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**A report by the Staff of the  
Public Utilities Commission of Ohio**

Aqua Ohio, Inc. Lake Erie Division  
Case Number 09-1044-WW-AIR

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**Ohio** | **Public Utilities  
Commission**

**STAFF'S REPORT  
OF  
INVESTIGATION**

In the Matter of the Application of Aqua )  
Ohio, Inc. for Authority to Increase its )  
Rates and Charges in its Lake Erie )  
Division

**Case No. 09-1044-WW-AIR**

Submitted  
to  
**The Public Utilities Commission of Ohio**

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Aqua )  
Ohio, Inc. for Authority to Increase its ) Case No. 09-1044-WW-AIR  
Rates and Charges in its Lake Erie )  
Division.

Alan R. Schriber, Chairman  
Paul A. Centolella, Commissioner  
Valerie A. Lemmie, Commissioner  
Steven D. Lesser, Commissioner  
Cheryl L. Roberto, 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 Service Monitoring and Enforcement Department.

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 v. Pub. Util. Comm.*, 111 Ohio St. 6 (1924)).

Respectfully submitted,

Utilities Department

A handwritten signature in black ink, appearing to read "Jodi Bair". The signature is fluid and cursive, with the first name "Jodi" and last name "Bair" clearly distinguishable.

Jodi Bair  
Director

Service Monitoring and Enforcement Department

A handwritten signature in black ink, appearing to read "John Williams". The signature is more stylized and less legible than the one above, with a large, sweeping initial "J" and "W".

John Williams  
Director

## **STAFF ACKNOWLEDGEMENTS**

The Staff Report components reflect the results of investigations conducted by the Staff of the Applicant's rate application. The Staff person responsible for each component is shown below:

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## **BACKGROUND**

Aqua Ohio Inc. (Applicant or Aqua Ohio) is an Ohio corporation and a public utility supplying water to consumers within the State of Ohio. The Applicant is a wholly owned subsidiary of Aqua America Inc. (Aqua America). Aqua America, of Bryn Mawr, Pennsylvania (formally Philadelphia Suburban Corporation) is a holding company of several regulated public utility companies that provides water or wastewater service in thirteen states.

The Applicant's operation consists of four divisions: Lake Erie, Stark, Struthers, and Masury. The Lake Erie Division serves 31,423 customers. The Lake Erie Division consists of the City of Mentor and surrounding communities, the former Lake Erie East Division of Aqua Ohio, Inc., the former Norlick Place Water Company, and the former Seneca Utilities, Inc. Water Company. Stark Regional Division serves 33,054 customers and is located in Stark and Summit Counties. Struthers Division serves 18,022 customers and its customer base is along the southern boundary of Youngstown, Ohio. The Masury Division serves 1,513 customers; this was a stand-alone company until a reorganization approved by the Commission in Case No. 01-1766-WW-UNC made it a division of Aqua Ohio Inc. All four divisions with the exception of Lake Erie East Division and Masury Division have their own water treatment plants. Lake Erie East Division purchases its water from Ohio-American Water Company and Masury Division purchases its water from Shenango Valley Water Division of Aqua Pennsylvania Inc.

On November 3, 2009, the Applicant filed a notice of intent to file an application for an increase in rates to be charged and collected for water service in its Lake Erie Division. The Applicant requested a test year beginning January 1, 2009 and ending December 31, 2009, and a date certain as of March 31, 2009.

By its Entry of December 2, 2009, the Commission approved the requested date certain and test year.

On December 11, 2009, the Applicant filed an application for a permanent rate increase together with the Standard Filing Requirements.

By its Entry of January 20, 2010, the application was accepted for filing as of December 11, 2009.

Applying the Applicant's proposed rates to the related test year sales volumes would generate additional base rate revenues of approximately \$2,811,133 which represents an increase of approximately 19% over total current operating revenues.



## **OPERATING INCOME AND RATE BASE**

### **SCOPE OF INVESTIGATION**

The scope of the 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 this 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 operation and organization. The Staff's investigation of test year operating income included a review of the Applicant's budgeting and forecasting techniques, verification of the operating revenue computation, and an examination of the reasonableness and appropriateness of the operating expenses. The original cost of property was tested for reasonableness through an examination of the Applicant's continuing property records. In addition, the existence and the used and useful nature of the assets were verified through physical inspections. Other independent analyses were performed as the Staff considered necessary under the circumstances.

The Applicant proposed various adjustments to operating income and rate base as summarized on the Applicant's schedules. The Staff reviewed and analyzed the Applicant's proposed adjustments to operating income and rate base, and traced them to supporting workpapers and to source data. 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 Applicant as a whole. The following sections of this report summarize the results of the Staff's investigation, which it believes are relevant to the determination of test year operating income and rate base.

### **REVENUE REQUIREMENTS**

As shown on Schedule A-1, the Staff recommends revenue increase ranging between \$1,352,711 and \$1,696,491. This represents an increase of 9.14% to 11.46% over test year operating revenues. This determination is based on the Staff's examination of the accounts and records of the Applicant for the test year ending December 31, 2009, and date certain as of March 31, 2009. The results of its examination are summarized in

this report and the schedules, which incorporate the Staff's recommended rate of return, rate base, and adjusted test year operating income.

## **RATE BASE**

The rate base represents the Applicant's net investment in plant, materials and supplies, and other assets as of the date certain, March 31, 2009, which were used and useful in providing water utility service to its customers, and upon which its investors are entitled to the opportunity to receive a fair and reasonable rate of return.

The Staff's analysis of the rate base is divided into Plant in Service, Depreciation Reserve, Construction Work in Progress, Working Capital, and Other Rate Base Items. A comparison of the rate base submitted by the Applicant and the Staff's recommendation is shown on Schedule B-1. Schedules B-2 through B-6 provides support for the Staff's findings.

### **Plant in Service**

The plant in service, as presented by the Applicant, is the surviving original cost of the plant that is used and useful in providing water service to its customers. The Staff reviewed and tested the Applicant's plant accounting system to ascertain if the information in the Applicant's plant ledger represents a reliable source of original cost data. The Staff also conducted inspections to verify the existence of property and to determine its used and useful nature. The Staff determined that there were no significant discrepancies and that the Applicant's plant ledger represents a reliable source of original cost data.

As a result of its investigation, the Staff recommends several adjustments to the Applicant's date certain plant investment for ratemaking purposes. These adjustments are identified below, summarized on Schedule B-2.1, and reflected on Schedules B-2.1a through B-2.1g.

### **Land & Land Rights**

In Case No. 03-2290-WW-AIR, the Staff and Applicant adjusted Plant in Service to reflect the original cost of land containing the well fields for the Shepard Hills plant. The Staff's adjustment is shown on Schedule B-2.1a.

### **Green Road Plant**

In Case No. 95-1076-WW-AIR, the Staff made an adjustment to Plant in Service resulting from the removal of the Applicant's Green Road Plant. A number of items from the Green Road Plant have since been retired or sold by the Applicant. The Staff's adjustment is shown on Schedule B-2.1b.

### **Reclassification of Organization Cost**

In Case No. 07-0564-WW-AIR, the Staff identified legal fees associated with the Seneca and Norlick plant acquisitions booked to Plant in Service – Account 301. It is the opinion of the Staff that these costs should have been classified as an expense in the year of occurrence rather than being capitalized. The Staff's adjustment is shown on Schedule B-2.1c.

### **Purification Land**

The Staff excluded the purification land adjacent to the Mentor Water Treatment Facility. This land was deemed not used and useful in Case No. 07-0564-WW-AIR. During the Staff's field investigation, Staff noted no change in the use of this land since the prior rate case. The Staff's adjustment is shown on Schedule B-2.1d.

### **Auburn Lakes**

During its investigation, the Staff identified legal fees associated with the acquisition of Auburn Lakes sub-division. It is the opinion of the Staff that this cost should have been classified as an expense in the year of occurrence rather than being capitalized. The Staff's adjustment excludes the legal fees since they were outside of the test year. The Staff's adjustment is shown on Schedule B-2.1e.

### **Customer Information System (CIS) Modifications & Enhancements**

The Staff excluded CIS Modification and Enhancement costs from Account 303 associated with project number 23090012962. This amount was excluded since it relates to the billing and billing backlog problems associated with Aqua Ohio Case No. 08-1125-WW-UNC. The Staff's adjustment is shown on Schedule B-2.1f.

### **Jefferson Elevated Storage Tank Land**

The Staff excluded the land associated with the second elevated storage tank in Jefferson from Account 340. The storage tank is currently under construction and the

Staff deemed this land not used and useful as of date certain. The Staff's adjustment is shown on Schedule B-2.1g.

## **Depreciation**

Depreciation is the process which distributes the original cost of depreciable assets, adjusted for net salvage, over the normal 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 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 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 accrual rates discussed below, and the March 31, 2009 plant balances. The Staff determined that the level of the overall booked reserve was in close agreement with the theoretical reserve calculation.

The Staff adjusted the Applicant's depreciation reserve to reclassify reserve that should have been included in Account 301 Organization but instead was booked to Account 302 Franchises & Consents. The Staff also made reserve adjustments to exclude the reserve associated with adjustments discussed in the Plant in Service section. These adjustments are shown on Schedule B-3.1.

The Staff is of the opinion that the actual jurisdictional reserve for depreciation, as adjusted by the Staff and shown on Schedule B-3, is proper and adequate and should be used for purposes of this proceeding.

### **Depreciation Accrual Rates and Expense**

The Applicant's current depreciation accrual rates are prescribed by this Commission in Case No. 93-882-WW-AAM. The Applicant filed a depreciation study for its water plant performed by its consultant, Gannett Fleming, Inc. The Applicant's accrual rates were developed using the straight line average service life method of depreciation. For certain General Plant accounts, the annual depreciation amounts were based on amortization accounting.

The Staff conducted a review of the depreciation study provided by the Applicant. The Staff finds itself in general agreement with the service life projected retirement dispersion and net salvage parameters proposed in the Applicant's study. However, the Staff noted a small difference in a few accounts between the accrual rates proposed by the Applicant and those that the Staff calculated based on the parameters proposed.

The Staff's recommended accrual rates are shown on Schedule B-3.3. The Staff recommends that the Applicant be ordered to use the accrual rates shown on Schedule B-3.3 for book depreciation purposes, effective concurrently with customer rates resulting from 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 Schedule B-3.2. The total jurisdictional depreciation expense, on Schedule B-3.2, was reduced by depreciation expense associated with Contributions in Aid of Construction (CIAC).

### **Construction Work in Progress**

The Applicant did not request an allowance for construction work in progress in its filing. This is reflected on Schedule B-4.

### **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 Applicant did not request a working capital allowance as shown on Applicant's Schedule B-5 and none is reflected on Staff's Schedule B-5.

### **Other Rate Base Items**

The rate base was reduced by the date certain balance of contributions in aid of construction, accumulated unrestricted investment tax credits, deferred income taxes related to accelerated depreciation, and other items.

The Staff's calculation of other rate base items is provided on Schedule B-6.

## **ALLOCATIONS**

The Applicant maintains separate records for each of its operating divisions and its service center. The values shown in the Applicant's filing reflect only those amounts attributable to Lake Erie Division and an allocated portion of the Applicant's service center. It is necessary to allocate certain service center costs to the Applicant's property and to its operating revenues and expenses to ensure that the proposed rate of return applies only to that property rendering service to customers involved in this proceeding.

The allocation factor presented on Applicant's Schedule B-7.1 relative to rate base is based upon date certain net plant. The Staff reviewed the Applicant's date certain information used to compute the net plant allocation factor and found its methodology consistent with that used by the Staff and approved by the Commission in the Applicant's prior cases. The Staff, therefore, recommends that the Applicant's net plant allocation factor be used for the purposes of this proceeding.

The allocation factor applied to the Applicant's operating income is a seven factor allocation formula that is based upon property, capital budget, customer equivalent, operating revenues, employees, payroll, and amount of water treated. The Staff believes that this allocation factor is consistent with the methodologies used by the Staff and approved by the Commission in the Applicant's prior cases.

## **OPERATING INCOME**

The Applicant's test year operating income consists of six months of actual data for the period January 1, 2009 through June 30, 2009, and six months of forecasted data for the period from July 1, 2009 through December 31, 2009. The Staff adjusted the Applicant's test year operating income as required to render it appropriate as a basis for setting rates.

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

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 Schedule A-1.1, C-1.1, C-3.1 through C-3.21, and C-4.

## **Proforma Adjustments**

Schedule C-1.1 shows the Applicant's proposed increase in operating revenues based on the Applicant's proposed rates and associated increases in uncollectible accounts expenses, Ohio gross receipts taxes, and federal income taxes.

## **Current Adjustments**

### **Metered Sales Revenue**

The Applicant annualized metered sales revenues based on the current rates in effect and the consumption (April 2008 – March 2009) presented on Applicant's Schedule E-4. The Staff verified the consumption based on the Applicant's Cost of Service study and agreed with the Applicant's adjustment. This is reflected on Schedule C-3.1.

### **Unmetered Sales Revenue**

The Applicant annualized unmetered sales revenue based on the current rates in effect and the consumption (April 2008 – March 2009) presented on Applicant's Schedule E-4. The Staff verified the consumption based on the Applicant's Cost of Service study and agreed with the Applicant's adjustment. This is reflected on Schedule C-3.2.

### **Other Operating Revenue**

The Staff adjusted test year revenues to annualize System Improvement Surcharge Revenues based on rates granted by the Commission in Case No. 08-1239-WW-SIC. The Staff's adjusted other operating revenues reflect a ratio developed using test year numbers applied to adjusted metered and unmetered sales revenue. Moreover, Staff adjusted other revenue to include actual test year revenue related to merchandising and hydrant repairs, non-jurisdictional lab fee revenue, and non-jurisdictional water read revenue. Staff's adjustment is presented on Schedule C-3.3.

