



In the Matter of the Application)
of the **Citizens Utilities Company of**)
Ohio for an Increase in the Rates)
and Charges for Water and Wastewater)
Services, Franklin and Portage)
Counties, Ohio and to Amend the)
Tariffs.)

Case No. 98-178-WS-AIR

**STAFF'S REPORT
OF
INVESTIGATION**

**In the Matter of the Application)
of the Citizens Utilities Company of)
Ohio for an Increase in the Rates)
and Charges for Water and Wastewater)
Services, Franklin and Portage)
Counties, Ohio and to Amend the)
Tariffs.)**

Case No. 98-178-WS-AIR

**Submitted
to
The Public Utilities Commission**

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application)
of the Citizens Utilities Company of)
Ohio for an Increase in the Rates)
and Charges for Water and Wastewater) Case No. 98-178-WS-AIR
Services, Franklin and Portage)
Counties, Ohio and to Amend the)
Tariffs.)

Craig A. Glazer, Chairman
Ronda Hartman Fergus, Commissioner
Jolynn Barry Butler, Commissioner
Judith A. Jones, Commissioner
Donald L. Mason, Commissioner

To The Honorable Commission:

In accordance with the provisions of R.C. section 4909.19, the Commission's Staff has conducted its investigation in the above matter and hereby submits its findings in the within Staff Report.

The Staff Report has been jointly prepared by the Commission's Utilities Department and Consumer Services Department.

The Utilities Department sections were prepared under the overall supervision of Kerry M. Stroup. The Accounts and Audits portion of the report was prepared under the supervision of David R. Hodgden, the rate of return portion was prepared under the supervision of Stephen E. Puican, and the Rates and Tariffs portion was prepared under the supervision of Douglas R. Maag.

The Consumer Services Department section was prepared under the overall supervision of Deborah Gnann. The Compliance portion of the report was prepared under the supervision of Michael R. Weiss and the Public Interest Center portion of the report was prepared under the supervision of Lisa M. Colosimo.

In accordance with R.C. Section 4909.19, copies of the Staff Report have been filed with the Docketing Division of the Commission and served by certified mail upon the mayors of all affected municipalities and other public officials deemed representative of the service area affected by the application. A copy of said report has also been served upon the utility or its authorized representative. Interested parties are advised that written objections to any portion of the Staff Report must be filed within thirty (30) days of the date of the filing of said report after which time the Commission will promptly set this matter for public hearing. Written notice of the time, place, and date of such hearing will be served upon all parties to the proceeding.

The Staff Report is intended to present for the Commission's consideration the results of the Staff's investigation. It does not purport to reflect the views of the Commission nor should any party to said proceeding consider the Commission as bound in any manner by the representations or recommendations set forth therein. The Staff Report, however, is legally cognizable evidence upon which the Commission may rely in reaching its decision in this matter. (See Lindsey, et. al. v. PUC, 111 O.S. 6)

Respectfully submitted,
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BACKGROUND

The Applicant, Citizens Utilities Company of Ohio (Citizens) formerly known as Ohio Utilities Company, is an Ohio Corporation authorized to engage in the business of supplying water and wastewater service in Franklin County, Ohio and water service in Portage County, Ohio. Since 1973, it has been an operating subsidiary of the Citizens Utilities Company, Stamford, Connecticut.

The Applicant owns and operates water and wastewater treatment facilities serving approximately 8,465 customers in five physically separate locations within Franklin County: Huber Ridge subdivision in Blendon Township, Blacklick Estates in Metazoan Township, Lake Darby Estates in Prairie and Brown Townships, Timberbrook subdivision (water only) in Norwich Township and the Worthington Hills subdivision (water only) in Perry and Sharon Townships. Additionally, the Applicant owns and operates water treatment facilities in Brimfield and Shalersville Townships, Portage County. Each location is distinct in nature and character as to the number of customer served, design and treatment capabilities, physical age and general condition. The source of water supply for all seven locations is from drilled wells.

In Ohio Utilities, Case No. 90-1233-WS-AIR, the Opinion and Order approved a stipulation between Citizens, the Staff, and OCC that, provided for creation of a consumer advisory panel (CAP) and for a study of the water in four of the Company's operating districts (Huber Ridge, Blacklick Estates, Lake Darby Estates, and Timberbrook Estates) to determine feasibility options, and costs of treatment to reduce total dissolved solids (TDS). The Commission's Opinion and Order opened a Commission Ordered Investigation, Case No. 92-550-WS-COI, to monitor the company's actions. Pursuant to the stipulation, the company contacted Poggemeyer Design Group, Inc. to conduct the TDS study. The TDS study recommended the installation of reverse osmosis (RO) equipment in each of the four operating districts.

The CAP polled the Company's customers by operating district to determine if the customers desired treatment of the water to reduce total dissolved solids. Given the poll results in each district, the CAP only recommended the installation of RO equipment for the Huber Ridge operating district.

Citizens, the Staff, and OCC signed a Joint Stipulation and Recommendation in Case No. 92-550-WS-COI, recommending that the Commission approve implementation of the RO process in the Huber Ridge operating district and a surcharge to the Huber Ridge customers.

On March 26, 1997, the Applicant submitted for review the cost of purchasing, constructing, and operating and maintaining the RO equipment which began operating in the Huber Ridge service area on March 26, 1997. By its Entry of May 15, 1997, the Commission approved the Special Billing to the Huber Ridge district effective May 23, 1997.

On January 30, 1998, the Applicant filed a notice with the Commission of its intent to file an application for an increase in rates in all seven locations. By its Entry of March 12, 1998, the Commission approved the requested test period beginning April 1, 1997, and ending March 31, 1998, and a date certain of September 30, 1997.

On April 23, 1998, the Applicant filed revised Schedules E-3.2, E-4, E-5 and supplemental testimony of James S. Duda.

The Applicant has proposed a phase-in of rates in this proceeding. Citizens is proposing to recover one-half the proposed increase during the first year. During the second year, Citizens is proposing to recover the remaining one-half of the increase, in addition to carrying costs equal to the pre-tax cost of capital approved in this proceeding. In the third year, Citizens proposes to be made whole by recovering the one-half of the increase not recovered in year one, plus associated capital carrying costs. In the fourth year of the phase-in, rates would be equal to the second year's rates, less the capital carrying costs.

The Applicant's current permanent rates and charges were established in Case No. 94-1237-WS-AIR by order of this Commission with an effective date of June 22, 1995.

OPERATING INCOME AND RATE BASE

SCHEDULE FORMAT

The Staff has prepared separate revenue requirement calculations for the water, wastewater and combined operations. Schedules A-1 (Total Company) through C-4 (Total Company) detail the calculation of the combined operation. Schedules A-1 (Water) through C-4 (Water) and A-1 (Wastewater) through C-4 (Wastewater) separate the calculations.

SCOPE OF INVESTIGATION

The scope of investigation was designed to determine if the Applicant's filed exhibits concerning the test year operating income, rate base and other data are reasonable for ratemaking purposes and if the financial and statistical records supporting the data can be relied upon. The Staff interviewed the Applicant's key management personnel and reviewed both internal and published financial reports to assure understanding of the Applicant's operations and organization. The Staff's investigation of test year operating income included a review of the Applicant's budget and forecasting techniques, verification of the operating revenue computation and the reasonableness and appropriateness of the operating expenses. The original cost of the property was tested for reasonableness through an examination of the Applicant's continuing property records. In addition, the existence and used and useful nature of the assets were verified through physical inspections. Other independent analysis were performed as the Staff considered necessary under the circumstances.

The Applicant proposed various adjustments to operating income and rate base. The Staff reviewed and analyzed these proposed adjustments to operating income and rate base and traced them to supporting workpapers and to source documents. As a result of its reviews and analyses, the Staff accepted some of the proposed adjustments as appropriate, changed some of the proposed adjustments using alternative approaches and/or proposed new adjustments as required to make the test year operating income and date certain rate base consistent with sound regulatory accounting practices, more representative of normal operations and appropriate for ratemaking purposes.

The purpose of the Staff's investigation was to develop financial data for ratemaking purposes; it was not intended to provide a basis for expressing an opinion on the financial statements of the company as a whole. The following sections of this report summarize the results of the Staff investigation which it believes are relevant to the determination of test year operating income and date certain rate base.

ALLOCATIONS

Although the jurisdictional rate area in this proceeding constitutes the Applicant's entire service territory, various allocations are necessary to cover charges from the Stamford administrative office. As an operating subsidiary of Citizens Utilities, various charges are billed directly to Citizens Utilities Company of Ohio and all others are allocated by use of a four-factor formula which is based on equally weighted components of plant in service, number of connections, O&M expenses, and payroll charged to O&M. Additionally, Citizens Utilities maintains a service office in Illinois to provide support to the water/wastewater operating companies located in Illinois, Ohio and Pennsylvania. The Illinois office charges are passed on to the operating company the same way as are the Stamford office charges. The Applicant used the four factor formula based on the year ending December 31, 1996. The Staff used the four factor formula based on a four year average 1994 though 1997.

Some allocations were required between water and wastewater operations because of the need for separate revenue requirements. Plant in service was directly assigned except for general plant which was common. Common general plant was allocated 46.57% to water and 53.43% to wastewater.

Operating revenues were readily identifiable and were directly assigned. Some operation and maintenance labor and labor related costs including payroll taxes were directly assignable. Property taxes were allocated based on a plant in service ratio. The PUCO and OCC assessments were allocated based on test year adjusted revenues. Also, most of the remaining O&M expenses were directly assignable with the exception of customer accounting and, administrative and general expenses. These two categories were allocated based on the number of customer bills. Federal income taxes were calculated individually.

REVENUE REQUIREMENTS

Schedule A-1, sets forth the Staff's determination of the Applicant's revenue requirements. The Staff has recommended a revenue increase for total company of \$1,004,484. This represents an increase of 19.36% over current base rate operating revenue. On a stand alone basis, water only, the Staff has recommended a revenue increase of \$224,457. This represents an increase of 7.69% over current base rate operating revenue. For wastewater only, the Staff has recommended an increase of \$720,234. This represents an increase of 31.69% over base rate operating revenue. This determination is based on the Staff's examination of the accounts and records of the Applicant for the twelve months ended March 31, 1998, as summarized in this report and the schedules which incorporate the Staff's recommended rate of return, rate base, and adjusted test year operating income.

PHASE-IN

The Staff has reviewed the Applicant's phase-in proposal and believes the approach taken by Citizens will minimize rate shock to the Applicant's customer's while at the same time providing for a fully compensatory phase-in of the revenue deficiency to the Applicant. If the phase-in plan is adopted by the Commission the Staff would recommend implementing one-half the Staff's recommended revenue deficiency, during the first year. During the second year, the Staff would recommend implementing the remaining one-half the Staff's recommended revenue deficiency plus carrying costs of the deferred revenue deficiency from the first year. In the third year, the Applicant would recover the deferred revenue plus carrying costs. In the fourth year of the phase-in, revenue would return to the Staff's original revenue requirement.

The following table shows the results for each of the four years:

<u>Year</u>	<u>Revenue Requirement</u>	<u>Revenue Increase</u>	<u>% Increase</u>
Phase 1	\$ 5,691,632	\$ 502,242	9.68%
Phase 2	\$ 6,251,330	\$ 559,698	9.83%
Phase 3	\$ 6,753,572	\$ 502,242	8.03%
Phase 4	\$ 6,193,874	\$ (559,698)	(8.29)%

RATE BASE

The rate base represents the net value of the Applicant's property and other assets as of the date certain, September 30, 1997, that were used and useful in providing utility service for the convenience and necessity of the public. The Staff's analysis of rate base is divided into Plant In Service, Depreciation, Construction Work In Progress, Working Capital and Other Rate Base Items.

The Staff's recommended rate base is shown on Schedule B-1. Schedules B-2 through B-6 provide additional support for the Staff's figures.

Plant In Service

The Applicant's plant in service represents the surviving original cost of the plant that is used and useful in utility service to the Applicant's customers. The Staff verified the date certain, surviving original cost of plant in service by examining a sample of work orders to ensure that each job was authorized, the proper original

cost was timely booked, material and labor were properly capitalized, and additions, improvements and retirements were properly made and timely recorded. The used and useful nature of property in the sample was verified through physical inspection. As a result of its investigation, the Staff recommends the following adjustments to plant as shown on Schedule B-2.1 and summarized on Schedule B-2.2. Staff's Schedules B-2.2a through B-2.2f provide detail.

1997 Overhead True-Ups (Water & Wastewater)

The Applicant's 1997 plant additions included budgeted overheads. The Staff adjusted date certain September 30, 1997, plant additions by including the actual overheads charged to each account. The adjustments by account are detailed on Staff's Schedule B-2.2a.

Valley CIAC Plant Not Recorded (Water)

The Applicant and Staff adjusted plant in service to include Valley Utility Company Contributions in Aid of Construction ("CIAC") plant approved in Case No. 92-581-WW-AIR but were never recorded when Ohio Utilities Company purchased Valley Utility Company. This adjustment is presented on Staff's Schedule B-2.2b.

Brimfield Plant (Water)

In Case No. 94-1237-WS-AIR The Staff and the Applicant stipulated two adjustments to excluded \$29,060, from account 314 Wells and Springs and \$32,184, in Electric Pumping Equipment account 325 the original cost associated with Wells 1 through 3 that were no longer in service. During the review of plant in service in this case the Staff determined the Applicant had not removed those two items from its books. The Staff recommends the Commission order the Company to take these two items off the books of the company. The adjustment is shown on Staff's Schedule B-2.2c.

Blacklick Legal (Wastewater)

During the review of plant in service the Staff discovered the Applicant had capitalized legal fees associated with a fine levied against the company by the OEPA for exceeding their discharge levels. The Staff excluded these fees since it does not recognize penalties for not operating within the perimeters established by the OEPA. The adjustment is shown on Staff's Schedule B-2.2d.

Blacklick Deferred Debit (Wastewater)

The Applicant's unadjusted plant in service included an adjustment for ratemaking purposes to include costs that had been deferred and forgotten associated with inflow and infiltration preliminary engineering work done in the early 1990's. The Staff adjusted plant in service to exclude those costs since the Staff cannot determine if those costs were included in plant in service from

Case No. 94-1237-WS-AIR. The adjustment is presented on Staff's Schedule B-2.2e.

Lake Darby Deferred Debit (Wastewater)

The Applicant's unadjusted plant in service included an adjustment for ratemaking purposes to include costs that had been deferred and forgotten associated with a preliminary engineering report to support an application to the OEPA to expand the treatment capacity of the Lake Darby Wastewater Treatment Facility. The Staff adjusted plant in service to exclude those costs since they were incurred prior to Case No. 94-1237-WS-AIR and the Staff cannot determine if those costs were included in plant in service from that case. The adjustment is presented on Staff's Schedule B-2.2f.

Stamford Administrative Office Allocation

The Applicant has allocated to jurisdictional plant in service the leasehold improvements, office furniture and various equipment used at the administrative office of Citizens Utilities Company in Stamford, Connecticut. Inclusion of these items, was approved by the Commission in Case No. 81-426-WS-AIR. The Staff concurs with this allocation. For presentation purposes the balances are included in the unadjusted jurisdictional amount of the Stamford plant accounts on Water and Wastewater Staff Schedules B-2.1. The Applicant however, presented its common plant as a separate line item on Applicant's Schedule B-1.

Capitalization of Overheads, AFUDC and Post-In-Service Carrying Charges

The Applicant reduced plant in service by the amount of \$544,810, with associated adjustments to depreciation reserve and depreciation expense. This relates to the capitalization of overheads and AFUDC for the years 1962 to 1973. This is the same adjustment made in the Applicant's prior cases starting with Case No. 78-1421-WS-AIR. Additionally, the Applicant increased plant by \$128,960, to reflect the capitalization of post-in-service carrying charges (PISCCS) covering the improvements to the Blacklick wastewater treatment plant as authorized by the Opinion and Order in Case No. 90-1233-WS-AIR. The Balances are included in the unadjusted jurisdictional amounts of the Water and Wastewater Schedules B-2.1.

Depreciation

Depreciation is a process which distributes the original cost of depreciable assets, adjusted for net salvage, over the normal useful life of the property in a systematic and rational manner. The Staff's investigation of depreciation is segregated into two areas: Depreciation Reserve, and Depreciation Accrual Rates and the corresponding Depreciation Expense. Each of these areas is discussed in detail in the following sections.

Depreciation Reserve

The Applicant maintains depreciation reserve by account. In order to determine if the Applicant's booked reserve for depreciation is proper and adequate, the Staff generally finds it useful to compare the booked reserve with a calculated theoretical reserve as a guide as to whether past accrual rate calculations have been appropriate. The Staff compared the Applicant's booked reserve level with a calculated theoretical reserve, based on the current accrual rates and September 30, 1997 plant balances. The results of this study indicate a difference between the actual and the theoretical reserves (net of CIAC) of 3.51%. In Case No. 94-1237-WS-AIR the Applicant was granted a ten year amortization of a reserve deficiency of \$1,076,385. Even though the difference between the actual and theoretical reserves is currently within the Staff's general benchmark of 5%, the Staff recommends that the current annual amortization of \$107,639 be continued for this case. The Staff will continue monitoring the magnitude of the reserve deficiency in future cases.

The Staff believes that the actual jurisdictional reserve for depreciation, as adjusted and shown on Schedule B-3, is proper and adequate and recommends its use for purposes of this proceeding. The Staff's adjustments are summarized on summarized on Schedule B-3.1. Staff's Schedules B-3.1a through B-3.1f provide detail.

1997 Overhead True-Ups (Water & Wastewater)

The Staff adjusted the Applicant's reserve associated with the plant exclusions of the Applicant's plant relative to overheads. The Staff's adjustments are shown on Water Schedule B-3.1a and Wastewater Schedule B-3.1a.

Valley CIAC Plant Not Recorded (Water)

The Staff adjusted the Applicant's reserve associated with the Valley Utility CIAC plant approved in Case No. 92-581-WW-AIR, but not recorded. The adjustments are shown on Staff's Schedule B-3.1b.

Brimfield (Water)

The Staff adjusted the Applicant's reserve associated with the plant in service adjustments to Accounts 314 and 325 made by the Staff in Case No. 94-1237-WS-AIR but not booked by the Applicant. The adjustments are shown on Staff's Schedule B-3.1c.

Blacklick Legal (Wastewater)

The Staff adjusted the Applicant's reserve associated with the plant in service exclusion of the legal fees that had been capitalized by the Applicant. The adjustment is shown on Staff's Schedule B-3.1d.

Blacklick Deferred Debit (Wastewater)

The Staff adjusted the Applicant's reserve associated with the plant in service exclusions of the inflow and infiltration preliminary engineering costs. The adjustment is shown on Staff's Schedule B-3.1e.

Lake Darby Deferred Debit (Wastewater)

The Staff adjusted the Applicant's reserve associated with the plant in service exclusions of the costs relative to expanding the Lake Darby Wastewater Treatment Facility. The adjustment is shown on Staff's Schedule B-3.1f.

Depreciation Accrual Rates and Expense

The Applicant's current accrual rates were prescribed in Case No. 94-1237-WS-AIR and were effective on July 1, 1995. The Staff is of the opinion that the current accrual rates are proper and adequate for use in this case. In addition, the Staff recommends an accrual rate of 2.50% (Average Service Life of 40 years and a Net Salvage of 0%) for Account 341, Structures and Improvements, a new account classification in this proceeding.

The Staff's calculation of depreciation expense, based on the jurisdictional plant in service balances at date certain and the accrual rates discussed above, is shown on Water Schedule B-3.2 and Wastewater Schedule B-3.2. The Staff's calculation includes one tenth of the reserve deficiency discussed above separated appropriately for water and wastewater. In addition, the Staff's calculation of depreciation expense was reduced by the depreciation expense associated with CIAC and AFUDC.

Construction Work In Progress (CWIP)

The Applicant did not request an allowance for CWIP in this case and, as indicated on Schedule B-4, the Staff recommends none.

Working Capital

Working Capital has been generally defined as the average amount of capital provided by investors in the company, over and above the investment in plant and other specifically identified rate base items, to bridge the gap between the time that expenditures are required to provide service and the time collections are received for this service.

The Staff's working capital calculation is based on a formula comprised of several components. The formula contains a revenue lag allowance and an expense lag

allowance, determined using lead or lag days derived from a lead/lag study, and an allowance for materials and supplies.

Historically, the Staff determined the working capital allowance for Citizens based upon a formula approach which utilized one-eighth of operation and maintenance expense. Customer's deposits, one-fourth of adjusted taxes other than income taxes (excluding FICA and the .75% portion of Ohio gross receipts tax) were used to partially offset working capital. However, in the present case the Applicant calculated an allowance for working capital based on a lead/lag study.

The Staff reviewed Applicant's lead/lag analysis to determine if the accounting practices or payment patterns established by the Applicant were reliable. As a result of this review, the Staff found the Applicant's calculation of expense days related to other operations and maintenance, administrative and general (other O&M, A&G) to be incorrect. In calculating other O&M, A&G expense days the Applicant added the weighted average of randomly selected invoices to determine its 10.30 days. The Staff calculated 32.34 days based on the service period and payment date of the same randomly selected invoices. Also, the Staff used the results of the Ohio-American Company's Case No. 95-935-WW-AIR lead/lag study in determining the following expense lag days; tank painting expense 22.0 days, current federal income tax expense 37.0 days, the 4.0% portion of Ohio gross receipts tax expense 138.0 days, the .75% portion of Ohio gross receipts tax expense -77.0 days, the interest on long-term debt 90 days, and the balance available for preferred dividends 46.0 days.

There is no materials and supplies component in this case as the Applicant does not maintain a materials and supplies inventory for repair purposes.

The Staff does not recommend a working capital allowance in this case. The Staff's calculations for revenue and expense lags are shown on Schedule B-5.

Other Rate Base Items

As shown on Schedule B-6, the Staff reduced the rate base by the customer's deposits account, customer advances for construction, the deferred taxes resulting from tax accelerated depreciation and the contributions in aid of construction. The Staff also included an estimated balance for first-time normalized items.

OPERATING INCOME

The Applicant's test year operating income consists of six months of actual data covering the period April 1, 1997, to September 30, 1997, with six months of forecasted data for the period October 1, 1997, to March 31, 1998. The Applicant's test year revenue was based on actual sales for the for the first six months of 1997 and

the remaining six forecasted months were based on actual sales for the same period in 1996.

The Staff's proforma operating income is the Staff's adjusted test year operating income modified to reflect the Applicant's proposed increase in revenue, uncollectible accounts, Ohio gross receipts tax, and federal income tax.

Schedules C-1 and C-2 present the Staff's determination of operating income. The calculations, methodologies and rationale used to develop the Staff's adjusted and proforma operating income are detailed on Schedules A-1.1, C-1.1, C-1.1a, C-3.1 through C-3.19 and C-4.

Proforma Adjustments

Schedule C-1 shows the proposed increase in operating revenues based on the Applicant's proposed rates, forfeited discounts and associated increases in uncollectibles, Ohio gross receipts taxes, and federal income tax.

Current Adjustments

The Staff's recommended adjustments to operating income are as follows:

Water Sales Revenue

The Applicant adjusted the base revenues by normalizing consumption volumes for basic water and water softening, and normalizing and annualizing consumption volumes for reverse osmosis. The normalization calculation was based on a 27-month average consumption level for the period of July 1995 through September 1997.

The Staff utilized actual consumption volumes for the period April 1997 through March 1998. The Staff's adjustment is presented on Schedule C-3.1.

Forfeited Discounts

The Applicant adjusted forfeited discounts to eliminate these revenues from the test year. Currently, a late payment penalty is assessed to customers who make payments later than 15 days of the mailing of the bill. The Applicant has determined that most of their customers cannot meet the deadline and proposes to eliminate the late payment fee. Consistent with the Energy and Water Division's recommendation to keep forfeited discounts, the Staff adjusted forfeited discounts using a ratio based on a four-year average (1994-1997). The ratio is applied to the Staff's adjusted revenue and is shown on Schedule C-3.2.

Other Revenue

Both the Applicant and the Staff adjusted other revenue to increase the return check fee from \$10 to \$20. Included in the adjustment was thirty minutes of labor at \$6 per half hour to process the returned checks. The Staff's calculation is presented on Schedule C-3.3.

Salaries and Wage Expense

The Applicant adjusted test year labor expense to reflect projected test year end level of employees and wages. The Applicant's projected test year end level of wages included wage increases for exempt and non-exempt, non-union classified employees. The Applicant also applied a five-month average overtime and O&M ratios in calculating the projected test year end level of wages.

The Staff annualized test year labor expense by using the test year end number of employees and hourly wage rates. The Staff has eliminated labor costs associated with one new meter reader from its calculation since the Applicant did not fill this position by the end of the test year. The Staff also applied a five-year average overtime and O&M ratios in calculating the annualized test year labor expense. The Staff's adjustment is shown on Schedule C-3.4.

Purchased Power and Water Expense

The Applicant adjusted purchased power expense based on the normalization adjustment to the consumption volumes. The purchased power rate per ccf was multiplied by the additional volumes resulting from normalized consumption.

The Staff did not utilize the normalization adjustment for consumption, therefore the portion of the purchased power adjustment based on this normalization was not included. The Staff's adjusted purchased power expense is based on the actual test year expense.

The Applicant's purchased water expense represents a five-year average of actual purchased water expense. Included in the five-year average are two abnormal years in which the company had to perform extraordinary maintenance to replace aerolater filters and paint a storage tank.

The Staff did not adjust purchased water expense. The Staff is of the opinion the Applicant's test year purchased water expense reflects a normal expense level.

The Staff's purchased power and water expense adjustment is presented on Schedule C-3.5.

Materials, Services and Misc.

The Applicant's adjusted materials, services and miscellaneous expenses covered six principal cost classifications: well testing, utilities, sludge hauling, chemicals, tank painting, and other repair parts and materials. The Applicant's adjusted materials, services and miscellaneous expense reflects an adjustment made to account 626.220, 643.030, and 742.230. This adjustment attempts to reflect a normal year of utility power expense after the reclassification of non-pumping power utility expenses to the pumping power account. However, the expenses for account 742.230 were over-estimated by \$22,000. The Applicant also included a total of \$32,355, of tank painting expense over ten years. The Staff did not recognize this amount, however, included \$37,146, as the Staff's adjusted test year tank painting expense. This adjustment is reflected on Staff's Schedule 3.6a. The Staff's adjusted materials, services and miscellaneous expense reflects actual test year expense. The Staff's adjustment is presented on Schedule C-3.6.

Tank Painting Expense

As previously noted under the Materials, Services and Miscellaneous Expense adjustment, the Applicant included \$32,355, for tank painting. This amount was based on the amortization of prior painting and repair costs over the expected life of the paint job. The Staff's allowance is based on a combination of prior painting jobs and one future contract for a elevated storage tank (Blacklick District) to be painted in 1999. The aggregate cost of \$371,461, was then amortized over ten years. The Staff's adjustment is shown on Schedule 3.6a.

Miscellaneous and Per Diem Expense

The Staff adjusted operating expenses to exclude \$1,365, in charitable contributions which should have been classified below the line. The Staff's adjustment is presented on Schedule 3.7.

Reclassification of Interest on Customer's Deposits Expense

Consistent with the treatment of customer's deposits as a reduction to rate base, the Staff has reclassified the interest expense associated with these deposits to operating expense. This adjustment is shown on Schedule C-3.8.

Uncollectible Accounts Expense

Test year uncollectible accounts expense was adjusted to reflect the Staff's adjustments to operating revenue. The Staff used an uncollectible rate derived from a four-year average of uncollectible expense to total revenues. The Staff's adjustment is shown on Schedule C-3.9.

Administrative Office Expense

The Applicant adjusted test year administrative office corporate, administrative office sector, and other administrative services expenses by applying a four percent inflation factor to the total 1997 annual budgeted cost.

The Staff adjusted the administrative office corporate and administrative office sector test year expense by reflecting a normalized level of expense using an average of the actual expense for the years 1994 through 1997.

The Staff adjusted the test year other administrative services expense by utilizing the actual expense for the year 1997. The Staff also reflected an exclusion of all 1997 expense related to the legal services included in the other administrative services expense.

The Staff's adjustment is shown on Schedule C-3.10.

Legal and Regulatory Expense

The Applicant's test year legal and regulatory expense includes rate case expense of \$170,000, amortized over three years. Rate case expense is addressed on the Staff's Schedule C-3.12.

The Balance of this account includes expenses that occurred prior to the test year and other expenses that should be reclassified to other accounts. The Staff corrected the misclassified expenses and used actual expense for outside services. The Staff's adjustment is shown in Schedule C-3.11

Rate Case Expense

Both the Applicant and the Staff amortized the estimated current rate case expense over a three-year period. The Staff's adjustment is shown on Schedule C-3.12.

The Staff recommends that the Commission review the Applicant's revised estimate of this expense, which should be submitted as a late filed exhibit before making a final determination of the appropriate level of rate case expense for use in this proceeding.

Insurance Expense

The Applicant's test year insurance expense was based on six months actual and six months budgeted data. The highest cost in the insurance expense is the all risk insurance. The Applicant's adjusted test year insurance expense was calculated based on nine months of 1996 actual and three months of 1997 budgeted all risk property insurance. The expense for the all risk insurance is apportioned on an insurable property value basis from 1996 data.

The Staff's adjusted test year insurance expense is mainly composed of nine months of 1997 actual and three months of 1998 budgeted all risk property insurance. The expense for the all risk insurance is apportioned on an insurable property value basis from 1997 actual data. All other premium factors utilized were from 1997 actual calculations. The Staff's adjustment is presented on Schedule C-3.13.

Transportation Expense

Both the Staff and the Applicant adjusted transportation expense to reflect charges to capital for the test year. The Staff's adjustment is shown on Schedule C-3.14.

Injuries and Damages Expense

The Applicant's adjusted test year injuries and damages expense was calculated from a 1997 budget (which is based on 1996 data) and then increased by 2.5%. The general liability factor and excess liability factors were based on 1996 data. The Staff's adjusted test year injuries and damages expense is based on the Applicant's 1998 injuries and damages budget (which is based on 1997 data). The general liability factor and excess liability factors were based on actual 1997 calculations. The Staff's adjustment is shown on Schedule C-3.15.

Pensions and Benefits Expense

The Applicant adjusted test year group insurance, other benefits, and pension/retirement medical expense by applying a 2.5% percent inflation factor to the total 1997 annual budgeted cost. The Applicant's adjustment also reflects the proposed increase to the number of employees which are included in its Salaries and Wages adjustment.

The Staff annualized test year group insurance expense, other benefits expense, and pension/retirement medical expense as follows:

The Staff adjusted test year medical insurance expense by reflecting the Applicant's latest known test year number of employee electives and premium rates.

The Staff adjusted test year dental, vision, and life insurance expense by annualizing the Applicant's actual budgeted monthly expense for 1998.

The Staff adjusted test year Incentive Deferred Compensation Program (IDCP) expense by annualizing the Applicant's latest known test year salary midpoints of eligible salary classified employees applied to the latest known target rates. The Staff also reflected in its adjustment the exclusion of IDCP expense related to the CUCO Manager position.

The Staff adjusted the 401k savings plan expense by annualizing the Applicant's actual budgeted monthly expense for 1998. The Staff also reflected in its adjustment the exclusion of 401k savings plan expense related to the CUCO Manager position.

The Staff adjusted the pension expense by annualizing the Applicant's actual budgeted monthly expense for 1998. The Staff at this time has not received the Applicant's latest known Actuarial Valuation Report for Citizen's Pension Plan requested in Data Request 13. The Staff recommends a review of this valuation report before a final determination is made for the proper level of pension expense.

The Staff adjusted the postretirement benefits expense by reflecting the Applicant's projected 1998 expense from the Applicant's latest known Actuarial Valuation Report Accounting for the Postretirement Health and Life Insurance Benefits.

The Staff's adjustment is shown on Schedule C-3.16.

Depreciation Expense

Depreciation expense was adjusted to reflect the Staff's recommended plant in service as of the date certain and the Staff's recommended accrual rates. This adjustment is provided on Schedule C-3.17, with supporting calculations shown on Schedule B-3.2.

Taxes Other Than Income Tax

Taxes other than income taxes were adjusted to reflect the proper base and the latest known tax rates. For example, Ohio gross receipts taxes were calculated to reflect taxes based on test year revenue rather than on the basis of total receipts for a different fiscal period, and FICA taxes were calculated based on test year adjusted payroll.

Schedule C-3.18 provides a summary of the calculated taxes and the resultant tax adjustment. Supporting calculations are provided on Schedules C-3.18a through C-3.18e.

Federal Income Tax Expense

The Staff computed test year federal income taxes to reflect the recommended adjustments to operating revenues and expenses. This computation also reflects the interperiod interest allocation, the normalization of the tax accelerated depreciation on a 1976 additions forward basis, and full deferral of all current reconciling items.

Schedule C-3.19 presents the Staff's income tax adjustment. Supporting calculations are shown on Schedule C-4.

RATE OF RETURN

The Staff has reviewed the Company's Application and also examined the direct testimony related to the rate of return portion of the Application. The Staff finds that the Company's requested rate of return of 8.58% based on its cost of equity of 10.84% to be reasonable and recommends its adoption.

RATES AND TARIFFS

INTRODUCTION

In this proceeding, Citizens Utilities Company of Ohio (CUCO or Applicant) requests authority to increase its rates and charges to all of its service districts. Applicant is a medium size water and sewer company providing service to approximately 8,639 customers. Applicant's current rates were established by Commission Entry in Case No. 94-1237-WS-AIR, and became effective July 1, 1995. Applicant now requests an increase in rates and charges that will generate additional water and sewer revenue of \$1,296,044, representing a 24.06% overall increase to the various current rates.

Energy & Water Staff has investigated the rate and tariff matters proposed by the Applicant. The results of Staff's investigation are reported herein. It is the Staff's intent to provide analysis with respect to the acceptability and reasonableness of the revenue recovery mechanisms contained in Applicant's proposed Tariff. The specific rates and charges referenced as Staff recommendations in this section were developed to generate Applicant's proposed revenue and may require adjustment based on the revenue requirement authorized by the Commission.

TARIFF ANALYSIS

Applicant has two tariffs on file with the Commission, a water tariff and a sewer tariff covering service to all districts of Citizens Utilities of Ohio. Unless otherwise stated, Staff comments/concerns are directed to both tariffs.

Dishonored Check Charge

Applicant's current dishonored check charge applies to water service only. This is because water and sewer charges are represented on the same bill and one check would be written to cover both charges. The dishonored check charge is, therefore, only charged once and listed in the water tariff. Staff agrees that a customer should only be charged once for each occurrence, however, Applicant serves 9 sewer-only customers. These customers should not be exempt from a dishonored check charge. Staff, therefore, recommends that Applicant revise its tariffs to reflect that sewer-only customers are subject to this charge.

Applicant is proposing to increase the dishonored check charge from \$10 to \$20. According to Data Request No. 19, Applicant does not currently recover the first \$6 dishonored check charge from the customer, which is imposed by the financial institution unless the check is returned to the company for a second time.

Of 304 dishonored check charge occurrences for October 1996 through September 1997, 24 resulted in reconnection fees. Staff finds that the company should recover all authorized costs associated with handling dishonored checks. The cost of processing dishonored checks should not be recovered from ratepayers in general. The result of such checks is reflected in the utility's cash flow requirements as follows:

- (1) Additions in working capital;
- (2) Interest expense associated with short-term borrowing; and
- (3) Labor and non-labor expenses in processing the dishonored checks.

Staff recommends the approval of a \$6 dishonored check charge for checks returned for the first time, and a \$10 dishonored check charge for a second return of the same check.

Staff also recommends that Applicant insert language in its dishonored check charge provision that states the charge will be assessed to cover the cost of processing the transaction, provided that the check is properly processed by the Company.

Bills and Payments for Services

Applicant bills all customers monthly, in arrears of service provided. The bills are due 15 days after the billing date.

Staff recommends that domestic and non-domestic water customers and sewer customers receiving water should continue to be billed based on metered consumption, while non-metered sewer customers will be billed a flat usage rate.

Staff finds Applicant's payment procedures reasonable and recommends approval.

Late Payment

Applicant proposes to discontinue the late payment charge to water and sewer customers who pay their bills after the due date. This proposal should be denied at this time.

Applicant has performed no analyses to determine whether customers are disadvantaged when late fees are applied, nor has Applicant conducted a study regarding the elasticity of late payments (Applicant's responses to Staff Data Request No. 20, questions 3 and 4).

Customers who pay on time should not incur late payment costs caused by other customers. Based upon Applicant's responses to Staff Data Request No. 20, late payment fees charged April, 1997 through March, 1998 for both sewer and water customers totaled over \$90,000. It is inappropriate to allocate late payment charge revenues currently received from customers who pay late into the overall base rates.

It is imperative to assess the magnitude of the effect of the proposed change in late payment fees on the overall customer pool. Staff recommends that if Applicant is desirous of this change, it perform the following and submit it with Applicant's next rate filing:

- (1) determine whether customers are disadvantaged when late payment charges are applied;
- (2) evaluate the effects of the proposed elimination of late payment fees on the customers who ordinarily pay within the 15 day period;
- (3) perform a study regarding the elasticity of payments in view of this; and
- (4) satisfactorily demonstrate that the proposed late payment fee elimination will not adversely affect working capital.

Staff recommends no change at this time in the current policy.

Bill Format

Applicant furnished Staff with a copy of the current bill form in response to Data Request No. 28 (2). Staff reviewed the bill form and finds it meets the requirements of Rule 4901:1-15-25 of the Ohio Administrative Code (O.A.C.) - Customer bill Format, and therefore, recommends approval.

Meter Reading

Applicant states in Data Request No. 28 (3b) that currently customer meters are read every other month in all service districts except Brimfield where meters are read every month. Estimated consumption is billed during the "off months" based on historical consumption. Actual consumption, adjusted for any overage or underage

from the previous estimated month, is billed during the month meters are read. The Applicant reads meters every other month because it has been cost effective with accurate estimates of usage levels, and there has been limited meter access. Due to customer requests for monthly readings and the availability of remote read meters, the Applicant is considering hiring an additional meter reader in order to read all meters on a monthly basis.

