OCA Statement No. 1

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	DOCKET NO. R-00016339
v.	:	
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

DIRECT TESTIMONY OF

ANDREA C. CRANE

ON REVENUE REQUIREMENTS

ON BEHALF OF

THE OFFICE OF CONSUMER ADVOCATE

August 3, 2001

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I. STATEMENT OF QUALIFICATIONS

Q. Please state your name and business address.

A. My name is Andrea C. Crane and my business address is 38C Grove Street, Ridgefield, Connecticut 06877.

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

A. I am Vice President of The Columbia Group, Inc., a financial consulting firm that specializes in utility regulation. In this capacity, I analyze rate filings, prepare expert testimony, and undertake various studies relating to utility rates and regulatory policy.

Q. Please summarize your professional experience in the utility industry.

A. Prior to my association with The Columbia Group, Inc., I held the position of Economic Policy and Analysis Staff Manager for GTE Service Corporation, from December 1987 to January 1989. From June 1982 to September 1987, I was employed by various Bell Atlantic subsidiaries. While at Bell Atlantic, I held assignments in the Product Management, Treasury, and Regulatory Departments.

Q. Have you previously testified in regulatory proceedings?

A. Yes, since joining The Columbia Group, Inc., I have testified in over 110 regulatory proceedings in the states of Arizona, Connecticut, Delaware, Hawaii, Kansas, Maryland, New Jersey, New Mexico, New York, Oklahoma, Pennsylvania, South Carolina, Rhode Island, Vermont and the District of Columbia. These proceedings involved water, wastewater, electric, gas, telephone, solid waste, cable television, and navigation utilities. A list of dockets in which I have filed testimony is included in Appendix A.

Q. Do you have any additional utility experience?

A. Yes, from March, 1991 until January, 1998, I served as the Vice Chairman of the Water Pollution Control Commission in Redding, Connecticut. This Commission was charged with designing, constructing, and operating a sewer treatment facility for the Town of Redding.

Q. What is your educational background?

A. I received a Masters degree in Business Administration, with a concentration in Finance, from Temple University in Philadelphia, Pennsylvania. My undergraduate degree is a B.A. in Chemistry from Temple University.

II. PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony?

A. The Columbia Group, Inc. was engaged by the Pennsylvania Office of Consumer Advocate ("OCA") to review the recent rate filing by the Pennsylvania-American Water Company ("PAWC" or "Company") and to provide recommendations to the Pennsylvania Public Utility Commission ("Commission") regarding the Company's revenue requirement and cost of capital. I am testifying on the issue of revenue requirements. Dr. J. Randall Woolridge from The Columbia Group, Inc. is testifying on the Company's cost of capital.

In developing my revenue requirement recommendation, I reviewed the prefiled testimony and exhibits of the Company and the responses to data requests propounded upon the Company by the OCA and other parties. I also obtained additional information from the Company via informal teleconference. To determine an overall recommended revenue requirement for PAWC, I have relied on the cost of capital recommendation of Dr. Woolridge. I also relied upon the depreciation expense recommendations of OCA witness Michael Majoros.

Q. What is the cost of capital and capital structure for PAWC that is being recommended by Dr. Woolridge?

A. As shown on Exhibit JRW-1, Dr. Woolridge is recommending the following cost of capital and capital structure:

	Percent	Cost	Weighted Cost
Long Term Debt	56.15%	7.52%	4.22%
Preferred Stock	1.23%	8.05%	0.10%
Common Equity	42.62%	9.00%	3.84%
Overall Cost of Capital			8.16%

Q. What are the major factors contributing to the Company's rate increase request?

A. The most significant factor contributing to the rate increase request is the growth in utility plant in service. The Company is projecting a future test year increase in utility plant in service from $1,585,453,100 at December 31, 2000 to $1,747,207,788 at December 31, 2001, for an increase of approximately $161.7 million (net of retirements). In total, PAWC is projecting an increase in its rate base of $105.6 million for the twelve months ending December 31, 2001. According to the Company, the projected future test year utility plant in service additions are composed of the following:

Installation and Replacement of Mains	$55.7 million
Five Regionalization Projects	15.2
New Services and Meters	15.0
Norristown Treatment Plant Upgrades	10.4
Philipsburg Wells Project	3.3
Tank Rehabilitation	2.7
Acquisitions of Other Systems	50.7
Other Projects	8.7
Total	$161.7 million

Other contributing factors to the Company's filing include a requested overall rate of return that is higher than the actual return earned in the historic test year and increased depreciation expense of $7.75 million more than the actual test year expense. With regard to operating and maintenance expense, the Company has included a $4.7 million "at risk" adjustment that it contends is designed to reduce its pro forma operating and maintenance expenses to the level requested in its last base rate case.

III. SUMMARY OF CONCLUSIONS

Q. Please summarize the Company's request in this case.

A. PAWC is requesting a rate increase of $38.7 million, or approximately 12.4% over the Company's claimed pro forma revenue at present rates. The Company's last base rate case was resolved by stipulation with rates effective December 18, 1999. Over the past decade, PAWC has filed for a base rate increase approximately every two years.

Q. What are your conclusions concerning the Company's pro forma income, rate base, and revenue requirement?

A. Based on my testimony and on the recommendations of other OCA witnesses, my conclusions are as follows:

1. The twelve months ending December 31, 2001 is a reasonable future test year for purposes of evaluating the Company's need for rate relief.
2. PAWC has a pro forma, future test year rate base of $1,300,652,754 (see Schedule ACC-2).
2. The Company has pro forma, future test year operating income at present rates of $107,152,388 (see Schedule ACC-8).
3. Based on these determinations, a revenue requirement decrease of $1,772,716 is appropriate. This is in contrast to the revenue requirement increase of $38,706,315 requested by the Company (see Schedule ACC-1).

IV. RATE BASE ISSUES

A. Introduction

Q. What test years did the Company utilize to develop its rate base claim in this proceeding?

A. The Company selected the historic test year ending December 31, 2000 and the future test year ending December 31, 2001.

B. Utility Plant in Service

Q. Please discuss the Company's utility plant in service claim.

A. As previously discussed, PAWC is projecting a significant increase to its utility plant in service during the future test year. In reviewing the Company's claim for future test year utility plant in service additions, it is reasonable to examine its claim in two parts. Approximately 30% of its future test year claim relates to acquisitions of other water utility systems while the remaining 70% relates to improvements to its existing plant such as main replacements and treatment plant upgrades. The Company's claim for plant additions associated with acquisitions should be reviewed separately from its claim for other plant additions.

The acquisitions included by PAWC in its filing include the following systems: T.O.W. Associates Industrial Park, the City of Coatesville Authority, the Butler Township Water and Sewer Authority, and the Fox Knoll Water Company. It is my understanding that the Company has completed each of these acquisitions. Therefore, it is reasonable to assume that the amount of plant in service related to acquisitions of approximately $50.5 million will be booked to utility plant in service during the future test year.

Q. Are you recommending any adjustment to the remaining utility plant in service additions being claimed by PAWC?

A. Yes, as discussed below, I am recommending a reduction to this plant to reflect the actual experience of PAWC with regard to meeting its projections of capital expenditures. A review of the Company's historic actual capital expenditures relative to its budgeted construction indicates that the Company may have difficulty completing all of its projected additions on schedule. In fact, the Company has not met its budgeted construction in any of the last ten years, as demonstrated below:

Year	Budgeted	Actual	Difference	Percent
1991	$46,800,655	46,524,602	$ 375,053	0.81%
1992	33,914,326	33,710,585	203,741	0.61%
1993	40,149,927	39,622,893	527,034	1.33%
1994	53,078,357	50,299,523	2,778,834	5.52%
1995	72,876,056	66,309,008	6,567,048	9.90%
1996	69,211,360	63,174,719	6,036,641	9.56%
1997	96,639,280	94,217,720	2,421,560	2.57%
1998	90,526,923	90,252,562	274,361	0.30%
1999	117,355,274	111,345,628	6,009,646	5.40%
2000	70,460,916	63,857,082	6,603,834	10.34%

In fact, over the past ten years, PAWC has consistently failed to meet its budgeted projections with regard to capital expenditures and there is no indication that this pattern will not be repeated in the future test year. In addition, the level of utility plant in service additions that the Company is projecting for the future test year (exclusive of acquisitions) is 174% of the amount of actual plant in service additions in the historic test year. If acquisitions are included, the Company's utility plant in service claim is three times the amount of plant added in 2000.

Q. Has the Company provided any updated future test year estimates for utility plant in service?

A. Yes, in response to OCA-I-10, the Company provided an update indicating the amount spent to date on its projected capital projects. Exclusive of acquisitions, the Company had spent only $9.9 million through the first three months of 2001, or less than 10% of its projected budget. While I understand that the summer months are typically more active months for construction than the first quarter of the year, the fact that only 10% of the budgeted amount had been spent through March 2001 clearly provides further support for my finding that some adjustment is in order.

Q. What do you recommend?

A. I recommend that the Company's projected test year plant additions be adjusted to reflect the actual percentage of capital expenditures relative to budget, made by the Company over the past ten years. In quantifying my adjustment, I applied the historic ten-year average completion percentage separately to non-depreciable plant and to depreciable plant. My adjustment to non-depreciable plant is shown in Schedule ACC-3 and my adjustment to depreciable plant is shown in Schedule ACC-4.

C. Reserve for Depreciation

Q. Have you made any adjustment to the Company's reserve for depreciation claim?

A. Yes, I have made an adjustment relating to projected plant additions. In its filing, the Company's accumulated depreciation claim was developed by adding depreciation expense projected to be incurred during the future test year to PAWC's depreciation reserve balance at December 31, 2000. Moreover, the Company's depreciation expense for the future test year included one-half year of depreciation expense on future test year utility plant in service additions. Since I am recommending that the Company's future test year utility plant in service claim be reduced, it is necessary to make a corresponding adjustment to remove the depreciation expense associated with these plant additions from the depreciation reserve. My recommended adjustment to the depreciation reserve is shown on Schedule ACC-32.

D. Cash Working Capital

Q. How has the Company developed its cash working capital claim?

A. PAWC has developed its cash working capital claim in three parts. First, the Company has included a rate base addition relating to a cash working capital requirement associated with its operating expenses. Second, the Company has included a cash working capital requirement associated with income taxes and other taxes. Finally, the Company has included in rate base a cash working capital offset relating to cash working capital provided by the payment of interest and dividends.

Q. Are you recommending any adjustments to the Company's cash working capital claim?

A. Yes, I am recommending four adjustments to the Company's cash working capital claim associated with operating and maintenance expenses. First, I am recommending that the Company's expense lag associated with payments to the American Water Works Service Company be increased from 8.6 days to 11.83 days. The Company indicated that a lag of 8.6 days was used "in compliance with the Commission's directive in the Final Order in Docket No. R-922428." In that case, the OCA argued that the payment lag associated with the Service Company charges should be based on the contractual payment terms, which required payment monthly after service was provided, instead of on the methodology actually used by PAWC whereby the Service Company charges are prepaid each month. The Commission decided that since the Service Company charges were largely driven by personnel costs, and since the Service Company personnel were largely used as substitutes for PAWC personnel, then it was appropriate to utilize PAWC's salary and wage expense lag, which at that time was 8.6 days, for the Service Company charges. In this case, the actual salary and wage lag (including applicable payroll taxes) for PAWC employees is 11.83 days and, consistent with the Commission's order in the 1992 base rate case, that is the lag that I recommend be used for the Service Company. I have included a lag of 11.83 days for the Service Company charges at Schedule ACC-5.

With regard to chemicals, the Company's lead/lag study reflects a lag of 30 days which is based on the time between the voucher due date and the end of service date. However, it appears from the supporting information provided in Book 3-E, Book 2 of 7 (page 6) that service is provided monthly, i.e. the company is billed once a month for a period of approximately 30 days. Therefore, an additional 15.2 days should be added to the 30 days included in the Company's lead/lag study to account for the additional lag between the midpoint of service being provided and the end of service date. My adjustment, which increases the lag associated with chemical expense from 30 to 45.2 days, in shown in Schedule ACC-5.

A similar problem appears to exist with regard to the expense lag used by PAWC for purchased power costs. The Company included a lag of only 15 days in its study, which is based on the period between the end of service being provided and the payment date. However, the Company did not include the 15.2 days that represent the midpoint of the service date, even though this additional service period lag was shown on the Company's supporting documentation in Exhibit 3-E, Book 2 of 7, page 23. Accordingly, I have increased the Company's purchased power expense lag from 15 days to 30.2 days. My recommendation reflects a midpoint of service date of 15.2 days and a payment lag of 15 days. This adjustment is also shown on Schedule ACC-5.

Finally, Schedule ACC-5 also includes certain adjustments to the Company's cash working capital claim associated with salaries and wages. In developing its claim, the Company utilized an expense lag of 2.9 days for FICA and Federal income taxes and 3.8 days for State income tax payments. These lags do not reflect the period of time from the midpoint of the payroll period to the end of the payroll period. Rather, they reflect only the amount of time from the end of the payroll period to the date when associated taxes were paid. Therefore, it is necessary to revise the FICA, Federal and State income tax expense lags used in the Company's study to include the additional lag between the midpoint of the payroll period and the tax payment date. The Company has acknowledged in several discovery responses that certain revisions are necessary. My adjustments are shown in Schedule ACC-5.

Q. Are you recommending any additional adjustments associated with cash working capital?

A. Yes, I recommend that the level of expenses used to calculate the Company's claim be synchronized with the level of operating expense found by this Commission to be appropriate. I have not quantified the impact of this adjustment on the Company's cash working capital claim. However, the level of operating and maintenance expenses included in the Company's cash working capital claim does incorporate the "at risk" adjustment made by PAWC in the amount of $4,717,909. Therefore, the first $4.7 million of my operating expense adjustment recommendations are in fact already incorporated in the Company's cash working capital claim.

Q. What is the net impact of your cash working capital adjustments associated with operating expenses?

A. My adjustments reduce the Company's cash working capital claim from $13,689,156 to $12,802,203 as shown in Schedule ACC-5.

Q. Are you recommending any adjustments to the Company's cash working capital claim associated with Accrued and Prepaid taxes?

A. While I am not recommending any adjustments to the expense lags associated with these taxes, I do recommend that the cash working capital claim associated with accrued and prepaid taxes be updated to reflect the actual level of taxes found to be appropriate by the Commission. I have updated the cash working capital claim associated with accrued and prepaid taxes to reflect the pro forma level of taxes based on my revenue requirement recommendation. This adjustment is shown in Schedule ACC-6.

Q. Do you recommend a similar adjustment to the Company's claim for cash working capital associated with interest and preferred dividends?

A. Yes, I do. Accordingly, at Schedule ACC-7, I have updated the Company's cash working capital claim associated with interest and preferred dividends to reflect the actual capital structure and cost of capital being recommended by Dr. Woolridge.

E. <u>Summary of Rate Base Adjustments</u>

Q. What is the impact of all of your rate base adjustments?

A. As summarized on Schedule ACC-2, my recommended adjustments reduce the Company's rate base from $1,306,409,765 to $1,300,652,754.

V. OPERATING INCOME ISSUES

A. Pro Forma Revenue

Q. Are you recommending any adjustments to the Company's pro forma revenue claims?

A. Yes, I am recommending seven adjustments. First, I am recommending that a normalized level of consumption be used for residential customers rather then the actual test year consumption incorporated by PAWC. Water consumption, particularly for residential customers, fluctuates from year to year due to changes in rainfall, temperature, economic conditions and other factors that can affect ratepayer consumption. For this reason, it is more appropriate to normalize consumption than to utilize consumption in any one given year. This normalization is important if rates are to be based on normal operating conditions. In any given year there are various factors that can influence consumption. No twelve month period can actually reflect "normal" operating conditions. Therefore, the use of an average will take these variations into account and result in consumption levels that more closely approximate normal operating conditions.

Q. What period of time should be used when normalizing consumption data?

A. In general, the most accurate results are obtained by using the greatest number of data points. Since "normal" temperature and rainfall are frequently calculated on the basis of a thirty-year average, then the use of a thirty-year average would produce results that should be well correlated with rainfall and temperature. However, other factors that influence consumption, such as newer appliances, demographics, and economic conditions can result in permanent consumption shifts over shorter periods of time. Therefore, we generally recommend the use of a five-year or ten-year average when developing normalization adjustments.

In this case, I have made an adjustment to normalize residential consumption to reflect five years of average consumption data. I have utilized five years for my adjustment because the data suggests that there may have been a permanent shift in consumption since the early 1990s.

My adjustment is shown in Schedule ACC-9. In quantifying my adjustment, I reduced the gross incremental revenues by the incremental revenue taxes that would result. In addition, on Schedule ACC-25, I have made an adjustment to reflect the incremental expenses that would be incurred by PAWC relating to increased consumption. In quantifying this impact, I used the relationship of consumption to incremental expenses quantified by the Company in PAWC Exhibit 3-A, page 47.

Q. Did you also normalize commercial consumption?

A. No, I did not. Commercial consumption can also vary from year to year due to changes in weather conditions and other factors. Moreover, this variation can depend upon the size and characteristics of the commercial customers. In annualizing the consumption for customers added during the test year, the Company evaluated smaller commercial customers (those with meters of 2" or less) separately from larger commercial customers. In order to properly undertake a consumption normalization adjustment for commercial customers, this same data should be examined over an historic period. In response to OCA-IX-6, the Company stated that historic data detailing commercial consumption by meter size is not available. Therefore, while I conceptually support a consumption normalization adjustment for commercial customers, my revenue requirement recommendation does not include such an adjustment at this time.

Q. What is your second revenue adjustment?

A. My second adjustment reduces the Company's public fire protection revenues. In response to OTS-RS-1-D, PAWC indicated that it had incorrectly annualized public fire protection revenues associated with the Butler Township Water and Sewer Authority's acquisition. The Company's filing reflects incorrect fire hydrant rates for the hydrants acquired in the Butler acquisition. PAWC further indicated that this revision would reduce pro forma present rate revenue by $48,415. Therefore, at Schedule ACC-10 I have made an adjustment to reflect this revision in public fire protection revenues.

Q. Are you also recommending an adjustment to public fire protection revenue associated with the Coatesville acquisition?

A. Yes, I am. It is my understanding that the Asset Purchase Agreement between PAWC and the City of Coatesville requires that rates for the former customers of the Authority not be increased for a period of three years from the date of closing. In its filing, PAWC made two revenue adjustments relating to the Coatesville acquisition. First, it made an adjustment to reflect revenue from the Coatesville customers at the current Coatesville rates. Second, it made a revenue imputation adjustment to reflect the difference between the current Coatesville rates and the current PAWC rates, effectively repricing the Coatesville customers at the rates charged to other customers of PAWC. However, in quantifying its revenue imputation adjustment, PAWC did not include any revenue from fire hydrants. At Schedule ACC-11, I have made an adjustment to reflect additional revenue for the 579 fire hydrants acquired with the Coatesville system. This adjustment is consistent with the revenue imputation adjustment made by PAWC for the remaining Coatesville customer classes. I have used the current monthly rate of $20.00 per hydrant to quantify this adjustment. This is the rate that applies to the majority of Zone 1 public fire customers.

Q. Have you made any adjustment to reflect revenues from additional acquisitions that are expected to be made in 2001?

A. No, I have not. However, I understand that there are three additional acquisitions that the Authority is pursuing, specifically the acquisition of the Sandy Ridge Water Authority, West Decatur Water Authority, and L.P. Water and Sewer Authority. According to the response to OCA-VI-11,

> The acquisitions of Sandy Ridge and West Decatur are held up due to the complaint filed by Houtzdale Municipal Authority concerning the well allocation permit. A formal complaint by a residential customer has been filed concerning the L.P. Water and Wastewater acquisitions. A hearing schedule has been set by Administrative Law Judge Solomon and testimonies have been filed.
>
> The Company did not include any revenues, expenses, or investment relating to any

of these three acquisitions in its filing and I am not recommending any adjustments relating to these acquisitions at the present time. However, the status of these acquisitions should be monitored as this rate case progresses. If one or more of these acquisitions is finalized during the pendency of this case, then I recommend that the Company's revenue requirement claim be updated accordingly.

Q. Please summarize the customer specific adjustments that PAWC included in its revenue requirement claim.

A. PAWC included numerous adjustments that it classified as customer specific adjustments in its revenue requirement. There were four categories of adjustments made by PAWC. First, PAWC made adjustments to revenues from Allegheny Ludlum, Community Central, JSP Industries, Waterfront Partners, and Thomson Consolidated Electronics to eliminate the effects of abnormal or non-recurring events that occurred during the historic test year or to reflect a full year of revenues for customers added during the test year. Second, adjustments were made to revenue from Mayview State Hospital to reflect a change in consumption that is expected to be permanent. Third, adjustments were made to eliminate revenue from Franklin Township Municipal Authority, Municipal Authority of Center Township, Strattanville Water Authority, and Butler Township Water and Sewer Authority to reflect the acquisition of these systems by PAWC and therefore the loss of sales for resale revenue. Fourth, the Company made several adjustments to reflect the loss or potential loss of revenue from Appleton Paper, Jaunty Textiles, Lion Brewery, Quaker Oats, Newton Artesian, Robinson Township, and North Penn Water Authority during the future test year[1].

Q. Are you recommending any adjustments to the claims made by PAWC?

A. Yes, I am recommending that certain adjustments associated with the loss of customers in the future test year be rejected. Specifically, I believe that the Company's adjustments associated with these potential losses are one-sided. PAWC did not include any future test year adjustments to reflect additional revenues from new industrial customers expected to be added during the future test year. The Company also did not consider that in addition to new industrial customers coming on line, there is also the possibility of new owners for those facilities that the Company has projected will close. Accordingly, there is no justification for PAWC's assumption that if these facilities close, there will be a net loss in customers for PAWC. At the time of the Company's filing, only one of these facilities has in fact closed.

I am also recommending that the Company's claim for a specific customer adjustment associated with Newtown Artesian be rejected. Newtown Artesian notified PAWC that it would cease purchases of water in April, 2001 but would retain an emergency connection. In its filing, PAWC has eliminated all usage revenue from this customer, effectively reflecting no sales to Newtown Artesian. It is likely that some sales to Newtown Artesian will continue.

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[1] The Company stated in the response to OTS-RS-7-D that it also expects to lose Thomson Consolidated Electronics as a customer in the future test year and that it will be revising its claim to include the loss of this revenue. I have not included this loss in my revenue requirement for the same reason that I have not included the claimed losses from other industrial customers at this time.

By the hearing phase of this case, we will have several months of actual history on Newtown's purchases since April 2001. I recommend that the Company's adjustment relating to Newtown Artesian be updated at that time. However, in the interim I have retained 25% of Newtown Artesian's historic test year water sales as a proxy for sales that may be made in the future test year.

Q. Are you recommending any additional customer specific adjustments?

A. Yes, I am recommending one additional adjustment. In response to OSBA-I-09, the Company provided information regarding an Agreement for Sale of Water between Pennsylvania-American Water Company and Union County Industrial Development Corporation. The Company stated that pursuant to this agreement, the minimum monthly bill amount was increased in February 2001 when construction of the water distribution facilities was completed. This increased minimum monthly bill was not incorporated in the Company's pro forma revenue claim. Therefore, PAWC indicated that an increase of $142,224 was necessary in order to reflect the increased minimum monthly bill amounts pursuant to this agreement. At Schedule ACC-12, I have made an adjustment to incorporate these higher monthly minimum bill amounts.

Q. What is the total impact of your customer specific adjustments?

A. My recommended customer specific adjustments result in an increase to the Company's gross revenue of $525,410. In order to quantify the impact of these adjustments on the Company's net operating income at present rates, I have made further adjustments to reflect the impact of revenue taxes, incremental production expenses, and income taxes as shown in Schedule ACC-12 (revenue and revenue taxes) and Schedule ACC-25 (incremental production expenses).

Q. Does this Company also receive revenues from various billing arrangements?

A. Yes, it does. In its filing, the Company indicated that in the historic test year it entered into agreements with several Municipal Authorities to perform their billing functions and it included a pro forma revenue adjustment to reflect revenue from these activities. When additional information on the volume of this activity was requested in OCA-VI-29, the Company found that its original adjustment was understated. In that response, PAWC indicated that a further adjustment to pro forma operating revenues of $37,663 should be made to account for revenue from customers that was not included in its initial filing. This additional revenue is included in Schedule ACC-13.

Q. How did the Company calculate its adjustment to penalty revenue?

A. To quantify its adjustment, the Company calculated the percentage of penalty revenue to total billed water sales for the historic test year. It then applied this percentage to pro forma billed water sales to determine pro forma penalty revenue. However, rather than using the actual percentage billed during the historic test year, I believe that it is more appropriate to calculate an average percentage over a multi-year period. This methodology will adjust for fluctuations that occur from year to year. I recommend a similar methodology for calculating uncollectible expense. My adjustment to the Company's penalty revenue, which reflects three years of penalty revenue to billed revenue, is shown in Schedule ACC-14.

Q. Please discuss your final adjustment.

A. The Company obtains rental income from the lease of office space its Hershey Corporate Office to the American Water Works Service Company. During the future test year, the space utilized by the Service Company is expected to increase when the Hershey facility becomes the National Data Center for the Service Company. In its filing, PAWC did include an adjustment to reflect increased rental income from the Service Company for the Hershey facility. However, the Company indicated in response to OCA-I-46 that in its filing it had underestimated the incremental revenue from the lease and that a further adjustment of $16,417 was necessary. This additional adjustment is shown in Schedule ACC-15.

Q. What is the total of the pro forma operating revenue adjustments that you are recommending?

A. As shown in the Pro Forma Income Statement provided in Schedule ACC-37, my adjustments result in an increase to gross operating revenue of $2,811,745.

B. <u>Salary and Wage Expenses</u>

Q. How did the Company calculate its revenue requirement claim associated with salary and wage expense?

A. PAWC calculated its salary and wage claim based on an estimated 1,066 employees. The Company included salary and wage adjustments to its actual historic test year payroll costs to reflect salary and non-union increases at July 1, 2001, the midpoint of the future test year, and at July 1, 2002, six months after the test-year. In addition, the Company included union wage increases that are projected to occur up to six months after the end of the future test-year.

Q. Are you recommending any adjustments to the Company's payroll expense claim?

A. Yes, I am recommending adjustments relating to post-future test year increases and to the number of employee positions included in the Company's claim.

Q. Please describe your first adjustment.

A. I recommend that post-future test year increases be disallowed. These salary and wage increases occur too far outside of the future test year to be considered in this case. By selectively adjusting one element of its revenue requirement, i.e. payroll costs, the Company has effectively violated the regulatory matching principle that requires a utility's revenues, expenses, and investment to be matched at a given point in time. The Company already has the opportunity to file a future test year. In addition, the Company has considerable latitude to make prospective revenue, expense, and rate base adjustments. By going beyond the end of the future test year and including post-test year salary and wage increases in rates, the Company has inappropriately and selectively expanded the future test year by an additional six months. Therefore, at Schedule ACC-16, I have made an adjustment to eliminate these future test year increases. In the alternative, should the Commission decide to permit some of this increase to be included in rates, then I recommend that only increases associated with union contracts that mandate contractual increases that take effect during this six month period be included. This would include increases of approximately $42,700 for the following unions: Mechanicsburg, Outside, Yardley, and White Deer. The remaining unions have contracts that expire during the future test year and therefore the post-test year increases included in the Company's filing for these unions should be rejected for two reasons: first, they are clearly outside of the future test year thereby violating the matching principle and second, they are neither known nor measurable.

Q. What is your second salary and wage adjustment?

A. The number of employees at PAWC is clearly declining, a fact not fully recognized in the Company's claim. As shown in Exhibit 3-H, Page 344, the number of budgeted employees has declined from 1,095 in 1999 to 1,085 in 2000 to 1,066 in 2001. The decline in the number of actual employees has been even more pronounced. As shown in Exhibit 3-H, page 41, the Company had 1,113 employees in 1996. The number of employees has consistently fallen each year to reach 1,032 in 2000. In spite of this decline, PAWC has included its budgeted employees of 1,066 in its future test year claim.

Q. Do you believe that further employee reductions are likely?

A. Yes, I do. The number of employees has continued to drop in 2001, reaching 1,025 in April, 2001.[2] Moreover, in response to OCA-I-28, PAWC acknowledged that it "anticipates that a reduction in its employee level can be achieved" as a result of initiatives to consolidate certain functions at the Service Company, such as customer contact functions and other functions that are currently performed by PAWC and American's other water utility subsidiaries." PAWC indicated that it "does not have sufficient data to calculate the level of savings" but that it anticipated that it would be able to provide a reasonable estimate of incremental savings (along with any incremental costs to achieve those savings) shortly.

Q. What do you recommend?

A. Based on the available documentation, I believe that the Company's salary and wage claim is seriously overstated. In order to determine a revenue requirement for PAWC, I recommend that the actual number of customers at the end of the historic test year (1,032) be utilized. This pro forma adjustment still permits the Company to include some vacancies in utility rates, since it provides for 7 additional employees over the latest actual employee count available. My recommendation is shown in Schedule ACC-17.

Q. Have you made a corresponding adjustment to the Company's payroll cost claim?

A. Yes, at Schedule ACC-18, I have made an adjustment to reduce the Company's payroll taxes

[2] Per the response to OCA-I-17.

consistent with both of my recommended salary and wage expense adjustments.

C. **Incentive Compensation Expense**

Q. Did the Company also include costs associated with an incentive compensation plan in its filing?

A. Yes, it did. The Company has included $360,909 related to incentive compensation.

Q. Did PAWC provide details of its incentive compensation plan?

A. No, it did not. PAWC is required to provide its incentive compensation plan in response to Revenue Requirement Interrogatory Question No. 17 as part of its initial filing requirements. The Company stated in its filing that the plan was confidential and that details of the plan would only be provided after a confidentiality agreement had been signed. I signed a confidentiality agreement several weeks ago and other confidential information has been provided to me pursuant to that agreement. However, the incentive compensation plan has not yet been provided by PAWC. On July 20, 2001, I brought this omission to the Company's attention. A formal data request was subsequently submitted requesting a copy of the plan. However, as of the preparation date of this testimony, I still have not yet been provided with a copy of the Company's plan.

Q. What are your general concerns about incentive compensation plans?

A. My general concerns center around the fact that such plans often fail to provide any benefits to ratepayers. In addition, many incentive compensation plans are tied to the corporate performance of the utility and/or its parent company, a criteria that can be directly at odds with ratepayer benefit. Nor is it clear from PAWC's filing what, if any, impact the introduction of incentive compensation plans have had on base salary and wage levels. If an incentive compensation plan is a substitute for a portion of an employee's overall compensation package, then one would expect base salary and wage levels to decline when incentive compensation plans are introduced. In this case, PAWC was asked to provide information about what, if any, adjustments were made to base compensation levels when the incentive plan was introduced. The Company failed to provide an answer to the question that was asked. Instead, PAWC limited its response to the observation that "[t]he aggregate annual increase in base compensation for employees eligible for incentive compensation is 25% below the aggregate annual base compensation increase for non-eligible employees."[3]

Q. **Has PAWC demonstrated that its incentive compensation plans have been effective in achieving any targeted goals?**

A. No, it has not. In response to OCA-I-23 seeking such information, the Company responded that its was "not aware of any empirical basis to prove the direct casual connection" between incentive compensation plans and the achievement of incentive compensation goals.

[3] Response to OCA-1-22.

Q. What do you recommend?

A. I recommend that the Company's incentive compensation cost claim be denied. As discussed above, such plans are traditionally based on corporate financial goals and/or market performance rather than on criteria that provide benefits to ratepayers. Moreover, the Company has not provided any quantification of the benefits of such incentive compensation programs nor has PAWC shown that the incentive compensation program is necessary in order to provide safe and adequate utility service to ratepayers. For all of these reasons, I recommend that the costs of the plan be disallowed. My adjustment is shown in Schedule ACC-19.

D. Group Insurance Costs

Q. How did the Company quantify its health care cost claim?

A. PAWC based its claim on the 1,066 budgeted employees included in its salary and wage claim. As stated on page 5 of Ms. Balmer's testimony, the Company's costs per employee were based on actual historic group insurance rates, adjusted to reflect an estimated 10% increase effective July 1, 2001.

Q. Are you recommending any adjustments to the Company's claim?

A. Yes, I am recommending two adjustments. First, I am recommending that PAWC's group insurance costs be reduced to reflect costs for only 1,032 employees rather than the 1,066 estimated future test year employees included in its filing. To quantify this adjustment, I have calculated an average historic test year cost per employee based on the Company's historic test year annualized claim for 1,032 employees. I applied this average historic test year cost per employee to my recommended employee reduction to determine a pro forma group insurance expense adjustment associated with these employees. This adjustment is shown in Schedule ACC-20.

I am also recommending that future test year cost increases be disallowed at this time. The Company has not provided any quantitative support for its claim. Moreover, the American Water Works system is self-funded for group insurance costs. We have asked the Company to provide an explanation for the manner in which such self-funded costs are estimated but to date this information has not been provided. Moreover, while the Company indicated in its filing that this cost increase would be effective July, 2001, no additional information on the specific amount of the cost increase, if any, has been provided to date in spite of the OCA's request for such updated information.

Q. Is there another reason why you are recommending that the cost increase be denied at this time?

A. Yes, there is. In response to OCA-VI-9, PAWC indicated that "[e]ffective July 1, 2001 associates were required to contribute more to their health care costs....Additionally, the ability for the associate to elect comprehensive coverage was eliminated; only managed care or HMO coverage are available unless those options are unavailable in the associate's living area." Given the fact that employees are now required to contribute more toward their health care costs and given the elimination of comprehensive coverage in favor of managed care and HMOs, it is reasonable to assume that group insurance costs may not increase at all on a per employee basis in the future test year. Therefore, I recommend that the Company's proposed group insurance cost increase be denied. This adjustment is also shown in Schedule ACC-20.

E. <u>Other Post Employment Benefit ("OPEB") Costs</u>

Q. What is your recommendation with regard to the recovery of other post employment benefit costs, or FAS 106 costs?

A. It is my understanding that the Commission limits FAS 106 cost recovery to the amount of actual contributions or funding made by a utility to an external trust. In the historic test year, the Company incurred total costs of $4,320,551 to fund the OPEB external trust accounts, $3,346,952 of which was expensed.[4] For the future test year, the Company is claiming total costs of $4,833,603, $3,844,648 of which it proposes to expense.