### **Labor Expense**

The Applicant's annualized labor expense reflects estimated employee levels and wages at the end of the test year. The Staff's annualized labor expense reflects actual employee levels and wage rates at the end of the test year. The Applicant's test year labor also includes incentive pay. The Staff excluded

incentive pay from test year operating and maintenance expenses. The Staff believes Shareholders should pay for the annual incentive awards during the present recession, not ratepayers. The Staff's adjustment is shown on Schedule C-3.4.

### **Pension Expense**

The Applicant adjusted pension expense based on the Actuarial Valuation Report issued October 2008 and allocated to Aqua Ohio, Inc., Lake Erie Division's portion based on covered payroll. The Staff adjusted pension expense by utilizing the adjusted Lake Erie Division pension expense from the Applicant's last rate case, Case No. 07-0564-WW-AIR, Schedule C-3.15 (Staff Report Schedule C-3.3).

The Applicant's pension expense is determined in accordance with Statement of Financial Accounting Standard No. 87 (SFAS 87). The Applicant has experienced a significant increase to its pension expense since the last rate case, Case No. 07-564-WW-AIR. The Staff attributes the significant increase in the expense to the dramatic stock market decline during 2008. Long-term interest rates also declined and long-term interest rates are used to calculate the present value of future pension obligations.

The Staff believes that a pension balancing account is appropriate given the extraordinary market conditions experienced during the fall of 2008. Consistent with the Commission Entry in Case No. 09-371-GA-AAM, the expenses incurred in compliance with SFAS No. 87 are a necessary business cost. Therefore, Staff recommends the annual pension expense that is incremental to the amount currently included in the base rates be deferred. The deferral should be recorded in a unique sub-account of Account 182.3, Other Regulatory Assets, or Account 254, Other Regulatory Liabilities. The deferred balance should not accrue carrying charges and the accounting treatment should be effective January 1, 2009. The Applicant should not seek recovery of the pension deferral, authorized in this proceeding, in a base rate proceeding for a period of five years, in order to give the market time to improve. Moreover, the Staff recommends the Commission order Aqua Ohio, Inc., Lake Erie Division, to file, under docket, annual updates on the status of the deferred balance. The filing should include pension data determined by Aqua Ohio's actuary. The amounts should be attributable to the operation and maintenance expense of the Lake Erie Division of Aqua Ohio, Inc., and the appropriate allocated share of Service Company pension expense to the Lake Erie Division of Aqua Ohio, Inc. Aqua Ohio, Inc., should provide the Staff with additional information as needed.

If at the end of the five years, there continues to be a regulatory asset remaining on the Applicant's books, Lake Erie Division of Aqua Ohio, Inc., should be permitted to begin recovery of the underfunded amount in rates beginning the



first rate case following the fifth year. The amortization of the deferred regulatory asset should also be included as a rate base addition to recognize investor provided funds were used to fund the shortfall. If the regulatory asset reverses itself and becomes a regulatory liability, the over-recovery should be treated as a reduction to pension expense. The amortization of the deferred regulatory liability should be treated as a rate base deduction to recognize the excess of the monies collected from customers.

The Staff adjustment is presented on Schedule C-3.5.

### **Postretirement Benefit Expense**

Both the Applicant and the Staff adjusted test year postretirement benefit expense utilizing the Actuarial Valuation Report issued January 2009. Both the Applicant and the Staff include the applicable portion of the service center expenses as discussed in the Allocation Section of this report. The Staff's adjustment is shown on Schedule C-3.6.

### **Employee Insurance Expense**

The Applicant annualized hospitalization expense using estimated employee levels, percent charged to Lake Erie Division and rates effective January 1, 2010. The Staff annualized hospitalization expense using actual employee levels, percent charged to the Lake Erie Division at the end of the test year and rates effective January 1, 2009. The Staff's adjustment is shown on Schedule C-3.7.

### **Operating Contract Expense**

The Applicant adjusted test year expenses related to non-jurisdictional operating contracts by utilizing a ratio of regular payroll dollars to contract dollars and excluded a portion of Lake Erie's transportation expense and workers' compensation associated with outsidess services. This separates Aqua Ohio (Lake Erie Division) usage from that of third parties: Ashtabula and Geneva. The Staff's adjustment utilizes the Applicant's methodology but incorporates twelve months of actual test year data. The Staff's adjustment is shown on Schedule C-3.8.

### **Miscellaneous Water Treatment Expense**

The Staff adjusted test year operating and maintenance expense to reflect the twelve months of actual test year data for miscellaneous water treatment

expense. The Staff's adjustment also excludes holiday gift cards. The Staff's adjustment is presented on Schedule C-3.9.

### **Uncollectible Expense**

The Applicant adjusted the uncollectible accounts expense to reflect a ratio based on twelve months of net write-offs to billed revenues. The Staff's adjustment utilized a ratio based on a two-year average of net write-offs to billed revenues. The Staff's adjustment is presented on Schedule C-3.10.

### **Rate Case Expense**

The Applicant estimated rate case expense to be \$172,000 for this proceeding and proposed a two and one-half year amortization period of this amount.

The Staff believes the Applicant's estimate of rate case expense is reasonable and recommends a three year amortization period. The Staff's adjustment is shown on Schedule C-3.11.

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

### **Tank Painting**

Both the Applicant and Staff adjusted test year operating expenses to include an allowance for tank painting. The Applicant's allowance was calculated by trending current costs using the Handy-Whitman Index. The Staff agrees with the Applicant's adjustment. This adjustment is presented on Schedule C-3.12.

### **Purchased Water Expense**

The Lake Erie Division purchases all of its water for its customers in the former Lake Erie East Division from Ohio American Water Company. The adjustment to purchased water reflects the rate increase granted to Ohio American in Case No. 07-1112-WS-AIR. This adjustment is shown on Schedule C-3.13.

### **Sludge Hauling Expense**

Both the Applicant and Staff adjusted test year sludge hauling expense to reflect current contract rates for the hauling and disposal of sludge. The Applicant has

found a more efficient process to decrease the water content in the sludge. This lowers the hauling costs of the sludge. This adjustment is shown on Schedule C-3.14.

### **Natural Gas Expense**

The Staff adjusted the Applicant's natural gas expense to reflect twelve months of actual test year gas usage data. The adjustment is shown on Schedule C-3.15.

### **Lobbying Expense**

The Staff made an adjustment to remove the portion of the Applicant's annual dues paid to the National Association of Water Companies for lobbying activities. The Staff's adjustment is presented on Schedule C-3.16.

### **Sundry Expenses**

The Staff made an adjustment to remove the portion of the Applicant's sundry expenses that pertain to the following: bar association dues; flowers; food & beverage; marketing & trade shows. The Staff also excluded legal and professional services incurred outside of the test year. The Staff's adjustment is presented on Schedule C-3.17.

### **Cell Phone Expense**

The Staff made an adjustment to remove cell phone charges incurred by the Applicant outside of the test year. The Staff's adjustment is presented on Schedule C-3.18.

### **Depreciation Expense**

Depreciation expense was adjusted to reflect the Staff's recommended depreciable plant in service as of date certain and the Staff's recommended accrual rates. The adjustment is shown on Schedule C-3.19 with supporting calculations provided on Schedule B-3.2. Further discussion on depreciation can be found in the Rate Base Section of this report.

### **Taxes Other Than Income Taxes**

Taxes other than income taxes were adjusted to reflect the proper base and latest known rates. For example, property taxes were computed by applying the latest known property tax rate to the property valuation at date certain, and Ohio gross receipts taxes were calculated to reflect taxes based on test year revenues rather than on the basis of total receipts for a different fiscal period.

Schedule C-3.20 provides the summary of the calculated taxes and the resultant adjustments of those taxes. The supporting calculations are detailed on Schedules C-3.20a through C-3.20g.

### **Federal income Tax**

The Staff computed test year federal income taxes to reflect the recommended adjustments to operating revenues and expenses. This computation reflects the inter-period interest allocation, ratable flow through of investment tax credit, and normalization of tax-accelerated depreciation.

Schedule C-3.21 shows the calculation of the federal income tax adjustment. Schedule C-4 shows the detailed calculation of federal income taxes.

## **RATE OF RETURN**

The Staff believes that a rate of return in the range of 7.62% to 8.14% is fair and reasonable. The recommended rate of return was developed using a cost of capital approach, which reflects the Applicant's market-derived cost of equity, the Applicant's embedded cost of long-term debt, and the embedded capital structure of the Applicant.<sup>1</sup>

### **Capital Structure**

The Applicant is a wholly-owned subsidiary of Aqua America, Inc. In the Applicant's prior cases, the Staff determined that the appropriate capital structure to be used in the rate of return analysis was that of the Aqua Ohio, Inc., rather than the parent consolidated capital structure. This determination was based on the level of revenues contributed by the utility subsidiaries and the level of equity financing which those subsidiaries maintained. The Staff believes that the use of the Aqua Ohio, Inc.'s capital structure is still appropriate.

### **Cost of Long Term Debt**

The Staff has employed the embedded costs of long term debt of the Aqua Ohio, Inc., as of June 30, 2009. In the calculation of the weighted cost of debt, the Staff divided the annual interest by the carrying value. The debt calculation includes the effect of unamortized debt expense on both the interest cost and the carrying value. Staff determined the embedded cost of long term debt to be 6.27%.<sup>2</sup> The Applicant has no preferred stock.

### **Cost of Common Equity**

As the stock of the Applicant is not traded on the market, the Staff has looked to proxies to determine the cost of common equity to the Applicant. The Staff considered a group of water utilities which are representative of the industry for purposes of cost of equity estimation. This group consists of publicly traded companies, listed as "Water Utilities" by Yahoo Stock Screener with a market capitalization above \$500 million, and included

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<sup>1</sup> See Schedule D-1.

<sup>2</sup> See Schedule D-1.2.

in the "Water Utility" group in the Value line Investment Survey Standard Edition. This comparable group consists of these four companies:

<u>Company Name</u>	<u>Ticker</u>
American Water Works Company, Inc.	AWK
American States Water Company	AWR
California Water Service Group	CWT
Aqua America, Inc.	WTR

The Staff employed a cost of equity estimate for the comparable group companies that is the average of their capital asset pricing model (CAPM) and discounted cash flow (DCF) derived estimates. In calculating its CAPM cost of common equity estimate, the Staff employed the average of the Value Line betas, being .7333 and the Ibbotson<sup>3</sup> derived spread of arithmetic mean total returns between large company stocks and long term government bonds (i.e., "risk free return"; 5.6%). These were used in the CAPM formulation with the weighted average of 10 year and 30 year daily closing Treasury yields for the period from April 1, 2009 through March 31, 2010. The weighting was done in a manner that emphasized later quarters to a greater degree. The averaged 10 year yield is 3.58%. The averaged 30 year yield is 4.47%. These average to 4.02%. This was added to the product of the beta and the 5.6% spread, and resulted in a CAPM cost of equity estimate of 8.13%.<sup>4</sup>

In calculating its DCF cost of common equity estimate, for each comparable company, the Staff employed the annual average stock price, the sum of the last four quarterly dividends, analysts' estimates of the expected rate of growth of earnings, and generic issuance costs related to the external equity financing. The stock price employed is the average daily closing price for the period from April 1, 2009 through March 31, 2010.

The DCF model assumes that earnings growth and dividends growth are the same. The Staff averaged earnings per share estimates from Reuters, Yahoo, MSN, and Value Line to get DCF growth estimates for each company.<sup>5</sup> The Value Line average incorporates both the explicit long-range earnings estimate shown in the "box" and the implicit continuous growth rate calculated from the estimates of earnings per share.

For the Staff's determination of DCF cost of equity, a non-constant DCF growth rate was assumed. Dividends were assumed to grow at a rate derived from financial analysts' growth estimates for the first five years (i.e., long term growth rate). The Staff's DCF growth estimates were used for the first five years, as they are averages of estimates from various investor news services. From the twenty-fifth year on, the

<sup>3</sup> Ibbotson Associates 2009 Yearbook: Stocks, Bonds, Bills and Inflation: Valuation Edition

<sup>4</sup> See Schedule D-1.3.

<sup>5</sup> See Schedule D-1.4.

growth rate was assumed to equal the long-term growth rate in GNP. For the sixth through twenty-fourth years, dividends vary between the two rates in a linear fashion.<sup>6</sup> The long-term growth rate in GNP was the average annual change in GNP from the U.S. Department of Commerce for 1929 through 2008.<sup>7</sup>

Based on long-term GNP growth, the respective company DCF growth estimate and dividend, a stream of annual dividends was calculated. The internal rate of return derived from the dividend stream and the stock price was used for Staff's non-constant growth DCF cost of equity estimate.

The comparable group non-constant DCF cost of equity estimates average 10.48%. When averaged with the 8.13% CAPM estimate, the result is 9.30%. Using a one-hundred basis point range of uncertainty, the cost of equity estimate becomes 8.80% to 9.80%.<sup>8</sup> To provide for this return, allowance must be made for issuance and other costs, as shown on Schedule D-1.1, resulting in an adjustment factor of 1.00991. Applying this factor to the baseline cost of common equity range results in a recommendation of 8.89% to 9.90%.

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<sup>6</sup> See Schedules D-1.5 through D-1.8.

<sup>7</sup> See Schedule D-1.9.

<sup>8</sup> See Schedule D-1.1.

