	85
14	320.31	Water Treatment Equipment	8,232,134	351,512	2,595,606	0	10,827,740	4.27%	462,344
15	320.33	Granular Activated Carbon	589,751	214,787	0	0	589,751	36.42%	214,787
16	330.41	T & D Reservoirs & Standpipes	2,116,669	38,100	1,570,000	24,500	3,682,169	1.80%	65,919
17	330.42	T & D Reservoirs & Standpipes - Painting	536,381	53,838	847,932	160,904	1,225,409	10.00%	122,541
18	331.41	T & D Mains - Mains (4" or Less)	8,653,596	140,188	47,835	22,913	8,678,518	1.62%	140,592
19	331.42	T & D Mains - Mains (6" - 10")	35,369,761	481,029	1,810,698	9,397	36,971,062	1.36%	502,806
20	331.43	T & D Mains - Mains (12" or More)	16,532,821	234,766	508,867	14,081	17,027,607	1.42%	241,792
21	333.4	Services	10,080,375	228,833	609,302	30,868	10,858,809	2.28%	243,021
22	334.42	Meters - Metal Case / Old Style	1,148,533	28,139	0	0	1,148,533	2.45%	28,139
23	334.43	Meters - Plastic Case	110,883	17,021	0	0	110,883	15.35%	17,021
24	334.44	Meters - Metal Case / New Style	1,089,803	10,680	379,100	87,216	1,371,687	0.98%	13,443
25	334.45	Meier Installations	3,918,813	64,269	327,540	12,126	4,234,227	1.64%	69,441
26	335.4	Hydrants	4,708,714	104,018	180,000	17,700	4,879,014	2.21%	107,826
27	340.51	Office Furniture	407,627	11,128	0	0	407,627	2.73%	11,128
28	340.53	Computer & Peripheral Equipment	1,053,642	167,529	140,316	49,069	1,144,889	15.90%	182,037
29	340.54	Other Office Equipment	154,279	6,279	6,050	0	160,329	4.07%	6,525
30	340.55	Computer Software	149,864	47,582	399,878	10,000	539,742	31.75%	171,368
31	341.52	Light Trucks	870,897	81,516	180,000	118,331	932,566	9.36%	87,288
32	341.53	Heavy Trucks	508,987	50,848	117,000	75,492	550,495	9.99%	54,994
33	341.54	Automobiles	163,617	17,245	54,000	32,215	185,402	10.54%	19,541
34	341.55	Transportation - Other	15,767	110	0	0	15,767	0.70%	110
35	342.5	Stores Equipment	43,392	2,161	3,400	0	46,792	4.88%	2,330
36	343.5	Tools, Shop & Garage Equipment	434,945	16,745	78,250	39,649	473,546	3.85%	18,232
37	344.5	Laboratory Equipment	243,508	27,078	24,900	1,447	266,961	11.12%	29,686
38	345.5	Power Operated Equipment	253,934	23,387	29,100	16,168	266,866	9.21%	24,578
39	346.51	Communication Equipment	289,876	12,842	5,000	2,500	292,378	4.43%	12,952
40	346.53	Communication Equipment - Telephone	129,094	19,248	0	0	129,094	14.91%	19,248
41	347.51	Miscellaneous Equipment	260,647	7,533	1,200	0	261,847	2.89%	7,567
42		Amortization of CIAC		(62,519)					(67,537)
43									
44									
45									
Total Plant in Service			\$106,089,051	\$2,707,723	\$10,430,474	\$760,936	\$116,758,589		\$3,139,412

Tennessee Public Service Commission
 Company: Tennessee-American Water Company
 Case No:

Summary of Adjustments to Taxes Other than Income

Test Year: Twelve Months Ended: December 31, 1995
 Exhibit No. 2, Schedule 5
 Page 1 of 1

Line No.	Adjustment Number Reference	Description	Per Books 12 Months Ended 12/31/95	Test Year Adjustments Present Rates	Normalized Test Year	Attrition Year Adjustments	Attrition Year at Present Rates	Adjustments for Proposed Rates	Attrition Year at Proposed Rates
1	1	Property Taxes	\$2,089,667	(\$137,659)	\$1,952,008	\$42,829	\$1,994,837	\$0	\$1,994,837
2	2	Other General Taxes	646,655	0	646,655	22,640	669,295	68,265	737,560
3	3	F.U.T.A. Taxes	8,423	(197)	8,226	(166)	8,060	0	8,060
4	4	F. I. C. A. Taxes	435,905	10,937	446,842	4,389	451,231	0	451,231
5	5	S.U.T.A. Taxes	2,105	1,655	3,760	(75)	3,685	0	3,685
13			\$3,182,755	(\$125,264)	\$3,057,491	\$69,617	\$3,127,108	\$68,265	\$3,195,373

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Summary of Income Taxes

Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:

Test Year: Twelve Months Ended: December 31, 1996
Exhibit No. 2, Schedule 8
Page 1 of 2

Line No.	Adjustment Number Reference	Description	Per Books 12 Months Ended 12/31/95 \$1,331,090	Test Year Adjustments Present Rates (\$57,948)	Normalized Test Year \$1,273,142	Attrition Year Adjustments (\$282,733)	Attrition Year at Present Rates \$990,409	Adjustments for Proposed Rates \$778,651	Attrition Year at Proposed Rates \$1,769,060
1		Federal Income Tax - Current	242,752	(10,568)	232,184	(51,562)	\$180,622	142,003	322,625
2		State Income Tax - Current	534,547	(4,436)	530,111	30,880	580,991	0	560,991
3		Deferred FIT - Liberalized Depreciation	0	0	0	0	0	0	0
4		Deferred FIT - Programmed Maintenance	0	0	0	0	0	0	0
5		Deferred SIT - Programmed Maintenance	0	0	0	0	0	0	0
6		Deferred Federal Income Tax - Other	22,727	(18,291)	4,436	5,091	9,527	0	9,527
7		Deferred State Income Tax - Other	1,800	(1,800)	0	0	0	0	0
8		Amortization of ITC	(76,368)	(9,044)	(85,412)	0	(85,412)	0	(85,412)
9		Adjustment of Prior Years - FIT	(37,122)	37,122	0	0	0	0	0
10		Adjustment of Prior Years - SIT	0	0	0	0	0	0	0
Total			\$2,019,426	(\$64,965)	\$1,954,461	(\$298,324)	\$1,656,137	\$920,654	\$2,576,781

**Computation of Current Federal and State Income Taxes Based on Current Rate for the
Normalized and Attrition Years and Proposed Rates for the Attrition Year**

Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:

Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 2, Schedule 6
Page 2 of 2

Line No.	Description	Normalized Year Present Rates		Attrition Year Present Rates		Attrition Year Proposed Rates	
		Federal	State	Federal	State	Federal	State
1	Operating Revenues	\$28,103,310	\$28,103,310	\$28,259,668	\$28,259,668	\$30,708,611	\$30,708,611
2							
3	Operation and Maintenance Expenses	14,189,985	14,189,985	14,356,080	14,356,080	14,370,039	14,370,039
4	Depreciation and Amortization	2,639,768	2,639,768	3,107,726	3,107,726	3,107,726	3,107,726
5	Taxes, Other than Income	3,057,491	3,057,491	3,127,108	3,127,108	3,195,373	3,195,373
6	State Income Taxes - Current	232,184		180,622		322,625	
7	Subtotal	20,119,428	19,887,244	20,771,536	20,590,914	20,895,763	20,673,138
8	Total Income Before Deductions	7,983,882	8,216,066	7,488,132	7,668,754	9,712,848	10,035,473
9							
10	Statutory Additions (Deductions):						
11	Interest on Debt	(2,893,240)	(2,893,240)	(3,525,154)	(3,525,154)	(3,525,154)	(3,525,154)
12	Book Depreciation	2,607,583	2,607,583	2,964,589	2,964,589	2,964,589	2,964,589
13	Tax Depreciation	(3,927,210)	(3,927,210)	(4,008,607)	(4,008,607)	(4,008,607)	(4,008,607)
14	Amortization of UPAA	(58,054)	(58,054)	(15,316)	(15,316)	(15,316)	(15,316)
15	Amortization of Leased Alteration Expense	13,345	13,345	12,876	12,876	12,876	12,876
16	Amort of CIAC & Accumulated Depr - CIAC	(59,496)	(59,496)	(59,496)	(59,496)	(59,496)	(59,496)
17	Taxable Meals and Entertainment Costs	11,924	11,924	11,924	11,924	11,924	11,924
18	Preferred Dividend Credit	(28,824)	(28,824)	(28,824)	(28,824)	(28,824)	(28,824)
19	Cost of Removal	(12,363)	(12,363)	(12,363)	(12,363)	(12,363)	(12,363)
20	Total Statutory Additions (Deductions)	(4,346,335)	(4,346,335)	(4,858,391)	(4,858,391)	(4,858,391)	(4,858,391)
21	Taxable Income	3,637,547	3,869,731	2,629,741	3,010,363	5,054,457	5,377,082
22							
23	Computation of Taxes:						
24	State Income Tax at 6%		232,184		180,622		322,625
25	Federal Income Tax at Statutory Rate	1,273,142		990,408		1,769,060	
26	Less: Tax Credits	0	0	0	0	0	0
27	Total Current Income Tax	\$1,273,142	\$232,184	\$990,408	\$180,622	\$1,769,060	\$322,625
28							
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Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 3, Schedule 1
Page 1 of 1

Rate of Return Summary
At the Mid-Point of the Attrition Year

Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:

Line No.	Class of Capital	Reference	Amount	Percent of Total	Cost Rate	Weighted Cost of Capital
1						
2					8.57	
3	Long-term Debt	Schedule 2	\$40,522,863	55.221%	8.34%	4.665%
4						4.622
5	Short-term Debt		800,000	1.090%	5.95%	0.065%
6						
7	Preferred Equity	Schedule 3	2,561,234	3.490%	6.49%	0.227%
8						
9	Common Equity					
10	Common Stock		16,536,192	22.534%	12.40%	2.794%
11	Retained Earnings		12,953,262	17.665%	12.40%	2.190%
12						
13	Total Capitalization		\$73,393,551	100.00%		9.884%
14						
15						
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Total Common Equity Return Proposed

12.40%

Embedded Cost of Long-Term Debt
At the Mid-Point of the Attrition Year

Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 3, Schedule 2
Page 1 of 1

Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:

Line No.	Debt Issue Type, Coupon Rate	Issue Date	Maturity Date	Principal Amount	Face Amount Outstanding	Unamortized (Issuance) Debt Exp.	Carrying Value	Annual Interest Expense	Annual Amort. of Issue Expense	Total Cost
1	General Mortgage Bonds									
2	9.23% Series	07/27/88	06/01/98	\$5,300,000	\$5,300,000	\$10,240	\$5,289,760	\$489,190	\$9,452	\$498,642
3	9.25% Series	01/12/90	12/01/99	2,500,000	2,500,000	34,721	2,465,279	231,250	1,537	232,787
4	9.43% Series	09/26/90	09/01/00	5,000,000	5,000,000	18,150	4,981,850	471,500	5,445	476,945
5	8.25% Series	06/25/92	06/01/05	3,200,000	3,200,000	15,971	3,184,029	284,000	1,976	285,976
6	8.28% Series	06/25/92	06/01/02	10,000,000	10,000,000	40,807	9,959,193	828,000	8,028	836,028
7	6.77% Series	06/08/93	06/01/03	9,000,000	9,000,000	53,388	8,946,612	609,300	8,776	618,076
8	7.50% Series (Proposed)	09/04/96	06/01/96	5,700,000	5,700,000	80,513	5,619,487	427,500	8,628	436,126
9	9% Series (1)			725,000	102,085	25,432	(25,432)	0	4,181	4,181
10	Capital Lease 9.489%		05/01/98				102,085	9,687	0	9,687
11										
12										
13										
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Total										\$3,378,448