Q. Did the Company provide an actuarial report to support its claim?

A. No, it did not. The only support provided by the Company is a one page list of estimated costs by American Water Works Company provided in Exhibit 3-E, Book 3, page 49. PAWC has not furnished any additional documentation to demonstrate how these costs were determined, what assumptions were used to develop these costs, or who was responsible for

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[4] See the response to OCA-VI-14.

developing these cost estimates. The Company did state that, at the present time, it did not yet have an actuarial report available to support these costs. PAWC indicated that an actuarial report may be available in September 2001. In the absence of the actuarial report, we have asked PAWC to provide additional workpapers or other documentation to support these future test year FAS 106 costs.

Given this current lack of documentation, I am recommending that the Company's requested future test year cost increase for FAS 106 costs be denied. My adjustment is shown in Schedule ACC-21. As stated, the OCA has asked PAWC to provide additional supporting details regarding the development of its future test year cost claim for FAS 106 costs. I will review any additional supporting documentation that may be provided during this proceeding and update my testimony, if necessary, based on whatever information may be furnished by the Company.

F. <u>Insurance Other than Group</u>

Q. Are you recommending any adjustment to the Company's claim for insurance other than group?

A. Yes, I am recommending two adjustments. First, the Company's claim includes an estimated increase of 4.5% for the future test year to reflect estimated increases in premiums. In OTS-RE-12-D, the Company was asked to provide support for certain components of its insurance adjustment. In response, PAWC stated that "[t]he new All Risk policy and premium notice have not been received. The sum of $148,948 is an estimate of the premium for this coverage. This claim will be updated when the policy becomes available." PAWC did not explain in this response how it developed the estimated cost increases for insurance or why it is appropriate to include such increases in utility rates. No historic data was provided to demonstrate the reasonableness of the Company's requested insurance increases nor did the Company provide documentation of any conversations with insurers or other support. Therefore, I am recommending this estimated cost increase be denied. If the actual future test year insurance cost becomes known during the litigation of this case, I will update my recommendation accordingly. My adjustment is shown in Schedule ACC-22.

Q. **Please describe your second adjustment.**

A. The Company's claim for insurance other than group also includes $533,224 in a "Retroactive Adjustment." According to the response to OCA-VI-37, "[t]he retroactive adjustment is the reflection of the deficit cash position that has developed for the 1997-1998 and 1998-1999 casualty insurance policy years as detailed on the attached schedule." The referenced schedule shows the following:

	1998	1999	2000
General Liability	(685,131)	(361,262)	0
Workers Compensation	(72,959)	(25,876)	0
All Risk	(39,159)	0	0

It is unclear from the Company's response to this request how the adjustment in the amount of $533,224 was determined or why this "retroactive" adjustment should be included at all, particularly when it appears that the historic test year amount relating to this retroactive adjustment was $0. Therefore, at Schedule ACC-22, I have also eliminated this retroactive adjustment in the amount of $533,224 from the Company's revenue requirement claim.

G. Uncollectible Expense

Q. How did the Company calculate its uncollectible expense claim?

A. As shown on page 56 of Exhibit 3-A, PAWC calculated its uncollectible expense by taking a percentage of net write-offs to water sales in the historic test year and applying this ratio to future test year water sales at both present and proposed rates. I am recommending that a three-year average of net write-offs be used rather than the actual historic test year percentage. PAWC appears to recognize that the use of a three year average is desirable, since it apparently utilizes a three year average to determine its uncollectible reserve, as described on page 12 of PAWC Exhibit 3-E, Book 1. According to the Company, its uncollectible reserve for book purposes is derived by calculating a percent charge-off based on averaging the immediate past 3 years of net charge-offs to billed water revenues. That percentage is then applied to the sum of the 60 days of billed revenues plus the unbilled revenue asset which establishes the reserve for uncollectibles. However, it appears that only the actual historic test year percentage was used in its filing. My adjustment to reflect a three-year average for uncollectible expense is shown in Schedule ACC-23.

H. Inflation Adjustment

Q. Please discuss your recommendation relating to the Company's inflation adjustment.

A. PAWC has included an inflation adjustment of 4.39% or $1,447,915 in its filing. It has applied this adjustment to almost $40 million in historic test year operating and maintenance expenses that have not been separately adjusted by the Company. I am opposed to the Company's proposed adjustment for two reasons. First, allowing inflation adjustments has the effect of institutionalizing inflation, thereby resulting in rates that are higher than necessary. Second, the Company has not shown that the costs to which the inflation adjustment was applied are the types of costs that in fact vary with inflationary trends. In fact, in this case the Company has included an "at risk" adjustment suggesting that the overall level of operating and maintenance expenses is not expected to necessarily increase with inflation. We asked the Company in OCA-VI-36 to identify the expenses, by account, to which its inflation adjustment is applied in an effort to determine the historic level of cost increases in these accounts. The Company's response referred us to its original filing which did not contain the requested information. Given the inherent problems with inflation adjustments and the fact that the Company has not shown that such an adjustment is reasonable for the accounts to which it was applied, I recommend that the Company's inflation adjustment be denied. My adjustment is shown in Schedule ACC-24.

I. Incremental Production Expenses

Q. How did the Company determine its claim for incremental production expenses?

A. The Company's adjustment is shown at page 47 of Exhibit 3-A. PAWC assumed that operating expenses associated with power costs and chemical costs increased proportionally with increases in consumption. Thus, the Company first calculated that its projected future test year consumption was 0.4% higher than actual historic test year consumption. It therefore increased its annualized historic test year costs for chemicals and purchased power by 0.4%.

Q. Are you recommending any adjustments to the Company's claim for incremental production expenses?

A. I am not recommending adjustments to the methodology used by PAWC. However, since I have included several pro forma revenue adjustments that increase the level of pro forma future test year consumption, it is necessary to make a corresponding adjustment to the Company's chemical and power costs. My adjustment is shown in Schedule ACC-25. To quantify my adjustment, I first calculated the total consumption adjustment that results from my pro forma revenue adjustments. These revenue adjustments will increase the Company's pro forma future test year consumption by approximately 1.11%. I then adjusted the Company's pro forma future test year power and chemicals expenses by 1.1% to account for costs associated with this increased consumption.

J. Advertising Costs

Q. What is the Company's future test year claim for advertising costs?

A. PAWC has included $1,038,579 in its filing related to advertising costs. A breakdown of the types of costs included in its claim was provided in the response to OCA-VI-34. While some of the advertising costs shown in that response may provide benefits to ratepayers, it is clear that many of these costs are incurred in order to promote the image of the corporation or for other promotional reasons that have nothing to do with the provision of safe and adequate water service.

Q. Are you recommending any adjustment to these costs?

A. Yes, I am recommending that advertising costs that are not directly necessary for the provision of safe and adequate water utility service be disallowed. Therefore, at Schedule ACC-26, I have made an adjustment to eliminate the following types of advertising costs from the Company's claim: holiday greetings, community organizations, miscellaneous, news service and amortization of media program, promotion items, and the category "Provision of Factual and Objective Data." My adjustments total $374,299, or approximately 36% of the

Company's advertising cost claim. It should be noted that my recommended revenue requirement still contains significant advertising costs. My revenue requirement recommendation includes the recovery from ratepayers of advertising costs in the following categories: public health and safety, conservation of water, explanation of billing practices, classified advertising, directory charges, hydrant flushing, consumer confidence reports, bill inserts, consumer service brochure, and the company newsletter. My adjustments are shown in Schedule ACC-26.

K. Charitable Contributions

Q. Did the Company eliminate charitable contributions from its revenue requirement claim?

A. As shown on page 55 of Exhibit 3-A, the Company did eliminate donations made directly by PAWC. It is my understanding that donations made by the Service Company and allocated to PAWC were not removed from the Company's claim. As shown on page 210 of Exhibit 3-H, these donations totaled $269,509.

Charitable contributions are not an appropriate revenue requirement component. Charitable contributions are not necessary for the provision of safe and adequate utility service. Moreover, permitting the recovery of charitable contributions in utility rates requires ratepayers to support organizations whose policies and views may be inconsistent with their own. In addition, requiring ratepayers to fund charitable contributions through their utility rates eliminates any income tax benefits that may accrue if the contributions are directly made by the individual and instead transfers those benefits to the utility. Charitable contributions are also often another means for the utility to promote its corporate image. For all these reasons, I recommend that the charitable contributions allocated to PAWC from the Service Company be eliminated from its revenue requirement claim. My adjustment is shown in Schedule ACC-27.

L. <u>Deferred Revenue</u>

Q. Are you recommending any adjustment to the Company's claim for deferred revenue associated with sales to Thomson Consolidated Electronics?

A. Yes, I am recommending two adjustments. The Company's claim includes recovery of deferred revenues associated with Thomson Consolidated Electronics that reflect the difference between the Company's Industrial Class rates and the DIS tariff. PAWC originally claimed deferred revenues of $470,877 for the historic and future test year. In response to OSBA-I-03, the Company indicated that it was revising its claim to eliminate future test year deferred revenue associated with Thomson Consolidated Electronics. This revision is the result of an announcement by the customer that it will close in 2001. Consequently, Thomson agreed to take service under the Industrial Tariff on a prospective basis and to pay PAWC the difference between the Industrial Tariff rate and the DIS rate for service since January 1, 2001. This effectively eliminates any deferral for Thomson Consolidated Electronics in 2001. Therefore, my first adjustment reduces the amount of the deferral from the $470,899 included in PAWC's original claim to $238,226.

Q. What is your second adjustment?

A. PAWC included recovery of its deferred revenue over a period of one year. In response to OTS-RS-13-D, the Company acknowledged that any recovery of deferred revenue should be spread over a multi-year period. In this response, PAWC stated that it would revise its claim to reflect a two-year recovery period. Since a two-year period is consistent with the rate case normalization period used by PAWC, I believe that a two-year period is also appropriate for the recovery of any deferred revenue that the Commission may permit to be included in utility rates. My adjustment to reflect a two-year recovery period is shown in Schedule ACC-28.

M. Affiliated Charges

Q. Please discuss the Company's claim for services allocated from the Service Company.

A. The Company has included actual historic test year Service Company costs of $5,724,288 in its claim. The actual costs incurred in 2000 reflected an increase of $1 million, or 21%, over the 1999 costs allocated to PAWC from the Service Company. As shown in Exhibit 3-E, Book 1, page 1, the most significant areas that increased in cost from 1999 to 2000 were Information Systems/Financial in the amount of $531,000 (or 68%), Information Systems/Customer Billing & Accounting in the amount of $310,000 (53%) and Human Resources in the amount of $129,000 (22%).

Q. Did the Company explain the reasons for these significant increases?

A. We asked the Company to provide an explanation for increases in these three specific areas. In response, the Company provided the following information:

> The increase is (sic) the Human Resources area was primarily due to three factors: (1) the retention of vendors for HR consulting services ($39,000); (2) the costs incurred for the retention of Merrill Lynch as the administrator of the 401K plan ($27,000); and (3) Hewitt Consultants preparation of compensation survey information and other benefit related surveys ($53,000).
>
> The increase in Information Systems Customer Billing and Accounting and Information Systems/Financial areas was primarily attributable to: (1) the addition of four associates to the payroll; (2) the use of outside consultants to provide specialized training for specific IS functions for which in-house expertise was not available; and (3) increases in the cost of equipment rentals and services.[5]

This response does not adequately explain an increase of $1 million in costs for the Service Company. While the Company quantified some of the reasons for the cost increases associated with Human Resources, none of the Information Systems cost increases were quantified nor did the Company explain why additional employees and/or services were required. Moreover, it appears that at least some of the costs allocated to PAWC by the Human Resources and Information Systems organizations were non-recurring and therefore should be excluded from prospective rates. For example, the costs associated with the compensation survey and other benefit related surveys are not the types of costs that occur on an annual basis. Similarly, the use of outside consultants to provide specialized training may be a one-time event. Our analysis of the Company's claim for these cost increases would

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[5] Response to OCA-VI-35.

have been facilitated if a detailed description of the services obtained from each outside consultant had been provided. In addition, detailed cost information, including information supporting each outside consultant's costs as well as supporting documentation for internal cost increases, should have been furnished by PAWC.

Q. What do you recommend?

A. With regard to Human Resources costs, I recommend that the costs incurred for the compensation and other benefit related surveys be disallowed, on the basis that these costs are non-recurring costs and that these surveys are not expected to be undertaken again in the future test year. With regard to Information Systems costs, the Company did not quantify the amount of the incremental test year costs that related to one-time activities, but it is reasonable to conclude that at least some of the outside consultant costs for specialized training will not reoccur prospectively. Therefore, I am recommending that one-half of the test year cost increase for Information Systems costs be disallowed. My adjustments, which are shown in Schedule ACC-29, still provide the Company with considerable cost increases relative to 1999 Service Company expense levels.

Q. Are you recommending any other adjustments to affiliated transaction costs?

A. Yes, I am recommending an adjustment to costs from American Water Capital Corp. ("AWCC"). According to the response to OCA-I-44, PAWC entered into an agreement in 2000 with an affiliate, American Water Capital Corp., to provide financing and cash management services rather than having these services provided by the Service Company. PAWC began receiving these services from AWCC on July 1, 2000. The Company received approval from the Commission to enter into this affiliated agreement on June 22, 2000. In support of this agreement, the Company indicated that the proposed agreement was expected to prove more economical than the current practice of conducting the financing at the individual subsidiaries.

It appears that the financing and cash management services provided by AWCC in the historic test year were in fact significantly more expensive than the provision of similar services that were previously provided by the Service Company. According to the response to OCA-VI-24, PAWC incurred costs of $271,832 in 1998 and of $268,366 in 1999 for these services, approximately one-half of the amount billed to PAWC by AWCC for the last half of the historic test year. These costs indicate that the basis on which the affiliated agreement with AWCC was approved, i.e. that it was a more economical alternative, has not been fulfilled.

Q. What do you recommend?

A. I recommend that the Commission disallow the difference between the AWCC charges incurred by PAWC in the test year and the average costs charged by the Service Company for financing and cash management services in 1998 and 1999. This adjustment provides some protection to ratepayers against excessive charges from the shifting of certain services to new unregulated affiliates. My adjustment is shown in Schedule ACC-30.

N. Depreciation Expense

Q. Have you made any adjustments to the Company's depreciation expense claim?

A. Yes, I have made two adjustments. First, at Schedule ACC-31, I have made an adjustment to incorporate Mr. Majoros' recommended depreciation rates in my revenue requirement claim. Mr. Majoros is recommending depreciation rates that result in a significant reduction to the Company's pro forma depreciation expense claim. Therefore, my first depreciation expense adjustment applies Mr. Majoros' recommended depreciation rates to the Company's pro forma future test year utility plant in service claim.

In addition, I am recommending a second depreciation expense adjustment to reduce the Company's depreciation expense claim consistent with the utility plant in service adjustment that I am recommending to the Company's rate base claim. To quantify my adjustments, I have applied the composite depreciation rate as calculated from Mr. Majoros' recommended depreciation rates to my recommended depreciable plant adjustment in order to determine the impact of my adjustment on the Company's annual depreciation expense. My adjustment is shown in Schedule ACC-32. As previously discussed, I have adjusted the Company's depreciation reserve based on one-half of this annual depreciation expense adjustment.

O. Interest Synchronization

Q. Have you adjusted the pro forma interest expense for income tax purposes?

A. Yes, I have made this adjustment at Schedule ACC-33. It is consistent (synchronized) with the OCA's recommended rate base, capital structure, and cost of capital recommendations. I am recommending a slightly lower rate base than the rate base included in the Company's filing. My recommendations, therefore, result in lower pro forma interest expense for the Company. This lower interest expense, which is an income tax deduction for state and federal tax purposes, will result in an increase to the Company's income tax liability under my recommendations. Therefore, my recommendations result in an interest synchronization adjustment that reflects a higher income tax burden for the Company, and a decrease to pro forma income at present rates.

Q. What income tax factor have you used to quantify your adjustments?

A. As shown on Schedule ACC-34, I have used a composite income tax factor of 41.49 %, which includes a state income tax rate of 9.99% and a federal income tax rate of 35%. These were the tax rates contained in the Company's filing.

Q. How did you develop the revenue multiplier?

A. As shown on Schedule ACC-35, the revenue multiplier includes the tax rates discussed above. In addition, the revenue multiplier includes uncollectible expense at 0.93%, the Public Utility Commission assessment of 0.65%, the OCA assessment of 0.12%, and the Office of Small Business Advocate ("OSBA") assessment of 0.03%. These are the same components included by the Company in the development of its revenue multiplier except that I have revised the uncollectible expense consistent with my recommendation that a three-year average of net write-offs be utilized.

VI. SUMMARY OF REVENUE REQUIREMENT RECOMMENDATIONS

Q. What is the result of the recommendations contained in your testimony?

A. My recommendations result in a revenue requirement deficiency at present rates of ($1,772,716) as summarized on Schedule ACC-1. This recommendation reflects revenue requirement adjustments of $40,479,031 to the Company's requested revenue requirement increase of $38,706,315. This analysis shows that a small decrease is appropriate rather than the $38.7 million increase being requested by PAWC.

Q. Have you quantified the revenue requirement impact of each of your recommendations?

A. Yes, at Schedule ACC-36, I have quantified the revenue requirement impact of each of the rate of return, rate base, revenue, and expense recommendations contained in this testimony.

Q. Does your revenue requirement recommendation include the impact of any of the recommendations being made by OCA witness Roger Colton?

A. No, it does not. It is my understanding that Mr. Colton has been engaged by the OCA to develop recommendations regarding low income and conservation programs. I have not reviewed Mr. Colton's recommendations at this time and therefore I am unable to state whether or not his recommendations will impact upon the Company's pro forma revenue or expense levels. Therefore, the revenue requirement effects, if any, of Mr. Colton's recommendations are not reflected in my proposed revenue requirement.

Q. Have you developed a pro forma income statement?

A. Yes, Schedule ACC-37 contains a pro forma income statement, showing net operating income under several scenarios, including the Company's claimed net operating income at present rates, my recommended net operating income at present rates and net operating income under my proposed rate increase. My recommendations will result in an overall return on rate base of 8.16%, as recommended by Dr. Woolridge.

Q. Does this conclude your testimony?

A. At this time, this concludes my testimony. However, as of the preparation date of this testimony, I am still waiting for certain data request responses from PAWC. Accordingly, my testimony will be updated and revised, as necessary, based on additional data request responses and, as outlined in my testimony, on additional information provided by PAWC.

APPENDIX A

List of Prior Testimonies

The Columbia Group, Inc., Testimonies of Andrea C. Crane

Company	Utility	State	Docket	Date	Topic	On Behalf Of:
Roxiticus Water Company	W	New Jersey	WR01030194	8/01	Revenue Requirements Cost of Cap.; Rate Design	Division of the Ratepayer Advocate
Western Resources, Inc.	E	Kansas	01-WSRE-949-GIE	6/01	Restructuring Financial Integrity	Citizens' Utility Ratepayer Board
Cablevision of Allamuchy et al.	C	New Jersey	CR00100824, etc.	4/01	Cable Rates	Division of the Ratepayer Advocate
Public Service Company of New Mexico	E	New Mexico	3137, Holding Co.	4/01	Holding Company	Office of the Attorney General
Keauhou Community Services, Inc.	W	Hawaii	00-0094	4/01	Rate Design	Division of Consumer Advocacy
Chem Nuclear Systems, Systems, LLC	SW	South Carolina	2000-366-A	3/01	Revenue Requirements	Department of Consumer Affairs
Atlantic City Sewerage Company	S	New Jersey	WR00080575	3/01	Revenue Requirements Cost of Cap.; Rate Design	Division of the Ratepayer Advocate
Southern Connecticut Gas Company	G	Connecticut	00-12-08	3/01	Affiliated Transactions	Office of Consumer Counsel
Delmarva Power and Light Company	G	Delaware	00-314	3/01	Retail Gas Marketing	Division of the Public Advocate
Senate Bill 190 Re: Performance Based Ratemaking	G	Kansas	Senate Bill 190	2/01	Performance Based Ratemaking Mechanisms	Citizens' Utility Ratepayer Board
Delmarva Power and Light Company	G	Delaware	00-463F	2/01	Fuel Costs	Division of the Public Advocate
Waitsfield Fayston Telephone Company	T	Vermont	6417	12/00	Revenue Requirements	Department of Public Service
Delaware Electric Cooperative	E	Delaware	00-365	11/00	Cost of Conduct Cost Allocation Manual	Division of the Public Advocate
Commission Inquiry Into Performance Based Ratemaking	G	Kansas	00-GIMG-425-GIG	10/00	Performance Based Ratemaking Mechanisms	Citizens' Utility Ratepayer Board
Pawtucket Water Supply Board	W	Rhode Island	3164	10/00	Revenue Requirements	Division of Public Utilities and Carriers
Public Service Company of New Mexico	E	New Mexico	3137, Part III	9/00	Standard Offer Service	Office of the Attorney General
Laie Water Company	W	Hawaii	00-0017	8/00	Rate Design	Division of Consumer Advocacy
El Paso Electric Company	E	New Mexico	3170, Part II, Ph. 1	7/00	Electric Restructuring	Office of the Attorney General
Public Service Company of New Mexico	E	New Mexico	3137, Part II	7/00	Electric Restructuring	Office of the Attorney General
PG Energy	G	Pennsylvania	R-00005119	6/00	Revenue Requirements	Office of Consumer Advocate
Sussex Shores Water Company	W	Delaware	99-576	4/00	Revenue Requirements	Division of the Public Advocate

Company	Utility	State	Docket	Date	Topic	On Behalf Of:
Utilicorp United, Inc.	G	Kansas	00-UTCG-336-RTS	4/00	Revenue Requirements	Citizens' Utility Ratepayer Board
Tidewater Utilities, Inc. Public Water Supply Co.	W	Delaware	99-466	3/00	Revenue Requirements	Division of the Public Advocate
Delmarva Power and Light Company	G/E	Delaware	99-582	3/00	Cost Accounting Manual Code of Conduct	Division of the Public Advocate
Consolidated Edison, Inc. and Northeast Utilities	E/G	Connecticut	00-01-11	2/00	Merger Issues	Office of Consumer Counsel
Philadelphia Suburban Water Company	W	Pennsylvania	R-00994868, 77 78, and 79	2/00	Revenue Requirements	Office of Consumer Advocate
Oklahoma Natural Gas Company	G	Oklahoma	PUD 990000166	1/00	Pro Forma Revenue Affiliated Transactions	OCC, Public Utility Division Staff
Connecticut Natural Gas Company	G	Connecticut	99-09-03	1/00	Affiliated Transactions	Office of Consumer Counsel
Southwestern Public Service Company	E	New Mexico	3116	12/99	Merger Approval	Office of the Attorney General
New England Electric System Eastern Utility Associates	E	Rhode Island	2930	11/99	Merger Policy	Department of Attorney General
Delaware Electric Cooperative	E	Delaware	99-457	11/99	Electric Restructuring	Division of the Public Advocate
Southern Connecticut Gas Company	G	Connecticut	99-04-18	9/99	Affiliated Interest	Office of Consumer Counsel
TCI Cable Company	C	New Jersey	CR99020079 et al	9/99	Cable Rates Form (1240/1205)	Division of the Ratepayer Advocate
Long Neck Water Company	W	Delaware	99-31	6/99	Revenue Requirements	Division of the Public Advocate
Delmarva Power and Light Company	E	Delaware	99-163	6/99	Electric Restructuring	Division of the Public Advocate
Potomac Electric Power Company	E	District of Columbia	951	6/99	Divestiture of Generation Assets	GSA
Cablevision of Bergen, Bayonne, Newark	C	New Jersey	WR98111197-199	5/99	Cable Rates Form (1240/1205)	Division of the Ratepayer Advocate
Kent County Water Authority	W	Rhode Island	2860	4/99	Revenue Requirements	Division of Public Utilities & Carriers
Montague Water and Sewer Companies	W/WW	New Jersey	WR98101161 WR98101162	4/99	Revenue Requirements Rate Design	Division of the Ratepayer Advocate
Delmarva Power and Light Company	E	Delaware	98-479F	3/99	Fuel Costs	Division of the Public Advocate
Lenfest Atlantic d/b/a Suburban Cable	C	New Jersey	CR97070479 et al	3/99	Cable Rates	Division of the Ratepayer Advocate

Company	Utility	State	Docket	Date	Topic	On Behalf Of:
Electric Restructuring Comments	E	District of Columbia	945	3/99	Regulatory Policy	GSA
Western Resources, Inc. Kansas City Power & Light	E	Kansas	97-WSRE-676-ME	2/99	Merger Approval	Citizens' Utility Ratepayer Board
Adelphia Cable Communications	C	Vermont	Dockets 6117-6119	12/98	Cable Rates (Form 1240, 1205, 1235) and Late Fees	Department of Public Service
Orange and Rockland/ Consolidated Edison	E	New Jersey	EM98070433	11/98	Merger Approval	Division of the Ratepayer Advocate
Cablevision	C	New Jersey	CR97090624, 625 626	11/98	Cable Rates (Form 1235)	Division of the Ratepayer Advocate
Petitions of BA-NJ and NJPA re: Payphone Ops.	T	New Jersey	CR97100792, et al	10/98	Payphone Subsidies FCC New Services Test	Division of the Ratepayer Advocate
United Water Delaware	W	Delaware	Docket No. 98-98	8/98	Revenue Requirements	Division of the Public Advocate
Cablevision	C	New Jersey	CR97100719, 726 730, 732	8/98	Cable Rates (Oral Testimony)	Division of the Ratepayer Advocate
Potomac Electric Power Company	E	Maryland	Case No. 8791	8/98	Revenue Requirements Rate Design	GSA
Mount Holly Water Company	W	New Jersey	WR98020058 PUC 03131-98N	7/98	Revenue Requirements	Division of the Ratepayer Advocate
Investigation of BA-NJ IntraLATA Calling Plans	T	New Jersey	TO97100808 PUCOT11326-97N	7/98	Anti-Competitive Practices	Division of the Ratepayer Advocate
TCI Cable Company/ Cablevision	C	New Jersey	CTV 03264-03268 and CTV 05061	7/98	Cable Rates	Division of the Ratepayer Advocate
Pawtucket Water Supply Board	W	Rhode Island	2674	4/98	Revenue Requirements	Division of Public Utilities and Carriers
Energy Master Plan Phase 1 Proceeding - Restructuring	E	New Jersey	EX94120585U, EO97070457	3/98	Electric Restructuring Issues	Division of the Ratepayer Advocate
Shorelands Water Company	W	New Jersey	WR97110835	2/98	Revenue Requirements	Division of the Ratepayer Advocate
TCI Communications, Inc.	C	New Jersey	CR97030141 and others	11/97	Cable Rates (Oral Testimony)	Division of the Ratepayer Advocate
Citizens Telephone Co. of Kecksburg	T	Pennsylvania	R-00971229	11/97	Alternative Regulation Network Modernization	Office of Consumer Advocate
Universal Service Funding	T	New Jersey	TX9512-631	9/97	Low Income Fund High Cost Fund	Division of the Ratepayer Advocate
Delmarva Power and Light Company	G/E	Delaware	97-65	9/97	Cost Accounting Manual Code of Conduct	Office of the Public Advocate
Western Resources, Oneok, and WAI	G	Kansas	WSRG-486-MER	9/97	Transfer of Gas Assets	Citizens' Utility Ratepayer Board

Company	Utility	State	Docket	Date	Topic	On Behalf Of:
Universal Service Funding	T	New Jersey	TX9512-631	8/97	Schools and Libraries Funding	Division of the Ratepayer Advocate
Ironton Telephone Company	T	Pennsylvania	R-00971182	7/97	Alternative Regulation Network Modernization	Office of Consumer Advocate
Comcast Cablevision	C	New Jersey	Various	7/97	Cable Rates (Oral Testimony)	Division of the Ratepayer Advocate
Maxim Sewerage Corporation	WW	New Jersey	WR97010052	7/97	Rev. Requirements	Division of the Ratepayer Advocate
Kent County Water Authority	W	Rhode Island	2555	6/97	Rev. Requirements	Division of Public Utilities and Carriers
Delmarva Power and Light Company	E	Delaware	97-58	5/97	Merger Policy	Office of the Public Advocate
Consumers Pennsylvania Water Co. - Roaring Creek	W	Pennsylvania	R-00973869	5/97	Rev. Requirements	Office of Consumer Advocate
Middlesex Water Company	W	New Jersey	WR96110818	4/97	Rev. Requirements	Division of the Ratepayer Advocate
Maxim Sewerage Corporation	WW	New Jersey	WR96080628	3/97	Purchased Sewerage Adjustment	Division of the Ratepayer Advocate
Interstate Naviation Company	N	Rhode Island	2484	2/97	Rev. Requirements Cost of Capital	Division of Public Utilities & Carriers
Electric Restructuring Comments	E	District of Columbia	945	1/97	Regulatory Policy	GSA
United Water Delaware	W	Delaware	96-194	1/97	Rev. Requirements	Office of the Public Advocate
PEPCO/ BGE/ Merger Application	E	District of Columbia	951	9/96	Regulatory Policy, Cost of Capital	GSA
Utilicorp Gas	G	Kansas	193,878-U	8/96	Rev. Requirements	Citizens' Utility Ratepayer Board
TKR Cable Company of Gloucester	C	New Jersey	CTV07030-95N	7/96	Cable Rates (Oral Testimony)	Division of the Ratepayer Advocate
TKR Cable Company of Warwick	C	New Jersey	CTV057537-95N	7/96	Cable Rates (Oral Testimony)	Division of the Ratepayer Advocate
Delmarva Power and Light Company	E	Delaware	95-196F	5/96	Fuel Cost Recovery	Office of the Public Advocate
Western Resources, Inc.	E	Electric	193,506-U 193,507-U	5/96	Rev. Requirements Cost of Capital	Citizens' Utility Ratepayer Board
Princeville Utilities Company, Inc.	W/WW	Hawaii	95-172	1/96	Rev. Requirements Rate Design	Princeville at Hanalei Community Association
Western Resources, Inc.	G	Kansas	193,503-U	1/96	Rev. Requirements Cost of Capital. RD	Citizens' Utility Ratepayer Board

Company	Utility	State	Docket	Date	Topic	On Behalf Of:
Environmental Disposal Corporation	WW	New Jersey	WR94070319 (Remand Hearing)	11/95	Rev. Requirements	Division of the Ratepayer Advocate
Lanai Water Company	W	Hawaii	94-0366	10/95	Rev. Requirements	Division of Consumer Advocacy
Cablevision of New Jersey, Inc.	C	New Jersey	CTV01382-95N	8/95	Basic Service Rates (Oral Testimony)	Division of the Ratepayer Advocate
Cablevision of New Jersey, Inc.	C	New Jersey	CTV01381-95N	8/95	Basic Service Rates (Oral Testimony)	Division of the Ratepayer Advocate
Chesapeake Utilities Corporation	G	Delaware	95-73	7/95	Rev. Requirements	Office of the Public Advocate
East Honolulu Community Services, Inc.	WW	Hawaii	94-7718	6/95	Rev. Requirements	Division of Consumer Advocacy
Wilmington Suburban Water Corporation	W	Delaware	94-149	3/95	Rev. Requirements	Office of the Public Advocate
Environmental Disposal Corporation	WW	New Jersey	WR94070319	12/94	Rev. Requirements	Division of the Ratepayer Advocate
Roaring Creek Water Company	W	Pennsylvania	R-00943177	12/94	Rev. Requirements	Office of Consumer Advocate
Delmarva Power and Light Company	E	Delaware	94-84	11/94	Rev. Requirements	Office of the Public Advocate
Delmarva Power and Light Company	G	Delaware	94-22	8/94	Rev. Requirements	Office of the Public Advocate
Empire District Electric Company	E	Kansas	190,360-U	8/94	Rev. Requirements	Citizens' Utility Ratepayer Board
Morris County Municipal Utility Authority	SW	New Jersey	MM10930027 ESW 1426-94	6/94	Rev. Requirements	Rate Counsel
US West Communications	T	Arizona	E-1051-93-183	3/94	Rev. Requirements	Residential Utility Consumer Office
Pawtucket Water Supply Board	W	Rhode Island	2158	3/94	Rev. Requirements	Division of Public Utilities & Carriers
Pollution Control Financing Authority of Camden County	SW	New Jersey	SR91111718J	2/94	Rev. Requirements	Rate Counsel
Roaring Creek Water Company	W	Pennsylvania	R-00932665	9/93	Rev. Requirements	Office of Consumer Advocate
Wilmington Suburban Water Company	W	Delaware	93-28	7/93	Rev. Requirements	Office of Public Advocate
Kent County Water Authority	W	Rhode Island	2098	7/93	Rev. Requirements	Division of Public Utilities & Carriers
Camden County Energy Recovery Associates, Inc.	SW	New Jersey	SR91111718J ESW1263-92	4/93	Rev. Requirements	Rate Counsel

Company	Utility	State	Docket	Date	Topic	On Behalf Of:
Pollution Control Financing Authority of Camden County	SW	New Jersey	SR91111718J ESW1263-92	4/93	Rev. Requirements	Rate Counsel
Jamaica Water Supply Company	W	New York	92-W-0583	3/93	Rev. Requirements	County of Nassau Town of Hempstead
New Jersey-American Water Company	W/WW	New Jersey	WR92090908J PUCO7266-92S	2/93	Rev. Requirements	Rate Counsel
Passaic County Utilities Authority	SW	New Jersey	SR91121816J ESW0671-92N	9/92	Rev. Requirements	Rate Counsel
East Honolulu Community Services, Inc.	WW	Hawaii	7064	8/92	Rev. Requirements	Division of Consumer Advocacy
The Jersey Central Power and Light Company	E	New Jersey	PUC00661-92 ER91121820J	7/92	Rev. Requirements	Rate Counsel
Mercer County Improvement Authority	SW	New Jersey	EWS11261-91S SR91111682J	5/92	Rev. Requirements	Rate Counsel
Garden State Water Company	W	New Jersey	WR9109-1483 PUC 09118-91S	2/92	Rev. Requirements	Rate Counsel
Elizabethtown Water Company	W	New Jersey	WR9108-1293J PUC 08057-91N	1/92	Rev. Requirements	Rate Counsel
New-Jersey American Water Company	W/WW	New Jersey	WR9108-1399J PUC 8246-91	12/91	Rev. Requirements	Rate Counsel
Pennsylvania-American Water Company	W	Pennsylvania	R-911909	10/91	Rev. Requirements	Office of Consumer Advocate
Mercer County Improvement Authority	SW	New Jersey	SR9004-0264J PUC 3389-90	10/90	Rev. Requirements	Rate Counsel
New York Telephone	T	New York	90-C-0191	7/90	Rev. Requirements Affiliated Interests	NY State Consumer Protection Board
Kent County Water Authority	W	Rhode Island	1952	6/90	Rev. Requirements Regulatory Policy	Division of Public Utilities & Carriers
Ellesor Transfer Station	SW	New Jersey	SO8712-1407 PUC 1768-88	11/89	Regulatory Policy	Rate Counsel
Interstate Navigation Co.	N	Rhode Island	D-89-7	7/89	Rev. Requirements Regulatory Policy	Division of Public Utilities & Carriers
Automated Modular Systems, Inc.	SW	New Jersey	PUC1769-88	5/89	Rev. Requirements Schedules	Rate Counsel
SNET Cellular, Inc.	T	Connecticut		2/89	Regulatory Policy	First Selectman Town of Redding

APPENDIX B

Supporting Schedules

PENNSYLVANIA-AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

REVENUE REQUIREMENT SUMMARY

	Company Claim (A)	Recommended Adjustment	Recommended Position	
1. Pro Forma Rate Base	$1,306,409,765	($5,757,011)	$1,300,652,754	(B)
2. Cost of Capital	9.43%	-1.27%	8.16%	(C)
3. Required Return	$123,251,923	($17,118,658)	$106,133,265	
4. Operating Income @ Present Rates	100,985,415	6,166,973	107,152,388	(D)
5. Operating Income Deficiency	$22,266,508	($23,285,631)	($1,019,123)	
6. Revenue Multiplier	1.7383		1.7395	(E)
7. Revenue Requirement Increase	$38,706,315	($40,477,877)	($1,772,716)	

Sources:
(A) Company Exhibit 3-A, pages 2 and 22.
(B) Schedule ACC-2.
(C) Exhibit JRW-1, Schedule 1.
(D) Schedule ACC-8.
(E) Schedule ACC-35.