Meter Test Charge

Applicant's tariff contains a meter test charge of \$18 for meters up to and including 3/4 inch in size and actual cost to the Company for meters over 3/4 inch in size. Applicant is not proposing to change this charge. Staff finds Applicant's current policy and charges for meter testing reasonable and recommends approval.

Reconnection Charge

Applicant charges \$10 for reconnection of service during normal business hours and Company out-of-pocket costs for reconnection of service during non-business hours. Applicant has proposed no change to this charge. Staff finds the Applicant's current policy and charges for reconnection of service reasonable and recommends approval.

Water Curtailment Plan

Section 10, Sheet No. 1 of Applicant's tariff contains duplicative language. It is found that the language in Item 3d should be replaced with the following language:

- 3d) If a customer whose service has been disconnected for violation of curtailment procedures requests a reconnection, such reconnection may only be made after the customer:

RATE AND REVENUE ANALYSIS

General guidelines or objectives are followed in Staff's review of rate schedules and designs. The applicable schedules should provide the utility the opportunity of recovering the authorized revenue. The various schedules should represent a reasonable distribution of revenue among the various customer groups. The particular schedule should be equitable and reasonable to all customers within a

group. The schedules should provide for customer understanding, continuity of rates, and minimal customer impact.

The rate design criteria are to be viewed as a package, in that they are interrelated. Although each item can be separately identified and applied to rate schedule determinations, no single standard is overriding in determining proper rate design. The rate schedules which comprise a particular utility's tariff should provide the opportunity for the recovery of expenses found proper in the course of a regular proceeding. If the rate schedule is designed on the basis of cost causation, it will provide for expense recovery in the long term, given changes in customer usage characteristics. Normally, and to the extent sufficient information is available, cost of service studies and related expense analysis are necessary to determine the appropriate level of revenue to be generated and appropriate recovery of such revenue.

The rate schedules should be designed to be equitable and reasonable to the customers served pursuant to their applicability. This criterion involves several considerations. The schedules should, to the extent practicable, be predicated upon the costs associated with a particular service rendered. Customers receiving like services should experience the same charges and provisions. Also, differences in the applicable charges should be representative of differences in costs.

From a practical rate design standpoint, absolute equality between costs and revenue may be difficult to achieve in the short term. While it may be viewed as equitable to set rates at costs, if there is a substantial divergence from the current rates, the resulting impact on individual customers may be viewed as unreasonable. While it is Staff's position that rates should reflect costs, it is also important to consider the continuity associated with the current and proposed pricing structures. This may result in movement towards more closely aligning revenues with costs, rather than an absolute match at a particular time period.

When employing these standards to develop and design a rate, the results should be understandable to the customers billed under the schedule.

REVENUE ANALYSIS

Uniform Tariff Rates

Applicant owns and operates water and wastewater treatment facilities serving approximately 7,413 customers in five physically separate locations within Franklin County (company district names in parentheses): Huber Ridge subdivision (Huber Ridge District) in Blendon Township, Blacklick Estates (Blacklick District) in

Metazoan Township, Lake Darby Estates (Lake Darby District) in Prairie and Brown Townships, Timberbrook subdivision (Timberbrook District) (water only) in Norwich Township and the Worthington Hills subdivision (Valley District) (water only) in Perry and Sharon Townships. Additionally, Applicant owns and operates water treatment facilities (Brimfield District) servicing approximately 835 customers in Brimfield and Shalersville Townships, Portage County. Each location is distinct in nature and character as to the number of customers served, design and treatment capabilities, physical age and general condition.

All of Applicant's service districts are under uniform water and wastewater tariff rates. The service districts of Huber Ridge, Blacklick, Lake Darby and Timberbrook have always had uniform water tariff rates and, excluding Timberbrook which only provides water service, have always had uniform wastewater tariff rates. In Case No. 90-1233-WS-AIR, the Brimfield service district's water rates were merged with that of the above mentioned districts. In Case No. 94-1237-WS-AIR Valley water district was merged with the other districts to form one uniform tariff rate design for all its water service districts. However, Lake Darby and Valley customers are provided water that is softened. The Company alleges that softened service is better quality than the unsoftened service provided to the other districts, and, therefore, Lake Darby and Valley customers pay a higher rate through a softening surcharge to recover the increased costs to soften. The Huber Ridge district customers elected to receive a higher quality water provided by a reverse osmosis process. This district has a reverse osmosis surcharge applied to its bills. A more thorough discussion of this surcharge follows. Applicant proposes no change to the current uniform tariff pricing for wastewater services.

Cost of Service - Water

Cost of service studies are used to approximate the costs incurred by the utility company in providing service and the appropriate level of cost responsibility for each distinct class of customer.

Methodology

Applicant performed a cost of service study using the Base-Extra Capacity Method of allocation of expenses and rate base.

This method of cost allocation is to recognize the need to meet both total commodity delivery and the maximum demand for the commodity. Allocation to the base capacity requirements is to recognize the plant and expenses that are required to provide service under average load conditions. Allocation to the extra capacity classification is to recognize the plant and expenses that are required to

provide service at maximum rates of use. This cost allocation is then separated between maximum day and maximum hour requirements.

Allocation was first applied to cost classifications; 18 allocation ratios were employed.

The second step was allocation of the cost classifications to customer groups; 8 allocation ratios were employed.

Classification of Costs

The first step of the allocation was classification of costs to various cost functions. Allocations were made to the following classifications:

- Base Capacity
- Extra Capacity Maximum Day
- Extra Capacity Maximum Hour
- Reverse Osmosis
- Softening
- Customer Costs
- Fire Protection - Public
- Fire Protection - Private

The two most critical allocations are to recognize the need to meet both total commodity delivery and maximum demand for the commodity. Allocation to the Base Capacity classification is to recognize the plant and expenses that are required to provide service under average load conditions. Allocation to the Extra Capacity classifications is to recognize the plant and expenses that are required to provide service at maximum rates of use, and a distinction is made between maximum day and maximum hour requirements.

Water storage was allocated to extra capacity requirement after fire protection was directly assigned. Applicant made direct assignments of specific accounts to reverse osmosis, water softening, fire hydrant service, meters, billing and collections, and meter reading. Customer service lines plant and expenses were assigned based on relative cost by size of the line(s). Transmission and distribution were classified based on requirements to meet both base and extra capacity requirements. Finally, administrative and general, labor related taxes, and income taxes were classified based on composite factors.

Staff finds the classifications of costs to be reasonable, with the exception of the allocations to Customer Costs. Critical to this finding is that Applicant chose to separately classify fire protection and not integrate it with other classifications such as "customer costs". Most transmission and distribution costs were classified as only

capacity related without any "customer cost" component (with the exception of, e.g., meters, meter reading, and customer service lines). Likewise, there were capacity only classifications for all sources of supply operation and maintenance, power and pumping operation and maintenance, water treatment operation and maintenance, and all depreciation expense associated with the same function plant. The classification of capacity between base and extra requirements was consistent with the maximum day and maximum hour capacity ratios. All classifications are displayed in a straightforward fashion.

Customer Costs

There are instances of expenses (e.g. public fire protection) allocated to Customer Cost that are inconsistent with the Staff policy and formula for calculation of customer related charges. Staff separately accounted for these and reallocated them between the Base and Extra Capacity classifications. The allocation used was the same as that used by Applicant based on the maximum day ratio (2:1). The customer costs included for calculation of the customer charge are discussed and shown in the Customer Charge Section of the report and the corresponding Tables.

Allocation to Customer Groups

In the second step of the process Applicant allocated each classification of cost to the classes of service, i.e., residential, commercial, and private fire protection. The capacity related allocations were based, similarly, on the relative usage between those customer classes. Allocation ratios are developed for use of the base related cost by the classes and ratios for the use of the extra related costs between the classes. Reverse osmosis and softening costs were directly assigned. Customer costs were allocated according to the relative number of customer equivalents. Private fire and public fire protection were directly assigned.

Staff finds the allocation of costs to the customer classes to be reasonable, except for that associated with public fire protection, discussed later. Critical to this finding is that Applicant consistently applied to a particular cost classification the relevant allocation factor; and that the allocation ratios appear to be reasonable. Again, all classifications and allocations to the classes are displayed in a straightforward fashion.

Public Fire Protection

In the first step, Applicant classified costs for public fire protection by the same process as other categories of cost, e.g., base, extra, and customer related costs. Public

fire protection was included in the development of the average use and extra use allocation ratios just as any other service.

In the second step, the total of the cost classifications was then allocated to the customer classes only according to the number of customer equivalents. In this way residential (domestic) customer class received 93.5 percent of the cost of public fire protection because residential customers comprise 93.5% of the number of customer equivalents.

In the third step of Applicant’s allocation process, public fire protection was allocated exclusively to the customer component of the rates. The result under Applicant’s proposal is that each customer would contribute \$2.43 per month to meet public fire protection requirements.

The following Table 1 shows the results of Applicant’s proposed classification of costs compared to that of the Staff, adjusted after reclassification of customer costs.

Table 1
 Classification of Water Costs
Percent Distribution

<u>Class.</u>	<u>Base</u>	<u>Max. Day</u>	<u>Max. Hr.</u>	<u>Soft.</u>	<u>R.O.</u>	<u>Customer</u>	<u>Pri. FP</u>	<u>Pub. FP</u>
Company	29.2%	20.0%	8.0%	2.2%	12.3%	20.4%	0.2%	7.7%
Staff	34.4%	25.1%	8.0%	2.2%	12.3%	10.0%	0.2%	7.7%

The following table shows Applicant's proposed distribution and its comparison to current distribution between water and wastewater services.

	<u>Current Revenue Distribution</u>	<u>Applicant's Cost of Service Study</u>
Total Water	56.2%	50.5%
Total Wastewater	43.8%	49.5%

The following Table 2 shows the results of the allocation of water costs to the classes of service.

Table 2
 Distribution of Water Costs to Customer Classes of Service
 Percent Distribution

<u>Class of Service</u>	<u>Current Revenue Distribution</u>	<u>Applicant's Cost of Service Study</u>	<u>Staff's Cost of Service Study</u>
Domestic	88.9%	90.2%	89.1%
Non-Domestic	10.4	9.6	10.7
Private Fire	<u>0.7</u>	<u>0.2</u>	<u>0.2</u>
Total	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

Table Notes: Company Proposed study allocates public fire protection to customer costs.
 Staff Recommended study allocates public fire protection to base and extra day classifications.

Cost of Service - Wastewater

Methodology

Applicant performed a wastewater cost of service in the same fashion as performed in the water cost of service. Allocation was first to cost functions (cost classifications), employing 8 allocation ratios. The second step was allocation of the cost classifications to customer groups, employing 4 allocation ratios.

Classification of Costs

The first step of the allocation was classification of costs to various cost functions. Allocations were made to the following classifications:

- Flow (Base Capacity)
- Extra Capacity
- Infiltration and Inflow
- Customer Costs

The composition of the wastewater is considered all domestic in nature and no weight or classification was made to recognize differences in composition.

Staff finds the classifications of cost to be reasonable, with the exception of the allocations to Customer Costs, discussed later. The classification of capacity between base and extra requirements was consistent with the maximum day capacity ratio. All classifications are displayed in a straightforward fashion.

Customer Costs

There are instances of expenses allocated to Customer Cost that are inconsistent with the Staff policy and formula for calculation of customer related charges. Staff separately accounted for these and reallocated them under the Flow (Base) Capacity component. The allocation used was the same as that used by the Company based on the maximum day ratio (2:1). The customer costs included for calculation of the customer charge are discussed and shown in the Customer Charge Section of the report and the corresponding Tables.

Allocation to Customer Groups

In the second step of the process the Company allocated each classification of cost to the classes of service, i.e., residential and commercial. The capacity related allocations were based, also, on the relative usage between those customer classes. Allocation ratios are developed for use of the base related cost by the classes and ratios for the use of the extra related costs between the classes. Customer costs were allocated according to the relative number of customer equivalents.

Staff finds the allocation of costs to the customer classes to be reasonable. Critical to this finding is that Applicant consistently applied to a particular cost classification the relevant allocation factor; and that the allocation ratios appear to be reasonable. Again, all classifications and allocations to the classes are displayed in an extremely straightforward fashion.

The following Table 3 shows the results of Applicant’s proposed classification of costs compared to that of the Staff, adjusted after reclassification of customer costs.

Table 3
 Classification of Wastewater Costs
 Percent Distribution

<u>Classification</u>	<u>Flow</u>	<u>Extra</u>	<u>Infiltration & Inflow</u>	<u>Customer</u>
Company Proposed	33.8%	29.2%	27.0%	10.0%
Staff Recommended	39.0%	29.2%	27.0%	4.8%

The following Table 4 shows the results of the allocation of wastewater costs to the classes of service.

Table 4
 Distribution of Wastewater Costs to Customer Classes of Service
 Percent Distribution

<u>Class of Service</u>	<u>Current Revenue Distribution</u>	<u>Applicant's Cost of Service Study</u>	<u>Staff's Cost of Service Study</u>
Domestic	91.1%	91.6%	91.1%
Non-Domestic	<u>8.9</u>	<u>8.4</u>	<u>8.9</u>
Total	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

Revenue Increase

Applicant proposes rates and charges for water and wastewater to recover the equivalent of \$1,082,240 annually. Applicant proposes that the amount be incorporated into rates through a phase-in technique. In year 1 of the phase-in approximately one-half of the proposed increase would be included in rates. In year 2, rates would be increased to the total requested amount with carrying charges for "deferring" one-half during the first year. In year 3, the rates would be increased to the total requested amount and the amount "deferred" during the first year, and the carrying charges would be removed. In year 4, the rates would be reduced to the total proposed amount.

Tables 5-7 show the proposed phase-in revenue increase associated with each year of the phase-in program and compare the phase-in with a one-step increase program.

Revenue Distribution

Applicant proposes that its rates and charges be adjusted to coincide with its cost of service study. As discussed in the Cost of Service Section of this report, Staff finds Applicant's cost of service to be reasonable, with the exception of the level of customer charges. Staff recommends that any increase approved by the Commission be allocated in the same proportion as Applicant's revenue distribution, excepting the revenue associated with the level of customer charges. The exception of the customer charge revenue does not pose a material change and results in a revenue distribution that is the approximate midpoint of the difference in the Applicant and Staff cost of service studies.

Table(s) 5- 7 show Applicant's current and proposed revenue distribution.

Customer Charge Calculation

Applicant's current tariffs contain a water customer charge and a sewer customer charge. Both rates are identical, \$3.60 for a 5/8" meter. Applicant is proposing to increase its monthly water customer charge ultimately to \$5.40, a 50% increase. The sewer customer charge is proposed to ultimately increase to \$7.20, a 100% increase. Applicant's proposed charges were developed through its cost of service study. This approach differs from the Commission's approved customer charge calculation methodology. Staff calculated a customer charge using Staff's methodology and finds that it differs from Applicant's proposal. Staff used data from the Standard Filing Requirements, and the proposed rate of return provided by Staff's Performance Analysis Division to calculate the customer charge. Staff is recommending approval of its calculated customer charge in that it respects the principles of gradualism and is minimally compensatory. If the Commission authorized revenue is different from that requested by the Applicant, Staff's recommended customer charge should not be altered.

The following Chart A illustrates Staff's calculation of the monthly customer charge for a 5/8" meter.

CHART A

Staff
 Customer Charge Calculation for 5/8" Meter

<u>Account</u>	<u>Description</u>	<u>Values</u>
345	Services	\$ 226,126
346	Meters	603,503
347	Meter Installations	<u>0</u>
	Customer Rate Base	\$ 829,629
	Rate of Return	<u>8.58%</u>
	Return on Rate Base	\$ 71,182
	<u>Operation and Maintenance Expense</u>	
	<u>Accounts: Transmission & Distribution</u>	
663	Meter Expense	\$ 507
664	Installation Expense	375
675	Service Maintenance	17,723
676	Meter Maintenance	<u>1,836</u>
	Total Related Trans & Distribution	\$ 20,441

CITIZENS UTILITIES COMPANY
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<u>Variable Taxes</u>	<u>Company</u>		<u>Customer Conversion Factor</u>	
Property	\$ 380,144	x	12.04%	\$ 45,769
Gross Receipts	160,289	x	12.04%	19,299
Federal Income Tax	170,116	x	12.04%	<u>20,482</u>
Total Customer Variable Taxes				\$ 85,550
Customer Conversion = $\frac{\text{Customer Rate Base}}{\text{Total Rate Base}}$ =				$\frac{\$ 829,629}{\$ 6,892,466} = 12.04\%$

Related Depreciation Expense

345	Services	\$ 7,646
346	Meters	19,415
347	Meter Installations	<u>0</u>
Total Related Depreciation Expense		\$ 27,061

<u>Account</u>	<u>Description</u>	<u>Values</u>
<u>Summary of Variable Expenses Per Meter Size</u>		
	Return on Rate Base	\$ 71,182
	Total Related Transmission & Distribution	20,441
	Total Taxes Related to Meter Size	85,550
	Total Related Depreciation Expense	<u>27,061</u>
	Total Customer Costs Related to Meters	\$ 204,234
	Total Equivalent 5/8" Meters (9,100 x 12)	<u>109,200</u>
	Monthly Customer Related to Meters	\$ 1.87
<u>Customer Expense Related Billings</u>		
<u>Customer Accounts:</u>		
901	Supervision	\$ 0
902	Meter Reading Expenses	25,880
903	Customer Records & Collection	170,377
905	Miscellaneous Customer Expense	<u>4,210</u>
	Total Customer Accounting Costs	\$ 200,467

CITIZENS UTILITIES COMPANY
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<u>Variable Taxes</u>	<u>Company</u>		<u>Customer Conversion Factor</u>		
Payroll Taxes	\$ 51,224	x	29.53%	=	\$ 15,126
Customer Conversion Factor =	<u>Customer Labor Expense</u>	=	<u>\$ 173,815</u>	=	29.53%
	Total Payroll Expense		\$ 588,668		
Total Customer Billing Costs					\$ 215,593
Total Monthly Customer Bills					103,343
Total Customer Billing Charge					\$ 2.09
Monthly Customer Charge Related to Meters					\$ 1.87
Monthly Customer Billing Charge					<u>2.09</u>
Monthly Customer Charge for 5/8" Meters					\$ 3.96
Staff Recommended Monthly Customer Charge for 5/8" Meters					\$ 4.00

Applicant used a different equivalence factor in equating its customer charges for meters larger than 5/8 inches than what the Staff has used in the past. Applicant's equivalence is an example that is used in the AWWA-M1 manual. Staff's method uses the cross sectional difference between different meter sizes in developing a geometric equivalent. Staff prefers this method because it is consistent and will not vary over time, and also provides a measurable difference between sizes.

There are three types of customer charge customers on Applicant's system; water only, sewer only, and water and sewer combined (dual customers). Applicant's tariff contains a water customer charge and a sewer customer charge that are identical rates. The Company's current practice is to apply the water customer charge to all customers receiving water, and the sewer customer charge to all customers receiving dual service. Staff's customer charge methodology is meter based and finds it not warranted to create a separate sewer charge. Staff recommends that Staff's calculated customer charge be charged as follows: apply the customer charge once to all water only and all sewer only customers, and twice to dual customers.

Staff recommends that the difference between the amount of total Commission authorized revenue and revenue recovered from the Staff proposed customer charge be recovered in the usage charge.

Using Staff's method for calculating customer charges, Chart B below provides customer charges for all size metered customers.

CHART B

Staff Recommended Customer Charge for All Size Metered Customers

<u>Meter Size</u>	<u>5/8"</u>	<u>3/4"</u>	<u>1"</u>	<u>1-1/2"</u>	<u>2"</u>	<u>3"</u>	<u>4"</u>
Charge Related To Meters	\$ 1.87	\$ 1.87	\$ 1.87	\$ 1.87	\$ 1.87	\$ 1.87	\$ 1.87
Equivalent Meter(x)	<u>1</u>	<u>1.44</u>	<u>2.56</u>	<u>5.76</u>	<u>10.24</u>	<u>23.04</u>	<u>40.96</u>
Total	\$ 1.87	\$ 2.69	\$ 4.79	\$ 10.77	\$ 19.15	\$ 43.08	\$ 76.60
Charge Related To Billings(+)	<u>\$ 2.09</u>	<u>\$ 2.09</u>	<u>\$ 2.09</u>	<u>\$ 2.09</u>	<u>\$ 2.09</u>	<u>\$ 2.09</u>	<u>\$ 2.09</u>
Staff Calculated Customer Charge	<u>\$ 3.96</u>	<u>\$ 4.78</u>	<u>\$ 6.88</u>	<u>\$ 12.86</u>	<u>\$ 21.24</u>	<u>\$ 45.17</u>	<u>\$ 78.69</u>
Staff Recommended Customer Charge	\$ 4.00	\$ 4.80	\$ 6.90	\$ 12.90	\$ 21.25	\$ 45.20	\$ 78.70

Softening Surcharge

Applicant's Lake Darby and Valley service districts customers are being provided softened water. The softening provides for softer water, thus providing a better quality of water than what the other districts are receiving. Staff has reviewed Applicant's assigned costs in creating the softening surcharge and finds the rate to be reasonable and recommends approval.

Reverse Osmosis Surcharge

Applicant's Huber Ridge service district customers are currently being supplied water that has been treated using a Reverse-Osmosis (R-O) process. The function of the R-O equipment installed in Huber Ridge is to reduce the amount of total dissolved solids in the district's water supply.

Pursuant to a 1992 stipulation (from Case No. 90-1233-WS-AIR), a Consumer Advisory Panel (CAP) was created to explore (under the guidance of the Poggemeyer Design Group), the feasibility, need, options and costs of the treatment of water for removal of total dissolved solids in four of the Company's operating districts. The

study recommended R-O treatment for all four districts studied. After reviewing the study's results, the CAP polled Applicant's customers to determine if there was a desire for this type of service. Given the poll results in each operating district, the CAP only recommended the installation of R-O equipment for the Huber Ridge operating district.

In Case No. 92-550-WS-COI, a surcharge was created exclusively for the customers of Huber Ridge, to recover the costs of R-O equipment after construction was completed. The stipulation in this case also established that:

"Once the surcharge amount is established, the Company will retain itemized records of the cost elements of the surcharge that will enable Staff and the OCC to audit the reasonableness of the surcharge on an ongoing basis. The surcharge will be audited by the Staff in the Company's next application for an increase in rates, and will be subject to adjustment in that proceeding based on a comparison of the surcharge versus actual costs. The adjustment, if necessary, shall reflect any prior over/under-recovery. Any future cost of service studies will be performed with all costs related to this treatment set forth on an itemized basis."

Applicant has complied with the stipulation in Case No. 92-550-WS-COI by supplying an itemized R-O account breakdown in their cost of service study. Applicant is proposing to maintain the R-O cost recovery mechanism as a surcharge, applied exclusively to the Huber Ridge district.

Staff has reviewed Applicant's cost-of-service study, and finds the account breakdown for R-O related costs to be reasonable. Staff recommends that the R-O costs continue to be recovered through a surcharge (detailed in the rate section). Staff finds that because there is a difference in water service quality due to R-O treatment, any costs associated with R-O equipment should continue to be recovered through a surcharge exclusive to the Huber Ridge operating district, and not be recovered through base rates. Staff finds the following R-O revenue adjustment to be reasonable and recommends approval.

Fire Protection Service

Applicant currently provides both Public and Private Fire Protection Service. However, Applicant only charges for Private Fire Protection Service directly. Applicant's cost of public fire protection service are built into CUCO's base rates.

Applicant's water tariff has private fire protection service rates for sprinkler heads and connections from 4 inch to 12 inch in size. Applicant does not provide private fire service, except for fire sprinkler service. Staff finds, since Applicant does not provide connection services, that a rate for the same is not warranted in the tariff.

Sewer Only Rates

Applicant has 9 customers that receive sewer only service. CUCO has been charging these customers \$21.01 per month for flat rate sewer service. These rates were established and tarified in Case No. 90-1233-WS-AIR. However, through administrative oversight, these rates were excluded from the last rate case, the tariffs, and this rate case filing.

It is not clear whether this customer group is charged a customer charge in addition to the flat usage rate. Staff finds such a charge reasonable and recommends application of the customer charge to this group of customers. Staff also recommends that the overall increase to wastewater rates be applied to the flat usage rate.

Rate Blocks

Applicant's current monthly water and wastewater rate design consists of a customer charge with a declining two block set of volumetric rates. The first consumption block is for all usage between 0-13.33 Ccf, and the second consumption block is for all usage over 13.33 Ccf. Wastewater bills are determined by the amount, or volume, of water used by the customer.

Applicant is proposing to alter its current rate design by keeping a customer charge, but changing the two declining blocks of volumetric rates. Applicant is proposing to increase the first consumption block from 0-13.33 Ccf to 0-20.00 Ccf, and increase the second consumption block from over 13.33 Ccf to over 20.00 Ccf.

In the last rate case filing (Case No. 94-1237-WS-AIR), Staff recommended the rate block structure that is currently in use by Applicant. This recommendation was based on Staff analysis of CUCO data, where 91.8 percent of domestic water usage and 92.51 percent of domestic wastewater usage was found to have fallen within Staff's recommended first rate block. Staff's analysis of current usage patterns for the domestic class find that 91.4 percent of current domestic water usage falls within the existing first rate block, as does 93.56 percent of current domestic wastewater use.

Staff finds that the current rate block structure allows the recovery of revenues from both the domestic and non-domestic classes of service consistent with Staff's cost-of-

service study. Staff also finds that Applicant's usage patterns have remained similar to patterns observed when the rate block structure was originally designed and approved in the last rate case, and that the current rate block structure remains usage sensitive.

Due to the fact that usage patterns have not substantially changed, and revenue recovery can be achieved in line with the cost-of-service study, Staff recommends that the current rate block structure be retained; 0-13.33 Ccf for the first block, and over 13.33 Ccf for the second block. Staff also finds that retaining the current declining block structure will aid in the continuity of customer billing and understanding.

Volumetric Rates

The volumetric water rates were calculated by reducing the total revenue requirement by the revenue generated from sources independent of the volumetric rates: Private Fire Service, Forfeited Discounts and Miscellaneous revenue. The remaining revenue to be recovered was then allocated to the customer classes consistent with Staff's cost of service study. The class revenue totals were reduced by the revenues from fixed customer charges to determine the class revenue to be recovered through the volumetric rates. The fixed volumetric softening surcharge, as discussed earlier, was then multiplied by the volume of softening water used and deducted from the revenue total to be recovered through volumetric rates.

The following tables compare Applicant's current and proposed and Staff's calculated rate structure design for both the one-step increase and the phase-in increase.

Tables 8-17 show Applicant and Staff proposed rates compared to current rates and to the previous year's rates for both the one-time increase and the phase-in proposals. Tables 18-37 are typical bill comparisons.

TABLE 5

**Citizens Utilities Company of Ohio
Case No. 98-178-WS-AIR**

**Applicant Proposed & Staff Calculated
Revenue Increase & Distribution
One-Time Increase**

WATER SERVICE

<u>Customer Classification</u>	<u>Revenues Under Present Rates</u>		<u>Revenues Under One-Step Rates</u>		<u>One-Step Increase</u>	
	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>% Increase</u>
Domestic	\$2,676,711	88.9%	\$2,917,598	89.4%	\$240,887	9.0%
Non-Domestic	\$312,522	10.4%	\$324,111	9.9%	\$11,589	3.7%
Private Fire	\$20,518	0.7%	\$20,518	0.6%	\$0	0.0%
Subtotal Sales	\$3,009,751	100.0%	\$3,262,227	100.0%	\$252,476	8.4%
Other Revenues	\$18,521		\$18,521		\$0	0.0%
Water Total	\$3,028,272		\$3,280,748		\$252,476	8.3%

WASTE WATER SERVICE

<u>Customer Classification</u> (1)	<u>Revenues Under Present Rates</u>		<u>Revenues Under One-Step Rates</u>		<u>One-Step Increase</u>	
	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>% Increase</u>
Domestic	\$2,126,643	91.0%	\$2,897,925	91.5%	\$771,282	36.3%
Non-Domestic	\$208,975	8.9%	\$266,659	8.4%	\$57,684	27.6%
Non-Metered	\$2,269	0.1%	\$3,067	0.1%	\$798	35.2%
Subtotal Sales	\$2,337,887	100.0%	\$3,167,651	100.0%	\$829,764	35.5%
Other Revenues	\$20,813		\$20,813		\$0	0.0%
Waste Water Total	\$2,358,700		\$3,188,464		\$829,764	35.2%
Total Company	\$5,386,972		\$6,469,212		\$1,082,240	20.1%

**Citizens Utilities Company of Ohio
Case No. 98-178-WS-AIR**

**Applicant Proposed & Staff Calculated
Distribution & Revenue Increase
Over Current Revenue**

**WATER SYSTEM
PHASE-IN**

Customer Classification	Revenues Under Current Rates		Revenues Under Year 1 Rates		Year 1 Increase		Revenues Under Year 2 Rates		Year 2 Increase		Revenues Under Year 3 Rates		Year 3 Increase		Revenues Under Year 4 Rates		Year 4 Increase	
	Amount	Percent	Amount	Percent	Amount	%	Amount	Percent	Amount	%	Amount	Percent	Amount	%	Amount	Percent	Amount	%
Domestic	\$2,676,711	88.9%	\$2,781,046	89.2%	\$104,335	3.9%	\$2,934,061	89.5%	\$257,350	9.6%	\$3,067,683	89.7%	\$390,972	14.6%	\$2,917,598	89.44%	\$240,887	9.0%
Non-Domestic	\$312,522	10.4%	\$317,875	10.2%	\$5,353	1.7%	\$323,809	9.9%	\$11,287	3.6%	\$332,632	9.7%	\$20,110	6.4%	\$324,111	9.94%	\$11,589	3.7%
Private Fire	\$20,518	0.7%	\$20,518	0.7%	\$0	0.0%	\$20,518	0.6%	\$0	0.0%	\$20,518	0.6%	\$0	0.0%	\$20,518	0.63%	\$0	0.0%
Subtotal Sales	\$3,009,751	100.0%	\$3,119,439	100.0%	\$109,688	3.6%	\$3,278,388	100.0%	\$268,637	8.9%	\$3,420,833	100.0%	\$411,082	13.7%	\$3,262,227	100.00%	\$252,476	8.4%
Other Revenues	\$18,521		\$18,521		\$0	0.0%	\$18,521		\$0	0.0%	\$18,521		\$0	0.0%	\$18,521		\$0	0.0%
Water Total	\$3,028,272		\$3,137,960		\$109,688	3.6%	\$3,296,909		\$268,637	8.9%	\$3,439,354		\$411,082	13.6%	\$3,280,748		\$252,476	8.3%

**Applicant Proposed & Staff Calculated
Distribution & Revenue Increase
Over Previous Year Revenue**

**WATER SYSTEM
PHASE-IN**

Customer Classification	Revenues Under Current Rates		Revenues Under Year 1 Rates		Year 1 Increase		Revenues Under Year 2 Rates		Year 2 Increase		Revenues Under Year 3 Rates		Year 3 Increase		Revenues Under Year 4 Rates		Year 4 Increase	
	Amount	Percent	Amount	Percent	Amount	%												
Domestic	\$2,676,711	88.9%	\$2,781,046	89.2%	\$104,335	3.9%	\$2,934,061	89.5%	\$153,015	5.5%	\$3,067,683	89.7%	\$133,622	4.6%	\$2,917,598	89.44%	-\$150,085	-4.9%
Non-Domestic	\$312,522	10.4%	\$317,875	10.2%	\$5,353	1.7%	\$323,809	9.9%	\$5,934	1.9%	\$332,632	9.7%	\$8,823	2.7%	\$324,111	9.94%	-\$8,521	-2.6%
Private Fire	\$20,518	0.7%	\$20,518	0.7%	\$0	0.0%	\$20,518	0.6%	\$0	0.0%	\$20,518	0.6%	\$0	0.0%	\$20,518	0.63%	\$0	0.0%
Subtotal Sales	\$3,009,751	100.0%	\$3,119,439	100.0%	\$109,688	3.6%	\$3,278,388	100.0%	\$158,949	5.1%	\$3,420,833	100.0%	\$142,445	4.3%	\$3,262,227	100.00%	-\$158,606	-4.6%
Other Revenues	\$18,521		\$18,521		\$0	0.0%	\$18,521		\$0	0.0%	\$18,521		\$0	0.0%	\$18,521		\$0	0.0%
Water Total	\$3,028,272		\$3,137,960		\$109,688	3.6%	\$3,296,909		\$158,949	5.1%	\$3,439,354		\$142,445	4.3%	\$3,280,748		-\$158,606	-4.6%

**Citizens Utilities Company of Ohio
Case No. 98-178-WS-AIR**

**Applicant Proposed & Staff Calculated
Distribution & Revenue Increase
Over Current Revenue**

**WASTE WATER SYSTEM
PHASE-IN**

Customer Classification	Revenues Under Current Rates		Revenues Under Year 1 Rates		Year 1 Increase		Revenues Under Year 2 Rates		Year 2 Increase		Revenues Under Year 3 Rates		Year 3 Increase		Revenues Under Year 4 Rates		Year 4 Increase	
	Amount	Percent	Amount	Percent	Amount	%												
Domestic	\$2,126,643	91.0%	\$2,511,450	91.2%	\$384,807	18.1%	\$2,940,383	91.5%	\$813,740	38.3%	\$3,320,449	91.5%	\$1,193,806	56.1%	\$2,897,925	91.48%	\$771,282	36.3%
Non-Domestic	\$208,975	8.9%	\$238,676	8.7%	\$29,701	14.2%	\$270,949	8.4%	\$61,974	29.7%	\$305,526	8.4%	\$96,551	46.2%	\$266,659	8.42%	\$57,684	27.6%
Non-Metered	\$2,269	0.1%	\$2,668	0.1%	\$399	17.6%	\$3,113	0.1%	\$844	37.2%	\$3,512	0.1%	\$1,243	54.8%	\$3,067	0.10%	\$798	35.2%
Subtotal Sales	\$2,337,887	100.0%	\$2,752,794	100.0%	\$414,907	17.7%	\$3,214,445	100.0%	\$876,558	37.5%	\$3,629,487	100.0%	\$1,291,600	55.2%	\$3,167,651	100.00%	\$829,764	35.5%
Other Revenues	\$20,813		\$20,813		\$0	0.0%	\$20,813		\$0	0.0%	\$20,813		\$0	0.0%	\$20,813		\$0	0.0%
Waste Water Total	\$2,358,700		\$2,773,607		\$414,907	17.6%	\$3,235,258		\$876,558	37.2%	\$3,650,300		\$1,291,600	54.8%	\$3,188,464		\$829,764	35.2%
Total Company	\$5,386,972		\$5,911,567		\$524,595	9.7%	\$6,532,167		\$1,145,195	21.3%	\$7,089,654		\$1,702,682	31.6%	\$6,469,212		\$1,082,240	20.1%

**Applicant Proposed & Staff Calculated
Distribution & Revenue Increase
Over Previous Year Revenue**

**WASTE WATER SYSTEM
PHASE-IN**

Customer Classification	Revenues Under Current Rates		Revenues Under Year 1 Rates		Year 1 Increase		Revenues Under Year 2 Rates		Year 2 Increase		Revenues Under Year 3 Rates		Year 3 Increase		Revenues Under Year 4 Rates		Year 4 Increase	
	Amount	Percent	Amount	Percent	Amount	%												
Domestic	\$2,126,643	91.0%	\$2,511,450	91.2%	\$384,807	18.1%	\$2,940,383	91.5%	\$428,933	17.1%	\$3,320,449	91.5%	\$380,066	12.9%	\$2,897,925	91.48%	-\$422,524	-12.7%
Non-Domestic	\$208,975	8.9%	\$238,676	8.7%	\$29,701	14.2%	\$270,949	8.4%	\$32,273	13.5%	\$305,526	8.4%	\$34,577	12.8%	\$266,659	8.42%	-\$38,867	-12.7%
Non-Metered	\$2,269	0.1%	\$2,668	0.1%	\$399	17.6%	\$3,113	0.1%	\$445	16.7%	\$3,512	0.1%	\$399	12.8%	\$3,067	0.10%	-\$445	-12.7%
Subtotal Sales	\$2,337,887	100.0%	\$2,752,794	100.0%	\$414,907	17.7%	\$3,214,445	100.0%	\$461,651	16.8%	\$3,629,487	100.0%	\$415,042	12.9%	\$3,167,651	100.00%	-\$461,836	-12.7%
Other Revenues	\$20,813		\$20,813		\$0	0.0%	\$20,813		\$0	0.0%	\$20,813		\$0	0.0%	\$20,813		\$0	0.0%
Waste Water Total	\$2,358,700		\$2,773,607		\$414,907	17.6%	\$3,235,258		\$461,651	16.6%	\$3,650,300		\$415,042	12.8%	\$3,188,464		-\$461,836	-12.7%
Total Company	\$5,386,972		\$5,911,567		\$524,595	9.7%	\$6,532,167		\$620,600	10.5%	\$7,089,654		\$557,487	8.5%	\$6,469,212		-\$620,442	-8.8%