## **RATES AND TARIFFS**

### **INTRODUCTION**

The Aqua Ohio Water Company, Lake Erie Division, consisting of Lake Erie West including Shepard Hills, Lake Erie East, Seneca areas, Norlick Place and Auburn Lakes requests authority to increase its rates and charges for general water service to all classes of customers. Applicant is a large water company providing utility service to approximately 32,000 customers. Norlick Place was acquired by Aqua Ohio in Case No. 05-08-WW-UNC, while Seneca Utilities was acquired by Aqua Ohio in Case No. 05-347-WW-UNC. Aqua Ohio adopted both companies' tariffs and in Case No. 05-1378-WW-UNC merged these two divisions and the Lake Erie East Division into their Lake Erie Division. Applicant now requests an increase in rates and charges that will generate additional revenue of \$2,811,140 representing approximately a 19% increase in the current revenue.

In Case No. 07-675-WW-AAC Aqua Ohio acquired Auburn Lakes. Aqua Ohio contracted with the each of the three condominium associations; The Woods at Auburn Lakes, Auburn Lakes, and Auburn Crossing Condominium Unit Owners' Association. As specified in the Commission Finding and Order signed September 19, 2007, the Commission found that the three water service agreements were filed after the rate proceeding and, therefore, the water service agreements and the rates contained therein, would not be impacted by the outcome of the proceeding, Case No. 07-564-WW-AIR.

Rates and Tariffs 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 tariffs. The specific rates and charges referenced as Staff recommended in this section were developed to generate Applicant's proposed revenue requirement. Such rates and charges may require adjustment to generate the revenue requirement authorized by the Commission. Typical customer bills under Applicant and Staff proposed rates are presented at the end of this section.



## **TARIFF ANALYSIS**

### **Notification of Customer Rights**

Rule 4901:1-15-16 (B), of the Ohio Administrative Code (O.A.C.) requires each waterworks company to file a copy of its Notification of Customer Rights (NCR) as an attachment to its tariff. Staff notes that there is no NCR attached to Aqua's filed tariff. During a recent customer service audit, Staff learned that Aqua was in the process of revising its NCR. Staff obtained from Aqua its draft revised NCR, and after completing its review, asked Aqua personnel to file the revised NCR in this case. Accordingly, Aqua filed its revised NCR in this case on April 29, 2010. Staff considers Aqua's revised NCR to be in compliance with the requirements of Rule 4901:1-15-16, O.A.C. and consistent with other applicable provisions of Chapter 4901:1-15, O.A.C.

### **MISCELLANEOUS CHARGES**

#### **Dishonored Payment Charge**

Staff finds that a dishonored payment charge is appropriate and should reflect the actual costs incurred by the Company to process such checks. The cost of dishonored payments should not be recovered by customers in general. Such payments decrease the funds available for the utility to meet its obligations with resulting:

- (1) Additions to working capital requirements;
- (2) Increased interest expense associated with short-term borrowing; and
- (3) Labor and non-labor expenses in processing the returned/dishonored payments.

Applicant is proposing increasing the dishonored payment charge from \$16.33 to \$21.37. A calculation supporting the proposed amount was provided in data request response #15. Staff finds the proposed charge is reasonable and recommends approval.

#### **Account Activation Charge**

An Account Activation Charge is for new services as well as for customers changing residences. The charge is to recover the costs associated with activating an account from those customers who cause the cost to be incurred, rather than from the entire customer base. It is the administrative costs of obtaining meter readings (if applicable) and turning on water at a new or existing premise and applies to all customer classes.

A worksheet was provided in data request response #15 supporting the derivation of the proposed account activation charge. The Applicant is proposing an increase

charge from \$21 to \$25.57. Staff finds the proposed charge reasonable and recommends approval.

### **Reconnection Charge**

Applicant submitted itemized costs in data requests response Nos. 15 and 18 for reconnection of service. Applicant is requesting an increase for its reconnection charges from \$43.00 to \$48.28 for "regular hours" and for "other than regular hours" from \$130.00 to \$135.60. In part 5 of the worksheet in data request response No.15, the Applicant provided costs associated with the plant operator performing his/or her duties as part of the reconnection process. The response also mentions the inclusion of the cost of the dispatcher monitoring the process by radio. In the last case the Applicant allocated one half hour for the plant operator and dispatcher in which Staff disagreed with the inclusion of the dispatcher's portion of the calculation. Although in this case the worksheet makes mention of the dispatcher as part of the process, the time for labor was reduced from one half hour to 15 minutes for the entire process for step 5 of the worksheet. Staff will consider that reduction as the elimination of time considered for the inclusion of the dispatcher and recommends approval.

### **RATES 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 to recover the authorized revenue. The various schedules should represent a reasonable distribution of revenue among the various customer groups. The schedules 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.

This criterion involves several considerations. The schedules should, to the extent practicable, be predicated upon the costs associated with particular service rendered. Customers receiving like services should experience the same charges and provisions. Also, differences in the applicable charge 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 Staff supports costs based charges, consideration is also given for customer typical bill impacts. These tests help provide benchmarks with regard to the reasonableness of charges and rate design. 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.

## **REVENUE ANALYSIS**

### **Cost of Service Analysis**

Cost of service studies (COS) 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 customers. This is accomplished in several steps as described below:

- (1) Functionalization is the separation of total costs of services into two broad categories of Operation and Maintenance (O&M) and Capital cost and the further division of costs to identify the nature of the specific expense item. For example, individual O&M expense items relate to the aspect of operations which directly cause those expenses (e.g. supply, treatment, and transmission and distribution, or administrative in nature). Capital costs are commonly expressed as annual costs related to the level of plant investment.
- (2) Classification is the distribution of the functionalized costs into the general cost categories of base demand, extra-capacity, customer costs and fire protection costs. The extra-capacity demand category is further divided into maximum-day demand and maximum-hour demand. The customer costs category is further divided into meters & services and billing & collecting.
- (3) Allocation is the assignment of cost responsibility to the various customer classes based on the number of customers and the relative demands imposed on the system by the customer classes.

Applicant submitted a cost of service study in this filing using the Base-Extra Capacity method. This method follows the general procedures outlined above and recognizes the idea that costs are incurred by the Company in providing service to both average and above average rates of demand. This study distributes revenue responsibility among the various customer classes. The original WP1a table in the COS did not include all of the Company's system deliveries. The five year average originally submitted was incomplete and did not have years 2005 and 2006 for Seneca, Norlick and Auburn Lakes districts. Given the limited availability of complete records for all of the districts, in data request response #31, the Applicant submitted a revised COS using a three year average using system deliveries from all of its districts, developing the maximum day and maximum hour allocators used for separating certain costs associated with serving customers. Several amendments were made to the COS reflecting corrections and additions to address issues through data requests raised by OCC and PUCO Staff. The customer charge calculation in Table 11 was revised from \$9.52 to \$9.38 as a result of O&M changes to the COS for customers with a 5/8" meter. Staff's review and comments concerning the customer charge will be addressed in the customer charge section of the Staff Report. Another adjustment was made due to a miscalculation of the median for fire hydrants. Data request response # 10 revised WP5d in the COS to reflect the correct median used in calculating fire hydrants. The

Table below illustrates a revenue distribution comparison of the original cost of service and revised cost of service submitted by the Applicant.

<u>Class of Service</u>	<u>Current Revenue Distribution</u>	<u>Original Cost of Service Study Applicant</u>	<u>Revised Cost of Service Study</u>
Residential	77.9%	81.6%	81.5%
Commercial	11.8	10.2	10.2
Industrial	3.1	2.6	2.6
Public Authority	2.2	1.9	2.0
Sales for Resale	1.3	1.2	1.2
Private Fire	3.6	2.5	2.4
<u>Public Fire</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	100%	100%	100%

The various adjustments made by the Applicant to the COS did not result in material differences causing a different class revenue distribution proposed by Staff, except for changes affecting the customer charge calculations. Staff reviewed the amended cost of service and finds the amended cost of service study to be reasonable. However, Staff recommends that the Company maintain adequate records supporting system deliveries for all of the Lake Erie Division so that in future rate cases the cost of service will provide a five year history for developing maximum day and maximum hour factors.

### **Revenue Distribution**

The following is a comparison of Applicant's proposed revenue distribution with the current revenue distribution. Staff finds Applicant's proposed distribution to be reasonable given that the public fire costs shown in the COS would be distributed to the first four customer classes.

**Applicant's Proposed Revenue Distribution  
Compared to Current Revenue Distribution**

<u>Class of Service</u>	<u>Percent Current</u>	<u>Applicant Proposed</u>	<u>Percent Change</u>
Residential	78.0%	77.7%	(.3)%
Commercial	11.8	11.9	.1
Industrial	3.1	3.1	0
Public Authority	2.2	2.2	0
Sales for Resale	1.3	1.3	0
Private Fire	3.6	3.8	.2
Total	100.0%	100.0%	0.0%

The following chart shows the Applicant proposed distribution of the revenue increase (not including SIC or miscellaneous revenue adjustments).

**Applicant's Proposed Revenue and  
Distribution of the Revenue Increase**

<u>Class of Service</u>	<u>Current Revenue</u>	<u>Proposed Revenue</u>	<u>Revenue Increase</u>	<u>Percent Increase</u>	<u>Distribution of Increase</u>
Residential	\$11,040,080	\$13,483,018	\$2,442,938	22.1%	76.5%
Commercial	1,673,917	2,086,623	412,706	24.7	12.9
Industrial	439,097	536,230	97,133	22.1	3.1
OPA	312,186	382,771	70,585	22.6	2.2
Sales For Resale	190,642	216,759	26,117	13.7	.8
Private Fire	509,167	651,060	141,893	27.9	4.5
Total	\$14,165,089	\$17,356,461	\$3,191,372	22.5%	100.0%

**Distribution of Revenue among Areas**

The revenue distribution proposed was designed with uniform pricing as a goal as well as making adjustments for cost of service. The Applicant started the process of consolidating the tariffs for all of the tariff areas in the last rate case (Case No. 07-0564-WW-AIR). Since, however, the rate structures are still quite different among the five tariff groups, the Applicant is proposing that full consolidation of rates should continue but not be completed in this rate matter. Staff agrees with this proposal and recommends approval.

The Applicant is proposing to increase the rates for the two flat rate areas (Senneca and Norlick) to a flat rate charge of \$36.00 per month, which is an amount approximately equal to the average residential bill in both the East and the West. It should be noted that while the rates are different in the East and the West, the average residential consumption is also different. Staff finds this proposal to be just and reasonable and recommends approval.

No change is proposed in the rates for the Auburn Hills Condos. In the 2007 Rate Case, the structure of the tariff blocks was consolidated so that both the East and the West have the same quantities of water for the three consumption blocks.

### **Customer Charge**

The Customer Charge for a customer with a 5/8" meter was set at the calculated rate using methodology approved by PUCO Staff. As referred to in the Cost of Service Analysis Section of this Staff Report, Staff accepted the Applicant's revised customer charge calculations of \$9.38. Using this methodology, the Applicant is proposing to increase the Customer Charge from \$8.00 per month to \$9.52 per month, which represents a 19% increase. The rates for the other sized meters were set using the ratio of AWWA meter capacities. The Customer Charge is proposed to be consolidated such that it is proposed to be the same rate in both the East and the West. As previously indicated, the Applicant submitted an amended cost of service study which reflects a customer charge of \$9.38. Staff recommends the \$9.38 customer charge be adopted.

TABLE 11

CALCULATION of CUSTOMER CHARGE for 5/8" METER

<u>Account</u>	<u>Description</u>	
	<u>Variable Expenses Per Meter Size Rate Base (Net of Depr. Reserve)</u>	
345	Services	3,734,268
346	Meters	1,636,083
347	Meter Installations	2,071,525
389	Land & Land Rights	232,699
390	Structures & Imp.	279,009
391	Office Furn. & Equip	192,756
	Customer Rate Base	
8,146,340	Requested Rate of Return	
8.63%	Return on Customer Plant	03,029
	<u>Operations and Maintenance Expense Accounts:</u>	
	<u>Transmission &amp; Distribution</u>	
663	Meter and Customer Installation Expense	\$ 224,162
675	Service Maintenance	8,085
676	Meter Maintenance	-
	Total Transmission & Distribution	\$ 232,247
	<u>Variable Taxes</u>	<u>Company</u>
		<u>Customer Conversion Factor</u>
	Property	\$ 2,887,624 x 0.1816 524,280
	PUCO & OCC Taxes	\$ 20,948 x 0.1816 3,803
	Excise	\$ 829,948 x 0.1816 150,686
	Federal Income Taxes	\$ 1,241,210 x 0.1816 225,355
	Total Customer Variable Taxes	\$ 904,125
	Customer Conversion Factor =	$\frac{\text{Customer Plant}}{\text{Total Net Plant}} = \frac{\$ 8,146,340}{44,868,331} = 0.1818$
	<u>Related Depreciation Expenses (Plant)</u>	
345	Services	\$ 161,599
346	Meters	104,928
347	Meter Installations	99,818
389	Land & Land Rights	-
390	Structures & Imp.	6,362
391	Office Furn. & Equip	58,635
	Total Related Depreciation Expenses	\$ 431,342

AQUA OHIO, INC. (Lake Erie Division)  
Case No. 09-1044-WW-AIR

Account      Description

Summary of Variable Expenses Per Meter Size Rate Base:

Return on Customers Plant	\$ 703,029
Total O & M - Transmission & Distribution	232,247
Total Customer Taxes	904,125
Depreciation Expense	<u>431,342</u>