8.31
8.34%

Embedded Cost of Long-Term Debt

(1) 9% series was called early at a premium of \$26,887; this premium is being amortized over the life of the 6.77% series (10 years).
The unamortized premium = \$16,879

Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 3, Schedule 3
Page 1 of 1

Embedded Cost of Preferred Stock
At the Mid-Point of the Attrition Year

Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:

Line No.	Debt Issue Type, Coupon Rate	Issue Date	Face Amount Outstanding	Premium or Discount	Unamortized Pfd. Stk. Exp. (Issuance)	Net Proceeds	Annual Dividends	Annual Amort. of Issuance Expense	Total Annual Cost
1	Cumulative Preferred								
2	5% Series	12/20/40	\$1,400,000	0	\$0	\$1,400,000	\$70,000	\$0	\$70,000
3	4-1/2% Series	7/29/54	229,500	0	3,168	226,332	10,328	352	10,680
4	9% Series	3/31/80	944,000	0	9,098	934,902	84,960	607	85,567
5									
6									
7									
8									
9	Total		\$2,573,500	\$0	\$12,266	\$2,561,234	\$185,288	\$959	\$186,247

Embedded Cost of Preferred Stock

6.49%

Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 4, Schedule 1
Page 1 of 1

Attrition Year Revenues at Current and Proposed Rates

Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:

Line No.	Class/Description	Current Rates Sales	Current Rates Revenues	Proposed Rates Sales	Proposed Rates Revenues	Difference	Percent Change
1	Residential	4,711,203	\$11,439,796	4,711,203	\$12,456,253	\$1,016,457	8.89%
2	Commercial	3,697,078	7,444,526	3,697,078	8,100,623	656,097	8.81%
3	Industrial	3,826,094	3,929,599	3,826,094	4,277,835	348,236	8.86%
4	Other Public Authority	1,332,175	2,036,833	1,332,175	2,217,359	180,526	8.86%
5	Other Water Utility	455,401	348,581	455,401	379,504	30,923	8.87%
6	Private Fire Service	0	903,379	0	983,432	80,053	8.86%
7	Public Fire Service	0	1,230,430	0	1,339,569	109,139	8.87%
8	Total	14,021,951	27,333,144	14,021,951	29,754,575	2,421,431	8.86%
9	Other Operating Revenues	0	926,468	0	952,157	25,689	2.77%
10		14,021,951	\$28,259,612	14,021,951	\$30,706,732	\$2,447,120	8.66%

Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 4, Schedule 2
Page 1 of 11

**Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:**

Line No.	Class/Description	Present Rates			Proposed Rates					
		Meters	Sales (CCF)	Rates	Meters	Sales (CCF)	Rates			
				Revenues	% of Total		Revenues	% of Total		
1										
2										
3	Residential									
4	Chatanooga									
5	5/8 - inch meter	662,344		\$7.86	\$5,206,024	45.51%	662,344	\$8.56	\$5,669,665	45.52%
6	3/4 - inch meter	685		13.18	9,028	0.08%	685	14.35	9,830	0.08%
7	1 - inch meter	1,935		21.95	42,473	0.37%	1,935	23.90	46,247	0.37%
8	1 1/2 - inch meter	139		43.93	6,106	0.05%	139	47.82	6,647	0.05%
9	2 - inch meter	275		70.26	19,322	0.17%	275	76.49	21,035	0.17%
10	3 - inch meter	0		131.75	0	0.00%	0	143.43	0	0.00%
11	4 - inch meter	0		219.58	0	0.00%	0	239.05	0	0.00%
12	6 - inch meter	0		439.16	0	0.00%	0	478.09	0	0.00%
13	8 - inch meter	0		702.66	0	0.00%	0	764.96	0	0.00%
14	Total Meters	665,378			5,282,953	46.18%	665,378		5,753,424	46.19%
15										
16	Volumetric									
17	First	400 Cubic Feet	2,296,171	0.1420	326,056	2.85%		0.1550	355,907	2.86%
18	Next	6,100 Cubic Feet	1,951,905	2,3170	4,522,563	39.53%	2,296,171	2,5220	4,922,704	39.52%
19	Next	43,500 Cubic Feet	55,206	1,4650	80,877	0.71%	1,951,905	1,5950	88,054	0.71%
20	Next	450,000 Cubic Feet	91	1,0830	99	0.00%	55,206	1,1790	107	0.00%
21	Next	1,000,000 Cubic Feet	0	0,8710	0	0.00%	91	0,9480	0	0.00%
22	All Over	1,500,000 Cubic Feet	0	0,5280	0	0.00%	0	0,5750	0	0.00%
23	Chatanooga Amount		4,303,373		4,929,595	43.09%	4,303,373		5,366,772	43.08%
24										
25	Lookout Mountain									
26	5/8 - inch meter	17,414		8.79	153,059	1.34%	17,414	9.57	168,652	1.34%
27	3/4 - inch meter	328		13.18	4,323	0.04%	328	14.35	4,707	0.04%
28	1 - inch meter	843		21.95	18,504	0.16%	843	23.90	20,148	0.16%
29	1 1/2 - inch meter	12		43.93	527	0.00%	12	47.82	574	0.00%
30	2 - inch meter	33		70.26	2,319	0.02%	33	76.49	2,524	0.02%
31	3 - inch meter	0		131.75	0	0.00%	0	143.43	0	0.00%
32	4 - inch meter	0		219.58	0	0.00%	0	239.05	0	0.00%
33	6 - inch meter	0		439.16	0	0.00%	0	478.09	0	0.00%
34	8 - inch meter	0		702.66	0	0.00%	0	764.96	0	0.00%
35	Total Meters	18,630			178,742	1.56%	18,630		194,605	1.56%
36										
37	Volumetric									
38	First	400 Cubic Feet	68,985	0.4140	28,560	0.25%		0.4510	31,112	0.25%
39	Next	6,100 Cubic Feet	145,248	3,2080	465,956	4.07%	68,985	3,4920	507,206	4.07%
40	Next	43,500 Cubic Feet	6,915	2,3950	16,561	0.14%	145,248	2,6070	18,027	0.14%
41	Next	450,000 Cubic Feet	0	1,4040	0	0.00%	6,915	1,5280	0	0.00%
42	Next	1,000,000 Cubic Feet	0	1,1930	0	0.00%	0	1,2990	0	0.00%
43	All Over	1,500,000 Cubic Feet	0	0,8450	0	0.00%	0	0,9200	0	0.00%
44	Lookout Mountain Amount		221,148		511,077	4.47%	221,148		556,345	4.47%
45										

Attrition Year Revenues at Current and Proposed Rates

Tennessee Public Service Commission
 Company: Tennessee-American Water Company
 Case No:

Test Year: Twelve Months Ended: December 31, 1995
 Exhibit No. 4, Schedule 2
 Page 2 of 11

Line No.	Class/Description	Meters	Sales (CCF)	Present Rates	Revenues	% of Total	Meters	Sales (CCF)	Proposed Rates	Revenues	% of Total
1	Residential										
2	Lakeview										
3	5/8 - inch meter	34,400		\$9.79	\$302,376	2.64%	34,400		\$9.57	\$329,208	2.64%
4	3/4 - inch meter	0		13.18	0	0.00%	0		\$14.35	0	0.00%
5	1 - inch meter	85		21.95	1,866	0.02%	85		\$23.90	2,032	0.02%
6	1 1/2 - inch meter	0		43.93	0	0.00%	0		\$47.82	0	0.00%
7	2 - inch meter	0		70.26	0	0.00%	0		\$76.49	0	0.00%
8	3 - inch meter	0		131.75	0	0.00%	0		\$143.43	0	0.00%
9	4 - inch meter	0		219.58	0	0.00%	0		\$239.05	0	0.00%
10	6 - inch meter	0		439.16	0	0.00%	0		\$478.09	0	0.00%
11	8 - inch meter	0		702.66	0	0.00%	0		\$764.96	0	0.00%
12	Total Meters	34,485			304,242	2.66%	34,485			331,240	2.66%
13											
14											
15											
16	Volumetric										
17	First 400 Cubic Feet		119,975	0.1420	17,036	0.15%		119,975	0.155	18,596	0.15%
18	Next 6,100 Cubic Feet		107,240	2.9350	314,748	2.75%		107,240	3.195	342,630	2.75%
19	Next 43,500 Cubic Feet		3,764	2.1210	7,984	0.07%		3,764	2.309	8,692	0.07%
20	Next 450,000 Cubic Feet		558	1.1310	631	0.01%		558	1.231	687	0.01%
21	Next 1,000,000 Cubic Feet		0	0.9210	0	0.00%		0	1.003	0	0.00%
22	All Over 1,500,000 Cubic Feet		0	0.5780	0	0.00%		0	0.629	0	0.00%
23	Lakeview Amount		231,537		340,399	2.98%		231,537		370,605	2.98%
24											
25											
26	Summary										
27	Chattanooga	665,378	4,303,373		10,212,548	89.27%	665,378	4,303,373		11,120,196	89.27%
28	Lookout Mountain	18,630	221,148		689,819	6.03%	18,630	221,148		750,950	6.03%
29	Lakeview	34,485	231,537		644,641	5.64%	34,485	231,537		701,845	5.63%
30		718,493	4,756,058		11,547,008	100.94%	718,493	4,756,058		12,572,991	100.94%
31											
32	Less: Correction & Allowances		44,855		107,212	0.94%		44,855		116,738	0.94%
33											
34	Total		4,711,203		\$11,439,796	100.00%		4,711,203		\$12,456,253	100.00%
35											
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Attition Year Revenues at Current and Proposed Rates

Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 4, Schedule 2
Page 3 of 11

Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:

Line No.	Class/Description	Meters	Sales (CCF)	Present Rates	Revenues	% of Total	Meters	Sales (CCF)	Proposed Rates	Revenues	% of Total
1											
2											
3	Commercial										
4	Chattanooga										
5	5/8 - inch meter	53,129		\$7.86	\$417,594	5.61%	53,129		\$8.56	\$454,784	5.61%
6	3/4 - inch meter	973		13.18	12,824	0.17%	973		14.35	13,963	0.17%
7	1 - inch meter	12,751		21.95	279,884	3.76%	12,751		23.90	304,749	3.76%
8	1 1/2 - inch meter	2,378		43.93	104,466	1.40%	2,378		47.82	113,716	1.40%
9	2 - inch meter	10,007		70.26	703,092	9.44%	10,007		76.49	765,435	9.45%
10	3 - inch meter	283		131.75	37,285	0.50%	283		143.43	40,591	0.50%
11	4 - inch meter	168		219.58	36,889	0.50%	168		239.05	40,160	0.50%
12	6 - inch meter	0		439.16	0	0.00%	0		478.09	0	0.00%
13	8 - inch meter	0		702.66	0	0.00%	0		764.96	0	0.00%
14	Total Meters	79,689			1,592,034	21.39%	79,689			1,733,398	21.40%
15											
16	Volumetric										
17	First	400 Cubic Feet	244,583	0.1420	34,731	0.47%		244,583	0.1550	37,910	0.47%
18	Next	6,100 Cubic Feet	1,144,356	2.3170	2,651,473	35.62%		1,144,356	2.5220	2,886,066	35.63%
19	Next	43,500 Cubic Feet	1,466,121	1.4650	2,147,868	28.85%		1,466,121	1.5950	2,338,464	28.87%
20	Next	450,000 Cubic Feet	788,550	1.0830	854,000	11.47%		788,550	1.1790	929,701	11.48%
21	Next	1,000,000 Cubic Feet	0	0.8710	0	0.00%		0	0.9480	0	0.00%
22	All Over	1,500,000 Cubic Feet	0	0.5280	0	0.00%		0	0.5750	0	0.00%
23	Chattanooga Amount		3,643,611		5,688,072	76.41%		3,643,611		6,192,141	76.44%
24											
25	Lookout Mountain										
26	5/8 - inch meter	544		8.79	4,782	0.06%	544		9.57	5,206	0.06%
27	3/4 - inch meter	24		13.18	316	0.00%	24		14.35	344	0.00%
28	1 - inch meter	255		21.95	5,597	0.08%	255		23.90	6,095	0.08%
29	1 1/2 - inch meter	36		43.93	1,581	0.02%	36		47.82	1,722	0.02%
30	2 - inch meter	94		70.26	6,604	0.09%	94		76.49	7,190	0.09%
31	3 - inch meter	0		131.75	0	0.00%	0		143.43	0	0.00%
32	4 - inch meter	0		219.58	0	0.00%	0		239.05	0	0.00%
33	6 - inch meter	0		439.16	0	0.00%	0		478.09	0	0.00%
34	8 - inch meter	0		702.66	0	0.00%	0		764.96	0	0.00%
35	Total Meters	953			18,880	0.25%	953			20,557	0.25%
36											
37	Volumetric										
38	First	400 Cubic Feet	3,060	0.4140	1,267	0.02%		3,060	0.4510	1,380	0.02%
39	Next	6,100 Cubic Feet	17,923	3.2080	57,496	0.77%		17,923	3.4920	62,586	0.77%
40	Next	43,500 Cubic Feet	12,053	2.3950	28,867	0.39%		12,053	2.6070	31,423	0.39%
41	Next	450,000 Cubic Feet	17,060	1.4040	23,953	0.32%		17,060	1.5280	26,068	0.32%
42	Next	1,000,000 Cubic Feet	13	1.1930	15	0.00%		13	1.2990	17	0.00%
43	All Over	1,500,000 Cubic Feet	0	0.8450	0	0.00%		0	0.9200	0	0.00%
44	Lookout Mountain Amount		50,109		111,598	1.50%		50,109		121,474	1.50%
45											

Attrition Year Revenues at Current and Proposed Rates

**Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:**

Line No.	Class/Description	Present Rates			Proposed Rates		
		Meters	Sales (CCF)	Rates	Meters	Sales (CCF)	Rates
1	Other Public Authority Class						
2	Chattanooga						
3	5/8 - inch meter	1,583		\$7.86	1,583		\$8.56
4	3/4 - inch meter	96		13.18	96		14.35
5	1 - inch meter	1,269		21.95	1,269		23.90
6	1 1/2 - inch meter	530		43.93	530		47.82
7	2 - inch meter	2,349		70.26	2,349		76.49
8	3 - inch meter	94		131.75	94		143.43
9	4 - inch meter	312		219.58	312		239.05
10	6 - inch meter	0		439.16	0		478.09
11	8 - inch meter	0		702.66	0		764.96
12	Total Meters	6,233			6,233		
13							
14							
15							
16	Volumetric						
17	First	400 Cubic Feet	17,547	0.1420	17,547		0.1550
18	Next	6,100 Cubic Feet	149,564	2.3170	149,564		2.5220
19	Next	43,500 Cubic Feet	326,181	1.4650	326,181		1.5950
20	Next	450,000 Cubic Feet	679,756	1.0830	679,756		1.1790
21	Next	1,000,000 Cubic Feet	154,436	0.8710	154,436		0.9480
22	All Over	1,500,000 Cubic Feet	0	0.5280	0		0.5750
23	Chattanooga Amount		1,327,485		1,327,485		1,848,018
24							
25	Lookout Mountain						
26	5/8 - inch meter	94		8.79	94		9.57
27	3/4 - inch meter	0		13.18	0		14.35
28	1 - inch meter	109		21.95	109		23.90
29	1 1/2 - inch meter	15		43.93	15		47.82
30	2 - inch meter	48		70.26	48		76.49
31	3 - inch meter	0		131.75	0		143.43
32	4 - inch meter	0		219.58	0		239.05
33	6 - inch meter	0		439.16	0		478.09
34	8 - inch meter	0		702.66	0		764.96
35	Total Meters	266			266		
36							
37	Volumetric						
38	First	400 Cubic Feet	755	0.4140	755		0.4510
39	Next	6,100 Cubic Feet	5,271	3.2080	5,271		3.4920
40	Next	43,500 Cubic Feet	2,176	2.3950	2,176		2.6070
41	Next	450,000 Cubic Feet	0	1.4040	0		1.5280
42	Next	1,000,000 Cubic Feet	0	1.1930	0		1.2990
43	All Over	1,500,000 Cubic Feet	0	0.8450	0		0.9200
44	Lookout Mountain Amount		8,202		8,202		24,420
45							

Attrition Year Revenues at Current and Proposed Rates

Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 4, Schedule 2
Page 8 of 11

Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:

Line No.	Class/Description	Present Rates			Proposed Rates		
		Meters	Sales (CCF)	Rates	Meters	Sales (CCF)	Rates
1	Other Public Authority Class						
2							
3							
4	Lakeview	48		\$8.79	48		\$9.57
5	5/8 - inch meter	0		13.18	0		\$14.35
6	3/4 - inch meter	0		21.95	0		\$0.00
7	1 - inch meter	0		43.93	0		\$47.82
8	1 1/2 - inch meter	0		70.26	0		\$76.49
9	2 - inch meter	24		131.75	24		\$143.43
10	3 - inch meter	0		219.58	0		\$239.05
11	4 - inch meter	0		439.16	0		\$478.09
12	6 - inch meter	0		702.66	0		\$764.96
13	8 - inch meter	0			0		0
14	Total Meters	72			72		
15							
16	Volumetric						
17	First 400 Cubic Feet	168		0.1420	168		0.155
18	Next 6,100 Cubic Feet	1,274		2.9350	1,274		3.195
19	Next 43,500 Cubic Feet	733		2.1210	733		2.309
20	Next 450,000 Cubic Feet	0		1.1310	0		1.231
21	Next 1,000,000 Cubic Feet	0		0.9210	0		1.003
22	All Over 1,500,000 Cubic Feet	0		0.5780	0		0.629
23	Lakeview Amount		2,175			2,175	
24							
25							
26	Summary						
27	Chattanooga	6,233	1,327,485		6,233	1,327,485	
28	Lookout Mountain	266	8,202		266	8,202	
29	Lakeview	72	2,175		72	2,175	
30		6,571	1,337,862		6,571	1,337,862	
31							
32	Less: Correction & Allowances		5,687			5,687	
33	Total		1,332,175			1,332,175	
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Attrition Year Revenues at Current and Proposed Rates

**Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:**

Line No.	Class/Description	Present Rates			Proposed Rates		
		Meters	Sales (CCE)	Rates	Meters	Sales (CCE)	Rates
				% of Total			% of Total
Other Water Utility Class							
1	Chattanooga						
2	5/8 - inch meter	0		\$0	0.00%		\$0
3	3/4 - inch meter	0			0.00%		
4	1 - inch meter	12		263	0.08%		287
5	1 1/2 - inch meter	0		43.93	0.00%		47.82
6	2 - inch meter	12		70.26	0.24%		76.49
7	3 - inch meter	0		131.75	0.00%		143.43
8	4 - inch meter	60		219.58	3.78%		239.05
9	6 - inch meter	12		439.16	1.51%		478.09
10	8 - inch meter	0		702.66	0.00%		764.96
11	Total Meters	96		19,551	5.61%		21,285
12							
13							
14							
15							
16							
17	Volumetric						
18	First	400 Cubic Feet	159	0.1420	0.01%	159	0.1550
19	Next	6,100 Cubic Feet	1,471	2,317.0	0.98%	1,471	2,522.0
20	Next	43,500 Cubic Feet	7,748	1,465.0	3.26%	7,748	1,595.0
21	Next	450,000 Cubic Feet	69,281	1,083.0	21.52%	69,281	1,179.0
22	Next	1,000,000 Cubic Feet	129,551	0,871.0	32.37%	129,551	0,948.0
23	All Over	1,500,000 Cubic Feet	247,191	0,528.0	37.44%	247,191	0,575.0
24	Chattanooga Amount		455,401	333,169	95.58%	455,401	362,725
25							
26	Lookout Mountain						
27	5/8 - inch meter	0		8.79	0.00%		9.57
28	3/4 - inch meter	0		13.18	0.00%		14.35
29	1 - inch meter	0		21.95	0.00%		23.90
30	1 1/2 - inch meter	0		43.93	0.00%		47.82
31	2 - inch meter	0		70.26	0.00%		76.49
32	3 - inch meter	0		131.75	0.00%		143.43
33	4 - inch meter	0		219.58	0.00%		239.05
34	6 - inch meter	0		439.16	0.00%		478.09
35	8 - inch meter	0		702.66	0.00%		764.96
36	Total Meters	0		0	0.00%		0
37							
38	Volumetric						
39	First	400 Cubic Feet	0	0.4140	0.00%	0	0.4510
40	Next	6,100 Cubic Feet	0	3,208.0	0.00%	0	3,492.0
41	Next	43,500 Cubic Feet	0	2,395.0	0.00%	0	2,607.0
42	Next	450,000 Cubic Feet	0	1,404.0	0.00%	0	1,528.0
43	Next	1,000,000 Cubic Feet	0	1,193.0	0.00%	0	1,299.0
44	All Over	1,500,000 Cubic Feet	0	0.8450	0.00%	0	0.9200
45	Lookout Mountain Amount		0	0	0.00%	0	0

Attrition Year Revenues at Current and Proposed Rates

Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 4, Schedule 2
Page 11 of 11

Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:

Line No.	Class/Description	Present Rates			Proposed Rates					
		Meters	Sales (CCF)	Revenues	% of Total	Meters	Sales (CCF)	Rates	Revenues	% of Total
1	Private Fire Service									
2										
3										
4										
5	1 - Inch Service	0	0	\$0	0.00%	0	0	\$22.44	\$0	0.00%
6	1 1/2 - Inch Service	1	1	46.34	0.00%	1	1	50.40	50	0.00%
7	2 - Inch Service	3	3	82.38	0.01%	3	3	89.64	269	0.01%
8	2 1/2 - Inch Service	3	3	125.63	0.02%	3	3	136.80	410	0.02%
9	3 - Inch Service	2	2	185.25	0.02%	2	2	201.72	403	0.02%
10	4 - Inch Service	45	45	370.95	0.78%	45	45	403.80	18,171	0.78%
11	6 - Inch Service	571	571	741.44	19.84%	571	571	807.12	460,866	19.84%
12	8 - Inch Service	259	259	1,484.01	18.01%	259	259	1,615.56	418,430	18.01%
13	10 - Inch Service	15	15	2,226.25	1.56%	15	15	2,423.64	36,355	1.57%
14	12 - Inch Service	15	15	2,968.64	2.09%	15	15	3,231.84	48,478	2.09%
15										
16	Total Meters	914		903,379	42.34%	914			983,432	42.33%
17										
18	Public Fire Service									
19										
20	Ridgeside	1		1,759.72	0.08%	1		1,915.68	1,916	0.08%
21	Public Fire	4,289		286.47	57.58%	4,289		311.88	1,337,653	57.58%
22	Total Public Fire Service	4,290		1,230,430	57.66%	4,290			1,339,569	57.67%
23										
24										
25										
26	Summary									
27	Private Fire Service	914	0	903,379	42.34%	914	0		983,432	42.33%
28	Public Fire Service	4,290	0	1,230,430	57.66%	4,290	0		1,339,569	57.67%
29										
30		5,204	0	2,133,809	100.00%	5,204	0		2,323,001	100.00%
31										
32	Less: Correction & Allowances		0	0	0.00%		0		0	0.00%
33										
34	Total		0	\$2,133,809	100.00%		0		\$2,323,001	100.00%
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

Test Year: Twelve Months Ended: December 31, 1995
Exhibit No. 4, Schedule 3
Page 1 of 1

Comparison of Present and Proposed Rates

**Tennessee Public Service Commission
Company: Tennessee-American Water Company
Case No:**

Line No.		Rates Effective September 21, 1993			Proposed Rates			Percent Increase		
		Chattanooga	Lookout Mountain	Lakeview	Chattanooga	Lookout Mountain	Lakeview	Chattanooga	Lookout Mountain	Lakeview
1										
2										
3										
4	Service Charge									
5	5/8 - inch meter	\$7.86	\$8.79	\$8.79	\$8.56	\$9.57	\$9.57	8.91%	8.87%	8.87%
6	3/4 - inch meter	13.18	13.18	13.18	14.35	14.35	14.35	8.88%	8.88%	8.88%
7	1 - inch meter	21.95	21.95	21.95	23.90	23.90	23.90	8.88%	8.88%	8.88%
8	1 1/2 - inch meter	43.93	43.93	43.93	47.82	47.82	47.82	8.85%	8.85%	8.85%
9	2 - inch meter	70.26	70.26	70.26	76.49	76.49	76.49	8.87%	8.87%	8.87%
10	3 - inch meter	131.75	131.75	131.75	143.43	143.43	143.43	8.87%	8.87%	8.87%
11	4 - inch meter	219.58	219.58	219.58	239.05	239.05	239.05	8.87%	8.87%	8.87%
12	6 - inch meter	439.16	439.16	439.16	478.09	478.09	478.09	8.86%	8.86%	8.86%
13	8 - inch meter	702.66	702.66	702.66	764.96	764.96	764.96	8.87%	8.87%	8.87%
14										
15										
16	Volumetric Rates									
17	First 400 Cubic F	0.142	0.414	0.142	0.155	0.451	0.155	9.15%	8.94%	9.15%
18	Next 6,100 Cubic F	2.317	3.208	2.935	2.522	3.492	3.195	8.85%	8.85%	8.85%
19	Next 43,500 Cubic F	1.465	2.395	2.121	1.595	2.607	2.309	8.87%	8.85%	8.86%
20	Next 450,000 Cubic F	1.083	1.404	1.131	1.179	1.528	1.231	8.86%	8.83%	8.84%
21	Next 1,000,000 Cubic F	0.871	1.193	0.921	0.948	1.299	1.003	8.84%	8.89%	8.90%
22	All Over 1,500,000 Cubic F	0.528	0.845	0.578	0.575	0.920	0.629	8.90%	8.88%	8.82%
23										
24	Private Fire Service									
25										
26										
27	1 - Inch Service	20.59			22.44			8.98%		
28	1 1/2 - Inch Service	46.34			50.40			8.76%		
29	2 - Inch Service	82.38			89.64			8.81%		
30	2 1/2 - Inch Service	125.63			136.80			8.89%		
31	3 - Inch Service	185.25			201.72			8.89%		
32	4 - Inch Service	370.95			403.80			8.86%		
33	6 - Inch Service	741.44			807.12			8.86%		
34	8 - Inch Service	1,484.01			1,615.66			8.86%		
35	10 - Inch Service	2,226.25			2,423.64			8.87%		
36	12 - Inch Service	2,968.64			3,231.84			8.87%		
37										
38	Public Fire Service									
39										
40										
41	Ridgeside	1,759.72			1,915.68			8.86%		
42	Public Fire	286.47			311.88			8.87%		

45

TENNESSEE REGULATORY AUTHORITY

Lynn Greer, Chairman
Sara Kyle, Director
Melvin Malone, Director



460 James Robertson Parkway
Nashville, Tennessee 37243-0505

MEMORANDUM

To: Eddie Roberson
Executive Secretary

From: William H. Novak, Manager *WHS*
Utility Rate Division - Energy & Water Section

Subject: Tennessee-American Water Company Compliance Audit
Docket 96-00959

Date: September 18, 1996

Attached is a copy of our Compliance Audit of Tennessee-American Water Company, including the Company's responses, for your review.

The Compliance Audit included a review to determine compliance with the USOA, as well as a review of the Company's compliance with other TRA directives. The Company submitted its responses to the audit findings on September 13, 1995. These responses have been incorporated into the report.

In its responses, the Company agreed with most of the Staff's findings. However, TAWC disagreed with the Staff's recommendations to capitalize plant painting costs and to record lobbying fees as a below-the-line expense. We expect that these two issues will be addressed in the Company's pending rate case. The Staff may ask for a separate hearing however for any items that are unresolved in this docket.

cc: Directors
Chris Klein
Dianne Neal
✓ Tennessee-American Water Company
Consumer Advocate
Associated Valley Industries

Copies: T. G. Pappas
Jim Salser
D. R. Bailey

9/26/96-lvbs

**TENNESSEE-AMERICAN WATER COMPANY
COMPLIANCE AUDIT REPORT
DOCKET 96-00959**

**PREPARED BY THE
ENERGY & WATER SECTION
OF THE
UTILITY RATE DIVISION**

September 18, 1996

i. EXECUTIVE SUMMARY

The Tennessee Regulatory Authority (TRA) has the power by state law to require a public utility to keep its records in accordance with the Uniform System of Accounts (USOA) as well as the jurisdiction to oversee utility operations. The TRA also has the authority to examine the books and records of utilities to determine whether the utility complies with its orders and directives. This compliance audit was performed on Tennessee-American Water Company (TAWC), a provider of water services to the Chattanooga area.

We examined the books and records to determine whether TAWC followed the USOA. We also reviewed the Company's compliance with various TRA directives, including the Management Audit ordered in the last rate case, and the Sales Adjustment Mechanism.

The results of the Compliance Audit are as follows:

1. The Company's proposal to amortize the Management Audit cost over three years is an unreasonably short time period.
2. The Company's provision in their tariff requiring contributions in aid of construction to be grossed-up for taxes is no longer appropriate.
3. The Company has not booked plant additions to Account 331 to the appropriate subaccounts.
4. The Company has applied a composite depreciation rate to Account 331 in calculating depreciation expense, instead of the approved subaccount rate.
5. The Company has incorrectly expensed plant painting expenditures that should have been capitalized.
6. The Company has incorrectly recorded club dues as an above-the-line expense.
7. The Company has incorrectly recorded lobbying fees as an above-the-line expense.

8. The Company has proposed an inappropriate tariff for Hydrant Meters.

All other areas examined for this report were in compliance with the TRA's Rules and Regulations. The Company has provided responses to each of these findings which are contained in this report. A summary of these responses are as follows:

- 1. The Company agreed to the Staff's findings concerning the Management Audit, Contributions in Aid of Construction, Plant Additions, Depreciation, Club Dues, and Hydrant Metering.**
- 2. The Company disagreed with the Staff's recommendation on plant painting expenditures.**
- 3. The Company disagreed with the Staff's recommendation on lobbying expenditures.**

The Staff will work with the Company to resolve the remaining two issues prior to the hearing in the current rate case. However, if these matters cannot be reconciled, the Staff will ask the TRA directors to make a ruling on them.

**TENNESSEE-AMERICAN WATER COMPANY
COMPLIANCE AUDIT
DOCKET 96-00959**

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I. JURISDICTION AND POWER OF THE TENNESSEE REGULATORY AUTHORITY

Tennessee Code Annotated (T.C.A.) §65-4-104 gave jurisdiction and control over public utilities to the Tennessee Public Service Commission. By virtue of Chapter 305 of the Public Acts of 1995, jurisdiction and control over public utilities was transferred from the Tennessee Public Service Commission (TPSC or Commission) to the Tennessee Regulatory Authority (the "TRA" or "Authority") on July 01, 1996. T.C.A. §65-4-104 states that:

The Authority shall have general supervision and regulation of, jurisdiction, and control over, all public utilities...

T.C.A. states further in §65-4-111 that the public utilities are to maintain a Uniform System of Accounts:

The Authority shall have the power after hearing, upon notice, by order in writing to require every public utility... to keep its books, records, and accounts so as to afford an intelligent understanding of the conduct of its business, and to that end to require every public utility of the same class to adopt a uniform system of accounting. Such system shall conform, where applicable, to any system adopted or approved by the Interstate Commerce Commission of the United States. And to furnish annually, or at other times as the authority may require, a detailed report of finances and operations as shown by said system of accounts.

The TRA responded to T.C.A. §65-4-111 by establishing its own rule 1220-4-1-1.11 regarding the uniform system of accounts which public utilities should maintain. The TRA's rule provides that all Class A, B., and C water companies follow the Uniform System of Accounts as adapted and amended by the National Association of Regulatory Utility Commissioners.

The TRA received its authority to examine the books and records of public utilities from T.C.A. §65-4-105 which states that the TRA would possess all the other powers conferred on the TRA.

...full power to examine the books and papers of the said companies, and to examine, under oath, the officers, agents, and employees of said companies...to procure the necessary information to intelligently and justly discharge their duties and carry out the provisions of this chapter and chapter 5 of this title.

II. PURPOSE OF COMPLIANCE AUDITS

The two basic reasons for compliance audits are to assure compliance with the Uniform System of Accounts (USOA) and to assure that the utility is following all rules, regulations and directives adopted by the TRA.

Compliance audits provide the foundation of assurance underlying the basic objective of regulatory accounting, which is to provide a uniform method of recording transactions among similar companies. This uniform record keeping is accomplished through the adoption of the USOA and insures the integrity, reliability, and comparability of the financial data contained in financial reports filed with the TRA which provides the TRA one of its most useful regulatory tools for establishing just and reasonable rates.

III. SCOPE OF AUDIT

We examined the books and records of Tennessee-American Water Company for the twelve months ended December 31, 1995 and conducted tests of the asset and expense accounts to determine if the company followed the

NARUC Water System of Accounts and other TRA rules, regulations and directives.