PENNSYLVANIA-AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

RATE BASE SUMMARY

	Company Claim (A)	Recomended Adjustment	Recomended Position	
1. Non Depreciable Plant	$16,539,240	($9,203)	$16,530,037	(B)
2. Depreciable Plant	1,730,668,548	(5,108,673)	1,725,559,875	(C)
3. Total Utility Plant in Service	$1,747,207,788	($5,117,877)	$1,742,089,911	
Less:				
4. Contributions in Aid of Construction	$71,380,194	0	$71,380,194	
5. Customer Advances for Construction	36,358,208	0	36,358,208	
6. Excluded Property	1,558,014	0	1,558,014	
7. Sub-Total	$109,296,416	$0	$109,296,416	
8. Net Utility Plant In Service	$1,637,911,372	($5,117,877)	$1,632,793,495	
9. Accrued Depreciation	270,789,978	(57,932)	270,732,046	(D)
10. Depreciated Utility Plant in Service	$1,367,121,394	($5,059,944)	$1,362,061,450	
Plus:				
11. Materials and Supplies	$1,870,785	$0	$1,870,785	
12. Cash Working Capital-Expenses	13,689,156	(886,953)	12,802,203	(E)
13. Accrued and Prepaid Taxes	627,956	162,126	790,082	(F)
14. PG&W Acquisition	16,300,434	0	16,300,434	
Less:				
15. Cash Working Capital-Int. & Div.	$5,437,550	($27,761)	$5,409,789	(G)
16. Unamortized ITC	584,579	0	584,579	
17. Extension Deposits in Suspense	(62,461)	0	(62,461)	
18. Deferred Taxes	87,240,292	0	87,240,292	
19. Total Rate Base Elements	$1,306,409,765	($5,757,011)	$1,300,652,754	

Sources:
(A) PAWC Exhibit 3-A, page 22.
(B) Schedule ACC-3.
(C) Schedule ACC-4.
(D) Schedule ACC-32.
(E) Schedule ACC-5.
(F) Schedule ACC-6.
(G) Schedule ACC-7.

PENNSYLVANIA-AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

NON DEPRECIABLE UTILITY PLANT IN SERVICE

1. Claimed Plant in Service Additions - Net	$3,053,049	(A)
2. Claimed Additions - Acquisitions - Net	2,853,049	(A)
3. Claimed Additions Net of Acquisitions	$200,000	
4. Percentage Uncompleted - 10 Year Average	4.60%	(B)
5. Recommended Adjustment	$9,203	

Sources:
(A) PAWC Exhibit No. 5-A.
(B) Derived from response to OCA-I-5.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

DEPRECIABLE UTILITY PLANT IN SERVICE

1. Claimed Plant in Service Additions - Net	$158,701,643	(A)
2. Claimed Additions - Acquisitions - Net	47,682,471	(A)
3. Claimed Additions Net of Acquisitions	$111,019,172	
4. Percentage Uncompleted - 10 Year Average	4.60%	(B)
5. Recommended Adjustment	$5,108,673	

Sources:
(A) PAWC Exhibit No. 5-A.
(B) Derived from response to OCA-I-5.

PENNSYLVANIA-AMERICAN WATER COMPANY

Cash Working Capital - Expenses

Future Test Year Ending December 31, 2001

	Lag Days (A)	Amount (A)	Dollar Days (A)
1. AWWS Company (B)	11.83	$5,671,400	$67,088,342
2. Chemicals (C)	45.20	4,475,547	202,294,724
3. Group Insurance	-7.50	6,081,159	(45,608,693)
4. Ins Other Than Group	-43.60	4,963,240	(216,397,264)
5. Salary and Wages (D)	11.83	43,600,231	515,757,521
6. Leased Equipment	-19.90	1,524,791	(30,343,341)
7. Leased Vehicles	0.90	4,321,350	3,889,215
8. Miscellaneous	24.50	22,601,252	553,730,674
9. Natural Gas	38.30	716,720	27,450,376
10. Purchased Power (E)	30.20	10,236,059	309,128,982
11. Purchased Water	40.60	1,602,344	65,055,166
12. Telephone	25.00	2,416,788	60,419,700
13. Waste Disposal	34.40	2,281,800	78,493,920
14. OPEBs	0.50	3,844,648	1,922,324
15. Total		$114,337,329	$1,592,881,647
16. Expense Lag			13.93
17. Revenue Lag			54.8
18, Net Lag			40.87
19. Daily Operating Expenses (F)			$313,253
20. Cash Working Capital Requirement			$12,802,203
21. Company Claim (F)			13,689,156
22. Recommended Adjustment			($886,953)

Sources:
(A) PAWC Exhibit 3-A, page 29.
(B) Lag Days reflects PAWC Payroll Related Lags, see Schedule ACC-5A.
(C) Adjusted by an additional 15.2 days to reflect midpoint of service.
(D) See Schedule ACC-5A.
(E) Adjusted to include 15.2 days service lag and 15.0 days payment lag.
(F) PAWC Exhibit 3-A, page 28.

PENNSYLVANIA-AMERICAN WATER COMPANY

Cash Working Capital - Payroll Related Costs

Future Test Year Ending December 31, 2001

	Amount	Lag	Dollar Days
1. Hourly Payroll-East (A)	$8,331,379	12.00	$99,976,548
2. Hourly Payroll-West (A)	10,165,853	13.00	132,156,089
3. Salary Payroll (A)	9,012,081	7.60	68,491,816
4. FIT and FICA (B)	5,386,753	13.83	74,498,794
5. State Income Tax (C)	1,150,021	11.30	12,995,237
6. Fed Unemployment Tax (D)	62,765	75.06	4,711,141
7. State Unemployment Tax (E)	220,218	60.20	13,257,124
8. Total	$34,329,070	11.83	$406,086,748
9. Payroll Only (F)	$27,509,313	10.93	$300,624,453

Sources:
(A) PAWC Exhibit 3-E, Book 2, page 10.
(B) FICA and FIT lag per pages 11 and 12 of PAWC Exhibit 3-E, Book 2, plus Average Payroll Lag per line 9.
(C) State Income Tax lag per page 13 of PAWC Exhibit 3-E, Book 2, plus Average Payroll Lag per line 9.
(D) PAWC Exhibit 3-E, Book 2, page 14.
(E) PAWC Exhibit 3-E, Book 2, page 15.
(F) Reflects average lag per lines 1-3.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

CASH WORKING CAPITAL-ACCRUED AND PREPAID TAXES

	Revenue Lag (A)	Expense Lag (A)	Net Lag	Amount	Cash Working Capital Requirement
1. General Assessment (B)	55.10	-197.50	-252.60	$2,244,587	$1,553,377
2. PURTA	55.10	-47.10	-102.20	1,974,000	552,720
3. State Capital Stock Tax	55.10	88.30	33.20	2,892,495	(263,098)
4. State Income Tax (B)	55.10	75.80	20.70	8,918,911	(505,812)
5. Federal Income Tax (B)	55.10	62.20	7.10	28,125,816	(547,105)
6. Total					$790,082
7. Company Claim (A)					627,956
8. Recommended Adjustment					$162,126

Sources:
(A) PAWC Exhibit 3-A, page 30.
(B) Amounts include impact of recommended adjustments.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

CASH WORKING CAPITAL-INTEREST AND DIVIDENDS

	Revenue Lag (A)	Expense Lag (A)	Net Lag	Amount	Cash Working Capital Requirement
1. Long Term Debt (B)	55.10	91.30	36.20	$54,887,546	($5,443,642)
2. Short Term Debt	55.10	30.20	-24.90	0	0
3. Preferred Dividends (C)	55.10	45.60	-9.50	1,300,653	33,853
4. Total					($5,409,789)
5. Company Claim (A)					(5,437,550)
6. Recommended Adjustment					$27,761

Sources:
(A) PAWC Exhibit 3-A, page 33.
(B) Interest Expense per Schedule ACC-33 .
(C) Reflects weighted Cost of Preferred Dividends per Exhibit JRW-1, Schedule 1 and recommended Rate Base per Schedule ACC-2.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

OPERATING INCOME SUMMARY

		Schedule No.
1. Company Claim	$100,985,415	1
2. At Risk Adjustment (A)	2,760,283	
3. Company Claim w/o At Risk Adjustment	$98,225,132	
Recommended Adjustments:		
4. Residential Revenue	1,224,745	9
5. Public Fire Protection Revenue	(27,833)	10
6. Public Fire Protection - Coatesville	79,887	11
7. Customer Specific Adjustments	302,055	12
8. Billing and Collections	22,018	13
9. Penalty Revenue	6,643	14
10. Hershey Data Center	9,605	15
11. Salary and Wages - Post TY	308,959	16
12. Salary and Wges - Employees	779,257	17
13. Payroll Taxes	83,249	18
14. Incentive Compensation	137,313	19
15. Group Insurance	135,936	20
16. FAS 106	238,754	21
17. Insurance Other than Group	388,101	22
18. Uncollectible Expense	35,827	23
19. Inflation Adjustment	847,124	24
20. Incremental Expenses	(90,094)	25
21. Advertising	218,989	26
22. Charitable Donations	157,680	27
23. Deferred Revenue Recovery	205,818	28
24. Service Company Charges	276,896	29
25. American Water Capital Corp.	322,109	30
26. Depreciation Expense-Rates	3,310,680	31
27. Depreciation Expense - Plant	67,788	32
28. Interest Synchronization	(114,250)	33
29. Net Operating Income	$107,152,388	

Sources:
(A) PAWC Exhibit 3-A, page 39, reduced by income taxes of 41.49%.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

RESIDENTIAL CONSUMPTION

1. Company Claimed Consumption (000 Gals.)		55.80	(A)
2. Consumption Based on Five Year Average (000 Gals.)		56.67	(B)
3. Recommended Consumption Adjustment (000 Gals.)		0.86	
4. Pro Forma Customers		508,546	(C)
5. Pro Forma Usage Adjustment (000 Gals.)		437,990	
6. Block Rate (000 Gals.)		$4.86	(A)
7. Gross Revenue Adjustment		$2,130,386	
8. Revenue Taxes @	1.74%	37,037	(D)
9. Net Revenue Adjustment		$2,093,348	
10. Income Taxes @	41.49%	868,604	
11. Net Income		$1,224,745	

Sources:
(A) PAWC Exhibit 3-F, page 12.
(B) Derived from response to OCA-VI-17 and PAWC Exhibit 3-G, page 225.
(C) PAWC Exhibit 3-F, pages 12 and 13.
(D) Schedule ACC-35.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

PUBLIC FIRE PROTECTION REVENUES

1. Original Company Claim		$7,265,622	(A)
2. Revised Company Claim		7,217,207	(B)
3. Recommended Gross Revenue Adjustment		($48,415)	
4. Revenue Taxes @	1.74%	(842)	(C)
5. Recommended Net Revenue Adjustment		($47,573)	
6. Income Taxes @	41.49%	(19,740)	
7. Net Income		($27,833)	

Sources:
(A) PAWC Exhibit 3-A, page 9.
(B) Derived from response to OTS-RS-1-D.
(C) Reflects tax rates per Schedule ACC-35.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

PUBLIC FIRE PROTECTION-COATESVILLE

1. Number of Hydrants		579	(A)
2. Monthly Hydrant Charge		$20.00	(B)
3. Monthly Revenue Adjustment		$11,580	
4. Annual Revenue Adjustment		$138,960	(C)
5. Revenue Taxes @	1.74%	2,416	(D)
6. Net Revenue Adjustment		136,544	
7. Income Taxes @	41.49%	56,657	
8. Net Income		$79,887	

Sources:
(A) Response to OTS-RS-4-D.
(B) PAWC Exhibit 8-A, page III-7, "Other Zone 1".
(C) Line 3 X 12.
(D) Reflects tax rates per Schedule ACC-35.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

SPECIFIC CUSTOMER ADJUSTMENTS

1. Appleton Paper		$139,913	(A)
2. Jaunty Textiles		46,844	(A)
3. Lion Brewery		109,605	(A)
4. Quarker Oats		83,553	(A)
5. Newtown Artesian		3,271	(B)
6. Union County Industrial Dev. Corp.		142,224	(C)
7. Total Revenue Adjustment		$525,410	
8. Revenue Taxes @	1.74%	9,134	(D)
9. Net Revenue Adjustment		$516,276	
10. Income Taxes @	41.49%	214,221	
11. Net Income		$302,055	

Sources:
(A) PAWC Exhibit 3-A, page 10.
(B) Reflects 25% of adjustment on PAWC Exhibit 3-A, page 10.
(C) Response to OTS-RS-14-D.
(D) Schedule ACC-35 , lines 2-5.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

BILLING AND COLLECTIONS

1. Original Company Claim		$239,460	(A)
2. Revised Company Claim		277,093	(B)
3. Recommended Adjustment		$37,633	
4. Income Taxes @	41.49%	15,615	
5. Net Income		$22,018	

Sources:
(A) PAWC Exhibit 3-A, page 17.
(B) Response to OCA-VI-29.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

PENALTY REVENUE

	1998	1999	2000	
1. Forfeited Discounts	$705,065	$958,012	$863,718	(A)
2. Billed Revenues	276,109,831	286,176,317	298,327,446	(B)
3. Percentage	0.26%	0.33%	0.29%	
4. Three Year Average			0.29%	
5. Total Pro Forma Billed Water Sales			$307,433,224	(C)
6. Pro Forma Penalties Revenue			$901,435	(D)
7. Company Claim			890,081	(C)
8. Recommended Adjustment			$11,354	
9. Income Taxes @	41.49%		4,711	
10. Net Income			$6,643	

(A) PAWC Exhibit 3-F, page 9.
(B) PAWC Exhibit 3-H, page 63.
(C) PAWC Exhibit 3-A, page 15.
(D) Line 4 X Line 5.

PENNSYLVANIA-AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

HERSHEY DATA CENTER

1. Originally Filed Claim		$202,024	(A)
2. Revised Company Claim		218,441	(A)
3. Recommended Adjustment		$16,417	
4. Income Taxes @	41.49%	6,812	
5. Net Income		$9,605	

Sources:
(A) Reponse to OCA 1-46.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

SALARY AND WAGE ADJUSTMENT - POST TEST YEAR

1. Post Test Year Adjustment Included in Company Claim		$528,076	(A)
2. Income Taxes @	41.49%	219,117	
3. Net Income		$308,959	

Sources:
(A) PAWC Exhibit 3-E, Book 3, page 4.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

SALARY AND WAGE ADJUSTMENT - EMPLOYEES

1. Salaried Employees @ 12/31/00		287		(A)
2. Salaried Employees Per Company Claim		296		(A)
3. Recommended Adjustment		9		
4. Average Future Test Year Cost Per Employee		$58,316		(B)
5. Recommended Salary Adjustment			$524,847	(C)
6. Hourly Employees @ 12/31/00		745		(D)
7. Hourly Employees Per Company Claim		770		(E)
8. Recommended Adjustment		25		
9. Average Future Test Year Cost Per Employee		$45,987		(F)
10. Recommended Wage Adjustment			$1,149,676	(G)
11. Total Salary and Wage Adjustment			$1,674,523	
12. Percent Expensed			79.54%	(H)
13. Recommended Expense Adjustment			$1,331,916	
14. Income Taxes @	41.49%		552,658	
15. Net Income			$779,257	

Sources:
(A) PAWC Exhibit 3-E, Book 3, page 9.
(B) Derived from PAWC Exhibit 3-E, Book 3, page 9.
(C) Line 3 X Line 4.
(D) PAWC Exhibit 3-E, Book 3, page 19.
(E) PAWC Exhibit 3-E, Book 3, page 29.
(F) Derived from PAWC Exhibit 3-E, page 29.
(G) Line 8 X Line 9.
(H) PAWC Exhibit 3-E, Book 3, page 4.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

PAYROLL TAXES

1. Pro Forma Salary and Wage Adjustments		$1,859,992	(A)
2. Payroll Taxes @	7.65%	142,289	(B)
3. Income Taxes @	41.49%	59,041	
4. Net Income		$83,249	

Sources:
(A) Schedules ACC-16 and ACC-17.
(B) Includes FICA and Medicare only per PAWC Exhibit 3-E, Book 1, page 51.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

INCENTIVE COMPENSATION

1. Company Claim		$360,909	(A)
2. Percentage Expensed		79.54%	(B)
3. Recommended Expense Adjustment		$287,067	
4. Income Taxes @	41.49%	149,754	
5. Net Income		$137,313	

Sources:
(A) PAWC Exhibit 3-H, page 147.
(B) PAWC Exhibit 3-A, page 40.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

GROUP INSURANCE COSTS

1. Future Test Year Claim		$7,454,052	(A)
2. Future Test Year Employees		1,066	(B)
3. Average Cost Per Employee		$6,993	
4. Recommended Employee Adjustment		34	(C)
5. Total Recommended FTY Cost Adjustment		$237,746	
6. Post FTY Increase Included by Company		128	(A)
7. Impact of July 2001 Estimated Increase		54,235	(D)
8. Total Recommended Adjustment		$292,110	
9. Percentage Expensed		79.54%	(A)
10. Pro Forma Expense Adjustment		$232,344	
11. Income Taxes @	41.49%	96,408	
12. Net Income		$135,936	

Sources:
(A) PAWC Exhibit 3-E, Book 3, page 41.
(B) PAWC Exhibit 3-E, Book 3, page 47.
(C) Schedule PAWC-17.
(D) Medical, Dental and Prescription per Exhibit 3-E, Book 3, page 44 repriced at rates per page 43.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

FAS 106 COSTS

1. Annual Company Claim		$4,833,603	(A)
2. Actual Fund Contributions		4,320,551	(B)
3. Recommended Adjustment		$513,052	
4. Percentage Expensed		79.54%	(A)
5. Pro Forma Expense Adjustment		$408,082	
6. Income Taxes @	41.49%	169,327	
7. Net Income		$238,754	

Sources:
(A) PAWC Exhibit No. 3-A, page 42.
(B) PAWC Exhibit 3-H, page 138.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

INSURANCE OTHER THAN GROUP

1. Retroactive Adjustment		$533,224	(A)
2. Inflation Adjustments		130,123	(A)
3. Total Recommended Adjustments		$663,347	
4. Income Taxes @	41.49%	275,246	
5. Net Income		$388,101	

Sources:
(A) PAWC Exhibit 3-E, Book 4, page 3.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

UNCOLLECTIBLE EXPENSE

	Year	Net Write Offs (A)	Billed Revenue (B)	Percentage Uncollectible
1.	1998	2,326,962	276,109,831	0.84%
2.	1999	2,863,461	286,176,317	1.00%
3.	2000	2,866,322	298,327,446	0.96%
4.	Three Year Average			0.93%
5.	Pro Forma Billed Water Sales			307,433,224
6.	Pro Forma Uncollectible Expense			$2,873,637
7.	Company Claim (C)			2,934,873
8.	Recommended Adjustment			$61,236
9.	Income Taxes @	41.49%		25,409
10.	Net Income			$35,827

Sources:
(A) PAWC Exhibit 3-E, Book 1, page 12.
(B) PAWC Exhibit 3-H, page 63.
(C) PAWC Exhibit 3-A, page 56.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

INFLATION ADJUSTMENT

1. Inflation Adjustment Included in Company Claim		$1,447,915	(A)
2. Income Taxes @	41.49%	600,791	
3. Net Income		$847,124	

Sources:
(A) PAWC Exhibit 3-A, page 54.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

INCREMENTAL PRODUCTION EXPENSES

1. Appleton Paper		464,747	(A)
2. Jaunty Textiles		124,842	(B)
3. Lion Brewery		386,337	(C)
4. Quarker Oats		256,485	(D)
5. Newtown Artesian		8,464	(E)
6. Residential Adjustment		4,379,905	(F)
7. Total Consumption Adjustment		5,620,779	
8. Company Pro Forma Consumption		504,581,228	(G)
9. Percentage Adjustment		1.11%	
10. Power and Chemical Costs		$13,823,837	(F)
11. Pro Forma Expense Adjustment		$153,991	
12. Income Taxes @	41.49%	63,896	
13. Net Income		$90,094	

Sources:
(A) PAWC Exhibit 3-F, page 27.
(B) PAWC Exhibit 3-F, page 30.
(B) PAWC Exhibit 3-F, page 34.
(C) PAWC Exhibit 3-F, page 31.
(D) PAWC Exhibit 3-F, page 32.
(E) Schedule ACC-12.
(F) PAWC Exhibit 3-A, page 47.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

ADVERTISING

		(A)
1. Provision of Factual and Objective Data		$8,199
2. Holiday Greetings		268
3. Community Organizations		16,857
4. Miscellaneous		7,803
5. News Service and Amortization of Media Program		312,443
6. Promotion Items		18,284
7. Miscellaneous		10,445
8. Total Recommended Adjustments		$374,299
9. Income Taxes @	41.49%	155,310
10. Net Income		$218,989

Sources:
(A) Response to OCA-VI-34.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

CHARITABLE CONTRIBUTIONS - SERVICE COMPANY

1. Company Claim		$269,509	(A)
2. Recommended Adjustment		269,509	
3. Income Taxes @	41.49%	111,829	
4. Net Income		$157,680	

Sources:
(A) PAWC Exhibit 3-H, page 218.

PENNSYLVANIA-AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

DEFERRED REVENUE RECOVERY

1. Thomson Consolidated Electronics Deferral		$238,226	(A)
2. Recovery of Deferral Over 2 Years		119,113	(B)
3. Deferral Recovery Included in Company's Claim		470,899	(C)
4. Recommended Adjustment		$351,786	
5. Income Taxes @	41.49%	145,968	
6. Net Income		$205,818	

Sources:
(A) Resposne to OSBA-I-03.
(B) Line 1 / 2. See OTS-RS-13-D.
(C) PAWC Exhibit 3-A, page 58.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

SERVICE COMPANY CHARGES

1. Hewitt Consultants Charges		$53,000	(A)
2. Information Systems/Customer Billing & Accouting		154,970	(B)
3. Information Systems/Financial		265,304	(B)
4. Total Recommended Adjustments		$473,274	
5. Income Taxes @	41.49%	196,378	
6. Net Income		$276,896	

Sources:
(A) Response to OCA-VI-35.
(B) 50% of test year increase, per PAWC Exhibit 3-E, Book 1, page 30.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

AMERICAN WATER CAPITAL CORPORATION

1. Test Year Billings		$550,553	(A)
2. Average of 1998/1999 Service Company Billings		270,099	(B)
3. Recommended Adjustment		$550,553	
4. Income Taxes @	41.49%	228,444	
5. Net Income		$322,109	

Sources:
(A) Response to OCA-I-44.
(B) Response to OCA-VI-24.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

DEPRECIATION EXPENSE -RATES

1. Pro Forma Depreciation Expense Per Company		$47,629,071	(A)
2. Pro Forma Depreciation Expense Per OCA		41,970,417	(B)
3. Recommended Adjustment		$5,658,654	
4. Income Taxes @	41.49%	2,347,974	
5. Net Income		$3,310,680	

Sources:
(A) PAWC Exhibit 3-A, page 1.
(B) Exhibit MJM-1, page 4.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

DEPRECIATION EXPENSE - PLANT ADJUSTMENT

1. Depreciable Plant Adjustment		$5,108,673	(A)
2. Composite Depreciation Rate		2.27%	(B)
3. Annual Depreciation Expense Adjustment		$115,865	
4. Income Taxes @	41.49%	48,076	
5. Net Income		$67,788	
6. Depreciation Reserve Adjustment		$57,932	(C)

Sources:
(A) Schedule ACC-4 .
(B) Derived from Exhibit MJM-1.
(C) Line 3 / 2.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

INTEREST SYNCRONIZATION

1. Recommended Rate Base		$1,300,652,754	(A)
2. Weighted Cost of Debt		4.22%	(B)
3. Pro Forma Interest Expense		$54,887,546	
4. Company Claim		55,162,891	(C)
5. Increase in Taxable Income		$275,345	
6. Income Taxes @	41.49%	$114,250	

Sources:
(A) Schedule ACC-2.
(B) Exhibit JRW-1, Schedule 1.
(C) PAWC Exhibit 3-A, page 1.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

INCOME TAX FACTOR

1.	Revenue	100.00%	
2.	State Income Tax Rate	9.99%	(A)
3.	Federal Taxable Income	90.01%	
4.	Federal Income Taxes @ 35%	31.50%	(A)
5.	Net Income	58.51%	
6.	Total Tax Rate	41.49%	(B)

Sources
(A) PAWC Exhibit 3-A, page 64.
(B) Line 2 plus Line 4.

PENNSYLVANIA AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

REVENUE MULTIPLIER

1. Revenue		100.00	
2. Uncollectibles @	0.93%	0.93	(A)
3. PUC Assessment @	0.65%	0.65	(B)
4. OCA Assessment @	0.12%	0.12	(B)
5. OSBA Assessment @	0.03%	0.03	(B)
6. State Taxable Income		98.26	
7. State Income Taxes @	9.99%	9.82	(C)
8. Federal Taxable Income		88.45	
9. Federal Income Taxes @ 35%		30.96	(C)
10. Net Income		57.49	
11. Revenue / Income		1.74	(D)

Sources
(A) Schedule ACC-23 .
(B) PAWC Exhibit 3-A, page 61.
(C) PAWC Exhibit 3-A, page 64.
(D) Line 1 / Line 10.

PENNSYLVANIA-AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

REVENUE REQUIREMENT IMPACT OF ADJUSTMENTS

1. Rate of Return	($28,941,091)
2. Non Depreciable Plant	($1,305)
3. Depreciable Plant	(724,650)
4. Accrued Depreciation	8,218
5. Cash Working Capital-Expenses	(125,812)
6. Accrued and Prepaid Taxes	22,997
7. Cash Working Capital-Int. & Div.	3,938
8. At Risk Adjustment	$4,798,256
9. Residential Revenue	(2,128,998)
10. Public Fire Protection Revenue	48,383
11. Public Fire Protection - Coatesville	(138,870)
12. Customer Specific Adjustments	(525,068)
13. Billing and Collections	(38,274)
14. Penalty Revenue	(11,547)
15. Hershey Data Center	(16,697)
16. Salary and Wages - Post TY	(537,069)
17. Salary and Wges - Employees	(1,354,598)
18. Payroll Taxes	(144,713)
19. Incentive Compensation	(238,694)
20. Group Insurance	(236,301)
21. FAS 106	(415,031)
22. Insurance Other than Group	(674,644)
23. Uncollectible Expense	(62,279)
24. Inflation Adjustment	(1,472,573)
25. Incremental Expenses	156,613
26. Advertising	(380,673)
27. Charitable Donations	(274,099)
28. Deferred Revenue Recovery	(357,777)
29. Service Company Charges	(481,333)
30. American Water Capital Corp.	(559,929)
31. Depreciation Expense - Plant	(117,838)
32. Depreciation Expense-Rates	(5,755,022)
33. Interest Synchronization	198,603
34. Revenue Multiplier	(1,154)
35. Total Adjustments	($40,479,031)
36. Company Claim	38,706,315
37. Recommended Revenue Requirement Deficiency	($1,772,716)

PENNSYLVANIA-AMERICAN WATER COMPANY

FUTURE TEST YEAR ENDING DECEMBER 31, 2001

PRO FORMA INCOME STATEMENT

		Per Company	Recommended Adjustments	Pro Forma Present Rates	Recommended Rate Adjustment	Pro Forma Proposed Rates
1. Operating Revenues		$311,643,975	$2,811,745	$314,455,720	($1,772,716)	$312,683,003
2. Operating Expenses		117,272,202	(2,055,134)	115,217,068	0	115,217,068
3. Depreciation and Amortization		49,724,568	(5,774,519)	43,950,049	0	43,950,049
4. Taxes Other Than Income		10,463,257	(94,544)	10,368,713	(30,819)	10,337,894
5. Taxable Income Before Interest Expenses		$134,183,948	$10,735,941	$144,919,889	($1,741,897)	$143,177,991
6. Interest Expense		55,162,891	(275,345)	54,887,546	0	54,887,546
7. Taxable Income		$79,021,057	$11,011,285	$90,032,342	($1,741,897)	$88,290,445
8. Income Taxes @	41.49%	33,198,533	4,568,968	37,767,501	(722,774)	37,044,727
9. Net Operating Income		$100,985,415	$6,166,973	$107,152,388	($1,019,123)	$106,133,264
10. Rate Base		$1,306,409,765		$1,300,652,754		$1,300,652,754
11. Rate of Return		7.73%		8.24%		8.16%

APPENDIX C

Referenced Data Requests

Response to OCA-I-5
Response to OCA-I-10
Response to OCA-I-17
Response to OCA-I-22
Response to OCA-I-23
Response to OCA-I-28
Response to OCA-I-44
Response to OCA-I-46
Response to OCA-VI-9
Response to OCA-VI-11
Response to OCA-VI-14
Response to OCA-VI-17
Response to OCA-VI-24
Response to OCA-VI-29
Response to OCA-VI-34
Response to OCA-VI-35
Response to OCA-VI-36
Response to OCA-VI-37
Response to OCA-IX-16

Response to OTS-RS-1-D
Response to OTS-RS-4-D
Response to OTS-RS-7-D
Response to OTS-RS-13-D
Response to OTS-RS-14-D
Response to OTS-RE-12-D
Response to OTS-RE-31-D

Response to OSBA-1-3
Response to OSBA-1-9

OCA-I-05 Q. Please provide, for each of the last ten years, a) the budgeted capital expenditures and b) the actual capital expenditures made by the Company.

OCA-I-05 A. Attached is a schedule showing the Company's planned and actual capital expenditures for the period of 1991-2000 inclusive.

The Company budgets its capital needs on the basis of projected cash expenditures that will be required annually to support construction activity during the budget year irrespective of whether the construction project for which an expenditure is made is scheduled for completion during the budget year or a subsequent accounting period. Accordingly, the amount of construction completed and recorded in plant accounts does not relate directly to the planned capital expenditures for that year. When a rate filing is made based on a future test year, the Company performs a detailed analysis of prospective construction activity to ascertain the in-service date for each project to be completed during the future test year, and only the cost associated with those projects is included in its rate base claim.

RESPONSIBLE WITNESS: Steven J. Seidl, Vice President Engineering

	PLANNED	ACTUAL	DIFFERENCE	PERCENT
1991	46,800,655	46,425,602	375,053	0.81%
1992	33,914,326	33,710,585	203,741	0.60%
1993	40,149,927	39,622,893	527,034	1.33%
1994	53,078,357	50,299,523	2,778,834	5.52%
1995	72,876,056	66,309,008	6,567,048	9.90%
1996	69,211,360	63,174,719	6,036,641	9.56%
1997	96,639,280	94,217,720	2,421,560	2.57%
1998	90,526,923	90,252,562	274,361	0.30%
1999	117,355,274	111,345,628	6,009,646	5.40%
2000	70,460,916	63,857,082	6,603,834	10.34%

Pa. P.U.C. Docket No. R-00016339

OCA-I-10

OCA-I-10 Q. Regarding Exhibit No. 5-A, please provide the amount spent to date on each project.

OCA-I-10 A. Attached is a schedule in the same format as Exhibit No. 5-A showing activity by account through March 2001. Additional updates will be provided as the data become available.