**Citizens Utilities Company of Ohio
Case No. 98-178-WS-AIR**

**Application Proposed Rates
Compared to
Current Rates**

**WATER SYSTEM
ONE-TIME INCREASE**

<u>Customer Classification</u>	<u>Current Rates</u>	<u>Applicant Proposed</u>			<u>Staff Calculated</u>		
		<u>Rates</u>	<u>Increase</u>	<u>%</u>	<u>Rates</u>	<u>Increase</u>	<u>%</u>
DOMESTIC SERVICE							
<u>Water Customer Charge (per Month)</u>							
For 5/8" meter	\$3.60	\$5.40	\$1.80	50.0%	\$4.00	\$0.40	11.1%
For 3/4" meter	\$4.51	\$10.70	\$6.19	137.3%	\$4.80	\$0.29	6.4%
For 1" meter	\$6.82	\$14.90	\$8.08	118.5%	\$6.90	\$0.08	1.2%
For 1/2" meter	\$13.43	\$25.50	\$12.07	89.9%	\$12.90	-\$0.53	-3.9%
For 2" meter	\$22.69	\$38.20	\$15.51	68.4%	\$21.25	-\$1.44	-6.3%
For 3" meter	\$49.13	\$68.00	\$18.87	38.4%	\$45.20	-\$3.93	-8.0%
For 4" meter	\$86.15	\$110.00	\$23.85	27.7%	\$78.70	-\$7.45	-8.6%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>							
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$2.3393	\$2.4020	\$0.0627	2.7%	\$2.6231	\$0.2838	12.1%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$1.6586	\$1.5780	-\$0.0806	-4.9%	\$1.7287	\$0.0701	4.2%
<u>Softening Surcharge</u>							
(applies to Valley & Lake Darby Districts)	\$0.4100	\$0.2810	-\$0.1290	-31.5%	\$0.2810	-\$0.1290	-31.5%
<u>Reverse Osmosis Surcharge</u>							
(applies to Blendon Township District)	\$1.5304	\$1.5770	\$0.0466	3.0%	\$1.5770	\$0.0466	3.0%
NON-DOMESTIC SERVICE:							
<u>Water Customer Charge: (per Month)</u>							
For 5/8" meter	\$3.60	\$5.40	\$1.80	50.0%	\$4.00	\$0.40	11.1%
For 3/4" meter	\$4.51	\$10.70	\$6.19	137.3%	\$4.80	\$0.29	6.4%
For 1" meter	\$6.82	\$14.90	\$8.08	118.5%	\$6.90	\$0.08	1.2%
For 1/2" meter	\$13.43	\$25.50	\$12.07	89.9%	\$12.90	-\$0.53	-3.9%
For 2" meter	\$22.69	\$38.20	\$15.51	68.4%	\$21.25	-\$1.44	-6.3%
For 3" meter	\$49.13	\$68.00	\$18.87	38.4%	\$45.20	-\$3.93	-8.0%
For 4" meter	\$86.15	\$110.00	\$23.85	27.7%	\$78.70	-\$7.45	-8.6%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>							
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$2.3393	\$2.4020	\$0.0627	2.7%	\$2.6231	\$0.2838	12.1%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$1.6586	\$1.5780	-\$0.0806	-4.9%	\$1.7287	\$0.0701	4.2%
<u>Softening Surcharge</u>							
(applies to Valley & Lake Darby Districts)	\$0.4100	\$0.2810	-\$0.1290	-31.5%	\$0.2810	-\$0.1290	-31.5%
<u>Reverse Osmosis Surcharge</u>							
(applies to Blendon Township District)	\$1.5304	\$1.5770	\$0.0466	3.0%	\$1.5770	\$0.0466	3.0%

**Citizens Utilities Company of Ohio
Case No. 98-178-WS-AIR**

**Applicant Proposed Rates
Compared to
Current Rates**

**WATER SYSTEM
PHASE-IN**

Customer Classification	Current Rates	Year 1			Year 2			Year 3			Year 4		
		Rates	Increase	%									
DOMESTIC SERVICE													
<u>Water Customer Charge (per Month)</u>													
For 5/8" meter	\$3.60	\$4.50	\$0.90	25.0%	\$5.40	\$1.80	50.0%	\$5.70	\$2.10	58.3%	\$5.40	\$1.80	50.0%
For 3/4" meter	\$4.51	\$7.60	\$3.09	68.5%	\$10.70	\$6.19	137.3%	\$11.30	\$6.79	150.6%	\$10.70	\$6.19	137.3%
For 1" meter	\$6.82	\$10.90	\$4.08	59.8%	\$15.00	\$8.18	119.9%	\$15.70	\$8.88	130.2%	\$14.90	\$8.08	118.5%
For 1/2" meter	\$13.43	\$19.50	\$6.07	45.2%	\$25.60	\$12.17	90.6%	\$26.90	\$13.47	100.3%	\$25.50	\$12.07	89.9%
For 2" meter	\$22.69	\$30.50	\$7.81	34.4%	\$38.30	\$15.61	68.8%	\$40.20	\$17.51	77.2%	\$38.20	\$15.51	68.4%
For 3" meter	\$49.13	\$58.60	\$9.47	19.3%	\$68.00	\$18.87	38.4%	\$71.60	\$22.47	45.7%	\$68.00	\$18.87	38.4%
For 4" meter	\$86.15	\$98.60	\$12.45	14.5%	\$111.00	\$24.85	28.8%	\$115.80	\$29.65	34.4%	\$110.00	\$23.85	27.7%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>													
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$2.3393	\$2.3500	\$0.0107	0.5%	\$2.4220	\$0.0827	3.5%	\$2.5293	\$0.1900	8.1%	\$2.4020	\$0.0627	2.7%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$1.6586	\$1.6130	-\$0.0456	-2.7%	\$1.5650	-\$0.0936	-5.6%	\$1.5650	-\$0.0936	-5.6%	\$1.5780	-\$0.0806	-4.9%
<u>Softening Surcharge</u>													
(applies to Valley & Lake Darby Districts)	\$0.4100	\$0.2810	-\$0.1290	-31.5%	\$0.2810	-\$0.1290	-31.5%	\$0.2810	-\$0.1290	-31.5%	\$0.2810	-\$0.1290	-31.5%
<u>Reverse Osmosis Surcharge</u>													
(applies to Blendon Township District)	\$1.5304	\$1.5540	\$0.0236	1.5%	\$1.5800	\$0.0496	3.2%	\$1.6606	\$0.1302	8.5%	\$1.5770	\$0.0466	3.0%
NON-DOMESTIC SERVICE:													
<u>Water Customer Charge: (per Month)</u>													
For 5/8" meter	\$3.60	\$4.50	\$0.90	25.0%	\$5.40	\$1.80	50.0%	\$5.70	\$2.10	58.3%	\$5.40	\$1.80	50.0%
For 3/4" meter	\$4.51	\$7.60	\$3.09	68.5%	\$10.70	\$6.19	137.3%	\$11.30	\$6.79	150.6%	\$10.70	\$6.19	137.3%
For 1" meter	\$6.82	\$10.90	\$4.08	59.8%	\$15.00	\$8.18	119.9%	\$15.70	\$8.88	130.2%	\$14.90	\$8.08	118.5%
For 1/2" meter	\$13.43	\$19.50	\$6.07	45.2%	\$25.60	\$12.17	90.6%	\$26.90	\$13.47	100.3%	\$25.50	\$12.07	89.9%
For 2" meter	\$22.69	\$30.50	\$7.81	34.4%	\$38.30	\$15.61	68.8%	\$40.20	\$17.51	77.2%	\$38.20	\$15.51	68.4%
For 3" meter	\$49.13	\$58.60	\$9.47	19.3%	\$68.00	\$18.87	38.4%	\$71.60	\$22.47	45.7%	\$68.00	\$18.87	38.4%
For 4" meter	\$86.15	\$98.60	\$12.45	14.5%	\$111.00	\$24.85	28.8%	\$115.80	\$29.65	34.4%	\$110.00	\$23.85	27.7%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>													
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$2.3393	\$2.3500	\$0.0107	0.5%	\$2.4220	\$0.0827	3.5%	\$2.5293	\$0.1900	8.1%	\$2.4020	\$0.0627	2.7%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$1.6586	\$1.6130	-\$0.0456	-2.7%	\$1.5650	-\$0.0936	-5.6%	\$1.5650	-\$0.0936	-5.6%	\$1.5780	-\$0.0806	-4.9%
<u>Softening Surcharge</u>													
(applies to Valley & Lake Darby Districts)	\$0.4100	\$0.2810	-\$0.1290	-31.5%	\$0.2810	-\$0.1290	-31.5%	\$0.2810	-\$0.1290	-31.5%	\$0.2810	-\$0.1290	-31.5%
<u>Reverse Osmosis Surcharge</u>													
(applies to Blendon Township District)	\$1.5304	\$1.5540	\$0.0236	1.5%	\$1.5800	\$0.0496	3.2%	\$1.6606	\$0.1302	8.5%	\$1.5770	\$0.0466	3.0%

TABLE 10

**Citizens Utilities Company of Ohio
Case No. 98-178-WS-AIR**

**Staff Calculated Rates
Compared to
Current Rates**

**WATER SYSTEM
PHASE-IN**

Customer Classification	Current Rates	Year 1			Year 2			Year 3			Year 4		
		Rates	Increase	%									
DOMESTIC SERVICE													
<u>Water Customer Charge (per Month)</u>													
For 5/8" meter	\$3.60	\$4.00	\$0.40	11.1%	\$4.00	\$0.40	11.1%	\$4.00	\$0.40	11.1%	\$4.00	\$0.40	11.1%
For 3/4" meter	\$4.51	\$4.80	\$0.29	6.4%	\$4.80	\$0.29	6.4%	\$4.80	\$0.29	6.4%	\$4.80	\$0.29	6.4%
For 1" meter	\$6.82	\$6.90	\$0.08	1.2%	\$6.90	\$0.08	1.2%	\$6.90	\$0.08	1.2%	\$6.90	\$0.08	1.2%
For 1/2" meter	\$13.43	\$12.90	-\$0.53	-3.9%	\$12.90	-\$0.53	-3.9%	\$12.90	-\$0.53	-3.9%	\$12.90	-\$0.53	-3.9%
For 2" meter	\$22.69	\$21.25	-\$1.44	-6.3%	\$21.25	-\$1.44	-6.3%	\$21.25	-\$1.44	-6.3%	\$21.25	-\$1.44	-6.3%
For 3" meter	\$49.13	\$45.20	-\$3.93	-8.0%	\$45.20	-\$3.93	-8.0%	\$45.20	-\$3.93	-8.0%	\$45.20	-\$3.93	-8.0%
For 4" meter	\$86.15	\$78.70	-\$7.45	-8.6%	\$78.70	-\$7.45	-8.6%	\$78.70	-\$7.45	-8.6%	\$78.70	-\$7.45	-8.6%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>													
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$2.3393	\$2.4514	\$0.1121	4.8%	\$2.6448	\$0.3055	13.1%	\$2.7967	\$0.4574	19.6%	\$2.6231	\$0.2838	12.1%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$1.6586	\$1.7148	\$0.0562	3.4%	\$1.7186	\$0.0600	3.6%	\$1.7353	\$0.0767	4.6%	\$1.7287	\$0.0701	4.2%
<u>Softening Surcharge</u>													
(applies to Valley & Lake Darby Districts)	\$0.4100	\$0.2810	-\$0.1290	-31.5%	\$0.2810	-\$0.1290	-31.5%	\$0.2810	-\$0.1290	-31.5%	\$0.2810	-\$0.1290	-31.5%
<u>Reverse Osmosis Surcharge</u>													
(applies to Blendon Township District)	\$1.5304	\$1.5540	\$0.0236	1.5%	\$1.5800	\$0.0496	3.2%	\$1.6606	\$0.1302	8.5%	\$1.5770	\$0.0466	3.0%
NON-DOMESTIC SERVICE:													
<u>Water Customer Charge: (per Month)</u>													
For 5/8" meter	\$3.60	\$4.00	\$0.40	11.1%	\$4.00	\$0.40	11.1%	\$4.00	\$0.40	11.1%	\$4.00	\$0.40	11.1%
For 3/4" meter	\$4.51	\$4.80	\$0.29	6.4%	\$4.80	\$0.29	6.4%	\$4.80	\$0.29	6.4%	\$4.80	\$0.29	6.4%
For 1" meter	\$6.82	\$6.90	\$0.08	1.2%	\$6.90	\$0.08	1.2%	\$6.90	\$0.08	1.2%	\$6.90	\$0.08	1.2%
For 1/2" meter	\$13.43	\$12.90	-\$0.53	-3.9%	\$12.90	-\$0.53	-3.9%	\$12.90	-\$0.53	-3.9%	\$12.90	-\$0.53	-3.9%
For 2" meter	\$22.69	\$21.25	-\$1.44	-6.3%	\$21.25	-\$1.44	-6.3%	\$21.25	-\$1.44	-6.3%	\$21.25	-\$1.44	-6.3%
For 3" meter	\$49.13	\$45.20	-\$3.93	-8.0%	\$45.20	-\$3.93	-8.0%	\$45.20	-\$3.93	-8.0%	\$45.20	-\$3.93	-8.0%
For 4" meter	\$86.15	\$78.70	-\$7.45	-8.6%	\$78.70	-\$7.45	-8.6%	\$78.70	-\$7.45	-8.6%	\$78.70	-\$7.45	-8.6%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>													
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$2.3393	\$2.4514	\$0.1121	4.8%	\$2.6448	\$0.3055	13.1%	\$2.7967	\$0.4574	19.6%	\$2.6231	\$0.2838	12.1%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$1.6586	\$1.7148	\$0.0562	3.4%	\$1.7186	\$0.0600	3.6%	\$1.7353	\$0.0767	4.6%	\$1.7287	\$0.0701	4.2%
<u>Softening Surcharge</u>													
(applies to Valley & Lake Darby Districts)	\$0.4100	\$0.2810	-\$0.1290	-31.5%	\$0.2810	-\$0.1290	-31.5%	\$0.2810	-\$0.1290	-31.5%	\$0.2810	-\$0.1290	-31.5%
<u>Reverse Osmosis Surcharge</u>													
(applies to Blendon Township District)	\$1.5304	\$1.5540	\$0.0236	1.5%	\$1.5800	\$0.0496	3.2%	\$1.6606	\$0.1302	8.5%	\$1.5770	\$0.0466	3.0%

TABLE 11

**Citizens Utilities Company of Ohio
Case No. 98-178-WS-AIR**

**Applicant Proposed Rates
Compared to
Previous Year's Rates**

**WATER SYSTEM
PHASE-IN**

Customer Classification	Current Rates	Year 1			Year 2			Year 3			Year 4		
		Rates	Increase	%	Rates	Increase	%	Rates	Increase	%	Rates	Increase	%
DOMESTIC SERVICE													
<u>Water Customer Charge (per Month)</u>													
For 5/8" meter	\$3.60	\$4.50	\$0.90	25.0%	\$5.40	\$0.90	20.0%	\$5.70	\$0.30	5.6%	\$5.40	-\$0.30	-5.3%
For 3/4" meter	\$4.51	\$7.60	\$3.09	68.5%	\$10.70	\$3.10	40.8%	\$11.30	\$0.60	5.6%	\$10.70	-\$0.60	-5.3%
For 1" meter	\$6.82	\$10.90	\$4.08	59.8%	\$15.00	\$4.10	37.6%	\$15.70	\$0.70	4.7%	\$14.90	-\$0.80	-5.1%
For 1/2" meter	\$13.43	\$19.50	\$6.07	45.2%	\$25.60	\$6.10	31.3%	\$26.90	\$1.30	5.1%	\$25.50	-\$1.40	-5.2%
For 2" meter	\$22.69	\$30.50	\$7.81	34.4%	\$38.30	\$7.80	25.6%	\$40.20	\$1.90	5.0%	\$38.20	-\$2.00	-5.0%
For 3" meter	\$49.13	\$58.60	\$9.47	19.3%	\$68.00	\$9.40	16.0%	\$71.60	\$3.60	5.3%	\$68.00	-\$3.60	-5.0%
For 4" meter	\$86.15	\$98.60	\$12.45	14.5%	\$111.00	\$12.40	12.6%	\$115.80	\$4.80	4.3%	\$110.00	-\$5.80	-5.0%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>													
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$2.3393	\$2.3500	\$0.0107	0.5%	\$2.4220	\$0.07	3.1%	\$2.5293	\$0.11	4.4%	\$2.4020	-\$0.13	-5.0%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$1.6586	\$1.6130	-\$0.0456	-2.7%	\$1.5650	-\$0.05	-3.0%	\$1.5650	\$0.00	0.0%	\$1.5780	\$0.01	0.8%
<u>Softening Surcharge</u>													
(applies to Valley & Lake Darby Districts)	\$0.4100	\$0.2810	-\$0.1290	-31.5%	\$0.2810	\$0.00	0.0%	\$0.2810	\$0.00	0.0%	\$0.2810	\$0.00	0.0%
<u>Reverse Osmosis Surcharge</u>													
(applies to Blendon Township District)	\$1.5304	\$1.5540	\$0.0236	1.5%	\$1.5800	\$0.03	1.7%	\$1.6606	\$0.08	5.1%	\$1.5770	-\$0.08	-5.0%
NON-DOMESTIC SERVICE:													
<u>Water Customer Charge: (per Month)</u>													
For 5/8" meter	\$3.60	\$4.50	\$0.90	25.0%	\$5.40	\$0.90	20.0%	\$5.70	\$0.30	5.6%	\$5.40	-\$0.30	-5.3%
For 3/4" meter	\$4.51	\$7.60	\$3.09	68.5%	\$10.70	\$3.10	40.8%	\$11.30	\$0.60	5.6%	\$10.70	-\$0.60	-5.3%
For 1" meter	\$6.82	\$10.90	\$4.08	59.8%	\$15.00	\$4.10	37.6%	\$15.70	\$0.70	4.7%	\$14.90	-\$0.80	-5.1%
For 1/2" meter	\$13.43	\$19.50	\$6.07	45.2%	\$25.60	\$6.10	31.3%	\$26.90	\$1.30	5.1%	\$25.50	-\$1.40	-5.2%
For 2" meter	\$22.69	\$30.50	\$7.81	34.4%	\$38.30	\$7.80	25.6%	\$40.20	\$1.90	5.0%	\$38.20	-\$2.00	-5.0%
For 3" meter	\$49.13	\$58.60	\$9.47	19.3%	\$68.00	\$9.40	16.0%	\$71.60	\$3.60	5.3%	\$68.00	-\$3.60	-5.0%
For 4" meter	\$86.15	\$98.60	\$12.45	14.5%	\$111.00	\$12.40	12.6%	\$115.80	\$4.80	4.3%	\$110.00	-\$5.80	-5.0%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>													
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$2.3393	\$2.3500	\$0.0107	0.5%	\$2.4220	\$0.07	3.1%	\$2.5293	\$0.11	4.4%	\$2.4020	-\$0.13	-5.0%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$1.6586	\$1.6130	-\$0.0456	-2.7%	\$1.5650	-\$0.05	-3.0%	\$1.5650	\$0.00	0.0%	\$1.5780	\$0.01	0.8%
<u>Softening Surcharge</u>													
(applies to Valley & Lake Darby Districts)	\$0.4100	\$0.2810	-\$0.1290	-31.5%	\$0.2810	\$0.00	0.0%	\$0.2810	\$0.00	0.0%	\$0.2810	\$0.00	0.0%
<u>Reverse Osmosis Surcharge</u>													
(applies to Blendon Township District)	\$1.5304	\$1.5540	\$0.0236	1.5%	\$1.5800	\$0.03	1.7%	\$1.6606	\$0.08	5.1%	\$1.5770	-\$0.08	-5.0%

TABLE 12

**Citizens Utilities Company of Ohio
Case No. 98-178-WS-AIR**

**Staff Calculated Rates
Compared to
Previous Year's Rates**

**WATER SYSTEM
PHASE-IN**

Customer Classification	Current Rates	Year 1			Year 2			Year 3			Year 4		
		Rates	Increase	%	Rates	Increase	%	Rates	Increase	%	Rates	Increase	%
DOMESTIC SERVICE													
<u>Water Customer Charge (per Month)</u>													
For 5/8" meter	\$3.60	\$4.00	\$0.40	11.1%	\$4.00	\$0.00	0.0%	\$4.00	\$0.00	0.0%	\$4.00	\$0.00	0.0%
For 3/4" meter	\$4.51	\$4.80	\$0.29	6.4%	\$4.80	\$0.00	0.0%	\$4.80	\$0.00	0.0%	\$4.80	\$0.00	0.0%
For 1" meter	\$6.82	\$6.90	\$0.08	1.2%	\$6.90	\$0.00	0.0%	\$6.90	\$0.00	0.0%	\$6.90	\$0.00	0.0%
For 1/2" meter	\$13.43	\$12.90	-\$0.53	-3.9%	\$12.90	\$0.00	0.0%	\$12.90	\$0.00	0.0%	\$12.90	\$0.00	0.0%
For 2" meter	\$22.69	\$21.25	-\$1.44	-6.3%	\$21.25	\$0.00	0.0%	\$21.25	\$0.00	0.0%	\$21.25	\$0.00	0.0%
For 3" meter	\$49.13	\$45.20	-\$3.93	-8.0%	\$45.20	\$0.00	0.0%	\$45.20	\$0.00	0.0%	\$45.20	\$0.00	0.0%
For 4" meter	\$86.15	\$78.70	-\$7.45	-8.6%	\$78.70	\$0.00	0.0%	\$78.70	\$0.00	0.0%	\$78.70	\$0.00	0.0%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>													
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$2.3393	\$2.4514	\$0.1121	4.8%	\$2.6448	\$0.19	7.9%	\$2.7967	\$0.15	5.7%	\$2.6231	-\$0.17	-6.2%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$1.6586	\$1.7148	\$0.0562	3.4%	\$1.7186	\$0.00	0.2%	\$1.7353	\$0.02	1.0%	\$1.7287	-\$0.01	-0.4%
<u>Softening Surcharge</u>													
(applies to Valley & Lake Darby Districts)	\$0.4100	\$0.2810	-\$0.1290	-31.5%	\$0.2810	\$0.00	0.0%	\$0.2810	\$0.00	0.0%	\$0.2810	\$0.00	0.0%
<u>Reverse Osmosis Surcharge</u>													
(applies to Blendon Township District)	\$1.5304	\$1.5540	\$0.0236	1.5%	\$1.5800	\$0.03	1.7%	\$1.6606	\$0.08	5.1%	\$1.5770	-\$0.08	-5.0%
NON-DOMESTIC SERVICE:													
<u>Water Customer Charge: (per Month)</u>													
For 5/8" meter	\$3.60	\$4.00	\$0.40	11.1%	\$4.00	\$0.00	0.0%	\$4.00	\$0.00	0.0%	\$4.00	\$0.00	0.0%
For 3/4" meter	\$4.51	\$4.80	\$0.29	6.4%	\$4.80	\$0.00	0.0%	\$4.80	\$0.00	0.0%	\$4.80	\$0.00	0.0%
For 1" meter	\$6.82	\$6.90	\$0.08	1.2%	\$6.90	\$0.00	0.0%	\$6.90	\$0.00	0.0%	\$6.90	\$0.00	0.0%
For 1/2" meter	\$13.43	\$12.90	-\$0.53	-3.9%	\$12.90	\$0.00	0.0%	\$12.90	\$0.00	0.0%	\$12.90	\$0.00	0.0%
For 2" meter	\$22.69	\$21.25	-\$1.44	-6.3%	\$21.25	\$0.00	0.0%	\$21.25	\$0.00	0.0%	\$21.25	\$0.00	0.0%
For 3" meter	\$49.13	\$45.20	-\$3.93	-8.0%	\$45.20	\$0.00	0.0%	\$45.20	\$0.00	0.0%	\$45.20	\$0.00	0.0%
For 4" meter	\$86.15	\$78.70	-\$7.45	-8.6%	\$78.70	\$0.00	0.0%	\$78.70	\$0.00	0.0%	\$78.70	\$0.00	0.0%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>													
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$2.3393	\$2.4514	\$0.1121	4.8%	\$2.6448	\$0.19	7.9%	\$2.7967	\$0.15	5.7%	\$2.6231	-\$0.17	-6.2%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$1.6586	\$1.7148	\$0.0562	3.4%	\$1.7186	\$0.00	0.2%	\$1.7353	\$0.02	1.0%	\$1.7287	-\$0.01	-0.4%
<u>Softening Surcharge</u>													
(applies to Valley & Lake Darby Districts)	\$0.4100	\$0.2810	-\$0.1290	-31.5%	\$0.2810	\$0.00	0.0%	\$0.2810	\$0.00	0.0%	\$0.2810	\$0.00	0.0%
<u>Reverse Osmosis Surcharge</u>													
(applies to Blendon Township District)	\$1.5304	\$1.5540	\$0.0236	1.5%	\$1.5800	\$0.03	1.7%	\$1.6606	\$0.08	5.1%	\$1.5770	-\$0.08	-5.0%

TABLE 13

**Citizens Utilities Company of Ohio
Case No. 98-178-WS-AIR**

**WASTE WATER SYSTEM
ONE-TIME INCREASE**

<u>Customer Classification</u>	<u>Current Rates</u>	<u>Applicant Proposed</u>			<u>Staff Calculated</u>		
		<u>Rates</u>	<u>Increase</u>	<u>%</u>	<u>Rates</u>	<u>Increase</u>	<u>%</u>
DOMESTIC SERVICE							
<u>Water Customer Charge (per Month)</u>							
For 5/8" meter	\$3.60	\$7.20	\$3.60	100.0%	\$4.00	\$0.40	11.1%
For 3/4" meter	\$4.51	\$10.70	\$6.19	137.3%	\$4.80	\$0.29	6.4%
For 1" meter	\$6.82	\$15.30	\$8.48	124.3%	\$6.90	\$0.08	1.2%
For 1/2" meter	\$13.43	\$28.40	\$14.97	111.5%	\$12.90	-\$0.53	-3.9%
For 2" meter	\$22.69	\$44.00	\$21.31	93.9%	\$21.25	-\$1.44	-6.3%
For 3" meter	\$49.13	\$81.00	\$31.87	64.9%	\$45.20	-\$3.93	-8.0%
For 4" meter	\$86.15	\$133.00	\$46.85	54.4%	\$78.70	-\$7.45	-8.6%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>							
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$3.1399	\$3.9350	\$0.80	25.3%	\$4.4093	\$1.27	40.4%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$2.1547	\$2.5190	\$0.36	16.9%	\$2.7272	\$0.57	26.6%
Non-Metered Flat Rate Service	\$21.01	\$21.01	\$0.00	0.0%	\$28.41	\$7.40	35.2%
NON-DOMESTIC SERVICE:							
<u>Water Customer Charge (per Month)</u>							
For 5/8" meter	3.60	\$7.20	\$3.60	100.0%	4.00	\$0.40	11.1%
For 3/4" meter	4.51	\$10.70	\$6.19	137.3%	4.80	\$0.29	6.4%
For 1" meter	\$6.82	\$15.30	\$8.48	124.3%	\$6.90	\$0.08	1.2%
For 1/2" meter	\$13.43	\$28.40	\$14.97	111.5%	\$12.90	-\$0.53	-3.9%
For 2" meter	\$22.69	\$44.00	\$21.31	93.9%	\$21.25	-\$1.44	-6.3%
For 3" meter	\$49.13	\$81.00	\$31.87	64.9%	\$45.20	-\$3.93	-8.0%
For 4" meter	\$86.15	\$133.00	\$46.85	54.4%	\$78.70	-\$7.45	-8.6%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>							
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$3.1399	3.9350	\$0.80	25.3%	4.4093	\$1.27	40.4%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$2.1547	2.5190	\$0.36	16.9%	2.7272	\$0.57	26.6%

**Citizens Utilities Company of Ohio
Case No. 98-178-WS-AIR**

**Applicant Proposed Rates
Compared to
Current Rates**

**WASTE WATER SYSTEM
PHASE-IN**

Customer Classification	Current Rates	Year 1			Year 2			Year 3			Year 4		
		Rates	Increase	%	Rates	Increase	%	Rates	Increase	%	Rates	Increase	%
DOMESTIC SERVICE													
<u>Water Customer Charge (per Month)</u>													
For 5/8" meter	\$3.60	\$5.40	\$1.80	50.0%	\$7.20	\$3.60	100.0%	\$8.25	\$4.65	129.2%	\$7.20	\$3.60	100.0%
For 3/4" meter	\$4.51	\$7.60	\$3.09	68.5%	\$10.70	\$6.19	137.3%	\$12.30	\$7.79	172.7%	\$10.70	\$6.19	137.3%
For 1" meter	\$6.82	\$11.10	\$4.28	62.8%	\$15.30	\$8.48	124.3%	\$17.50	\$10.68	156.6%	\$15.30	\$8.48	124.3%
For 1/2" meter	\$13.43	\$20.90	\$7.47	55.6%	\$28.40	\$14.97	111.5%	\$32.50	\$19.07	142.0%	\$28.40	\$14.97	111.5%
For 2" meter	\$22.69	\$33.30	\$10.61	46.8%	\$44.00	\$21.31	93.9%	\$50.40	\$27.71	122.1%	\$44.00	\$21.31	93.9%
For 3" meter	\$49.13	\$65.10	\$15.97	32.5%	\$81.00	\$31.87	64.9%	\$92.80	\$43.67	88.9%	\$81.00	\$31.87	64.9%
For 4" meter	\$86.15	\$109.60	\$23.45	27.2%	\$133.00	\$46.85	54.4%	\$152.40	\$66.25	76.9%	\$133.00	\$46.85	54.4%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>													
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$3.1399	\$3.5150	\$0.3751	11.9%	\$4.0060	\$0.8661	27.6%	\$4.5087	\$1.3688	43.6%	\$3.9350	\$0.7951	25.3%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$2.1547	\$2.3220	\$0.1673	7.8%	\$2.5650	\$0.4103	19.0%	\$2.8863	\$0.7316	34.0%	\$2.5190	\$0.3643	16.9%
NON-DOMESTIC SERVICE:													
<u>Water Customer Charge (per Month)</u>													
For 5/8" meter	\$3.60	\$5.40	\$1.80	50.0%	\$7.20	\$3.60	100.0%	\$8.25	\$4.65	129.2%	\$7.20	\$3.60	100.0%
For 3/4" meter	\$4.51	\$7.60	\$3.09	68.5%	\$10.70	\$6.19	137.3%	\$12.30	\$7.79	172.7%	\$10.70	\$6.19	137.3%
For 1" meter	\$6.82	\$11.10	\$4.28	62.8%	\$15.30	\$8.48	124.3%	\$17.50	\$10.68	156.6%	\$15.30	\$8.48	124.3%
For 1/2" meter	\$13.43	\$20.90	\$7.47	55.6%	\$28.40	\$14.97	111.5%	\$32.50	\$19.07	142.0%	\$28.40	\$14.97	111.5%
For 2" meter	\$22.69	\$33.30	\$10.61	46.8%	\$44.00	\$21.31	93.9%	\$50.40	\$27.71	122.1%	\$44.00	\$21.31	93.9%
For 3" meter	\$49.13	\$65.10	\$15.97	32.5%	\$81.00	\$31.87	64.9%	\$92.80	\$43.67	88.9%	\$81.00	\$31.87	64.9%
For 4" meter	\$86.15	\$109.60	\$23.45	27.2%	\$133.00	\$46.85	54.4%	\$152.40	\$66.25	76.9%	\$133.00	\$46.85	54.4%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>													
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$3.1399	\$3.5150	\$0.3751	11.9%	\$4.0060	\$0.8661	27.6%	\$4.5087	\$1.3688	43.6%	\$3.9350	\$0.7951	25.3%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$2.1547	\$2.3220	\$0.1673	7.8%	\$2.5650	\$0.4103	19.0%	\$2.8863	\$0.7316	34.0%	\$2.5190	\$0.3643	16.9%

**Citizens Utilities Company of Ohio
Case No. 98-178-WS-AIR**

**Staff Calculated Rates
Compared to
Current Rates**

**WASTE WATER SYSTEM
PHASE-IN**

Customer Classification	Current Rates	Year 1			Year 2			Year 3			Year 4		
		Rates	Increase	%									
DOMESTIC SERVICE													
<u>Water Customer Charge (per Month)</u>													
For 5/8" meter	\$3.60	\$4.00	\$0.40	11.1%	\$4.00	\$0.40	11.1%	\$4.00	\$0.40	11.1%	\$4.00	\$0.40	11.1%
For 3/4" meter	\$4.51	\$4.80	\$0.29	6.4%	\$4.80	\$0.29	6.4%	\$4.80	\$0.29	6.4%	\$4.80	\$0.29	6.4%
For 1" meter	\$6.82	\$6.90	\$0.08	1.2%	\$6.90	\$0.08	1.2%	\$6.90	\$0.08	1.2%	\$6.90	\$0.08	1.2%
For 1/2" meter	\$13.43	\$12.90	-\$0.53	-3.9%	\$12.90	-\$0.53	-3.9%	\$12.90	-\$0.53	-3.9%	\$12.90	-\$0.53	-3.9%
For 2" meter	\$22.69	\$21.25	-\$1.44	-6.3%	\$21.25	-\$1.44	-6.3%	\$21.25	-\$1.44	-6.3%	\$21.25	-\$1.44	-6.3%
For 3" meter	\$49.13	\$45.20	-\$3.93	-8.0%	\$45.20	-\$3.93	-8.0%	\$45.20	-\$3.93	-8.0%	\$45.20	-\$3.93	-8.0%
For 4" meter	\$86.15	\$78.70	-\$7.45	-8.6%	\$78.70	-\$7.45	-8.6%	\$78.70	-\$7.45	-8.6%	\$78.70	-\$7.45	-8.6%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>													
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$3.1399	\$3.7429	\$0.6030	19.2%	\$4.4813	\$1.3414	42.7%	\$5.1294	\$1.9895	63.4%	\$4.4093	\$1.2694	40.4%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$2.1547	\$2.4620	\$0.3073	14.3%	\$2.7746	\$0.6199	28.8%	\$3.1418	\$0.9871	45.8%	\$2.7272	\$0.5725	26.6%
Non-Metered Flat Rate Service	\$21.01	\$24.71	\$3.70	17.6%	\$28.83	\$7.82	37.2%	\$32.52	\$11.51	54.8%	\$28.41	\$7.40	35.2%
NON-DOMESTIC SERVICE:													
<u>Water Customer Charge (per Month)</u>													
For 5/8" meter	\$3.60	\$4.00	\$0.40	11.1%	\$4.00	\$0.40	11.1%	\$4.00	\$0.40	11.1%	\$4.00	\$0.40	11.1%
For 3/4" meter	\$4.51	\$4.80	\$0.29	6.4%	\$4.80	\$0.29	6.4%	\$4.80	\$0.29	6.4%	\$4.80	\$0.29	6.4%
For 1" meter	\$6.82	\$6.90	\$0.08	1.2%	\$6.90	\$0.08	1.2%	\$6.90	\$0.08	1.2%	\$6.90	\$0.08	1.2%
For 1/2" meter	\$13.43	\$12.90	-\$0.53	-3.9%	\$12.90	-\$0.53	-3.9%	\$12.90	-\$0.53	-3.9%	\$12.90	-\$0.53	-3.9%
For 2" meter	\$22.69	\$21.25	-\$1.44	-6.3%	\$21.25	-\$1.44	-6.3%	\$21.25	-\$1.44	-6.3%	\$21.25	-\$1.44	-6.3%
For 3" meter	\$49.13	\$45.20	-\$3.93	-8.0%	\$45.20	-\$3.93	-8.0%	\$45.20	-\$3.93	-8.0%	\$45.20	-\$3.93	-8.0%
For 4" meter	\$86.15	\$78.70	-\$7.45	-8.6%	\$78.70	-\$7.45	-8.6%	\$78.70	-\$7.45	-8.6%	\$78.70	-\$7.45	-8.6%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>													
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$3.1399	\$3.7429	\$0.6030	19.2%	\$4.4813	\$1.3414	42.7%	\$5.1294	\$1.9895	63.4%	\$4.4093	\$1.2694	40.4%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$2.1547	\$2.4620	\$0.3073	14.3%	\$2.7746	\$0.6199	28.8%	\$3.1418	\$0.9871	45.8%	\$2.7272	\$0.5725	26.6%

**Citizens Utilities Company of Ohio
Case No. 98-178-WS-AIR**

**Applicant Proposed Rates
Compared to
Previous Year's Rates**

**WASTE WATER SYSTEM
PHASE-IN**

Customer Classification	Current Rates	Year 1			Year 2			Year 3			Year 4		
		Rates	Increase	%									
DOMESTIC SERVICE													
<u>Water Customer Charge (per Month)</u>													
For 5/8" meter	\$3.60	\$5.40	\$1.80	50.0%	\$7.20	\$1.80	33.3%	\$8.25	\$1.05	14.6%	\$7.20	-\$1.05	-12.7%
For 3/4" meter	\$4.51	\$7.60	\$3.09	68.5%	\$10.70	\$3.10	40.8%	\$12.30	\$1.60	15.0%	\$10.70	-\$1.60	-13.0%
For 1" meter	\$6.82	\$11.10	\$4.28	62.8%	\$15.30	\$4.20	37.8%	\$17.50	\$2.20	14.4%	\$15.30	-\$2.20	-12.6%
For 1/2" meter	\$13.43	\$20.90	\$7.47	55.6%	\$28.40	\$7.50	35.9%	\$32.50	\$4.10	14.4%	\$28.40	-\$4.10	-12.6%
For 2" meter	\$22.69	\$33.30	\$10.61	46.8%	\$44.00	\$10.70	32.1%	\$50.40	\$6.40	14.5%	\$44.00	-\$6.40	-12.7%
For 3" meter	\$49.13	\$65.10	\$15.97	32.5%	\$81.00	\$15.90	24.4%	\$92.80	\$11.80	14.6%	\$81.00	-\$11.80	-12.7%
For 4" meter	\$86.15	\$109.60	\$23.45	27.2%	\$133.00	\$23.40	21.4%	\$152.40	\$19.40	14.6%	\$133.00	-\$19.40	-12.7%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>													
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$3.14	\$3.52	\$0.3751	11.9%	\$4.01	\$0.49	14.0%	\$4.51	\$0.50	12.5%	\$3.94	-\$0.57	-12.7%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$2.15	\$2.32	\$0.1673	7.8%	\$2.57	\$0.24	10.5%	\$2.89	\$0.32	12.5%	\$2.52	-\$0.37	-12.7%
NON-DOMESTIC SERVICE:													
<u>Water Customer Charge (per Month)</u>													
For 5/8" meter	\$3.60	\$5.40	\$1.80	50.0%	\$7.20	\$1.80	33.3%	\$8.25	\$1.05	14.6%	\$7.20	-\$1.05	-12.7%
For 3/4" meter	\$4.51	\$7.60	\$3.09	68.5%	\$10.70	\$3.10	40.8%	\$12.30	\$1.60	15.0%	\$10.70	-\$1.60	-13.0%
For 1" meter	\$6.82	\$11.10	\$4.28	62.8%	\$15.30	\$4.20	37.8%	\$17.50	\$2.20	14.4%	\$15.30	-\$2.20	-12.6%
For 1/2" meter	\$13.43	\$20.90	\$7.47	55.6%	\$28.40	\$7.50	35.9%	\$32.50	\$4.10	14.4%	\$28.40	-\$4.10	-12.6%
For 2" meter	\$22.69	\$33.30	\$10.61	46.8%	\$44.00	\$10.70	32.1%	\$50.40	\$6.40	14.5%	\$44.00	-\$6.40	-12.7%
For 3" meter	\$49.13	\$65.10	\$15.97	32.5%	\$81.00	\$15.90	24.4%	\$92.80	\$11.80	14.6%	\$81.00	-\$11.80	-12.7%
For 4" meter	\$86.15	\$109.60	\$23.45	27.2%	\$133.00	\$23.40	21.4%	\$152.40	\$19.40	14.6%	\$133.00	-\$19.40	-12.7%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>													
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$3.14	\$3.52	\$0.3751	11.9%	\$4.01	\$0.49	14.0%	\$4.51	\$0.50	12.5%	\$3.94	-\$0.57	-12.7%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$2.15	\$2.32	\$0.1673	7.8%	\$2.57	\$0.24	10.5%	\$2.89	\$0.32	12.5%	\$2.52	-\$0.37	-12.7%