Total Customer Variable Costs \$ 2,270,743

Total Equivalent 5/8" Meters 35,631

Monthly Customer Variable Charges ((2,277,260/35,631)/12 ) \$ 5.3108

Fixed Expenses per Meter Size

Customer Accounts:

901	Supervision	\$ -
902	Meter Reading Expenses	-
903	Customer Records & Collection	979,621
905	Miscellaneous Customer Expense	<u>124,650</u>

Total

\$ 1,104,271

<u>Company</u>		<u>Customer Conversion Factor</u>		
Payroll Taxes	\$1,987,960	x	0.2277	\$ <u>452,636</u>
Customer Conversion Factor	= <u>Cust. Labor Exp.</u>	= \$ 335,074	= 0.2277	
	Total Payroll Exp.	1,471,632		
Total Customer Fixed Costs				\$ 1,556,907
Total Customer Monthly Bills				382,568
Monthly Customer Fixed Charges	(\$ 1,556,907 / 382,568)			\$ 4.0696
Customer Variable per Meter Size				\$ 5.3108
Customer Fixed per Meter Size				<u>\$ 4.0696</u>
Monthly Customer Charges for 5/8" Meters				<u>\$ 9.38</u>

Customer Charges for All Meter Sizes

<u>Variable Meter Size</u>	<u>Rate</u>	<u>Total Multiplier</u>	<u>Fixed Variable</u>	<u>Rate</u>	<u>Total</u>
	1	2	1*2=3	4	3+4=5
5/8"	5.3108	1	5.3108	4.0696	9.38
3/4"	5.3108	1.43	7.594444	4.0696	11.66
1"	5.3108	2.55	13.54254	4.0696	17.61
1 1/2"	5.3108	5.75	30.5371	4.0696	34.61
2"	5.3108	10.2	54.17016	4.0696	58.24
3"	5.3108	23.02	122.2546	4.0696	126.32
4"	5.3108	40.93	217.371	4.0696	221.44
6"	5.3108	92.16	489.4433	4.0696	493.51



### **Unmetered Service**

The Norlick Place and Seneca areas are unmetered and therefore have a flat rate of Service. In Case No. 86-2046-WS-COI, Norlick Place and Seneca were two of ten small water companies that the Commission found metering would be an uneconomic option for its water customers. Staff finds that both area customer bases have been relatively consistent in terms of water use and customer size. Staff recommends that these two areas remain unmetered until such time as metering is warranted.

Seneca area has 4 flat rates as follows: residential, commercial, yard hydrant and available for use. An available-for-use (AFU) charge applies to those customers who own property adjacent to water mains and that are not connected to the system. The Applicant is proposing to delete the AFU charge, stating that the charge has a total billed amount of less than \$19,000 on an annual basis, which represents a very small portion of the overall revenue requirement for the Lake Division. The Applicant also states that it's very costly and difficult to collect all of the availability charge revenues due to the inability to discontinue service. In recommending deletion of the charge, the Applicant did not provide an analysis supporting its recommendation, nor did the Applicant provide an explanation of where the AFU source of revenue would be recovered. Staff finds that without adequate information being provided to support the Applicant's recommendation, the AFU charge should not be eliminated until the Applicant can justify it being removed.

### **FIRE PROTECTION SERVICE**

#### **Public Fire Protection Service**

The Applicant provides public fire protection service, however, it does not charge separately for the service. It includes the costs of this service in the volumetric rates. This has been a long-standing practice of the Applicant, and Staff finds this practice reasonable and recommends approval.

#### **Private Fire Protection Service**

The private fire service charges for the East were increased by 3% to set the tariff rate at the effective current rate when the 3% SIC is included. The private fire service charges, other than the private fire hydrant rate, for the West were increased by approximately 33.6% to continue to close the gap between the rates for the private fire customer classes in the East and the West. The private fire hydrant rate for the West is proposed to be set at \$48.70, which is the same rate as the East, and represents a 27.4% increase. Staff recommends approval.

### **Declining Rate Block Structure**

The Applicant in each of its metered areas has a three-step, declining rate block structure. The purpose of a declining rate block structure is to capture the majority of each specific customer class' usage as well as the costs per unit imposed on the system per that customer class in a particular block of the structure, while maintaining one rate design for all the different classes. The first block of the rate design is formed to capture the majority of the residential class, which imposes the highest demand on the system due to its peak usage patterns, thus placing the highest cost per unit on the system. The second block is formed to capture the majority of the commercial and other public authority classes, which impose a slightly lower demand and cost per unit on the system than does the residential class, but more cost per unit than the industrial class. The last block is formed to capture the majority of the industrial class, which has a more consistent load throughout the day and places the lowest demand and thus the lowest cost per unit on the system.

Staff finds declining rate block structures to be reasonable when dealing with multiple customer classes with different load factors because it allows for ease of administering for the company (one rate schedule), while capturing the imposed costs of the customer classes. Applicant fits this scenario of multiple customer classes with different load factors. Staff, therefore, recommends approval of the Applicant's declining rate block structure to set metered rates among the different customer classes.

### **Volumetric Rates**

Staff recommends that the volumetric rates be calculated by reducing the total revenue requirement by the revenue generated from sources independent of the volumetric rates; Private Fire Service, Miscellaneous and Late Payment revenues. The remaining revenue to be recovered should then be allocated to the customer classes consistent with the recommended revenue distribution. The class revenue totals should be reduced by the revenues from Staff recommended fixed customer charges to determine the class revenue to be recovered through the volumetric rates. The rates should then be adjusted by iteration to recover the class revenues as closely as possible when applied to the test year billing determinants.



## **SERVICE MONITORING AND ENFORCEMENT**

### **WATER QUALITY**

Staff investigated all Aqua Ohio Water Company 's physical facilities and administrative operations in the Lake Erie District to assess compliance with 4901:1-15 O.A.C., the Standards for Waterworks Companies and Sewage Disposal System Companies, and the provisions in the Stipulation and Recommendation approved by the Commission in Case No. 07-564-WW-AIR. The investigation entailed a review of plant operating records, water quality tests, maintenance and operational concerns and various inputs provided by customers.

The Lake Erie Division includes the Aqua Ohio systems formerly know as Lakeshore West (Lake County), Lakeshore East (Ashtabula County), and Norlick Place (Williams County), Lake Seneca (Williams County), Shepherd Hills (or Suburban in Summit County), and Auburn Lakes (Geauga County).

### **PHYSICAL FACILITIES REVIEW**

#### **Tank Inspections**

O.A.C. Rule 4901:1-15-10(B)(6) requires every waterworks company to inspect its storage tanks at least once every five years and to make records of the inspections available for review to the Commission's Staff. Lake Erie Division has met this requirement as shown in the following storage tank statistics and inspection table:

### Aqua Ohio - Lake Erie Division - Tank Statistics and Inspection Records (2010)

Area	Note	Location	Storage Type	Volume (Gallons)	Installed	Last Inspected	Next Due
Ashtabula		Jefferson	Standpipe	250,000		2009	2014
	*1	Proposed New Tank	Elevated	500,000	2010		2016
Auburn Lakes		<i>No applicable tanks</i>					
Lake County		Alder Court	Standpipe	750,000	1990	2007	2012
		Baxter Road – East	Standpipe	2,000,000	2003	2009	2014
		Baxter Road – West	Standpipe	1,000,000	1961	2007	2012
		Eagle Reservoir (1)	Reservoir	250,000	2001	2007	2012
		Eagle Reservoir (2)	Reservoir	250,000	2001	2007	2012
		Lake Erie College	Elevated (Spheroid)	400,000	2006	2007	2012
	*2	Lakeland	Standpipe	1,000,000		2007	2012
	*3	Metro	Standpipe	750,000		2009	2014
		Reynolds Rd	Standpipe	700,000		2007	2012
		Station Street	Standpipe	1,000,000	1960	2008	2013
		Sylvia Drive	Reservoir	5,000,000	1982		
	*4	(Interior)				2006	2011
	*4	(Exterior)				2007	2012
Norlick Place		<i>No applicable tanks</i>					
Seneca	*5	Elevated	Elevated	100,000		2006	2011
Shepherd Hills		Plant 1	Buried	5,000		2005	2010
		Plant 2	Buried	5,000		2005	2010
		Plant 3	Buried	5,000		2005	2010
		Plant 4	Buried	5,000		2005	2010

Table footnotes

*1	Construction on new tank begun spring of 2010. Required 5 year inspection would not be necessary until 2016, assuming post construction painting inspection in 2010.
*2	The Lakeland Standpipe is tentatively scheduled to be painted in 2010.
*3	Tank painted 2008. Assuming 1 year post painting inspection, this tank should be scheduled for reinspection in 2014.
*4	This tank was drained and inspected in 2006 or 2007. Only the exterior was painted because of the critical nature of the tank making extended outages undesirable.
*5	This tank is tentatively scheduled to be painted in 2010. If so, next inspection could be 2016, assuming one year post painting inspection is made.

### Unaccounted for Water (UFW) – General

O.A.C. Rule 4901:1-15-20 requires all metered systems to report the amount of unaccounted for water (UFW) to the Commission Staff quarterly. The Company is required to submit a remedial report assessing the cost benefit of a leak survey if the UFW is found to be equal to or greater than 15% of the gross water production in a system. Norlick Place, Seneca Area and Auburn Lakes systems are unmetered and therefore, the unaccounted for water can not be calculated. The reported UFW for Ashtabula County, Lake County and the Shepherd Hills Area systems for 2009 were found to be well under 15%.

#### 2009 Lake Erie Division Daily Production Averages and UFW Ratios

	Quantities In Gallons			UFW Ratio
	Average Daily Production	Accounted For Water	Unaccounted for Water	
Ashtabula County	405,586	375,242	30,344	7.48%
Lake County	7,825,112	6,765,573	1,059,539	13.54%
Shepherd Hills	50,479	45,967	4,515	8.95%
Unmetered Systems				
Auburn Lakes	78,660	X	X	X
Norlick Place	27,441	X	X	X
Seneca	49,510	X	X	X

### Infrastructure Leakage Index

Staff has found that the Infrastructure Leakage Index (ILI) developed by the American Water Works Association (AWWA)<sup>1</sup> and the International Water Association (IWA) may function better than the UFW ratio required by the current rules as a benchmark indication of a system's performance in minimizing the impact of excessive water losses on water customers.

Staff encourages water companies to begin to assess the amount of unaccounted using the ILI. Toward that end Staff recommends the Commission order the company to meet with Staff within 60 days of the signing of the Opinion and Order in this case to discuss ILI calculations and the format developed by Staff for reporting the ILI. Staff recommends the first report including 2009 and 2010 data be filed by January 31, 2011. Subsequent reports of ILI data are to be submitted by January 31 of the year following reporting year.

<sup>1</sup> AWWA Manual of Water Supply Practices M36, Water Audits and Loss Control Programs, 3<sup>rd</sup> Edition

ILI data is not a substitution for Aqua's duty to report the UFW ratio as required under O.A.C. 4901:1-15-20(C)(5) which will continue to be the measure of the Company's performance in controlling water losses and submission of quarterly reports as required by the existing rules.

### **Valve Working and Hydrant Flushing**

O.A.C. Rule 4901:1-15-10(B)(5) requires water utilities to operate all plant and pumping station valves and all valves on transmission mains or at critical locations annually. All valves on local distribution mains are required to be operated every two years. Aqua Ohio's Lake and Ashtabula Areas have been granted a waiver from this rule that allows them to operate local distribution valves every four years. Valve operating records reflect that the Company is operating its valves in all areas as required by the rule or as permitted by the waiver.

The Company is flushing all hydrants and mains annually and all dead end lines bi-annually as required. These records have also been found to be adequate and are made available for review upon request.

## **ADMINISTRATIVE REVIEW**

### **Outage/Interruption of Service Reporting**

Aqua is reporting outages and interruptions as part of its quarterly report. Staff reminds the Company that it is also responsible under O.A.C. 4901:1-15-10(C)(1) for reporting all planned service related outages expected to last over two hours or planned/routine annual/semi-annual main flushing to the staff Outage Coordinator at least three days prior to the event. In addition O.A.C. 4901:1-15-12(E) requires any unplanned or emergency repair outages should be promptly reported to the Outage Coordinator at the earliest possible time.

### **Community Contacts**

The Staff interviewed mayors, administrators, engineers and fire chiefs throughout the Lake Erie Division and found that all reported having a good working relationship with the Company. It should be noted that Norlick Place, Seneca, and the Auburn Lakes area systems do not provide fire protection.

## Customer Survey

Staff issues surveys to assess customer perception of water quality and service issues to water companies approximately every 4 to 5 years. Surveys were sent to Aqua customers in the Lake, Ashtabula, Norlick, and Shepherd Hills areas in April of 2007. The results were published in November 2007 and were included in the staff report for the last rate case, 07-564-WW-AIR. Surveys were not sent to customers in the Auburn Lakes area because sufficient time had not passed since the system was acquired by Aqua.

The results of the water quality type issues of the last surveys performed for the Lake Erie Division have been condensed and re-evaluated as part of the investigation for this report. Although Staff found it unnecessary to repeat the details of the survey in this report, it did look at the water quality issues. The table below shows a summary of the responses to the first three water quality issues the survey had in it, showing how the mid range acceptable response to excellent level responses compared to the total responses for each question:

### 2007 Customer Perception Water Quality Issues Summary

	Ashtabula County	Lake County	Seneca	Shepherd Hills	Norlick Place
Mid to Excellent Responses	37	160	61	88	42
Total Responses	41	162	63	95	47
Percent of Total Responses	90.2%	98.8%	96.8%	92.6%	89.4%

Mid to Excellent Responses	37	161	57	85	39
Total Responses	41	164	62	97	47
Percent of Total Responses	90.2%	98.2%	91.9%	87.6%	83.0%

Mid to Never Experiences	40	158	57	92	42
Total Responses	40	162	64	95	47
Percent of Total Responses	100.0%	97.5%	89.1%	96.8%	89.4%

The table indicates that the overall perception of the customers was that water quality and water pressure were in the mid to excellent range. The customers also responded that overall they experience discolored water during normal operations mid to never.