This Compliance audit also includes the results of the Management Audit performed by PMC Management Consultants, Inc. This audit combined with the Compliance Audit, satisfy the TRA's oversight responsibilities to the Utility's ratepayers. Specifically, these audits verify that the amounts on the Company's books:

- are properly classified;
- accurately reflect any TRA ordered rate making adjustments;
- do not include unusual or abnormal financial occurrences;
- were calculated following proper accounting rules and procedures for separating regulated and nonregulated operations, and in-state and out-of-state operations;
- accurately reflect allowable charges from affiliated companies.

IV. AUDIT TEAM

The TRA's Utility Rate Division is responsible for conducting compliance audits. The audit was conducted by Hal Novak, Pat Murphy, Laura Foreman, David Hood and Mark Burden of the Utility Rate Division.

V. COMPANY BACKGROUND

Tennessee American Water Company, located at 1101 Broad Street, Chattanooga, Tennessee, is a wholly owned subsidiary of American Water Works Company, which has its headquarters at 1025 Laurel Oak Road, Voorhees, New Jersey. Tennessee American is a provider of water services to the cities of Chattanooga, East Ridge, Lookout Mountain, Lakeview and other

unincorporated areas in Georgia. The company currently provides service to approximately 68,000 customers.

VI. MANAGEMENT AUDIT

Background:

In the Company's last rate case (Docket 93-02943), the TPSC agreed to a stipulation between the Company and Staff requiring a management audit of the Company's operations to be performed by a qualified consultant. Subsequently, the Staff and Company interviewed several consultants for this assignment. The consultant contract was ultimately awarded to PMC Management Consultants, Inc. (PMC).

The purpose of a management audit is to aid the TRA in its regulatory oversight of the Company by identifying cost-effective management improvements to produce more efficient operations. The Management Audit Report dated August 31, 1995 contained 33 recommendations. The 33 recommendations have been reviewed and agreed to by the Company and the TRA Staff. On November 7, 1995, the Company filed an implementation plan for each of these recommendations. The Company has since provided quarterly updates to the TRA on the progress of the implementation plan, and expects to complete all 33 recommendations by the end of 1997.

Finding:

The Company proposes to amortize the cost of the Management Audit over an unreasonably short time period. The total estimated cost of the Management Audit including the implementation plans is approximately

\$304,000. The Company has proposed to amortize this cost over a three-year period. However, this audit will produce results which will provide longer lasting benefits to the Company.

Recommendation:

The TRA Staff feels that expensing these costs over three years does not provide for adequate recognition of expenses over the life of the investment in the audit. We therefore recommend amortization of these costs over 5 years, which approximates the length of time between two rate cases.

Company Response:

The Company accepts this recommendation if the TRA will recognize the unamortized costs of the management audit, net of taxes, in rate base in the current rate case.

Staff Rebuttal:

The TRA Staff agrees with the Company that the unamortized costs of the management audit should be properly reflected in rate base.

VII. SFAS 106 COMPLIANCE

Background:

During May 1993, the Commission issued an order on the investigation of proper regulatory treatment of other Post-Retirement Benefits for utilities regulated by the TPSC (Docket 92-14631 (A)). The order promulgated rules for Tennessee American Water Company to implement for the new accounting standard. This matter originally came before the Commission in order to determine the correct way to implement the Statement of Financial Accounting Standards No. 106 and it was subsequently determined that each utility should be treated separately.

Post Retirement benefits other than pensions include items such as health insurance paid by the utility on behalf of retired employees. FAS 106 required that employers reflect in current expenses an accrual for post retirement benefits other than pensions (PBOPs) during the service periods of covered employees. These costs are viewed as deferred compensation arrangements whereby an employer promises to exchange future benefits for current services. Rather than expensing the costs of the PBOPs when payments are made in cash, the cost is recognized over the active service period of the employee.

The terms of the settlement for TAWC are as follows:

- Amounts included in TAWC rates for PBOP costs are to be deposited in an irrevocable external trust fund. Disbursements from the fund were limited to 1) payment of PBOPs pursuant to the applicable post retirement benefit plan or 2) payments for appropriate expenses of the trust.

- Any transition obligations relating to prior service costs to be amortized over 20 years.
- The attribution period is to be through the expected retirement date not the eligibility date.

Findings:

Tennessee American Water Company has correctly implemented the terms set forth in the Order for Docket 92-14631 (A). Amounts for PBOP costs are accrued monthly in a deferred account and deposited yearly with Towers Perrin. Towers Perrin provides an annual statement of FAS 106 expense which includes an amount for amortization of the transition obligation resulting from the change in accounting methods for PBOP expense.

Company Response:

Company agrees with the Staff's findings.

VIII. SALES ADJUSTMENT MECHANISM

Background:

In the Company's last case, the Commission approved a Sales Adjustment Mechanism (SAM) for sales to the Coca Cola plant in Chattanooga. The parties in the previous case agreed to a level of sales for Coca Cola. If the actual sales deviated from the agreed to level, an adjustment mechanism was utilized.

Findings:

The Company has projected a total SAM deficiency of approximately \$265,000, and has proposed to recover this amount over the next three years. The Staff has reviewed the Company's calculation and agrees with the method used to calculate the deficiency. The Staff also agrees with the Company's proposed recovery period of three years for this item.

Recommendation:

The Company should be allowed to recover the projected deficiency in the SAM of approximately \$265,000 over 3 years. As a result, approximately \$88,000 should be included in the Company's cost of service for consideration in the current rate case.

Company Response:

Company agrees with the Staff's recommendation.

IX. HYDRANT METER TARIFF**Background:**

The Company has proposed a new tariff for hydrant meters used in construction. According to the Company, Contractors and construction companies are in need of temporary water service at various sites throughout the Chattanooga community, and at unknown specified periods of time. The Company presently provides these parties with a special three inch fire hydrant water meter to record and bill their usage accurately as opposed to estimating their consumption. The usage by these temporary customers is not constant and there are periods of non-usage during which they are billed for a three-inch service charge.

Findings:

The Company's proposed tariff is an inappropriate solution to the identified problem. The Company has proposed a tariff rate of \$25 per month, in lieu of the three-inch meter service charge of \$131.75. The revenue requirement of this change is approximately \$70,000 that would have to be made up from all other customer classes.

The Staff has asked the Company to survey other water utilities to find out how they address this issue. The Company has since discovered that other utilities provide a site for water delivery at their various operation centers. The contractors then bring in trucks to fill with water. In this situation, there is no meter charge, and the likelihood of incorrect consumption records is eliminated.

Recommendation:

The Staff recommends that the Company provide for construction water at its service centers, and to eliminate the fire hydrant water meter altogether. The Staff also recommends that the rate charged for this type of consumption be set to the Company's end-step rate.

Company Response:

The Company will withdraw its proposal for a tariff rate of \$25.00 per month for hydrant meters. TAWC proposes to investigate alternatives in supplying this service to its customers and provide the TRA Staff a complete analysis by the time the Company files its next rate increase request.

Staff Rebuttal:

The Company's proposal to withdraw the proposed tariff is acceptable to the Staff.

X. CONTRIBUTIONS IN AID OF CONSTRUCTION**Background:**

The Uniform System of Accounts defines a Contribution in Aid of Construction (CIAC) as:

Any amount or item of money, services or property received by a utility, from any person or governmental agency, any portion of which is provided at no cost to the utility, which represents an addition or transfer to the capital of the utility, and which is utilized to offset the acquisition, improvement or construction costs of the utility's property, facilities, or equipment used to provide utility services to the public.

Prior to the enactment of the Tax Reform Act of 1986, all CIAC were treated as a tax free contribution to the utility's capital. After the Tax Reform Act of 1986 became law on October 22, 1986, CIAC were considered as taxable income. In order to keep the utility in the same financial position as before the Tax Reform Act of 1986, the TPSC ordered all utilities to gross up CIAC by a factor of 33% (Docket U-87-7525, October 21, 1987).

Finding:

On August 2, 1996, legislation was passed in Congress that repealed the 1986 enacted tax on CIAC for water and sewer utilities. This repeal applies to property placed in service after June 12, 1996.

The company currently has tariffs on file at the Tennessee Regulatory Authority that require a gross up of 33% on all CIAC. Since the new law eliminates the tax on CIAC made after June 12, 1996, the company should revise its tariffs to delete the 33% gross up factor.

Recommendation:

It is recommended that the company make revisions to its tariffs to delete the 33% gross up factor. It is also recommended that refunds be made to any customers who have made a CIAC after June 12, 1996.

Company Response:

The Company agrees with the TRA Staff recommendations. The Company will file revised tariff schedules and applicable rules and regulations to reflect the elimination of the 33% gross-up factor for income taxes. The new tariffs and applicable rules and regulations will be filed by October 31, 1996. Also, all CIAC collected after June 12, 1996 will be refunded to customers by December 31, 1996.

XI. UTILITY PLANT ACCOUNT RECORDS

Background:

The Uniform System of Accounts (USOA) specifically states how utilities are to record the costs for Account 331, Transmission and Distribution Mains and for Account 334, Meters and Meter Installations.

Regarding Account 331, the USOA states that:

"Records supporting this account shall be so kept as to show separately the cost of mains of **different sizes and types** (emphasis added) and of each tunnel, bridge, or river crossing."

Regarding Account 334, the USOA states that:

"The records covering meters shall be so kept that the utility can furnish information as to the number of meters of **each type and size** (emphasis added) in service and in reserve as well as the location of each meter included in this account."

Findings:

The company is incorrectly booking all plant additions for Account 331, Transmission and Distribution Mains (T&D Mains), into one primary plant account instead of being segregated into sub-accounts as required by the USOA. There are three classifications of mains that are being booked into this primary account: T&D Mains, 4 inches or less; T&D Mains 6-10 inches; and T&D Mains 12 inches or more. The company is currently booking all T&D Main plant additions into one primary account regardless of the size.

Furthermore, plant additions for Account 334, Meters and Meter Installations are being booked into one primary account instead of sub-accounts as required by the USOA. Currently the company has three

types of meters that are being classified into one account: Metal Case/Old Style Meters; Plastic Case Meters; and Metal Case/New Meters.

Recommendation:

It is recommended that the company begin booking its plant additions for Account 331, Transmission and Distribution Mains and for Account 334, Meters and Meter Installations into sub-accounts as required by the Uniform System of Accounts.

Company Response:

The Company will comply with the recommendations of the audit staff. We request that we be given until the end of the first quarter of 1997 to reflect the changes on the company's financial statements. This will give us adequate time to determine the amounts to be charged to the proper sub-accounts.

Staff Rebuttal:

The Company's proposal to reflect this change at the end of the first quarter of 1997 is acceptable to the Staff.

XII. DEPRECIATION EXPENSE**Background:**

On July 18, 1991, in Docket 91-00183, the TPSC approved depreciation rates to be used by the company effective January 1, 1992. In this docket, the "Transmission and Distribution Main" (T&D Main) account was classified into three separate sub-accounts. These three sub-accounts and the corresponding depreciation rates approved by the TPSC are: T&D Mains, 4 inches or less (1.62%); T&D Mains 6-10 inches (1.36%); and T&D Mains 12 inches or more (1.42%). The composite depreciation rate for the three different classifications as approved by the TPSC was 1.41%.

Also in Docket 91-00183, the TPSC approved depreciation rates for the following "Meter" sub-accounts: Meters - Metal Case/Old Style, 2.45%; Meters - Plastic Case, 15.35%; and Meters - Metal Case/New Style, 0.98%. The company averaged the rates approved by the TPSC in Docket 91-00183 in calculating a 2.51% composite depreciation rate which it is presently using in calculating the depreciation expense for these three accounts.