**Citizens Utilities Company of Ohio
Case No. 98-178-WS-AIR**

**Staff Calculated Rates
Compared to
Previous Year's Rates**

**WASTE WATER SYSTEM
PHASE-IN**

Customer Classification	Current Rates	Year 1			Year 2			Year 3			Year 4		
		Rates	Increase	%	Rates	Increase	%	Rates	Increase	%	Rates	Increase	%
DOMESTIC SERVICE													
<u>Water Customer Charge (per Month)</u>													
For 5/8" meter	\$3.60	\$4.00	\$0.40	11.1%	\$4.00	\$0.00	0.0%	\$4.00	\$0.00	0.0%	\$4.00	\$0.00	0.0%
For 3/4" meter	\$4.51	\$4.80	\$0.29	6.4%	\$4.80	\$0.00	0.0%	\$4.80	\$0.00	0.0%	\$4.80	\$0.00	0.0%
For 1" meter	\$6.82	\$6.90	\$0.08	1.2%	\$6.90	\$0.00	0.0%	\$6.90	\$0.00	0.0%	\$6.90	\$0.00	0.0%
For 1/2" meter	\$13.43	\$12.90	-\$0.53	-3.9%	\$12.90	\$0.00	0.0%	\$12.90	\$0.00	0.0%	\$12.90	\$0.00	0.0%
For 2" meter	\$22.69	\$21.25	-\$1.44	-6.3%	\$21.25	\$0.00	0.0%	\$21.25	\$0.00	0.0%	\$21.25	\$0.00	0.0%
For 3" meter	\$49.13	\$45.20	-\$3.93	-8.0%	\$45.20	\$0.00	0.0%	\$45.20	\$0.00	0.0%	\$45.20	\$0.00	0.0%
For 4" meter	\$86.15	\$78.70	-\$7.45	-8.6%	\$78.70	\$0.00	0.0%	\$78.70	\$0.00	0.0%	\$78.70	\$0.00	0.0%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>													
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$3.1399	\$3.7429	\$0.6030	19.2%	\$4.4813	\$0.7384	19.7%	\$5.1294	\$0.6481	14.5%	\$4.4093	-\$0.7201	-14.0%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$2.1547	\$2.4620	\$0.3073	14.3%	\$2.7746	\$0.3126	12.7%	\$3.1418	\$0.3672	13.2%	\$2.7272	-\$0.4146	-13.2%
Non-Metered Flat Rate Service	\$21.01	\$24.71	\$3.70	17.6%	\$28.83	\$4.12	16.7%	\$32.52	\$3.69	12.8%	\$28.41	-\$4.11	-12.6%
NON-DOMESTIC SERVICE:													
<u>Water Customer Charge (per Month)</u>													
For 5/8" meter	\$3.60	\$4.00	\$0.40	11.1%	\$4.00	\$0.00	0.0%	\$4.00	\$0.00	0.0%	\$4.00	\$0.00	0.0%
For 3/4" meter	\$4.51	\$4.80	\$0.29	6.4%	\$4.80	\$0.00	0.0%	\$4.80	\$0.00	0.0%	\$4.80	\$0.00	0.0%
For 1" meter	\$6.82	\$6.90	\$0.08	1.2%	\$6.90	\$0.00	0.0%	\$6.90	\$0.00	0.0%	\$6.90	\$0.00	0.0%
For 1/2" meter	\$13.43	\$12.90	-\$0.53	-3.9%	\$12.90	\$0.00	0.0%	\$12.90	\$0.00	0.0%	\$12.90	\$0.00	0.0%
For 2" meter	\$22.69	\$21.25	-\$1.44	-6.3%	\$21.25	\$0.00	0.0%	\$21.25	\$0.00	0.0%	\$21.25	\$0.00	0.0%
For 3" meter	\$49.13	\$45.20	-\$3.93	-8.0%	\$45.20	\$0.00	0.0%	\$45.20	\$0.00	0.0%	\$45.20	\$0.00	0.0%
For 4" meter	\$86.15	\$78.70	-\$7.45	-8.6%	\$78.70	\$0.00	0.0%	\$78.70	\$0.00	0.0%	\$78.70	\$0.00	0.0%
<u>Water Consumption Charge - Non-Softened Water: (per Ccf)</u>													
First 13.33 hundred cubic feet (Appl. Prop. = First 20)	\$3.14	\$3.7429	\$0.6030	19.2%	\$4.4813	\$0.74	19.7%	\$5.1294	\$0.65	14.5%	\$4.4093	-\$0.72	-14.0%
Over 13.333 hundred cubic feet (Appl. Prop. = Over 20)	\$2.15	\$2.4620	\$0.3073	14.3%	\$2.7746	\$0.31	12.7%	\$3.1418	\$0.37	13.2%	\$2.7272	-\$0.41	-13.2%

Typical Bill Comparison

One-Time

"Basic Domestic Water Only - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 5.40	\$ 1.80	50.00%	\$ 4.00	\$ 0.40	11.11%
1	5.94	7.80	1.86	31.36	6.62	0.68	11.51
2	8.28	10.20	1.93	23.26	9.25	0.97	11.69
3	10.62	12.61	1.99	18.72	11.87	1.25	11.79
4	12.96	15.01	2.05	15.83	14.49	1.54	11.85
5	15.30	17.41	2.11	13.82	17.12	1.82	11.89
6	17.64	19.81	2.18	12.34	19.74	2.10	11.92
7	19.98	22.21	2.24	11.21	22.36	2.39	11.95
8	22.31	24.62	2.30	10.31	24.98	2.67	11.97
9	24.65	27.02	2.36	9.59	27.61	2.95	11.98
10	26.99	29.42	2.43	8.99	30.23	3.24	12.00
11	29.33	31.82	2.49	8.49	32.85	3.52	12.01
12	31.67	34.22	2.55	8.06	35.48	3.81	12.02
13.33	34.78	37.42	2.64	7.58	38.97	4.18	12.03
14	35.89	39.03	3.13	8.73	40.12	4.23	11.78
15	37.55	41.43	3.88	10.32	41.85	4.30	11.45
16	39.21	43.83	4.62	11.78	43.58	4.37	11.15
17	40.87	46.23	5.36	13.12	45.31	4.44	10.86
18	42.53	48.64	6.11	14.36	47.04	4.51	10.61
19	44.19	51.04	6.85	15.50	48.77	4.58	10.37
20	45.85	53.44	7.59	16.56	50.50	4.65	10.14
21	47.50	55.02	7.51	15.82	52.23	4.72	9.94
22	49.16	56.60	7.43	15.12	53.95	4.79	9.74
23	50.82	58.17	7.35	14.47	55.68	4.86	9.56
24	52.48	59.75	7.27	13.86	57.41	4.93	9.40
25	54.14	61.33	7.19	13.28	59.14	5.00	9.24
30	62.43	69.22	6.79	10.87	67.78	5.35	8.57
35	70.72	77.11	6.39	9.03	76.43	5.70	8.06
40	79.02	85.00	5.98	7.57	85.07	6.05	7.66
50	95.60	100.78	5.18	5.41	102.36	6.75	7.06
75	137.07	140.23	3.16	2.31	145.57	8.51	6.21
100	178.53	179.68	1.15	0.64	188.79	10.26	5.75
150	261.46	258.58	(2.88)	(1.10)	275.23	13.76	5.26
200	344.39	337.48	(6.91)	(2.01)	361.66	17.27	5.01
300	510.25	495.28	(14.97)	(2.93)	534.53	24.28	4.76
400	676.11	653.08	(23.03)	(3.41)	707.40	31.29	4.63
500	\$ 841.97	\$ 810.88	\$ (31.09)	(3.69)%	\$ 880.27	\$ 38.30	4.55%

Typical Bill Comparison

Phase-In
Year 1

"Basic Domestic Water Only - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 4.50	\$ 0.90	25.00%	\$ 4.00	\$ 0.40	11.11%
1	5.94	6.85	0.91	15.33	6.45	0.51	8.62
2	8.28	9.20	0.92	11.13	8.90	0.62	7.54
3	10.62	11.55	0.93	8.78	11.35	0.74	6.93
4	12.96	13.90	0.94	7.28	13.81	0.85	6.55
5	15.30	16.25	0.95	6.23	16.26	0.96	6.28
6	17.64	18.60	0.96	5.47	18.71	1.07	6.08
7	19.98	20.95	0.97	4.88	21.16	1.18	5.93
8	22.31	23.30	0.99	4.42	23.61	1.30	5.81
9	24.65	25.65	1.00	4.04	26.06	1.41	5.71
10	26.99	28.00	1.01	3.73	28.51	1.52	5.63
11	29.33	30.35	1.02	3.47	30.97	1.63	5.57
12	31.67	32.70	1.03	3.25	33.42	1.75	5.51
13.33	34.78	35.83	1.04	3.00	36.68	1.89	5.45
14	35.89	37.40	1.51	4.20	37.83	1.93	5.38
15	37.55	39.75	2.20	5.85	39.54	1.99	5.29
16	39.21	42.10	2.89	7.37	41.26	2.04	5.21
17	40.87	44.45	3.58	8.76	42.97	2.10	5.14
18	42.53	46.80	4.27	10.04	44.69	2.16	5.07
19	44.19	49.15	4.96	11.23	46.40	2.21	5.01
20	45.85	51.50	5.65	12.33	48.11	2.27	4.95
21	47.50	53.11	5.61	11.81	49.83	2.33	4.90
22	49.16	54.73	5.56	11.32	51.54	2.38	4.84
23	50.82	56.34	5.52	10.86	53.26	2.44	4.80
24	52.48	57.95	5.47	10.43	54.97	2.49	4.75
25	54.14	59.57	5.43	10.02	56.69	2.55	4.71
30	62.43	67.63	5.20	8.33	65.26	2.83	4.53
35	70.72	75.70	4.97	7.03	73.84	3.11	4.40
40	79.02	83.76	4.74	6.00	82.41	3.39	4.29
50	95.60	99.89	4.29	4.48	99.56	3.96	4.14
75	137.07	140.22	3.15	2.30	142.43	5.36	3.91
100	178.53	180.54	2.01	1.12	185.30	6.77	3.79
150	261.46	261.19	(0.27)	(0.10)	271.04	9.58	3.66
200	344.39	341.84	(2.55)	(0.74)	356.78	12.39	3.60
300	510.25	503.14	(7.11)	(1.39)	528.26	18.01	3.53
400	676.11	664.44	(11.67)	(1.73)	699.74	23.63	3.49
500	\$ 841.97	\$ 825.74	\$ (16.23)	(1.93)%	\$ 871.22	\$ 29.25	3.47%

Note: Applicant Proposed and Staff Calculated Increases are over Current

Typical Bill Comparison

Phase-In
Year 2

"Basic Domestic Water Only - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 5.40	\$ 1.80	50.00%	\$ 4.00	\$ 0.40	11.11%
1	5.94	7.82	1.88	31.70	6.64	0.71	11.88
2	8.28	10.24	1.97	23.74	9.29	1.01	12.21
3	10.62	12.67	2.05	19.29	11.93	1.32	12.40
4	12.96	15.09	2.13	16.44	14.58	1.62	12.52
5	15.30	17.51	2.21	14.47	17.22	1.93	12.60
6	17.64	19.93	2.30	13.02	19.87	2.23	12.66
7	19.98	22.35	2.38	11.91	22.51	2.54	12.71
8	22.31	24.78	2.46	11.03	25.16	2.84	12.75
9	24.65	27.20	2.54	10.32	27.80	3.15	12.77
10	26.99	29.62	2.63	9.73	30.45	3.46	12.80
11	29.33	32.04	2.71	9.24	33.09	3.76	12.82
12	31.67	34.46	2.79	8.82	35.74	4.07	12.84
13.33	34.78	37.69	2.90	8.34	39.26	4.47	12.86
14	35.89	39.31	3.41	9.51	40.41	4.51	12.57
15	37.55	41.73	4.18	11.12	42.13	4.57	12.18
16	39.21	44.15	4.94	12.60	43.84	4.63	11.81
17	40.87	46.57	5.70	13.96	45.56	4.69	11.48
18	42.53	49.00	6.47	15.21	47.28	4.75	11.17
19	44.19	51.42	7.23	16.36	49.00	4.81	10.89
20	45.85	53.84	7.99	17.44	50.72	4.87	10.63
21	47.50	55.41	7.90	16.63	52.44	4.93	10.38
22	49.16	56.97	7.81	15.88	54.16	4.99	10.16
23	50.82	58.54	7.71	15.18	55.87	5.05	9.94
24	52.48	60.10	7.62	14.52	57.59	5.11	9.74
25	54.14	61.67	7.53	13.90	59.31	5.17	9.55
30	62.43	69.49	7.06	11.31	67.90	5.47	8.77
35	70.72	77.32	6.59	9.32	76.50	5.77	8.16
40	79.02	85.14	6.12	7.75	85.09	6.07	7.69
50	95.60	100.79	5.19	5.42	102.28	6.67	6.98
75	137.07	139.92	2.85	2.08	145.24	8.17	5.96
100	178.53	179.04	0.51	0.28	188.21	9.67	5.42
150	261.46	257.29	(4.17)	(1.60)	274.14	12.67	4.85
200	344.39	335.54	(8.85)	(2.57)	360.07	15.67	4.55
300	510.25	492.04	(18.21)	(3.57)	531.93	21.67	4.25
400	676.11	648.54	(27.57)	(4.08)	703.79	27.67	4.09
500	\$ 841.97	\$ 805.04	\$ (36.93)	(4.39)%	\$ 875.65	\$ 33.67	4.00%

Note: Applicant Proposed and Staff Calculated Increases are over Current

Typical Bill Comparison

Phase-In
Year 3

"Basic Domestic Water Only - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 5.70	\$ 2.10	58.33%	\$ 4.00	\$ 0.40	11.11%
1	5.94	8.23	2.29	38.56	6.80	0.86	14.44
2	8.28	10.76	2.48	29.96	9.59	1.31	15.88
3	10.62	13.29	2.67	25.15	12.39	1.77	16.69
4	12.96	15.82	2.86	22.07	15.19	2.23	17.21
5	15.30	18.35	3.05	19.94	17.98	2.69	17.57
6	17.64	20.88	3.24	18.37	20.78	3.14	17.83
7	19.98	23.41	3.43	17.17	23.58	3.60	18.03
8	22.31	25.93	3.62	16.22	26.37	4.06	18.19
9	24.65	28.46	3.81	15.45	29.17	4.52	18.32
10	26.99	30.99	4.00	14.82	31.97	4.97	18.43
11	29.33	33.52	4.19	14.28	34.76	5.43	18.52
12	31.67	36.05	4.38	13.83	37.56	5.89	18.59
13.33	34.78	39.42	4.63	13.32	41.28	6.50	18.68
14	35.89	41.11	5.22	14.53	42.44	6.55	18.24
15	37.55	43.64	6.09	16.21	44.18	6.63	17.64
16	39.21	46.17	6.96	17.74	45.91	6.70	17.09
17	40.87	48.70	7.83	19.15	47.65	6.78	16.59
18	42.53	51.23	8.70	20.45	49.38	6.86	16.12
19	44.19	53.76	9.57	21.66	51.12	6.93	15.69
20	45.85	56.29	10.44	22.77	52.85	7.01	15.29
21	47.50	57.85	10.35	21.78	54.59	7.09	14.92
22	49.16	59.42	10.25	20.86	56.33	7.16	14.57
23	50.82	60.98	10.16	19.99	58.06	7.24	14.24
24	52.48	62.55	10.07	19.18	59.80	7.32	13.94
25	54.14	64.11	9.97	18.42	61.53	7.39	13.65
30	62.43	71.94	9.50	15.22	70.21	7.78	12.45
35	70.72	79.76	9.04	12.78	78.88	8.16	11.54
40	79.02	87.59	8.57	10.84	87.56	8.54	10.81
50	95.60	103.24	7.63	7.98	104.91	9.31	9.74
75	137.07	142.36	5.29	3.86	148.30	11.23	8.19
100	178.53	181.49	2.95	1.65	191.68	13.14	7.36
150	261.46	259.74	(1.73)	(0.66)	278.44	16.98	6.49
200	344.39	337.99	(6.41)	(1.86)	365.21	20.81	6.04
300	510.25	494.49	(15.77)	(3.09)	538.74	28.48	5.58
400	676.11	650.99	(25.13)	(3.72)	712.27	36.15	5.35
500	\$ 841.97	\$ 807.49	\$ (34.49)	(4.10)%	\$ 885.80	\$ 43.82	5.20%

Note: Applicant Proposed and Staff Calculated Increases are over Current

Typical Bill Comparison

Phase-In
Year 4

"Basic Domestic Water Only - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 5.40	\$ 1.80	50.00%	\$ 4.00	\$ 0.40	11.11%
1	5.94	7.80	1.86	31.36%	6.62	0.68	11.51
2	8.28	10.20	1.93	23.26%	9.25	0.97	11.69
3	10.62	12.61	1.99	18.72%	11.87	1.25	11.79
4	12.96	15.01	2.05	15.83%	14.49	1.54	11.85
5	15.30	17.41	2.11	13.82%	17.12	1.82	11.89
6	17.64	19.81	2.18	12.34%	19.74	2.10	11.92
7	19.98	22.21	2.24	11.21%	22.36	2.39	11.95
8	22.31	24.62	2.30	10.31%	24.98	2.67	11.97
9	24.65	27.02	2.36	9.59%	27.61	2.95	11.98
10	26.99	29.42	2.43	8.99%	30.23	3.24	12.00
11	29.33	31.82	2.49	8.49%	32.85	3.52	12.01
12	31.67	34.22	2.55	8.06%	35.48	3.81	12.02
13.33	34.78	37.42	2.64	7.58%	38.97	4.18	12.03
14	35.89	39.03	3.13	8.73%	40.12	4.23	11.78
15	37.55	41.43	3.88	10.32%	41.85	4.30	11.45
16	39.21	43.83	4.62	11.78%	43.58	4.37	11.15
17	40.87	46.23	5.36	13.12%	45.31	4.44	10.86
18	42.53	48.64	6.11	14.36%	47.04	4.51	10.61
19	44.19	51.04	6.85	15.50%	48.77	4.58	10.37
20	45.85	53.44	7.59	16.56%	50.50	4.65	10.14
21	47.50	55.02	7.51	15.82%	52.23	4.72	9.94
22	49.16	56.60	7.43	15.12%	53.95	4.79	9.74
23	50.82	58.17	7.35	14.47%	55.68	4.86	9.56
24	52.48	59.75	7.27	13.86%	57.41	4.93	9.40
25	54.14	61.33	7.19	13.28%	59.14	5.00	9.24
30	62.43	69.22	6.79	10.87%	67.78	5.35	8.57
35	70.72	77.11	6.39	9.03%	76.43	5.70	8.06
40	79.02	85.00	5.98	7.57%	85.07	6.05	7.66
50	95.60	100.78	5.18	5.41%	102.36	6.75	7.06
75	137.07	140.23	3.16	2.31%	145.57	8.51	6.21
100	178.53	179.68	1.15	0.64%	188.79	10.26	5.75
150	261.46	258.58	(2.88)	(1.10)%	275.23	13.76	5.26
200	344.39	337.48	(6.91)	(2.01)%	361.66	17.27	5.01
300	510.25	495.28	(14.97)	(2.93)%	534.53	24.28	4.76
400	676.11	653.08	(23.03)	(3.41)%	707.40	31.29	4.63
500	\$ 841.97	\$ 810.88	\$ (31.09)	(3.69)%	\$ 880.27	\$ 38.30	4.55%

Note: Applicant Proposed and Staff Calculated Increases are over Current

Typical Bill Comparison

One-Time

"Domestic Water Only with Softening - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 5.40	\$ 1.80	50.00%	\$ 4.00	\$ 0.40	11.11%
1	6.35	8.10	1.75	27.62	6.90	0.55	8.74
2	9.10	10.81	1.71	18.77	9.81	0.71	7.80
3	11.85	13.51	1.66	14.02	12.71	0.86	7.30
4	14.60	16.21	1.61	11.06	15.62	1.02	6.98
5	17.35	18.92	1.57	9.04	18.52	1.17	6.77
6	20.10	21.62	1.52	7.57	21.42	1.33	6.61
7	22.85	24.32	1.48	6.46	24.33	1.48	6.49
8	25.59	27.02	1.43	5.59	27.23	1.64	6.40
9	28.34	29.73	1.38	4.88	30.14	1.79	6.33
10	31.09	32.43	1.34	4.30	33.04	1.95	6.27
11	33.84	35.13	1.29	3.81	35.95	2.10	6.21
12	36.59	37.84	1.24	3.40	38.85	2.26	6.17
13.33	40.25	41.43	1.18	2.94	42.71	2.46	6.12
14	41.63	43.24	1.61	3.86	44.06	2.42	5.82
15	43.70	45.95	2.24	5.13	46.07	2.37	5.41
16	45.77	48.65	2.88	6.28	48.08	2.31	5.04
17	47.84	51.35	3.51	7.34	50.09	2.25	4.70
18	49.91	54.05	4.15	8.31	52.10	2.19	4.38
19	51.98	56.76	4.78	9.20	54.11	2.13	4.10
20	54.05	59.46	5.41	10.02	56.12	2.07	3.83
21	56.11	61.31	5.19	9.25	58.13	2.01	3.59
22	58.18	63.15	4.97	8.54	60.14	1.95	3.36
23	60.25	65.00	4.75	7.88	62.15	1.89	3.14
24	62.32	66.84	4.52	7.26	64.16	1.84	2.94
25	64.39	68.69	4.30	6.68	66.16	1.78	2.76
30	74.73	77.92	3.19	4.27	76.21	1.48	1.98
35	85.07	87.15	2.08	2.44	86.26	1.19	1.40
40	95.42	96.38	0.96	1.01	96.31	0.89	0.94
50	116.10	114.84	(1.26)	(1.09)	116.41	0.30	0.26
75	167.82	160.99	(6.83)	(4.07)	166.65	(1.17)	(0.70)
100	219.53	207.14	(12.39)	(5.65)	216.89	(2.64)	(1.20)
150	322.96	299.44	(23.52)	(7.28)	317.38	(5.59)	(1.73)
200	426.39	391.74	(34.65)	(8.13)	417.86	(8.53)	(2.00)
300	633.25	576.34	(56.91)	(8.99)	618.83	(14.42)	(2.28)
400	840.11	760.94	(79.17)	(9.42)	819.80	(20.31)	(2.42)%
500	\$ 1,046.97	\$ 945.54	\$ (101.43)	(9.69)%	\$ 1,020.77	\$ (26.20)	(2.50)%

Typical Bill Comparison

Phase-In
Year 1

"Domestic Water Only with Softening - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 4.50	\$ 0.90	25.00%	\$ 4.00	\$ 0.40	11.11%
1	6.35	7.13	0.78	12.31%	6.73	0.38	6.03
2	9.10	9.76	0.66	7.29%	9.46	0.37	4.02
3	11.85	12.39	0.55	4.60%	12.2	0.35	2.95
4	14.6	15.02	0.43	2.92%	14.93	0.33	2.28
5	17.35	17.66	0.31	1.78%	17.66	0.32	1.82
6	20.10	20.29	0.19	0.95%	20.39	0.30	1.49
7	22.85	22.92	0.07	0.31%	23.13	0.28	1.23
8	25.59	25.55	(0.05)	(0.18)%	25.86	0.26	1.03
9	28.34	28.18	(0.16)	(0.58)%	28.59	0.25	0.87
10	31.09	30.81	(0.28)	(0.91)%	31.32	0.23	0.74
11	33.84	33.44	(0.40)	(1.19)%	34.06	0.21	0.63
12	36.59	36.07	(0.52)	(1.42)%	36.79	0.20	0.54
13.33	40.25	39.57	(0.68)	(1.68)%	40.42	0.17	0.43
14	41.63	41.33	(0.30)	(0.72)%	41.76	0.13	0.30
15	43.70	43.97	0.26	0.60%	43.76	0.05	0.12
16	45.77	46.60	0.82	1.80%	45.75	(0.02)	(0.04)
17	47.84	49.23	1.39	2.90%	47.75	(0.09)	(0.19)
18	49.91	51.86	1.95	3.91%	49.74	(0.17)	(0.33)
19	51.98	54.49	2.51	4.83%	51.74	(0.24)	(0.46)
20	54.05	57.12	3.07	5.69%	53.73	(0.31)	(0.58)
21	56.11	59.01	2.90	5.17%	55.73	(0.38)	(0.68)
22	58.18	60.91	2.73	4.68%	57.73	(0.46)	(0.78)
23	60.25	62.80	2.55	4.23%	59.72	(0.53)	(0.88)
24	62.32	64.70	2.38	3.81%	61.72	(0.60)	(0.97)
25	64.39	66.59	2.20	3.42%	63.71	(0.67)	(1.05)
30	74.73	76.06	1.33	1.78%	73.69	(1.04)	(1.39)
35	85.07	85.53	0.46	0.54%	83.67	(1.40)	(1.65)
40	95.42	95.00	(0.42)	(0.44)%	93.65	(1.77)	(1.85)
50	116.10	113.94	(2.16)	(1.86)%	113.61	(2.49)	(2.15)
75	167.82	161.29	(6.53)	(3.89)%	163.5	(4.31)	(2.57)
100	219.53	208.64	(10.89)	(4.96)%	213.4	(6.13)	(2.79)
150	322.96	303.34	(19.62)	(6.08)%	313.19	(9.77)	(3.03)
200	426.39	398.04	(28.35)	(6.65)%	412.98	(13.41)	(3.15)
300	633.25	587.44	(45.81)	(7.23)%	612.56	(20.69)	(3.27)
400	840.11	776.84	(63.27)	(7.53)%	812.14	(27.97)	(3.33)
500	\$ 1,046.97	\$ 966.24	\$ (80.73)	(7.71)%	\$ 1,011.72	\$ (35.25)	(3.37)%

Note: Applicant Proposed and Staff Calculated Increases are over Current

Typical Bill Comparison

Phase-In
Year 2

"Domestic Water Only with Softening - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 5.40	\$ 1.80	50.00%	\$ 4.00	\$ 0.40	11.11%
1	6.35	8.10	1.75	27.62	6.93	0.58	9.08
2	9.10	10.81	1.71	18.77	9.85	0.75	8.28
3	11.85	13.51	1.66	14.02	12.78	0.93	7.85
4	14.6	16.21	1.61	11.06	15.70	1.11	7.58
5	17.35	18.92	1.57	9.04	18.63	1.28	7.39
6	20.10	21.62	1.52	7.57	21.55	1.46	7.26
7	22.85	24.32	1.48	6.46	24.48	1.64	7.16
8	25.59	27.02	1.43	5.59	27.41	1.81	7.08
9	28.34	29.73	1.38	4.88	30.33	1.99	7.02
10	31.09	32.43	1.34	4.30	33.26	2.17	6.96
11	33.84	35.13	1.29	3.81	36.18	2.34	6.92
12	36.59	37.84	1.24	3.40	39.11	2.52	6.88
13.33	40.25	41.43	1.18	2.94	43.00	2.75	6.84
14	41.63	43.24	1.61	3.86	44.34	2.71	6.50
15	43.70	45.95	2.24	5.13	46.34	2.64	6.04
16	45.77	48.65	2.88	6.28	48.34	2.57	5.61
17	47.84	51.35	3.51	7.34	50.34	2.50	5.22
18	49.91	54.05	4.15	8.31	52.34	2.43	4.87
19	51.98	56.76	4.78	9.20	54.34	2.36	4.54
20	54.05	59.46	5.41	10.02	56.34	2.29	4.24
21	56.11	61.31	5.19	9.25	58.34	2.22	3.96
22	58.18	63.15	4.97	8.54	60.34	2.15	3.70
23	60.25	65.00	4.75	7.88	62.34	2.09	3.46
24	62.32	66.84	4.52	7.26	64.34	2.02	3.24
25	64.39	68.69	4.30	6.68	66.34	1.95	3.02
30	74.73	77.92	3.19	4.27	76.33	1.60	2.14
35	85.07	87.15	2.08	2.44	86.33	1.26	1.48
40	95.42	96.38	0.96	1.01	96.33	0.91	0.96
50	116.10	114.84	(1.26)	(1.09)	116.33	0.22	0.19
75	167.82	160.99	(6.83)	(4.07)	166.32	(1.50)	(0.90)
100	219.53	207.14	(12.39)	(5.65)	216.31	(3.23)	(1.47)
150	322.96	299.44	(23.52)	(7.28)	316.29	(6.68)	(2.07)
200	426.39	391.74	(34.65)	(8.13)	416.27	(10.13)	(2.38)
300	633.25	576.34	(56.91)	(8.99)	616.23	(17.03)	(2.69)
400	840.11	760.94	(79.17)	(9.42)	816.19	(23.93)	(2.85)
500	\$ 1,046.97	\$ 945.54	\$ (101.43)	(9.69)%	\$ 1,016.15	\$ (30.83)	(2.94)%

Note: Applicant Proposed and Staff Calculated Increases are over Current

Typical Bill Comparison

Phase-In
Year 3

"Domestic Water Only with Softening - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 5.70	\$ 2.10	58.33%	\$ 4.00	\$ 0.40	11.11%
1	6.35	8.51	2.16	34.04	7.08	0.73	11.47
2	9.10	11.32	2.22	24.42	10.16	1.06	11.61
3	11.85	14.13	2.28	19.27	13.23	1.39	11.69
4	14.60	16.94	2.34	16.06	16.31	1.71	11.74
5	17.35	19.75	2.40	13.86	19.39	2.04	11.77
6	20.10	22.56	2.47	12.27	22.47	2.37	11.80
7	22.85	25.37	2.53	11.06	25.54	2.70	11.81
8	25.59	28.18	2.59	10.11	28.62	3.03	11.83
9	28.34	30.99	2.65	9.35	31.70	3.36	11.84
10	31.09	33.80	2.71	8.72	34.78	3.68	11.85
11	33.84	36.61	2.77	8.19	37.85	4.01	11.86
12	36.59	39.42	2.83	7.74	40.93	4.34	11.86
13.33	40.25	43.16	2.91	7.24	45.03	4.78	11.87
14	41.63	45.04	3.41	8.19	46.38	4.74	11.39
15	43.70	47.85	4.15	9.50	48.39	4.69	10.73
16	45.77	50.66	4.89	10.69	50.41	4.64	10.13
17	47.84	53.48	5.64	11.78	52.43	4.59	9.59
18	49.91	56.29	6.38	12.78	54.44	4.53	9.08
19	51.98	59.10	7.12	13.70	56.46	4.48	8.62
20	54.05	61.91	7.86	14.54	58.47	4.43	8.19
21	56.11	63.75	7.64	13.61	60.49	4.38	7.80
22	58.18	65.60	7.42	12.74	62.51	4.32	7.43
23	60.25	67.44	7.19	11.94	64.52	4.27	7.09
24	62.32	69.29	6.97	11.18	66.54	4.22	6.77
25	64.39	71.14	6.75	10.48	68.56	4.17	6.47
30	74.73	80.37	5.63	7.54	78.64	3.91	5.23
35	85.07	89.60	4.52	5.31	88.72	3.64	4.28
40	95.42	98.83	3.41	3.57	98.80	3.38	3.55
50	116.1	117.29	1.18	1.02	118.96	2.86	2.46
75	167.82	163.44	(4.38)	(2.61)	169.37	1.55	0.92
100	219.53	209.59	(9.95)	(4.53)	219.78	0.24	0.11
150	322.96	301.89	(21.08)	(6.53)	320.59	(2.37)	(0.73)
200	426.39	394.19	(32.21)	(7.55)	421.41	(4.99)	(1.17)
300	633.25	578.79	(54.47)	(8.60)	623.04	(10.22)	(1.61)
400	840.11	763.39	(76.73)	(9.13)	824.67	(15.45)	(1.84)
500	\$ 1,046.97	\$ 947.99	\$ (98.99)	(9.45)%	\$ 1,026.30	\$ (20.68)	(1.97)%

Note: Applicant Proposed and Staff Calculated Increases are over Current

Typical Bill Comparison

Phase-Inc
Year 4

"Domestic Water Only with Softening - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 5.40	\$ 1.80	50.00%	\$ 4.00	\$ 0.40	11.11%
1	6.35	8.10	1.75	27.62	6.90	0.55	8.74
2	9.10	10.81	1.71	18.77	9.81	0.71	7.80
3	11.85	13.51	1.66	14.02	12.71	0.86	7.30
4	14.60	16.21	1.61	11.06	15.62	1.02	6.98
5	17.35	18.92	1.57	9.04	18.52	1.17	6.77
6	20.10	21.62	1.52	7.57	21.42	1.33	6.61
7	22.85	24.32	1.48	6.46	24.33	1.48	6.49
8	25.59	27.02	1.43	5.59	27.23	1.64	6.40
9	28.34	29.73	1.38	4.88	30.14	1.79	6.33
10	31.09	32.43	1.34	4.30	33.04	1.95	6.27
11	33.84	35.13	1.29	3.81	35.95	2.10	6.21
12	36.59	37.84	1.24	3.40	38.85	2.26	6.17
13.33	40.25	41.43	1.18	2.94	42.71	2.46	6.12
14	41.63	43.24	1.61	3.86	44.06	2.42	5.82
15	43.70	45.95	2.24	5.13	46.07	2.37	5.41
16	45.77	48.65	2.88	6.28	48.08	2.31	5.04
17	47.84	51.35	3.51	7.34	50.09	2.25	4.70
18	49.91	54.05	4.15	8.31	52.10	2.19	4.38
19	51.98	56.76	4.78	9.20	54.11	2.13	4.10
20	54.05	59.46	5.41	10.02	56.12	2.07	3.83
21	56.11	61.31	5.19	9.25	58.13	2.01	3.59
22	58.18	63.15	4.97	8.54	60.14	1.95	3.36
23	60.25	65.00	4.75	7.88	62.15	1.89	3.14
24	62.32	66.84	4.52	7.26	64.16	1.84	2.94
25	64.39	68.69	4.30	6.68	66.16	1.78	2.76
30	74.73	77.92	3.19	4.27	76.21	1.48	1.98
35	85.07	87.15	2.08	2.44	86.26	1.19	1.40
40	95.42	96.38	0.96	1.01	96.31	0.89	0.94
50	116.10	114.84	(1.26)	(1.09)	116.41	0.30	0.26
75	167.82	160.99	(6.83)	(4.07)	166.65	(1.17)	(0.70)
100	219.53	207.14	(12.39)	(5.65)	216.89	(2.64)	(1.20)
150	322.96	299.44	(23.52)	(7.28)	317.38	(5.59)	(1.73)
200	426.39	391.74	(34.65)	(8.13)	417.86	(8.53)	(2.00)
300	633.25	576.34	(56.91)	(8.99)	618.83	(14.42)	(2.28)
400	840.11	760.94	(79.17)	(9.42)	819.80	(20.31)	(2.42)
500	\$ 1,046.97	\$ 945.54	\$ (101.43)	(9.69)%	\$ 1,020.77	\$ (26.20)	(2.50)%

Note: Applicant Proposed and Staff Calculated Increases are over Current

Typical Bill Comparison

One Time

"Domestic Water Only with Reverse Osmosis - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 5.40	\$ 1.80	50.00%	\$ 4.00	\$ 0.40	11.11%
1	7.47	9.40	1.93	25.83	8.20	0.73	9.78
2	11.34	13.40	2.06	18.15	12.40	1.06	9.35
3	15.21	17.40	2.19	14.39	16.60	1.39	9.15
4	19.08	21.40	2.32	12.15	20.80	1.72	9.02
5	22.95	25.40	2.45	10.66	25.00	2.05	8.94
6	26.82	29.39	2.58	9.60	29.20	2.38	8.88
7	30.69	33.39	2.71	8.81	33.40	2.71	8.84
8	34.56	37.39	2.83	8.20	37.60	3.04	8.81
9	38.43	41.39	2.96	7.71	41.80	3.37	8.78
10	42.30	45.39	3.09	7.31	46.00	3.70	8.76
11	46.17	49.39	3.22	6.98	50.20	4.03	8.74
12	50.04	53.39	3.35	6.70	54.40	4.36	8.72
13.33	55.18	58.71	3.52	6.39	59.99	4.80	8.71
14	57.32	61.39	4.07	7.09	62.20	4.88	8.52
15	60.51	65.39	4.88	8.06	65.51	5.00	8.26
16	63.70	69.38	5.69	8.93	68.81	5.12	8.03
17	66.89	73.38	6.50	9.71	72.12	5.23	7.82
18	70.08	77.38	7.31	10.43	75.42	5.35	7.63
19	73.26	81.38	8.12	11.08	78.73	5.47	7.46
20	76.45	85.38	8.93	11.68	82.04	5.58	7.30
21	79.64	88.52	8.88	11.15	85.34	5.70	7.16
22	82.83	91.66	8.83	10.66	88.65	5.82	7.02
23	86.02	94.81	8.79	10.21	91.95	5.93	6.90
24	89.21	97.95	8.74	9.80	95.26	6.05	6.78
25	92.40	101.09	8.69	9.41	98.56	6.17	6.67
30	108.34	116.80	8.46	7.81	115.09	6.75	6.23
35	124.29	132.51	8.22	6.61	131.62	7.33	5.90
40	140.23	148.22	7.99	5.69	148.15	7.92	5.65
50	172.12	179.64	7.52	4.37	181.21	9.08	5.28
75	251.85	258.19	6.34	2.52	263.85	12.00	4.77
100	331.57	336.74	5.17	1.56	346.49	14.92	4.50
150	491.02	493.84	2.82	0.57	511.78	20.75	4.23
200	650.47	650.94	0.47	0.07	677.06	26.59	4.09
300	969.37	965.14	(4.23)	(0.44)	1,007.63	38.26	3.95
400	1,288.27	1,279.34	(8.93)	(0.69)	1,338.20	49.93	3.88
500	\$ 1,607.17	\$1,593.54	\$ (13.63)	(0.85)%	\$ 1,668.77	\$ 61.60	3.83%