Staff also looked at the water quality issues the customers may have expressed in the last question, which allowed the customers to write their own informal responses to the Company's performance.



**Question 12 – Please express any comments or suggestions about your water service:**

	Ashtabula County	Lake County	Seneca	Shepherd Hills	Norlick Place
Low Pressure	0	1	2	0	7
Wants Meter	0	0	2	0	0
Color	1	3	7	2	5
High Rates	2	4	1	4	2
Odor	2	2	2	11	0
Won't Drink Water	2	1	1	1	3
Taste	5	1	2	2	1
Total Replies	41	164	47	64	98
Low Pressure	0.0%	0.6%	4.3%	0.0%	7.1%
Wants Meter	0.0%	0.0%	4.3%	0.0%	0.0%
Color	2.4%	1.8%	14.9%	3.1%	5.1%
High Rates	4.9%	2.4%	2.1%	6.3%	2.0%
Odor	4.9%	1.2%	4.3%	17.2%	0.0%
Won't Drink Water	4.9%	0.6%	2.1%	1.6%	3.1%
Taste	12.2%	0.6%	4.3%	3.1%	1.0%

This table showed that 12.2% of the responses of Aqua customers in the Ashtabula County area had concerns about the taste of the water, 14.9% of the customer responses in the Lake Seneca area had discoloration concerns, and 17.2% of the customer responses in the Shepherd Hills (Suburban) area expressed concerns about the smell of the water. The discolored water issue in Lake Seneca was addressed in rate case 07-564-WW-AIR and was discussed in the stipulation follow-up part of this report below. Staff supplemented the above with a current review of all customer contacts from the Commission's call center, the Company's quarterly reports to the Commission, and the water/wastewater field staff audits. For the most part this review did not indicate a on going problem with water taste or discoloration. However the 2009 Lake County quarterly report did show 18 customer complaints related to taste, 10 concerning discolored water and 22 related to water pressure

**Recommendations:**

Staff recommends that the Company report to the Staff within 60 days of the Opinion and Order in this case, the underlying causes of the above complaints and all remediation actions taken.

## **Customer Service Assessment**

Staff reviewed the customer contacts to the PUCO's call center for Aqua statewide during the period of March 1, 2009 through March 31, 2010. Throughout this period, the call center received a total of 737 contacts regarding Aqua Ohio. Billing questions formed the largest category, with 268 contacts. Concerns regarding non-payment disconnection accounted for 104 contacts. Service issues including new service concerns accounted for 66 contacts, including 16 customers who had issues with pressure (14) or water quality (2). Ten customers contacted the call center to protest the company's rate case.

Seven customers voiced their concerns about the quality of the company's customer service. Six customers contacted the call center because they had difficulty reaching the company. Seven customers had comments on the company's policies, while three had comments on the Commission. The other 12 were miscellaneous contacts, such as questions about utility easements.

## **STIPULATION FOLLOW-UP (Case 07-564-WW-AIR)**

(Note: This discussion is limited to Items 11, 12 and 13 of the Stipulation)

### **11. Customer Service Billing Issues Commitment**

Aqua Ohio agreed in its last rate case, (07-564-WW-AIR), to among other things to address and resolve billing and billing backlog problems with their customers and have all customers back on their regular billing cycle by July 1, 2008. The Company failed to meet this commitment and in October 2008 Staff opened a Commission ordered investigation in Case No. 08-1125-WW-UNC the same month Staff, Office of Consumers' Counsel and the Company filed a stipulated agreement towards resolving all outstanding billing and billing backlog issues by October 15, 2008. As part of this stipulated agreement Aqua agreed to file a report on the status of all billing and billing backlog complaints that would then be audited by Staff.

Staff filed its audit report in December of 2008 indicating that Aqua failed to meet the commitment to resolve billing and billing backlog issues. Based upon this finding the matter was scheduled for an evidentiary hearing in February 2009. At the February evidentiary hearing Aqua stipulated that the Company had failed to resolve the billing and billing backlog issues discussed in the April and October stipulations, but disputed the forfeiture recommendation in the Staff audit report.

The Commission in its August 2009 Opinion and Order accepted the terms of the stipulation and ordered the forfeiture be assessed. The Opinion and Order also required the Staff to report within 120 days on the status of the Company's resolution of billing problems. The Staff docketed its report in December of 2009 stating that Staff

believed Aqua's billing and billing backlog issues were no longer of sufficient magnitude to warrant additional Commission action at this time. Both the Company and OCC filed comments on the Staff's report and the matter is currently pending before the Commission.

#### **12. Lake Seneca Discoloration Issue Commitment:**

Aqua Ohio agreed to promptly address discolored water issues brought to its attention in the Lake Seneca system. If the conditions were related to the treatment or distribution of the water (as opposed to the customer's lines and internal plumbing), then Aqua Ohio agreed to take the necessary actions to promptly resolve the problem. If the discolored water was being caused by conditions related to the customer's lines and internal plumbing, then the Company agreed to inform the customer of its findings and offer guidance to the customer on how to resolve such discoloration.

#### **Finding:**

One discolored water (Quality of Utility Product) complaint has been received by the PUCO's call center since the last stipulation went into effect. This complaint was from June 2008 and related to dirty water caused by routine scheduled system flushing. A Company representative met with the customer and explained the flushing. The representative left the customer with direct contact information should he have any future concerns.

This is the only complaint received for any of the Lake Erie Division systems in Staff's records. Seneca had 7 customers out of 64 respondents (approximately 11%) in the 2007 customer perception survey reporting concerns with the color of their water. The area's operator has informed Staff that it is his standard business practice to respond immediately and to respond directly with any customer who may contact the Company with a discolored water complaint.

#### **Recommendations:**

Staff recommends that the Company continue a pro-active business practice to respond promptly, within 21 days, to any discolored water complaints it may receive through its call center or by referral by the PUCO or OCC, as agreed to in the stipulated order in case 07-564-WW-AIR.

#### **13. Meter-Reading, Encoder Change-Out Program Commitment:**

Aqua Ohio agreed to complete reading within sixty (60) days of the Finding and Order in Case 07-564-WW-AIR, any Lake Erie District meters not read within the twelve (12) month period ending December 31, 2007. If access to the premises to read the meter

was not made available by a customer, a written notice pursuant to O.A.C. 4901-1-15-27 was to be sent. All remaining non-encoder meters were to be replaced by December 31, 2008.

## Finding

Aqua Ohio provided Staff with annual metering data for those systems that are metered. In the Lake Erie Division, these are the Lake County and the Ashtabula County Areas. Shepherd Hills is totally metered with radio read type equipment and is not included in the annual reporting. A tabulation of the 2007 through the 2009 Annual Meter Reports follows below:

### Aqua Ohio Lake Erie Division 2007 thru 2009 Annual Meter Reports

	Ashtabula County			Lake County		
	2007	2008	2009	2007	2008	2009
Total number of active and inactive meters	1,339	1,342	1,347	29,707	29,817	29,900
Number of active meters read	1,302	1,337	1,286	26,200	29,567	29,650
Number of (active) meters with at least one inside read	1,295	1,332	1,286	26,200	29,387	29,650
Percentage of meters with at least one inside read	99.5%	99.6%	100.0%	100.0%	99.4%	100.0%
Number of non-encoder meters	14	5	0	2,153	430 *	1
Number of non-encoder meters with at least one inside reads	7	2	0	1,800	250	1
Percentage of non-encoder meters with at least one inside read	50.0%	40.0%	0.0%	83.6%	58.1%	0.0%
Total number of meters	1,339	1,342	1,347	29,707	29,817	29,900
Total number of encoder meters	1,288	1,337	1,347	27,554	39,384	29,900
Percentage of encoder meters	96.2%	99.6%	100.0%	92.8%	132.1%	100.0%
Number of encoder meters installed	60	9	5	1,850	3,187	429
Month and year when all meters will be encoder	N/A	04/30/09	Complete	12/31/08	04/30/09	Complete

Ashtabula County

Lake County

\* All accounts had received final request/disconnection letters

Full conversion to encoder meters was not accomplished by the Company by the end of 2008 as agreed to in the stipulation; however, notices to all customers who had not made their meters available to Aqua had been sent and the Company had implemented an accelerated installation program to complete the installation of encoder type meters by mid 2009. All residential customers in the metered Lake Erie Division have either encoder or radio-read type meters or are being read inside at least once annually.

### **Recommendation:**

Ohio Administrative Code Rule 4901:1-15-19(A) requires every company to read each customer's meter at least once per year unless access to the meter is unobtainable. Aqua is now 100% metered with encoder type meters in Ashtabula and Lake Counties and is able to fully comply with this rule. Therefore, Staff recommends that the Company be permitted to cease submitting annual meter reports for these areas.

## **AREA DESCRIPTIONS AND SIGNIFICANT IMPROVEMENTS**

### **Lake County (Lakeshore West) Area**

Aqua Ohio provides water service to approximately 29,650<sup>2</sup> customers in the Lake County communities of Mentor, Mentor-on-the Lake, Painesville Township, Concord Township, Kirtland, Waite Hill, and Kirtland Hills. The Area has a surface water treatment plant taking its raw water supply from Lake Erie. The treatment plant has a filtering capacity of 18 million gallons per day (MGD) and a pumping capacity of 20 MGD. The Area delivered approximately 7.8 million gallons per day to the distribution system in 2009<sup>3</sup>, with an UFW ratio of 13.54%.

The Lake County Area facilities were described in more detail in the 07-564-WW-AIR Staff Report and have not been repeated in their entirety in this discussion. However, a table including the eleven storage tanks and their volumes has been updated to show the current inspection statuses. (See the "**Tank Inspections**" section of this report.)

Inspections performed in 2009 found there were approximately 4,250 fire hydrants were serviced annually and 411 dead end mains, 35 of which have flush valves, that were inspected and serviced semi-annually. Flushing is performed by the Company's service personnel who also paint 1/3 of the hydrants each year. There were 702 distribution valves that are over 12-inch in size and 3,209 valves smaller than 12-inch in size. One

<sup>2</sup> Based on active services reported in the 2009 Annual Meter Report, summarized later in this report.

<sup>3</sup> Quarterly Operating Reports for 2009.

hundred percent of the large valves were operated each year and 25%<sup>4</sup> or more of the smaller valves are operated each year to keep them in good operational condition and to help insure their proper operations should the Company need to isolate a portion of their system for routine or emergency work.

### **Significant Capital Improvements**

Aqua Ohio has made several significant improvements in the past two years including:

1. Company installed 700 feet of 12" ductile iron water main to improve the supply of water for back flushing of the plant intake lines to help control a frazil ice<sup>5</sup> condition.
2. Aqua changed from gaseous chlorine to liquid sodium hypochlorite for disinfection.

Aqua has followed a distribution main replacement program in the past two years to improve service reliability that included the replacement of approximately 11,500 feet in 2009 and 2,800 main in 2009.

The Company is planning on \$1.4 million dollars in main replacement projects in 2010; including 13,650 feet of 8" main, 26 hydrants, and 167 services.

### **Ashtabula County Area**

The Ashtabula Area is located in Village of Jefferson and serves approximately 1,320 customers. The Company purchases water for this system from the Ohio American Water Company and delivers approximately 375,000 gallons per day (gpd) to its customers through approximately 23 miles of water main, with a 7.48% UFW loss rate. In 2009, Aqua maintained 178 fire hydrants and 3 flush valves in the Ashtabula Area. The Company operated 100% of its 37 large valves as required<sup>6</sup> over 12-inch and 99.5% of its 182 valves smaller than 12-inch, all of which were found in good operating condition. The Company maintains a 250,000 gallon elevated storage tank and has awarded a contract to Chicago Bridge and Iron, (CB & I), for the construction of a new 500,000<sup>7</sup> gallon elevated storage tank. No mains were reported to have been replaced in 2008 thru 2009 and none are scheduled to be replaced in 2010.

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<sup>4</sup> Permitted by waiver (00-459-WW-UNC)

<sup>5</sup> Frazil ice is form of icing create under dynamic conditions that can adversely affect the hydraulic characteristics of surface water intake structures and piping.

<sup>6</sup> O.A.C. 4901:1-15-10 and/or Waiver (00-459-WW-UNC)

<sup>7</sup> Inspection records show that a 400,000 gallon tank was proposed, but the Ohio EPA permit shows the volume to be 500,000 gallons.

### **Shepherd Hills Area**

The Shepherd Hills Area is located in Sagamore Hills, Summit County, Ohio and serves 300 residential customers. Average daily production is approximately 50,000 gpd and the UFW ratio for 2009 is 8.95%. This system is totally metered with radio frequency read meters. All of the Area's 19 flushing valves and its lone hydrant were operated as required. All distribution and plant valves are operated annually as required. A Supervisory Control and Data Acquisition (SCADA) system monitors all plant operations locally and can be used by Lake County Area personnel to remotely monitor operations. No significant improvements or additions have been added to this system in 2008 or 2009.