RESPONSIBLE WITNESS: Steven J. Seidl, Vice President Engineering

PENNSYLVANIA-AMERICAN WATER COMPANY
PLANT ADDITIONS AND RETIREMENTS
FUTURE TEST FOR YEAR ENDED DECEMBER 31, 2001

STATE ACCT NO	DESCRIPTION OF ADDITION	WORK ORDER NO	ADDITION	AMT EXP THRU MAR	COMP DATE	DESCRIPTION OF RETIREMENT	WORK ORDER NO	RETIREMENT	COMP DATE
303	LAND FOR FRACKVILLE WELLS	IP 97-12	200,000	55,663	Aug-01	NONE			
303	MISCELLANEOUS INTANGIBLE PLANT/COATESVILLE ACQUISITION	IP 00-11	244,110	244,110	Mar-01	NONE			
	ACCOUNT TOTAL		444,110	299,773					
303.11	LAND AND LAND RIGHTS - WATER RIGHTS/COATESVILLE ACQUISITION	IP 00-11	1,942,823	1,942,823	Mar-01	NONE			
	ACCOUNT TOTAL		1,942,823	1,942,823					
303 2	LAND - PUMPING PLANT/BUTLER ACQUISITION	IP 00-14	4,333		Apr-01	NONE			
303 2	EASEMENTS - SOURCE OF SUPPLY (WELLY)TOW ACQUISITION	IP 00-13	2	2	Feb-01	NONE			
	ACCOUNT TOTAL		4,335	2					
303 3	LAND - WATER TREATMENT PLANT/TOW ACQUISITION	IP 00-13	1	1	Feb-01	NONE			
	ACCOUNT TOTAL		1	1					
303.4	LAND AND EASEMENTS - DISTRIBUTION PLANT/BUTLER ACQUISITION	IP 00-14	12,064		Apr-01	NONE			
303.4	LAND - DISTRIBUTION STANDPIPES/TOW ACQUISITION	IP 00-13	80,000	80,000	Feb-01	NONE			
303.4	LAND AND LAND RIGHTS/COATESVILLE ACQUISITION	IP 00-11	569,716	569,716	Mar-01	NONE			
	ACCOUNT TOTAL		661,780	649,716					
303 99	COMPREHENSIVE PLANNING STUDIES	IP 01-11	220,000	12,426	Dec-01	NONE			
	ACCOUNT TOTAL		220,000	12,426					
304	FRACKVILLE WELLS	IP 97-12	41,000	11,411	Aug-01	NONE			
304	PHILIPSBURG WELLS	IP 98-12	330,000	135,789	Dec-01	NONE			
304	MILTON FILTER PLANT CLARIFER IMPROVEMENT	IP 99-15	109,000	72,891	Oct-01	NONE			
304	PURCHASE EQUIPMENT	ITEM H	53,000	54,133	Mar-01	NONE			
304	PURCHASE EQUIPMENT	ITEM H	106,000		Jun-01	NONE			
304	PURCHASE EQUIPMENT	ITEM H	158,000		Sep-01	NONE			
304	PURCHASE EQUIPMENT	ITEM H	211,000		Dec-01	NONE			
	ACCOUNT TOTAL		1,008,000	274,224					
304 2	STRUCTURES - PUMPING PLANT/ BUTLER ACQUISITION	IP 00-14	73,444		Apr-01	NONE			
304.2	POWER AND PUMPING STRUCTURES/COATESVILLE ACQUISITION	IP 00-11	992,996	992,996	Mar-01	NONE			
	ACCOUNT TOTAL		1,066,440	992,996					
304 3	STRUCTURES - WATER TREATMENT PLANT/TOW ACQUISITION	IP 00-13	97,612	97,612	Feb-01	NONE			
304.3	PURIFICATION BUILDINGS/COATESVILLE ACQUISITION	IP 00-11	3,938,858	3,938,858	Mar-01	NONE			
304.3	POCONO REGIONALIZATION	IP 96-42	105,900	1,099	Jun-01	NONE			
	ACCOUNT TOTAL		4,142,370	4,037,569					
304.62	STORES, SHOP AND GARAGE BUILDING/COATESVILLE ACQUISITION	IP 00-11	27,754	27,754	Mar-01	NONE			
	ACCOUNT TOTAL		27,754	27,754					

PENNSYLVANIA-AMERICAN WATER COMPANY
PLANT ADDITIONS AND RETIREMENTS
FUTURE TEST FOR YEAR ENDED DECEMBER 31, 2001

STATE ACCT NO	DESCRIPTION OF ADDITION	WORK ORDER NO	ADDITION	AMT EXP THRU MAR	COMP DATE	DESCRIPTION OF RETIREMENT	WORK ORDER NO	RETIREMENT	COMP DATE
305	COLLECTING AND IMPOUNDING RESERVOIRS/COATESVILLE ACQUISITION	IP 00-11	1,803,886	1,803,886	Mar-01	NONE			
	ACCOUNT TOTAL		1,803,886	1,803,886					
306	LAKE, RIVER AND OTHER INTAKES/COATESVILLE ACQUISITION	IP 00-11	27,495	27,495	Mar-01	NONE			
	ACCOUNT TOTAL		27,495	27,495					
307	WELLS AND SPRINGS/TOW ACQUISITION	IP 00-13	3,096	3,096	Feb-01	NONE			
307	FRACKVILLE WELLS	IP 97-12	328,000	91,287	Aug-01	NONE			
307	PHILIPSBURG WELLS	IP 98-12	1,155,000	475,260	Dec-01	NONE			
	ACCOUNT TOTAL		1,486,096	569,643					
310.4	PURIFICATION SYSTEM - EQUIPMENT/COATESVILLE ACQUISITION	IP 00-11	2,958,850	2,958,850	Mar-01	NONE			
	ACCOUNT TOTAL		2,958,850	2,958,850					
311.2	PUMPING EQUIPMENT/BUTLER ACQUISTIONS	IP 00-14	6,606		Apr-01	NONE			
311.2	PUMPING EQUIPMENT/TOW ACQUISITIONS	IP 00-13	2,126	2,126	Feb-01	NONE			
311.2	ELECTIRC PUMPING EQUIPMENT/COATESVILLE ACQUISITION	IP 00-11	956,130	956,130	Mar-01	NONE			
311.2	POCONO REGIONALIZATION	IP 96-42	105,900	1,099	Jun-01	NONE			
311.2	FRACKVILLE WELLS	IP 97-12	82,000	22,822	Aug-01	NONE			
311.2	PHILIPSBURG WELLS	IP 98-12	165,000	67,894	Dec-01	NONE			
311.2	JACKSON TOWNSHIP	IP 00-13	200,000	200,000	Dec-01	NONE			
	ACCOUNT TOTAL		1,517,762	1,250,071					
311.73	SHIRE OAKS SURGE CONTROL	IP 00-05	723,000	141,383	Sep-01	NONE			
311.73	CLEARWELL WHITE DEER PLANT	IP 99-11	379,200	177,045	Dec-01	NONE			
311.73	POCONO REGIONALIZATION	IP 96-42	2,118,000	21,974	Jun-01	NONE			
311.73	PURCHASE EQUIPMENT	ITEM H	53,000	54,133	Mar-01	NONE			
311.73	PURCHASE EQUIPMENT	ITEM H	106,000		Jun-01	NONE			
311.73	PURCHASE EQUIPMENT	ITEM H	158,000		Sep-01	NONE			
311.73	PURCHASE EQUIPMENT	ITEM H	211,000		Dec-01	NONE			
	ACCOUNT TOTAL		3,748,200	394,535					
320	PURCHASE AND REPLACE GRANULAR ACTIVATED CARBON	IP 01-03	1,022,000		Nov-01	RETIRE CARBON		919,800	Nov-01
320	PURCHASE EQUIPMENT	ITEM H	53,000	54,133	Mar-01	NONE			
320	PURCHASE EQUIPMENT	ITEM H	106,000		Jun-01	NONE			
320	PURCHASE EQUIPMENT	ITEM H	158,000		Sep-01	NONE			
320	PURCHASE EQUIPMENT	ITEM H	211,000		Dec-01	NONE			
320	NORRISTOWN FILTER PLANT IMPROVEMENTS AND EXPANSION	IP 91-04	10,381,000	1,018,686	Sep-01	RETIRE PLANT NO. 1		683,858	Sep-01
320	HIGHLAND DRIVE AERATION FACILITY	IP 00-06	690,000	29,547	Dec-01	NONE			
320	INSTALL CHLORINE SCRUBBERS	IP 01-10	750,000		Dec-01	NONE			
320	POCONO REGIONALIZATION	IP 96-42	423,600	4,395	Jun-01	NONE			
320	WATER TREATMENT EQUIPMENT/TOW ACQUISITION	IP 00-13	144,611	144,611	Feb-01	NONE			
320	FRACKVILLE WELLS	IP 97-12	41,000	11,411	Dec-01	NONE			
320	PHILIPSBURG WELLS	IP 98-12	330,000	135,789	Dec-01	NONE			
320									
	ACCOUNT TOTAL		14,310,211	1,398,572				1,603,658	
330	CLEARWELL WHITE DEER PLANT	IP-99-11	568,800	265,567	Dec-01	NONE			
330	POCONO REGIONALIZATION	IP 96-42	1,059,000	10,987	Dec-01	NONE			

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STATE ACCT NO	DESCRIPTION OF ADDITION	WORK ORDER NO	ADDITION	AMT EXP THRU MAR	COMP DATE	DESCRIPTION OF RETIREMENT	WORK ORDER NO	RETIREMENT	COMP DATE
330	STEEL TREATMENT UNIT REHABILITATION	IP 99-32	450,000		Dec-01	RETIRE PAINTING		5,000	Dec-01
330	TANK REHAB	IP00-04,01-12	2,700,000	858,538	Nov-01	RETIRE PAINTING		270,000	Nov-01
330	DISTRIBUTION RESERVOIRS AND STANDPIPES/BUTLER ACQUISITION	IP 00-14	205,703		Apr-01	NONE			
330	DISTRIBUTION RESERVOIRS AND STANDPIPES/TOW ACQUISITION	IP 00-13	318,945	318,945	Feb-01	NONE			
330	DISTRIBUTION RESERVOIRS AND STANDPIPES/COATESVILLE ACQUISITION	IP 00-11	3,666,358	3,666,358	Mar-01	NONE			
330	JEFFERSON TOWNSHIP TANK	IP 01-13	1,000,000		Dec-01	NONE			
	ACCOUNT TOTAL		9,968,806	5,118,395				275,000	
331.8	TRANSMISSION AND DISTRIBUTION MAINS/BUTLER ACQUISITION	IP 00-14	4,303,601		Apr-01	NONE			
331.8	TRANSMISSION AND DISTRIBUTION MAINS/TOW ACQUISITION	IP 00-13	273,023	273,023	Feb-01	NONE			
331.8	TRANSMISSION AND DISTRIBUTION MAINS/COATESVILLE ACQUISITION	IP 00-11	22,532,129	22,532,129	Mar-01	NONE			
331.8	INSTALL MAINS AND REPLACE	VARIOUS	2,892,000	5,102,216	Mar-01	RETIRE MAINS		289,200	Mar-01
331.8	INSTALL MAINS AND REPLACE	VARIOUS	13,936,000		Jun-01	RETIRE MAINS		1,393,600	Jun-01
331.8	INSTALL MAINS AND REPLACE	VARIOUS	20,632,000		Sep-01	RETIRE MAINS		2,063,200	Sep-01
331.8	INSTALL MAINS AND REPLACE	VARIOUS	14,776,000		Dec-01	RETIRE MAINS		1,477,600	Dec-01
331.8	JEFFERSON TOWNSHIP	IP 01-13	1,700,000		Dec-01	NONE			
331.8	TRANSMISSION AND DISTRIBUTION MAINS/FOX KNOLL ACQUISITION	IP 00-15	18,362		Apr-01	NONE			
331.8	RELOCATION OF MAINS DUE TO MON-VALLEY EXPRESSWAY	IP 99-23	709,000	233,658	Dec-01	RETIRE MAINS		70,900	Dec-01
331.8	STRATTANVILLE	IP 99-36	778,000	137,275	Jul-01	NONE			
331.8	FRANKLIN TOWNSHIP	IP 99-37	3,445,000	1,156,631	Jul-01	NONE			
331.8	NORTH ABINGTON ROAD IMPROVEMENTS	IP 01-04	719,000		Oct-01	NONE			
331.8	EWING ROAD IMPROVEMENTS	IP 01-09	394,000	4,694	Sep-01	NONE			
331.8	COATESVILLE	VARIOUS	3,265,000		Dec-01	RETIRE MAINS		326,500	Dec-01
331.8	TUNNEL REHABILITATION	IP 99-01	1,060,000	116,181	Dec-01	NONE			
331.8	REHABILIATION OF REGULATOR VAULTS	IP 99-33	356,000	20,724	Dec-01	NONE			
331.8	LAKE SCRANTON RAW WATER TRANSFER IMPROVEMENTS	IP 99-02	698,000	3,187	Dec-01	NONE			
331.8	POCONO REGIONALIZATION	IP 96-42	423,600	4,395	Dec-01	NONE			
331.8	FRACKVILLE WELLS	IP 97-12	328,000	91,287	Dec-01	NONE			
331.8	PHILIPSBURG WELLS	IP 98-12	1,320,000	543,154	Dec-01	NONE			
331.8	JACKSON TOWNSHIP	IP 00-13	3,800,000		Dec-01	NONE			
	ACCOUNT TOTAL		98,358,715	30,218,554				5,621,000	
333	INSTALL AND REPLACE SERVICES	ITEM C	788,000	1,677,994	Mar-01	RETIRE SERVICES		78,800	Mar-01
333	INSTALL AND REPLACE SERVICES	ITEM C	3,346,000		Jun-01	RETIRE SERVICES		334,600	Jun-01
333	INSTALL AND REPLACE SERVICES	ITEM C	4,331,000		Sep-01	RETIRE SERVICES		433,100	Sep-01
333	INSTALL AND REPLACE SERVICES	ITEM C	1,609,000		Dec-01	RETIRE SERVICES		160,900	Dec-01
333	COATESVILLE	ITEM C	780,000		Dec-01	RETIRE SERVICES		78,000	Dec-01
333	SERVICES/BUTLER ACQUISITION	IP 00-14	720,069		Apr-01	RETIRE SERVICES		72,007	Dec-01
333	SERVICES/TOW ACQUISITION	IP 00-13	3,540	3,540	Feb-01	RETIRE SERVICES		354	Dec-01
333	SERVICES/COATESVILLE ACQUISITION	IP 00-11	2,758,572	2,758,572	Mar-01	RETIRE SERVICES		275,857	Dec-01
334	SERVICES/FOX KNOLL ACQUISITION	IP 00-15	5,474		Apr-01	NONE			
	ACCOUNT TOTAL		14,341,655	4,440,106				1,433,618	

PENNSYLVANIA-AMERICAN WATER COMPANY
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STATE ACCT NO	DESCRIPTION OF ADDITION	WORK ORDER NO	ADDITION	AMT EXP THRU MAR	COMP DATE	DESCRIPTION OF RETIREMENT	WORK ORDER NO	RETIREMENT	COMP DATE
334	INSTALL METERS	VARIOUS	323,000	720,511	Mar-01	RETIRE METERS		32,300	Mar-01
334	INSTALL METERS	VARIOUS	1,371,000		Jun-01	RETIRE METERS		137,100	Jun-01
334	INSTALL METERS	VARIOUS	1,774,000		Sep-01	RETIRE METERS		177,400	Sep-01
334	INSTALL METERS	VARIOUS	657,000		Dec-01	RETIRE METERS		65,700	Dec-01
334	COATESVILLE	ITEM D	273,000		Dec-01	RETIRE METERS		27,300	Dec-01
334	METERS AND METER INSTALLATIONS/BUTLER ACQUISITION	IP 00-14	271,797		Apr-01	RETIRE METERS		27,180	Dec-01
334	METERS AND METER INSTALLATIONS/TOW ACQUISITION	IP 00-13	1,746	1,746	Feb-01	RETIRE METERS		175	Dec-01
334	METERS AND METER INSTALLATIONS/COATESVILLE ACQUISITION	IP 00-11	801,734	801,734	Mar-01	RETIRE METERS		80,173	Dec-01
335	METERS AND METER INSTALLATIONS/FOX KNOLL ACQUISITION	IP 00-15	1,419		Apr-01	NONE			
	ACCOUNT TOTAL		5,474,696	1,523,991				547,328	
335	INSTALL AND REPLACE HYDRANTS	ITEM B	275,000	34,689	Mar-01	RETIRE HYDRANTS		27,500	Mar-01
335	INSTALL AND REPLACE HYDRANTS	ITEM B	476,000		Jun-01	RETIRE HYDRANTS		47,600	Jun-01
335	INSTALL AND REPLACE HYDRANTS	ITEM B	587,000		Sep-01	RETIRE HYDRANTS		58,700	Sep-01
335	INSTALL AND REPLACE HYDRANTS	ITEM B	282,000		Dec-01	RETIRE HYDRANTS		28,200	Dec-01
335	HYDRANTS/BUTLER ACQUISITION	IP 00-14	160,599		Apr-01	RETIRE HYDRANTS		16,060	Dec-01
335	HYDRANTS/TOW ACQUISITION	IP 00-13	4,532	4,532	Feb-01	RETIRE HYDRANTS		453	Dec-01
335	HYDRANTS/ACQUISITION ACQUISITION	IP 00-11	351,404	351,404	Mar-01	RETIRE HYDRANTS		35,141	Dec-01
	ACCOUNT TOTAL		2,116,535	390,625				211,654	
340	OFFICE FURNITURE AND EQUIPMENT/COATESVILLE ACQUSITION	IP 00-11	275,426	275,426	Mar-01	NONE			
340	OFFICE FURNITURE AND EQUIPMENT	E	0	28,168	Dec-01				
	ACCOUNT TOTAL		275,426	303,594					
340.3	PURCHASE AND INSTALL CUSTOMER INFORMATION SOFTWARE	IP 97-28	4,000,000	1,044,494	Dec-01	NONE			
	ACCOUNT TOTAL		4,000,000	1,044,494					
341	TRANSPORTATION EQUIPMENT/COATESVILLE ACQUISITION	IP 00-11	275,435	275,435	Mar-01	NONE			
	ACCOUNT TOTAL		275,435	275,435					
342	STORES EQUIPMENT/COATESVILLE ACQUISITION	IP 00-11	1,996	1,996	Mar-01	NONE			
	ACCOUNT TOTAL		1,996	1,996					
343	TOOLS AND WORK EQUIPMENT/COATESVILLE ACQUISITION	IP 00-11	102,359	102,359	Mar-01	NONE			
343	TOOLS AND WORK EQUIPMENT	G	0	79,943	Dec-01				
	ACCOUNT TOTAL		102,359	182,302					
344	LABORATORY EQUIPMENT/TOW ACQUISITION	IP 00-13	995	995	Feb-01	NONE			
344	LABORATORY EQUIPMENT/COATESVILLE ACQUISITION	IP 00-11	55,870	55,870	Mar-01	NONE			
	ACCOUNT TOTAL		56,865	56,865					
346	COMMUNICATION EQUIPMENT/COATESVILLE ACQUISITION	IP 00-11	48,349	48,349	Mar-01	NONE			
	ACCOUNT TOTAL		48,349	48,349					
347	PURCHASE MISCELLANEOUS EQUIPMENT	ITEM H	106,000	108,265	Mar-01	NONE			
347	PURCHASE MISCELLANEOUS EQUIPMENT	ITEM H	211,000		Jun-01	NONE			
347	PURCHASE MISCELLANEOUS EQUIPMENT	ITEM H	317,000		Sep-01	NONE			
347	PURCHASE MISCELLANEOUS EQUIPMENT	ITEM H	422,000		Dec-01	NONE			

PENNSYLVANIA-AMERICAN WATER COMPANY
PLANT ADDITIONS AND RETIREMENTS
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STATE ACCT NO	DESCRIPTION OF ADDITION	WORK ORDER NO	ADDITION	AMT EXP THRU MAR	COMP DATE	DESCRIPTION OF RETIREMENT	WORK ORDER NO	RETIREMENT	COMP DATE
	ACCOUNT TOTAL		1,056,000	108,265					
	GRAND TOTAL		171,446,950	60,353,307				9,692,258	

OCA-I-17 Q. Please provide the following monthly labor data for each of the past 3 years, and for 2001 to date, showing annual totals. Also, please provide new monthly data as it becomes available through the course of this proceeding.

a. number of actual employees broken down by type (e.g., salaried, hourly, union, non-union, temporary, etc.);
b. number of authorized employees broken down by type (e.g., salaried, hourly, union, non-union, temporary, etc.);
c. regular payroll broken down between expensed, capitalized and other;
d. overtime payroll broken down between expensed, capitalized and other;
e. temporary payroll broken down between expensed, capitalized and other; and
f. other payroll (specify).

OCA-I-17 A. On March 22, 2001, the Company acquired the assets and workforce of the City of Coatesville Authority ("CCA"). As a consequence, the Company's claim for salary and wage expense consists of two parts. Salary and wage expense for the Company exclusive of the water system acquired from the CCA is set forth at page 40 of Exhibit No. 3-A, and detailed supporting calculations are set forth in Exhibit No. 3-E, Book 3. The requested information that corresponds to this portion of the Company's claim is set forth in Attachment A to this response. The portion of the Company's claim that relates to the assets and operations acquired from CCA is set forth at pages 52 and 53 of Exhibit No. 3-A. For this portion of the Company's claim, the requested information for the period from and after the date of PAWC's acquisition is set forth in Attachment B.

RESPONSIBLE WITNESS : Maria G. Balmer, Financial Analyst

ATTACHMENT A

PENNSYLVANIA-AMERICAN WATER COMPANY
DOCKET NO. 00016339
OCA SET I, QUESTION 17

PENNSYLVANIA-AMERICAN WATER COMPANY

	MONTH	TOTAL	UNION	NON-UNION	SALARY	TEMP
a.	JAN 1998	1089	511	285	293	0
	FEB	1084	508	283	293	0
	MAR	1083	506	284	293	0
	APR	1081	504	287	290	0
	MAY	1090	507	289	294	0
	JUN	1086	503	288	295	0
	JUL	1083	499	288	296	0
	AUG	1081	499	287	295	0
	SEP	1079	496	287	296	0
	OCT	1080	495	287	298	0
	NOV	1083	497	287	299	0
	DEC	1085	499	288	298	0
	JAN 1999	1081	547	236	298	0
	FEB	1081	488	294	299	0
	MAR	1078	488	293	297	0
	APR	1076	484	293	299	0
	MAY	1071	482	291	298	0
	JUN	1168	479	291	398	0
	JUL	1076	484	293	299	0
	AUG	1086	494	293	299	0
	SEP	1091	493	298	300	0
	OCT	1093	480	312	301	0
	NOV	1088	478	311	299	0
	DEC	1088	478	309	301	0
	JAN 2000	1088	478	309	301	0
	FEB	1067	469	302	296	0
	MAR	1065	468	302	295	0
	APR	1054	464	299	291	0
	MAY	1045	459	296	290	0
	JUN	1040	458	294	288	0
	JUL	1040	459	291	290	0
	AUG	1037	459	290	288	0
	SEP	1034	458	289	287	0
	OCT	1034	458	289	287	0
	NOV	1032	457	286	289	0
	DEC	1032	459	286	287	0
	JAN 2001	1029	456	286	287	0
	FEB	1025	455	285	285	0
	MAR	1025	459	282	285	0
	APR	1025	460	281	282	0
b.	1998	1085	497	290	298	0
	1999	1095	497	296	302	0
	2000	1085	491	293	301	0
	2001	1066	484	286	296	0

PENNSYLVANIA-AMERICAN WATER COMPANY
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c. EXPENSED	TOTAL	EXPENSED	CAPITALIZED
JAN 98	3,857,204	3,139,050	718,154
FEB	3,394,240	3,017,990	376,251
MAR	3,680,826	3,151,717	529,109
APR	3,628,840	3,094,135	534,705
MAY	3,585,286	3,116,405	468,880
JUN	3,464,315	3,053,963	410,352
JUL	3,746,925	3,244,775	502,150
AUG	3,646,765	3,119,713	527,052
SEP	3,890,489	3,154,102	736,387
OCT	3,836,340	3,202,868	633,472
NOV	3,661,954	3,104,864	557,091
DEC	3,924,165	3,272,283	651,882
	44,317,349	37,671,864	6,645,485
JAN 99	3,787,140	3,339,393	447,747
FEB	3,617,633	3,018,750	598,883
MAR	3,917,699	3,178,227	739,472
APR	3,858,400	3,167,932	690,468
MAY	3,657,293	2,948,207	709,086
JUN	3,836,157	3,051,691	784,466
JUL	3,913,817	3,154,958	758,859
AUG	3,911,735	3,104,075	807,660
SEP	3,934,589	3,111,938	822,651
OCT	3,761,868	3,087,211	674,657
NOV	3,991,312	3,280,858	710,454
DEC	4,084,603	3,376,209	708,394
	46,272,246	37,819,449	8,452,797
JAN 2000	3,962,513	3,286,192	676,321
FEB	3,835,718	3,138,662	697,056
MAR	3,786,227	3,013,005	773,222
APR	3,563,721	2,870,648	693,073
MAY	3,804,957	3,149,692	655,265
JUN	3,645,344	2,847,310	798,034
JUL	3,815,448	3,030,356	785,092
AUG	4,017,040	3,142,985	874,055
SEP	3,716,335	3,007,138	709,197
OCT	4,131,687	3,143,427	988,260
NOV	3,935,165	3,232,902	702,263
DEC	3,863,507	3,205,057	658,450
	46,077,662	37,067,374	9,010,288
JAN 01	4,025,996	3,400,249	625,747
FEB	3,925,578	3,219,980	705,598
MAR	3,948,903	3,264,667	684,236
APR	3,813,782	3,052,636	761,146

PENNSYLVANIA-AMERICAN WATER COMPANY
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d.	OVERTIME	TOTAL	EXPENSED	CAPITALIZED
	JAN 98	417,953	357,088	60,865
	FEB	212,842	168,342	44,499
	MAR	233,949	176,571	57,378
	APR	247,241	191,096	56,145
	MAY	244,719	185,579	59,140
	JUN	325,094	225,895	99,199
	JUL	453,753	331,407	122,347
	AUG	331,394	235,918	95,476
	SEP	330,845	254,649	76,196
	OCT	360,503	284,087	76,415
	NOV	384,100	286,443	97,658
	DEC	354,011	295,203	58,808
		3,896,403	2,992,277	904,127
	JAN 99	556,373	488,556	67,817
	FEB	227,804	186,113	41,691
	MAR	249,167	165,824	83,343
	APR	206,940	128,745	78,195
	MAY	196,920	121,363	75,557
	JUN	282,986	154,911	128,075
	JUL	420,568	252,681	167,887
	AUG	460,952	304,557	156,395
	SEP	379,342	237,054	142,288
	OCT	372,339	243,109	129,230
	NOV	398,747	242,100	156,647
	DEC	370,749	293,657	77,092
		4,122,887	2,818,670	1,304,217
	JAN 2000	447,193	362,393	84,800
	FEB	370,127	288,021	82,106
	MAR	243,641	150,958	92,683
	APR	193,679	131,970	61,709
	MAY	268,449	164,672	103,777
	JUN	294,258	178,558	115,700
	JUL	361,731	241,418	120,313
	AUG	377,155	226,358	150,797
	SEP	378,740	248,050	130,690
	OCT	355,260	244,564	110,696
	NOV	373,183	271,149	102,034
	DEC	429,228	327,636	101,592
		4,092,644	2,835,747	1,256,897
	JAN 01	459,860	363,316	96,544
	FEB	217,365	157,160	60,205
	MAR	206,935	134,453	72,482
	APR	204,165	115,271	88,894

NONE

f. NONE

ATTACHMENT B

PENNSYLVANIA-AMERICAN WATER COMPANY
DOCKET NO. 00016339
OCA SET I, QUESTION 17

COATESVILLE

a.	MONTH	TOTAL	UNION	NON-UNION	SALARY	TEMP
	MAR 2001	29	18	0	11	0
	APR	29	18	0	11	0
b.	2001	29	18	0	11	0

c.	EXPENSED	TOTAL	EXPENSED	CAPITALIZED
	MAR 01	9,996	9,996	0
	APR	121,184	121,184	0
d.	OVERTIME	TOTAL	EXPENSED	CAPITALIZED
	MAR 01	282	282	0
	APR	4,707	4,707	0

NONE

f. NONE

OCA-I-22 Q. Please explain what adjustments, if any, were made to base salary compensation levels of eligible incentive compensation employees at the time any such incentive compensation plan(s) were initiated.

OCA-I-22 A. The aggregate annual increase in base compensation for employees eligible for incentive compensation is 25% below the aggregate annual base compensation increase for non-eligible employees.

RESPONSIBLE WITNESS: Robert W. Freeston, Vice President and Treasurer

OCA-I-23 Q. Please explain how the Company determines that the achievement of any incentive compensation goals are reached as a result of the incentive compensation plan, as opposed to other reasons. Provide all supporting empirical data.

OCA-I-23 A. The Company is not aware of any empirical basis to prove the direct causal connection the question assumes. Please refer to the Company's response to OCA-I-21.

RESPONSIBLE WITNESS: Robert W. Freeston, Vice President and Treasurer

OCA-I-28

Q. Does the Company anticipate reducing the number of employees, including any voluntary early retirement or other force reduction programs, during the next 3 years? If yes, state the timing and number of affected employees. Also state the projected costs and savings of any such plan.

A. The Company has no plans for a voluntary early retirement program or similar force reduction program in the next three years. However, the American Water System has launched initiatives to consolidate at the Service Company level customer contact (call center) and certain other functions that are currently preformed by PAWC and American's other water utility subsidiaries. As a result of these initiatives, PAWC anticipates that a reduction in its employee level can be achieved. Although there will be a concomitant increase in charges to PAWC by the Service Company, PAWC expects to achieve a net savings in annual, on-going expenses. In addition, there will be start-up and/or transition costs that will be borne by PAWC and American's other water utility subsidiaries. Currently, PAWC does not have sufficient data to calculate the level of savings and costs or to identify the employee positions that will be eliminated. The Company anticipates that it will be able to provide a reasonable estimate of such savings and costs shortly.

RESPONSIBLE WITNESS: Robert W. Freeston, Vice President and Treasurer

OCA-I-44 Q. Regarding Question 22, page 153, Exhibit 3-H, please provide the total amount billed to PAWC in each of the past three years by each affiliate.

OCA-I-44 A. For each of the agreements listed in Exhibit H (Revenue Requirement) at page 153, the requested information is set forth below. The docket numbers shown below and in Exhibit H, are the proceedings at which each of the contracts was approved by the Commission.

(1) American Water Capital Corp. – Financial Service Agreement (Docket No. G-00000763). This agreement became effective in 2000. The amount billed to PAWC for 2000 was $550,553.

(a) American Water Works Service Company, Inc. ("Service Co.") – Lease Agreement (Docket No. 00000747). Under this agreement PAWC leases office space to the Service Company. Therefore, there are no billings to PAWC.

(3) American Water Resources, Inc, ("AWR") – Agreement for Customer Support and Call Center Services (Docket No. G-00000764). Under this agreement, PAWC bills AWR for customer calls in connection with the Water Line Replacement Program. Therefore, there are not billings to PAWC.

(4) American Anglian Environmental Technologies, LP ("AAET") (Docket No. G-00990706). Under this agreement, PAWC leases granular activated carbon for its treatment plants, exclusive of those in Northeast and Montrose. A three-year history of billings by area is attached.

(5) AAET (Docket No. G-00000741). Under this agreement, PAWC leases granular activated carbon for its treatment plants in Northeast and Montrose. A three-year history of billings by area is attached.

(6) AAET (Docket No. G-00970539). This agreement is for the contract operation of the Company's Pocono Country Place wastewater system. None of the costs incurred for this contract are included in the current filing.

(7) Service Co. (Docket No. G-00880131). This is the Service Co. contract provided as Exhibit 4-A and discussed in Mr. Freeston's direct testimony. The amounts billed to PAWC by Service Co. under this contract for the last three years were as follows:

1998	$4,594,112
1999	$4,723,327
2000	$5,724,288

RESPONSIBLE WITNESS :Maria G. Balmer, Financial Analyst

PENNSYLVANIA-AMERICAN WATER COMPANY
DOCKET NO. 00016339
OCA SET I QUESTION #44

PLANT	YEAR	EXPENDED
PITTSBURGH	2000	430,290
NORTHEAST		17,596
NEW CASTLE		259,583
HAYS MINE	1999	239,710
ALDRICH		152,395
YELLOW BREECHES		106,747
NORRISTOWN		122,512
NORRISTOWN		146,383
HERSHEY		114,705
CEASETOWN		28,765
CEASETOWN		127,967
NEW CASTLE		147,828
HAYS MINE	1998	228,653
ALDRICH		173,334
HERSHEY		75,386
SILVER SPRINGS		147,636
MONTROSE		7,643
NEW CASTLE		143,686

OCA-I-46 Q. Please provide copies of the current and proposed leases for the Hershey Data Center office space referenced on page 16 of Exhibit 3-A.

OCA-I-46 A. Copies of the Lease Agreements between PAWC and American Water Works Service Company, Inc. dated January 24, 2000, and March 1, 2001, are attached. Also enclosed is a schedule showing the calculation of rent under the March 1, 2001 lease revision. Since actual leased footage was not known when the filing was being prepared, an estimate was used to calculate rental income. Actual space under lease and the corresponding rental income are greater than estimated. The filing will be revised accordingly, as shown on the attached schedule.

RESPONSIBLE WITNESS : Jo Anne Lontz, Financial Analyst

LEASE AGREEMENT

THIS AGREEMENT OF LEASE, made as of this 24 day of January, 2000, by and between PENNSYLVANIA-AMERICAN WATER COMPANY, a Pennsylvania corporation with offices located at 800 West Hershey Park Drive, Hershey, Pennsylvania 17033 (hereinafter referred to as the "LESSOR"), and AMERICAN WATER WORKS SERVICE COMPANY, INC., a Delaware corporation with offices located at 1025 Laurel Oak Road, Voorhees, New Jersey 08043 (hereinafter referred to as the "LESSEE").

WITNESSETH:

ARTICLE 1. LEASED PREMISES

1.1 LESSOR hereby leases to LESSEE and LESSEE hereby rents from LESSOR, Five Thousand Seven Hundred Eighty (5,780) square feet of office space (the "Leased Premises") on the ground floor in an office building which, together with the tract of real estate and other improvements thereon, is known as 800 West Hershey Park Drive, Hershey, Pennsylvania (the "Property"), the exact description of which is attached hereto, made a part hereof, and marked Exhibit "A".

1.2 The Leased Premises shall be used as a business office, and such associated uses as may be necessary to conduct its business. LESSEE shall not use the said Leased Premises for any other purpose than that set forth herein, nor permit the use of any part of the same by any other person or entity for any other purpose. Assignment of this Lease is prohibited except by written permission of the LESSOR.

ARTICLE 2. TERM

2.1 The term of this Lease shall be fifteen (15) years (the "Term"), commencing on 1st day of March, 2000 and ending on the 28th day of February, 2015.

2.2 The Lessee shall have the right, at its option, to renew the term of this Lease for an additional term of five (5) years.

ARTICLE 3. RENT

3.1 **Annual Rent.**

(a) The LESSEE covenants to pay to the LESSOR a rent for the Leased Premises during the first year of the Term at a rate of $8.95 per square foot, or a total of FIFTY-ONE THOUSAND

SEVEN HUNDRED THIRTY-ONE ($51,731) DOLLARS, (the aforesaid annual rent, as hereinafter adjusted, being hereinafter referred to as the "Annual Rent"). At the end of each year of the Lease Term, the Annual Rent will be adjusted in direct proportion to increase in the All Cities Consumer Price Index for All Urban Consumers published by the Bureau of Labor Statistics of the United States Department of Labor (the "Consumer Price Index"), using the Consumer Price Index for January 2000 as the base index; provided, however, that in no event shall the Annual Rent, after having been adjusted in accordance with the Consumer Price Index, be increased by more that three (3%) percent per annum.

(b) The Annual Rent for the Term shall be payable in equal monthly installments, in advance, on the first day of each month, without notice or demand, and without abatement, deduction, or set-off, at the address of the **LESSOR**. The first such monthly installment in the amount of **FOUR THOUSAND THREE HUNDRED TEN DOLLARS AND NINETY-TWO CENTS ($4,310.92)** shall be payable on the Commencement Date.