Finding:

The company is incorrectly using composite depreciation rates to book depreciation expense for Account 331, Transmission and Distribution Mains, and Account 334, Meters and Meter Installations.

The company should depreciate each classification of T&D Mains (Account 331) and Meters and Meter Installation. (Account 334) by the individual sub-account depreciation rate that was approved by the TPSC.

Recommendation:

It is recommended that the company begin booking depreciation expense for Account 331, Transmission and Distribution Mains, and Account 334, Meters and Meter Installations, by using the individual sub-account depreciation rates approved in Docket 91-00183.

Company Response:

The Company will comply with the recommendations of the audit staff. We request that we be given until the end of the first quarter of 1997 to reflect the changes on the company's financial statements. This will give us adequate time to determine the amounts to be charged to depreciation based on the rates approved in Docket 91-00183.

Staff Rebuttal:

The Company's proposal to reflect this change at the end of the first quarter of 1997 is acceptable to the Staff.

XIII. PLANT PAINTING PROJECT

Background:

During 1995 the company accepted a contractual bid from Millwright Construction & Maintenance for a major painting project. The project included the filter plant, chemical buildings and the interior of the Citico Pump Station. The contractor completed the project in December, 1995. The cost of the project was \$39,814 and the company recorded it as a current period expense to Account 726200.18 - "Painting Supplies", a maintenance expense account.

Finding:

After reviewing the painting project, the Staff has determined that the plant refurbishment will provide benefits that extend over one or more future accounting periods. Furthermore, discussions with company personnel revealed that the same facilities had not been painted for a very long time and would not have to be repainted for at least another 15 years.

The Uniform System of Accounts (USOA) specifically details the accounting treatment regarding miscellaneous and unusual expenditures.

For clarification purposes the USOA states:

Account 186, Miscellaneous Deferred Debits, shall include all debits not elsewhere provided for, such as miscellaneous work in progress, losses on disposition of property, net of income taxes, deferred by authorization of the Commission, and **unusual or extraordinary expenses, not included in other accounts** [Emphasis Added], which are in the process of amortization, and items the proper final disposition of which is uncertain.

Recommendation

It is recommended that the plant painting expenditures be capitalized and amortized over its economic and useful life.

Company Response:

The company requests that the auditors reconsider their recommendation to capitalize the costs associated with the painting of some of the company's facilities. The painting of a building does not constitute an unusual or extraordinary expense which would require the cost to be capitalized and depreciated as recommended by the TRA Staff. The NARUC defines extraordinary items as "not typical or customary business activities of the company" (NARUC chart of accounts general instructions pg. 15).

Financial Accounting Standards 71, "Accounting for the Effects of Certain Types of Regulations" permits the company to defer such costs if it is probable that the company will be allowed to recover those costs in future rates, however Tennessee American's rate structure allows for a certain amount of maintenance costs each year. The costs of the painting job was allowed for when determining maintenance expenses for the year and therefore did not increase the cost of service. To defer and amortize these costs would inflate future cost of service which violates the capitalization criteria under FAS 71 (para. 9(b)).

Staff Rebuttal:

The Staff agrees with the company that the plant painting expenditure is not an extraordinary item. We do believe that the painting

project is an unusual expenditure due to its infrequency of occurrence.

As a result, the project should be treated as a miscellaneous or unusual expenditure based on the NARUC guidelines for Account 186, Miscellaneous Deferred Debits described in the Staff's finding. Also, the company should make a corresponding adjustment to maintenance expense during the current rate case.

XIV. MISCELLANEOUS EXPENSES

Background:

For Miscellaneous Expenses, the USOA states that:

"this account shall include all expenses not includible in other operating expense accounts".

USOA accounting principles also provide examples of expenses which should be recorded as a miscellaneous expense. For example, Industry Dues, Meetings of the Industry, Stockholders meeting expenses, etc... The USOA did not intend for these examples to be all inclusive but rather to provide a foundation regarding miscellaneous expenses that should be included in a company's Operations and Maintenance expenses for rate making purposes.

Findings:

During 1995 the company recorded Miscellaneous Expenses to above-the-line operations in various accounts that were not related to utility activities.

Account 656750.17-Expenses for Employees:

Various transactions involving social club activities and various out-of-state travel not related to company operations. The amount of these expenses total \$1,628. The total account balance at 12/31/95 is \$15,554.

Account 656750.53-Community Relations-General-Other:

Various transactions involving social club activities and various miscellaneous expenses not related to company operations. The amount of these expenses total \$8,750. The total account balance at 12/31/95 is \$54,701.

Account 656750.63-Meals & Entertainment:

Transactions involving spouse travel expenses, social club activities and various miscellaneous expenses not related to company operations were found. The amount of these expenses total \$4,973. The total account balance at 12/31/95 is \$8,485.

Account 656750.17-Club Dues:

Transactions involving country club and social club activities not related to the company operations were identified. The amount of these expenses total \$2,481. The total account balance at 12/31/95 is \$2,632.

Recommendation

It is recommended that the company identify and record social club, country club and other expenses that are not related to the utility's operation to below-the-line expense accounts.

Company Response:

The Company accepts the TRA Staff recommendation.

XV. LOBBYING EXPENSES**Background:**

TAWC had not accounted for Lobbying expenses related to membership dues to the National Association of Water Companies (NAWC) until 1995, when the company began accounting for them as a result of the Omnibus Budget Reconciliation Act of 1993. The new federal act mandated that expenses associated with lobbying activities were no longer deductible as business expenses for tax purposes. As a result, the NAWC had to notify to its members that a portion of its efforts were lobbying activities.

Finding:

During the Staff audit it was discovered that 23% percent of the company's membership dues to NAWC were accounted for as above-the-line Lobbying expenses. Although TAWC has appropriately separated the association's dues related to lobbying activities, the Staff feels that the lobbying expenses should be charged to below-the-line operations because of the long standing regulatory policy in Tennessee (U-5816, 12/24/73).

Total Lobbying expenses recorded in 1995 amount to \$3,453.

Recommendation:

It is recommended that the company record Lobbying expenses to below-the-line operations.

Company Response:

The TRA Staff recommended that lobbying expenses be recorded below the line, thus excluding them from rate recovery. The Company believes that lobbying expenses are 1) prudent expenses of a Company and are not excessive, and 2) they benefit the ratepayers.

As a result of recent legislation that was passed by Congress and signed by the President, CIAC for water and sewer utilities are no longer included in taxable income. This legislation was supported through the lobbying efforts of the NAWC of which TAWC is a member.

The Company believes that lobbying expenses are prudent and should be recognized. The TRA Staff could set some sort of benchmark level for utilities (i.e., .01% of operating revenues) to recover in rates. This allows the utility some flexibility in making expenditures for lobbying efforts.

Staff Rebuttal:

The Staff's finding indicated that it has been policy in Tennessee to deduct lobbying expenses from operating expenses for rate-making purposes (South Central Bell, U-5816 dated 12/24/73 and U-6402 dated 5/4/77). Therefore, the Staff maintains its position regarding the accounting treatment for lobbying expenses.

BASS, BERRY & SIMS PLC

A PROFESSIONAL LIMITED LIABILITY COMPANY
ATTORNEYS AT LAW

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(615) 742-6200

REC'D TN
REGULATORY AUTH.

KNOXVILLE OFFICE:
1700 RIVERVIEW TOWER
KNOXVILLE, TN 37901-1509
(423) 521-6200

96 OCT 7 PM 2 30

October 7, 1996 OFFICE OF THE
EXECUTIVE SECRETARY

K. David Waddell
Executive Secretary
TENNESSEE REGULATORY AUTHORITY
460 James Robertson Parkway
Nashville, TN 37243-0505

RE: Tennessee American Water Company
Docket No. 96-00959

Dear Mr. Waddell:

Enclosed please find original and nine (9) copies of a Stipulation and Recommendation of Settlement dated this date and signed by counsel in behalf of all three parties, Tennessee American Water Company, the Consumer Advocate Division of the Office of the Attorney General and the Chattanooga Manufacturers Association Water Intervention Group.

This matter is set for hearing on October 17, 1996, at 10:00 o'clock A.M. in Chattanooga, Tennessee. I would appreciate it if you would bring this Stipulation and Recommendation of Settlement to the attention of the Directors.

With kindest regards, I remain

Very truly yours,



T. G. Pappas

TGP/br#476858

Enclosures

cc: David Yates

William C. Carriger

James E. Salser ✓

Richard T. Sullivan

Dianne Neal

BEFORE THE TENNESSEE REGULATORY AUTHORITY

Nashville, Tennessee

REC'D IN
HORITY, REGISTRY AUTH.

Nashville, Tennessee OCT 7 PM 2 30

IN RE:

**PETITION OF TENNESSEE AMERICAN WATER
COMPANY TO CHANGE AND INCREASE
CERTAIN RATES AND CHARGES SO AS TO
EARN A FAIR AND ADEQUATE RATE OF
RETURN ON ITS PROPERTY USED AND USEFUL
IN FURNISHING WATER SERVICE TO ITS
CUSTOMERS**

CHIEF OF THE
EXECUTIVE SECRETARY

DOCKET NO. 96-00959

STIPULATION AND RECOMMENDATION OF SETTLEMENT

This matter is before the Tennessee Regulatory Authority ("Authority") pursuant to the Petition filed by Tennessee American Water Company ("Company") to change and increase certain rates and charges as set out in that Petition. The Authority has set the matter for hearing in Chattanooga, Tennessee, October 17, 1996, beginning at 10:00 o'clock a.m., EDT at the School Board Building.

The parties to this proceeding, the Company, the Consumer Advocate Division of the Office of the Attorney General ("Consumer Advocate") and the Chattanooga Manufacturers Association Water Intervention Group ("CMA") have had full and free exchange of information and have negotiated in an attempt to resolve issues in this case. The parties have resolved the issues in controversy and have entered into this Stipulation and Recommendation of Settlement as follows:

(1) The Company has reduced the amount of its requested additional annual revenues from \$2,448,943.00 to \$1,405,000.00 and shall adjust its rates to recover approximately

\$1,405,000.00 in additional annual revenues from its customers for service rendered on and after November 1, 1996. Attached hereto as attachment A is a schedule that shows the calculation of the stipulated revenue increase. It is agreed that the additional revenues and the design of the tariffs to be applied by the Company are fair and reasonable. The tariffs are attached to this Stipulation as attachment B and are designed to increase the customer rates 5.1% "across the board".

(2) It is understood that this Stipulation and Recommendation has not been approved by the Authority and will be submitted to the Authority.

(3) The parties agree that the negotiations have been conducted in good faith in an attempt to resolve the Company's need for increase revenues and that the resolution of this matter as set out in this Stipulation and Recommendation is a fair and reasonable resolution of all the issues in this proceeding and is in the best interest of the Company's customers and the Company.

(4) The parties agree that by entering into this Stipulation and Recommendation, they are not agreeing, for the future, to any item or change as requested by the Company nor any specific theory supporting the appropriateness of such changes.

(5) This Stipulation and Recommendation has been agreed to for the purposes of settling this case and shall not be binding upon the parties hereto in any other proceeding before this Authority or any Court and it shall not be offered in evidence or relied upon in any other proceeding involving Tennessee American Water Company before the Authority.