### **Lake Seneca Area**

The Seneca Area is located outside of Pioneer, Ohio in Williams County. The Area serves approximately 282 customers from 2 wells. Treatment consists of aeration and filtration with chlorine being fed for disinfection. The Company maintains 6 fire hydrants and a 100,000 gallon elevated storage tank in the distribution system. The tank is tentatively scheduled to be painted in 2010. The average daily production of water is approximately 48,000 gpd. All hydrants and valves are operated annually as required<sup>8</sup>. This is an unmetered water system that is currently billed on a flat rate. No significant improvements were made in 2008 or 2009 and none are scheduled for 2010.

### **Norlick Place Area**

The Norlick Place subdivision is located outside the City of Bryan, Ohio in Williams County. This water treatment plant serves 110 residential customers from 2 wells. All system valves including distribution, plant and flushing valves are operated annually as required. Aqua is preparing plans for submission to the Ohio EPA for the possible construction of a new treatment plant scheduled tentatively to be installed in 2010.

### **Auburn Lakes Area**

The Auburn Lakes Area was added to Aqua's Lake Erie Division in November 2007, but was not considered in the 2007 rate case evaluations. Three associations with a total of approximately 440 individual services are served through special contracts: Auburn Lakes Condominium Association, the Woods at Auburn Lakes Condominium Association, and Auburn Crossing Condominium Unit Owners' Association. Water is

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<sup>8</sup> O.A.C. 4901:1-15-10 and/or Waiver (00-459-WW-UNC)

supplied from 6 wells with a total rated capacity estimated to be 425 gallons per minutes (gpm). Well no. 1 is not in service and may be abandoned.

The water is aerated and filtered with a 230 gpm General Filter with cascade trays and greensand media filter. The unit appears to be in good condition externally, but the Company is considering replacing it due to poor interior conditions found during inspections. A new unit is estimated to cost \$300,000. The plant has 150,000 gallons of clearwell storage.

The Company flushes its distribution mains through 4 fire hydrants. It has several dead end mains on which at least two blow-off valves were installed in 2009. Two more blow-off valves are planned for the near future. No new or replacement mains were installed since the Area was acquired.



## **MANAGEMENT AND OPERATIONS REVIEW**

Section 4909.154 of the Ohio Revised Code states that the Public Utilities Commission shall consider the management policies, practices, and organization of public utilities in fixing the just, reasonable, and compensatory rates, joint rates, tolls, classification, charges or rentals to be observed and charged for service of any public utility.

In January 1985, the Commission approved an amendment to the Standard Filing Requirements. This amendment requires medium and large utilities to include in their rate filings a written summary of the utility's corporate process utilized by the board of directors and corporate officers. Among other things, this summary report is to include a discussion of policy and goal setting, strategic and long range planning, organizational structure, decision making and controlling, and communications for the company's executive management process. An additional executive summary report is required to describe the management process for the various functional areas common to most utility companies such as Plant Operations, Finance and Accounting, etc. (Chapter 4901-7-01 O.A.C., Schedules S-4.1 and S-4.2).

Staff routinely reviews the S-4.1 and S-4.2 schedules, applicant performance, and various events relating to the applicant company's management. As a result of these review activities, the Staff selects certain management topics for rate case investigation and reporting. In the current rate case, the Staff reports on Aqua Ohio, Inc's Customer Service System.

### **Customer Service System**

As reported previously in Case No. 08-1125-WW-UNC in 2002, Aqua Ohio simultaneously implemented a centralized out-of-state billing system (i.e., a Banner based product upgrade), commenced a consolidation of call center operations, hired a new vendor to mail customer bills, and initiated a new service work-order system.

Beginning in June 2007, Staff noted a dramatic increase in Aqua Ohio customer contacts to the PUCO's call center concerning billing and meter reading issues. These customer contacts primarily involved two issues. The first involved customers receiving no bill for a period greater than 60 days. The second issue involved customers receiving bills that reflected estimated usage for greater than 60 days and did not reflect the actual meter readings performed during the associated billing periods. The problems persisted into 2008 and became a topic in settlement discussions regarding Aqua's application for increased rates in its Lake Erie Division (Lake Erie) in Case No. 07-564-WW-AIR that ultimately settled via stipulation signed April 11, 2008.

In addition, in Case No. 09-560-WW-AIR, Aqua Ohio requested to increase rates for its Masury Division and incorporate the costs for developing and implementing its new Billing and Customer Service System. An issue arose in this case regarding a line item for "CIS Modifications and Enhancements" which questioned whether the ratepayers were being asked to pay for the original development of the system(s) and then pay again for needed modifications.

The issues in the above mentioned cases prompted Staff to take a closer look at the Aqua Ohio Customer Service System in the context of a Management and Operations Review. Staff's objective was to investigate the need for the new Customer Service System, the reasonableness of the Company's development and implementation process over the life of the system, and the overall costs and benefits of the new Customer Service Information System.

### **Need for New Customer Service System**

Aqua America, Inc. currently serves approximately 3 million people in 13 states. Over the past 15 years, Aqua America, Inc. completed 250 growth ventures, tripling its customer base. By 2003, Company growth through acquisition had resulted in Aqua America, Inc. having nine active Customer Information Systems supporting approximately 25 separate locations where customer calls were received. Most of these systems were small offices with fewer than six employees and some had as few as two.

One of the major information systems that supported customers in New Jersey, New York, Pennsylvania, Ohio, and Illinois (approximately 1/3 of Aqua America, Inc.'s customers) presented a major concern when the manufacturer announced it would no longer support the system after 2006. In addition, from an infrastructure reliability standpoint, there were few provisions for backup/emergency disaster recovery should one of the offices experience an emergency or equipment failure. Aqua America, Inc. determined that a new system with a common platform and singular training for call center representatives would provide the ability for the Company to duplicate functions at other locations. Finally, because each office used different software and hardware systems and different business definitions and processes, Aqua America, Inc. was not able to accurately measure or manage customer service metrics that were comparable across locations.

The diverse Customer Information Systems also presented an accounting and control challenge. As the Customer billing financial reports were unique to each system, corporate accounting had difficulty incorporating these reports into the corporate financial system for accounting purposes. As the number of different systems performing the same function multiplied, it became more difficult for corporate to operate efficiently and accurately. For example, as the customer billing accounting reports were generated by each of the nine separate billing systems throughout Aqua

America, Inc., corporate had to hand enter this data into the central accounting system on a monthly basis in order to obtain corporate accounting information.

Lastly, as the disparate legacy Customer Service Systems were built on various platforms using various technologies, the information technology professionals required to support these systems required different skill sets. In some cases, Aqua was relying on a single individual to support the system. These issues combined compelled Aqua to convert its Customer Service Systems into one system that could serve the needs of whole Company.

In addition to the Customer Service Information System project and call center consolidation, Aqua America Inc.'s Banner based billing system was scheduled for a major software upgrade for 2004. The blending of the Customer Service Information System to an updated billing system made strategic sense from a technical perspective. This also made the project more complex.

These projects, the Banner system upgrade, the Customer Service Information System, and the call center consolidation strategy were "blended" or combined into a meta-project called "Meritage". From a ratemaking perspective, it is the Meritage project that is requested for inclusion into rates as part of this case.

### **Development and Implementation Process**

In 2003, Aqua America, Inc. hired Accenture, a global management consulting, technology services and outsourcing company, to develop a project plan for consolidating all customer service centers as well as incorporating the plan to develop and implement a new Customer Information System. Teams were dispatched to identify and collect the business practices at the various operating companies' call centers, and to work on a strategy for standardizing the local practices into a single set of corporate definitions and practices. In addition, this process was intended to enhance the overall corporate customer service metrics baseline via Accenture's broad background in the utility industry. For instance, a metric used to measure call answer volume and times may be skewed if one region's definition of a call includes blocked or dropped calls while another region excludes these calls in their measurements. Standardizing definitions and practices across the regions enables Aqua America, Inc to more accurately measure and address operating Company performance and insure that all customers benefit the same from improvements.

Accenture presented Aqua America, Inc. management with a strategy for performing the complex task of unifying and standardizing Aqua's customer service business practices and options for consolidating service centers for optimal service and cost benefits. Accenture presented Aqua with the option to consolidate from 25 customer service call centers to eight, or alternatively, to three. Aqua America, Inc. elected to implement the three call center option as suggested by the cost benefit study provided by Accenture.

The locations chosen for the final three customer service centers were Kankakee, IL (north/Midwest), Bryn Mawr, PA, (east) and Cary, NC (south).

The consolidation of the customer service centers necessitated a standardized corporate software system and the retraining of most or all of the customer service staffing as well as software support technicians. In 2003, Accenture estimated the project would encompass the last quarter of 2003 through the fourth quarter of 2006 until the final phased-in implementation by regions was completed. The project was divided into three key activities so multiple pieces could be simultaneously developed. For example the customer service infrastructure phase was projected to take three quarters beginning in the fourth quarter, 2003. The Customer Strategy Blueprint phase was to take five quarters beginning in fourth quarter, 2003. Finally, the Implementation of Banner CIS & Consolidation Strategy phase was to take from fourth quarter, 2003 to fourth quarter, 2006.

### **Costs and Benefits of New Customer Service System**

The Meritage project was well-planned and large in scale. The preliminary project budget covering years 2003 to 2007 for upgrading the computer information systems and consolidating the call centers was \$12,482,552. A revised Meritage budget, which was more thoroughly planned and vetted, was calculated for 2004 projecting the Meritage project to arrive at the cost of 15,056,610.

The Meritage project was ultimately delivered near the revised budget estimate of \$14,396,706 even though the phased implementation schedule slipped from December 31, 2006 to mid 2007. Thus the Meritage project cost was completed 20.6% over initial budget estimates, but 4.4% under the revised, more thoroughly planned project budget. As for the overall development and implementation schedule, the Meritage project was for the most part delivered as planned, but the final four regions phased implementation slipped by five months.

The final cost of Aqua America, Inc.'s Meritage CIS project, as of December 31, 2007 totaled \$14,396,706. The total costs for Aqua Ohio totaled \$2,276,215 or 15.81% of the total project cost. Aqua America, Inc. allocated the Meritage costs based on number of customers. For the purpose of this rate case, Lake Erie customers' allocation of 33.54% of Ohio's total results in the ratepayers' share of \$763,443 (plus AFUDC of \$108,001). Amortized over 20 years, Lake Erie customers are requested to pay \$38,172 or about \$1.19 each for the new Customer Service Information System.

The benefits to Aqua America, Inc. and its customers related to the Meritage project are numerous. Consolidating call centers while adding efficiencies will save the company and the ratepayers in terms of ongoing call center labor costs. In addition, while the metrics relating to customer call answer times remained consistent with past practices, the ability of the Company to respond to each customer in an informative and timely manner improved. The new Customer Information System allows the service

representative to see and act instantly on all aspects of a customer's service, from viewing the customer's bill and billing history, to viewing or making payment arrangements, to viewing meter readings and history, to viewing or adjusting payment processes, to monitoring collections and updating work order history. This account information is also available to the work order system and field staff allowing for the Company to make quick and precise service delivery to the customer.

Other benefits to the Company for implementing the Meritage project included defining and implementing a corporate wide standard for measuring performance. As an organization utilizing Management by Objective (MBO) strategies (i.e. a company wide strategy to increase organizational performance by aligning goals and subordinate objectives throughout the organization), it is clear that the new Customer Service Information System would be a valuable tool for obtaining and monitoring key performance indicators across the organization for Aqua management. Examples of performance indicators measured include the percentage read rate of metered accounts, the percentage of accounts estimated, percentage of accounts not billed, volume of aged service orders, percentage of PUC complaint information received within 48 hours year to date, etc. Some of the performance indicators are further refined in a ratio between measurements such as trailing 12 month percentage of bad debt to total revenue. These metrics, among others, are used by region to gauge performance by regional office personnel, regional offices overall, and the Company as a whole.

Further, the use of corporate-wide, standardized performance indicator information provides a baseline and framework for ongoing business improvement. Because the Customer Service Information System and Banner billing system are scalable, Aqua America, Inc. is poised from an IT perspective to easily integrate additional facilities in the event of further business growth. All of these benefits should ultimately allow Aqua America, Inc. and its operating companies to provide quality services with minimal future growth in costs.

## **Conclusion**

It is well documented in the information technology world that large scale billing and customer service information technology projects are challenging to develop and implement and generally take 1-2 years before a company can expect to realize the anticipated tangible and intangible benefits of the new system. A 2004 CIS industry report states that 10% of new CIS projects experience "very difficult" or "failed" installations while another 45% describe their project installations as "tough but ok". (Source: Gary Weseloh, VP and Senior Consultant, Five Point Partners)

In another report presented to the 27<sup>th</sup> CIS Conference held in June, 2003, utility company CIS projects were projected to cost from \$50 to \$110 per customer. In another report published September, 2003, CIS projects utilizing an in-house managed application would likely range between \$2.5 to \$5 million for a 100,000 customer utility.

By 2006, a similar report predicted costs of \$4 million for a utility serving 100,000 customers. Finally, a 2009 review of 25 utilities installing new CIS solutions in the past 5 years found that the average costs for implementing a new CIS was \$46.21 per customer and the average implementation was time was 20 months. (Sources: TMG Consulting, Author Greg Galluzzi, Senior VP, Five Point Partners).

In reviewing Aqua America, Inc.'s Meritage project, Staff calculates that the cost per customer of the new Customer Service Information System is \$23.82. This cost compares favorably to the industry ranges presented in the reports cited above which \$25 - \$50 per customer as the likely cost range for a utility company CIS application. Amortized over 20 years, Aqua's CIS comes to \$1.19 per year for each of Lake Erie's customers.