Typical Bill Comparison

Phase-In
Year 1

"Domestic Water Only with Reverse Osmosis - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 4.50	\$ 0.90	25.00%	\$ 4.00	\$ 0.40	11.11%
1	7.47	8.40	0.93	12.51	8.01	0.54	7.17
2	11.34	12.31	0.97	8.54	12.01	0.67	5.92
3	15.21	16.21	1.00	6.59	16.02	0.81	5.31
4	19.08	20.12	1.04	5.44	20.02	0.94	4.94
5	22.95	24.02	1.07	4.67	24.03	1.08	4.70
6	26.82	27.92	1.11	4.12	28.03	1.21	4.53
7	30.69	31.83	1.14	3.72	32.04	1.35	4.40
8	34.56	35.73	1.17	3.40	36.04	1.49	4.30
9	38.43	39.64	1.21	3.15	40.05	1.62	4.22
10	42.30	43.54	1.24	2.94	44.05	1.76	4.15
11	46.17	47.44	1.28	2.77	48.06	1.89	4.10
12	50.04	51.35	1.31	2.62	52.06	2.03	4.05
13.33	55.18	56.54	1.36	2.46	57.39	2.21	4.00
14	57.32	59.16	1.84	3.20	59.58	2.26	3.95
15	60.51	63.06	2.55	4.22	62.85	2.34	3.87
16	63.70	66.96	3.27	5.13	66.12	2.42	3.80
17	66.89	70.87	3.98	5.95	69.39	2.50	3.74
18	70.08	74.77	4.70	6.70	72.66	2.58	3.68
19	73.26	78.68	5.41	7.39	75.93	2.66	3.63
20	76.45	82.58	6.13	8.01	79.19	2.74	3.59
21	79.64	85.75	6.10	7.66	82.46	2.82	3.54
22	82.83	88.91	6.08	7.34	85.73	2.90	3.50
23	86.02	92.08	6.06	7.05	89.00	2.98	3.46
24	89.21	95.25	6.04	6.77	92.27	3.06	3.43
25	92.40	98.42	6.02	6.51	95.54	3.14	3.40
30	108.34	114.25	5.91	5.45	111.88	3.54	3.27
35	124.29	130.09	5.80	4.66	128.23	3.94	3.17
40	140.23	145.92	5.69	4.05	144.57	4.34	3.09
50	172.12	177.59	5.47	3.18	177.26	5.14	2.98
75	251.85	256.77	4.92	1.95	258.98	7.13	2.83
100	331.57	335.94	4.37	1.32	340.70	9.13	2.75
150	491.02	494.29	3.27	0.67	504.14	13.12	2.67
200	650.47	652.64	2.17	0.33	667.58	17.11	2.63
300	969.37	969.34	(0.03)	0.00	994.46	25.09	2.59
400	1,288.27	1,286.04	(2.23)	(0.17)	1,321.34	33.07	2.57
500	\$ 1,607.17	\$1,602.74	\$ (4.43)	(0.28)%	\$ 1,648.22	\$ 41.05	2.55%

Note: Applicant Proposed and Staff Calculated Increases are over Current

Typical Bill Comparison

Phase-In
Year 2

"Domestic Water Only with Reverse Osmosis - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 5.40	\$ 1.80	50.00%	\$ 4.00	\$ 0.40	11.11%
1	7.47	9.40	1.93	25.87	8.22	0.76	10.11
2	11.34	13.40	2.06	18.21	12.45	1.11	9.79
3	15.21	17.41	2.20	14.44	16.67	1.47	9.63
4	19.08	21.41	2.33	12.21	20.90	1.82	9.54
5	22.95	25.41	2.46	10.73	25.12	2.18	9.48
6	26.82	29.41	2.59	9.67	29.35	2.53	9.44
7	30.69	33.41	2.73	8.88	33.57	2.89	9.40
8	34.56	37.42	2.86	8.27	37.80	3.24	9.38
9	38.43	41.42	2.99	7.78	42.02	3.60	9.36
10	42.30	45.42	3.12	7.38	46.25	3.95	9.34
11	46.17	49.42	3.26	7.05	50.47	4.31	9.33
12	50.04	53.42	3.39	6.77	54.70	4.66	9.32
13.33	55.18	58.75	3.56	6.46	60.32	5.13	9.30
14	57.32	61.43	4.11	7.17	62.53	5.21	9.08
15	60.51	65.43	4.92	8.13	65.83	5.32	8.79
16	63.70	69.43	5.73	9.00	69.12	5.43	8.52
17	66.89	73.43	6.55	9.79	72.42	5.54	8.28
18	70.08	77.44	7.36	10.50	75.72	5.65	8.06
19	73.26	81.44	8.17	11.16	79.02	5.75	7.85
20	76.45	85.44	8.99	11.75	82.32	5.86	7.67
21	79.64	88.59	8.94	11.23	85.62	5.97	7.50
22	82.83	91.73	8.90	10.74	88.92	6.08	7.34
23	86.02	94.88	8.85	10.29	92.21	6.19	7.20
24	89.21	98.02	8.81	9.88	95.51	6.30	7.07
25	92.40	101.17	8.77	9.49	98.81	6.41	6.94
30	108.34	116.89	8.55	7.89	115.30	6.96	6.42
35	124.29	132.62	8.33	6.70	131.80	7.51	6.04
40	140.23	148.34	8.11	5.78	148.29	8.06	5.75
50	172.12	179.79	7.67	4.45	181.28	9.15	5.32
75	251.85	258.42	6.57	2.61	263.74	11.89	4.72
100	331.57	337.04	5.47	1.65	346.21	14.63	4.41
150	491.02	494.29	3.27	0.67	511.14	20.11	4.10
200	650.47	651.54	1.07	0.16	676.07	25.59	3.93
300	969.37	966.04	(3.33)	(0.34)	1,005.93	36.55	3.77
400	1,288.27	1,280.54	(7.73)	(0.60)	1,335.79	47.51	3.69
500	\$ 1,607.17	\$ 1,595.04	\$ (12.13)	(0.75)%	\$ 1,665.65	\$ 58.47	3.64%

Note: Applicant Proposed and Staff Calculated Increases are over Current

Typical Bill Comparison

Phase-In
Year 3

"Domestic Water Only with Reverse Osmosis - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 5.70	\$ 2.10	58.33%	\$ 4.00	\$ 0.40	11.11%
1	7.47	9.89	2.42	32.40	8.46	0.99	13.22
2	11.34	14.08	2.74	24.17	12.91	1.58	13.89
3	15.21	18.27	3.06	20.12	17.37	2.16	14.22
4	19.08	22.46	3.38	17.72	21.83	2.75	14.42
5	22.95	26.65	3.70	16.13	26.29	3.34	14.55
6	26.82	30.84	4.02	14.99	30.74	3.93	14.64
7	30.69	35.03	4.34	14.15	35.20	4.51	14.71
8	34.56	39.22	4.66	13.49	39.66	5.10	14.76
9	38.43	43.41	4.98	12.96	44.12	5.69	14.80
10	42.30	47.60	5.30	12.54	48.57	6.28	14.84
11	46.17	51.79	5.62	12.18	53.03	6.86	14.87
12	50.04	55.98	5.94	11.88	57.49	7.45	14.89
13.33	55.18	61.55	6.37	11.54	63.42	8.23	14.92
14	57.32	64.36	7.04	12.28	65.69	8.37	14.60
15	60.51	68.55	8.04	13.29	69.09	8.58	14.18
16	63.70	72.74	9.04	14.19	72.48	8.79	13.79
17	66.89	76.93	10.04	15.01	75.88	8.99	13.44
18	70.08	81.12	11.04	15.76	79.27	9.20	13.13
19	73.26	85.31	12.04	16.44	82.67	9.41	12.84
20	76.45	89.50	13.04	17.06	86.07	9.61	12.57
21	79.64	92.72	13.08	16.42	89.46	9.82	12.33
22	82.83	95.95	13.12	15.84	92.86	10.03	12.10
23	86.02	99.17	13.15	15.29	96.25	10.23	11.90
24	89.21	102.40	13.19	14.79	99.65	10.44	11.70
25	92.40	105.63	13.23	14.32	103.05	10.65	11.52
30	108.34	121.75	13.41	12.38	120.03	11.68	10.78
35	124.29	137.88	13.59	10.94	137.00	12.72	10.23
40	140.23	154.01	13.78	9.82	153.98	13.75	9.81
50	172.12	186.27	14.14	8.22	187.94	15.82	9.19
75	251.85	266.91	15.06	5.98	272.84	20.99	8.34
100	331.57	347.55	15.97	4.82	357.74	26.16	7.89
150	491.02	508.83	17.80	3.63	527.53	36.51	7.44
200	650.47	670.11	19.63	3.02	697.33	46.85	7.20
300	969.37	992.67	23.29	2.40	1,036.92	67.54	6.97
400	1,288.27	1,315.23	26.95	2.09	1,376.51	88.23	6.85
500	\$ 1,607.17	\$1,637.79	\$ 30.61	1.90%	\$ 1,716.10	\$ 108.92	6.78%

Note: Applicant Proposed and Staff Calculated Increases are over Current

Typical Bill Comparison

Phase-In
Year 4

"Domestic Water Only with Reverse Osmosis - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 5.40	\$ 1.80	50.00%	\$ 4.00	\$ 0.40	11.11%
1	7.47	9.40	1.93	25.83	8.20	0.73	9.78
2	11.34	13.40	2.06	18.15	12.40	1.06	9.35
3	15.21	17.40	2.19	14.39	16.60	1.39	9.15
4	19.08	21.40	2.32	12.15	20.80	1.72	9.02
5	22.95	25.40	2.45	10.66	25.00	2.05	8.94
6	26.82	29.39	2.58	9.60	29.20	2.38	8.88
7	30.69	33.39	2.71	8.81	33.40	2.71	8.84
8	34.56	37.39	2.83	8.20	37.60	3.04	8.81
9	38.43	41.39	2.96	7.71	41.80	3.37	8.78
10	42.30	45.39	3.09	7.31	46.00	3.70	8.76
11	46.17	49.39	3.22	6.98	50.20	4.03	8.74
12	50.04	53.39	3.35	6.70	54.40	4.36	8.72
13.33	55.18	58.71	3.52	6.39	59.99	4.80	8.71
14	57.32	61.39	4.07	7.09	62.20	4.88	8.52
15	60.51	65.39	4.88	8.06	65.51	5.00	8.26
16	63.70	69.38	5.69	8.93	68.81	5.12	8.03
17	66.89	73.38	6.50	9.71	72.12	5.23	7.82
18	70.08	77.38	7.31	10.43	75.42	5.35	7.63
19	73.26	81.38	8.12	11.08	78.73	5.47	7.46
20	76.45	85.38	8.93	11.68	82.04	5.58	7.30
21	79.64	88.52	8.88	11.15	85.34	5.70	7.16
22	82.83	91.66	8.83	10.66	88.65	5.82	7.02
23	86.02	94.81	8.79	10.21	91.95	5.93	6.90
24	89.21	97.95	8.74	9.80	95.26	6.05	6.78
25	92.40	101.09	8.69	9.41	98.56	6.17	6.67
30	108.34	116.80	8.46	7.81	115.09	6.75	6.23
35	124.29	132.51	8.22	6.61	131.62	7.33	5.90
40	140.23	148.22	7.99	5.69	148.15	7.92	5.65
50	172.12	179.64	7.52	4.37	181.21	9.08	5.28
75	251.85	258.19	6.34	2.52	263.85	12.00	4.77
100	331.57	336.74	5.17	1.56	346.49	14.92	4.50
150	491.02	493.84	2.82	0.57	511.78	20.75	4.23
200	650.47	650.94	0.47	0.07	677.06	26.59	4.09
300	969.37	965.14	(4.23)	(0.44)	1,007.63	38.26	3.95
400	1,288.27	1,279.34	(8.93)	(0.69)	1,338.20	49.93	3.88
500	\$ 1,607.17	\$1,593.54	\$ (13.63)	(0.85)%	\$ 1,668.77	\$ 61.60	3.83%

Note: Applicant Proposed and Staff Calculated Increases are over Current

Typical Bill Comparison

One-Step

"Basic Domestic Wastewater Only - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 7.20	\$ 3.60	100.00%	\$ 4.00	\$ 0.40	11.11%
1	6.74	11.14	4.40	65.21	8.41	1.67	24.77
2	9.88	15.07	5.19	52.53	12.82	2.94	29.75
3	13.02	19.01	5.99	45.97	17.23	4.21	32.32
4	16.16	22.94	6.78	41.96	21.64	5.48	33.90
5	19.30	26.88	7.58	39.25	26.05	6.75	34.96
6	22.44	30.81	8.37	37.30	30.46	8.02	35.72
7	25.58	34.75	9.17	35.83	34.87	9.29	36.30
8	28.72	38.68	9.96	34.68	39.27	10.56	36.75
9	31.86	42.62	10.76	33.76	43.68	11.82	37.12
10	35.00	46.55	11.55	33.00	48.09	13.09	37.41
11	38.14	50.49	12.35	32.37	52.50	14.36	37.66
12	41.28	54.42	13.14	31.84	56.91	15.63	37.87
13.33	45.45	59.65	14.20	31.24	62.78	17.32	38.11
14	46.90	62.29	15.39	32.82	64.60	17.70	37.75
15	49.05	66.23	17.17	35.01	67.33	18.28	37.26
16	51.21	70.16	18.95	37.01	70.06	18.85	36.81
17	53.36	74.10	20.73	38.85	72.78	19.42	36.40
18	55.52	78.03	22.51	40.55	75.51	19.99	36.02
19	57.67	81.97	24.29	42.12	78.24	20.57	35.66
20	59.83	85.90	26.07	43.58	80.97	21.14	35.33
21	61.98	88.42	26.44	42.65	83.69	21.71	35.03
22	64.14	90.94	26.80	41.79	86.42	22.28	34.75
23	66.29	93.46	27.17	40.98	89.15	22.86	34.48
24	68.45	95.98	27.53	40.22	91.88	23.43	34.23
25	70.60	98.50	27.89	39.51	94.60	24.00	34.00
30	81.37	111.09	29.72	36.52	108.24	26.86	33.01
35	92.15	123.69	31.54	34.23	121.87	29.73	32.26
40	102.92	136.28	33.36	32.41	135.51	32.59	31.66
50	124.47	161.47	37.00	29.73	162.78	38.31	30.78
75	178.34	224.45	46.11	25.86	230.96	52.63	29.51
100	232.20	287.42	55.22	23.78	299.14	66.94	28.83
150	339.94	413.37	73.43	21.60	435.50	95.56	28.11
200	447.67	539.32	91.65	20.47	571.86	124.19	27.74
300	663.14	791.22	128.08	19.31	844.58	181.44	27.36
400	878.61	1,043.12	164.51	18.72	1,117.30	238.69	27.17
500	\$ 1,094.08	\$1,295.02	\$ 200.94	18.37%	\$ 1,390.02	\$ 295.94	27.05%

Typical Bill Comparison

Phase-In
Year 1

"Basic Domestic Wastewater Only - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 5.40	\$ 1.80	50.00%	\$ 4.00	\$ 0.40	11.11%
1	6.74	8.92	2.18	32.27	7.74	1.00	14.88
2	9.88	12.43	2.55	25.81	11.49	1.61	16.26
3	13.02	15.95	2.93	22.47	15.23	2.21	16.97
4	16.16	19.46	3.30	20.42	18.97	2.81	17.40
5	19.3	22.98	3.68	19.04	22.71	3.42	17.69
6	22.44	26.49	4.05	18.05	26.46	4.02	17.91
7	25.58	30.01	4.43	17.30	30.20	4.62	18.07
8	28.72	33.52	4.80	16.72	33.94	5.22	18.19
9	31.86	37.04	5.18	16.25	37.69	5.83	18.29
10	35.00	40.55	5.55	15.86	41.43	6.43	18.37
11	38.14	44.07	5.93	15.54	45.17	7.03	18.44
12	41.28	47.58	6.30	15.26	48.91	7.64	18.50
13.33	45.45	52.25	6.80	14.96	53.89	8.44	18.56
14	46.90	54.61	7.71	16.44	55.54	8.64	18.43
15	49.05	58.13	9.07	18.49	58.00	8.95	18.25
16	51.21	61.64	10.43	20.37	60.47	9.26	18.08
17	53.36	65.16	11.79	22.10	62.93	9.57	17.93
18	55.52	68.67	13.15	23.69	65.39	9.87	17.78
19	57.67	72.19	14.51	25.16	67.85	10.18	17.65
20	59.83	75.70	15.87	26.53	70.31	10.49	17.53
21	61.98	78.02	16.04	25.88	72.78	10.79	17.42
22	64.14	80.34	16.21	25.27	75.24	11.10	17.31
23	66.29	82.67	16.38	24.70	77.70	11.41	17.21
24	68.45	84.99	16.54	24.17	80.16	11.72	17.12
25	70.60	87.31	16.71	23.67	82.62	12.02	17.03
30	81.37	98.92	17.55	21.56	94.93	13.56	16.66
35	92.15	110.53	18.38	19.95	107.24	15.10	16.38
40	102.92	122.14	19.22	18.67	119.55	16.63	16.16
50	124.47	145.36	20.89	16.79	144.17	19.71	15.83
75	178.34	203.41	25.07	14.06	205.72	27.39	15.36
100	232.20	261.46	29.26	12.60	267.27	35.07	15.10
150	339.94	377.56	37.62	11.07	390.37	50.44	14.84
200	447.67	493.66	45.99	10.27	513.47	65.80	14.70
300	663.14	725.86	62.72	9.46	759.67	96.53	14.56
400	878.61	958.06	79.45	9.04	1,005.87	127.26	14.48
500	\$ 1,094.08	\$1,190.26	\$ 96.18	8.79%	\$ 1,252.07	\$ 157.99	14.44%

Note: Applicant Proposed and Staff Calculated Increases are over Current

Typical Bill Comparison

Phase-In
Year 2

"Basic Domestic Wastewater Only - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 7.20	\$ 3.60	100.00%	\$ 4.00	\$ 0.40	11.11%
1	6.74	11.21	4.47	66.26	8.48	1.74	25.84
2	9.88	15.21	5.33	53.97	12.96	3.08	31.20
3	13.02	19.22	6.20	47.61	17.44	4.42	33.98
4	16.16	23.22	7.06	43.72	21.93	5.77	35.68
5	19.30	27.23	7.93	41.09	26.41	7.11	36.82
6	22.44	31.24	8.80	39.20	30.89	8.45	37.65
7	25.58	35.24	9.66	37.78	35.37	9.79	38.27
8	28.72	39.25	10.53	36.66	39.85	11.13	38.76
9	31.86	43.25	11.39	35.77	44.33	12.47	39.15
10	35.00	47.26	12.26	35.03	48.81	13.81	39.47
11	38.14	51.27	13.13	34.42	53.29	15.16	39.74
12	41.28	55.27	13.99	33.90	57.78	16.50	39.96
13.33	45.45	60.60	15.15	33.32	63.74	18.28	40.22
14	46.90	63.28	16.39	34.94	65.59	18.70	39.87
15	49.05	67.29	18.24	37.18	68.37	19.32	39.38
16	51.21	71.30	20.09	39.23	71.14	19.94	38.93
17	53.36	75.30	21.94	41.11	73.92	20.56	38.52
18	55.52	79.31	23.79	42.85	76.69	21.18	38.14
19	57.67	83.31	25.64	44.46	79.47	21.80	37.79
20	59.83	87.32	27.49	45.95	82.24	22.42	37.47
21	61.98	89.89	27.90	45.02	85.02	23.04	37.17
22	64.14	92.45	28.31	44.15	87.79	23.66	36.88
23	66.29	95.02	28.72	43.33	90.57	24.28	36.62
24	68.45	97.58	29.13	42.57	93.34	24.90	36.37
25	70.60	100.15	29.54	41.85	96.12	25.52	36.14
30	81.37	112.97	31.60	38.83	109.99	28.61	35.16
35	92.15	125.80	33.65	36.52	123.86	31.71	34.42
40	102.92	138.62	35.70	34.69	137.73	34.81	33.83
50	124.47	164.27	39.80	31.98	165.48	41.01	32.95
75	178.34	228.40	50.06	28.07	234.85	56.51	31.69
100	232.20	292.52	60.32	25.98	304.21	72.01	31.01
150	339.94	420.77	80.83	23.78	442.94	103.00	30.30
200	447.67	549.02	101.35	22.64	581.67	134.00	29.93
300	663.14	805.52	142.38	21.47	859.13	195.99	29.55
400	878.61	1,062.02	183.41	20.87	1,136.59	257.98	29.36
500	\$ 1,094.08	\$1,318.52	\$ 224.44	20.51%	\$ 1,414.05	\$ 319.97	29.25%

Note: Applicant Proposed and Staff Calculated Increases are over Current

Typical Bill Comparison

Phase-In
Year 3

"Basic Domestic Wastewater Only - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 8.25	\$ 4.65	129.17%	\$ 4.00	\$ 0.40	11.11%
1	6.74	\$12.76	6.02	89.30	9.13	2.39	35.45
2	9.88	\$17.27	7.39	74.77	14.26	4.38	44.32
3	13.02	\$21.78	8.76	67.26	19.39	6.37	48.91
4	16.16	\$26.28	10.13	62.66	24.52	8.36	51.72
5	19.30	\$30.79	11.49	59.56	29.65	10.35	53.62
6	22.44	\$35.30	12.86	57.32	34.78	12.34	54.98
7	25.58	\$39.81	14.23	55.64	39.91	14.33	56.01
8	28.72	\$44.32	15.60	54.32	45.04	16.32	56.81
9	31.86	\$48.83	16.97	53.26	50.16	18.31	57.46
10	35.00	\$53.34	18.34	52.40	55.29	20.30	57.99
11	38.14	\$57.85	19.71	51.67	60.42	22.28	58.43
12	41.28	\$62.35	21.08	51.06	65.55	24.27	58.81
13.33	45.45	\$68.35	22.90	50.37	72.37	26.92	59.22
14	46.90	\$71.37	24.47	52.18	74.48	27.58	58.81
15	49.05	\$75.88	26.83	54.69	77.62	28.57	58.24
16	51.21	\$80.39	29.18	56.99	80.76	29.56	57.72
17	53.36	\$84.90	31.54	59.10	83.91	30.54	57.24
18	55.52	\$89.41	33.89	61.04	87.05	31.53	56.79
19	57.67	\$93.92	36.24	62.84	90.19	32.52	56.38
20	59.83	\$98.42	38.60	64.52	93.33	33.50	56.00
21	61.98	101.31	39.33	63.45	96.47	34.49	55.65
22	64.14	104.20	40.06	62.46	99.61	35.48	55.32
23	66.29	107.08	40.79	61.54	102.76	36.47	55.01
24	68.45	109.97	41.52	60.67	105.90	37.45	54.72
25	70.60	112.86	42.26	59.85	109.04	38.44	54.45
30	81.37	127.29	45.91	56.42	124.75	43.37	53.30
35	92.15	141.72	49.57	53.80	140.46	48.31	52.43
40	102.92	156.15	53.23	51.72	156.17	53.25	51.73
50	124.47	185.01	60.55	48.64	187.58	63.12	50.71
75	178.34	257.17	78.84	44.21	266.13	87.79	49.23
100	232.20	329.33	97.13	41.83	344.67	112.47	48.44
150	339.94	473.64	133.71	39.33	501.76	161.83	47.60
200	447.67	617.96	170.29	38.04	658.85	211.18	47.17
300	663.14	906.59	243.45	36.71	973.03	309.89	46.73
400	878.61	1,195.22	316.61	36.03	1,287.21	408.60	46.51
500	\$ 1,094.08	\$1,483.85	\$ 389.77	35.62%	\$ 1,601.39	\$ 507.31	46.37%

Note: Applicant Proposed and Staff Calculated Increases are over Current

Typical Bill Comparison

Phase-In
Year 4

"Basic Domestic Wastewater Only - 5/8"

<u>Ccf</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Calculated</u>	<u>Increase</u>	<u>Percent Increase</u>
0	\$ 3.60	\$ 7.20	\$ 3.60	100.00%	\$ 4.00	\$ 0.40	11.11%
1	6.74	11.14	4.40	65.21	8.41	1.67	24.77
2	9.88	15.07	5.19	52.53	12.82	2.94	29.75
3	13.02	19.01	5.99	45.97	17.23	4.21	32.32
4	16.16	22.94	6.78	41.96	21.64	5.48	33.90
5	19.30	26.88	7.58	39.25	26.05	6.75	34.96
6	22.44	30.81	8.37	37.30	30.46	8.02	35.72
7	25.58	34.75	9.17	35.83	34.87	9.29	36.30
8	28.72	38.68	9.96	34.68	39.27	10.56	36.75
9	31.86	42.62	10.76	33.76	43.68	11.82	37.12
10	35.00	46.55	11.55	33.00	48.09	13.09	37.41
11	38.14	50.49	12.35	32.37	52.50	14.36	37.66
12	41.28	54.42	13.14	31.84	56.91	15.63	37.87
13.33	45.45	59.65	14.20	31.24	62.78	17.32	38.11
14	46.90	62.29	15.39	32.82	64.60	17.70	37.75
15	49.05	66.23	17.17	35.01	67.33	18.28	37.26
16	51.21	70.16	18.95	37.01	70.06	18.85	36.81
17	53.36	74.10	20.73	38.85	72.78	19.42	36.40
18	55.52	78.03	22.51	40.55	75.51	19.99	36.02
19	57.67	81.97	24.29	42.12	78.24	20.57	35.66
20	59.83	85.90	26.07	43.58	80.97	21.14	35.33
21	61.98	88.42	26.44	42.65	83.69	21.71	35.03
22	64.14	90.94	26.80	41.79	86.42	22.28	34.75
23	66.29	93.46	27.17	40.98	89.15	22.86	34.48
24	68.45	95.98	27.53	40.22	91.88	23.43	34.23
25	70.60	98.50	27.89	39.51	94.60	24.00	34.00
30	81.37	111.09	29.72	36.52	108.24	26.86	33.01
35	92.15	123.69	31.54	34.23	121.87	29.73	32.26
40	102.92	136.28	33.36	32.41	135.51	32.59	31.66
50	124.47	161.47	37.00	29.73	162.78	38.31	30.78
75	178.34	224.45	46.11	25.86	230.96	52.63	29.51
100	232.20	287.42	55.22	23.78	299.14	66.94	28.83
150	339.94	413.37	73.43	21.60	435.50	95.56	28.11
200	447.67	539.32	91.65	20.47	571.86	124.19	27.74
300	663.14	791.22	128.08	19.31	844.58	181.44	27.36
400	878.61	1,043.12	164.51	18.72	1,117.30	238.69	27.17
500	\$ 1,094.08	\$1,295.02	\$ 200.94	18.37%	\$ 1,390.02	\$ 295.94	27.05%

Note: Applicant Proposed and Staff Calculated Increases are over Current

CONSUMER SERVICES DEPARTMENT

Citizens Utilities Company of Ohio (CUCO) has seven water systems and three wastewater systems which serve approximately 8,660 customers in various unincorporated areas of Franklin and Portage Counties.

The Consumer Services Department's Compliance Division investigated CUCO's physical facilities and administrative operation to determine whether it is providing adequate service. By inspecting the company's source of supply, plant, and distribution-related facilities, as well as the associated operating and maintenance records, staff can determine the adequacy of the operation and recommend changes that will maintain and, when necessary, improve the delivery of quality water. Inspecting the administrative operation, including how CUCO applies its tariff, allows staff to determine tariff compliance and service quality. Staff's investigation entailed system observations, discussions with company personnel and government officials, customer interviews, a review of plant operating records, water quality tests, and a staff-issued customer survey.

Tariff Compliance Status

Staff routinely monitors CUCO's administrative operation to determine if it is complying with its tariff's terms and conditions of service. The staff found that the company had appropriately administered all aspects of its tariff.

Blacklick District Reverse Osmosis Water Treatment Issue

Under the stipulation in Case No. 90-1233-WS-AIR, adopted by the Commission in its opinion and order in that proceeding, a consumer advisory panel (CAP) was formed to consider the findings of a water quality study on the feasibility, cost of, and various options available to remove total dissolved solids (TDS) from the water. The CAP, which included customer representatives from each of the company's districts, and one representative each from the company, the PUCO staff, and the Office of the Ohio Consumers' Counsel (OCC), was empowered to poll the company's customers on their feelings about additional water treatment. The stipulation stated that if the CAP found support for additional treatment in one or more service areas, the Commission would initiate a proceeding to approve the action and a customer charge to pay for it.

The CAP selected the Poggemeyer Design Group, an engineering firm, to perform the TDS Reduction Feasibility Study, an inquiry that found reverse osmosis (RO) treatment to be the best technology to eliminate TDS. The CAP developed and issued a fact sheet and customer survey based partly on the study that included

information to assist customers to make an informed decision. The information defined water hardness and TDS, described current treatment processes, and explained both ion-exchange softening and its range of costs and RO and its range of costs by service area. The survey allowed customers to choose TDS, softening, or no additional treatment.

On October 26, 1993, the CAP, without non-Blacklick district customer representatives, met to discuss the survey results. The consensus was that the findings were inconclusive and that a second written survey offering two options--softening or RO--would be reissued to all the Blacklick customers around January 1994. Since the company failed to conduct the second survey, the staff recommended in Case No. 94-1237-WS-AIR the Commission order the company to meet with a modified CAP (PUCO staff, OCC, and Blacklick customer CAP representatives) to develop and issue another survey to all district customers. The Commission concurred with staff and, in its June 22, 1995 opinion and order, required the company to not only conduct the second survey but, within six months, provide the Commission with the Blacklick customers' preference on system-wide water treatment. Return rates from the initial survey provided a confidence level of over 90%, and the modified CAP agreed any future survey focusing purely on preference would show Blacklick customers' deep division on the need for a particular water treatment process, including many who see no need for any additional treatment.

To satisfy the requirement for a further Blacklick survey and generate economic information to help the Commission decide whether additional system-wide treatment was needed, the modified CAP agreed to develop a questionnaire that would consider Blacklick customers' expense for in-home water treatment (filtration and softening) as well as the economic effect the water had on their plumbing (scale and corrosion) and water-related appliances (hot water heaters). The resulting data would be analyzed to determine the economic benefits of centralized RO treatment. The modified CAP, however, decided not to consider the ion-exchange softening option at the time because centralized softening would not reduce TDS, the issue that had initiated the study.

The modified CAP did agree to have the company contract Chadwick, Martin, Baily, Inc. for a random telephone survey of 100 Blacklick District residential customers. The survey, which the modified CAP developed and the consultant administered, was docketed along with the survey results on January 3, 1997. The modified CAP unanimously concluded from the survey report that while centralized RO water treatment would be slightly cheaper for customers than home-based water softening and the cost of repairing plumbing damaged by corrosion or scale, the difference was not significant enough to suggest a definite direction in which to proceed. The report noted the company's Huber Ridge District RO treatment plant will have been in service for about a year by January 1998 and that customer satisfaction and water quality there would be analyzed to assist in the Blacklick decision. The report added that RO cost analysis would be updated and the modified CAP would consider all information before making a recommendation to the Commission by June 30, 1998.

In December 1997, Staff issued its standard random water quality and customer service survey to 1,200 customers in the Blacklick and Huber Ridge districts (see Customer Survey section). One hundred eighteen (41.6%) of the 283 Huber Ridge survey respondents rated their overall water quality above average since RO treatment began there in April 1997--an indication of an improving attitude toward the water quality since 57.9% of customers in the same district graded overall water quality "poor" during a similar 1994 survey. Water analysis reports demonstrate that RO treatment has delivered the softer water and significantly lower TDS that were intended.

The modified CAP met June 10, 1998, to evaluate the survey results and the updated RO cost estimates. Based on the Huber Ridge RO treatment project, it appears a similar project for Blacklick would cost approximately \$1,243,000--a significant increase over the engineering firm's 1992 estimate of \$734,300. The previous figure excluded the expense of the clearwell facility that would be required. The new estimate raises the ccf cost to approximately \$1.52 or approximately \$12.16 per month for the average customer using approximately 8 ccf. If the company receives 100% of its current request (20.1% overall) under the proposed rate design, the average customer's combined monthly water and wastewater bill with RO treatment would rise to \$75.46. During the meeting, the discussion often reverted to the current rate increase application as the Blacklick customer CAP representatives emphasized that their water was already too expensive and that no improvement in its quality would justify the ultimate cost (considering the present rate request and eventual RO expense). The modified CAP was particularly concerned about the estimated 1,031 (35.62%) residential customers who use more than 8 ccf -- many of whom may have large families and would be unable to afford the increases. The modified CAP decided to review all the information further and, during a June 24, 1998 follow-up meeting, unanimously agreed that the current rates and pending rate case make RO treatment for the district cost prohibitive.

Compliance Status with Previous Case Requirements

The stipulation agreement in CUCO's last rate application, Case No. 94-1237-WW-AIR, and the staff report in the matter contained several requirements that the Commission adopted and which became incumbent upon the company:

Corrosion Study

In 1995, the company conducted the required corrosion studies for all districts except Brimfield using the Langlier, saturation, and Ryznar stability indices. The studies found scale-forming (non-corrosive) finished water at the Blacklick, Huber Ridge, and Timberbrook districts and a slight tendency towards "corrosivity" due to centralized ion exchange softening at the Lake Darby and Worthington Hills districts. The indices do not consider phosphates in the water, such as the zinc phosphate fed at the Worthington Hills District since 1990. But even without phosphates, company complaint records--as well as the customer survey, whose results appear later in this section--found minimal

instances of discoloration at Lake Darby. Additionally, the Lake Darby system is primarily composed of concrete and pvc pipe rendering corrosivity a distribution system non-issue.

Softening Parameters/Aerator Repair

The company was required to keep finished water hardness at the Lake Darby and Worthington Hills Districts between 80 and 150 milligrams per liter (mg/l) and to prevent significant fluctuations within this range. CUCO 1997 plant operating records show hardness at Lake Darby averaged 124 mg/l (the maximum was 156 mg/l on Sunday, January 12) and a very good (5.52 mg/l) average standard deviation. Operating records for the Worthington Hills District plant indicate an average hardness of 129 mg/l and a maximum of 280-mg/l maximum on Saturday, June 28, 1997. Considering the relatively high readings that occur mostly over weekends when the plant gets limited attention and during high summer demands, Worthington's average standard deviation was a respectable 19.64 mg/l. The company reports that despite repair by the manufacturer it has had repeated problems with the district's softening-related flow meters and controllers, problems that required plant operators to override the automatic controllers to produce finished water within the softening parameters. CUCO has budgeted to replace the flow meters and controllers in 1999.

As ordered, the company also timely fixed the leaking Worthington aerator.

Elevated Tank Mold Problem

CUCO was to eliminate the moldlike substance from Lake Darby's elevated storage tank. The company has been unable to get the contractor who painted the tank just before the problem occurred to return and rectify the situation. While the substance poses no health problem, CUCO recently reported that it would budget to have the area power-washed and repainted in 1999.

Aerolator Inspection Schedule

The company has not complied with the requirement that it develop and follow a written inspection schedule for its Blacklick Aerolator, an iron removal unit that has performed very well since its rehabilitation in 1994. Since Aerolators must be inspected and their media evaluated regularly, the best way to ensure timely maintenance is through a formalized inspection and media evaluation schedule. Staff recommends that the Commission order the company to establish this procedure for its Blacklick and Lake Darby units within 90 days of the opinion and order in this case and provide the schedule to the Compliance Division as soon as it is complete.

Blacklick District Production Meter

CUCO was to replace the two meters that were grossly under registering the water entering the Blacklick distribution system. The lines feeding the system have been linked, and a single meter was installed in June 1996 – nine months after the replacement due date. This meter is calibrated yearly to ensure accuracy.

Sludge Press

In 1996, the company spent \$34,714 on a larger, more effective sludge press to replace the worn out one it was required to have at Lake Darby. The Blacklick and Huber Ridge sludge presses were also replaced at a cost of \$40,256 each in 1997 and 1998, respectively. These units de-water the wastewater sludge, reducing its overall disposal costs.

Manhole Location Program

Since its 1995 location report to the Compliance Division, CUCO has found 43 manholes in the Blacklick district, 162 in Huber Ridge, and 46 in Lake Darby. This leaves 80, 99, and 37 manholes, respectively, to be located, inspected and brought to grade. Except where backups have occurred and there are weekly inspections to avoid problems, each manhole is examined at least once every three years. Staff is pleased with the company's program and expects its diligent search will be complete by the end of the year 2000.

Significant System Improvements

CUCO has undertaken significant capital improvements since its last rate case, including a \$2.4 million total upgrade of the Blacklick wastewater treatment plant to meet more stringent Ohio Environmental Protection Agency (OEPA) effluent water quality requirements and over \$1.5 million in improvements to the Huber Ridge wastewater plant, also to meet OEPA requirements.

Reverse osmosis water treatment was added for Huber Ridge, an improvement which only customers in that district pay for.

The well piping in the Brimfield District's Aurora East system was replaced and its Beechcrest system received a new well house with new plumbing, pressure tank, fuse panels and electrical boxes. The Beechcrest system's Well #6 was also totally rehabilitated to improve reliability and water quality.

All Brimfield District customers currently receive unfiltered water. CUCO concluded that it was cost prohibitive to install iron-removal facilities (filtration) at both of its existing district plants and, therefore, decided to investigate the possibility of acquiring filtered water from the adjacent Portage County water systems. Staff reported in the previous 1994 rate case that CUCO was negotiating a

purchase water agreement with Portage County. After extensive negotiations with the county and meetings with PUCO staff, CUCO concluded that a purchase water agreement was also cost prohibitive.

Metering

To eliminate the inaccuracies associated with estimated bills, CUCO has been aggressively installing encoder meters in all its districts. Until the full-scale replacement program began in 1995, company personnel often had to enter customers' premises to read the meter. Encoder meters not only allow remote reading but eliminate the need to annually compare the accuracy of a generator-type remote with the actual meter inside the customer's business or residence. The company installed 1,115 encoder meters in 1997, and it projects that the remaining 1,118 will be in place by January 1, 2000.