(6) It is agreed that if the Authority does not adopt this Stipulation and Recommendation in its entirety, each party hereto reserves the right to withdraw from it and request that the matter proceed as if no stipulation or recommendation had been entered into, and in such event this

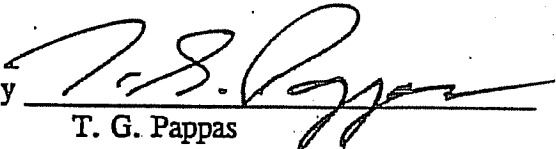
Stipulation and Recommendation shall not be binding upon any of the parties, and shall not be admitted into evidence or relied upon by any party in this proceeding before the Authority or any Court proceeding for judicial review.

(7) If the Regulatory Authority adopts this Stipulation and Recommendation in its entirety, each party agrees that it shall not file an application for rehearing with the Authority nor appeal this case or any part thereof for the judicial review.

AGREED to this 2th day of October, 1996.

TENNESSEE AMERICAN WATER COMPANY

By


T. G. Pappas

CONSUMER ADVOCATE DIVISION
of the OFFICE OF THE ATTORNEY
GENERAL

By

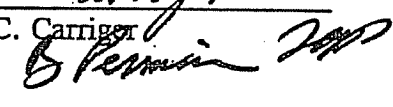

David Yates



CHATTANOOGA MANUFACTURERS
ASSOCIATION WATER INTERVENTION
GROUP

By


William C. Carriger



Attachment A

Tennessee-American Water Company
Stipulated Revenue Increase
Docket No. 96-00959

	<u>Amount</u>
Rate Base	\$76,085,848
Operating Income at Present Rates	6,366,903
Earned Rate of Return	8.37%
Fair Rate of Return	9.47%
Required Operating Income	7,205,330
Operating Income Deficiency	838,427
Gross Revenue Conversion Factor	<u>1.675758</u>
Stipulated Revenue Increase	<u>\$1,405,000</u>

Attachment B
Page 1 of 4

TENNESSEE-AMERICAN WATER COMPANY

TPSC No. 19

Fourth Revision of Sheet No. 4

Canceling

Third Revision of Sheet No. 4

SERVICE CHARGES:Service Charge Per Month

<u>Meter Size</u>	<u>Chattanooga General Water Service Tariff</u>	<u>Lookout Mountain Tariff</u>	<u>Lakeview Tariff</u>
5/8"	\$ 8.26	\$ 9.24	\$ 9.24 (I)
3/4"	13.86	13.86	13.86 (I)
1"	23.07	23.07	23.07 (I)
1-1/2"	46.18	46.18	46.18 (I)
2"	73.86	73.86	73.86 (I)
3"	138.50	138.50	138.50 (I)
4"	230.83	230.83	230.83 (I)
6"	461.67	461.67	461.67 (I)
8"	738.67	738.67	738.67 (I)

VOLUMETRIC RATES:Cost per CCF

<u>Monthly Use</u>	<u>Chattanooga General Water Service Tariff</u>	<u>Lookout Mountain Tariff</u>	<u>Lakeview Tariff</u>
0-4 CCF/Mo.	\$.1490	\$.4350	\$.1490 (I)
4-65	2.4360	3.3720	3.0850 (I)
65-500	1.5400	2.5180	2.2300 (I)
500-5,000	1.1390	1.4760	1.1890 (I)
5,000-15,000	.9160	1.2540	.9680 (I)
Over 15,000	.5550	.8880	.6080 (I)

(I) Increase

ISSUED:

EFFECTIVE DATE:

November 1, 1996

BY: R.T. SULLIVAN, VICE PRESIDENT
1101 Broad Street
Chattanooga, Tennessee 37401

Attachment B
Page 2 of 4

TENNESSEE-AMERICAN WATER COMPANY

TPSC No. 19
Fourth Revision of Sheet No. 6
Canceling
Third Revision of Sheet No. 6

CLASSIFICATION OF SERVICE

PUBLIC FIRE SERVICE FOR THE CITY OF RIDGESIDE

Available For:

Public Fire Service in the City of Ridgeside.

Annual Rates, Charges and Conditions of Service

The annual charge for water service furnished to fire hydrants existing on October 20, 1956, attached to its then-existing water mains in the City shall be \$1,849.92. This charge shall be due and payable in twelve (12) equal installments, each installment to be due and payable on the 10th day of the month, covering service for the preceding month, and if not paid within sixty (60) days thereafter, shall bear interest from said due and payable date at the rate of six percent (6%) per annum. (I)

The City shall have the right to install or cause to be installed, at its own cost and expense, such additional fire hydrants as it may desire on mains within the limits of the city six (6") and larger in diameter, size to be determined by the Water Company, in the public highways in the City, and, on such extended mains as may be ordered by the City, and the City shall pay an annual rental on such water main extensions of six (6") inches or larger at the rate of three cents (\$.03) per inch of diameter for each lineal foot of main laid in the extension of such main, provided, however, that the Water Company shall not be required to make any extension of its mains while the City is in arrears on its fire hydrant rental payment.

(I) Increase

ISSUED:

EFFECTIVE DATE:

November 1, 1996

BY: R.T. SULLIVAN, VICE PRESIDENT
1101 Broad Street
Chattanooga, Tennessee 37401

TENNESSEE-AMERICAN WATER COMPANY

TPSC No. 19

Fourth Revision of Sheet No. 8

Canceling

Third Revision of Sheet No. 8

CLASSIFICATION OF SERVICEPUBLIC FIRE SERVICEAvailable For:

Public Fire Service in the City of Chattanooga, City of East Ridge, City of Red Bank, the Town of Lookout Mountain, Tennessee, and Unincorporated Areas of Hamilton and Marion Counties, Tennessee; and the City of Rossville, the Town of Lookout Mountain, Georgia and the Unincorporated Areas of Walker, Catoosa and Dade Counties, Georgia.

RatesRates Per Annum

Each Public Fire Hydrant

\$301.20

(1)

(1) Increase

ISSUED:

EFFECTIVE DATE:

November 1, 1996

BY: R.T. SULLIVAN, VICE PRESIDENT
1101 Broad Street
Chattanooga, Tennessee 37401

TENNESSEE-AMERICAN WATER COMPANY

TPSC No. 19

Fifth Revision of Sheet No. 9

Canceling

Fourth Revision of Sheet No. 9

CLASSIFICATION OF SERVICEPRIVATE FIRE SERVICEAvailable For:

Private Fire Service in all territory served by the Company. Private Fire Service is rendered only after approval by the President or Vice President and General Manager of the Company of an "Application for Special Connection," and only in accordance with the terms and conditions as provided therein.

RatesRate per AnnumPrivate Fire Service Connections:

1" diameter	\$ 21.60 (I)
1-1/2" diameter	48.72 (I)
2" diameter	86.64 (I)
2-1/2" diameter	132.12 (I)
3" diameter	194.76 (I)
4" diameter	390.00 (I)
6" diameter	779.40 (I)
8" diameter	1,560.12 (I)
10" diameter	2,340.36 (I)
12" diameter	3,120.72 (I)

Private Fire Hydrants other than those supplied
by Private Fire Service Connections

\$779.40 (I)

(I) Increase

ISSUED:

EFFECTIVE DATE:

November 1, 1996

BY: R.T. SULLIVAN, VICE PRESIDENT
1101 Broad Street
Chattanooga, Tennessee 37401

BASS, BERRY & SIMS PLC
A PROFESSIONAL LIMITED LIABILITY COMPANY
ATTORNEYS AT LAW

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(615) 742-6200

KNOXVILLE OFFICE:
1700 RIVERVIEW TOWER
KNOXVILLE, TN 37901-1509
(423) 521-6200

October 30, 1996

Mr. James E. Salser
Director of Rates & Revenues
AMERICAN WATER WORK SERVICE COMPANY
200 E. Park Drive, Ste. 600
Mt. Laurel, NJ 08054

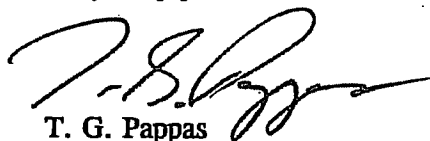
RE: Tennessee American Water Company
1996 Rate Case - Docket No. 96-00959

Dear Jim:

I am enclosing a copy of the Hearing Officer's Initial Order dated October 28, 1996, in the above-styled rate case, for your information and files. As soon as the Authority's Order of yesterday is signed, I will send you a copy.

With kindest regards, I remain

Very truly yours,


T. G. Pappas

TGP/br#482299
cc: Richard T. Sullivan
Enclosure

BEFORE THE TENNESSEE REGULATORY AUTHORITY

October 28, 1996

Nashville, Tennessee

**IN RE: PETITION OF TENNESSEE AMERICAN WATER)
 COMPANY TO CHANGE AND INCREASE)
 CERTAIN RATES AND CHARGES SO AS TO)
 EARN A FAIR AND ADEQUATE RATE OF)
 RETURN ON ITS PROPERTY USED AND USEFUL)
 IN FURNISHING WATER SERVICE TO ITS)
 CUSTOMERS)**

DOCKET NO. 96-00959

INITIAL ORDER

This matter is before the Tennessee Regulatory Authority ("Authority") pursuant to the Petition filed by Tennessee American Water Company ("Company") to change and increase certain rates and charges as set out in that Petition. The Authority set the matter for hearing in Chattanooga, Tennessee, for October 17, 1996, beginning at 10:00 o'clock a.m. EDT at the Hamilton County School Board Building. The Authority at a regularly scheduled Authority Conference on October 15, 1996, appointed its Chairman H. Lynn Greer, Hearing Officer, to hear this matter and to issue an Initial Order.

I. HEARING

This matter then came on to be heard before the Hearing Officer H. Lynn Greer, on October 17, 1996, at the Hamilton County School Board Building, Chattanooga, Tennessee, beginning at 10:00 o'clock a.m. EDT, at which time the following appearances were entered.

APPEARANCES:

T. G. PAPPAS, Bass, Berry & Sims PLC, 27th Floor, First American Center, Nashville, Tennessee, 37238, appearing on behalf of Tennessee-American Water Company.

DAVID W. YATES, Consumer Advocate Division, Office of the Attorney General, 404 James Robertson Parkway, Suite 1504, Nashville, Tennessee 37243-8700.

WILLIAM C. CARRIGER, Strang, Fletcher, Carriger, Walker, Hodge & Smith, 400 Krystal Building, One Union Square, Chattanooga, Tennessee 37402, appearing in behalf of The Chattanooga Manufacturers Association Water Intervention Group.

The Hearing Officer asked for any preliminary statements, Counsel for the Company stated that the Company had complied with Rule 1220.4-1.05 of the Rules of the Authority and Tennessee Code Annotated 65-5-201 pertaining to publication and posting of a Notice of Hearing ("Notice") by publishing the Notice in the Chattanooga News Free Press on October 7, 1996, and the Chattanooga Times on October 7, 1996 and by posting a copy of the Notice in the Company's main lobby of the Customer Service area in Chattanooga on October 4, 1996. Counsel then moved that the letter to Mr. K. David Waddell, dated October 14, 1996, as to the publication, with copies of the printed and published notices be made Exhibit 1 in this cause, and the Hearing Officer so ordered.