3.2 Additional Rent.

(a) In addition to each monthly installment of Annual Rent specified in Paragraph 3.1, **LESSEE** shall pay to **LESSOR** as additional rent hereunder, an amount equal to 1/12 of the proportionate share of (i) all real estate taxes and assessments levied and assessed against the Leased Premises and payable during the term, (ii) the building maintenance, and (iii) utilities supplied to the Leased Premises, and other related costs related to the Leased Premises, based on a three-year average, which sum shall be derived by dividing the square footage of office space occupied by **LESSEE** under the Lease by the total square footage of the office building occupied.

(b) As additional rent hereunder, **LESSEE** shall reimburse **LESSOR** for all amounts expended by **LESSOR** for leasehold improvements constructed at **LESSEE'S** request. The total amount shall be amortized in equal monthly payments over the remaining term of the Lease at an interest rate equal to the pretax rate of return authorized by the Pennsylvania Public Utility Commission in **LESSOR'S** most recent rate case, or the pretax rate of return identified or as reported in LESSOR'S latest rate case settlement approved by the Pennsylvania Public Utility Commission, at the time that the improvements are completely installed.

ARTICLE 4.
MAINTENANCE AND SERVICES

4.1 **LESSEE** shall, during the Term of this Lease, at **LESSEE**'s own cost and expense, keep the Leased Premises in good order and repair.

4.2 LESSOR reserves the right to discontinue any services which, during the Term of this Lease the LESSOR voluntarily elects to render but which are not expressly covenanted for in this Lease, since they do not constitute any part of the consideration for this Lease.

4.3 LESSOR shall see to the removal of refuse and rubbish from the Leased Premises on a regular basis.

4.4 LESSEE shall pay for all repairs to and replacement of any part of the Leased Premises necessitated by damage or injury occurring in moving LESSEE's property onto or out of the Leased Premises or the Property or in installing therein or removing therefrom fixtures and all other types of property of LESSEE or resulting from the negligence or abuse of LESSEE. All repairs and replacements required by any of the foregoing provisions shall be in quality and class equal to the original materials and workmanship and shall be performed only by contractors and/or mechanics approved by LESSOR.

4.5 LESSEE shall not permit any mechanics' or other liens for work, labor, services or materials to attach to the Leased Premises or to the Property as a result of the installation of or removal of LESSEE's fixtures, or other property of LESSEE. Whenever any such lien or liens shall be filed, or shall attach, LESSEE shall, within ten (10) days thereafter, either pay the same or procure the satisfaction or discharge thereof in such manner as is or shall be prescribed by law; provided, however, that if LESSEE desires to contest any such lien it may do so provided LESSEE shall bond any such lien in the full amount thereof, including accrued interest, in accordance with the applicable laws of the Commonwealth of Pennsylvania.

ARTICLE 5.
LESSEE'S CONDUCT AND COMPLIANCE

5.1 LESSEE shall not at any time use or occupy the Leased Premises or permit or suffer the same to be used or occupied in violation of any statute, ordinance or other requirement of any governmental authority.

5.2 LESSEE agrees that it will perform or comply with all of the covenants, conditions and agreements herein expressed on its part to be performed and complied with, and that LESSEE will, immediately upon receipt of written notice, where notice of non-performance or non-compliance is required by this Lease, comply with the requirement or such notice and further, if LESSEE shall violate any covenant, condition or agreement herein, whether or not notice is required, LESSOR may at its option do or cause to be done any or all things provided by this Lease and in so doing LESSOR shall have the right to cause its agents, employees, and contractors to enter upon the Leased Premises and in such event shall have no liability to LESSEE for any loss or damage resulting in any way from such action; and LESSEE agrees to pay within ten (10) days of demand any monies paid or expenses incurred by LESSOR in taking such action, including counsel fees, any such sum to be collectible from LESSEE as additional rent hereunder.

5.3 In the event LESSOR or LESSEE shall be delayed, hindered or prevented from the performance of any act required hereunder (other than the payment of rent or additional rent), by reason of act of God, fire casualty, action of the elements, strikes, lockouts, other labor troubles, inability to procure, or general shortage of labor, equipment, facilities, materials or supplies, failure of transportation, or of power, governmental laws or regulations, riots, insurrection, war or any other cause similar or dissimilar to the foregoing beyond the control of the LESSOR or LESSEE (a "Force Majeure Event"), the performance of any such act shall be excused for the period of delay, and the period for the performance of any such act shall be extended for the period necessary to complete performance following the period of such delay. A Force Majeure Event shall not affect LESSEE's obligation to pay rent and additional rent or constitute grounds for canceling this Lease.

5.4 A violation by LESSEE of this Article shall be considered a default, and LESSOR shall be entitled to exercise all rights and remedies of this Lease against LESSEE.

ARTICLE 6.
FIRE INSURANCE

6.1 LESSEE, at its sole cost and expense, shall secure and maintain throughout the Term of this Lease fire, casualty and extended coverage insurance covering the Leased Premises. LESSEE shall, at its sole cost and expense, be responsible for carrying fire and extended coverage insurance on all personal property and fixtures located on the Leased Premises.

ARTICLE 7
TERMINATION OF LESSOR'S TITLE AND DESTRUCTION

7.1 In the event that the Leased Premises are totally or partially destroyed or damaged by casualty, this Lease shall terminate absolutely as of the date of such termination or casualty and the rent and all sums payable as rent shall abate for the balance of the Term hereof. In such case, LESSOR shall refund to LESSEE the rent and all other charges paid in advance by LESSEE, apportioned to the date of such casualty, and LESSEE shall surrender the Leased Premises immediately to LESSOR which may enter upon and repossess them.

ARTICLE 8.
EMINENT DOMAIN

8.1 In the event during the Term of this Lease, of the taking by exercise of the power of eminent domain of the whole or any part of the Leased Premises or the Property to such an extent as to materially and adversely affect the reasonable conduct of LESSEE's use of the Leased Premises, this Lease shall terminate as of the date of such taking. In such event, the rent and other charges payable hereunder as rent shall be apportioned to said date of termination of this Lease and LESSEE waives all claims against LESSOR for or on account of or incident of such taking, but expressly reserves any and all rights available under applicable law to the LESSEE against the condemnor as the result of such taking.

ARTICLE 9.
INDEMNIFICATION - LIABILITY INSURANCE

9.1 **LESSEE** shall indemnify and save **LESSOR** harmless from and against any and all claims, actions, damages, liability and expense in connection with loss of life, personal injury and/or damage to property occurring in or about, or arising out of, the Leased Premises, occasioned wholly or in part by any act or omission of **LESSEE**, its agents, sub-tenants, licenses, contractors, customers or employees. In case **LESSOR** shall be made a party to any litigation commenced by or against **LESSEE**, its agents, sub-tenants, licensees, contractors, customers or employees, as aforementioned, then **LESSEE** shall protect and hold **LESSOR** harmless and shall pay all costs, expenses and reasonable attorneys' fees incurred or paid by **LESSOR** in connection with such litigation.

9.2 **LESSEE** shall, at all times during the Term hereof, keep in force at its own expense: public liability and casualty insurance in companies doing business in Pennsylvania acceptable to **LESSOR** naming **LESSEE** as the insured party, and **LESSOR** as the additional insured, with limits of not less than Five Hundred Thousand Dollars ($500,000) on account of bodily injury to or death of any one person and not less than One Million ($1,000,000) Dollars on account of bodily injury to or death of more than one person and not less than Five Hundred Thousand ($500,000) Dollars on account of loss or damage from any cause to the property of **LESSEE** on the Leased Premises as the result of any one accident or disaster; provided further that said casualty insurance shall insure **LESSEE** against any loss it may incur as a result of damages to any interest **LESSEE** may have in this Lease, in betterments and in leasehold improvements, whether made by **LESSOR** or **LESSEE**.

9.3 **LESSEE** shall, at all times during the Term of this Lease, be responsible for all damage to the Leased Premises caused by burglary, robbery, vandalism or malicious mischief, and shall maintain insurance for that purpose.

9.4 **LESSEE** shall furnish to **LESSOR**, at least one (1) day prior to the Commencement Date and at least ten (10) days prior to each anniversary date thereof, copies of policies or certificates of insurance evidencing coverages required by this Lease. **LESSEE** shall also furnish evidence of renewals of such policies prior to the expiration of same.

9.5 **LESSEE** shall be solely responsible for procuring the aforesaid liability insurance and casualty insurance on the contents of the Leased Premises, and **LESSEE**'s failure to procure any insurance shall not impose any liability upon **LESSOR**.

ARTICLE 10.
WAIVER OF SUBROGATION

10.1 Each of the parties hereto hereby waives all rights of subrogation and rights of recovery against the other and against its agents, servants and employees, for any and all losses incurring to the Leased Premises and/or to any property, whether real or personal contained therein, during the Term of this

Lease (or any renewal or extension thereof), whether or not caused by the fault or negligence of the other party, or its agents, servants, or employees or whether or not the other party, or its agents, servants, or employees shall, in any way, have contributed to such loss, to the extent of the releasing party's insurance coverage.

ARTICLE 11
CHANGE BY LESSOR

11.1 LESSOR shall also have the right at any time, without the same constituting an actual or constructive eviction and without abatement of rent or incurring any liability to LESSEE, to make changes to the Leased Premises, including but not limited to entering upon the Leased Premises to install, repair, or maintain any present or future pipelines or utility service lines, provided that LESSOR does not deny LESSEE access to the Leased Premises or unreasonably interfere with the conduct of LESSEE's business activities.

ARTICLE 12.
END OF TERM

12.1 Upon the expiration or other termination of the Term of this Lease, or any extension or renewal hereof, LESSEE shall quit, surrender and deliver to LESSOR the Leased Premises in good order and repair, reasonable wear and tear and damage excepted, and LESSEE shall remove all of its trade fixtures and equipment. LESSEE's obligation to observe or perform this covenant shall survive such expiration or other termination.

12.2 If LESSEE retains possession of the Leased Premises or any part thereof after the termination of this Lease, LESSEE shall pay LESSOR as agreed rent during any such unlawful retention, an amount, calculated on a per diem basis for each day of such retention, equal to twice the Annual Rent applicable to the last month of the Term of this Lease, for the time LESSEE remains in possession. Without limiting any rights and remedies of LESSOR resulting from the wrongful holding over by LESSEE, or creating any right in LESSEE to continue in possession of the Leased Premises, all LESSEE's obligations with respect to the use, occupancy and maintenance of the Leased Premises shall continue during such period of unlawful retention.

12.3 LESSEE shall indemnify and hold harmless LESSOR from and against any and all liability, loss, damage, cost and expense suffered, incurred or threatened as a result of any notice, complaint, claim, demand, suit, controversy, order, writ, judgment, statute, regulation or other legal requirement, including without limitation of the generality of the foregoing, court costs, attorneys' and consultants' fees, environmental clean-up costs, natural resources damages, fines, penalties and damages to persons, personal property, real property, and business enterprises, including any and all claims and liabilities arising out of or relating to the Leased Premises, or any release or threat of release of any hazardous substance, other pollutant or contaminant or waste of any kind in, on, under, or from the Leased Premises, all to the extent arising from and as a result of LESSEE's failure to comply with any environmental law, rule or regulation.

Notwithstanding any thing to the contrary in the Lease, the provision of this indemnity shall survive the payment, release, foreclosure, satisfaction, termination, discharge, or other disposition of this Lease.

ARTICLE 13.
ACCESS TO PREMISES

13.1 LESSOR and LESSOR's agents shall have the right to enter the Leased Premises at reasonable times to examine the same, or to make such installations, repairs, or additions to the Leased Premises (including but not limited to utility lines) to the Property as LESSOR may deem necessary or desirable, and LESSOR shall be allowed to take all material into and upon the Leased Premises that may be required without the same constituting an eviction of LESSEE in whole or in part and the rent reserved shall in no wise abate while the installation, repairs, or additions are being made, by reason of loss or interruption of business to LESSEE, or otherwise.

ARTICLE 14.
ASSIGNMENT/ SUBLETTING

14.1 LESSEE shall not voluntarily, involuntarily or by operation of law, assign, transfer, mortgage, pledge or otherwise encumber this Lease, all or any part of LESSEE's interest in this Lease or Leased Premises, in whole or in part, or sublet the whole or any part of the Leased Premises, without the prior written consent of LESSOR.

14.2 LESSOR shall have the right to transfer and assign, in whole or in part all and every feature and obligation hereunder and in the Leased Premises, the Property and improvements referred to herein, and such transfer or assignment may be made to any person and shall be in all things respected and recognized by LESSEE.

ARTICLE 15.
SUBORDINATION

15.1 This Lease and all of its terms, covenants and provisions are subordinate to the liens of any mortgage or mortgages as now or hereafter shall be placed from time to time upon the Property and to any renewals, extension, modifications or consolidations thereof, and to all advances heretofore or hereafter made from time to time upon the security thereof without the necessity of any further instrument or act on the part of LESSEE to effect subordination.

ARTICLE 16.
DEFAULT

16.1 If at any time LESSEE shall fail to remedy any default in the payment of any sum due under this Lease for fifteen (15) days, without notice thereof, or fails to remedy any default with respect to any of the other provisions, covenants or conditions of this Lease to be kept or performed by LESSEE within thirty

(30) days after notice, or if LESSEE abandons the Leased Premises, or if LESSEE breaches any obligation under this Lease which cannot be cured, then in any such event LESSOR may at LESSOR's option and without limiting LESSOR in the exercise of any other right or remedy LESSOR may have on account of such default, and without any further demand or notice, re-enter the Leased Premises, with or without process of law, and repossess the same, and the LESSEE shall vacate said Leased Premises without further notice. Such repossession shall not be held to be a waiver of any other remedy which LESSOR may have for recovery of such breach.

ARTICLE 17.
QUIET ENJOYMENT

17.1 LESSOR covenants with LESSOR that upon LESSEE paying the rent and observing and performing all the terms, covenants and conditions, on LESSEE's part to be observed and performed, LESSEE may peaceably and quietly enjoy the Leased Premises subject, nevertheless, to the terms and conditions of this Lease.

ARTICLE 18.
NOTICES

18.1 All notices to be given under this Lease shall be deemed sufficiently given only if in writing and sent certified mail, return receipt requested, addressed to the LESSOR or the LESSEE, respectively, at the addresses set forth above, or such other address as either party may designate by notice given in the manner provided in this Article. Notices sent by certified mail shall be deemed received as of the date set forth on the return receipt.

ARTICLE 19.
SUCCESSORS AND ASSIGNS

19.1 All rights, obligations and liabilities herein given to, or imposed upon the respective parties hereto, shall extend to and bind the several respective heirs, executors, administrators, successors and assigns of said parties, except as otherwise expressly provided.

ARTICLE 20.
COMMON AREAS

20.1 LESSOR shall maintain the common areas of the Property in good order and repair, which shall be for the joint use of LESSEE and LESSOR. LESSEE shall have the right to use the common areas and the Leased Premises at any time of the day.

ARTICLE 21.
NO RECORDING OF LEASE

21.1 The parties agree that this Lease shall not be recorded.

ARTICLE 22.
APPLICABLE LAW

22.1 The laws of the Commonwealth of Pennsylvania shall govern the validity, performance and enforcement of this Lease.

ARTICLE 23.
CONDITION PRECEDENT

23.1 Notwithstanding any other Section of this Lease, pursuant to Chapter 21 of the Pennsylvania Public Utility Code, this Lease shall not become effective until approved in writing by the Pennsylvania Public Utility Commission. Should the Pennsylvania Public Utility Commission fail to grant its approval, this Lease shall become null and void.

IN WITNESS WHEREOF, and intending to be legally bound thereby, the parties hereto have hereunto set their hands and seals unto this Lease and caused it to be executed, the day and year first written above.

ATTEST:

Secretary

PENNSYLVANIA-AMERICAN WATER COMPANY, Lessor

Robert W. Freeston
Vice President and Comptroller

ATTEST:

Secretary

AMERICAN WATER WORKS SERVICE COMPANY, INC., Lessee

Robert D. Sievers
Vice President and Comptroller

ADDENDUM TO LEASE AGREEMENT

THIS ADDENDUM (hereafter referred to as "Addendum") is made and entered into this 1st day of March, 2001, by and between PENNSYLVANIA-AMERICAN WATER COMPANY, a Pennsylvania corporation, with offices at 800 West Hersheypark Drive, Hershey, Pennsylvania, 17033 (hereinafter referred to as "**LESSOR**"),

AND

AMERICAN WATER WORKS SERVICE, COMPANY, INC., a Delaware corporation with offices located at 1025 Laurel Oak Road, Voorhees, New Jersey, 08043 (hereinafter referred to as "**LESSEE**").

WITNESSETH

WHEREAS, **LESSOR** is the owner of real property improved with a two story building (the "Building" or "Premises") situated at 800 West Hersheypark Drive, Hershey, Pennsylvania, (the "Property"); and

WHEREAS, the parties entered into a Lease Agreement on or about January 24, 2000 (the "Lease Agreement") whereby **LESSEE** leases approximately Five Thousand Seven Hundred Eighty (5,780) square feet of floor space on the first floor of the Building at 800 West Hersheypark Drive, Hershey, Pennsylvania (the "Leased Premises")

WHEREAS, by and through this Addendum to Lease Agreement (the "Addendum") **LESSEE** desires to lease additional space in the Building which shall be referred to as the "Additional Leased Premises" and which shall consist of approximately Three Thousand Two Hundred and Fifty-One (3,251) square feet of floor space on the first floor of the Building which is in addition to the original Five Thousand Seven Hundred Eighty (5,780) square feet of floor space on the first floor.

WHEREAS, **LESSOR** desires to Lease the Additional Leased Premises to **LESSEE** upon the terms and conditions set forth in this Addendum which, in no way alters or diminishes the terms and conditions set forth in the Lease Agreement, which shall remain in full force and effect.

NOW, THEREFORE, in consideration of the mutual promises contained herein and intending to be legally bound hereby, the parties agree as follows:

ARTICLE 1 AMENDED
LEASED PREMISES

1.1 *Leased Premises.* LESSOR hereby leases to LESSEE and LESSEE hereby leases
from LESSOR the Additional Leased Premises.

ARTICLE 2.
TERM

2.1 The term of this Lease shall be fourteen (14) years (the "Term"), commencing on 1st day of March, 2001 and ending on the 28th day of February, 2015.

2.2 The Lessee shall have the right, at its option, to renew the term of this Lease Addendum for an additional term of five (5) years.

ARTICLE 3
RENT

3.1 *Additional Annual Rent.* (a) LESSEE will pay to LESSOR an annual rent for the Additional Leased Premises during the Term in the amount of Forty-Five Thousand Five Hundred Fourteen ($45,514) Dollars, (the aforesaid annual rent being hereinafter referred to as the "Additional Annual Rent"); (b) The "Additional Annual Rent" for each applicable lease year shall be payable by LESSEE to LESSOR in equal monthly installments of one-twelfth (1/12) of said Additional Annual Rent, or Three Thousand Seven Hundred Ninety-Two Dollars and Eighty-Three Cents ($3,792.83), in advance on the first day of each calendar month, without notice or demand, and without abatement, deduction, or set-off, at the address of the LESSOR. The first such monthly installment shall be payable on the Commencement Date. The rent for any fractional month at the beginning or end of the term in which LESSEE has occupied the Additional Leased Premises shall be prorated on a per diem basis based on a three hundred sixty-five (365) day year. Rent shall be paid to LESSOR at its address set forth in this "Addendum", or at such other address as LESSOR may, from time to time, specify by written notice to LESSEE.

(a) At the end of each year of the Lease Term, the Additional Annual Rent will be adjusted in direct proportion to increase in the All Cities Consumer Price Index for All Urban Consumers published by the Bureau of Labor Statistics of the United States Department of Labor (the "Consumer Price Index"), using the Consumer Price Index for March 2001 as the base index; provided, however, that in no event shall the Additional Annual Rent, after having been adjusted in accordance with the Consumer Price Index, be increased by more that three (3%) percent per annum.

3.2 *Additional Rent.*

(a) In addition to each monthly installment of Additional Annual Rent specified in Paragraph 3.1, **LESSEE** shall pay to **LESSOR** as additional rent hereunder, an amount equal to 1/12 of the proportionate share of (i) all real estate taxes and assessments levied and assessed against the Premises and payable during the term, (ii) the building maintenance, and (iii) utilities supplied to the Premises, and other costs related to the Additional Leased Premises, based on a three-year average, which sum shall be derived by dividing the square footage of office space occupied by **LESSEE** under the Lease by the total square footage of the office building occupied.

(b) As additional rent hereunder, **LESSEE** shall reimburse **LESSOR** for all amounts expended by **LESSOR** for leasehold improvements constructed at **LESSEE'S** request. The total amount shall be amortized in equal monthly payments over the remaining term of the Lease Addendum at an interest rate equal to the pretax rate of return authorized by the Pennsylvania Public Utility Commission in **LESSOR'S** most recent rate case, or the pretax rate of return identified or as reported in LESSOR'S latest rate case settlement approved by the Pennsylvania Public Utility Commission, at the time that the improvements are completely installed.

ARTICLE 4.
MAINTENANCE AND SERVICES

4.1 **LESSEE** shall, during the Term of this Lease Addendum, at **LESSEE's** own cost and expense, keep the Additional Leased Premises in good order and repair.

4.2 **LESSOR** reserves the right to discontinue any services which, during the Term of this Lease Addendum the **LESSOR** voluntarily elects to render but which are not expressly covenanted for in this Lease Addendum, since they do not constitute any part of the consideration for this Lease Addendum.

4.3 **LESSOR** shall see to the removal of refuse and rubbish from the Additional Leased Premises on a regular basis.

4.4 **LESSEE** shall pay for all repairs to and replacement of any part of the Additional Leased Premises necessitated by damage or injury occurring in moving **LESSEE's** property onto or out of the Additional Leased Premises or the Property or in installing therein or removing therefrom fixtures and all other types of property of **LESSEE** or resulting from the negligence or abuse of **LESSEE.** All repairs and replacements required by any of the foregoing provisions shall be in quality and class equal to the original materials and workmanship and shall be performed only by contractors and/or mechanics approved by **LESSOR.**

4.5 **LESSEE** shall not permit any mechanics' or other liens for work, labor, services or materials to attach to the Additional Leased Premises or to the Property as a result of the installation of or removal of **LESSEE**'s fixtures, or other property of **LESSEE**. Whenever any such lien or liens shall be filed, or shall attach, **LESSEE** shall, within ten (10) days thereafter, either pay the same or procure the satisfaction or discharge thereof in such manner as is or shall be prescribed by law; provided, however, that if **LESSEE** desires to contest any such lien it may do so provided **LESSEE** shall bond any such lien in the full amount thereof, including accrued interest, in accordance with the applicable laws of the Commonwealth of Pennsylvania.

ARTICLE 5.
LESSEE'S CONDUCT AND COMPLIANCE

5.1 **LESSEE** shall not at any time use or occupy the Additional Leased Premises or permit or suffer the same to be used or occupied in violation of any statute, ordinance or other requirement of any governmental authority.

5.2 **LESSEE** agrees that it will perform or comply with all of the covenants, conditions and agreements herein expressed on its part to be performed and complied with, and that **LESSEE** will, immediately upon receipt of written notice, where notice of non-performance or non-compliance is required by this Lease Addendum, comply with the requirement or such notice and further, if **LESSEE** shall violate any covenant, condition or agreement herein, whether or not notice is required, **LESSOR** may at its option do or cause to be done any or all things provided by this Lease Addendum and in so doing **LESSOR** shall have the right to cause its agents, employees, and contractors to enter upon the Additional Leased Premises and in such event shall have no liability to **LESSEE** for any loss or damage resulting in any way from such action; and **LESSEE** agrees to pay within ten (10) days of demand any monies paid or expenses incurred by **LESSOR** in taking such action, including counsel fees, any such sum to be collectible from **LESSEE** as additional rent hereunder.

5.3 In the event **LESSOR** or **LESSEE** shall be delayed, hindered or prevented from the performance of any act required hereunder (other than the payment of rent or additional rent), by reason of act of God, fire casualty, action of the elements, strikes, lockouts, other labor troubles, inability to procure, or general shortage of labor, equipment, facilities, materials or supplies, failure of transportation, or of power, governmental laws or regulations, riots, insurrection, war or any other cause similar or dissimilar to the foregoing beyond the control of the **LESSOR** or **LESSEE** (a "Force Majeure Event"), the performance of any such act shall be excused for the period of delay, and the period for the performance of any such act shall be extended for the period necessary to complete performance following the period of such delay. A Force Majeure Event shall not affect **LESSEE**'s obligation to pay rent and additional rent or constitute grounds for canceling this Lease Addendum.

5.4 A violation by **LESSEE** of this Article shall be considered a default, and **LESSOR** shall be entitled to exercise all rights and remedies of this Lease Addendum against **LESSEE**.

ARTICLE 6.
FIRE INSURANCE

6.1 **LESSEE**, at its sole cost and expense, shall secure and maintain throughout the Term of this Lease Addendum fire, casualty and extended coverage insurance covering the Additional Leased Premises. **LESSEE** shall, at its sole cost and expense, be responsible for carrying fire and extended coverage insurance on all personal property and fixtures located on the Additional Leased Premises.

ARTICLE 7
TERMINATION OF LESSOR'S TITLE AND DESTRUCTION

7.1 In the event that the Additional Leased Premises are totally or partially destroyed or damaged by casualty, this Lease Addendum shall terminate absolutely as of the date of such termination or casualty and the rent and all sums payable as rent shall abate for the balance of the Term Addendum hereof. In such case, **LESSOR** shall refund to **LESSEE** the rent and all other charges paid in advance by **LESSEE**, apportioned to the date of such casualty, and **LESSEE** shall surrender the Additional Leased Premises immediately to **LESSOR** which may enter upon and repossess them.

ARTICLE 8.
EMINENT DOMAIN

8.1 In the event during the Term of this Lease Addendum, of the taking by exercise of the power of eminent domain of the whole or any part of the Additional Leased Premises or the Property to such an extent as to materially and adversely affect the reasonable conduct of **LESSEE**'s use of the Additional Leased Premises, this Lease Addendum shall terminate as of the date of such taking. In such event, the rent and other charges payable hereunder as rent shall be apportioned to said date of termination of this Lease Addendum and **LESSEE** waives all claims against **LESSOR** for or on account of or incident of such taking, but expressly reserves any and all rights available under applicable law to the **LESSEE** against the condemnor as the result of such taking.

ARTICLE 9.
INDEMNIFICATION - LIABILITY INSURANCE

9.1 **LESSEE** shall indemnify and save **LESSOR** harmless from and against any and all claims, actions, damages, liability and expense in connection with loss of life, personal injury and/or damage to property occurring in or about, or arising out of, the Additional Leased Premises, occasioned wholly or in part by any act or omission of **LESSEE**, its agents, sub-tenants, licenses, contractors, customers or employees. In case **LESSOR** shall be made a party to any litigation commenced by or against **LESSEE**, its agents, sub-tenants, licensees, contractors, customers or employees, as aforementioned, then **LESSEE** shall protect and hold **LESSOR** harmless and shall pay all costs, expenses and reasonable attorneys' fees incurred or paid by **LESSOR** in connection with such litigation.

9.2 **LESSEE** shall, at all times during the Term hereof, keep in force at its own expense: public liability and casualty insurance in companies doing business in Pennsylvania acceptable to **LESSOR** naming **LESSEE** as the insured party, and **LESSOR** as the additional insured, with limits of not less than Five Hundred Thousand Dollars ($500,000) on account of bodily injury to or death of any one person and not less than One Million ($1,000,000) Dollars on account of bodily injury to or death of more than one person and not less than Five Hundred Thousand ($500,000) Dollars on account of loss or damage from any cause to the property of **LESSEE** on the Additional Leased Premises as the result of any one accident or disaster; provided further that said casualty insurance shall insure **LESSEE** against any loss it may incur as a result of damages to any interest **LESSEE** may have in this Lease, in betterments and in leasehold improvements, whether made by **LESSOR** or **LESSEE**.

9.3 **LESSEE** shall, at all times during the Term of this Lease Addendum, be responsible for all damage to the Additional Leased Premises caused by burglary, robbery, vandalism or malicious mischief, and shall maintain insurance for that purpose.

9.4 **LESSEE** shall furnish to **LESSOR**, at least one (1) day prior to the Commencement Date and at least ten (10) days prior to each anniversary date thereof, copies of policies or certificates of insurance evidencing coverages required by this Lease Addendum. **LESSEE** shall also furnish evidence of renewals of such policies prior to the expiration of same.

9.5 **LESSEE** shall be solely responsible for procuring the aforesaid liability insurance and casualty insurance on the contents of the Additional Leased Premises, and **LESSEE's** failure to procure any insurance shall not impose any liability upon **LESSOR**.

ARTICLE 10.
WAIVER OF SUBROGATION

10.1 Each of the parties hereto hereby waives all rights of subrogation and rights of recovery against the other and against its agents, servants and employees, for any and all losses incurring to the Additional Leased Premises and/or to any property, whether real or personal contained therein, during the Term of this Lease Addendum (or any renewal or extension thereof), whether or not caused by the fault or negligence of the other party, or its agents, servants, or employees or whether or not the other party, or its agents, servants, or employees shall, in any way, have contributed to such loss, to the extent of the releasing party's insurance coverage.

ARTICLE 11
CHANGE BY LESSOR

11.1 LESSOR shall also have the right at any time, without the same constituting an actual or constructive eviction and without abatement of rent or incurring any liability to LESSEE, to make changes to the Additional Leased Premises, including but not limited to entering upon the Additional Leased Premises to install, repair, or maintain any present or future pipelines or utility service lines, provided that LESSOR does not deny LESSEE access to the Additional Leased Premises or unreasonably interfere with the conduct of LESSEE's business activities.

ARTICLE 12.
END OF TERM

12.1 Upon the expiration or other termination of the Term of this Lease Addendum, or any extension or renewal hereof, LESSEE shall quit, surrender and deliver to LESSOR the Additional Leased Premises in good order and repair, reasonable wear and tear and damage excepted, and LESSEE shall remove all of its trade fixtures and equipment. LESSEE's obligation to observe or perform this covenant shall survive such expiration or other termination.

12.2 If LESSEE retains possession of the Additional Leased Premises or any part thereof after the termination of this Lease Addendum, LESSEE shall pay LESSOR as agreed rent during any such unlawful retention, an amount, calculated on a per diem basis for each day of such retention, equal to twice the Additional Annual Rent applicable to the last month of the Term of this Lease Addendum, for the time LESSEE remains in possession. Without limiting any rights and remedies of LESSOR resulting from the wrongful holding over by LESSEE, or creating any right in LESSEE to continue in possession of the Additional Leased Premises, all LESSEE's obligations with respect to the use, occupancy and maintenance of the Additional Leased Premises shall continue during such period of unlawful retention.

12.3 LESSEE shall indemnify and hold harmless LESSOR from and against any and all liability, loss, damage, cost and expense suffered, incurred or threatened as a result of any notice, complaint, claim, demand, suit, controversy, order, writ, judgment, statute, regulation or other legal requirement, including without limitation of the generality of the foregoing, court costs, attorneys' and consultants' fees, environmental clean-up costs, natural resources damages, fines, penalties and damages to persons, personal property, real property, and business enterprises, including any and all claims and liabilities arising out of or relating to the Additional Leased Premises, or any release or threat of release of any hazardous substance, other pollutant or contaminant or waste of any kind in, on, under, or from the Additional Leased Premises, all to the extent arising from and as a result of LESSEE's failure to comply with any environmental law, rule or regulation. Notwithstanding any thing to the contrary in the Lease, the provision of this indemnity shall survive the payment, release, foreclosure, satisfaction, termination, discharge, or other disposition of this Lease Addendum.

ARTICLE 13.
ACCESS TO PREMISES

13.1 **LESSOR** and **LESSOR's** agents shall have the right to enter the Additional Leased Premises at reasonable times to examine the same, or to make such installations, repairs, or additions to the Additional Leased Premises (including but not limited to utility lines) to the Property as **LESSOR** may deem necessary or desirable, and **LESSOR** shall be allowed to take all material into and upon the Additional Leased Premises that may be required without the same constituting an eviction of **LESSEE** in whole or in part and the rent reserved shall in no wise abate while the installation, repairs, or additions are being made, by reason of loss or interruption of business to **LESSEE**, or otherwise.

ARTICLE 14.
ASSIGNMENT/ SUBLETTING

14.1 **LESSEE** shall not voluntarily, involuntarily or by operation of law, assign, transfer, mortgage, pledge or otherwise encumber this Lease Addendum, all or any part of **LESSEE's** interest in this Lease Addendum or the Additional Leased Premises, in whole or in part, or sublet the whole or any part of the Additional Leased Premises, without the prior written consent of **LESSOR**.

14.2 **LESSOR** shall have the right to transfer and assign, in whole or in part all and every feature and obligation hereunder and in the Additional Leased Premises, the Property and improvements referred to herein, and such transfer or assignment may be made to any person and shall be in all things respected and recognized by **LESSEE**.

ARTICLE 15.
SUBORDINATION

15.1 This Lease Addendum and all of its terms, covenants and provisions are subordinate to the liens of any mortgage or mortgages as now or hereafter shall be placed from time to time upon the Property and to any renewals, extension, modifications or consolidations thereof, and to all advances heretofore or hereafter made from time to time upon the security thereof without the necessity of any further instrument or act on the part of **LESSEE** to effect subordination.

ARTICLE 16.
DEFAULT

16.1 If at any time **LESSEE** shall fail to remedy any default in the payment of any sum due under this Lease for fifteen (15) days, without notice thereof, or fails to remedy any default with respect to any of the other provisions, covenants or conditions of this Lease Addendum to be kept or performed by **LESSEE** within thirty (30) days after notice, or if **LESSEE** abandons the Additional Leased Premises, or ifLESSEE breaches any obligation under this Lease Addendum which cannot be cured, then in any such event LESSOR may at LESSOR's option and without limiting LESSOR in the exercise of any other right or remedy LESSOR may have on account of such default, and without any further demand or notice, re-enter the Additional Leased Premises, with or without process oflaw, and repossess the same, and the LESSEE shall vacate said Additional Leased Premises without further notice. Such repossession shall not be held to be a waiver of any other remedy which LESSOR may have for recovery of such breach.

ARTICLE 17.
QUIET ENJOYMENT

17.1 LESSOR covenants with LESSOR that upon LESSEE paying the rent and observing and performing all the terms, covenants and conditions, on LESSEE's part to be observed and performed, LESSEE may peaceably and quietly enjoy the Additional Leased Premises subject, nevertheless, to the terms and conditions of this Lease Addendum.

ARTICLE 18.
NOTICES

18.1 All notices to be given under this Lease Addendum shall be deemed sufficiently given only if in writing and sent certified mail, return receipt requested, addressed to the LESSOR or the LESSEE, respectively, at the addresses set forth above, or such other address as either party may designate by notice given in the manner provided in this Article. Notices sent by certified mail shall be deemed received as of the date set forth on the return receipt.