Inflow and Infiltration (I&I) Elimination Program

Inflow (non-wastewater entering the sanitary system via improper connections) and infiltration (non-wastewater entering the sanitary system indirectly) have troubled all of the company's wastewater system districts: Blacklick, Huber Ridge, and Lake Darby. Excessive I&I strains wastewater plant capacity and causes problems that can violate OEPA regulations. In 1997, CUCO spent approximately \$132,000, mostly at Blacklick and Lake Darby, on efforts toward correcting the situation. These include the manhole location program, manhole rehabilitation via grouting, raising manholes to grade level, and installing inflow dishes. The company has conducted smoke and dye testing to locate I&I and purchased a camera to televise and pinpoint sewer pipe problems. The program is now focusing on the Huber Ridge system.

Unaccounted-for Water (ufw)

As of February 1998, ufw in CUCO's Brimfield District was 23.87%, exceeding the Commission's 15% maximum standard. The company stated in its required remedial action report that it would check the calibration of the production meters at each well and perform a leak detection survey in both the Aurora East and Beechcrest distribution systems. Since that report, the company found a well production meter at Aurora East was over-registering by 30-40% and replaced it July 13.

Since the Brimfield District has two separate distribution systems, staff recommends the Commission order CUCO to maintain individual ufw reports on each system, as required by Ohio Administrative Code Rule 4901:1-15-22 (C)(5).

The Blacklick District's ufw has risen steadily from 6.69% in January 1997 to 16.22% as of June 1998. Staff recommends that the company investigate and report its

findings for this system--including any ufw remedial action--to the Compliance Division within 30 days of the opinion and order in this case.

Valve Working Program

Excellent distribution system records show that the company exceeds the Commission's requirements by working all its distribution system valves annually.

Public Interest Center (PIC) Customer Contacts

From January 1, 1997 through July 24, 1998, the customers of CUCO's seven districts contacted the PIC 187 times.

<u>Issue</u>	<u>Number of Contacts</u>
Protest rates or CUCO's current rate application	35
Billing questions	17
Tariff Issues	14
Non-payment disconnection	13
High bill	11
Customer service or the water quality	11
Metering	10
Repair service	7
Company policy	6
Personnel complaint	2
Miscellaneous company errors	4
New service	2
Unable to reach the company	1
General issues	10

PIC referred 20 customers to CUCO who were seeking account information. Another 24 whose concerns did not require staff intervention were also referred to CUCO after PIC investigators explained how to best present the customers' needs to the company.

There were no negative trends or unexpected increases in any of the preceding categories.

CUCO's customer service manager recently left the company. PIC had a productive relationship with the manager, whose work did much to improve company relations with its customers. Staff looks forward to CUCO continuing its commitment to quality customer service with equally consumer-oriented personnel at all levels of the operation.

Company Quarterly Performance Reports (CQPR)

This year, the Water & Wastewater Section has requested the three large utilities, including CUCO, to provide key performance information each quarter. The CQPRs, in conjunction with a new utility facility information database, field staff compliance reporting, and customer survey data, will permit the section to more uniformly and consistently monitor the 54 regulated utilities' performance. Staff plans to expand the CPQR request to the remaining companies in 1999.

Staff greatly appreciates CUCO's excellent timely CQPR information on water and wastewater plant performance, water quality, main breaks and outages, and customer contacts (complaints and inquiries).

Community Leaders and Fire Department Contacts

Staff interviewed at least one township trustee and one fire department official in each CUCO operating district. With the exception of the Brimfield Fire Department interviewee, everyone indicated they had a good overall working relationship with the company and that it helps them carry out their duties and responsibilities by informing them of operational conditions, which might affect the community.

The Brimfield Fire Department has not accepted the company's many invitations to witness system flushings and conduct flow tests. CUCO states that the department does not notify it when it uses a hydrant; notice that would allow the company to better respond to the dirty water complaints that occur when hydrants are used. The fire department counters that it always records the amount of water used and has its dispatcher convey that information to the company. Staff recommends that CUCO continue to try to improve its relationship with the fire department.

Customer Survey

In December 1997, staff issued a random survey on water quality and customer service to 3,500 of the company's customers (1,200 at Blacklick, 1,000 at Huber Ridge, 400 at Lake Darby & Worthington, 250 at Brimfield's Beechcrest, 150 at Brimfield's Aurora East, and 100 at Timberbrook). Except for those in the Blacklick and Lake Darby districts, most customers rated their overall water quality "average" or above. The responses to the questions on customer service indicate this subject was not an issue.

CUCO received numerous discoloration complaints from Huber Ridge customers in the nine months following implementation of reverse osmosis in the district. In a June 1997 newsletter CUCO explained that the discoloration resulted from the change in water quality, which caused mineral deposits inside the mains to slough off. CUCO responded by flushing the entire system four times (and problem areas

weekly) throughout the rest of the year. It also adjusted the water's pH to reduce its tendency to dissolve minerals in the mains

In Blacklick, 47% of survey respondents (132) gave their water quality the lowest possible rating. The survey reflected that customers who rated their water quality below average (a rating of 4 or 5) were proportionately more likely to have a water treatment device (softener, whole-house filter, or point-of-use water filter) and provide negative comments than those who rated their water quality above average (1 or 2). Despite operating records showing the Blacklick treatment plant does an excellent job of removing iron, the previously discussed corrosion study indicating the water tends to be scale forming and not corrosive, and the phosphate blend the company feeds that not only protects plumbing but sequesters any iron entering the system, nearly 20% of Blacklick respondents indicated they experienced frequent discoloration (4 or 5 rating). CUCO's 1998 business plan states that its customer survey data found "a strong inverse relationship between the size of the customer's bill and virtually all areas of customer satisfaction."

Staff gave CUCO 48 completed surveys whose responses or comments required company follow-up. Since many of the responses were about water quality, CUCO developed a troubleshooting fact sheet on mineral build-up, taste and odor, pressure, sewer backups, and other regular household water-related maintenance tips. The company sent the fact sheet along with a cover letter that also provided rate information to a number of the customers who made the responses or comments. Those customers who had concerns which were not covered by the fact sheet, CUCO attempted to contact by phone. The company provided staff with a detailed report summarizing each of the customers' concerns and its efforts to address them.

CITIZENS UTILITIES COMPANY OF OHIO
3500 Surveys Issues/891 Surveys Returned/Addresses Present: 834

(1) I would rate my overall water quality as:

	<u>Blacklick</u>		<u>Timberbrook</u>		<u>Aurora</u>		<u>Huber Ridge</u>		<u>Lake Darby</u>		<u>Valley</u>		<u>Beechcrest</u>	
Excellent	#	%	#	%	#	%	#	%	#	%	#	%	#	%
1	3	01.07	0	00.00	0	00.00	32	12.36	1	01.11	7	04.90	5	09.09
2	21	07.50	11	28.95	4	15.38	75	28.96	14	15.56	32	22.38	13	23.64
3	68	24.29	10	26.32	11	42.31	75	29.34	29	32.22	58	40.56	23	41.82
4	56	20.00	10	26.32	5	19.32	47	18.15	29	32.22	24	16.78	7	12.73
5	132	47.14	7	18.42	6	23.08	29	11.20	17	18.89	22	15.38	7	12.73
Poor														

(2) I would rate my water pressure as:

	<u>Blacklick</u>		<u>Timberbrook</u>		<u>Aurora</u>		<u>Huber Ridge</u>		<u>Lake Darby</u>		<u>Valley</u>		<u>Beechcrest</u>	
Excellent	#	%	#	%	#	%	#	%	#	%	#	%	#	%
1	39	13.93	4	10.53	1	03.58	48	18.53	13	14.44	30	20.98	4	07.27
2	65	23.21	13	34.21	5	19.23	105	40.54	36	40.00	47	32.87	19	34.55
3	105	37.50	12	31.58	10	38.46	67	25.87	25	27.78	42	29.37	20	36.36
4	41	14.64	7	18.42	5	19.23	28	10.81	8	08.89	14	09.79	5	09.09
5	30	10.71	2	05.26	5	19.23	11	04.25	8	08.89	10	07.00	5	09.09
Poor														

(3) During normal operation (non-flushing/main break occasions, etc.), how often do you experience discolored water?

	<u>Blacklick</u>		<u>Timberbrook</u>		<u>Aurora</u>		<u>Huber Ridge</u>		<u>Lake Darby</u>		<u>Valley</u>		<u>Beechcrest</u>	
Never	#	%	#	%	#	%	#	%	#	%	#	%	#	%
1	73	26.07	14	36.84	2	07.69	68	26.25	43	47.78	50	34.97	12	21.82
2	86	30.71	15	39.47	7	26.92	73	28.19	28	31.33	62	43.36	13	23.64
3	64	22.86	7	18.42	6	23.08	33	12.74	11	12.22	16	11.19	15	27.27
4	35	12.50	2	05.26	7	26.92	35	13.51	2	02.22	9	06.29	11	20.00
5	22	07.86	0	00.00	4	15.38	50	19.31	5	05.56	6	04.20	4	07.27
Frequently														

(4) I currently utilize in my home:

	<u>Blacklick</u>	<u>Timberbrook</u>	<u>Aurora</u>	<u>Huber Ridge</u>	<u>Lake Darby</u>	<u>Valley</u>	<u>Beechcrest</u>
Softening System	153	36	1	47	41	44	10
Whole House Water Filter	24	3	6	11	7	1	1
Point-of-Use Water Filter	47	9	5	32	20	37	7
None	99	1	16	182	38	68	40

CITIZENS UTILITIES COMPANY
Case No. 98-178-WS-AIR

(5) If you called the company, was your call answered promptly and was your concern addressed in a professional manner?

	<u>Blacklick</u>	<u>Timberbrook</u>	<u>Aurora</u>	<u>Huber Ridge</u>	<u>Lake Darby</u>	<u>Valley</u>	<u>Beechcrest</u>
Did not call:	132	20	11	146	44	81	17
Promptly Answered:							
Yes	112	15	11	101	36	54	34
No	18	1	2	8	4	4	3
Professional Manner:							
Yes	102	17	11	86	30	52	33
No, Unknow.	4	0	1	1	4	0	0
No, Disint.	3	0	0	2	1	0	1
No Satis.	11	0	1	8	1	3	1
No, Rude	8	0	1	3	2	2	0

(6) The company's response time to service call requests (e.g., meter re-read) and emergencies (e.g., main break) is:

	<u>Blacklick</u>	<u>Timberbrook</u>	<u>Aurora</u>	<u>Huber Ridge</u>	<u>Lake Darby</u>	<u>Valley</u>	<u>Beechcrest</u>
Service Call Response:							
No such experience	186	22	12	185	71	91	34
Excellent							
1	20	7	2	15	1	16	6
2	25	4	1	24	5	16	3
3	17	3	3	15	5	6	5
4	5	0	1	6	2	3	1
5	3	0	2	3	2	1	1
Poor							

	<u>Blacklick</u>	<u>Timberbrook</u>	<u>Aurora</u>	<u>Huber Ridge</u>	<u>Lake Darby</u>	<u>Valley</u>	<u>Beechcrest</u>
Emergency Response:							
No such experience	219	29	19	226	83	111	36
Excellent							
1	6	3	1	8	0	10	6
2	8	2	0	4	1	1	4
3	6	0	1	5	1	1	5
4	1	0	0	1	1	0	0
5	3	0	2	0	0	0	1
Poor							

(7) In your community, which utility services charge rates that you consider reasonable for the value of service currently received?

	<u>Blacklick</u>	<u>Timberbrook</u>	<u>Aurora</u>	<u>Huber Ridge</u>	<u>Lake Darby</u>	<u>Valley</u>	<u>Beechcrest</u>
Gas	184	24	19	173	35	90	34
Electric	150	19	8	156	56	82	29
Phone	166	29	17	157	62	80	29
Cable	63	10	5	67	21	39	8
Water	33	10	13	49	9	57	34
Sewer	25	3	4	40	9	23	11

CITIZENS UTILITIES COMPANY
Case No. 98-178-WS-AIR

(8) If you would like to receive information on topics like water quality, rates, payment options, etc., make your selection from the following list and indicate how you would like to receive the information by choosing a number from the Communication Methods and placing it before the Issue.

	<u>Blacklick</u>	<u>Timberbrook</u>	<u>Aurora</u>	<u>Huber Ridge</u>	<u>Lake Darby</u>	<u>Valley</u>	<u>Beechcrest</u>
<u>Water Quality</u>							
Meetings w/ co. officials	12	2	0	9	1	5	3
Bill Insert	51	6	5	51	22	20	6
Radio	4	0	0	2	0	1	0
Newspaper	2	0	0	2	0	2	0
Television	1	0	0	1	3	1	0
Other	3	1	0	2	1	3	0
No Preference	11	4	1	6	3	5	4

	<u>Blacklick</u>	<u>Timberbrook</u>	<u>Aurora</u>	<u>Huber Ridge</u>	<u>Lake Darby</u>	<u>Valley</u>	<u>Beechcrest</u>
<u>Boil Advisories</u>							
Meetings w/ co. officials	3	0	0	1	0	0	0
Bill Insert	18	0	2	11	4	3	2
Radio	11	3	1	16	3	11	1
Newspaper	3	0	0	1	0	0	0
Television	8	2	0	21	7	5	0
Other	3	2	0	3	2	3	2
No Preference	3	2	0	1	1	2	0

	<u>Blacklick</u>	<u>Timberbrook</u>	<u>Aurora</u>	<u>Huber Ridge</u>	<u>Lake Darby</u>	<u>Valley</u>	<u>Beechcrest</u>
<u>Rate Information</u>							
Meetings w/ co. officials	9	0	1	5	1	3	0
Bill Insert	45	6	0	54	23	18	6
Radio	0	0	0	2	0	0	0
Newspaper	1	0	0	1	2	1	0
Television	3	0	0	0	2	1	0
Other	3	1	0	3	0	0	0
No Preference	9	0	0	3	5	3	2

	<u>Blacklick</u>	<u>Timberbrook</u>	<u>Aurora</u>	<u>Huber Ridge</u>	<u>Lake Darby</u>	<u>Valley</u>	<u>Beechcrest</u>
<u>Routine Flushing</u>							
Meetings w/ co. officials	2	0	0	2	0	1	1
Bill Insert	43	5	5	45	13	21	7
Radio	2	0	0	0	2	0	0
Newspaper	2	0	0	3	1	1	0
Television	1	0	0	2	0	0	0
Other	4	2	0	1	0	1	0
No Preference	3	0	1	1	1	2	1

CITIZENS UTILITIES COMPANY
Case No. 98-178-WS-AIR

	<u>Blacklick</u>	<u>Timberbrook</u>	<u>Aurora</u>	<u>Huber Ridge</u>	<u>Lake Darby</u>	<u>Valley</u>	<u>Beechcrest</u>
<u>Billing Options</u>							
Meetings w/ co. officials	4	1	0	1	1	0	0
Bill Insert	36	5	2	41	21	17	4
Radio	0	0	0	0	0	1	0
Newspaper	0	0	0	0	0	0	0
Television	0	0	0	0	0	0	0
Other	3	1	0	3	0	0	0
No Preference	6	1	0	6	1	5	1

	<u>Blacklick</u>	<u>Timberbrook</u>	<u>Aurora</u>	<u>Huber Ridge</u>	<u>Lake Darby</u>	<u>Valley</u>	<u>Beechcrest</u>
<u>Conservation Info.</u>							
Meetings w/ co. officials	1	0	0	1	0	1	1
Bill Insert	32	2	0	36	11	19	5
Radio	1	0	0	1	0	0	0
Newspaper	1	0	0	4	1	0	0
Television	1	2	0	2	1	0	0
Other	3	1	0	1	1	0	0
No Preference	3	0	0	1	1	3	1

(9) Please express any comments or suggestions about your water service:

	<u>Blacklick</u>	<u>Timberbrook</u>	<u>Aurora</u>	<u>Huber Ridge</u>	<u>Lake Darby</u>	<u>Valley</u>	<u>Beechcrest</u>
<u>Negative Rates</u>							
Comments	47	6	0	62	22	11	2
<u>Positive Water</u>							
Quality	0	0	0	9	0	1	0
<u>Negative Water</u>							
Quality	92	8	7	55	21	31	14
<u>Positive Service</u>							
Quality	0	0	0	0	0	0	0
<u>Negative Service</u>							
Quality	9	2	1	6	2	8	3
<u>Positive Pressure</u>							
Quality	0	0	0	0	0	0	0
<u>Negative Pressure</u>							
Quality	2	1	1	4	3	4	2
<u>Reliability</u>							
Quality	0	0	0	0	0	0	0
<u>Need to Contact</u>							
Quality	29	4	2	16	9	10	3
<u>No Comment</u>							
Quality	96	14	15	94	29	72	30

SCHEDULE A-1

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Revenue Requirements

	<u>Applicant</u> (a)	<u>Staff</u>
(1) Rate Base (b)	\$ 14,781,756	\$ 14,231,047
(2) Adjusted Operating Income (c)	\$ 479,918	\$ 575,588
(3) Rate of Return Earned (2) ÷ (1)	3.25%	4.04%
(4) Rate of Return Recommended (d)	8.63%	8.58%
(5) Required Operating Income (1) x (4)	\$ 1,275,019	\$ 1,221,024
(6) Income Deficiency (5) - (2)	\$ 795,101	\$ 645,436
(7) Gross Revenue Conversion Factor (e)	1.630000	1.624769
(8) Revenue Increase Required (6) x (7)	\$ 1,296,044	\$ 1,048,685
(9) Revenue Increase Recommended	1,296,044	1,004,484 (f)
(10) Adjusted Operating Revenue (c)	5,386,781	5,189,389
(11) Revenue Requirements (9) + (10)	\$ 6,682,825	\$ 6,193,873
(12) Increase Over Current Revenue (9) ÷ (10)	24.06%	19.36%

- (a) Applicant's Schedule A-1
- (b) Staff's Schedule B-1
- (c) Staff's Schedule C-2
- (d) Refer to Rate of Return Section
- (e) Staff's Schedule A-1.1
- (f) Staff's recommended revenue increase reflects Applicant's noticed rates

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Calculation of Gross Revenue Conversion Factor

(1)	Gross Revenue	100.000000
(2)	Uncollectibles (1) x 0.590000% (a)	<u>0.590000</u>
(3)	Net Revenue (1) - (2)	99.410000
(4)	Ohio Gross Receipts Tax (3) x 4.750000% (b)	<u>4.721975</u>
(5)	Income Before Federal Income Taxes (3) - (4)	94.688025
(6)	Federal Income Taxes (5) x 35% (c)	<u>33.140809</u>
(7)	Operating Income Percentage (5) - (6)	61.547216
(8)	Gross Revenue Conversion Factor (1) ÷ (7)	<u>1.624769</u>

(a) Staff's C-1.1

(b) Derived From Staff's Schedule C-1.1 as Follows:

(1)	Increase In Excise Tax	47,431
(2)	Proposed Total Revenue Increase	1,004,484
(3)	Uncollectibles	<u>5,926</u>
(4)	Net Revenue Increase	998,558
	Effective Gross Receipts Tax Rate (1) ÷ (4)	<u>4.75%</u>

(c) Derived From Staff's Schedule C-1.1 as Follows:

(1)	Net Revenue Increase (b)	998,558
(2)	Increase in Ohio Gross Receipts Tax	<u>47,431</u>
(3)	Net Revenue Increase (1) - (2)	951,127
(4)	Increase in Federal Income Taxes	<u>\$ 332,894</u>
(5)	Effective FIT Rate (4) ÷ (3)	<u>35.00%</u>

SCHEDULE B-1

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Rate Base Summary
As of Date Certain, September 30, 1997

	<u>Applicant</u> (a)	<u>Staff</u>
(1) Plant in Service	\$ 25,125,116	\$ 24,625,886 (b)
(2) Depreciation Reserve	<u>3,516,539</u>	<u>3,436,406</u> (c)
(3) Net Plant in Service	21,608,577	21,189,480
(4) Common Plant - Net (d)	91,084	
(5) Working Capital Allowance	12,658	(e)
(6) Other Rate Base Items	<u>(6,930,563)</u>	<u>(6,958,433)</u> (f)
(7) Rate Base (3) Thru (6)	<u>\$ 14,781,756</u>	<u>\$ 14,231,047</u>

- (a) Applicant's Schedule B-1
- (b) Staff's Schedule B-2
- (c) Staff's Schedule B-3
- (d) Applicant's Schedule B-2.5; Gross Common Plant \$156,218 Less Depreciation Reserve of \$ 91,084
- (e) Staff's Schedule B-5
- (f) Staff's Schedule B-6

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Jurisdictional Plant in Service Summary

<u>Major Property Groupings</u>	<u>Applicant</u> (a)	<u>Staff</u> (b)
<u>WATER</u>		
Intangible Plant	\$ 30,137	\$ 30,137
Source of Supply Plant	1,370,232	1,324,552
Pumping Plant	1,102,323	1,068,390
Water Treatment Plant	2,533,608	2,092,965
Transmission & Distribution Plant	5,930,157	5,929,968
General Plant	1,058,900	1,058,321
Common Plant		72,751
Other Tangible Property		213,455
Less: Adjust For AFUDC, Overheads and PISCC	<u>(253,697)</u>	<u>(253,697)</u>
Total Water Plant	\$ 11,771,660	\$ 11,536,842
<u>WASTEWATER</u>		
Intangible Plant	\$ 6,733	\$ 6,733
Unclassified		
Treatment & Discharge	8,854,398	8,506,895
Collection & Influent	4,398,722	4,398,558
General	384,716	384,503
Common Plant		83,468
Less: Adjust For AFUDC, Overheads and PISCC	<u>(291,113)</u>	<u>(291,113)</u>
Total Wastewater Plant	<u>13,353,456</u>	<u>13,089,044</u>
Grand Total Water/Wastewater Plant	<u>\$ 25,125,116</u>	<u>\$ 24,625,886</u>

(a) Applicant's Schedule B-2
(b) Staff's Schedule B-2.1

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Calculation of Jurisdictional Plant in Service

Acct. No.	Description	Applicant's Unadjusted (a)	Adjustments (b)	Staff's Adjusted Jurisdictional (c)
<u>WATER</u>				
<u>Intangible Plant:</u>				
301	Organization	\$ 19,118		\$ 19,118
302	Franchises & Consents	11,019		11,019
303	Misc. Intangible Plant			
	Total Intangible Plant	30,137		30,137
<u>Source of Supply Plant:</u>				
310	Land & Land Rights	97,033		97,033
311	Structures & Improvements	939,802	(15,337)	924,465
312	Collecting & Impounding Res.	5,314		5,314
313	Lake, River & Other Intakes	587		587
314	Wells & Springs	327,496	(30,343)	297,153
316	Supply Mains			
	Total Source of Supply Plant	1,370,232	(45,680)	1,324,552
<u>Pumping Plant:</u>				
320	Land & Land Rights	48,681		48,681
321	Structures & Improvements	124,837	3,326	128,163
323	Other Power Prod. Equip.	2,521		2,521
325	Electric Pumping Equip.	918,253	(29,228)	889,025
326	Diesel Pumping Equip.			
328	Other Pumping Equip.			
	Total Pumping Plant	1,094,292	(25,902)	1,068,390
<u>Water Treatment Plant:</u>				
330	Land & Land Rights			
331	Structures & Improvements	320,972		320,972
332	Water Treatment Equip.	1,999,181	(227,188)	1,771,993
	Total Water Treatment Plant	2,320,153	(227,188)	2,092,965
<u>Transmission & Distribution Plant:</u>				
340	Land & Land Rights	7,153		7,153
341	Structures & Improvements			
342	Distr. Reser. & Standpipes	842,190		842,190
343	Trans. and Distr. Mains	3,149,276	88,803	3,238,079
345	Services	705,984	23,274	729,258
346	Meters	795,655	(18)	795,637
348	Hydrants	301,784	14,193	315,977
349	Other T&D Plant	1,674		1,674
	Total Transmission & Distribution Plant	\$ 5,803,716	\$ 126,252	\$ 5,929,968

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Calculation of Jurisdictional Plant in Service

<u>Acct. No.</u>	<u>Description</u>	<u>Applicant's Unadjusted (a)</u>	<u>Adjustments (b)</u>	<u>Staff's Adjusted Jurisdictional (c)</u>
<u>WATER</u>				
<u>General Plant:</u>				
389	Land & Land Rights	\$	\$	\$
390	Structures & Improvements	60,680		60,680
391.1	Office Furniture	143,703	(28)	143,675
391.3	Computer Equip. & Software	272,993		272,993
392	Transportation Equip.	347,274	(438)	346,836
393	Stores Equipment	2,189		2,189
394	Tools,Shop,& Garage Equip.	94,104	(31)	94,073
395	Laboratory Equip.	55,240	(53)	55,187
396	Power Operated Equip.	32,263	(29)	32,234
397	Communication Equip.	41,676		41,676
398	Miscellaneous Equip.	8,778		8,778
	Total General Plant	1,058,900	(579)	1,058,321
<u>Common Plant:</u>				
390	Structures & Improvements	26,150		26,150
391.1	Office Furniture	16,451		16,451
391.2	Office Equipment & Machines	747		747
391.3	Computer Equip. & Software	28,751		28,751
393-398	Other Plant	652		652
	Total Common Plant	72,751		72,751
399	Other Intangible Property	213,455		213,455
	AFUDC, Overheads and PISCC	(253,697)		(253,697)
	Total Water Plant in Service	\$ 11,709,939	\$ (173,097)	\$ 11,536,842

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Calculation of Jurisdictional Plant in Service

Acct. No.	Description	Applicant's Unadjusted (a)	Adjustments (b)	Staff's Adjusted Jurisdictional (c)
<u>WASTEWATER</u>				
<u>Intangible Plant:</u>				
301	Organization	\$ 4,543	\$	\$ 4,543
302	Franchises & Consents	2,190		2,190
303	Misc. Intangible Plant			
	Total Intangible Plant	6,733		6,733
<u>Treatment & Discharge:</u>				
310	Land & Land Rights	136,238		136,238
311	Structures & Improvements	1,324,865	(3,579)	1,321,286
312	Preliminary Treatment	51,785	(180)	51,605
313	Primary Treatment	220,456		220,456
314	Secondary Treatment	5,275,808	(296,295)	4,979,513
315	Tertiary	192,220	(292)	191,928
316	Disinfection	250,659	(122)	250,537
317	Effluent Lift Station	37,817		37,817
319	Sludge Treatment & Disposal	413,115	(3,529)	409,586
320	Power Production	14,435		14,435
321	Influent Lift Station	872,951	(43,112)	829,839
322	General Treatment	63,269	(394)	62,875
325	Lagoon Purification	780		780
	Total Treatment & Discharge	8,854,398	(347,503)	8,506,895
<u>Collection & Influent:</u>				
341	Structures & Improvements	614		614
342	Collection Lift Station	168,413	(29)	168,384
343	Collection Mains	3,129,008		3,129,008
344	Force Mains	20,464	(135)	20,329
345	Discharge Services	280,257		280,257
348	Manholes	799,966		799,966
	Total Collection & Influent	4,398,722	(164)	4,398,558
<u>General:</u>				
390	Structures & Improvements	39,110		39,110
391.1	Office Furniture & Equip.	27,371	(2)	27,369
391.3	Computer Equip. & Software	10,092		10,092
392	Transportation Equip.	18,257		18,257
393	Stores Equipment	3,834		3,834
394	Tools, Shop, & Garage Equip.	181,385	(181)	181,204
395	Laboratory Equip.	48,148		48,148
396	Power Operated Equip.	3,845		3,845
396	Communication Equip.	20,701	(1)	20,700
397	Miscellaneous Equipment	31,973	(29)	31,944
	Total General	\$ 384,716	\$ (213)	\$ 384,503

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Calculation of Jurisdictional Plant in Service

<u>Acct. No.</u>	<u>Description</u>	<u>Applicant's Unadjusted</u> (a)	<u>Adjustments</u> (b)	<u>Staff's Adjusted Jurisdictional</u> (c)
	<u>WASTEWATER</u>			
	<u>Common Plant:</u>			
	Structures & Improvements	\$ 30,002	\$	\$ 30,002
	Office Furniture	18,875		18,875
	Office Machines & Equip.	856		856
	Computer Equip. & Software	32,986		32,986
	Other Plant	<u>749</u>	<u> </u>	<u>749</u>
	Total Common Plant	83,468		83,468
	AFUDC, Overheads and PISCC	(291,113)		(291,113)
	Total Wastewater Plant in Service	<u>\$ 13,436,924</u>	<u>\$ (347,880)</u>	<u>\$ 13,089,044</u>
	Grand Total Water/Wastewater Plant	<u>\$ 25,146,863</u>	<u>\$ (520,977)</u>	<u>\$ 24,625,886</u>

- (a) Applicant's Schedule B-2 and Schedule B-2.5
- (b) Staff's Schedule B-2.2
- (c) Columns (a) + (b)

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Summary of Staff's Adjustments to Plant In Service

<u>Water Plant</u>		
(1)	1997 Overhead True-Ups (a)	\$ (246,325)
(2)	Valley CIAC Plant (b)	134,472
(3)	Brimfield (c)	<u>(61,244)</u>
(4)	Total Water Adjustments (1) thru (3)	<u>\$ (173,097)</u>
 <u>Wastewater Plant</u>		
(1)	1997 Overhead True-Ups (a)	\$ (8,672)
(2)	Blacklick Operations (legal) (d)	(246,545)
(3)	Blacklick Deferred Debit (e)	(86,070)
(4)	Lake Darby Deferred Debit (f)	<u>(6,593)</u>
(5)	Total Wastewater Adjustment (1) thru (4)	<u>\$ (347,880)</u>

- (a) Staff's Schedule B-2.2a
- (b) Staff's Schedule B-2.2b
- (c) Staff's Schedule B-2.2c
- (d) Staff's Schedule B-2.2d
- (e) Staff's Schedule B-2.2e
- (f) Staff's Schedule B-2.2f

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
1997 Overhead True-Ups

<u>Acct. No.</u>	<u>Description</u>	<u>Amount</u> (a)
	<u>Water</u>	
311	Structures & Improvements	\$ (15,337)
314	Wells & Springs	(1,283)
325	Electric Pumping Equip.	(1,749)
332	Water Treatment Equip.	(227,188)
345	Services	(13)
346	Meters	(18)
348	Hydrants	(158)
391.1	Office Furniture	(28)
392	Transportation Equip.	(438)
394	Tools, Shop, & Garage Equip.	(31)
395	Laboratory Equip.	(53)
397	Communication Equipment	<u>(29)</u>
	Total Water True-Up Adjustment	<u>\$ (246,325)</u>
	<u>Wastewater</u>	
311	Structures & Improvements	\$ (3,579)
312	Preliminary Treatment	(180)
314	Secondary Treatment	(122)
315	Tertiary	(292)
316	Disinfection	(122)
319	Sludge Treatment & Disposal	(3,529)
321	Influent Lift Station	(77)
322	General Treatment	(394)
342	Collection Lift Station	(29)
344	Force Mains	(135)
391.1	Office Furniture & Equipment	(2)
394	Tools,Shop,& Garage Equip.	(181)
397	Communication Equipment	(1)
398	Miscellaneous Equipment	<u>(29)</u>
	Total Wastewater True-Up Adjustment	<u>\$ (8,672)</u>

(a) Refer To Text

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
 Valley CIAC Plant Not Recorded In
Case No. 92-581-WW-AIR

<u>Acct. No.</u>	<u>Description</u>	<u>Amount</u> (a)
321	Structures & Improvements	\$ 3,326
325	Electric Pumping Equip.	4,705
343	Trans. and Distr. Mains	88,803
345	Services	23,287
348	Hydrants	<u>14,351</u>
	Total CIAC	<u>\$ 134,472</u>

(a) Refer To Text

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Brimfield Adjustment

<u>Acct. No.</u>	<u>Description</u>	<u>Amount</u> (a)
314	Wells & Springs (a)	\$ (29,060)
325	Electric Pumping Equip. (a)	<u>(32,184)</u>
	Total Adjustment	<u>\$ (61,244)</u>

(a) Prior Stipulation Adjustment from Case No. 94-1237-WS-AIR

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Blacklick Operations (legal)

<u>Acct. No.</u>	<u>Description</u>	<u>Amount (a)</u>
314	Secondary Treatment (a)	<u>\$ (246,545)</u>

(a) Refer To Text

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Blacklick Deferred Debit

<u>Acct. No.</u>	<u>Description</u>	<u>Amount</u> (a)
314	Secondary Treatment	\$ (43,035)
321	Influent Lift Station	<u>(43,035)</u>
	Total Blacklick Adjustment	<u>\$ (86,070)</u>

(a) Refer To Text

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Lake Darby Deferred Debit

<u>Acct. No.</u>	<u>Description</u>	<u>Amount (a)</u>
314	Secondary Treatment	<u>\$ (6,593)</u>

(a) Refer To Text

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Calculation of Jurisdictional Depreciation Reserve

Acct. No.	<u>Description</u>	<u>Applicant's Unadjusted</u> (a)	<u>Adjustments</u> (b)	<u>Staff's Adjusted Jurisdictional</u> (c)
	<u>Water</u>			
	<u>Intangible Plant:</u>			
301	Organization	\$	\$	\$
302	Franchises & Consents			
303	Misc. Intangible Plant	_____	_____	_____
	Total Intangible Plant			
	<u>Source of Supply Plant:</u>			
310	Land & Land Rights			
311	Structures & Improvements	133,155	(159)	132,996
312	Collecting & Impounding Res.	2,938		2,938
313	Lake, River & Other Intakes	190		190
314	Wells & Springs	110,969	(24,879)	86,090
316	Supply Mains	_____	_____	_____
	Total Source of Supply Plant	247,252	(25,038)	222,214
	<u>Pumping Plant:</u>			
320	Land & Land Rights			
321	Structures & Improvements	74,030		74,030
323	Other Power Prod. Equip.	406		406
325	Electric Pumping Equip.	159,532	(33,643)	125,889
326	Diesel Pumping Equip.			
328	Other Pumping Equip.	_____	_____	_____
	Total Pumping Plant	233,968	(33,643)	200,325
	<u>Water Treatment Plant:</u>			
330	Land & Land Rights			
331	Structures & Improvements	144,932		144,932
332	Water Treatment Equip.	278,244	(2,486)	275,758
	Total Water Treatment Plant	423,176	(2,486)	420,690
	<u>Transmission & Distribution Plant:</u>			
340	Land & Land Rights			
341	Structures & Improvements			
342	Distr. Reser. & Standpipes	406,660		406,660
343	Trans. and Distr. Mains	955,807		955,807
345	Services	280,857		280,857
346	Meters	57,521		57,521
347	Meter Installations	116,023		116,023
348	Hydrants	734	(3)	731
	Total Transmission & Distribution Plant	\$ 1,817,602	\$ (3)	\$ 1,817,599

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Calculation of Jurisdictional Depreciation Reserve

<u>Acct. No.</u>	<u>Description</u>	<u>Applicant's Unadjusted</u> (a)	<u>Adjustments</u> (b)	<u>Staff's Adjusted Jurisdictional</u> (c)
	<u>Water</u>			
	<u>General Plant:</u>			
389	Land & Land Rights	\$	\$	\$
390	Structures & Improvements	41,184		41,184
390	Limited Term Utility Plant			
391.1	Office Furniture	55,690	(1)	55,689
391.2	Computer Equip. & Software	203,761		203,761
391.3	Office Machines & Equip.	171,731	(33)	171,698
392	Transportation Equip.	569		569
393	Stores Equipment	38,669	(1)	38,668
394	Tools, Shop, & Garage Equip.	18,658	(1)	18,657
395	Laboratory Equip.	18,544		18,544
396	Power Operated Equip.	7,383	(1)	7,382
397	Communication Equip.	3,512		3,512
398	Miscellaneous Equip.			
	Total General Plant	559,701	(37)	559,664
	<u>Common Plant:</u>	30,333		30,333
	Less: Contributions In Aid of Construction	(993,924)	(60,487)	(1,054,411)
	Less: Meters as CIAC (d)	(117,779)		(117,779)
	Less: AFUDC, Overheads and PISCC (d)	(109,639)		(109,639)
	Total Water Plant in Service	<u>\$ 2,090,690</u>	<u>\$ (121,694)</u>	<u>\$ 1,968,996</u>

- (a) Applicant's Schedules B-3 and B-3.2
- (b) Staff's Schedule B-3.1
- (c) Columns (a) + (b)
- (d) Applicant's Schedule B-3.2

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Calculation of Jurisdictional Depreciation Reserve

<u>Acct. No.</u>	<u>Description</u>	<u>Applicant's Unadjusted</u> (a)	<u>Adjustments</u> (b)	<u>Staff's Adjusted Jurisdictional</u> (c)
	<u>Wastewater</u>			
	<u>Intangible Plant:</u>			
301	Organization	\$	\$	\$
302	Franchises & Consents			
303	Misc. Intangible Plant			
	<u>Total Intangible Plant</u>			
	<u>Treatment & Discharge:</u>			
310	Land & Land Rights			
311	Structures & Improvements	242,862	(27)	242,835
312	Preliminary Treatment	6,103	(2)	6,101
313	Primary Treatment	101,331		101,331
314	Secondary Treatment	670,598	(9,792)	660,806
315	Tertiary	43,355	(3)	43,352
316	Disinfection	46,646	(1)	46,645
317	Effluent Lift Station	12,514		12,514
319	Sludge Treatment & Disposal	73,966	(67)	73,899
320	Power Production	3,622		3,622
321	Influent Lift Station	47,808	(13,670)	34,138
322	General Treatment	47,410	(6)	47,404
325	Lagoon Purification	298		298
	<u>Total Treatment & Discharge</u>	1,296,513	(23,568)	1,272,945
	<u>Collection & Influent:</u>			
341	Structures & Improvements	46		46
342	Collection Lift Station	60,419	(1)	60,418
343	Collection Mains	1,014,432		1,014,432
344	Force Mains	12,494	(1)	12,493
345	Discharge Services	125,485		125,485
348	Manholes	325,542		325,542
	<u>Total Collection & Influent</u>	\$ 1,538,418	\$ (2)	\$ 1,538,416