Based on Aqua America, Inc.'s better than average performance in developing and implementing their Customer Service Information System, and in view of the many and varied benefits achieved by the Company and its customers, Staff concludes that the Aqua Water Company succeeded in implementing a new Customer Service Information System in an economic manner.

### **Recommendations**

Staff believes Aqua America, Inc. should be commended for their accomplishment in achieving this changeover in technology in a reasonable and cost efficient manner. The investigation performed by Staff reflects that the Company achieved real benefits to Aqua Ohio customers as a result of Aqua America, Inc. implementing the Meritage project, which included an updated billing system and a new customer service information system. In the longer term, the scalability of Aqua's system will allow for efficient growth which should benefit all Aqua Water ratepayers. Importantly, the business performance indicators provided to Aqua's operating companies, managers, and field staff will enable Aqua to deliver a high level of service on a consistent basis.

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Revenue Requirements

	<u>Applicant</u> (a)	<u>Lower</u> <u>Bound</u>	<u>Upper</u> <u>Bound</u>
(1) Rate Base (b)	\$ 41,275,758	\$ 41,369,887	\$ 41,369,887
(2) Adjusted Operating Income (c)	1,830,725	2,305,910	2,305,910
(3) Rate of Return Earned (2) / (1)	4.44%	5.57%	5.57%
(4) Rate of Return Recommended (d)	8.63%	7.62%	8.14%
(5) Required Operating Income (1) x (4)	\$ 3,562,098	\$ 3,152,385	\$ 3,367,509
(6) Income Deficiency (5) - (2)	1,731,373	846,475	1,061,599
(7) Gross Revenue Conversion Factor (e)	1.6241	1.598053	1.598053
(8) Revenue Increase Required (6) x (7)	2,811,923	1,352,711	1,696,491
(9) Revenue Increase Recommended	2,811,133	1,352,711	1,696,491
(10) Adjusted Operating Revenue (c)	14,760,877	14,797,626	14,797,626
(11) Revenue Requirements (9) + (10)	\$ 17,572,010	\$ 16,150,337	\$ 16,494,117
(12) Increase Over Current Revenue (9) / (10)	19.04%	9.14%	11.46%

- (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

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Calculation of Gross Revenue Conversion Factor

(1) Gross Revenue	100.000000
(2) Uncollectibles (1) x 0.460100% (a)	<u>0.460100</u>
(3) Net Revenue (1) - (2)	99.539900
(4) Ohio Gross Receipts Tax (3) x 4.75% (b)	<u>4.727548</u>
(5) Income Before Federal Income Taxes (3) - (4)	94.812352
(6) Federal Income Taxes (7) x 34% (c)	<u>32.236200</u>
(7) Operating Income Percentage (5) - (6)	62.576152
(8) Gross Revenue Conversion Factor (1) / (7)	<u>1.598053</u>

(a) Staff's C-1.1

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

(1) Increase In Ohio Gross Receipts Tax	\$ 132,899
(2) Proposed Total Revenue Increase	2,811,133
(3) Uncollectibles	<u>12,934</u>
(4) Net Revenue Increase	\$ 2,798,199
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)	\$ 2,798,199
(2) Increase In Ohio Gross Receipts Tax	<u>132,899</u>
(3) Net Revenue Increase (1) - (2)	2,665,300
(4) Increase In Federal Income Taxes	\$ 906,202
(5) Effective FIT Rate (4) / (3)	<u>34.00%</u>



**SCHEDULE B-1**

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Rate Base Summary  
As of Date Certain, March 31, 2009

	<u>Applicant</u> (a)	<u>Staff</u>	
(1) Plant in Service	\$ 90,637,229	\$ 90,227,394	(b)
(2) Depreciation Reserve	<u>19,563,184</u>	<u>19,251,968</u>	(c)
(3) Net Plant in Service (1) - (2)	71,074,045	70,975,426	
(4) Construction Work in Progress			(d)
(5) Working Capital Allowance			(e)
(6) Less: Contributions in Aid of Construction	(26,052,151)	(26,052,151)	(f)
(7) Less: Advances for Construction	(146,698)	(146,698)	(f)
(8) Less: Customers' Advances - Related Facilities	(6,865)	(6,865)	(f)
(9) Less: Other Items	<u>(3,592,573)</u>	<u>(3,399,825)</u>	(g)
(10) Rate Base (3) Thru (9)	<u>\$ 41,275,758</u>	<u>\$ 41,369,887</u>	

- (a) Applicant's Schedule B-1
- (b) Staff's Schedule B-2
- (c) Staff's Schedule B-3
- (d) Staff's Schedule B-4, Subject to 10% Limitation
- (e) Staff's Schedule B-5
- (f) Applicant's Schedule B-6
- (g) Staff's Schedule B-6

SCHEDULE B-2

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Jurisdictional Plant in Service Summary

<u>Major Property Groupings</u>	<u>Applicant</u> (a)	<u>Staff</u> (b)
(1) Intangible Plant	\$ 298,124	\$ 268,976
(2) Source of Supply Plant	1,618,472	1,618,473
(3) Pumping Plant	3,820,814	3,820,814
(4) Water Treatment Plant	10,579,286	10,387,790
(5) Transmission & Distribution Plant	67,909,961	67,833,313
(6) General Plant	<u>3,034,441</u>	<u>3,034,441</u>
(7) Total District (1) thru (6)	87,261,098	86,963,807
(8) Corporate Office Intangible Plant	2,142,315	2,029,769
(9) Corporate Office General Plant	<u>1,233,816</u>	<u>1,233,818</u>
(10) Total Corporate Office (8) + (9)	<u>3,376,131</u>	<u>3,263,587</u>
(11) Total District and Corporate Office (7) + (10)	<u>\$ 90,637,229</u>	<u>\$ 90,227,394</u>

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

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Calculation of Jurisdictional Plant In Service

Acct. No.	Description	Applicant's Unadjusted (a)	Adjustments (b)	Staff's Adjusted Jurisdictional (c)	Jurisdictional Allocations (d)	Staff's Adjusted Jurisdictional (e)
<u>Intangible Plant:</u>						
301	Organization	\$ 60,534	\$ (48,879)	\$ 11,655	100.00%	\$ 11,655
302	Franchises & Consents	145,695		145,695	100.00%	145,695
303	Misc. Intangible Plant	111,626		111,626	100.00%	111,626
	Total Intangible Plant	317,855	(48,879)	268,976		268,976
<u>Source of Supply Plant:</u>						
310	Land & Land Rights	378,122	(146,442)	231,680	100.00%	231,680
311	Structures & Improvements	69,579		69,579	100.00%	69,579
312	Collecting & Impounding Res.					
313	Lake, River & Other Intakes	1,426,525	(285,465)	1,141,060	100.00%	1,141,060
314	Wells & Springs	40,786	(9,792)	30,994	100.00%	30,994
316	Supply Mains	145,160		145,160	100.00%	145,160
	Total Source of Supply Plant	2,060,172	(441,699)	1,618,473		1,618,473
<u>Pumping Plant:</u>						
320	Land and Land Rights	4,894		4,894	100.00%	4,894
321	Structures & Improvements	688,384		688,384	100.00%	688,384
323	Other Power Prod. Equip.	493,409		493,409	100.00%	493,409
325	Electric Pumping Equip.	2,634,127		2,634,127	100.00%	2,634,127
326	Diesel Pumping Equipment					
328	Other Pumping Equip.					
	Total Pumping Plant	3,820,814		3,820,814		3,820,814
<u>Water Treatment Plant:</u>						
330	Land and Land Rights	270,785	(191,496)	79,289	100.00%	79,289
331	Structures & Improvements	1,621,265		1,621,265	100.00%	1,621,265
332	Water Treatment Equip.	8,687,236		8,687,236	100.00%	8,687,236
	Total Water Treatment Plant	10,579,286	(191,496)	10,387,790		10,387,790
<u>Trans. &amp; Distribution Plant:</u>						
340	Land & Land Rights	409,538	(51,467)	358,071	100.00%	358,071
341	Structures & Improvements	546,325		546,325	100.00%	546,325
342	Distr. Reser. & Standpipes	4,549,717		4,549,717	100.00%	4,549,717
343	Trans. and Distr. Mains	44,730,210	(25,182)	44,705,028	100.00%	44,705,028
345	Services	7,223,727		7,223,727	100.00%	7,223,727
346	Meters	2,989,415		2,989,415	100.00%	2,989,415
347	Meter Installations	2,294,673		2,294,673	100.00%	2,294,673
348	Hydrants	5,166,357		5,166,357	100.00%	5,166,357
	Total Trans. & Dist. Plant	\$ 67,909,962	\$ (76,649)	\$ 67,833,313		\$ 67,833,313

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Calculation of Jurisdictional Plant in Service

Acct. No.	Description	Applicant's Unadjusted (a)	Adjustments (b)	Staff's Adjusted Jurisdictional (c)	Jurisdictional Allocations (d)	Staff's Adjusted Jurisdictional (e)
<b>General Plant:</b>						
389	Land & Land Rights	\$	\$	\$		\$
390	Structures & Improvements					
390.1	Str. & Imp.-Leasehold Impr.	83,439		83,439	100.00%	83,439
391.1	Office Furniture	98,364		98,364	100.00%	98,364
391.2	Data Processing	65,397		65,397	100.00%	65,397
391.3	Computers	203,694		203,694	100.00%	203,694
392	Trans. Equip.- Fully Depre.	133,212		133,212	100.00%	133,212
392.1	Trans. Equip.- Depreciable	669,943		669,943	100.00%	669,943
393	Stores Equipment	5,159		5,159	100.00%	5,159
394	Tools, Shop, & Garage Equip.	305,875		305,875	100.00%	305,875
395	Laboratory Equip.	78,475		78,475	100.00%	78,475
396	Power Operated Equip.	761,438		761,438	100.00%	761,438
397	Communication Equipment	588,579		588,579	100.00%	588,579
398	Miscellaneous Equipment	40,866		40,866	100.00%	40,866
	<b>Total General Plant</b>	<b>3,034,441</b>		<b>3,034,441</b>		<b>3,034,441</b>
	<b>Total District</b>					
	<b>Water Plant In Service</b>	<b>87,722,530</b>	<b>(758,723)</b>	<b>86,963,807</b>		<b>86,963,807</b>
<b>Serv.Center Intan. Plant:</b>						
303	Misc. Intangible Plant	6,387,342	(335,555)	6,051,787	33.54%	2,029,769
	<b>Total Service Center Office</b>					
	<b>Intangible Plant</b>	<b>\$ 6,387,342</b>	<b>\$ (335,555)</b>	<b>\$ 6,051,787</b>		<b>\$ 2,029,769</b>

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Calculation of Jurisdictional Plant in Service

Acct. No.	Description	Applicant's Unadjusted (a)	Adjustments (b)	Staff's Adjusted Jurisdictional (c)	Jurisdictional Allocations (d)	Staff's Adjusted Jurisdictional (e)
<u>Service Center General Plant:</u>						
389	Land & Land Rights	\$ 693,797	\$	\$ 693,797	33.54%	\$ 232,700
390	Structures & Improvements	778,373		778,373	33.54%	261,068
390.1	Structures & Improvements					
	Leasehold Improvements	1,067,802		1,067,802	33.54%	358,141
391.1	Office Furniture & Equip.	198,742		198,742	33.54%	66,658
391.2	Office Furniture & Equip.					
	Data Processing	414,364		414,364	33.54%	138,978
391.3	Office Furniture & Equip.					
	Computers	268,465		268,465	33.54%	89,372
392	Transportation Equipment					
	Fully Depreciated					
392.1	Trans. Equip. - Depreciable					
394	Tools, Shop and Garage	81,054		81,054	33.54%	27,186
395	Laboratory Equipment	55,110		55,110	33.54%	18,484
397	Communication Equipment	112,948		112,948	33.54%	37,883
398	Miscellaneous Equipment	9,987		9,987	33.54%	3,350
<u>Total Service Center</u>						
Office General Plant		3,678,642		3,678,642		1,233,818
Total Corporate Office		10,065,984	(338,555)	9,730,429		3,263,587
Total District & Corporate Office		\$ 97,768,514	\$ (1,094,278)	\$ 96,694,236		\$ 90,227,394

- (a) Applicant's Schedule B-2.1  
(b) Staff's Schedule B-2.1a Thru B-2.1g  
(c) Columns (a) + (b)  
(d) Applicant's Schedule B-3  
(e) Columns (c) x (d)

SCHEDULE B-2.1a

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Account 310 - Land & Land Rights Plant Adjustment

(1) Original Cost of Land - Shepard Hills (a)	\$ 4,050
(2) Prior Case Adjustment (a)	<u>(150,492)</u>
(3) Adjustment (1) - (2)	\$ <u>(146,442)</u>

(a) Prior Case No. 03-2290-WW-AIR,  
and Staff's Workpaper WPB-2.1

SCHEDULE B-2.1b

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Green Road Plant Adjustments to Plant In Service

	Green Road Plant Exclusion <u>(a)</u>
<u>Source of Supply Plant:</u>	
(1) Account 313 - Lake, River & Other Intakes	\$ (285,465)
(2) Account 314 - Wells & Springs	<u>(9,792)</u>
(3) Total Source of Supply Plant (1) + (2)	\$ <u>(295,257)</u>

(a) Prior Case No. 95-1076-WW-AIR,  
and Staff's Workpaper WPB-2.1

SCHEDULE B-2.1c

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Reclassification of Account 301 - Organization

(1) Reclassification of Account 301 - Organization to Legal Expenses (a)	\$ <u>(19,730)</u>
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(a) Refer to Text



SCHEDULE B-2.1d

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Purification Land Adjustment - Account 330