ARTICLE 19.
SUCCESSORS AND ASSIGNS

19.1 All rights, obligations and liabilities herein given to, or imposed upon the respective parties hereto, shall extend to and bind the several respective heirs, executors, administrators, successors and assigns of said parties, except as otherwise expressly provided.

ARTICLE 20.
COMMON AREAS

20.1 LESSOR shall maintain the common areas of the Property in good order and repair, which shall be for the joint use of LESSEE and LESSOR. LESSEE shall have the right to use the common areas and the Additional Leased Premises at any time of the day.

ARTICLE 21.
NO RECORDING OF LEASE

21.1 The parties agree that this Lease Addendum shall not be recorded.

ARTICLE 22.
APPLICABLE LAW

22.1 The laws of the Commonwealth of Pennsylvania shall govern the validity, performance and enforcement of this Lease Addendum.

ARTICLE 23.
CONDITION PRECEDENT

23.1 Notwithstanding any other Section of this Lease Addendum, pursuant to Chapter 21 of the Pennsylvania Public Utility Code, this Lease Addendum shall not become effective until approved in writing by the Pennsylvania Public Utility Commission. Should the Pennsylvania Public Utility Commission fail to grant its approval, this Lease Addendum shall become null and void.

IN WITNESS WHEREOF, and intending to be legally bound thereby, the parties hereto have hereunto set their hands and seals unto this Lease Addendum and caused it to be executed, the day and year first written above.

ATTEST:

Secretary

PENNSYLVANIA-AMERICAN WATER COMPANY, Lessor

Robert W. Freeston
Vice President and Treasurer

ATTEST:

Secretary

AMERICAN WATER WORKS SERVICE COMPANY, INC., Lessee

Robert D. Sievers
Vice President and Comptroller

OCA SET I - QUESTION 46

RENTAL INCOME - OFFICE LEASE ADJUSTMENT

ORIGINAL ADJUSTMENT

	SQUARE FOOTAGE	COST PER SQUARE FOOT	TOTAL LEASE REVENUE
ORIGINAL OFFICE SPACE	5,780	$22.37	$129,299
ADDITIONAL OFFICE SPACE	3,251	$22.37	$72,725
TOTAL	9,031		$202,024

REVISED ADJUSTMENT

	SQUARE FOOTAGE	COST PER SQUARE FOOT	TOTAL LEASE REVENUE
ORIGINAL OFFICE SPACE	5,780	$22.37	$129,299
ADDITIONAL OFFICE SPACE	3,251	$27.42	$89,142
TOTAL	9,031		$218,441

INCREASE TO REVENUES $16,417

OCA-VI-09 Q. Please identify all changes to the Company's "medical insurance benefit for associates" referenced on page 9, line 6-7 of Mr. Freeston's testimony and state when such a change was made.

OCA-VI-09 A. Effective July 1, 2001 associates were required to contribute more to their health care costs. The contribution for individual coverage increased from $0 per month to $10 per month; individual and dependent coverage increased from $20 per month to $35 per month. Additionally, the ability for the associate to elect comprehensive coverage was eliminated; only managed care or HMO coverage are available unless those options are unavailable in the associate's living area.

Associates were also given the option to receive $100 per month in lieu of medical insurance coverage. In order to make this election the associate had to certify they had alternative medical coverage.

RESPONSIBLE WITNESS: Robert W. Freeston, Vice President & Treasurer

OCA-VI-11

OCA-VI-11 Q. Regarding Appendix A to Statement No. 2, please provide the status of each of the pending acquisitions shown on this Appendix.

OCA-VI-11 A. The acquisitions of the Butler Township Water Authority and Fox Knoll were completed prior to April 27, 2000. The acquisitions of Sandy Ridge and West Decatur are held up due to the complaint filed by Houtzdale Municipal Authority concerning the well allocation permit. A formal complaint by a residential customer has been filed concerning the LP Water and Wastewater acquisitions. A hearing schedule has been set by Administrative Law Judge Solomon and testimonies have been filed.

RESPONSIBLE WITNESS: Charles Johnston, Vice President, Business Development

OCA-VI-14 Q. Please reconcile the historic test year OPEB charge of $3,468,952 shown on page 42 of Exhibit 3-A with the amount of $4,320,551 referenced on page 138 of Exhibit 3-H.

OCA-VI-14 A. The amount of $4,320,551 is the total of OPEB payments made by PAWC to the OPEB trust accounts. Of this amount, $3,468,952 was charged to expense for the twelve months ended December 31, 2000. The difference is the amount capitalized during the twelve months ended December 31, 2000.

RESPONSIBLE WITNESS: Maria G. Balmer, Financial Analyst

OCA-VI-17 Q. Regarding page 225 of Exhibit 3-G, please update this information to include data from 1991 through 1995.

OCA-VI-17 A. Please refer to the attached schedule.

OCA SET VI
QUESTION NO. 17
(CONSUMPTION IN 000 GALLONS)

PENNSYLVANIA AMERCIAN WATER COMPANY

CUSTOMERS AND CONSUMPTION

	YEAR ENDED 31-Dec-91		YEAR ENDED 31-Dec-92		YEAR ENDED 31-Dec-93		YEAR ENDED 31-Dec-94		YEAR ENDED 31-Dec-95	
METERED SALES	CUSTOMER	CONSUMPTION	CUSTOMER	CONSUMPTION	CUSTOMER	CONSUMPTION	CUSTOMER	CONSUMPTION	CUSTOMER	CONSUMPTION
RESIDENTIAL	336,693	20,413,139	339,203	20,446,449	342,421	20,500,520	346,200	20,546,844	353,514	20,965,204
COMMERCIAL	27,755	8,998,020	27,818	8,685,987	28,040	9,044,809	28,016	9,208,598	28,077	9,262,986
INDUSTRIAL	833	6,294,098	820	5,747,893	609	5,373,336	611	5,339,657	605	5,273,753
MUNICIPAL	1,676	2,629,098	1,677	2,509,856	1,725	2,443,817	1,749	2,716,025	1,809	2,690,563
SALES FOR RESALE	33	1,849,858	33	1,765,958	33	1,719,492	32	1,247,423	31	774,698
MISCELLANEOUS			0	0	11	4,433	0	0	0	0
TOTAL METERED	366,990	40,184,213	369,551	39,156,143	372,839	39,086,407	376,608	39,058,547	384,036	38,967,204
UNMETERED SALES										
RESIDENTIAL	0	0	0	0	0	0	0	0	6,324	0
COMMERCIAL	0	0	0	0	0	0	0	0	1	0
INDUSTRIAL	0	0	0	0	0	0	0	0	0	0
MUNICIPAL	0	0	0	0	0	0	0	0	0	0
SALES FOR RESALE	0	0	0	0	0	0	0	0	0	0
MISCELLANEOUS	0	0	0	0	0	0	0	0	0	0
TOTAL METERED	0	0	0	0	0	0	0	0	6,325	0
PRIVATE FIRE PROTECTION	1,627	0	1,588	0	1,570	18,963	1,556	0	1,533	0
PUBLIC FIRE PROTECTION	244	0	244	0	244	0	253	0	253	0
TOTAL	368,861	40,184,213	371,383	39,156,143	374,653	39,105,370	378,417	39,058,547	392,147	38,967,204

OCA-VI-24 Q. Regarding the response to OCA-I-13, please provide the following information about American Water Capital Corporation:

a) Why it was necessary to form a separate corporation to provide financing and cash management services rather than having these services provided by the Service Company;
b) How PAWC obtained financing and cash management services prior to the formation of American Water Capital Corporation;
c) All amounts for American Water Capital Corporation included in the historic test year costs incurred by PAWC;
d) All contracts for services between PAWC and American Water Capital Corporation and the date each contract was approved by the PPUC;
e) The charges incurred by PAWC for financing and cash management services in 1998 and 1999:
f) The date PAWC began receiving services from American Water Capital Corporation.

OCA-VI-24 A. a,b,d,) Please refer to copies of the approved Affiliated Interest Agreement and the Commissions order approving same are attached.

c) See response to OCA -I-44, subsection 1.
e) 1998 $271,832 1999 $268,366
f) July 1, 2000

RESPONSIBLE WITNESS: Robert W. Freeston, Vice President & Treasurer

PENNSYLVANIA
PUBLIC UTILITY COMMISSION
Harrisburg, PA. 17105-3265

Public Meeting held June 22, 2000

Commissioners Present:

John M. Quain, Chairman
Robert K. Bloom, Vice Chairman
Nora Mead Brownell
Aaron Wilson, Jr.
Terrance J. Fitzpatrick

Affiliated interest agreement between Pennsylvania-American Water Company (PAWC) and American Water Capital Corp. (AWCC) concerning the provision of financial services by AWWC to PAWC.	Docket Number: G-00000763

OPINION AND ORDER

BY THE COMMISSION:

On May 24, 2000, Pennsylvania-American Water Company (PAWC) filed for approval pursuant to Chapter 21 of the Pennsylvania Public Utility Code, 66 Pa. C.S. §§2101 *et seq.*, the above-captioned affiliated interest agreement. The agreement is intended to govern the provision of certain financial services by an affiliate, American Water Capital Corp. (AWCC), to PAWC. PAWC is a regulated utility providing water and wastewater service to more than 500,000 customers in portions of 31 counties across Pennsylvania. Both PAWC and AWCC are wholly-owned subsidiaries of American Water Works Company, Inc. (AWW).

PAWC has proposed that it enter a Financial Services Agreement under which AWW's financing subsidiary, AWCC, will provide both long-term and short-term financing to PAWC. The agreement is one of many AWW has instituted with its utility subsidiaries as it prepares to issue publicly- or privately-held debt and preferred stock by the parent company, and then to be issued similar securities by the subsidiaries according to the capital needs of each. AWW believes such issuances by the larger entity will prove more economical than the current practice of conducting the financing at the individual subsidiaries.

PAWC notes several reasons for such corporate-wide financing to be more economical. Among them is the ability of AWW, through AWCC, to issue much larger amounts of publicly-issued debt at one time, instead of the smaller amounts of debt issued by PAWC and other subsidiaries as private placements. The larger size, together with the fact that it is a public issue, will afford investors the chance for greater liquidity in post-issuance trading of the securities. Another reason is the stronger credit rating or the perception of greater credit strength of AWW compared to PAWC because of the greater geographical and regulatory diversity of the larger entity. Both those factors would contribute to investors requiring lower rates of return than they would require from PAWC and its sister subsidiaries. Moreover, while public issuances require more costly registration requirements at the Securities and Exchange Commission (the SEC), incurring such issuance cost once for large dollar amounts will, according to PAWC, result in a much lower overall issuance cost as a percent of the proceeds of the issuance. This saving will in turn will be passed on to PAWC allowing it to experience lower issuance costs than the Pennsylvania utility currently incurs when issuing securities on its own.

The terms which AWCC will impose on PAWC for long-term loans to the subsidiary will mirror the terms and conditions of the securities issued publicly by the national entity, including interest or dividend rates that reflect the issuance costs of AWCC. Such terms will be included in the notes to be issued by PAWC to AWCC. Such issuances by PAWC will be made pursuant to one or more securities certificates which the Pennsylvania subsidiary will file with us. However, those certificates will not require concomitant filings of affiliated interest agreements, it being the purpose of the instant Financial Services Agreement to govern future long-term financing by PAWC.

The proposed Financial Services Agreement also provides for a cash management program for the participating subsidiaries, including PAWC, which will allow the subsidiaries to aggregate their short-term borrowing and their investment of excess cash flows. Such facility will replace the maintenance by the subsidiaries of separate bank credit facilities, and will allow the intra-AWW use of temporary surpluses at one subsidiary to offset short-term cash flow shortfalls at another subsidiary. This will allow the AWW system to reduce its reliance on external lenders, and to afford its subsidiaries lower borrowing costs and the ability to earn more competitive interest on their short-term investments. The agreement filed by PAWC for approval provides that AWCC will make daily sweeps of PAWC's and other subsidiaries' excess cash and pay those subsidiaries the same interest rate AWCC would be obliged to pay its lending company. Such funds will next be provided to those subsidiaries having cash shortfalls, and those subsidiaries will be charged the same interest rate AWCC would otherwise have to pay to its lender. Any excess funds will be invested in the money market and earnings credited to the companies providing excess cash in proportion to the amount provided by each. In the money market as well as the market for long-term debt, size offers an advantage. AWCC will being able to invest larger amounts, and thus earn better interest rates, than would have been available to PAWC and its sister subsidiaries acting on their own.

For both its long-term and short-term borrowing, PAWC will be required to provide to AWCC estimates of its maximum borrowing needs over the forthcoming three-year period. Such estimates from all the subsidiaries will allow AWCC to establish the amount of borrowing capacity it needs to arrange with outside lenders. Those estimates of maximums expected for short- and long-term borrowing will also be used to proportionally allocate to users any overhead expenses, including AWCC's administrative expenses and commitment fees for bank credit lines.

PAWC argues that the more favorable interest rates it will incur and earn under the proposed arrangement will become reflected in the capital costs to be recovered in future rate proceedings, and will thereby allow the benefits to be passed on to the utility's customers.

We note that our approval of the Financial Services Agreement does not constitute a determination that the associated payments of interest and fees are reasonable or prudent for purposes of determining rates. However following our examination of the proposed agreement and the proposed notes, we have determined that the terms and conditions appear to be reasonable and consistent with the public interest; **THEREFORE,**

IT IS ORDERED:

1. That the Financial Services Agreement between Pennsylvania-American Water Company and American Water Capital Corp. is hereby approved.

2. That our approval of this agreement does not preclude the Commission from investigating in any formal proceeding the reasonableness of any of the fees or interest payments to be incurred pursuant to the agreement.

BY THE COMMISSION,

James J. McNulty

James J. McNulty
Secretary

(SEAL)

ORDER ADOPTED: June 22, 2000

ORDER ENTERED: JUN 22 2000

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA-AMERICAN WATER COMPANY'S REQUEST FOR APPROVAL UNDER CHAPTER 21 OF THE PUBLIC UTILITY CODE OF A FINANCIAL SERVICES AGREEMENT WITH AN AFFILIATED FINANCING CORPORATION	:	**DOCKET NO.**

TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:

I. INTRODUCTION

1. Pursuant to Section 2102 of the Public Utility Code (66 Pa.C.S. §2102), Pennsylvania-American Water Company ("PAWC" or the "Company") requests that the Pennsylvania Public Utility Commission ("PUC" or the "Commission") approve the Financial Services Agreement between PAWC and American Water Capital Corp. ("AWCC" or the "Financing Corporation") attached hereto as Appendix A as well as the provision of financial services by AWCC to PAWC in accordance with the terms of that Agreement.

2. The name and address of the utility requesting Chapter 21 approval is:

Pennsylvania-American Water Company
800 West Hersheypark Drive
P.O. Box 888
Hershey, PA 17033

3. The names and addresses of the attorneys for PAWC are as follows:

Thomas P. Gadsden, Esq.
Anthony C. DeCusatis, Esq.
Morgan, Lewis & Bockius LLP
1701 Market Street
Philadelphia, PA 19103-2921
215-963-5234
215-963-5299 (Fax)

Velma A. Redmond, Esq.
Vice President, Corporate Counsel and Secretary
Pennsylvania-American Water Company
800 West Hersheypark Drive
P.O. Box 888
Hershey, PA 17033
717-531-3210
717-531-3252 (Fax)

II. THE COMPANIES INVOLVED

4. PAWC is a corporation organized and existing under the laws of the Commonwealth of Pennsylvania and is a wholly owned subsidiary of the American Water Works Company, Inc. ("AWW"). PAWC furnishes water service in a certificated service territory encompassing portions of 31 counties across the Commonwealth. As of December 31, 1999,

PAWC provided water service to approximately 543,388 customers in the following classifications:

Residential:	498,628
Commercial:	38,957
Industrial:	811
Municipal, Resale and Other:	2,261
Fire Protection:	2,731

In addition, PAWC furnishes wastewater service to approximately 4,800 customers within a certificated service territory located in the Pocono Mountain region of Pennsylvania and encompassing the development known as A Pocono Country Place.

5. AWW is a corporation organized and existing under the laws of the State of Delaware that owns the stock of various subsidiary operating water utilities. AWW subsidiaries provide water service to approximately 2.5 million customers in 22 states. The common stock of AWW is listed on the New York Stock Exchange.

6. AWCC is a corporation organized and existing under the laws of the State of Delaware and is a wholly owned subsidiary of AWW. AWCC is dedicated to providing financial services to AWW, its subsidiary water companies and limited liability companies organized by certain subsidiaries to facilitate financing (collectively, the "Participating Companies") in a manner designed to capture economies of scope and scale and, thereby, reduce the cost of debt and preferred stock financing for those companies. Appendix B hereto is a list of the AWW subsidiaries that, subject to necessary regulatory approvals, will obtain financing services from AWCC.

III. THE FINANCIAL SERVICES AGREEMENT

7. Subject to Commission approval, PAWC and AWCC will enter into a Financial Services Agreement in the form attached hereto as Appendix A. Subject to necessary regulatory approvals in other jurisdictions, similar Financial Services Agreements will be executed between AWCC and the other Participating Companies.[1/] Under the terms of the Financial Services Agreement, AWCC will provide long-term lending, short-term lending and cash management services to PAWC, as more fully described below.

A. Long-Term Debt Financing

8. Through its Financial Services Agreement with AWCC, PAWC will get the ability to access the public debt markets at favorable rates while minimizing issuance and administrative fees and expenses. To achieve this goal, AWCC will aggregate the borrowing power of the Participating Companies in order to make offerings of substantial size. By capturing economies of scale and scope in this way, each Participating Company will gain access to the public debt market at lower costs than it could obtain on its own.

9. Currently, each Participating Company provides its own long-term debt financing. For the most part, such financing is obtained through so-called "private placements" of long-term

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1/ The Financial Services Agreements provide that each Participating Company's obligations are "several and not joint." *See* ¶5. This means that no company will be responsible for payment of any amount in excess of what is due by that company to AWCC for its own borrowings and the services rendered directly to it.

debt secured by a mortgage indenture creating a lien on the issuer's property. The term "private placement" refers to the issuance of securities under the exemption created by Section 4(2) of the Securities Act of 1933 (15 U.S.C. § 77d(2)) from the overarching requirement of Section 5 of the Securities Act (15 U.S.C. §77e) that a registration statement be in effect for any interstate sale of securities. Specifically, Section 4(2) exempts "transactions by an issuer not involving a public offering." To implement this exemption, the Securities and Exchange Commission ("SEC") issued Regulation D (17 C.F.R. §§230.501-230.506) containing objective guidelines which, if satisfied, assure issuers that a proposed transaction is within the Section 4(2) exemption. These "safe harbor" rules: (1) prohibit offers or sales through general solicitation or advertising; (2) require purchasers to be "accredited investors," i.e., have knowledge and sophistication in financial and business matters and be capable of evaluating the merits and risks of the offered investment, or obtain the advice of a "purchaser representative" who has such knowledge and expertise; (3) require the issuer to meet certain information and disclosure obligations; and (4) restrict the resale of securities acquired under a Regulation D exemption unless the securities are subsequently registered or sold pursuant to a valid exemption.

10. The principal benefit of private placements is that they eliminate the time and expense of preparing a registration statement. The bulk of the cost of the registration process (legal, accounting, printing, for example) is the same regardless of the size of the issue registered. Consequently, it is seldom cost effective for small issuers to incur that expense because any savings from the potentially lower coupon rate achievable on publicly issued debt would be outweighed by issuance costs and underwriting fees. While Regulation D created an economic

alternative to registration, its restrictions on how securities may be offered, who may purchase them and how they may be resold limit the range of likely investors and the amount of capital available for investment.

11. The market for private placements of utility debt has largely been limited to financial institutions, such as insurance companies, retirement funds or bank trust departments, which meet the "accredited investor" criteria. In recent years, financial markets have undergone several structural changes that caused private placements to become less desirable for both lenders and borrowers. Because of business and regulatory considerations, institutional lenders seek investments that offer a higher degree of liquidity and lower risk than relatively small private placements of debt or preferred stock can provide. To achieve their goal, institutional lenders increasingly look to the public debt market for investment opportunities. Publicly issued debt is a more liquid investment because it can be traded on major exchanges or over the counter and, as a consequence, a healthy secondary market has developed.

12. As institutional lenders have migrated to the public debt market, the pool of potential purchasers of private placements has shrunk. As a result, issuers have been receiving fewer bids at each private placement auction, and the reduced competition for their bonds has exerted upward pressure on interest rates for privately placed debt.

13. At the same time that lenders' preference for publicly issued debt was increasing, the hurdle costs for borrowers to enter the public debt market have been decreasing. In addition, borrowers are able to reduce borrowing costs through judicious market timing, which is possible

by use of the so-called "shelf-registration" procedure authorized by SEC Rule 415 (17 C.F.R. §230.415). Under Rule 415, qualifying securities[2/] can be registered for an offering to be made on a continuous or delayed basis. The registration statement contains the general terms of the securities, which can be sold at intervals and in amounts determined by the issuer within two years of the effective date of the registration statement. At the time of sale, the registration statement is supplemented with the specific terms of each issue, such as rate and maturity. A shelf registration gives the issuer flexibility to respond quickly to changes in the market and sell securities when interest rates are favorable. The issuer does not have to miss a window of opportunity while waiting for post-effective supplements to the registration statement to become effective. This flexibility is particularly important when financial markets experience high levels of volatility.

14. The mechanics of the borrowing program available through AWCC are straightforward. Each year PAWC and the other Participating Companies will give AWCC an estimate of their long-term and short-term borrowing requirements for prospective one and three-year periods. Based on this information, AWCC will determine the aggregate annual long-term and short-term borrowing targets for three years in the future. (The short-term borrowing requirements are discussed in Section B, *infra.*) AWCC will arrange for the registration of debt and/or preferred securities in an amount sufficient to meet the individual companies' needs and

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2/ For the most part, shelf registration can be used only by companies that qualify for registration on Form S-3, which is available to issuers with established records that are subject to the reporting requirements of the Securities Exchange Act of 1934 (15 U.S.C. §§78a-78kk). Notably, PAWC could not satisfy this requirement.

will arrange with one or more investment bankers for either an underwritten or agency-based sale of the securities. Thus, only one registration statement need be filed. Moreover, the amount of the issue can be very large because it represents the aggregate financing needs of all the Participating Companies. This also provides savings because underwriting fees are stated as a percent of the total offering, and the percentage generally declines as the principal amount of the offering increases. Upon receipt of the proceeds of the issuance, AWCC will lend to each of the Participating Companies its share of the total. The loan from AWCC to a Participating Company will be evidenced by a Promissory Note in the form attached as Exhibit B to the Financial Services Agreement, which will mirror the terms and conditions of the bonds or other securities issued by AWCC.

15. It is currently anticipated that all of AWCC's borrowings will be unsecured and, therefore, the corresponding loans from AWCC to the Participating Companies will also be unsecured. However, to provide assurance to lenders of AWCC's payment of principal and interest, AWW will issue a "support letter" for the benefit of the purchasers of AWCC bonds. "Support letter" is a term of art in the financial market referring to an instrument that requires the parent of an affiliated group, for the term of the bonds issued by its financing subsidiary: (1) to own all of the issued and outstanding stock of the financing subsidiary (AWCC in this case); (2) to cause its financing subsidiary to maintain a positive tangible net worth; and (3) if the financing subsidiary is unable to satisfy its obligations, to provide funds to assure that payments of interest and principal are made when due. AWW's obligations under the support letter would be classified as a "security" for purposes of the registration requirement of Section 5 of the

Securities Act and, therefore, AWW would have to be a co-registrant, with AWCC, for any AWCC securities that benefit from the financial assurance of the AWW support letter. Where AWW support letters are provided, rating agencies will assess the creditworthiness of AWCC's debt on the strength of AWW's credit as well as the cash flows available from the dividend stream AWW receives from its utility subsidiaries. Accordingly, the credit ratings of AWCC debt should reflect the credit quality of the American Water Works System. It is reasonable to expect that a System-wide credit evaluation will yield higher credit ratings than the Participating Companies could achieve on their own. This would result from a number of factors, including reduced business risk for the System as a whole, as compared to any one Participating Company, due to the dispersion of AWW's utility subsidiaries among different geographic regions and regulatory jurisdictions.

16. For the reasons discussed above, PAWC projects that it will realize meaningful savings by obtaining long-term debt financing from AWCC under the Financial Services Agreement. For a public debt issuance by AWCC of as much as $200 million, the potential interest rate savings could be between 25 and 40 basis points as compared to private placements of under $100 million. In addition, it is anticipated that each Participating Company's share of issuance costs will be less, per dollar borrowed, than it currently incurs to borrow in the private placement market. As a consequence, the yield to maturity and, therefore, the weighted cost of long-term debt included in revenue requirement and reflected in customers' rates will be lower than would be the case if the current methods of financing were continued.

17. Through the use of AWCC as an aggregator of their individual long-term financing requirements, the Participating Companies will be able to: (1) expand the pool of potential investors beyond those available in the private placement market; (2) obtain access to favorable interest rates and other terms offered by the public debt markets on a cost effective basis by increasing scale economies and reducing registration, underwriting and other issuance costs; (3) realize the market timing benefits made possible by the shelf registration process; and (4) obtain long-term debt financing that is not issued under their respective mortgage indentures and, therefore, does not impose a lien on their property. Also, because the Participating Companies will not be required to borrow exclusively under the Financial Services Agreement[3/], PAWC can pursue other sources of low-cost financing, such as low-interest loans from the Pennsylvania Infrastructure Investment Authority ("PennVest") and tax advantaged loans available through the Pennsylvania Department of Commerce.

18. The long-term borrowing program available from AWCC is consistent with the findings and conclusions (C11-22) and implements the recommendation (R11-14) made by Davies Associates, Inc. in its Comprehensive Management Audit of PAWC issued August 1, 1992, which stated in pertinent part:

> The Company's increasing reliance on a single group of investors (insurance companies) to provide funds for the construction program can put the continuance of the program at risk and increase the cost, especially if the bond rating slips below single A.

3/ In addition to its non-exclusivity provision (¶7), the Financial Services Agreement may be terminated by PAWC upon ten days prior written notice to AWCC (¶9).

> Because of these factors, Pennsylvania-American should develop a plan for entering the public market.

In response to the foregoing recommendation, PAWC, with the assistance of financial professionals, carefully analyzed the feasibility of issuing publicly-traded debt. The analysis showed that for offerings of the size made by PAWC, public debt issuances would not provide a cost advantage relative to continued use of private placements.[4] However, as previously explained, by aggregating PAWC's long-term financing with that of the other Participating Companies through their respective Financial Services Agreements, AWCC will be able to achieve for PAWC the benefits of public debt issuances discussed in the Management Audit by capturing scale economies and, thereby, reducing issuance costs as a percentage of the amount borrowed.

19. As previously explained, AWCC anticipates using the "shelf-registration" process to register debt securities to be issued over a prospective two-year period in amounts and at times that, in AWCC's judgment, minimize total borrowing costs. As also explained,

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4/ However, based on the results of the aforementioned analysis, PAWC saw an opportunity to achieve incremental savings on a cost-effective basis by qualifying future private placements so that purchasers could resell the securities pursuant to SEC Rule 144A (17 C.F.R. §230.144A). Rule 144A was adopted to foster a secondary market for privately placed securities among "qualified institutional buyers" by easing the restrictions on the resale of restricted (non-registered) securities. As a consequence, Rule 144A-eligible securities have a greater degree of liquidity than other kinds of privately placed securities, but are still less liquid than securities for which a registration statement is on file with the SEC. PAWC issued $33 million of Rule 144A-eligible debt in November 1997 under its Medium Term Note program, which was approved by the Commission's registration of PAWC's Securities Certificate at Docket No. S-00970635, as described in Paragraph No. 19, *infra*.

PAWC's long-term borrowings from AWCC will consist of a portion of the proceeds from such debt issuances and will mirror the terms and conditions thereof. In order to assure symmetry between AWCC's obligations to public debt holders and PAWC's obligations to AWCC. PAWC intends to file securities certificates with the Commission from time to time that correspond to the "shelf-registrations" obtained by AWCC. PAWC's securities certificates will set forth the maximum principal amount of debt it expects to issue over a stated prospective period and will also set forth the anticipated maturity and interest rate on a not-to-exceed basis. Upon registration by the Commission, the securities certificates will provide PAWC with sufficient flexibility in the interest rates, amounts and timing of its debt issuances so that it can properly match the terms of AWCC's external financing. This form of securities certificate has previously been registered by the Commission, which recognized the benefits to the Company and its customers from granting the Company this level of flexibility. *See In Re: Securities Certificate Of Pennsylvania-American Water Company For The Issuance From Time To Time In An Outstanding Amount Not To Exceed $200,000,000 Of Medium Term Notes (General Mortgage Bonds) Under The General Mortgage Indenture*, Securities Certificate Docket No. S-00970635 (August 28, 1999).

B. Short-Term Debt Financing and Cash Management

20. Under the Financial Services Agreement, PAWC will obtain short-term loans (i.e., loans with a term of less than one year) and cash management services from AWCC at favorable rates and costs. To achieve this goal, AWCC will aggregate and integrate the short-

term financing and cash management of all of the Participating Companies and, thereby, obtain cost-efficiencies from economies of scope and scale.

21. Currently, each Participating Company obtains its own short-term financing through separate, company-specific lines of credit established with banks in or near their respective principal offices. Each Participating Company is charged a commitment fee by the lender to establish the credit line and is charged a market rate of interest on the principal amount borrowed. Additionally, each Participating Company is responsible for managing its cash to assure sufficient funds are on hand to pay expenses, make other expenditures when due and invest excess cash, if possible, in a way that does not compromise its ability to meet its financial obligations. As a consequence, the Participating Companies have multiple lines of credit with a number of banks and a corresponding number of credit line fees. Additionally, each Participating Company attempts to realize a return from the excess cash it generates, which means that there are a number of smaller amounts of money that each company tries to invest on its own.

22. Through the respective Financial Services Agreements, AWCC will aggregate the Participating Companies' short-term borrowings. Based on the Participating Companies' projections of annual short-term borrowing needs for a prospective three-year period, AWCC will arrange for a syndicated bank line of credit to cover the total projections or, when appropriate, may issue short-term obligations in the public debt market for some portion or all of the short-term borrowing needs. AWCC will lend to each of the Participating Companies the amount it requires to meet those short-term obligations. The loans from AWCC to a

Participating Company will be evidenced by a Promissory Note in the form attached as Exhibit A to the Financial Services Agreement, which will mirror the interest rate and other relevant terms of the credit facilities used by AWCC.

23. The AWCC short-term borrowing program will provide cost savings to the Participating Companies in several ways. First, it may reduce the commitment fees incurred to maintain credit lines by rolling up the various individual company credit facilities into a single syndicated credit line. Second, the interest rate charged on draw-downs from the credit line will be lower because lenders will look to the credit quality of the American System to support AWCC's obligations and, therefore, will perceive less risk than lending to individual Participating Companies. Finally, to the extent AWCC can successfully tap the short-term public debt market, it will obtain funds at lower cost than those available from bank credit facilities

24. AWCC will also provide an integrated cash management program for the Participating Companies. Under this program, AWCC will conduct daily "sweeps" of cash surpluses in the operating accounts of each Participating Company. A company that has a temporary excess cash balance will lend that cash to AWCC, for which AWCC will pay interest at the same rate it pays under its bank credit line. The funds AWCC obtains through its daily "sweeps" of Participating Company accounts will be loaned to other Participating Companies that have a cash deficit, and those loans will bear the same interest rate AWCC is obliged to pay the lending company. Available cash exceeding that needed for intra-System borrowings will be invested by AWCC on behalf of the Participating Companies that have excess cash. Because AWCC will be investing larger sums of money than any one Participating Company could invest

on its own, the Participating Companies can expect to realize a higher rate of return than they would otherwise achieve. Through the integration of System-wide internally generated cash, in the manner described above, AWCC will reduce the amount it otherwise would have to borrow under a bank line of credit or other credit facility and will maximize the return on amounts invested externally.

25. The AWCC cash management program will benefit the Participating Companies in several ways. First, by maximizing the use of System-wide internally-generated cash to meet the Participating Companies' short-term borrowing needs, overall borrowing costs will be lowered by reducing the System's dependence on external borrowing and, thereby, decreasing both commitment fees and interest expense. Second, by actively managing the integrated cash availability of the Participating Companies, AWCC will provide short-term investment opportunities for companies with temporary excess cash that otherwise would not be available. Third, the cash management program will provide lending companies a higher return than they could otherwise achieve. At the same time, Participating Companies that are net borrowers will not pay more than a market rate of interest on intra-System loans obtained through the cash management program.

26. Customers will benefit from the reduction of short-term borrowing costs in several ways. First, since commitment fees for bank credit lines are an operating expense included in revenue requirement, any reduction in those fees will produce a commensurate reduction in costs borne by customers. Second, to the extent PAWC is or may become a net lender/investor under the cash management program, increases in invesment income will reduce

its prospective borrowing needs. Finally, although short-term debt is not included in PAWC's capital structure for ratemaking purposes, it is a major component of PAWC's Allowance for Funds Used During Construction ("AFUDC"). A reduction in short-term borrowing costs will reduce PAWC's AFUDC rate and, thereby, reduce the amount of AFUDC capitalized in connection with additions to utility plant included in the Company's rate base.

27. The short-term borrowing and cash management program that AWCC will provide is similar in all material respects to a financial services arrangement among the Bell Atlantic telephone companies[5] and Bell Atlantic Network Funding Corporation, which the Commission found to be reasonable and in the public interest and, therefore, approved under Section 2102. *Affiliated Interest Agreement Between The Bell Telephone Company Of Pennsylvania And Bell Atlantic Funding Corporation Providing For The Acquisition Of Certain Financial Services*, Docket No. G-880114 (September 29, 1988).

C. **Allocation Of Expenses**

28. Apart from interest expense, which will be charged to each Participating Company in the manner described in Sections A. and B., above, there are three categories of expenses to be incurred by AWCC that will be allocated among the Participating Companies in the manner set forth in Paragraph 2 of the Financial Services Agreement and summarized below.