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Calculation of Jurisdictional Depreciation Reserve

<u>Acct. No.</u>	<u>Description</u>	<u>Applicant's Unadjusted</u> (a)	<u>Adjustments</u> (b)	<u>Staff's Adjusted Jurisdictional</u> (c)
	<u>Wastewater</u>			
	<u>General:</u>			
390	Structures & Improvements	\$ 33,519	\$	\$ 33,519
391.1	Office Furniture & Equip.	11,853		11,853
391.3	Computer Equip. & Software	8,318		8,318
392	Transportation Equip.	21,173		21,173
393	Stores Equipment	1,743		1,743
394	Tools, Shop, & Garage Equip.	52,648	(3)	52,645
395	Laboratory Equip.	17,061		17,061
396	Power Operated Equip.	616		616
396	Communication Equip.	11,531		11,531
397	Miscellaneous Equip.	<u>6,205</u>	<u> </u>	<u>6,205</u>
	Total General	164,667	(3)	164,664
	Common Plant	34,801		34,801
	Less: Contributions In Aid of Construction	(1,417,608)		(1,417,608)
	AFUDC, Overheads and PISCC (d)	<u>(125,808)</u>	<u> </u>	<u>(125,808)</u>
	Total Wastewater Plant	<u>\$ 1,490,983</u>	<u>\$ (23,573)</u>	<u>\$ 1,467,410</u>
	Grand Total Water/Wastewater Plant	<u>\$ 3,581,673</u>	<u>\$ (145,267)</u>	<u>\$ 3,436,406</u>

- (a) Applicant's Schedule B-3 and B-3.2
- (b) Staff's Schedule B-3.1
- (c) Columns (a) + (b)
- (d) Applicant's Schedule B-3.2

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Summary of Staff's Adjustments to Reserve

<u>Water Plant:</u>		
(1)	1997 Overhead True-Ups (a)	\$ (2,721)
(2)	Contributions In Aid of Construction (b)	(60,487)
(3)	Brimfield (c)	<u>(58,486)</u>
(4)	Total Water Adjustments (1) thru (3)	<u>\$ (121,694)</u>
 <u>Wastewater Plant:</u>		
(1)	1997 Overhead True-Ups (d)	\$ (114)
(2)	Blacklick Operations (Legal) (e)	(2,464)
(3)	Blacklick Deferred Debit (f)	(20,425)
(4)	Lake Darby Deferred Debit (g)	<u>(570)</u>
(5)	Total Wastewater Adjustment (1) thru (4)	<u>\$ (23,573)</u>

- (a) Staff's Schedule B-3.1a, page 1
- (b) Staff's Schedule B-3.1b
- (c) Staff's Schedule B-3.1c
- (d) Staff's Schedule B-3.1a, page 2
- (e) Staff's Schedule B-3.1d
- (f) Staff's Schedule B-3.1e
- (g) Staff's Schedule B-3.1f

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
1997 Overhead True-Ups

<u>Acct. No.</u>	<u>Account Description</u>	<u>Plant Adjustment</u> (a)	<u>Age</u> (b)	<u>Accrual Rate %</u> (c)	<u>Reserve Adjustment</u> (d)
	<u>Water</u>				
311	Structures & Improvements	\$ (15,337)	0.38	2.73%	\$ (159)
314	Wells & Springs	(1,283)	0.38	2.44	(12)
325	Electric Pumping Equip.	(1,749)	0.38	3.67	(24)
332	Water Treatment Equip.	(227,188)	0.38	2.88	(2,486)
346	Meters	(13)	0.38	3.84	
348	Hydrants	(18)	0.38	1.92	
349	Other T & D Plant	(158)	0.38	5.00	(3)
391.1	Office Furniture	(28)	0.38	5.00	(1)
392	Transportation Equip.	(438)	0.38	20.00	(33)
394	Tools, Shop, & Garage Equip.	(31)	0.38	5.94	(1)
395	Laboratory Equip.	(53)	0.38	6.67	(1)
397	Communication Equip.	(29)	0.38	5.00%	(1)
	Total Water True-Up Adjustment	<u>\$ (246,325)</u>			<u>\$ (2,721)</u>

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
1997 Overhead True-Ups

<u>Acct. No.</u>	<u>Account Description</u>	<u>Plant Adjustment</u> (a)	<u>Age</u> (b)	<u>Accrual Rate %</u> (c)	<u>Reserve Adjustment</u> (d)
	<u>Wastewater</u>				
311	Structures & Improvements	\$ (3,579)	0.38	2.00%	\$ (27)
312	Preliminary Treatment	(180)	0.38	3.03	(2)
314	Secondary Treatment	(122)	0.38	2.63	(1)
315	Tertiary	(292)	0.38	2.50	(3)
316	Disinfection	(122)	0.38	3.23	(1)
319	Sludge Treatment & Disposal	(3,529)	0.38	5.00	(67)
321	Influent Lift Station	(77)	0.38	5.32	(2)
322	General Treatment	(394)	0.38	4.00	(6)
342	Collection Lift Station	(29)	0.38	5.00	(1)
344	Force Mains	(135)	0.38	2.33	(1)
391	Office Furniture & Equipment	(2)	0.38	5.26	
394	Tools, Shop, & Garage Equip.	(181)	0.38	5.00	(3)
397	Communciation Equip.	(1)	0.38	5.00	
398	Miscellaneous Equip.	<u>(29)</u>	0.38	3.57%	<u> </u>
	Total Wastewater True-Up Adjustment	<u>\$ (8,672)</u>			<u>\$ (114)</u>

- (a) Staff's Schedule B-2.2a
- (b) Age at Date Certain
- (c) Staff's Schedule B-3.2
- (d) Columns (a) x (b) x (c)

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Contributions In Aid of Construction

<u>Acct. No.</u>	<u>Account Description</u>	<u>Reserve Adjustment</u> (a)
311	Structures & Improvements	\$ (1,204)
325	Electric Pumping Equipment	(2,118)
343	Trans. and Distr. Mains	(39,623)
345	Services	(11,122)
348	Hydrants	<u>(6,420)</u>
	Totals	<u>\$ (60,487)</u>

(a) Staff's Schedule WPB-3.1b

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Brimfield (Prior Case)

<u>Acct. No.</u>	<u>Account Description</u>	<u>Reserve Adjustment</u> (a)
314	Wells & Springs	\$ (24,867)
325	Electric Pumping Equipment	<u>(33,619)</u>
	Totals	<u>\$ (58,486)</u>

(a) Staff Schedule WPB-3.1c

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Account 314 - Secondary Treatment

(1)	Staff's Adjustment to Plant In Service (a)	\$ (246,545)
(2)	Average Age of Plant at Date Certain (b)	0.38
(3)	Current Accrual Rate %	<u>2.63%</u>
(4)	Reserve Adjustment (1) x (2) x (3)	<u>\$ (2,464)</u>

- (a) Staff's Schedule B-2.2d
- (b) 1997 In-Service Date
- (c) Staff's Schedule B-3.2

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Blacklick Deferred Debit

<u>Acct.</u> <u>No.</u>	<u>Account Description</u>	<u>Reserve</u> <u>Adjustment</u> (a)
314	Secondary Treatment	\$ (6,757)
321	Influent Lift Station	<u>(13,668)</u>
	Totals	<u>\$ (20,425)</u>

(a) Staff's Schedule WPB-3.1e; (Wastewater)

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Lake Darby Deferred Debit
Account 314 - Secondary Treatment

(1)	Staff's Adjustment to Plant In Service (a)	\$	(6,593)
(2)	Average Age of Plant at Date Certain (b)		3.29
(3)	Current Accrual Rate % (c)		<u>2.63%</u>
(4)	Reserve Adjustment (1) x (2) x (3)	\$	<u><u>(570)</u></u>

- (a) Staff's Schedule B-2.2f
- (b) Staff's Schedule WPB-3.1f
- (c) Staff's Schedule B-3.2

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Calculation of Jurisdictional Depreciation Expense

<u>Acct. No.</u>	<u>Description</u>	<u>Jurisdictional Plant In Service</u> (a)	<u>Accrual Rate</u> (b)	<u>Jurisdictional Depreciation Expense</u> (c)
	<u>Water</u>			
	<u>Intangible Plant:</u>			
301	Organization	\$ 19,118		\$
302	Franchises & Consents	11,019		
303	Misc. Intangible Plant	_____		_____
	Total Intangible Plant	30,137		
	<u>Source of Supply Plant:</u>			
310	Land & Land Rights	97,033		
311	Structures & Improvements	924,465	2.73%	25,238
312	Collecting & Impounding Res.	5,314	4.17	222
313	Lake, River & Other Intakes	587	2.70	16
314	Wells & Springs	297,153	2.44	7,251
316	Supply Mains	_____		_____
	Total Source of Supply Plant	1,324,552		32,727
	<u>Pumping Plant:</u>			
320	Land & Land Rights	48,681		
321	Structures & Improvements	128,163	2.08	2,666
323	Other Power Prod. Equip.	2,521	3.03	76
325	Electric Pumping Equip.	889,025	3.67	32,627
326	Diesel Pumping Equip.			
328	Other Pumping Equip.	_____		_____
	Total Pumping Plant	1,068,390		35,369
	<u>Water Treatment Plant:</u>			
330	Land & Land Rights			
331	Structures & Improvements	320,972	1.85	5,938
332	Water Treatment Equip.	1,771,993	2.88	51,033
	Total Water Treatment Plant	2,092,965		56,971
	<u>Transmission & Distribution Plant:</u>			
340	Land & Land Rights	7,153		
341	Structures & Improvements			
342	Distr. Reser. & Standpipes	842,190	2.17	18,276
343	Trans. and Distr. Mains	3,238,079	1.43	46,305
345	Services	729,258	2.17	15,825
346	Meters	795,637	3.84	30,552
347	Meter Installations	315,977	1.92	6,067
348	Hydrants	1,674	5.00%	84
	Total Transmission & Distribution Plant	\$ 5,929,968		\$ 117,109

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Calculation of Jurisdictional Depreciation Expense

<u>Acct. No.</u>	<u>Description</u>	<u>Jurisdictional Plant In Service</u> (a)	<u>Accrual Rate</u> (b)	<u>Jurisdictional Depreciation Expense</u> (c)
	<u>Water</u>			
	<u>General Plant:</u>			
389	Land & Land Rights	\$		\$
390	Structures & Improvements	60,680	2.50%	1,517
390	Limited Term Utility Plant			
391.1	Office Furniture	143,675	5.00	7,184
391.3	Computer Equip. & Software	272,993	20.00	54,599
392	Transportation Equip.	346,836	20.00	69,367
393	Stores Equipment	2,189	5.00	109
394	Tools, Shop, & Garage Equip.	94,073	5.94	5,588
395	Laboratory Equip.	55,187	6.67	3,681
396	Power Operated Equip.	32,234	3.33	1,073
397	Communication Equipment	41,676	5.00	2,084
398	Miscellaneous Equipment	<u>8,778</u>	5.00	<u>439</u>
	Total General Plant	1,058,321		145,641
	<u>Common Plant:</u>			
390	Structures & Improvements	26,150		
391.1	Office Furniture	16,451		
391.2	Office Equipment & Machines	747		
391.3	Computer Equip. & Software	28,751		
393-398	Other Plant	<u>652</u>		
	Total Common Plant	72,751		
399	Other Intangible Property	213,455	25.00	53,364
	AFUDC, Overheads and PISCC (d)	(253,697)	1.45%	(3,679)
	Reserve Deficiency Amortization (e)			38,333
	Less: CIAC Expense (f)	(2,818,838)		(55,556)
	Total Water Plant in Service	<u>\$ 8,718,004</u>		<u>\$ 420,279</u>

- (a) Staff's Schedule B-2.1
- (b) Refer To Text
- (c) Columns (a) x (b)
- (d) Applicant's Schedule B-3.2
- (e) Developed in Case No. 94-1237-WS-AIR
- (f) Staff Schedule B-3.2a

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Calculation of Jurisdictional Depreciation Expense

<u>Acct. No.</u>	<u>Description</u>	<u>Jurisdictional Plant In Service</u> (a)	<u>Accrual Rate</u> (b)	<u>Jurisdictional Depreciation Expense</u> (c)
	<u>Wastewater</u>			
	<u>Intangible Plant:</u>			
301	Organization	\$ 4,543		\$
302	Franchises & Consents	2,190		
303	Misc. Intangible Plant	<u> </u>		<u> </u>
	Total Intangible Plant	6,733		
	<u>Treatment & Discharge:</u>			
310	Land & Land Rights	136,238		
311	Structures & Improvements	1,321,286	2.00%	26,426
312	Preliminary Treatment	51,605	3.03	1,564
313	Primary Treatment	220,456	2.44	5,379
314	Secondary Treatment	4,979,513	2.63	130,961
315	Tertiary	191,928	2.50	4,798
316	Disinfection	250,537	3.23	8,092
317	Effluent Lift Station	37,817	4.76	1,800
319	Sludge Treatment & Disposal	409,586	5.00	20,479
320	Power Production	14,435	4.00	577
321	Influent Lift Station	829,839	5.32	44,147
322	General Treatment	62,875	4.00	2,515
325	Lagoon Purification	<u>780</u>	3.33	<u>26</u>
	Total Treatment & Discharge	8,506,895		246,764
	<u>Collection & Influent:</u>			
341	Structures & Improvements	614	2.50	15
342	Collection Lift Station	168,384	5.00	8,419
343	Collection Mains	3,129,008	1.56	48,813
344	Force Mains	20,329	2.33	474
345	Discharge Services	280,257	1.92	5,381
348	Manholes	<u>799,966</u>	1.96%	<u>15,679</u>
	Total Collection & Influent	4,398,558		78,781

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Calculation of Jurisdictional Depreciation Expense

<u>Acct. No.</u>	<u>Description</u>	<u>Jurisdictional Plant In Service</u> (a)	<u>Accrual Rate</u> (b)	<u>Jurisdictional Depreciation Expense</u> (c)
	<u>Wastewater</u>			
	<u>General Plant:</u>			
389	Land & Land Rights	\$		\$
390	Structures & Improvements	39,110	2.50%	978
391.1	Office Furniture & Equip.	27,369	5.26	1,440
391.3	Computer Equip. & Software	10,092	20.00	2,018
392	Transportation Equip.	18,257	20.00	3,651
393	Stores Equipment	3,834	6.25	240
394	Tools, Shop, & Garage Equip.	181,204	5.00	9,060
395	Laboratory Equip.	48,148	5.26	2,533
396	Power Operated Equip.	3,845	10.00	385
397	Communication Equipment	20,700	5.00	1,035
398	Miscellaneous Equipment	<u>31,944</u>	3.57	<u>1,140</u>
	Total General Plant	384,503		22,480
	AFUDC, Overheads, and PISCC (d)	(291,113)	1.45%	(4,221)
	Reserve Deficiency Amortization (e)			69,306
	Less: CIAC Expense (f)	<u>(3,924,296)</u>		<u>(68,630)</u>
	Total Wastewater Plant in Service	<u>\$ 9,081,280</u>		<u>\$ 344,480</u>

- (a) Staff's Schedule B-2.1
- (b) Refer To Text
- (c) Columns (a) x (b)
- (d) Applicant's Schedule B-3.2
- (e) Developed in Case No. 94-1237-WS-AIR
- (f) Staff's Schedule B-3.2a

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
CIAC Depreciation Expense Calculation

<u>Acct. No.</u>	<u>Account Description</u>	<u>CIAC Plant In Service</u> (a)	<u>Accrual Rate %</u> (b)	<u>Staff's CIAC Depr. Expense</u> (c)
310	Land & Land Rights	\$ (23,391)		\$
311	Structures & Improvements	(89,081)	2.73%	(2,432)
314	Wells & Springs	(71,050)	2.44	(1,734)
321	Structures & Improvements	(3,326)	2.08	(69)
325	Electric Pumping Equipment	(43,706)	3.67	(1,604)
342	Distr. Reser. & Standpipes	(307,770)	2.17	(6,679)
343	Trans. and Distr. Mains	(1,475,552)	1.43	(21,100)
345	Services	(365,598)	2.17	(7,933)
346	Meters	(66,313)	3.84	(2,546)
348	Hydrants	<u>(149,308)</u>	1.92	<u>(2,867)</u>
	Subtotal Water Plant	(2,595,095)		(46,964)
	CIAC for Meters	<u>\$ (223,743)</u>	3.84%	<u>\$ (8,592)</u>
	Totals for Water Plant	<u>\$ (2,818,838)</u>		<u>\$ (55,556)</u>

- (a) Staff's Schedule WPB-3.2a
- (b) Staff's Schedule B-3.2
- (c) Columns (a) x (b)

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
CIAC Depreciation Expense Calculation

<u>Acct. No.</u>	<u>Account Description</u>	<u>CIAC Plant In Service</u> (a)	<u>Accrual Rate %</u> (b)	<u>Staff's CIAC Depr. Expense</u> (c)
310	Land & Land Rights	\$ (38,299)		\$
311	Structures & Improvements	(83,372)	2.00%	(1,667)
314	Secondary Treatment	(203,737)	2.63	(5,358)
319	Sludge Treatment & Disposal	(50,934)	5.00	(2,547)
342	Collection Lift Stations	(20,999)	5.00	(1,050)
343	Collection Mains	(2,760,890)	1.56	(43,070)
345	Discharge Service	(192,900)	1.92	(3,704)
348	Manholes	<u>(573,165)</u>	1.96%	<u>(11,234)</u>
	Totals for Wastewater Plant	<u>\$ (3,924,296)</u>		<u>\$ (68,630)</u>

- (a) Applicant's Schedule B-6.2
- (b) Staff's Schedule B-3.2
- (c) Columns (a) x (b)

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Construction Work In Progress Summary

None

SCHEDULE B-5

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Working Capital Allowance

	<u>Adjusted</u> <u>Revenues &</u> <u>Expenses</u>	<u>Revenue</u> <u>Lag</u>	<u>Expense</u> <u>Lag</u>	<u>Net</u> <u>Interval</u>	<u>Weighted</u> <u>Dollar</u> <u>Days</u>	<u>Working</u> <u>Capital</u> <u>Requirements</u>
<u>Operating Expenses:</u>						
(1) Salaries & Wages Expense	\$ 933,632	48.40	13.00	35.40	33,050,573	\$ 90,550
(2) Pur. Power and Water Expense	302,489	48.40	34.40	14.00	4,234,846	11,602
(3) Materials, Ser. & Misc. Exp.	483,506	48.40	32.34	16.06	7,765,106	21,274
(4) Tank Painting Expense	37,146	48.40	22.00	26.40	980,657	2,687
(5) Miscellaneous & Per Diem Exp.	87,657	48.40	32.34	16.06	1,407,771	3,857
(6) Int. on Customer's Dep. Exp.	1,401	48.40	48.40			
(7) Uncollectible Accounts Exp.	30,617	48.40	48.40			
(8) Administrative Office Expense	244,807	48.40	20.50	27.90	6,830,115	18,713
(9) Legal & Regulatory Expense	54,066	48.40	20.50	27.90	1,508,441	4,133
(10) Rate Case Expense	56,666	48.40	32.34	16.06	910,061	2,493
(11) Insurance Expense	34,355	48.40	(146.00)	194.40	6,678,612	18,298
(12) Transportation Expense	56,682	48.40	32.34	16.06	910,313	2,494
(13) Injuries & Damages Expense	57,458	48.40	(146.00)	194.40	11,169,835	30,602
(14) Pensions & Benefits Expense	207,091	48.40	229.00	(180.60)	(37,400,635)	(102,467)
(15) Customer Accounting	99,943	48.40	32.34	16.06	1,605,085	4,397
(16) Rents	26,912	48.40	32.34	16.06	432,207	1,184
(17) Telephone	<u>26,605</u>	48.40	32.34	16.06	427,276	<u>1,171</u>
(18) Total Oper. & Maint. Expenses	<u>2,741,034</u>			48.37		<u>110,988</u>
(19) Depreciation	764,759	48.40		48.40	37,014,336	101,409
<u>Taxes Other Than FIT:</u>						
(21) Excise Taxes-4.00%	205,350	48.40	138.00	(89.60)	(18,399,322)	(50,409)
(22) Excise Taxes-.75%	38,505	48.40	(77.00)	125.40	4,828,473	13,229
(23) Property Taxes	814,462	48.40	279.61	(231.21)	(188,311,727)	(515,923)
(24) FICA Taxes	69,944	48.40	12.00	36.40	2,545,962	6,975
(25) PUCO & OCC Taxes	8,099	48.40	88.00	(39.60)	(320,720)	(879)
(26) Federal & State Unemployment	2,352	48.40	60.75	(12.35)	(29,046)	(80)
<u>Federal Income Taxes:</u>						
(28) Current FIT	(39,312)	48.40	37.00	11.40	(448,152)	(1,228)
(29) Net Investment Tax Credit	(2,300)	48.40		48.40	(111,320)	(305)
(30) Deferred FIT	41,079	48.40	48.40			
<u>Cash invested in rate of return:</u>						
(32) Interest on long-term debt	466,778	48.40	90.00	(41.60)	(19,417,965)	(53,200)
(33) Bal. available for preferred dividends	39,847	48.40	46.00	2.40	95,633	262
(34) Bal. available for common dividends	38,793	48.40		48.40	1,877,572	<u>5,144</u>
(35) Total Annual Cost of Operation	<u>\$5,189,389</u>					
(36) Revenues and Expenses Allowance						<u>\$(384,017)</u>

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Other Rate Base Items

	Total Company (a)
(1) Customer's Deposits (a)	\$ (23,351)
(2) Customer Advances for Construction (a)	(25,523)
(3) Deferred Income Taxes - Liberalized Depreciation (a)	(138,556)
(4) Contributions in Aid of Construction (b)	(6,743,133)
(5) Deferred Taxes - Capitalized Expenses (c)	<u>(27,870)</u>
(6) Total Rate Base Deductions (1) Through (5)	<u>\$ (6,958,433)</u>

- (a) Applicant's Schedule B-6
- (b) Applicant's Schedule B-6.2
- (c) Staff's Schedule WPC-4

SCHEDULE C-1

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Proforma Operating Income Statement
For The Twelve Months Ending March 31, 1998

	<u>Adjusted</u> <u>Revenues &</u> <u>Expenses</u> (a)	<u>Staff</u> <u>Proforma</u> <u>Adjustments</u> (b)	<u>Proforma</u> <u>Revenues &</u> <u>Expenses</u> (c)	<u>Applicant</u> <u>Proforma</u> <u>Revenues &</u> <u>Expenses</u> (d)
<u>Operating Revenues:</u>				
Water Sales Revenues	\$ 5,065,841	\$ 988,059	\$ 6,053,900	\$ 6,634,030
Forfeited Discount	84,214	16,425	100,639	
Other Revenue	<u>39,334</u>		<u>39,334</u>	<u>48,795</u>
Total Operating Revenues	5,189,389	1,004,484	6,193,873	6,682,825
<u>Operating Expenses:</u>				
Operation & Maintenance	2,741,034	5,926	2,746,960	2,995,004
Depreciation	764,759		764,759	603,439
Taxes, Other Than Income	1,138,711	47,431	1,186,142	1,439,807
Federal Income Taxes	<u>(30,703)</u>	<u>332,894</u>	<u>302,191</u>	<u>369,557</u>
Total Operating Expenses	4,613,801	386,252	5,000,053	5,407,807
Net Operating Income	<u>\$ 575,588</u>	<u>\$ 618,232</u>	<u>\$ 1,193,820</u>	<u>\$ 1,275,018</u>
Rate Base (e)	<u>\$ 14,231,047</u>		<u>\$ 14,231,047</u>	<u>\$ 14,781,756</u>
Rate of Return (f)	<u>4.04%</u>		<u>8.39%</u>	<u>8.63%</u>

- (a) Staff's Schedule C-2
- (b) Staff's Schedule C-1.1
- (c) Columns (a) + (b)
- (d) Applicant's Schedule C-1
- (e) Staff's Schedule B-1
- (f) Net Operating Income ÷ Rate Base

SCHEDULE C-1.1

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Proforma Adjustments

(1)	Proposed Revenue Increase (a)	\$ 988,059
(2)	Proposed Forfeited Discounts (1) x 1.662400% (b)	<u>16,425</u>
(3)	Total Revenue Increase (1) + (2)	<u>\$ 1,004,484</u>
(4)	Uncollectible Accounts Expense (3) x 0.590000% (c)	<u>\$ 5,926</u>
(5)	Ohio Gross Receipts Tax (d)	<u>\$ 47,431</u>
(6)	Federal Income Tax (e)	<u>\$ 332,894</u>

- (a) Staff's Schedule C-1.1a
- (b) Staff's Schedule C-3.2
- (c) Derived From Staff's Schedule C-3.9
- (d) Staff's Schedule C-3.18b
- (e) Staff's Schedule C-4

SCHEDULE C-1.1a

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Revenue Requirements

<u>Class Of Service</u>	<u>Bills</u> (a)	<u>Consumption (CCF)</u> (b)	<u>Current Revenue</u> (c)	<u>Proposed Revenue</u> (d)	<u>Proposed Increase</u> (e)	<u>Percentage Increase</u> (f)
<u>Water</u>						
Domestic	100,565	773,285	\$ 2,533,725	\$ 2,745,693	\$ 211,968	8.37%
Non-Domestic	2,778	107,494	296,839	305,658	8,819	2.97
Private Fire			<u>20,518</u>	<u>20,518</u>		
Total Water			2,851,082	3,071,869	220,787	7.74
<u>Other Revenue:</u>						
Forfeited Discounts			47,396	51,067	3,671	7.74
Other Revenue			<u>18,521</u>	<u>18,521</u>		
Total Other Revenue			65,917	69,588	3,671	5.57
Total Water Revenue	103,343	880,779	2,916,999	3,141,457	224,458	7.69
<u>Wastewater</u>						
Domestic	75,777	559,601	2,015,987	2,730,436	714,449	35.44
Non-Domestic	1,839	77,273	<u>198,772</u>	<u>251,595</u>	<u>52,823</u>	26.57
Total Wastewater			2,214,759	2,982,031	767,272	34.64
<u>Other Revenue:</u>						
Forfeited Discount			36,818	49,573	12,755	34.64
Other Revenue			<u>20,813</u>	<u>20,813</u>		
Total Other Revenue			57,631	70,386	12,755	22.13
Total Wastewater	77,616	636,874	2,272,390	3,052,417	780,027	34.33
Total	<u>180,959</u>	<u>1,517,653</u>	<u>\$ 5,189,389</u>	<u>\$ 6,193,874</u>	<u>\$ 1,004,485</u>	19.36%

- (a) Applicant's Most Recent Twelve Months Bills 03/31/98
- (b) Applicant's Consumption 12 Months Ending 03/31/98
- (c) Column (b) x Applicant's Current Rates
- (d) Column (b) x Applicant's Proposed Rates
- (e) Column (d) - (c)
- (f) Column (e) ÷ (c)

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Adjusted Test Year Operating Income

	Applicant			Staff	
	Test Year Revenues & Expenses	Adjustments	Adjusted Revenues & Expenses	Incremental Adjustments	Adjusted Revenues & Expenses
	(a)	(b)	(c)	(d)	(e)
Operating Revenues:					
Water Sales Revenues	\$ 5,076,782	\$ 270,665	\$ 5,347,447	\$ (281,606)	\$ 5,065,841
Forfeited Discount	80,931	(80,931)		84,214	84,214
Other Revenue	<u>36,294</u>	<u>3,040</u>	<u>39,334</u>		<u>39,334</u>
Total Operating Revenues	5,194,007	192,774	5,386,781	(197,392)	5,189,389
Operating Expenses:					
Salaries and Wages Exp.	955,104	90,046	1,045,150	(111,518)	933,632
Pur. Power and Water Exp.	317,716	6,226	323,942	(21,453)	302,489
Materials. Ser. & Misc. Exp.	492,179	21,400	513,579	(30,073)	483,506
Tank Painting Expense	32,355		32,355	4,791	37,146
Misc. & Per Diem Exp.	89,022		89,022	(1,365)	87,657
Int. on Customer's Dep. Exp.				1,401	1,401
Uncollectible Accounts Exp.	29,088	1,080	30,168	449	30,617
Administrative Office Exp.	311,437	464	311,901	(67,094)	244,807
Legal & Regulatory Exp.	49,754	(27,213)	22,541	31,525	54,066
Rate Case Expense	83,880		83,880	(27,214)	56,666
Insurance Expense	19,623	906	20,529	13,826	34,355
Transportation Expense	55,566	1,116	56,682		56,682
Injuries & Damages Exp.	73,373	(6,838)	66,535	(9,077)	57,458
Pensions & Benefits Exp.	265,421	(27,419)	238,002	(30,911)	207,091
Customer Accounting	99,943		99,943		99,943
Rents	26,912		26,912		26,912
Telephone	<u>26,605</u>		<u>26,605</u>		<u>26,605</u>
Total Oper. & Maint. Exp.	2,927,978	59,768	2,987,746	(246,712)	2,741,034
Depreciation & Amortization	668,790	(65,351)	603,439	161,320	764,759
Taxes, Other Than Income	952,983	423,532	1,376,515	(237,804)	1,138,711
Income Taxes	<u>41,196</u>	<u>(102,033)</u>	<u>(60,837)</u>	<u>30,134</u>	<u>(30,703)</u>
Total Operating Exp.	<u>4,590,947</u>	<u>315,916</u>	<u>4,906,863</u>	<u>(293,062)</u>	<u>4,613,801</u>
Net Operating Income	<u>\$ 603,060</u>	<u>\$ (123,142)</u>	<u>\$ 479,918</u>	<u>\$ 95,670</u>	<u>\$ 575,588</u>

- (a) Applicant's Schedule C-2
- (b) Applicant's Schedule C-3
- (c) Columns (a) + (b)
- (d) Staff's Schedule C-3
- (e) Columns (c) + (d)

SCHEDULE C-3

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Summary of Staff's Adjustments

	<u>Staff's Adjustments</u> (a)	<u>Applicant's Adjustments</u> (b)	<u>Staff's Incremental Adjustments</u> (c)
	<u>Operating Revenues:</u>		
C-3.1	\$ (10,941)	\$ 270,665	\$ (281,606)
C-3.2	3,283	(80,931)	84,214
C-3.3	<u>3,040</u>	<u>3,040</u>	<u> </u>
	Total Revenue Adjustments	192,774	(197,392)
	<u>Operating Expenses:</u>		
C-3.4	(21,472)	90,046	(111,518)
C-3.5	(15,227)	6,226	(21,453)
C-3.6	(8,673)	21,400	(30,073)
C-3.6a	4,791		4,791
C-3.7	(1,365)		(1,365)
C-3.8	1,401		1,401
C-3.9	1,529	1,080	449
C-3.10	(66,630)	464	(67,094)
C-3.11	4,312	(27,213)	31,525
C-3.12	(27,214)		(27,214)
C-3.13	14,732	906	13,826
C-3.14	1,116	1,116	
C-3.15	(15,915)	(6,838)	(9,077)
C-3.16	<u>(58,330)</u>	<u>(27,419)</u>	<u>(30,911)</u>
	Total O & M Expenses	59,768	(246,712)
C-3.17	95,969	(65,351)	161,320
C-3.18	185,728	423,532	(237,804)
C-3.19	<u>(71,899)</u>	<u>(102,033)</u>	<u>30,134</u>
	Total Expense Adjustments	<u>\$ 315,916</u>	<u>\$ (293,062)</u>

- (a) Staff's Schedules C-3.1 Through C-3.19
- (b) Applicant's Schedule C-2
- (c) Columns (a) - (b)

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Water Sales Revenue Adjustment

	<u>Water</u>	<u>Wastewater</u>	<u>Total Company</u>
(1) Adjusted Revenue (a)	\$ 2,851,082	\$ 2,214,759	\$ 5,065,841
(2) Test Year Revenue (b)	<u>2,844,392</u>	<u>2,232,390</u>	<u>5,076,782</u>
(3) Adjustment (1) - (2)	<u>\$ 6,690</u>	<u>\$ (17,631)</u>	<u>\$ (10,941)</u>

- (a) Staff's Data Request 18 and Staff's Workpaper WPC-3.1
- (b) Applicant's Schedule C-2

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Forfeited Discounts Revenue Adjustment

	<u>Water</u>	<u>Wastewater</u>	<u>Total Company</u>
(1) Adjusted Base Revenue (a)	\$ 2,851,082	\$ 2,214,759	\$ 5,065,841
(2) Forfeited Discount Rate (b)	<u>1.6624%</u>	<u>1.6624%</u>	<u>1.6624%</u>
(3) Adjusted Forfeited Discount Revenues (1) x (2)	47,396	36,818	84,214
(4) Less: Test Year Forfeited Discount Revenues (c)	<u>40,635</u>	<u>40,296</u>	<u>80,931</u>
(5) Adjustment (3) - (4)	<u>\$ 6,761</u>	<u>\$ (3,478)</u>	<u>\$ 3,283</u>

- (a) Staff's Schedule C-1.1a
- (b) Staff's Schedule WPC-3.2
- (c) Applicant's Schedule C-2

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Other Revenue Adjustment

	<u>Water</u>	<u>Wastewater</u>	<u>Total Company</u>
(1) Adjusted Other Revenues (a)	\$ 18,521	\$ 20,813	\$ 39,334
(2) Test Year Other Revenue (b)	<u>17,001</u>	<u>19,293</u>	<u>36,294</u>
(3) Adjustment (1) - (2)	<u>\$ 1,520</u>	<u>\$ 1,520</u>	<u>\$ 3,040</u>

- (a) Staff's Schedule C-1.1a
- (b) Applicant's Schedule C-2

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Salaries and Wages Expense Adjustment

	<u>Water</u>	<u>Wastewater</u>	<u>Total Company</u>
(1) Adjusted Payroll (a)	\$ 544,464	\$ 389,168	\$ 933,632
(2) Test Year Payroll (b)	<u>537,948</u>	<u>417,156</u>	<u>955,104</u>
(3) Adjustment (1) - (2)	<u>\$ 6,516</u>	<u>\$ (27,988)</u>	<u>\$ (21,472)</u>

- (a) Staff's Schedule WPC-3.4
- (b) Applicant's Schedule C-2

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Purchased Power and Water Expense Adjustment

	<u>Water</u>	<u>Wastewater</u>	<u>Total Company</u>
(1) Adjusted Purchased Power Expense (a)	\$ 158,288	\$ 140,481	\$ 298,769
(2) Less: Test Year Purchased Power Expense (b)	<u>167,449</u>	<u>146,547</u>	<u>313,996</u>
(3) Adjustment (1) - (2)	<u>\$ (9,161)</u>	<u>\$ (6,066)</u>	<u>\$ (15,227)</u>
(4) Adjusted Test Year Water Expense (b)	3,720	Not Applicable	3,720
(5) Less: Test Year Expense (b)	<u>3,720</u>	<u>Not Applicable</u>	<u>3,720</u>
(6) Adjustment (1) - (2)	\$	\$	\$
(7) Total Adjustment (3) + (6)	<u>\$ (9,161)</u>	<u>\$ (6,066)</u>	<u>\$ (15,227)</u>

- (a) Staff's Data Request 2
- (b) Applicant's Schedule C-2

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Materials, Services and Miscellaneous

	<u>Water</u>	<u>Wastewater</u>	<u>Total Company</u>
(1) Adjusted Materials, Services & Miscellaneous (a)	\$ 256,052	\$ 227,454	\$ 483,506
(2) Test Year Materials, Services & Miscellaneous (b)	<u>239,342</u>	<u>252,837</u>	<u>492,179</u>
(3) Total Adjustment (1) - (2)	<u>\$ 16,710</u>	<u>\$ (25,383)</u>	<u>\$ (8,673)</u>

- (a) Staff's Data Request 2 (excludes tank painting expense)
- (b) Applicant's Schedule C-2 (excludes tank painting expense)

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Tank Painting Expense Adjustment

(1)	Blacklick	250,000 Gal. Elevated (a)	\$ 150,000
(2)	Huber Ridge	500,000 Gal. Elevated (a)	46,620
(3)	Lake Darby	500,000 Gal. Elevated (a)	38,830
(4)	Timberbrook	200,000 Gal. Elevated (a)	32,091
(5)	Valley	200,000 Gal. Elevated (a)	37,860
		300,000 Gal. Ground (Estimated) (a)	38,960
(6)	Brimfield - Beechcrest	75,000 Gal. Elevated (a)	15,900
(7)	Brimfield - Aurora East	60,000 Gal. Standpipe (a)	<u>11,200</u>
(8)	Total Cost (1) Thru (7)		371,461
(9)	Amortization Period		<u>10</u>
(10)	Adjusted Tank Painting Expense (8) ÷ (9)		37,146
(11)	Test Year Expense (b)		<u>32,355</u>
(12)	Adjustment (10) - (11)		<u>\$ 4,791</u>

- (a) Staff's Data Request 29
- (b) Applicant's Supplemental Information 8

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Miscellaneous & Per Diem Expense Adjustment

(1)	Adjusted Miscellaneous & Per Diem Expense (a)	\$ 87,657
(2)	Test Year Miscellaneous & Per Diem Expense (b)	<u>89,022</u>
(3)	Adjustment (1) - (2)	<u>\$ (1,365)</u>

- (a) Staff's Workpaper WPC-3.7
- (b) Applicant's Schedule C-2

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Reclassification Of Interest On Customers' Deposits Expense Adjustment

	<u>Water</u>	<u>Wastewater</u>	<u>Total Company</u>
(1) Customers' Deposits (a)	\$ 10,874	\$ 12,477	\$ 23,351
(2) Interest Rate (a)	<u>6.00%</u>	<u>6.00%</u>	<u>6.00%</u>
(3) Interest On Customer Deposits (1) x (2)	<u>\$ 1,401</u>	<u>\$ 749</u>	<u>\$ 1,401</u>

(a) Applicant's Schedule B-5.1

SCHEDULE C-3.9

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Uncollectible Expense Adjustment

	<u>Water</u>	<u>Wastewater</u>	<u>Total Company</u>
(1) Total Revenue (a)	\$ 2,916,999	\$ 2,272,390	\$ 5,189,389
(2) Uncollectible Ratio (b)	<u>0.59%</u>	<u>0.59%</u>	<u>0.59%</u>
(3) Adjusted Uncollectible Expense (1) x (2)	17,210	13,407	30,617
(4) Test Year Uncollectible Expense (c)	<u>16,618</u>	<u>12,470</u>	<u>29,088</u>
(5) Adjustment (3) - (4)	<u>\$ 592</u>	<u>\$ 937</u>	<u>\$ 1,529</u>