The Company then stated that the Company had entered into an agreement of Stipulation and Recommendation of Settlement with all the parties in this cause, the Consumer Advocate Division, Office of the Attorney General and the Chattanooga Manufacturer's Association Water

Intervention Group. He asked that a copy of the letter dated October 7, 1996, to the Executive Secretary, together with the agreement and attachments thereto, be filed and made a part of this record as Exhibit 2, and the Hearing Officer so ordered.

Counsel for the Company then stated the general terms and conditions of the Stipulation and Recommendation of Settlement. It was stated that the Company's requested additional annual revenues had been reduced from \$2,448,943.00 to \$1,405,000.00. Counsel further stated that as shown in attachment B to the Stipulation and Recommendation of Settlement, customers' rates would increase 5.1% and that this was a reduction from the originally requested rate increase of approximately 8.9% as shown in its Petition. The stipulation Exhibit 2 in this proceeding included these seven terms to which the parties agreed:

(1) The Company has reduced the amount of its requested annual revenues from \$2,448,943.00 to \$1,405,000.00 and shall adjust its rates to recover approximately \$1,405,000.00 in additional annual revenues from its customers for service rendered on and after November 1, 1996. Attached hereto as attachment A is a schedule that shows the calculation of the stipulated revenue increase. It is agreed that the additional revenues and the design of the tariffs to be applied by the Company are fair and reasonable. The tariffs are attached to this Stipulation as attachment B and are designed to increase the customer rates 5.1% "across the board".

(2) It is understood that this Stipulation and Recommendation has not been approved by the Authority and will be submitted to the Authority.

(3) The parties agree that the negotiations have been conducted in good faith in an attempt to resolve the Company's need for increase revenues and that the resolution of this matter as set out in this Stipulation and Recommendation is a fair and reasonable resolution of all the issues in this proceeding and is in the best interest of the Company's customers and the Company.

(4) The parties agree that by entering into this Stipulation and Recommendation, they are not agreeing, for the future, to any item or change as requested by the Company nor any specific theory supporting the appropriateness of such changes.

(5) This Stipulation and Recommendation has been agreed to for the purposes of settling this case and shall not be binding upon the parties hereto in any other proceeding before this Authority or any Court and it shall not be offered in evidence or relied upon in any other proceeding involving Tennessee American Water Company before the Authority.

(6) It is agreed that if the Authority does not adopt this Stipulation and Recommendation in its entirety, each party hereto reserves the right to withdraw from it and request that the matter proceed as if no stipulation or recommendation had been entered into, and in such event this Stipulation and Recommendation shall not be binding upon any of the parties, and shall not be admitted into evidence or relied upon by any party in this proceeding before the Authority or any Court proceeding for judicial review.

(7) If the Regulatory Authority adopts this Stipulation and Recommendation in its entirety, each party agrees that it shall not file an application for rehearing with the Authority nor appeal this case or any part thereof for the judicial review.

Counsel for the Company and the Intervenor moved that all pre-filed testimony and exhibits be entered as if the questions had been asked and the answers had been given and all parties waived cross-examination of all witnesses. The Hearing Officer then inquired as to whether there were any public witnesses present who wanted to testify or make a statement. No public witnesses appeared to testify or make a statement.

II. CRITERIA FOR ESTABLISHING JUST AND REASONABLE RATES

The Authority considers petitions such as this one, filed pursuant to T.C.A. § 65-5-203, in light of the following considerations:

1. The investment or rate base upon which the utility should be permitted to earn a fair rate of return;
2. The proper level of revenues for the utility;

3. The proper level of expenses for the utility; and
4. The rate of return the utility should earn.

III. FINDINGS AND CONCLUSIONS

The following findings and conclusions as agreed to by the parties in this action are as herein set out. Counsel for the Intervenor Chattanooga Manufacturers Association Water Intervention Group, stated that the interest which compelled his client's intervention was for the purpose of monitoring the tariff design, and the testimony which they filed dealt primarily with that issue. They agreed that their concerns had been resolved by the Stipulation entered into by the Company and the Intervenor. From all the record and exhibits before me, this Hearing Officer makes the following findings and conclusions.

A. TEST PERIOD

The objective of selecting a test period is to obtain financial data and adjust it as necessary to reflect the inter-relationship of revenues, expenses and investment expected to occur in the immediate future. In this case the Company selected the twelve months ending December 31, 1995, as the historical test period and made two levels of adjustments. The first adjustment normalizes the test year and the second adjusts the normalized year to arrive at the attrition year which is the twelve months ending October 31, 1997. The Stipulation and Recommendation of the parties as to this issue is adopted. The Hearing Officer, therefore, finds that the test period as adjusted will allow the Company the opportunity to earn a fair rate of return on its investment.

B. RATE BASE

The parties stipulated as to a rate base for the attrition year of \$76,085,848. The Hearing Officer finds that the rate base in this case has been adjusted to reflect the investment and expenses of the Company for the attrition year test period and therefore is proper and should give the Company the opportunity to earn a fair rate of return on its investment to which it is entitled.

C. REVENUES AND EXPENSES

The parties stipulated that they have agreed to certain facts which were obtained by their review of the Company's books and records for the purposes of this case. They agreed that the net operating income at present rates of the Company, for the attrition period was \$6,366,903. They further agreed that the revenue deficiency for the attrition year is \$838,427 based upon an overall return of 9.47%. The calculation of the rate base, revenue deficiency, the revenue increase needed and the other components used are found in attachment A to Exhibit 2, which is as follows:

Tennessee-American Water Company
Stipulated Revenue Increase
Docket No. 96-00959

	Amount
Rate Base	\$76,085,848
Operating Income at Present Rules	6,366,903
Earned Rate of Return	8.37%
Fair Rate of Return	9.47%
Required Operating Income	7,205,330
Operating Income Deficiency	838,427
Gross Revenue Conversion Factor	<u>1,675,758</u>
Stipulated Revenue Increase	<u>\$ 1,405,000</u>

D. FAIR RATE OF RETURN

The Authority in reaching a decision on a rate of return must give in-depth analysis and consideration to numerous factors, such as capital structure, cost of capital and changes that can be reasonably anticipated in the foreseeable future. The Authority has the obligation to make this determination based upon the controlling legal standard laid down in the landmark Bluefield and Hope cases. These cases have been cited and relied upon by many courts including the Tennessee Supreme Court. (See, Southern Bell Telephone & Telegraph Co. v. Public Service Commission, 304 S.W.2d 640, 647 (1957)). In the Bluefield case the United States Supreme Court stated:

"A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risk and uncertainties; but it has no constitutional rights to profits such as are realized or anticipated in highly profitable or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility, and should be adequate, under efficient and economical management to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties."

Bluefield Water Works and Improvement Company v. Public Service Commission of the State of West Virginia, 262 U.S. 679, 692-93 (1923).

Later, in the Hope case, the United States Supreme Court refined these guidelines, holding that:

"From the investor or company points of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on

the debt and dividends on the stock. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise so as to maintain its credit and to attract capital."

Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591, 603 (1944).

The parties for this case and this case only have agreed in a capital structure that produces a rate of return for the Company of 9.47% which is fair and reasonable and meets the tests of the Bluefield and Hope cases. Therefore, the Company needs additional gross annual revenues in the amount of approximately \$1,405,000.00, as shown in the table above.

E. RATE DESIGN

The parties have agreed that an across the board increase of 5.1% designed to produce an increase in annual revenues of \$1,405,000 is fair and reasonable. The Hearing Officer approves this increase as being just and reasonable and meets the standards set out in T.C.A. § 65-5-203(a). The Company filed tariffs on October 17, 1996 pursuant to the agreement reached between the parties. It is the finding of the Hearing Officer that the tariffs as filed shall go into effect on November 1, 1996.

IV. REVIEW OF INITIAL ORDER

The appeal from an initial order is controlled by T.C.A. § 4-5-315. The steps necessary to have an initial order appealed are fully set out in that section. Pursuant to the provisions of the above cited section, the Authority may upon its own motion review the initial order and the parties may file exceptions or replies to exceptions in the form of a brief setting forth specific issues. The

exceptions and any replies thereto will be considered by the Authority in its review. The Authority will determine the matter at a regularly scheduled Authority conference.

IT IS THEREFORE ORDERED:

1. That the tariffs filed by the Company on May 17, 1996, to become effective on June 16, 1996, which have heretofore been suspended, are hereby denied.
2. That the tariffs filed by the Company with an issue date of October 17, 1996, and an effective date of November 1, 1996, designed to produce additional annual revenues of approximately \$1,405,000 and designed to increase customer rates across the board by 5.1% be approved and permitted to go into effect as of November 1, 1996, subject to the Authority's adoption of the Initial Order.
3. That the Settlement Agreement resolves all issues in this case which were before the Hearing Officer.


LYNN GREER
HEARING OFFICER

BEFORE THE TENNESSEE REGULATORY AUTHORITY

NASHVILLE, TENNESSEE

October 31, 1996

IN RE: PETITION OF TENNESSEE AMERICAN WATER)
COMPANY TO CHANGE AND INCREASE CERTAIN)
RATES AND CHARGES SO AS TO EARN A FAIR)
AND ADEQUATE RATE OF RETURN ON ITS)
PROPERTY USED AND USEFUL IN FURNISHING)
WATER SERVICE TO ITS CUSTOMERS)

DOCKET NO. 96-00959

ORDER

This matter is before the Tennessee Regulatory Authority (hereafter "Authority") upon the petition of Tennessee American Water Company (hereafter "Company") to increase its rates and charges to produce additional gross revenues in the amount of \$2,448,943.00. The matter was set for hearing and heard on October 17, 1996, at the Hamilton County School Board Building, Chattanooga, Tennessee, beginning at 10:00 a.m. EDT before H. Lynn Greer, Hearing Officer.


The Hearing Officer issued his Initial Order holding that the Stipulation and Recommendation of Settlement entered into by and between the parties should be approved in its entirety. The Hearing Officer found and concluded from the entire record that: (a) the additional revenues needed by the Company were \$1,405,000.00, and that this amount is just and reasonable; (b) the stipulated and agreed upon decrease from 8.9% requested, to 5.1% increase in customer rates is fair, just and reasonable; and (c) that tariffs filed by the Company on October 17, 1996, to become effective on November 1, 1996, designed to increase annual revenues by \$1,405,000.00 are just and reasonable and should be permitted to go into effect on November 1, 1996.

The Authority considered this matter at a regularly scheduled Authority Conference held on October 29, 1996. It was concluded, after careful consideration of the entire record, that the Hearing Officer's Initial Order should be approved and adopted. The Authority further finds that it should adopt the findings and conclusions of the Hearing Officer as its own.

IT IS THEREFORE ORDERED:

- 1) That the Hearing Officer's Initial Order in this Docket is hereby approved, adopted and incorporated by reference in this Order as though fully copied verbatim herein, including the findings and conclusions of the Hearing Officer which the Authority adopts as its own;
- 2) That the tariffs filed by Tennessee American Water Company on May 17, 1996, to become effective on June 16, 1996, which have heretofore been suspended are hereby denied; and
- 3) That the tariffs filed on October 17, 1996, with an effective date of November 1, 1996, be and the same are hereby approved to be effective for service rendered to customers on and after November 1, 1996.


CHAIRMAN


DIRECTOR


DIRECTOR

ATTEST:


EXECUTIVE SECRETARY

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing has been served by way of electronic mail on this the 4th day of January, 2011, upon the following:

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