5/ The companies consisted of the former Bell Telephone Company of Pennsylvania, New Jersey Bell Telephone Company, Diamond State Telephone Company, Chesapeake and Potomac Telephone Company of Maryland, Chesapeake and Potomac Telephone Company of Virginia and Chesapeake and Potomac Telephone Company of West Virginia.

a. **Issuance Costs For Long-Term Borrowings.** Issuance costs for each long-term borrowing will be allocated among the Participating Companies in proportion to the principal amount of such borrowing that is loaned to each company.

b. **Costs Of Short-Term Borrowings.** The annual costs of short-term borrowings other than interest expense, which consists of commitment fees for bank credit lines and the issuance costs of any public debt offerings, will be allocated among the Participating Companies in proportion to the maximum principal amount that each company requests be made available to it for the year.

c. **Overhead.** Overhead costs consist primarily of the day-to-day costs incurred by AWCC to provide financial services under the Financial Services Agreements with the Participating Companies. Overheads will be allocated among the Participating Companies in the same proportion as each company's long-term and maximum requested short-term borrowings and investments in a calendar year bear to all of the long-term and maximum requested short-term borrowings and investments by all Participating Companies during the same year.

29. The proposed allocations are fair and reasonable because they will allocate the cost of providing financial services to the Participating Companies based on the extent of their use of the services provided, which is consistent with well-established cost allocation and ratemaking principles.

IV. THE FINANCIAL SERVICES AGREEMENT SHOULD BE APPROVED

30. Section 2102(b) provides, in pertinent part:

> The commission shall approve such contract or arrangement [with an affiliated interest] . . . only if it shall clearly appear and be established upon investigation that it is reasonable and consistent with the public interest.

31. For the reasons set forth in detail in Section III, above, the Financial Services Agreement will provide substantial benefits to customers through lower costs for long-term and short-term debt financing. Additionally, the Agreement provides a fair and reasonable means to allocate among the Participating Companies the costs incurred by AWCC to provide such benefits. Therefore, the Financial Services Agreement is reasonable and consistent with the public interest and should be approved by the Commission.

V. CONCLUSION

For the reasons set forth hereinabove, the Commission should enter an order granting its approval under Section 2101of the Financial Services Agreement, the forms of Promissory Notes attached thereto as Exhibits A and B, and the provision of financial services by AWCC to PAWC in accordance with the terms of the Financial Services Agreement, including loans made from time to time by AWCC to PAWC.

Respectfully submitted,

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Dated: May 11, 2000

APPENDIX A

Financial Services Agreement

EXECUTION COPY

FINANCIAL SERVICES AGREEMENT

THIS AGREEMENT, dated as of June 15, 2000, by and between Pennsylvania-American Water Company (the "Company") and American Water Capital Corp. ("AWCC").

BACKGROUND

The Company currently performs its own financial services.

However, the Company has determined that it can obtain these services more efficiently through the consolidation of certain necessary management and staff functions with those performed for other entities that may enter into agreement with AWCC substantially similar to this one ("Co-Participants").

AWCC is dedicated to performing such consolidated functions.

Accordingly, the parties have determined to enter into this Agreement for the provision of financial services by AWCC to the Company and for the proper determination and allocation of the costs of providing such services.

Therefore, the parties agree as follows:

AGREEMENT

1. Services. AWCC will provide, either directly or through arrangements with third parties for the benefit of the Company, such financial services as the Company and AWCC may from time to time agree, including but not limited to those more fully described in Appendix I attached to this Agreement.

2. Costs. In consideration of the provision of the services contemplated by paragraph 1, the Company agrees to pay AWCC a portion of the costs and appropriate overhead incurred by AWCC in providing those services, as follows. The costs incurred by AWCC in connection with its bank credit lines and short-term public borrowings will be divided among the Co-Participants in proportion to the maximum principal amount that each Co-Participant requests be made available to it during the course of a year. The costs incurred by AWCC in connection with each long-term borrowing by AWCC will be divided among each Co-Participant in proportion to the principal amount of that borrowing that is loaned to that Co-Participant. AWCC's overhead will be allocated among the Co-Participants in the same proportion as each Co-Participant's long-term and maximum, requested short-term borrowings and investments in a calendar year bear to all of the long and maximum short-term borrowings and investments by all Co-Participants during the same year.

3. Statements. AWCC will prepare and deliver to the Company monthly statements of the services provided by AWCC and amounts payable to AWCC, giving effect to

all the provisions of this Agreement. The Company shall pay the net amount shown on its statement within thirty (30) days after the billing date.

4. Inspection. Upon reasonable notice, AWCC will make available to the Company for its inspection AWCC's books, records, bills, accounts and any other documents which describe or support the costs allocated to the Company under this Agreement.

5. Obligations Not Joint. AWCC and the Company expressly agree: (a) that the obligations of the Company and each Co-Participant to AWCC are several and not joint; (b) that the Company will not be responsible to any Co-Participant, to AWCC or to any assignee or creditor of AWCC for any payment in excess of payments due by the Company to AWCC under this Agreement or a Note in the form attached to this Agreement; and (c) that no Co-Participant will be responsible to the Company, to any other Co-Participant, to AWCC or to any assignee or creditor of AWCC for any payment in excess of payments due by that Co-Participant to AWCC under any agreement substantially similar to this Agreement or under any Note attached to that other agreement. AWCC covenants and agrees that it will require, as a condition to its entering into any such other agreement with a Co-Participant, that such other agreement contains the same provision as that contained in the immediately preceding sentence.

6. Notes. The Company's borrowings under this Agreement will be evidenced by one or more promissory notes in the form of Exhibit A or Exhibit B attached to this Agreement.

7. Non-Exclusivity. Nothing in this Agreement prohibits or restricts the Company from borrowing from third parties, or obtaining services described in this Agreement from third parties, whenever and on whatever terms it deems appropriate.

8. Effectiveness. This Agreement shall be effective as of June 22, 2000 provided that, if prior approval by the regulatory commission of any jurisdiction is required before this Agreement may become effective as to the Company, or before AWCC may provide a particular service hereunder to the Company, this Agreement shall not be effective as to the Company or as to that service, as the case may be, unless and until the required approval has been obtained. Unless and until this Agreement becomes effective as to the Company in whole or in part, the Company shall not be entitled to the benefits of, nor shall it have any rights or duties under, this Agreement. This Agreement may be amended or rescinded only by written instrument signed by the Company and AWCC.

9. Termination. The Company may terminate its participation in this Agreement by giving ten (10) days prior written notice of such termination to AWCC; and (b) AWCC may terminate this Agreement by giving ninety (90) days prior written notice of such termination to the Company. Termination of this Agreement will not affect: (a) the Company's obligations under any Promissory Notes; (b) any party's obligations with respect to any amounts owing under Sections 2 and 3 of this Agreement (including such amounts attributable to obligations of any terminating party under any Promissory Notes that remain outstanding after this Agreement is terminated as to that party); or (c) AWCC's obligations to repay any investments made by a Company pursuant to Appendix I.

10. Copies. This Agreement may be executed by the parties in one or more copies and each executed copy shall be considered an original.

In witness of the foregoing, each of the Company and AWCC has caused its respective corporate seal to be affixed to this Agreement and has caused this Agreement to be signed on its behalf by its duly authorized officers.

ATTEST:

By: V.A. Redmond
V.A. Redmond
Vice President and Secretary

PENNSYLVANIA-AMERICAN WATER COMPANY

By: J.E. Harrison
J. E. Harrison
Vice President and Treasurer

ATTEST:

By: W. Timothy Pohl
Title: W. Timothy Pohl
Vice President and Secretary

AMERICAN WATER CAPITAL CORP.

By: Joseph F. Hartnett
Name and Title: Joseph F. Hartnett, Jr.
Vice President and Treasurer

APPENDIX I

DESCRIPTION OF FINANCIAL SERVICES

Set forth below is a list of the services which AWCC agrees to provide to the Company upon its request pursuant to the Agreement to which this Appendix is attached.

1. Short-Term Loans. AWCC will provide Short-Term Loans to the Company pursuant to the terms set forth in the promissory notes to be issued by the Company to AWCC, each substantially in the form attached to this Agreement as Exhibit A.

2. Long-Term Borrowings. AWCC will provide loans other than Short-Term Loans to the Company pursuant to the terms set forth in the promissory notes to be issued by the Company to AWCC, each substantially in the form attached hereto as Exhibit B.

3. Cash Management. Cash not required by the Company to pay its daily disbursements or to pay when due the principal of and interest on, the Company's borrowings from AWCC other than Short-Term Loans will be used by AWCC first to reduce the outstanding principal balance of the Company's Short-Term Loans owing to AWCC and any excess will be deemed to be invested with AWCC and will earn a daily rate of interest that is equal to the interest income earned by AWCC on those funds. Upon the request of that Company, AWCC shall execute one or more promissory notes in favor of the Company, in form and substance substantially similar to the Promissory Note attached as Exhibit A to the Agreement as evidence of such investment.

EXHIBIT A
PROMISSORY NOTE
FOR SHORT-TERM LOANS

$____________________ __________________, 2000

FOR VALUE RECEIVED, [NAME OF COMPANY], a __________________ corporation (herein "Borrower") hereby promises to pay ON DEMAND to the order of American Water Capital Corp., a Delaware corporation ("Lender"), in same day funds at its offices at Voorhees, New Jersey or such other place as Lender may from time to time designate, the principal sum of __________________ dollars ($___________) (the "Maximum Principal Sum"), or such lesser amount as shall equal the aggregate unpaid principal amount of the loans made by Lender to Borrower (other than loans evidenced by a promissory note under which the principal amount is due and payable in one or more scheduled installments more than one year after the date of its issue), together with interest thereon from the date hereof until paid in full. Interest will be charged on the unpaid outstanding principal balance of this Note at a rate per annum equal to Lender's actual cost of funds to make such loan, such rate to change as Lender's actual cost of funds changes. Interest on borrowings shall be due and payable on the first business day of each month, commencing with the first business day of the month after the month in which this Note is executed. In the absence of manifest error, the records maintained by Lender of the amount and term, if any, of borrowings hereunder shall be deemed conclusive.

Borrower may borrow, repay and reborrow hereunder in amounts which do not, in the aggregate outstanding at any time, exceed the Maximum Principal Sum.

The occurrence of one or more of any of the following shall constitute an event of default hereunder:

(a) Borrower shall fail to make any payment of principal and/or interest due hereunder or under any other promissory note between Lender and Borrower within five business days after the same shall become due and payable, whether at maturity or by acceleration or otherwise;

(b) Borrower shall apply for or consent to the appointment of a receiver, trustee or liquidator of itself or any of its property, admit in writing its inability to pay its debts as they mature, make a general assignment for the benefit of creditors, be adjudicated a bankrupt or insolvent or file a voluntary petition in bankruptcy or a petition or an answer seeking reorganization or an arrangement with creditors or to take advantage of any bankruptcy, reorganization, insolvency, readjustment of debt, dissolution or liquidation of law or statute, or an answer admitting the material allegations of a petition filed against it in any proceeding under any such law, or if action shall be taken by Borrower for the purposes of effecting any of the foregoing, or

(c) Any order, judgment or decree shall be entered by any court of competent jurisdiction, approving a petition seeking reorganization of Borrower or all or a substantial part of the assets of Borrower, or appointing a receiver, trustee or liquidator of

EXHIBIT A
PROMISSORY NOTE
FOR SHORT-TERM LOANS

$\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_$, 2000

FOR VALUE RECEIVED, [NAME OF COMPANY], a ____________________ corporation (herein "Borrower") hereby promises to pay ON DEMAND to the order of American Water Capital Corp., a Delaware corporation ("Lender"), in same day funds at its offices at Voorhees, New Jersey or such other place as Lender may from time to time designate, the principal sum of __________________ dollars ($___________) (the "Maximum Principal Sum"), or such lesser amount as shall equal the aggregate unpaid principal amount of the loans made by Lender to Borrower (other than loans evidenced by a promissory note under which the principal amount is due and payable in one or more scheduled installments more than one year after the date of its issue), together with interest thereon from the date hereof until paid in full. Interest will be charged on the unpaid outstanding principal balance of this Note at a rate per annum equal to Lender's actual cost of funds to make such loan, such rate to change as Lender's actual cost of funds changes. Interest on borrowings shall be due and payable on the first business day of each month, commencing with the first business day of the month after the month in which this Note is executed. In the absence of manifest error, the records maintained by Lender of the amount and term, if any, of borrowings hereunder shall be deemed conclusive.

Borrower may borrow, repay and reborrow hereunder in amounts which do not, in the aggregate outstanding at any time, exceed the Maximum Principal Sum.

The occurrence of one or more of any of the following shall constitute an event of default hereunder:

(a) Borrower shall fail to make any payment of principal and/or interest due hereunder or under any other promissory note between Lender and Borrower within five business days after the same shall become due and payable, whether at maturity or by acceleration or otherwise;

(b) Borrower shall apply for or consent to the appointment of a receiver, trustee or liquidator of itself or any of its property, admit in writing its inability to pay its debts as they mature, make a general assignment for the benefit of creditors, be adjudicated a bankrupt or insolvent or file a voluntary petition in bankruptcy or a petition or an answer seeking reorganization or an arrangement with creditors or to take advantage of any bankruptcy, reorganization, insolvency, readjustment of debt, dissolution or liquidation of law or statute, or an answer admitting the material allegations of a petition filed against it in any proceeding under any such law, or if action shall be taken by Borrower for the purposes of effecting any of the foregoing; or

(c) Any order, judgment or decree shall be entered by any court of competent jurisdiction, approving a petition seeking reorganization of Borrower or all or a substantial part of the assets of Borrower, or appointing a receiver, trustee or liquidator of

Borrower or any of its property, and such order, judgment or decree shall continue unstayed and in effect for any period of sixty (60) days.

Upon the occurrence of any event of default, the entire unpaid principal sum hereunder plus all interest accrued thereon plus all other sums due and payable to Lender hereunder shall, at the option of Lender, become due and payable immediately. In addition to the foregoing, upon the occurrence of any event of default, Lender may forthwith exercise singly, concurrently, successively or otherwise any and all rights and remedies available to Lender by law, equity, statute or otherwise.

Borrower hereby waivers presentment, demand, notice of nonpayment, protest, notice of protest or other notice of dishonor in connection with any default in the payment of, or any enforcement of the payment of, all amounts due hereunder. To the extent permitted by law, Borrower waives the right to any stay of execution and the benefit of all exemption laws now or hereafter in effect.

Following the occurrence of any event of default, Borrower will pay upon demand all costs and expenses (including all amounts paid to attorneys, accountants, and other advisors employed by Lender), incurred by Lender in the exercise of any of its rights, remedies or powers hereunder with respect to such event of default, and any amount thereof not paid promptly following demand therefor shall be added to the principal sum hereunder and will bear interest at the contract rate set forth herein from the date of such demand until paid in full. In connection with and as part of the foregoing, in the event that this Note is placed in the hands of an attorney for the collection of any sum payable hereunder, Borrower agrees to pay reasonable attorneys' fees for the collection of the amount being claimed hereunder, as well as all costs, disbursements and allowances provided by law.

If for any reason one or more of the provisions of this Note or their application to any entity or circumstances shall be held to be invalid, illegal or unenforceable in any respect or to any extent, such provisions shall nevertheless remain valid, legal and enforceable in all such other respects and to such extent as may be permissible. In addition, any such invalidity, illegality or unenforceability shall not affect any other provisions of this Note, but this Note shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

This Note inures to the benefit of Lender and binds Borrower and Lender's and Borrower's respective successors and assigns, and the words "Lender" and "Borrower" whenever occurring herein shall be deemed and construed to include such respective successors and assigns.

This Promissory Note is one of the promissory notes referred to in the Financial Services Agreement dated as of June 15, 2000 between Borrower and Lender to which reference is made for a statement of additional rights and obligations of the parties hereto.

IN WITNESS WHEREOF, Borrower has executed this Promissory Note the day and year first written above.

[BORROWER]

By:________________________________
Name and Title:

EXHIBIT B
PROMISSORY NOTE
FOR LONG-TERM BORROWINGS

$________________________ ____________________, 2000

FOR VALUE RECEIVED, [NAME OF COMPANY], a ________________ corporation (herein "Borrower") hereby promises to pay to the order of American Water Capital Corp., a Delaware corporation ("Lender"), in same day funds at its offices at ________________________ or such other place as Lender may from time to time designate, the principal sum of __________________ dollars ($____________), together with interest thereon from the date hereof until paid in full. Interest shall be charged on the unpaid outstanding principal balance hereof at a rate per annum equal to the rate paid and to be paid by Lender with respect to the borrowings it made in order to provide funds to Borrower hereunder. Interest on borrowings shall be due and payable in immediately available funds on the same business day on which the Lender must pay interest on the borrowings it made in order to provide funds to the Borrower hereunder. The principal amount hereof shall be due and payable hereunder at such times and in such amounts and in such installments hereunder as the Lender must pay with respect to the borrowings it made in order to provide funds to the Borrower hereunder. Lender has provided Borrower with a copy of the documentation evidencing the borrowings made by Lender in order to provide funds to Borrower hereunder. In the absence of manifest error, such documentation and the records maintained by Lender of the amount and term, if any, of borrowings hereunder shall be deemed conclusive.

The occurrence of one or more of any of the following shall constitute an event of default hereunder:

(a) Borrower shall fail to make any payment of principal and/or interest due hereunder or under any other promissory note between Lender and Borrower within five business days after the same shall become due and payable, whether at maturity or by acceleration or otherwise;

(b) Borrower shall apply for or consent to the appointment of a receiver, trustee or liquidator of itself or any of its property, admit in writing its inability to pay its debts as they mature, make a general assignment for the benefit of creditors, be adjudicated a bankrupt or insolvent or file a voluntary petition in bankruptcy or a petition or an answer seeking reorganization or an arrangement with creditors or to take advantage of any bankruptcy, reorganization, insolvency, readjustment of debt, dissolution or liquidation of law or statute, or an answer admitting the material allegations of a petition filed against it in any proceeding under any such law, or if action shall be taken by Borrower for the purposes of effecting any of the foregoing; or

(c) Any order, judgment or decree shall be entered by any court of competent jurisdiction, approving a petition seeking reorganization of Borrower or all or a substantial part of the assets of Borrower, or appointing a receiver, trustee or liquidator of Borrower or any of its property, and such order, judgment or decree shall continue unstayed and in effect for any period of sixty (60) days.

Upon the occurrence of any event of default, the entire unpaid principal sum hereunder plus all interest accrued thereon plus all other sums due and payable to Lender hereunder shall, at the option of Lender, become due and payable immediately. In addition to the foregoing, upon the occurrence of any event of default, Lender may forthwith exercise singly, concurrently, successively or otherwise any and all rights and remedies available to Lender by law, equity, statute or otherwise.

Borrower hereby waivers presentment, demand, notice of nonpayment, protest, notice of protest or other notice of dishonor in connection with any default in the payment of, or any enforcement of the payment of, all amounts due hereunder. To the extent permitted by law, Borrower waives the right to any stay of execution and the benefit of all exemption laws now or hereafter in effect.

Following the occurrence of any event of default, Borrower will pay upon demand all costs and expenses (including all amounts paid to attorneys, accountants, and other advisors employed by Lender), incurred by Lender in the exercise of any of its rights, remedies or powers hereunder with respect to such event of default, and any amount thereof not paid promptly following demand therefor shall be added to the principal sum hereunder and will bear interest at the contract rate set forth herein from the date of such demand until paid in full. In connection with and as part of the foregoing, in the event that this Note is placed in the hands of an attorney for the collection of any sum payable hereunder, Borrower agrees to pay reasonable attorneys' fees for the collection of the amount being claimed hereunder, as well as all costs, disbursements and allowances provided by law.

If for any reason one or more of the provisions of this Note or their application to any entity or circumstances shall be held to be invalid, illegal or unenforceable in any respect or to any extent, such provisions shall nevertheless remain valid, legal and enforceable in all such other respects and to such extent as may be permissible. In addition, any such invalidity, illegality or unenforceability shall not affect any other provisions of this Note, but this Note shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

This Note inures to the benefit of Lender and binds Borrower and Lender's and Borrower's respective successors and assigns, and the words "Lender" and "Borrower" whenever occurring herein shall be deemed and construed to include such respective successors and assigns.

This Promissory Note is one of the promissory notes referred to in the Financial Services Agreement dated as of June 15, 2000 between Borrower and Lender to which reference is made for a statement of additional rights and obligations of Lender and Borrower.

IN WITNESS WHEREOF, Borrower has executed this Promissory Note the day and year first written above.

[BORROWER]

By:_______________________________
Name and Title:

APPENDIX B

List of Water Company Subsidiaries Of American Water Works Company

1. Arizona-American Water Company
2. Bluefield Valley Water Works Company
3. California-American Water Company
4. Connecticut-American Water Company
5. Hampton Water Works Company
6. Hawaii-American Water Company
7. Illinois-American Water Company
8. Indiana-American Water Company
9. Iowa-American Water Company
10. Kentucky-American Water Company
11. Long Island Water Corporation
12. Maryland-American Water Company
13. Massachusetts-American Water Company
14. Michigan-American Water Company
15. Missouri-American Water Company
16. New Jersey-American Water Company
17. New Mexico-American Water Company
18. New York-American Water Company
19. Ohio-American Water Company
20. Pennsylvania-American Water Company
21. St. Louis County Water Company
22. Tennessee-American Water Company
23. The Salisbury Water Company
24. Virginia-American Water Company
25. West-Virginia-American Water Company

OCA-VI-29 Q. For each agreement identified in response to OCA-I-59, please provide a) the rates for the billing and collection services offered; b) the total number of active and inactive accounts during the historic test year; c) the total number of active and inactive accounts projected for the future test year; d) an explanation as to how the rates for services were determined; and e) the date PAWC began providing service to each entity.

OCA-VI-29 A. Please refer to the attached schedule for parts a, b, c, and e. The Company is unable to obtain information on past inactive accounts and did not make projections for inactive accounts during the future test year. Several municipalities that signed agreements with the Company in 2001 for billing and collection services were not included in the revenues for the adjustment as shown on page 17 of Exhibit No. 3-A. The Company will adjust its future pro forma revenues from $239,460 to $277,093, an increase of $37,663, as shown on the attached schedule.

The rates for the billing and collection services were achieved by arms' length negotiation. After the initial contract was negotiated, the same terms were offered to other interested parties. The contracts provide for escalation based on the All Cities CPI.

RESPONSIBLE WITNESS: Jo Anne Lontz, Financial Analyst (parts a, b, c, and e)
Robert W. Freeston, Vice President & Treasurer (part d)

OCA SET VI
QUESTION NO. 29

MUNICIPALITY	(a) RATE PER BILL	(b) ACTIVE ACCOUNTS AT 12/31/00	(c) PROJECTED ACCOUNTS AT 12/31/01	(e) SERVICE COMMENCEMENT DATE
BOROUGH OF GREENTREE	$0.55	2,066	2,066	APR 2000
BALDWIN TOWNSHIP	$0.55	958	958	MAR 2000
MUNICIPALITY OF MT. LEBANON	$0.55	11,318	11,318	APR 2000
CARNEGIE BOROUGH	$0.55	3,160	3,160	APR 2000
BOROUGH OF DORMONT	$0.55	3,597	3,597	OCT 2000
MUNICIPAL AUTHORITY OF SOUTH FAYETTE	$0.55	4,512	4,512	APR 2000
BOROUGH OF HOMESTEAD	$0.55	0	0	JAN 2001
BOROUGH OF CRAFTON	$0.55	0	0	FEB 2001
CECIL TOWNSHIP	$0.55	0	2,002	FEB 2001
BOROUGH OF ELIZABETH	$0.55	681	681	JUL 1998
CITY OF WARREN	$0.55	4,326	4,326	DEC 1994
	$0.70	50	50	
BOROUGH OF NESCOPECK	$0.55	0	0	FEB 2001
MCDONALD SEWER AUTHORITY	$0.55	0	0	MAY 2001
WHITE DEER TOWNSHIP	$0.55	0	0	FEB 2001

		ACTIVE ACCOUNTS AT 6/30/01	ADJUSTED REVENUE CLAIM
BOROUGH OF HOMESTEAD	$0.55	1,304	$8,606
BOROUGH OF CRAFTON	$0.55	2,250	14,850
BOROUGH OF NESCOPECK	$0.55	524	3,458
MCDONALD SEWER AUTHORITY	$0.55	1,017	6,712
WHITE DEER TOWNSHIP	$0.55	607	4,006
TOTAL			$37,633

OCA-VI-34 Q. Regarding the $1,038,579 claimed in Account 660.8 for the future test year, please provide, in as much detail as possible, all costs that are included in this account including a breakdown of each type of advertising cost.

OCA-VI-34 A.

DESCRIPTION	AMOUNT
PUBLIC HEALTH AND SAFETY	15,701
CONSERVATION OF WATER	0
EXPLANATION OF BILLING PRACTICES	(2,579)
PROVISION OF FACTUAL AND OBJECTIVE DATA	8,199
OTHER ADVERTISING PROGRAMS	
CLASSIFIED ADVERTISING	13,125
HOLIDAY GREETINGS	268
COMMUNITY ORGANIZATIONS	16,857
DIRECTORY CHARGES	11,666
HYDRANT FLUSHING	46,378
MISCELLANEOUS	7,803
SUBTOTAL FROM EXH 3-E, BOOK #1, QUES #25	117,420
NEWS SERVICE AND AMORTIZATION OF MEDIA PROGRAM	312,443
CONSUMER CONFIDENCE REPORTS	347,891
BILL INSERTS	179,114
CUSTOMER SERVICE BROCHURE	12,257
COMPANY NEWSLETTER	25,683
PROMOTION ITEMS	18,284
MISCELLANOUS	10,445
TOTAL ACCOUNT 660.8 @ HISTORIC	1,023,537
ADDITIONAL AMOUNT FROM COATESVILLE ADJUSTMENT	15,042
TOTAL ACCOUNT 660.8 @ FUTURE	1,038,579

RESPONSIBLE WITNESS: Maria G. Balmer, Financial Analyst

OCA-VI-35 Q. Regarding page 30 of Exhibit 3-E, Book 1, please provide an explanation for the significant increase between 1999 and 2000 in a) Human Resources, b) Information Systems/Customer Billing and Accounting, and c) Information Systems/Financial costs.

OCA-VI-35 A.

a) The increase is the Human Resources area was primarily due to three factors: (1) the retention of vendors for HR consulting services ($39,000); (2) the costs incurred for the retention of Merrill Lynch as the administrator of the 401K plan ($27,000); and (3) Hewitt Consultants preparation of compensation survey information and other benefit related surveys ($53,000).

b) and c) The increase in Information Systems/Customer Billing and Accounting and Information Systems/Financial areas was primarily attributable to: (1) the addition of four associates to the payroll; (2) the use of outside consultants to provide specialized training for specific IS functions for which in-house expertise was not available; and (3) increases in the cost of equipment rentals and services.

RESPONSIBLE WITNESS: Robert W. Freeston, Vice President & Treasurer

OCA-VI-36 Q. Please provide all supporting calculations for the Company's inflation adjustment shown on page 54 of Exhibit 3-A, including the amount of each test year expense, by account, to which the inflation factor has been applied.

OCA-VI-36 A. Details for the calculation of the inflation adjustment are contained in Exhibit No. 3-E, Book 4, page 39.

RESPONSIBLE WITNESS: Maria G. Balmer, Financial Analyst

OCA-VI-37 Q. Regarding page 3 of Exhibit 3-E, Book 4, please explain what is meant by "retroactive adjustment" and provide the amount of each retroactive adjustment booked by the Company in each of the past three years.

OCA-VI-37 A. The retroactive adjustment is the reflection of the deficit cash position that has developed for the 1997-1998 and 1998-1999 casualty insurance policy years as detailed on the attached schedule.

RESPONSIBLE WITNESS: Maria G. Balmer, Financial Analyst

PENNSYLVANIA-AMERICAN WATER COMPANY
DOCKET NO. R-00016339
OCA-VI-37

POLICY	1998	1999	2000
GENERAL LIABILITY	(685,131)	(361,262)	0
WORKERS COMPENSATION	(72,959)	(25,876)	0
ALL RISK	(39,158)	0	0

OCA-IX-16 Q. What historic records does the Company have regarding numbers of customers, consumption, and/or revenues for commercial customers with meters of 2" and smaller vs. larger size meters?

OCA-IX-16 A. This information is only used by the Company to determine pro forma commercial revenue for purposes of base rate filings. If not done promptly after the close of an accounting period, the Company loses the capability to extract this information. Therefore the Company would have this information for the historic test years of its recent base rate filings, provided that the information has been retained.

RESPONSIBLE WITNESS: Jo Anne Lontz, Financial Analyst

OTS-RS-1-D Q. In reference to the Public Fire rates that are being phased-in, provide a schedule that shows:

- A) Company acquired,
- B) Number of hydrants,
- C) Rate as of December 31, 2000,
- D) Current rate,
- E) Annual increase(s),
- F) Phase in period,
- G) The final rate,
- H) Date when the rate will be final.

OTS-RS-1-D A. Please see the attached schedule. In preparing its supporting data, (Exhibit No. 3-G, p. 49), the Company incorrectly annualized public fire protection revenue for the Butler Township Water and Sewer Authority's system at $240 per year per hydrant (for 222 hydrants) and $113.64 per year per hydrant (for 2 hydrants). In its Order approving the Company's acquisition of the Butler system, the Commission specified the fire protection rates to be charged Butler Township, which are to be increased, over a five year period to $113.64 per hydrant, as shown on the attached schedule. The Company will revise its revenue claim to reflect the application of the correct rates, which will reduce pro forma present rate revenue by $48,415.

RESPONSIBLE WITNESS: Jo Anne Lontz, Financial Analyst

OTS-RS-1-D

COMPANY ACQUIRED	A-212285 DOCKET NO.	NUMBER OF HYDRANTS	ANNUAL RATE AT 12/31/2000	MONTHLY CURRENT RATE	ANNUAL CURRENT RATE	ANNUAL INCREASE	PHASE IN PERIOD	FINAL RATE	FINAL INCREASE DATE
FAIRVIEW WATER COMPANY	F0033	21	$60.00	$6.66	$80.00	$20.00	5 YEARS	$100.00	5/7/2002
CLARION TOWNSHIP	F0037	40	60.00	6.66	80.00	20.00	5 YEARS	100.00	1/28/2002
BOROUGH OF APPLWOLD WATER SYSTEM	F0060	10	96.00	12.00	144.00	48.00	5 YEARS	240.00	3/26/2003
KOPPEL WATER SYSTEM *	F0064	9	70.00	5.83	70.00	35.00	3 YEARS	105.00	11/5/2001
CENTER TOWNSHIP WATER SYSTEM *	F0066	77	42.00	3.50	42.00	21.00	5 YEARS	105.00	12/30/2003
MUNCIPAL AUTHORITY OF THE TOWNSHIP OF FRANKLIN	F0068	0	21.00	1.75	21.00	21.00	5 YEARS	105.00	8/30/2004
STRATTANVILLE BOROUGH	F0069	18	20.00	3.33	40.00	20.00	5 YEARS	100.00	4/6/2004
BUTLER TOWNSHIP AREA WATER AND SEWER AUTHORITY	F0079	222 2	240.00 113.64	1.89	22.73	22.73	5 YEARS	113.64	4/28/2005

* The rate listed on page 45 of Exhibit 3-G is the rate billed to the hydrants during the month of December 2000, not the rate in effect at 12/31/2000, this does not change the amount of the total adjustment for public fire protection.

OTS-RS-4-D Q. Provide a schedule that shows the number of Public Fire hydrants by municipality in the territory formerly served by the City of Coatesville Water Authority.

OTS-RS-4-D A. The public fire hydrants, by municipality, are shown below.

Coatesville	194
South Coatesville	38
Caln	160
East Fallowfield	20
Valley Township	26
West Caln	23
Sadsbury Township (CC)	30
West Sadsbury	2
Parkesburg	80
Atglen	1
Sadsbury Township (LC)	1
Bart	1
Eden	1
Quarryville	1
Colerain	1
Total	579

RESONSIBLE WITNESS: Jo Anne Lontz, Financial Analyst

OTS-RS-7-D Q. In reference to the Rider Contract for Thomson Consolidated Electronics shown on page 58 of PAWC Exhibit 3-A,

A) What date did the contract go into effect?

B) Provide a copy of the viable alternative information given to PAWC in order for that customer to be eligible for the rider rate.

OTS-RS-7-D A. A) The contract went into effect on December 15, 1999

B) Please refer to Attachment A.

Please note that Thomson Consumer Electronics recently announced that it is closing its plant in the third quarter of 2001. PAWC will revise its pro forma revenues at present rates to reflect this change.

RESPONSIBLE WITNESS: Paul T. Diskin, Assistant Director Rates and Revenues

ATTACHMENT A

OTS-RS - 7

THOMSON CONSUMER ELECTRONICS

1002 New Holland Avenue, Lancaster, PA 17601, U.S.A. Tel: (717) 295-2845. Fax: (717) 295-2804.

nas M. Carson
resident, Americas Tube Operations
SBU Key Components - Tubes & Displays

October 6, 1999

Robert L. Robowski
Director, Rates and Revenue
Pennsylvania American Water Company
800 West Hershey Park Drive
Hershey, PA 17033

Dear Mr. Robowski,

Thomson Consumer Electronics (TCE) desires a new water service rate for its Scranton plant under the Demand Based Industrial Service rider (Rider DIS) as described by Pennsylvania American Water Company's (PAWC) current tariff. This letter specifically addresses the prerequisite that TCE have a "viable competitive alternative" to the water service that the Scranton plant receives from PAWC in order to qualify for a Rider DIS rate.

The Scranton plant manufactures color television picture tubes. TCE also operates a picture tube plant in Marion, Indiana. The Marion plant has the ability to produce exactly the same product as the Scranton plant, and these plants compete directly with each other for production allocation. TCE allocates its production based on a wide variety of issues, including operating costs of which water service is significant. Unfortunately for the Scranton plant, the Marion plant enjoys a significantly lower water rate. TCE views this lower rate as a "viable competitive alternative" to the water service at the Scranton plant.

Based on this "viable competitive alternative", TCE can and will shift production from the Scranton plant to the Marion plant as necessary to maximize profits and growth. The Scranton plant is a major industrial customer on PAWC's system using over 263 million gallons of water in 1998, and any shift in production away from the Scranton plant would result in significant detriment to PAWC and its other customers.

TCE hopes that this letter adequately addresses the "viable competitive alternative" issue with regards to the Scranton plant's inclusion in PAWC's Rider DIS. Any further questions with regards to this matter should be directed to Mr. Larry Stalica, Manager - Energy, Facilities, and Maintenance at (570) 969-5406.