- (a) Staff's Schedule C-2
- (b) Staff's Schedule WPC-3.8
- (c) Applicant's Schedule C-2

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Administrative Office Expense Adjustment

(1)	Adjusted Administrative Office Corporate and Sector Expense (a)	\$	241,293
(2)	Adjusted Other Administrative Services Expense (a)		<u>3,514</u>
(3)	Total Adjusted Administrative Office Expense (1) + (2)		244,807
(4)	Test Year Expense (b)		<u>311,437</u>
(5)	Adjustment (3) - (4)	\$	<u>(66,630)</u>
(6)	Allocated to Water (c)	\$	<u>(35,474)</u>
(7)	Allocated to Wastewater (c)	\$	<u>(31,156)</u>

- (a) Staff's Schedule WPC-3.10
- (b) Applicant's Schedule C-2
- (c) Applicant's Schedule C-3.9

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Legal and Regulatory Expense Adjustment

	<u>Water</u>	<u>Wastewater</u>	<u>Total Company</u>
(1) Adjusted Legal and Regulatory Expense (a)	\$ 28,785	\$ 25,281	\$ 54,066
(2) Test Year Legal and Regulatory Expense (b)	<u>26,489</u>	<u>23,265</u>	<u>49,754</u>
(3) Adjustment (1) - (2)	<u>\$ 2,296</u>	<u>\$ 2,016</u>	<u>\$ 4,312</u>

- (a) Staff's Schedule WPC-3.11
- (b) Applicant's Schedule C-2 And Staff's Customer Accounting And Administrative & General Allocation Factors

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Rate Case Expense Adjustment

	<u>Water</u>	<u>Wastewater</u>	<u>Total Company</u>
(1) Adjusted Rate Case Expense (a)	\$ 30,169	\$ 26,497	\$ 56,666
(2) Test Year Rate Case Expense (b)	<u>44,658</u>	<u>39,222</u>	<u>83,880</u>
(3) Total Adjustment (1) - (2)	<u>\$ (14,489)</u>	<u>\$ (12,725)</u>	<u>\$ (27,214)</u>

- (a) Staff's Schedule WPC-3.12
- (b) Applicant's Schedule C-2

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Insurance Expense Adjustment

	<u>Water</u>	<u>Wastewater</u>	<u>Total Company</u>
(1) Adjusted Insurance Expense (a)	\$ 18,291	\$ 16,064	\$ 34,355
(2) Test Year Insurance Expense (b)	<u>10,447</u>	<u>9,176</u>	<u>19,623</u>
(3) Adjustment (1) - (2)	<u>\$ 7,844</u>	<u>\$ 6,888</u>	<u>\$ 14,732</u>

- (a) Staff's Workpaper WPC-3.13
- (b) Applicant's Schedule C-2

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Transportation Expense Adjustment

	<u>Water</u>	<u>Wastewater</u>	<u>Total Company</u>
(1) Adjusted Transportation Expense (a)	\$ 37,103	\$ 32,587	\$ 69,690
(2) Transportation Expense Charged to Construction (a)	<u>6,925</u>	<u>6,083</u>	<u>13,008</u>
(3) Net Transportation Cost (1) - (2)	30,178	26,504	56,682
(4) Less: Test Year Transportation Expense (b)	<u>29,583</u>	<u>25,983</u>	<u>55,566</u>
(5) Adjustment (1) - (2)	<u>\$ 595</u>	<u>\$ 521</u>	<u>\$ 1,116</u>

- (a) Applicant's Schedule C-3.15
- (b) Applicant's Schedule C-2

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Injuries and Damages Expense Adjustment

	<u>Water</u>	<u>Wastewater</u>	<u>Total Company</u>
(1) Adjusted Workers Comp (a)	\$ 15,834	\$ 13,907	\$ 29,741
(2) Adjusted Injuries and Damages (b)	<u>14,757</u>	<u>12,960</u>	<u>27,717</u>
(3) Total (1) + (2)	30,591	26,867	57,458
(4) Less: Test Year Injuries and Damages (c)	<u>39,064</u>	<u>34,309</u>	<u>73,373</u>
(5) Adjustment (3) - (4)	<u>\$ (8,473)</u>	<u>\$ (7,442)</u>	<u>\$ (15,915)</u>

- (a) Staff's Data Request 9
- (b) Staff's Workpaper WPC-3.15
- (c) Applicant's Schedule C-2

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Pensions and Benefits Expense Adjustment

	<u>Water</u> (a)	<u>Wastewater</u> (b)	<u>Total Company</u>
(1) Annualized Medical (Company) Expense (c)	\$ 6,948	\$ 4,965	\$ 11,913
(2) Annualized Medical (HMO) Expense (c)	54,134	38,688	92,822
(3) Annualized Dental Expense (d)	5,251	3,753	9,004
(4) Annualized Vision Expense (e)	1,147	820	1,967
(5) Annualized Life Insurance Expense (f)	1,388	992	2,380
(6) Annualized IDCP Expense (g)	18,353	13,117	31,470
(7) Annualized 401k Expense (h)	9,211	6,583	15,794
(8) Annualized Pension Expense (i)	24,326	17,385	41,711
(9) Annualized Postretirement Benefits Expense (j)	<u>17</u>	<u>13</u>	<u>30</u>
(10) Tot. Annualized O & M Pen. and Bene. (1) thru (9)	120,775	86,316	207,091
(11) Test Year Pension & Benefits Expense (k)	<u>141,310</u>	<u>124,111</u>	<u>265,421</u>
(12) Adjustment (10) - (11)	<u>\$ (20,535)</u>	<u>\$ (37,795)</u>	<u>\$ (58,330)</u>

- (a) Derived from Water Allocation Ratio of 58.32% calculated on Staff's Schedule WPC-3.16
- (b) Derived from Wastewater Allocation Ratio of 41.68% calculated on Staff's Schedule WPC-3.16
- (c) Staff's Schedule WPC-3.16a
- (d) Applicant's Actual Budgeted Dental Expense for 1998 from the Applicant's Supplemental Information (C)(8) times the Staff's O & M Ratio (\$870 x 12) x 86.25%
- (e) Applicant's Actual Budgeted Vision Expense for 1998 from the Applicant's Supplemental Information (C)(8) times the Staff's O & M Ratio (\$190 x 12) x 86.25%
- (f) Applicant's Actual Budgeted Life Insurance Expense for 1998 from the Applicant's Supplemental Information (C)(8) times the Staff's O & M Ratio (\$230 x 12) x 86.25%
- (g) Staff's Schedule WPC-3.16b
- (h) Staff's Schedule WPC-3.16c
- (i) Applicant's Actual Budgeted Pension Expense for 1998 from the Applicant's Supplemental Information (C)(8) times the Staff's O & M Ratio (\$4,030 x 12) x 86.25
- (j) Applicant's Projected 1998 Expense from the latest known Actuarial Valuation Report Accounting for the Postretirement Health and Life Insurance Benefits
- (k) Applicant's Schedule C-2 and Applicant's Schedule C-3.16

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Depreciation Expense Adjustment

	<u>Water</u>	<u>Wastewater</u>	<u>Total Company</u>
(1) Staff's Adjusted Depreciation Expense (a)	\$ 420,279	\$ 344,480	\$ 764,759
(2) Test Year Depreciation Expense (b)	<u>356,360</u>	<u>312,430</u>	<u>668,790</u>
(3) Adjustment (1) - (2)	<u>\$ 63,919</u>	<u>\$ 32,050</u>	<u>\$ 95,969</u>

- (a) Staff's Schedule B-3.2
- (b) Applicant's Schedule C-2

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Summary of Taxes Other Than Income Adjustments

	Schedule Reference	Water	Wastewater	Total Company
(1) Ohio Property Taxes	C-3.18a	\$ 381,563	\$ 432,899	\$ 814,462
(2) Ohio Gross Receipts Tax	C-3.18b	129,828	114,026	243,854
(3) FICA Tax	C-3.18c	40,819	29,125	69,944
(4) Unemployment Taxes	C-3.18d	1,371	981	2,352
(5) PUCO Maintenance & OCC Fund	C-3.18e	<u>4,312</u>	<u>3,787</u>	<u>8,099</u>
(6) Total Taxes Other Than Income (1) Thru (5)		557,892	580,818	1,138,711
(7) Test Year Taxes Other Than Income (a)		<u>475,848</u>	<u>477,135</u>	<u>952,983</u>
(8) Adjustment (6) - (7)		<u>\$ 82,044</u>	<u>\$ 103,683</u>	<u>\$ 185,728</u>

(a) Applicant's Schedule C-2

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Total Company)
Calculation of Property Tax

	<u>Water</u>	<u>Wastewater</u>	<u>Total Company</u>
(1) Jurisdictional Plant in Service at 9/30/97 (a)	\$ 11,536,842	\$ 13,089,044	\$ 24,625,886
(2) Assessment Valuation Percentage (b)	<u>36.13%</u>	<u>36.13%</u>	<u>36.13%</u>
(3) Plant in Service Subject to Prop. Tax (1) x (2)	4,168,261	4,729,072	8,897,333
(4) Property Tax Rate - per \$1,000 (b)	<u>91.54</u>	<u>91.54</u>	<u>91.54</u>
(5) Ohio Property Tax (3) x (4)	<u>\$ 381,563</u>	<u>\$ 432,899</u>	<u>\$ 814,462</u>

- (a) Staff's Schedule B-2
- (b) Staff's Data Request 16 and Staff's Schedule WPC-3.18a

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Calculation of Ohio Gross Receipts Tax

	<u>Adjusted Operating Income</u>	<u>Proforma Operating Income</u>
(1) Operating Revenue (a)	\$5,189,389	\$ 6,193,873
<u>Less Exemptions:</u>		
(2) Statutory Exemption	25,000	25,000
(3) Uncollectible Expense (1) x 0.59% (b)	<u>30,617</u>	<u>36,544</u>
(4) Net Taxable Revenue (1) - (2) - (3)	5,133,772	6,132,329
(5) Tax Rate	<u>4.75%</u>	<u>4.75%</u>
(6) Gross Receipts Tax (4) x (5)	<u>\$ 243,854</u>	<u>\$ 291,286</u>
(7) Ohio Gross Receipt Tax Allocated To Water (c)	<u>\$ 129,828</u>	<u>\$ 155,080</u>
(8) Ohio Gross Receipt Tax Allocated To Wastewater (d)	<u>\$ 114,026</u>	<u>\$ 136,205</u>

(a) Staff's Schedule C-1

(b) Staff's Schedule C-3.9

(c) Derived From Staff's Allocation of Water Current and Proposed of 53.24%

(d) Derived From Staff's Allocation of Wastewater Current and Proposed of 46.76%

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Calculation of FICA Taxes

	<u>Water</u>	<u>Wastewater</u>	<u>Total Company</u>
(1) Total Adjusted Payroll (a)	\$ 544,464	\$ 389,168	\$ 933,632
(2) Less: Excludable Wages Over FICA Ceiling (b)	<u>13,432</u>	<u>10,418</u>	<u>23,850</u>
(3) Wages Subject To FICA Tax (1) - (2)	531,032	378,750	909,782
(4) Effective FICA Tax Rate (c)	<u>7.65%</u>	<u>7.65%</u>	<u>7.65%</u>
(5) FICA Tax (3) x (4)	40,624	28,974	69,598
(6) O & M Medicare Tax Due On Excludable FICA Wages (2) x 1.45% x 91.41% (d)	<u>195</u>	<u>151</u>	<u>346</u>
(7) Total FICA Tax (5) + (6)	<u>\$ 40,819</u>	<u>\$ 29,125</u>	<u>\$ 69,944</u>

- (a) Staff's Schedule C-3.4
- (b) Staff's Schedule WPC-3.18c
- (c) Latest Federal Tax Codes
- (d) Applicant's Schedule WPC-3.4

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Calculation of Unemployment Taxes

	<u>State</u>	<u>Federal</u>	<u>Total</u>
(1) Taxable Wages	\$ 9,000	\$ 7,000	\$
(2) Number of Employees (a)	<u>27</u>	<u>27</u>	
(3) Total Taxable Wages (1) x (2)	243,000	189,000	
(4) O & M Ratio (a)	<u>86.25%</u>	<u>86.25%</u>	
(5) Total Wages Subject to Unemploy. Taxes (3) x (4)	209,588	163,013	
(6) Unemployment Tax Rates (b)	<u>0.50%</u>	<u>0.80%</u>	
(7) Unemployment Taxes (5) x (6)	<u>\$ 1,048</u>	<u>\$ 1,304</u>	<u>\$ 2,352</u>
(8) Allocated to Water (c)	<u>\$ 611</u>	<u>\$ 760</u>	<u>\$ 1,371</u>
(9) Allocated to Wastewater (d)	<u>\$ 437</u>	<u>\$ 544</u>	<u>\$ 981</u>

- (a) Staff's Data Request 10
- (b) Staff's Data Request 26
- (c) Derived from Water Allocation Ratio of 58.32% calculated on Staff's Schedule WPC-3.4
- (d) Derived from Wastewater Allocation Ratio of 41.68% calculated on Staff's Schedule WPC-3.4

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Calculation of PUCO Maintenance and OCC Fund

	<u>Total Company</u>
(1) PUCO Maintenance (a)	\$ 6,378
(2) OCC Funds (a)	<u>1,721</u>
(3) Total Assessment (1) + (2)	<u>\$ 8,099</u>
(4) Allocated to Water (b)	<u>\$ 4,312</u>
(5) Allocated to Wastewater (b)	<u>\$ 3,787</u>

- (a) Latest Known Assessments
- (b) Applicant's Schedule C-9

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Federal Income Tax Expense Adjustment

(1) Adjusted Federal Income Taxes (a)	\$ (30,703)
(2) Test Year Federal Income Taxes (b)	<u>41,196</u>
(3) Adjustment (1) - (2)	<u>\$ (71,899)</u>

- (a) Staff's Schedule C-4
- (b) Applicant's Schedule C-2

SCHEDULE C-4

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Total Company)
Calculation of Federal Income Taxes

	<u>Adjusted Operating Income</u>	<u>Proforma Operating Income</u>
(1) Operating Income Before FIT (a)	\$ 544,885	\$ 1,496,012
<u>Reconciling Items:</u>		
(2) Interest Charges (b)	(466,778)	(466,778)
(3) Book Depreciation (c)	764,759	764,759
(4) Tax Accelerated Depreciation (d)	<u>875,556</u>	<u>875,556</u>
(5) Excess of Tax Over Book Depreciation (3) - (4)	(110,797)	(110,797)
(6) Other Reconciling Items: Capitalized Expenses	(79,629)	(79,629)
(7) Total Reconciling Items (2) + (5) + (6)	(657,204)	(657,204)
(8) Federal Taxable Income (1) + (7)	(112,319)	838,808
(9) Federal Tax Rate (e)	<u>35.00%</u>	<u>35.00%</u>
(10) Federal Income Taxes (8) x (9)	(39,312)	293,583
(11) Investment Tax Credit Utilized	<u> </u>	<u> </u>
(12) Federal Income Taxes - Current (10) - (11)	(39,312)	293,583
<u>Deferred Income Taxes:</u>		
(13) Tax Accelerated Depreciation (d)	875,556	875,556
(14) Tax Straight Line Depreciation (c)	<u>764,759</u>	<u>764,759</u>
(15) Excess of Tax Accelerated over Tax S/L Deprec. (13) - (14)	110,797	110,797
(16) Deferred @0.35%	38,779	38,779
<u>Other Deferred Taxes:</u>		
(17) Amortization of Prior Years ITC (b)	(2,300)	(2,300)
(18) Capitalized Expenses (6) x 35.00% (b)	<u>27,870</u>	<u>27,870</u>
(19) Other Deferred Items	<u>(30,170)</u>	<u>(30,170)</u>
(20) Total Deferred Taxes (16) + (19)	8,609	8,609
(21) Total Federal Income Taxes (12) + (20)	<u>\$ (30,703)</u>	<u>\$ 302,191</u>

- (a) Staff's Schedule C-1
- (b) Weighted Cost of Debt x Rate Base
- (c) Staff's Schedule B-3.2
- (d) Applicant's Schedule C-4(m)
- (e) Corporate Tax Rate

SCHEDULE A-1

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Wastewater)
Revenue Requirements

	<u>Applicant</u> (a)	<u>Staff</u>
(1) Rate Base (b)	\$ 7,941,247	\$ 7,597,772
(2) Adjusted Operating Income (c)	\$ 105,686	\$ 208,605
(3) Rate of Return Earned (2) ÷ (1)	1.33%	2.75%
(4) Rate of Return Recommended (d)	8.63%	8.58%
(5) Required Operating Income (1) x (4)	\$ 684,982	\$ 651,889
(6) Income Deficiency (5) - (2)	\$ 579,297	\$ 443,284
(7) Gross Revenue Conversion Factor (e)	1.630000	1.624769
(8) Revenue Increase Required (6) x (7)	\$ 944,273	\$ 720,234
(9) Revenue Increase Recommended	944,273	720,234
(10) Adjusted Operating Revenue (c)	2,358,645	2,272,390
(11) Revenue Requirements (9) + (10)	\$ 3,302,918	\$ 2,992,624
(12) Increase Over Current Revenue (9) ÷ (10)	40.03%	31.69%

- (a) Applicant's Schedule A-1
- (b) Staff's Schedule B-1
- (c) Staff's Schedule C-2
- (d) Refer to Rate of Return Section
- (e) Staff's Schedule A-1.1

SCHEDULE C-1

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Wastewater)
Proforma Operating Income Statement
For The Twelve Months Ending March 31, 1998

	<u>Adjusted</u> <u>Revenues &</u> <u>Expenses</u> (a)	<u>Staff</u> <u>Proforma</u> <u>Adjustments</u> (b)	<u>Proforma</u> <u>Revenues &</u> <u>Expenses</u> (c)	<u>Applicant</u> <u>Proforma</u> <u>Revenues &</u> <u>Expenses</u> (d)
<u>Operating Revenues:</u>				
Water Sales Revenues	\$ 2,214,759	\$ 767,272	\$ 2,982,031	\$ 3,282,105
Forfeited Discount	36,818	12,755	49,573	
Other Revenues	<u>20,813</u>		<u>20,813</u>	<u>20,813</u>
Total Operating Revenues	2,272,390	780,027	3,052,417	3,302,918
<u>Operating Expenses:</u>				
Operation and Maintenance	1,202,168	4,602	1,206,770	1,388,734
Depreciation	344,480		344,480	281,901
Taxes, Other Than Income	580,818	36,833	617,651	747,325
Federal Income Taxes	<u>(63,682)</u>	<u>258,508</u>	<u>194,826</u>	<u>199,975</u>
Total Operating Expenses	2,063,784	299,942	2,363,726	2,617,935
Net Operating Income	<u>\$ 208,606</u>	<u>\$ 480,085</u>	<u>\$ 688,691</u>	<u>\$ 684,983</u>
Rate Base (e)	<u>\$ 14,231,047</u>		<u>\$ 14,231,047</u>	<u>\$ 7,941,247</u>
Rate of Return (f)	<u>1.47%</u>		<u>4.84%</u>	<u>8.63%</u>

- (a) Staff's Schedule C-2
- (b) Staff's Schedule C-1.1
- (c) Columns (a) + (b)
- (d) Applicant's Schedule C-1
- (e) Staff's Schedule B-1
- (f) Net Operating Income ÷ Rate Base

CITIZENS UTILITIES COMPANY OF OHIO
 Case No. 98-178-WS-AIR (Wastewater)
Proforma Adjustments

(1)	Proposed Revenue Increase (a)	\$ 767,272
(2)	Proposed Forfeited Discounts (1) x 1.662400% (b)	<u>12,755</u>
(3)	Total Revenue Increase (1) + (2)	<u>\$ 780,027</u>
(4)	Uncollectible Accounts Expense (3) x 0.590000% (c)	<u>\$ 4,602</u>
(5)	Ohio Gross Receipts Tax (d)	<u>\$ 36,833</u>
(6)	Federal Income Tax (e)	<u>\$ 258,508</u>

- (a) Staff's Schedule C-1.1a
- (b) Staff's Schedule C-3.2
- (c) Derived From Staff's Schedule C-3.9
- (d) Staff's Schedule C-3.18b
- (e) Staff's Schedule C-4

SCHEDULE C-2

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Wastewater)
Adjusted Test Year Operating Income

	Applicant			Staff	
	Test Year Revenues & Expenses	Adjustments	Adjusted Revenues & Expenses	Incremental Adjustments	Adjusted Revenues & Expenses
	(a)	(b)	(c)	(d)	(e)
Operating Revenues:					
Water Sales Revenues	\$ 2,232,390	\$ 105,442	\$ 2,337,832	\$ (123,073)	\$ 2,214,759
Forfeited Discount	40,296	(40,296)		36,818	36,818
Other Revenue	19,293	1,520	20,813		20,813
Total Operating Revenues	2,291,979	66,666	2,358,645	(86,255)	2,272,390
Operating Expenses:					
Salaries and Wages Exp.	417,156	39,327	456,483	(67,315)	389,168
Pur. Power and Water Exp.	146,547	11,867	158,414	(17,933)	140,481
Materials. Ser. & Misc. Exp.	252,837	19,122	271,959	(44,505)	227,454
Misc. & Per Diem Exp.	41,631		41,631	(638)	40,993
Int. on Customer's Dep. Exp.				749	749
Uncollectible Accounts Exp.	12,471	463	12,934	474	13,408
Administrative Office Exp.	145,642	217	145,859	(31,373)	114,486
Legal & Regulatory Exp.	62,493	(12,726)	49,767	14,742	64,509
Rate Case Exp.				(12,725)	(12,725)
Insurance Exp.	9,177	424	9,601	6,464	16,065
Transportation Exp.	25,985	522	26,507	(1)	26,506
Injuries & Damages Exp.	34,313	(3,198)	31,115	(4,244)	26,871
Pensions & Benefits Exp.	124,123	(12,822)	111,301	(24,973)	86,328
Customer Accounting	42,849		42,849		42,849
Rents	12,585		12,585		12,585
Telephone	12,442		12,442		12,442
Total Oper. & Maint. Exp.	1,340,251	43,196	1,383,447	(181,279)	1,202,168
Depreciation & Amortization	312,430	(30,529)	281,901	62,579	344,480
Taxes, Other Than Income	477,135	224,077	701,212	(120,394)	580,818
Income Taxes	(43,148)	(70,453)	(113,601)	49,919	(63,682)
Total Operating Expenses	2,086,668	166,291	2,252,959	(189,174)	2,063,785
Net Operating Income	\$ 205,311	\$ (99,625)	\$ 105,686	\$ 102,919	\$ 208,605

- (a) Applicant's Schedule C-2
- (b) Applicant's Schedule C-3
- (c) Columns (a) + (b)
- (d) Staff's Schedule C-3
- (e) Columns (c) + (d)

SCHEDULE C-3

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Wastewater)
Summary of Staff's Adjustments

	<u>Staff's Adjustments</u> (a)	<u>Applicant's Adjustments</u> (b)	<u>Staff's Incremental Adjustments</u> (c)
<u>Operating Revenues:</u>			
C-3.1	\$ (17,631)	\$ 105,442	\$ (123,073)
C-3.2	(3,478)	(40,296)	36,818
C-3.3	<u>1,520</u>	<u>1,520</u>	<u> </u>
	Total Revenue Adjustments	66,666	(86,255)
<u>Operating Expenses:</u>			
C-3.4	(27,988)	39,327	(67,315)
C-3.5	(6,066)	11,867	(17,933)
C-3.6	(25,383)	19,122	(44,505)
C-3.7	(638)	0	(638)
C-3.8	749	0	749
C-3.9	937	463	474
C-3.10	(31,156)	217	(31,373)
C-3.11	2,016	(12,726)	14,742
C-3.12	(12,725)	0	(12,725)
C-3.13	6,888	424	6,464
C-3.14	521	522	(1)
C-3.15	(7,442)	(3,198)	(4,244)
C-3.16	<u>(37,795)</u>	<u>(12,822)</u>	<u>(24,973)</u>
	Total O & M Expenses	43,196	(181,279)
C-3.17	32,050	(30,529)	62,579
C-3.18	103,683	224,077	(120,394)
C-3.19	<u>(20,534)</u>	<u>(70,453)</u>	<u>49,919</u>
	Total Expense Adjustments	<u>\$ 166,291</u>	<u>\$ (189,174)</u>

- (a) Staff's Schedules C-3.1 Through C-3.19
- (b) Applicant's Schedule C-2
- (c) Columns (a) - (b)

SCHEDULE C-4

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Wastewater)
Calculation of Federal Income Taxes

	<u>Adjusted Operating Income</u>	<u>Proforma Operating Income</u>
(1) Operating Income Before FIT (a)	\$ 144,923	\$ 883,517
<u>Reconciling Items:</u>		
(2) Interest Charges (b)	(249,207)	(249,207)
(3) Book Depreciation (c)	344,480	344,480
(4) Tax Accelerated Depreciation (d)	<u>409,022</u>	<u>409,022</u>
(5) Excess of Tax Over Book Depreciation (3) - (4)	(64,542)	(64,542)
(6) Other Reconciling Items: Capitalized Expenses	(37,294)	(37,294)
(7) Total Reconciling Items (2) + (5) + (6)	(351,043)	(351,043)
(8) Federal Taxable Income (1) + (7)	(206,120)	532,474
(9) Federal Tax Rate (e)	<u>35.00%</u>	<u>35.00%</u>
(10) Federal Income Taxes (8) x (9)	(72,142)	186,366
(11) Investment Tax Credit Utilized	<u>0</u>	<u>0</u>
(12) Federal Income Taxes - Current (10) - (11)	(72,142)	186,366
<u>Deferred Income Taxes:</u>		
(13) Tax Accelerated Depreciation (d)	409,022	409,022
(14) Tax Straight Line Depreciation (c)	<u>344,480</u>	<u>344,480</u>
(15) Excess of Tax Accelerated over Tax S/L Deprec. (13) - (14)	64,542	64,542
(16) Deferred @0.35%	22,590	22,590
<u>Other Deferred Taxes:</u>		
(17) Amortization of Prior Years ITC (b)	(1,077)	(1,077)
(18) Capitalized Expenses (6) x 35.00% (b)	<u>13,053</u>	<u>13,053</u>
(19) Other Deferred Items	(14,130)	(14,130)
(20) Total Deferred Taxes (16) + (19)	8,460	8,460
(21) Total Federal Income Taxes (12) + (20)	<u>\$ (63,682)</u>	<u>\$ 194,826</u>

- (a) Staff's Schedule C-1
- (b) Weighted Cost of Debt x Rate Base
- (c) Staff's Schedule B-3.2
- (d) Applicant's Schedule C-4(m)
- (e) Corporate Tax Rate

SCHEDULE A-1

CITIZENS UTILITIES COMPANY
Case No. 98-178-WS-AIR (Water)
Revenue Requirements

	<u>Applicant</u> (a)	<u>Staff</u>
(1) Rate Base (b)	\$ 6,840,509	\$ 6,633,275
(2) Adjusted Operating Income (c)	374,232	366,983
(3) Rate of Return Earned (2) ÷ (1)	5.47%	5.53%
(4) Rate of Return Recommended (d)	8.63%	8.58%
(5) Required Operating Income (1) x (4)	590,037	569,135
(6) Income Deficiency (5) - (2)	215,806	202,152
(7) Gross Revenue Conversion Factor (e)	1.630000	1.624769
(8) Revenue Increase Required (6) x (7)	351,771	328,451
(9) Revenue Increase Recommended	351,771	224,457 (f)
(10) Adjusted Operating Revenue (c)	3,028,136	2,916,999
(11) Revenue Requirements (9) + (10)	\$ 3,379,907	\$ 3,141,456
(12) Increase Over Current Revenue (9) ÷ (10)	11.62%	7.69%

- (a) Applicant's Schedule A-1
- (b) Staff's Schedule B-1
- (c) Staff's Schedule C-2
- (d) Refer to Rate of Return Section
- (e) Staff's Schedule A-1.1
- (f) Staff's recommended revenue increase reflects Applicant's noticed rates

SCHEDULE C-1

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Water)
Proforma Operating Income Statement
For The Twelve Months Ending March 31, 1998

	<u>Adjusted</u> <u>Revenues &</u> <u>Expenses</u> (a)	<u>Staff</u> <u>Proforma</u> <u>Adjustments</u> (b)	<u>Proforma</u> <u>Revenues &</u> <u>Expenses</u> (c)	<u>Applicant</u> <u>Proforma</u> <u>Revenues &</u> <u>Expenses</u> (d)
<u>Operating Revenues:</u>				
Water Sales Revenues	\$ 2,851,082	\$ 220,787	\$ 3,071,869	\$ 3,361,386
Forfeited Discount	47,396	3,670	51,066	
Other Revenues	<u>18,521</u>	<u> </u>	<u>18,521</u>	<u>18,521</u>
 Total Operating Revenues	 2,916,999	 224,457	 3,141,456	 3,379,907
 <u>Operating Expenses:</u>				
Operation and Maintenance	1,538,866	1,324	1,540,190	1,606,269
Depreciation	420,279		420,279	321,538
Taxes, Other Than Income	557,892	10,599	568,491	692,482
Federal Income Taxes	<u>32,979</u>	<u>74,387</u>	<u>107,366</u>	<u>169,582</u>
 Total Operating Expenses	 2,550,016	 86,310	 2,636,326	 2,789,871
 Net Operating Income	 <u>\$ 366,983</u>	 <u>\$ 138,147</u>	 <u>\$ 505,130</u>	 <u>\$ 590,036</u>
 Rate Base (e)	 <u>\$ 6,633,275</u>		 <u>\$ 14,231,047</u>	 <u>\$ 6,840,509</u>
 Rate of Return (f)	 <u>5.53%</u>		 <u>3.55%</u>	 <u>8.63%</u>

- (a) Staff's Schedule C-2
- (b) Staff's Schedule C-1.1
- (c) Columns (a) + (b)
- (d) Applicant's Schedule C-1
- (e) Staff's Schedule B-1
- (f) Net Operating Income ÷ Rate Base

CITIZENS UTILITIES COMPANY
Case No. 98-178-WS-AIR (Water)
Proforma Adjustments

(1)	Proposed Revenue Increase (a)	\$ 220,787
(2)	Proposed Forfeited Discounts (1) x 1.662400% (b)	<u>3,670</u>
(3)	Total Revenue Increase (1) + (2)	<u>\$ 224,457</u>
(4)	Uncollectible Accounts Expense (3) x 0.590000% (c)	<u>\$ 1,324</u>
(5)	Ohio Gross Receipts Tax (d)	<u>\$ 10,599</u>
(6)	Federal Income Tax (e)	<u>\$ 74,387</u>

- (a) Staff's Schedule C-1.1a
- (b) Staff's Schedule C-3.2
- (c) Derived From Staff's Schedule C-3.9
- (d) Staff's Schedule C-3.18b
- (e) Staff's Schedule C-4

SCHEDULE C-2

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Water)
Adjusted Test Year Operating Income

	<u>Applicant</u>			<u>Staff</u>	
	<u>Test Year Revenues & Expenses</u> (a)	<u>Adjustments</u> (b)	<u>Adjusted Revenues & Expenses</u> (c)	<u>Incremental Adjustments</u> (d)	<u>Adjusted Revenues & Expenses</u> (e)
Operating Revenues:					
Water Sales Revenues	\$ 2,844,392	\$ 165,223	\$ 3,009,615	\$ (158,533)	\$ 2,851,082
Forfeited Discount	40,635	(40,635)		47,396	47,396
Other Revenue	<u>17,001</u>	<u>1,520</u>	<u>18,521</u>		<u>18,521</u>
Total Operating Revenues	2,902,028	126,108	3,028,136	(111,137)	2,916,999
Operating Expenses:					
Salaries and Wages Exp.	537,948	50,719	588,667	(44,203)	544,464
Pur. Power and Water Exp.	171,169	(5,641)	165,528	(3,520)	162,008
Materials. Ser. & Misc. Exp.	239,342	2,278	241,620	14,432	256,052
Tank Painting Expense	32,355		32,355	4,791	37,146
Miscellaneous & Per Diem Exp.	47,391		47,391	(727)	46,664
Int. on Customer's Dep. Exp.				652	652
Uncollectible Accounts Exp.	16,617	617	17,234	(25)	17,209
Administrative Office Exp.	165,795	247	166,042	(35,721)	130,321
Legal & Regulatory Exp.	71,141	(14,487)	56,654	16,783	73,437
Rate Case Expense				(14,488)	(14,488)
Insurance Expense	10,446	482	10,928	7,362	18,290
Transportation Expense	29,581	594	30,175	1	30,176
Injuries & Damages Exp.	39,060	(3,640)	35,420	(4,833)	30,587
Pensions & Benefits Exp.	141,298	(14,597)	126,701	(5,938)	120,763
Customer Accounting	57,094		57,094		57,094
Rents	14,327		14,327		14,327
Telephone	<u>14,163</u>		<u>14,163</u>		<u>14,163</u>
Total Oper. & Maint. Exp.	1,587,727	16,572	1,604,299	(65,433)	1,538,866
Depreciation & Amortization	356,360	(34,822)	321,538	98,741	420,279
Taxes, Other Than Income	475,848	199,455	675,303	(117,411)	557,892
Income Taxes	<u>84,344</u>	<u>(31,580)</u>	<u>52,764</u>	<u>(19,785)</u>	<u>32,979</u>
Total Operating Expenses	<u>2,504,279</u>	<u>149,625</u>	<u>2,653,904</u>	<u>(103,887)</u>	<u>2,550,017</u>
Net Operating Income	<u>\$ 397,749</u>	<u>\$ (23,517)</u>	<u>\$ 374,232</u>	<u>\$ (7,249)</u>	<u>\$ 366,983</u>

- (a) Applicant's Schedule C-2
- (b) Applicant's Schedule C-3
- (c) Columns (a) + (b)
- (d) Staff's Schedule C-3
- (e) Columns (c) + (d)

SCHEDULE C-3

CITIZENS UTILITIES COMPANY
Case No. 98-178-WS-AIR (Water)
Summary of Staff's Adjustments

	<u>Staff's Adjustments</u> (a)	<u>Applicant's Adjustments</u> (b)	<u>Staff's Incremental Adjustments</u> (c)
<u>Operating Revenues:</u>			
C-3.1	\$ 6,690	\$ 165,223	\$ (158,533)
C-3.2	6,761	(40,635)	47,396
C-3.3	<u>1,520</u>	<u>1,520</u>	<u> </u>
	Total Revenue Adjustments	14,971	126,108
			(111,137)
<u>Operating Expenses:</u>			
C-3.4	6,516	50,719	(44,203)
C-3.5	(9,161)	(5,641)	(3,520)
C-3.6	16,710	2,278	14,432
C-3.6a	4,791		4,791
C-3.7	(727)		(727)
C-3.8	652		652
C-3.9	592	617	(25)
C-3.10	(35,474)	247	(35,721)
C-3.11	2,296	(14,487)	16,783
C-3.12	(14,488)		(14,488)
C-3.13	7,844	482	7,362
C-3.14	595	594	1
C-3.15	(8,473)	(3,640)	(4,833)
C-3.16	<u>(20,535)</u>	<u>(14,597)</u>	<u>(5,938)</u>
	Total O & M Expenses	(48,861)	16,572
			(65,433)
C-3.17	63,919	(34,822)	98,741
C-3.18	82,044	199,455	(117,411)
C-3.19	<u>(51,365)</u>	<u>(31,580)</u>	<u>(19,785)</u>
	Total Expense Adjustments	<u>\$ 45,738</u>	<u>\$ 149,625</u>
			<u>\$ (103,887)</u>

- (a) Staff's Schedules C-3.1 Through C-3.19
(b) Applicant's Schedule C-2
(c) Columns (a) - (b)

SCHEDULE C-4

CITIZENS UTILITIES COMPANY OF OHIO
Case No. 98-178-WS-AIR (Water)
Calculation of Federal Income Taxes

	<u>Adjusted Operating Income</u>	<u>Proforma Operating Income</u>
(1) Operating Income Before FIT (a)	\$ 399,962	\$ 612,497
<u>Reconciling Items:</u>		
(2) Interest Charges (b)	(217,571)	(217,571)
(3) Book Depreciation (c)	420,279	420,279
(4) Tax Accelerated Depreciation (d)	<u>466,534</u>	<u>466,534</u>
(5) Excess of Tax Over Book Depreciation (3) - (4)	(46,255)	(46,255)
(6) Other Reconciling Items: Capitalized Expenses	(42,335)	(42,335)
(7) Total Reconciling Items (2) + (5) + (6)	(306,161)	(306,161)
(8) Federal Taxable Income (1) + (7)	93,801	306,336
(9) Federal Tax Rate (e)	<u>35.00%</u>	<u>35.00%</u>
(10) Federal Income Taxes (8) x (9)	32,830	107,217
(11) Investment Tax Credit Utilized	<u> </u>	<u> </u>
(12) Federal Income Taxes - Current (10) - (11)	32,830	107,217
<u>Deferred Income Taxes:</u>		
(13) Tax Accelerated Depreciation (d)	466,534	466,534
(14) Tax Straight Line Depreciation (c)	<u>420,279</u>	<u>420,279</u>
(15) Excess of Tax Accelerated over Tax S/L Deprec. (13) - (14)	46,255	46,255
(16) Deferred @ 0.35%	16,189	16,189
<u>Other Deferred Taxes:</u>		
(17) Amortization of Prior Years ITC (b)	(1,223)	(1,223)
(18) Capitalized Expenses (6) x 35.00% (b)	<u>14,817</u>	<u>14,817</u>
(19) Other Deferred Items	<u>(16,040)</u>	<u>(16,040)</u>
(20) Total Deferred Taxes (16) + (19)	149	149
(21) Total Federal Income Taxes (12) + (20)	<u>\$ 32,979</u>	<u>\$ 107,366</u>

- (a) Staff's Schedule C-1
- (b) Weighted Cost of Debt x Rate Base
- (c) Staff's Schedule B-3.2
- (d) Applicant's Schedule C-4(m)
- (e) Corporate Tax Rate