Sincerely,

Thomas M. Carson
Vice President,
Americas Tube Operations

AN ORDINANCE ESTABLISHING RATES AND CHARGES FOR THE USE OF WATER SUPPLIED BY THE WATERWORKS SYSTEM OF THE CITY OF MARION, INDIANA, AND REPEALING ALL ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT THEREWITH

WHEREAS, the Marion Utility Service Board and the Common Council of the City of rion, Indiana, have determined that the existing rates and charges for the use of water plied by the waterworks of said City to properly operate its waterworks plant, provide for preciation, maintenance, bond and interest charges, provide a return on utility plant and to ance needed extensions and additions to the waterworks system are inadequate and that the isting rates and charges should therefore be increased; and

WHEREAS, it presently appears that it is necessary that the present rate schedules of the ater Department be increased in order to charge its customers reasonable and just rates and arges for services as defined by IC 8-1.5-3-8(c); and

WHEREAS, it is necessary that the Water Department receive a reasonable rate of return its utility plant in service pursuant to IC 8-1.5-3-8(e);

NOW, THEREFORE, BE IT ORDAINED by the Common Council of the City of arion, Indiana;

SECTION I

There shall be and are hereby established for use of water supplied by the waterworks stem of the City of Marion, Indiana, the following rates and charges:

(a)

Metered Rates Per Month	Rate Per 100 Cu. Ft.
First 133 Cu. Ft.	$2.49
Next 534 Cu. Ft.	2.16
Next 9,333 Cu. Ft.	1.23
Over 10,000 Cu. Ft.	.82

(b) Minimum Charge Per Month

Each user shall pay a minimum charge in accordance with the following applicable size of meter installed, for which the user will be entitled to the quantity of water set out in the above schedule of rates at the above level of charges.

[illegible] WPS

Size of Meter	Per Month (Minimum)
5/8 Inch Meter	$6.96
3/4 Inch Meter	11.32
1 Inch Meter	19.90
1 1/2 Inch Meter	30.42
2 Inch Meter	52.19
3 Inch Meter	105.76
4 Inch Meter	211.05
6 Inch Meter	316.31
8 Inch Meter	421.59

(c) Fire Protection - Per Annum	Rates
Public Hydrant - per hydrant	$259.82
Private Hydrant - per hydrant	259.82
Sprinkler Heads - per head	.27

(d) Non-Recurring Charges	Rates
i. Reconnect Charges	
During Working Hours	$10.00
After Hours	20.00
Weekends	35.00
ii. Pool Filling Labor Charges	
Hourly Rate	$8.00
iii. Repeat Calls to Same Residence For Off-repair (3 calls)	$10.00
iv. Deposits	Approved by MUSB 8/20/92
5/8 & 3/4 Inch Meters	$60.00
1 & 1 1/2 Inch Meters	100.00
2 Inch Meters	200.00
3 Inch Meters	350.00
4 Inch Meters	650.00
6 Inch Meters	1,000.00

SECTION II

All ordinances and parts of ordinances in conflict herewith are hereby repealed.

SECTION III

This ordinance shall be in full force and effect from and after its passage, and approval [and] signing by the Mayor.

PASSED AND ADOPTED by the Common Council of the City of Marion, Indiana, this 1 day of Sept., 1992.

Presiding Officer

[A]TTEST:

[Ci]ty Clerk

PRESENTED by me to the Mayor of the City of Marion, Indiana, this 2 day of Sept, 1992.

City Clerk

APPROVED by me as Mayor of the City of Marion, Indiana, this 2nd day of Sept, 1992.

Mayor, City of Marion, Indiana

OTS-RS-13-D	Q.	Provide a schedule that shows how the $470,877 deferred revenue expense shown on page 58 of PAWC Exhibit 3-A was calculated. Explain what amortization period was selected to recover this difference and explain why that period was selected.
OTS-RS-13-D	A.	Please refer to the two schedules included in Attachment A. The amounts shown under the column labeled "total" need to be added to arrive at $470,877. As reflected in Exhibit 3-A, the Company proposed to recover these expenses over twelve months. The Company's claim should be revised to reflect a 24 month amortization, which reflects the interval between this filing and the next anticipated water base rate increase filing.

RESPONSIBLE WITNESS: Paul T. Diskin, Assistant Director Rates and Revenues

ATTACHMENT A

OTS – RS -13

RESPONSIBLE WITNESS: Paul T. Diskin, Assistant Director Rates and Revenues

	188412	401210
1/1/2000	8,029.15	-8,029.16
FEB	17,386.35	-17,306.35
MAR	22,242.22	-22,242.22
APR	19,756.60	-19,756.60
MAY	20,026.80	-20,026.80
JUN	24,569.32	-24,569.32
JUL	18,440.85	-18,440.85
AUG	21,040.77	-21,040.77
SEP	29,038.11	-20,038.11
OCT	21,945.14	-21,945.14
NOV	16,730.94	-16,730.94
DEC	19,020.13	-19,020.13
TOTAL	238,228.38	-238,228.38
TOTAL 2000	238,228.38	-238,228.38

CONTRACT RATES

CONTRACT RATES	EFFECTIVE JANUARY 2000 00 GAL RATE	
MONTHLY CUSTOMER CHARGE	$1,120.00	AS IN EFFECT IN CO. TARIFF
MAXIMUM DAY DEMAND CHARGE	7,029.60	AFTER FIRST YEAR, ADJUSTED MONTHLY
MAXIMUM HOURLY DEMAND CHARGE	5,064.80	ADJUSTED ANNUALLY
FIXED ANNUAL AVG DEMAND CHARGE	16,294.48	ADJUSTED ANNUALLY
COMMODITY CHARGE		ADJUSTED ANNUALLY

	JAN-00	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
00 GAL	146,820	182,655	202,180	191,916	193,000	211,240	187,005	197,486	229,640	199,850	178,820	187,966	2,308,355
CHARGES													
MO CUST	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$13,440.00
MAX DAY	7,029.50	7,029.50	7,029.50	7,029.50	7,029.50	7,029.50	7,029.50	7,029.50	7,029.50	7,029.50	7,029.50	7,029.50	84,354.00
MAX HRLY	5,064.80	5,064.80	5,064.80	5,064.80	5,064.80	5,064.80	5,064.80	5,064.80	5,064.80	5,064.80	5,064.80	5,064.80	60,777.60
FIXED ANNUAL	16,294.48	16,294.48	16,294.48	16,294.48	16,294.48	16,294.48	16,294.48	16,294.48	16,294.48	16,294.48	16,294.48	16,294.48	195,533.76
COMMODITY	5,256.16	6,539.05	7,238.04	6,870.56	6,909.40	7,562.39	6,694.78	7,069.25	8,221.11	7,147.47	6,401.76	6,729.16	82,639.11
TOTAL	$34,764.94	$36,047.[illegible]	$36,746.82	$36,379.34	$36,418.18	$37,071.17	$36,203.56	$36,578.03	$37,729.89	$36,656.26	$35,910.55	$36,237.93	$436,744.49

TARIFF RATES	JAN-00	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
DSIC				0.12%	0.12%	0.12%	0.39%	0.39%	0.39%	1.01%	1.01%	1.01%	
STAS							-0.44%	-0.44%	-0.44%	-0.44%	-0.44%	-0.44%	
METER CHARGE	$0.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$12,320.00
USAGE	0.00	52,314.18	57,869.04	54,948.65	55,257.33	60,446.61	53,551.75	56,527.62	65,681.41	57,149.26	51,223.12	53,824.87	$618,793.84
SUB-TOTAL	0.00	53,434.18	58,989.04	56,068.65	56,377.33	61,566.61	54,671.75	57,647.62	66,801.41	58,269.26	52,343.12	54,944.87	$631,113.84
STAS	0.00	0.00	0.00	0.00	0.00	0.00	-240.56	-253.65	-293.93	-256.38	-230.31	-241.76	-$1,516.59
DSIC	0.00	0.00	0.00	67.28	67.65	73.88	213.22	224.83	260.53	588.52	528.67	554.94	$2,579.51
TOTAL	$42,794.09	$53,434.18	$58,989.04	$56,135.93	$56,444.98	$61,640.49	$54,644.41	$57,618.80	$66,768.01	$58,601.40	$52,641.48	$55,258.05	$674,970.85
DEFERRED REV	$8,029.15	$17,386.35	$22,242.22	$19,756.60	$20,026.80	$24,569.32	$18,440.85	$21,040.77	$29,038.11	$21,945.14	$16,730.93	$19,020.13	$238,226.37

	ACCOUNT 186413	ACCOUNT 401310
1/1/2001	12,165.96	12,165.96
FEB		
MAR		
APR		
MAY		
JUN		
JUL		
AUG		
SEP		
OCT		
NOV		
DEC		
TOTAL	12,165.96	12,165.96
TOTAL 2000	12,165.96	12,165.96

CONTRACT RATES

CONTRACT RATES	EFFECTIVE JANUARY 2001 00 GAL	RATE	
MONTHLY CUSTOMER CHARGE		$1,120.00	AS IN EFFECT IN CO. TARIFF
MAXIMUM DAY DEMAND CHARGE		7,269.33	AFTER FIRST YEAR, ADJUSTED MONTHLY
MAXIMUM HOURLY DEMAND CHARGE		5,234.76	ADJUSTED ANNUALLY
FIXED ANNUAL AVG DEMAND CHARGE		16,842.80	ADJUSTED ANNUALLY
COMMODITY CHARGE			ADJUSTED ANNUALLY

	JAN A.1	FEB A-1	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
00 GAL	164,255	173,850	202,180	191,915	193,000	211,240	187,005	197,465	229,840	199,850	178,820	187,965	2,316,985
CHARGES													
MO CUST	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$13,440.00
MAX DAY	7,269.33	7,269.33	7,269.33	7,269.33	7,269.33	7,269.33	7,269.33	7,269.33	7,269.33	7,269.33	7,269.33	7,269.33	87,231.96
MAX HRLY	5,234.76	5,234.76	5,234.76	5,234.76	5,234.76	5,234.76	5,234.76	5,234.76	5,234.76	5,234.76	5,234.76	5,234.76	62,817.10
FIXED ANNUAL	16,842.80	16,842.80	16,842.80	16,842.80	16,842.80	16,842.80	16,842.80	16,842.80	16,842.80	16,842.80	16,842.80	16,842.80	202,113.60
COMMODITY	6,077.44	6,432.45	7,480.66	7,100.86	7,141.00	7,815.88	6,919.19	7,306.21	8,496.68	7,387.05	6,616.34	6,954.71	85,728.45
TOTAL	$36,544.33	$36,899.34	$37,947.55	$37,567.75	$37,607.89	$38,282.77	$37,386.08	$37,773.10	$38,963.57	$37,853.95	$37,083.24	$37,421.60	$451,331.18

TARIFF RATES	JAN-99	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
DSIC	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	
STAS	-0.0043	-0.0043	-0.0043	-0.0043	-0.0043	-0.0043	-0.0043	-0.0043	-0.0043	-0.0043	-0.0043	-0.0043	
METER CHARGE	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$13,440.00
USAGE	47,079.36	49,809.16	57,869.04	54,948.65	55,257.33	60,446.61	53,551.75	56,527.62	65,681.41	57,149.28	51,223.12	53,824.87	$663,368.20
SUB-TOTAL	48,199.36	50,929.16	58,989.04	56,068.65	56,377.33	61,566.61	54,671.75	57,647.62	66,801.41	58,269.28	52,343.12	54,944.87	$676,808.20
STAS	-207.26	-219.00	-253.65	-241.10	-242.42	-264.74	-235.09	-247.88	-287.25	-250.56	-225.08	-236.26	-$2,910.29
DSIC	718.17	758.84	878.94	835.42	840.02	917.34	814.61	858.95	995.34	868.21	779.91	818.68	$10,084.44
TOTAL	$48,710.29	$51,469.00	$59,614.33	$56,662.97	$56,974.93	$62,219.21	$55,251.27	$58,258.69	$67,509.50	$58,886.91	$52,897.95	$55,527.29	$683,982.35
DEFERRED REV	$12,165.96	$14,569.66	$21,666.77	$19,095.22	$19,367.04	$23,936.44	$17,865.19	$20,485.59	$28,545.93	$21,032.96	$15,814.71	$18,105.69	$232,651.17

12831

OTS-RS-14-D

OTS-RS-14-D Q. Provide a copy of the UCIDC agreement referenced on page V-8 of PAWC Exhibit 8-A.

OTS-RS-14-D A. A copy of the contract between Pennsylvania-American Water Company and Union County Industrial Development Corporation is attached. In February 2001, the facility was completed and the monthly minimum bill amount was increased from $10,448.08 to $21,762.40. Pro Forma revenue for this customer, as reflected in the Company's filing, was calculated at $10,448.08 per month. Consequently, the Company will revise its revenue claim for this increase as shown below.

Present Rates 2001	$261,149
Less: Per Books 2000	118,925
Adjustment	142,224

RESPONSIBLE WITNESS: Jo Anne Lontz, Rate Analyst

AGREEMENT FOR SALE OF WATER

This AGREEMENT, is made this 9th day of April, 1999, by and between PENNSYLANIA-AMERICAN WATER COMPANY, a corporation organized and existing under the laws of the Commonwealth of Pennsylvania, having an office for the transaction of business at 800 West Hershey Park Drive, Hershey, PA 17033, (hereinafter called "PAWC"), and UNION COUNTY INDUSTRIAL DEVELOPMENT CORPORATION, a corporation organized and existing under the laws of the State of Pennsylvania, having an office for the transaction of business at 219 D Hafer Road, Lewisburg, PA 17837, (hereinafter referred to as "UCIDC").

WHEREAS, UCIDC is the owner of a certain property situate in Gregg Township, Union County, Pennsylvania; and

WHEREAS, PAWC is a public utility authorized to provide water service to the public in rtion of Gregg Township, Union County, Pennsylvania; and

WHEREAS, in order for UCIDC to develop the Great Stream Commons Business Park on a certain portion of its property, it is necessary for UCIDC to provide utilities, including water supply; and

WHEREAS, UCIDC desires to purchase water from PAWC and PAWC desires to supply water to UCIDC; and

WHEREAS, it is necessary to construct additional water distribution facilities in order to supply water to UCIDC and the Great Stream Commons Business Park; and

WHEREAS, the parties desire to enter into an agreement to set forth the terms and conditions of service.

NOW THEREFORE, UCIDC and PAWC, intending to be legally bound hereby, do hereby covenant and agree as follows:

1. Upon completion of the construction of the facilities referred to in Paragraph 2 hereof, PAWC agrees to furnish and sell and UCIDC agrees to purchase from PAWC, a supply ptable water for the Great Stream Commons Business Park located in Gregg Township,

Union County, Pennsylvania, at such rates of flow and such pressures and in such quantities as are and will be available in PAWC's distribution system from time to time, and subject to such interruptions and fluctuation in service as may from time to time occur.

2. PAWC shall have its distribution system extended from its present terminus in Gregg Township approximately 8,250 feet in accordance with the drawing identified as Master Sketch Plan for Great Stream Commons attached hereto and made a part hereof as "Attachment A". This project will require the installation of 16", 12", and 8" ductile iron cement lined water line, a new distribution storage tank, and modifications to an existing booster pumping station to be owned, operated, and maintained by PAWC.

3. A meter at the point of delivery will measure the quantities of water delivered to UCIDC and serve as a basis for billing UCIDC at the regular rates of PAWC now or hereafter from time to time lawfully established.

4. UCIDC agrees that, at its own cost and expense, it will install and subsequently maintain a meter tile and all appurtenances in accordance with PAWC's specifications, which will house the meter assembly to be furnished by PAWC.

5. UCIDC shall, during each and every monthly billing period for a period of eighty-four (84) consecutive monthly billing periods, purchase from PAWC a minimum quantity of water which shall, when billed in accordance with PAWC's duly filed and approved tariff, generate charges per month ("Minimum Purchase Requirement") equal to the total amounts expended by PAWC to date on construction of the facilities divided by eighty-four (84). UCIDC agrees that if its metered water consumption does not equal or exceed the Minimum Purchase Requirement, UCIDC will pay for such additional quantities as necessary to meet such Minimum Purchase Requirement. UCIDC shall be responsible for such Minimum Purchase Requirement for a period of 84 months from the date that the facilities described at Paragraph 2 are installed and placed in service.

6. The eighty-four (84) consecutive monthly billing period, as provided for at Section 5, shall commence within thirty (30) calendar days after PAWC places in service any portion of the water distribution facilities to be installed under this Agreement. PAWC shall have the right to determine the date that the water distribution facilities or any portions thereof placed in service. The Minimum Purchase Requirement shall be recalculated as any

remaining portions of the water distribution facilities are placed in service. The recalculated Minimum Purchase Requirement shall be based on the total final cost incurred by PAWC to install the water distribution facilities less previous monthly payments made by UCIDC under the agreement. UCIDC shall pay the recalculated Minimum Purchase Requirement each and every billing period that is remaining in the eighty-four (84) month consecutive billing period established herein.

7. In the event that additional customers attach directly to and are served by the Main Extension, as distinguished from extensions or branches thereof, PAWC shall, on a regular monthly billing schedule, read all of the PAWC meters at all of the metering points along the Main Extension. PAWC shall credit the amount of such additional customer revenues towards UCIDC's Minimum Purchase Requirement. Nothing herein shall be construed to obligate UCIDC to be responsible for the water bills of the other customers.

8. Upon the execution of this Agreement, and prior to any construction of facilities by PAWC, UCIDC shall furnish to PAWC a Guaranteed Indemnity Agreement executed by Union County to guarantee payment for the Minimum Purchase Requirement.

9. PAWC and its representative, employees, agents, and contractors shall have the right to enter upon the premises of UCIDC for the purpose of testing, removing, replacing, or inspecting its meters, or making such tests or inspections as it deems necessary and it shall have the right, at its own expense, to attach any testing device or use any means which it may elect to ascertain the condition of the service pipe and other facilities.

10. UCIDC hereby agrees, in consideration of the amount of $1.00, to convey a Deed of Easement and Right-of-way for the facilities described at Paragraph 2 hereof, and in consideration of fair market value to convey a Deed for a site suitable to construct a distribution storage tank. Such conveyances shall be made by separate agreement.

11. PAWC shall at all times have the right to connect other customers to the Main Extension, and to connect water lines to the Main Extension.

12. The ownership of the Main Extension and appurtenant facilities installed hereunder shall at all times be in PAWC, its successors and assigns.

13. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

OTS-RE-12-D Q. Refer to Exhibit 3-A, page 49, and Exhibit 3-E, Book 4 of 7, page 3. Provide explanations and calculations to support each of the following adjustments:

a.	Retroactive adjustment	$533,224
b.	All Risk	$400,907
		18,041
		$418,948

OTS-RE-12-D A.

a. Please refer to Exhibit No. 3-E, Book No. 4, page 6.

b. The new All Risk policy and premium notice have not been received. The sum of $148,948 is an estimate of the premium for this coverage. This claim will be updated when the policy becomes available.

RESPONSIBLE WITNESS: Maria G. Balmer

OTS-RE-31-D Q. Refer to page 5 of Pa-American Exhibit 3-E, Book 2 of 7 (Revenue and Expense Lag). On this page the average lag days is calculated as (7.1). Explain why you used 8.6.

OTS-RE-31-D A. The average lag of 8.6 days was used in compliance with the Commission's directive in the Final Order at Docket No. R-922428

RESPONSIBLE WITNESS: Paul T. Diskin,. Assistant Director Rates and Revenues

Pa. P.U.C. Docket No. R-00016339

OSBA-I-03

OSBA-I-03 Q. Reference page 58 of Exhibit 3-A. Please provide all workpapers used to develop the deferred revenue total.

OSBA-I-03 A. Attached are two schedules setting forth the deferred revenue calculation for the years 2000 and 2001 for Thomson Consumer Electronics, which total $470,877. Thomson ceased to comply with the minimum purchase requirement set forth in its water purchase agreement. In addition, Thomson recently announced that it will close its facility in the third quarter of 2001. As a consequence, Thomson has agreed that: (1) prospectively, it will take service at the Company's industrial class rate; and (2) for service since January 1, 2001, billed at the contract rate, it will pay the Company the difference between the contract rate and the industrial class rate. Accordingly, the Company's deferred revenue claim is being revised from $470,877 to $238,226 to eliminate the claimed revenue deferral for 2001. Therefore the deferral revenue adjustment will be revised to $238,226, the amount that pertains to year 2000. The Company is also revising its revenue claim to reflect the loss of Thomson.

RESPONSIBLE WITNESS: Jo Anne Lontz, Financial Analyst

OSBA QUESTION NO. 3

THOMSON CONS ELECTRONICS - 240310125
CONTRACT DIS RATE
DEFERRED REVENUE FOR 2000

CONTRACT RATES	EFFECTIVE JANUARY 2000 00 GAL		RATE	
MONTHLY CUSTOMER CHARGE			$1,120.00	AS IN EFFECT IN CO. TARIFF
MAXIMUM DAY DEMAND CHARGE	8270	0.85	7,029.50	AFTER FIRST YEAR, ADJUSTED MONTHLY
MAXIMUM HOURLY DEMAND CHARGE	487	10.4	5,064.80	ADJUSTED ANNUALLY
FIXED ANNUAL AVG DEMAND CHARGE	7,060.00	2.308	16,294.48	ADJUSTED ANNUALLY
COMMODITY CHARGE		0.0358		ADJUSTED ANNUALLY

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
00 GAL	146,820	182,655	202,180	191,915	193,000	211,240	187,005	197,465	229,640	199,650	178,820	187,965	2,308,355
CHARGES													
MO CUST	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$13,440.00
MAX DAY	7,029.50	7,029.50	7,029.50	7,029.50	7,029.50	7,029.50	7,029.50	7,029.50	7,029.50	7,029.50	7,029.50	7,029.50	84,354.00
MAX HRLY	5,064.80	5,064.80	5,064.80	5,064.80	5,064.80	5,064.80	5,064.80	5,064.80	5,064.80	5,064.80	5,064.80	5,064.80	60,777.60
FIXED ANNUAL	16,294.48	16,294.48	16,294.48	16,294.48	16,294.48	16,294.48	16,294.48	16,294.48	16,294.48	16,294.48	16,294.48	16,294.48	195,533.76
COMMODITY	5,256.16	6,539.05	7,238.04	6,870.56	6,909.40	7,562.39	6,694.78	7,069.25	8,221.11	7,147.47	6,401.76	6,729.15	82,639.11
TOTAL	$34,764.94	$36,047.83	$36,746.82	$36,379.34	$36,418.18	$37,071.17	$36,203.56	$36,578.03	$37,729.89	$36,656.26	$35,910.55	$36,237.93	$436,744.49

TARIFF RATES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
DSIC				0.12%	0.12%	0.12%	0.39%	0.39%	0.39%	1.01%	1.01%	1.01%	
STAS							-0.44%	-0.44%	-0.44%	-0.44%	-0.44%	-0.44%	
METER CHARGE	$0.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$12,320.00
USAGE	0.00	52,314.18	57,869.04	54,948.65	55,257.33	60,446.61	53,551.75	56,527.62	65,681.41	57,149.26	51,223.12	53,824.87	$618,793.84
SUB-TOTAL	0.00	53,434.18	58,989.04	56,068.65	56,377.33	61,566.61	54,671.75	57,647.62	66,801.41	58,269.26	52,343.12	54,944.87	$631,113.84
STAS	0.00	0.00	0.00	0.00	0.00	0.00	-240.56	-253.65	-293.93	-256.38	-230.31	-241.76	-$1,516.59
DSIC	0.00	0.00	0.00	67.28	67.65	73.88	213.22	224.83	260.53	588.52	528.67	554.94	$2,579.51
TOTAL	$42,794.09	$53,434.18	$58,989.04	$56,135.93	$56,444.98	$61,640.49	$54,644.41	$57,618.80	$66,768.01	$58,601.40	$52,641.48	$55,258.05	$674,970.85
DEFERRED REV	$8,029.15	$17,386.35	$22,242.22	$19,756.60	$20,026.80	$24,569.32	$18,440.85	$21,040.77	$29,038.11	$21,945.14	$16,730.93	$19,020.13	$238,226.37

OSBA QUESTION NO. 3

THOMSON CONS ELECTRONICS - 240310125
CONTRACT DIS RATE
DEFERRED REVENUE FOR 2001

CONTRACT RATES	EFFECTIVE JANUARY 2001			
	00 GAL		RATE	
MONTHLY CUSTOMER CHARGE			$1,120.00	AS IN EFFECT IN CO. TARIFF
MAXIMUM DAY DEMAND CHARGE	8270	0.879	7,269.33	AFTER FIRST YEAR, ADJUSTED MONTHLY
MAXIMUM HOURLY DEMAND CHARGE	487	10.749	5,234.76	ADJUSTED ANNUALLY
FIXED ANNUAL AVG DEMAND CHARGE	6,320.00	2.665	16,842.80	ADJUSTED ANNUALLY
COMMODITY CHARGE		0.037		ADJUSTED ANNUALLY

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
00 GAL	164,255	173,850	202,180	191,915	193,000	211,240	187,005	197,465	229,640	199,650	178,820	187,965	2,316,985
CHARGES													
MO CUST	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$13,440.00
MAX DAY	7,269.33	7,269.33	7,269.33	7,269.33	7,269.33	7,269.33	7,269.33	7,269.33	7,269.33	7,269.33	7,269.33	7,269.33	87,231.96
MAX HRLY	5,234.76	5,234.76	5,234.76	5,234.76	5,234.76	5,234.76	5,234.76	5,234.76	5,234.76	5,234.76	5,234.76	5,234.76	62,817.16
FIXED ANNUAL	16,842.80	16,842.80	16,842.80	16,842.80	16,842.80	16,842.80	16,842.80	16,842.80	16,842.80	16,842.80	16,842.60	16,842.80	202,113.60
COMMODITY	6,077.44	6,432.45	7,480.66	7,100.86	7,141.00	7,815.88	6,919.19	7,306.21	8,496.68	7,387.05	6,616.34	6,954.71	85,728.45
TOTAL	$36,544.33	$36,899.34	$37,947.55	$37,567.75	$37,607.89	$38,282.77	$37,386.08	$37,773.10	$38,963.57	$37,853.95	$37,083.24	$37,421.60	$451,331.18

TARIFF RATES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
DSIC	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	
STAS	-0.0043	-0.0043	-0.0043	-0.0043	-0.0043	-0.0043	-0.0043	-0.0043	-0.0043	-0.0043	-0.0043	-0.0043	
METER CHARGE	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$1,120.00	$13,440.00
USAGE	47,079.38	49,809.16	57,869.04	54,948.65	55,257.33	60,446.61	53,551.75	56,527.62	65,681.41	57,149.26	51,223.12	53,824.87	$663,368.20
SUB-TOTAL	48,199.38	50,929.16	58,989.04	56,068.65	56,377.33	61,566.61	54,671.75	57,647.62	66,801.41	58,269.26	52,343.12	54,944.87	$676,808.20
STAS	-207.26	-219.00	-253.65	-241.10	-242.42	-264.74	-235.09	-247.88	-287.25	-250.56	-225.08	-236.26	-$2,910.29
DSIC	718.17	758.84	878.94	835.42	840.02	917.34	814.61	858.95	995.34	868.21	779.91	818.68	$10,084.44
TOTAL	$48,710.29	$51,469.00	$59,614.33	$56,662.97	$56,974.93	$62,219.21	$55,251.27	$58,258.69	$67,509.50	$58,886.91	$52,897.95	$55,527.29	$683,982.35
DEFERRED REV	$12,165.96	$14,569.66	$21,666.77	$19,095.22	$19,367.04	$23,936.44	$17,865.19	$20,485.59	$28,545.93	$21,032.96	$15,814.71	$18,105.69	$232,651.17

OSBA-I-09 Q. Reference page V-8 of Exhibit No. 8-A. Please provide a detailed explanation for the "UCIDC Agreement" line item.

OSBA-I-09 A. "UCIDC Agreement" refers to the Agreement for Sale of Water between Pennsylvania-American Water Company and Union County Industrial Development Corporation, a copy of which is attached. In February 2001, construction of the water distribution facilities was completed and the monthly minimum bill amount was increased from $10,448.08 to $21,762.40, in accordance with the terms of the agreement. Pro forma revenue for this customer, as reflected in the Company's filing, was calculated at $10,448.08 per month. Consequently, the Company will revise its revenue claim, as shown.

Present Rates	$261,149
Less: Per Books 2000	118,925
Adjustment	142,224

RESPONSIBLE WITNESS: Jo Anne Lontz, Financial Analyst

AGREEMENT FOR SALE OF WATER

This AGREEMENT, is made this 9th day of April, 1999, by and between PENNSYLANIA-AMERICAN WATER COMPANY, a corporation organized and existing under the laws of the Commonwealth of Pennsylvania, having an office for the transaction of business at 800 West Hershey Park Drive, Hershey, PA 17033, (hereinafter called "PAWC"), and UNION COUNTY INDUSTRIAL DEVELOPMENT CORPORATION, a corporation organized and existing under the laws of the State of Pennsylvania, having an office for the transaction of business at 219 D Hafer Road, Lewisburg, PA 17837, (hereinafter referred to as "UCIDC").

WHEREAS, UCIDC is the owner of a certain property situate in Gregg Township, Union County, Pennsylvania; and

WHEREAS, PAWC is a public utility authorized to provide water service to the public in portion of Gregg Township, Union County, Pennsylvania; and

WHEREAS, in order for UCIDC to develop the Great Stream Commons Business Park on a certain portion of its property, it is necessary for UCIDC to provide utilities, including water supply; and

WHEREAS, UCIDC desires to purchase water from PAWC and PAWC desires to supply water to UCIDC; and

WHEREAS, it is necessary to construct additional water distribution facilities in order to supply water to UCIDC and the Great Stream Commons Business Park; and

WHEREAS, the parties desire to enter into an agreement to set forth the terms and conditions of service.

NOW THEREFORE, UCIDC and PAWC, intending to be legally bound hereby, do hereby covenant and agree as follows:

1. Upon completion of the construction of the facilities referred to in Paragraph 2 ...of, PAWC agrees to furnish and sell and UCIDC agrees to purchase from PAWC, a supply of potable water for the Great Stream Commons Business Park located in Gregg Township,

Union County, Pennsylvania, at such rates of flow and such pressures and in such quantities as are and will be available in PAWC's distribution system from time to time, and subject to such interruptions and fluctuation in service as may from time to time occur.

2. PAWC shall have its distribution system extended from its present terminus in Gregg Township approximately 8,250 feet in accordance with the drawing identified as Master Sketch Plan for Great Stream Commons attached hereto and made a part hereof as "Attachment A". This project will require the installation of 16", 12", and 8" ductile iron cement lined water line, a new distribution storage tank, and modifications to an existing booster pumping station to be owned, operated, and maintained by PAWC.

3. A meter at the point of delivery will measure the quantities of water delivered to UCIDC and serve as a basis for billing UCIDC at the regular rates of PAWC now or hereafter from time to time lawfully established.

4. UCIDC agrees that, at its own cost and expense, it will install and subsequently maintain a meter tile and all appurtenances in accordance with PAWC's specifications, which [illegible]ll house the meter assembly to be furnished by PAWC.

5. UCIDC shall, during each and every monthly billing period for a period of eighty-four (84) consecutive monthly billing periods, purchase from PAWC a minimum quantity of water which shall, when billed in accordance with PAWC's duly filed and approved tariff, generate charges per month ("Minimum Purchase Requirement") equal to the total amounts expended by PAWC to date on construction of the facilities divided by eighty-four (84). UCIDC agrees that if its metered water consumption does not equal or exceed the Minimum Purchase Requirement, UCIDC will pay for such additional quantities as necessary to meet such Minimum Purchase Requirement. UCIDC shall be responsible for such Minimum Purchase Requirement for a period of 84 months from the date that the facilities described at Paragraph 2 are installed and placed in service.

6. The eighty-four (84) consecutive monthly billing period, as provided for at Section 5, shall commence within thirty (30) calendar days after PAWC places in service any portion of the water distribution facilities to be installed under this Agreement. PAWC shall [illegible] the right to determine the date that the water distribution facilities or any portions thereof are placed in service. The Minimum Purchase Requirement shall be recalculated as any

remaining portions of the water distribution facilities are placed in service. The recalculated Minimum Purchase Requirement shall be based on the total final cost incurred by PAWC to install the water distribution facilities less previous monthly payments made by UCIDC under the agreement. UCIDC shall pay the recalculated Minimum Purchase Requirement each and every billing period that is remaining in the eighty-four (84) month consecutive billing period established herein.

7. In the event that additional customers attach directly to and are served by the Main Extension, as distinguished from extensions or branches thereof, PAWC shall, on a regular monthly billing schedule, read all of the PAWC meters at all of the metering points along the Main Extension. PAWC shall credit the amount of such additional customer revenues towards UCIDC's Minimum Purchase Requirement. Nothing herein shall be construed to obligate UCIDC to be responsible for the water bills of the other customers.

8. Upon the execution of this Agreement, and prior to any construction of facilities by PAWC, UCIDC shall furnish to PAWC a Guaranteed Indemnity Agreement executed by Union County to guarantee payment for the Minimum Purchase Requirement.

9. PAWC and its representative, employees, agents, and contractors shall have the right to enter upon the premises of UCIDC for the purpose of testing, removing, replacing, or inspecting its meters, or making such tests or inspections as it deems necessary and it shall have the right, at its own expense, to attach any testing device or use any means which it may elect to ascertain the condition of the service pipe and other facilities.

10. UCIDC hereby agrees, in consideration of the amount of $1.00, to convey a Deed of Easement and Right-of-way for the facilities described at Paragraph 2 hereof, and in consideration of fair market value to convey a Deed for a site suitable to construct a distribution storage tank. Such conveyances shall be made by separate agreement.

11. PAWC shall at all times have the right to connect other customers to the Main Extension, and to connect water lines to the Main Extension.

12. The ownership of the Main Extension and appurtenant facilities installed hereunder shall at all times be in PAWC, its successors and assigns.

13. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

14. This Agreement constitutes the entire understanding by and between the parties hereto, except as subject to the rules and regulations of PAWC's duly filed and approved tariff.

15. All notices, demands, requests, or other communications hereunder shall be deemed sufficient and properly given if in writing and delivered in person to the following address (or such other or additional addresses provided by notice to the other party) or sent by certified or registered mail, postage prepaid with return receipt requested at such addresses:

Pennsylvania-American Water Company
800 West Hershey Park Drive
Hershey, PA 17033

AND
Union County Industrial Development Corporation
219 D Hafer Road
Lewisburg, PA 17837

16. This Agreement shall be construed in accordance with the laws of the Commonwealth of Pennsylvania.

17. This Agreement is conditioned upon approval by the Pennsylvania Public Utility Commission, to the extent such approval is required.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by the respective duly authorized officers, under their respective seals, as of the day and year first above written.

ATTEST

Union County Industrial Development Corporation

(Seal)

TITLE

ATTEST

Pennsylvania-American Water Company

Secretary (Seal)

(Vice President)