(1) Elimination of Purification Land (a)	\$ <u>(191,496)</u>
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(a) Case No. 07-564-WW-AIR

SCHEDULE B-2.1e

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Auburn Lakes Adjustment

(1) Account 301 - Organization (a)	(29,149)
(2) Account 343 - Transmission & Distribution Mains (a)	<u>(25,182)</u>
(3) Total Auburn Lakes System Acquisition Adjustment (1) + (2)	\$ <u>(54,331)</u>

(a) Applicant's Workpaper WPB-2.3a and Staff's Data Request No. 32

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Service Center - CIS Modifications and Enhancements Adjustment

(1) Service Center Account 303 CIS Modifications and Enhancements Adjustment (a) \$ (335,555)

(a) Applicant's Workpaper WPB-2.3q and Staff's Data Request No. 33

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Jefferson Elevated Storage Tank Land Adjustment-Account 340

(1) Elimination of Jefferson Second Elevated Storage Tank Land (a)	\$ <u>(51,467)</u>
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(a) Refer to Text

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Calculation of Jurisdictional Depreciation Reserve

Acct. No.	Description	Applicant's Unadjusted (a)	Adjustments (b)	Staff's Adjusted Jurisdictional (c)	Jurisdictional Allocations (d)	Staff's Adjusted Jurisdictional (e)
<u>Intangible Plant:</u>						
301	Organization	\$ 7,800	\$ (1,682)	\$ 6,118	100.00%	\$ 6,118
302	Franchises & Consents	148,876	(4,428)	144,448	100.00%	144,448
303	Misc. Intangible Plant	47,650		47,650	100.00%	47,650
	Total Intangible Plant	204,326	(6,110)	198,216		198,216
<u>Source of Supply Plant:</u>						
310	Land & Land Rights					
311	Structures & Improvements	21,137		21,137	100.00%	21,137
312	Collecting & Impounding Res.					
313	Lake, River & Other Intakes	875,549	(285,465)	590,084	100.00%	590,084
314	Wells & Springs	21,389	(9,792)	11,597	100.00%	11,597
316	Supply Mains	35,275		35,275	100.00%	35,275
	Total Source of Supply Plant	953,350	(295,257)	658,093		658,093
<u>Pumping Plant:</u>						
320	Land and Land Rights					
321	Structures & Improvements	235,946		235,946	100.00%	235,946
323	Other Power Prod. Equip.	149,826		149,826	100.00%	149,826
325	Electric Pumping Equip.	643,230		643,230	100.00%	643,230
326	Diesel Pumping Equipment					
328	Other Pumping Equip.					
	Total Pumping Plant	1,029,002		1,029,002		1,029,002
<u>Water Treatment Plant:</u>						
330	Land and Land Rights					
331	Structures & Improvements	508,726		508,726	100.00%	508,726
332	Water Treatment Equip.	3,784,951		3,784,951	100.00%	3,784,951
	Total Water Treatment Plant	4,293,677		4,293,677		4,293,677
<u>Transmission &amp; Distribution Plant:</u>						
340	Land & Land Rights					
341	Structures & Improvements	100,929		100,929	100.00%	100,929
342	Distr. Reser. & Standpipes	1,242,174		1,242,174	100.00%	1,242,174
343	Trans. and Distr. Mains	3,750,848	(452)	3,750,396	100.00%	3,750,396
345	Services	2,703,948		2,703,948	100.00%	2,703,948
346	Meters	1,353,332		1,353,332	100.00%	1,353,332
347	Meter Installations	223,148		223,148	100.00%	223,148
348	Hydrants	917,170		917,170	100.00%	917,170
	Total Trans. & Distrib. Plant	\$ 10,291,549	\$ (452)	\$ 10,291,097		\$ 10,291,097

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Calculation of Jurisdictional Depreciation Reserve

Acct. No.	Description	Applicant's Unadjusted (a)	Adjustments (b)	Staff's Adjusted Jurisdictional (c)	Jurisdictional Allocations (d)	Staff's Adjusted Jurisdictional (e)
<u>General Plant:</u>						
389	Land & Land Rights	\$	\$	\$	\$	\$
390	Structures & Improvements					
390	Struc. & Improv. - Lease. Improv.	83,439		83,439	100.00%	83,439
391.1	Office Furniture and Equipment	41,789		41,789	100.00%	41,789
391.2	Off. Furn. and Equip. - D.P.	53,978		53,978	100.00%	53,978
391.3	Off. Furn. and Equip. - Computers.	225,069		225,069	100.00%	225,069
392	Trans. Equip. - Fully Depr.	133,212		133,212	100.00%	133,212
392	Trans. Equip. - Depreciable	259,068		259,068	100.00%	259,068
393	Stores Equipment	7,009		7,009	100.00%	7,009
394	Tools, Shop, & Garage Equip.	126,712		126,712	100.00%	126,712
395	Laboratory Equip.	63,959		63,959	100.00%	63,959
396	Power Operated Equip.	381,063		381,063	100.00%	381,063
397	Communication Equipment	403,727		403,727	100.00%	403,727
398	Miscellaneous Equipment	33,112		33,112	100.00%	33,112
	<b>Total General Plant</b>	<b>1,812,137</b>		<b>1,812,137</b>		<b>1,812,137</b>
	<b>Tot. District Water Depre. Reserve</b>	<b>18,584,041</b>	<b>(301,819)</b>	<b>18,282,222</b>		<b>18,282,222</b>
<u>Service Center Intangible Plant:</u>						
303	Miscellaneous Intangible Plant	1,360,735	(28,025)	1,332,710	33.54%	446,991
	<b>Total Service Center Intangible Plant</b>	<b>\$ 1,360,735</b>	<b>\$ (28,025)</b>	<b>\$ 1,332,710</b>		<b>\$ 446,991</b>

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Calculation of Jurisdictional Depreciation Reserve

Acct. No.	Description	Applicant's Unadjusted (a)	Adjustments (b)	Staff's Adjusted Jurisdictional (c)	Jurisdictional Allocations (d)	Staff's Adjusted Jurisdictional (e)
<u>Corporate Office General Plant</u>						
389	Land & Land Rights					
390	Structures & Improvements	42,880		42,880	33.54%	14,382
390.1	Struc. & Impr.- Leasehold Impr.	965,464		965,464	33.54%	323,817
391.1	Office Furniture and Eq.	140,406		140,406	33.54%	47,092
391.2	Off. Furn. and Eq.- Data Pro.	57,608		57,608	33.54%	19,322
391.3	Off. Furn. and Eq.- Computers	245,846		245,846	33.54%	82,457
392	Trans.Eq.- Fully Depreciated					
392.1	Trans.Eq. - Depreciable					
394	Tools, Shop, & Garage Equip.	38,037		38,037	33.54%	12,758
395	Laboratory Equip.	48,895		48,895	33.54%	16,399
397	Communication Equipment	15,752		15,752	33.54%	5,283
398	Miscellaneous Equipment	3,713		3,713	33.54%	1,245
Total Service Center General Plant		1,558,601		1,558,601		522,755
Total Service Center		2,919,336	(28,025)	2,891,311		969,746
Total District and Service Center		\$ 21,503,377	\$ (329,844)	\$ 21,173,533		\$ 19,251,968

- (a) Applicant's Schedule B-3  
(b) Staff's Schedule B-3.1  
(c) Columns (a) + (b)  
(d) Applicant's Schedule B-7  
(e) Columns (c) x (d)

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Summary of Staff's Adjustments to Reserve

Acct. No.	Description	Reclassification Reserve (a)	Green Road Plant Exclusion (b)	Reclassification Organization To Legal Expense (c)	Auburn Lakes (d)	Service Center CIS Modification & Enhancements (e)	Total Adjustments (f)
<b>Intangible Plant:</b>							
301	Organization	\$ 4,428		\$ (2,466)	\$ (3,644)	\$	(1,682)
302	Franchises & Consents	(4,428)					(4,428)
<b>Source of Supply Plant:</b>							
310	Land and Land Rights						
313	Lake & Other Intakes		(285,465)				(285,465)
314	Wells and Springs		(9,792)				(9,792)
<b>Transmission &amp; Distribution Plant:</b>							
343	Transmission & Distribution Plant Mains				(452)		(452)
<b>Service Center Intangible Plant:</b>							
303	Misc. Intangible Plant Service Center					(28,025)	(28,025)
<b>Total Adjustments</b>		\$	\$ (295,257)	\$ (2,466)	\$ (4,096)	\$ (28,025)	\$ (329,844)

(a) Staff's Schedule B-3.1a  
(b) Staff's Schedule B-3.1b  
(c) Staff's Schedule B-3.1c  
(d) Staff's Schedule B-3.1d  
(e) Staff's Schedule B-3.1e  
(f) Columns (a) thru (e)



SCHEDULE B-3.1a

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Reclassification of Reserve Adjustment

	Reclassification Reserve (a)
<u>Intangible Plant:</u>	
(1) Account 301 - Land & Land Rights	\$ (7,800)
(2) Account 301 - Lake, River & Other Intakes	12,228
(3) Account 302 - Franchises & Consents	(148,876)
(4) Account 302 - Franchises & Consents	<u>144,448</u>
(5) Total Adjustment (1) thru (4)	\$ <u>0</u>

(a) Staff's Data Request No. 23

SCHEDULE B-3.1b

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Green Road Plant Adjustments to Plant In Service

Green Road  
Plant  
Exclusion  
(a)

Source of Supply Plant:

(1) Account 310 - Land & Land Rights	\$	0
(2) Account 313 - Lake, River & Other Intakes		(285,465)
(3) Account 314 - Wells & Springs		<u>(9,792)</u>
(4) Total Source of Supply Plant (1) thru (3)	\$	<u>(295,257)</u>

(a) Staff's Data Request No. 23

Aqua Ohio, Inc.

Case No. 09-1044-WW-AIR

Reserve Reclassification of Account 301 - Organization to legal Expense Adjustment

(1) Reserve Reclassification of Account 301 - Organization to Legal Expenses (a)	\$ <u>(2,466)</u>
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(a) Staff's Data Request No. 23

SCHEDULE B-3.1d

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Auburn Lakes Adjustment

(1) Account 301 - Organization (a)	\$ (3,644)
(2) Account 343 - Transmission & Distribution Mains (a)	<u>(452)</u>
(3) Total Auburn Lakes System Acquisition Adjustment (1) + (2)	\$ <u>(4,096)</u>

(a) Staff's Workpaper WPB-3.1

SCHEDULE B-3.1e

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Service Center - CIS Modifications and Enhancements Adjustment

(1) Service Center Account 303 CIS Modifications and Enhancements Adjustment (a)	\$ <u>(28,025)</u>
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(a) Staff's Workpaper WPB-3.1

Aqua Ohio, Inc.  
Case No. 08-1044-WW-AIR  
Calculation of Jurisdictional Depreciation Expense

Acct. No.	Description	Jurisdictional Plant In Service (a)	Accrual Rate (b)	Jurisdictional Depreciation Expense (c)
<u>Intangible Plant:</u>				
301	Organization	\$ 11,855	(h)	\$ 1,165
302	Franchises & Consents	145,895	(h)	795
303	Misc. Intangible Plant	111,626	(h)	5,391
Total Intangible Plant		268,976		7,351
<u>Source of Supply Plant:</u>				
310	Land & Land Rights	231,680		
311	Structures & Improvements	69,579	3.00%	2,087
312	Collecting & Impounding Res.		2.10%	
313	Lake, River & Other Intakes	1,141,060	2.49%	28,412
314	Wells & Springs	30,994	4.00%	1,240
316	Supply Mains	145,160	1.50%	2,177
Total Source of Supply Plant		1,618,473		33,916
<u>Pumping Plant:</u>				
320	Land and Land Rights	4,894		
321	Structures & Improvements	688,384	2.18%	15,007
323	Other Power Prod. Equip.	493,409	3.50%	17,269
325	Electric Pumping Equip.	2,634,127	2.84%	74,809
326	Diesel Pumping Equipment			
328	Other Pumping Equip.			
Total Pumping Plant		3,820,814		107,085
<u>Water Treatment Plant:</u>				
330	Land and Land Rights	79,289		
331	Structures & Improvements	1,621,265	3.98%	64,202
332	Water Treatment Equip.	8,687,236	2.62%	227,606
Total Water Treatment Plant		10,387,790		291,808
<u>Transmission &amp; Distribution Plant:</u>				
340	Land & Land Rights	358,071		
341	Structures & Improvements	546,325	2.33%	12,729
342	Distr. Reser. & Standpipes	4,549,717	2.27%	103,279
343	Trans. and Distr. Mains	44,705,028	1.50%	670,575
345	Services	7,223,727	2.50%	180,593
346	Meters	2,989,415	3.52%	105,227
347	Meter Installations	2,294,673	4.35%	99,818
348	Hydrants	5,166,357	1.57%	81,112
Total Trans. & Distribution Plant		\$ 67,833,313		\$ 1,253,333

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Calculation of Jurisdictional Depreciation Expense

Acct. No.	Description	Jurisdictional Plant In Service (a)	Accrual Rate (b)	Jurisdictional Depreciation Expense (c)
<u>General Plant:</u>				
389	Land & Land Rights	\$		\$
390	Structures & Improvements		2.10%	
390	Leasehold Improvements	83,439	(d)	
391.1	Office Furniture	98,364	3.59%	3,531
391.2	Off. Furn. & Equip. - Data Processing	65,397	9.12%	5,964
391.3	Off. Mach. & Equip. - Computers	203,694	12.10%	24,647
392	Trans. Equip.- Fully Depre.	133,212	(d)	
392	Trans. Equip.	669,943	10.00%	60,963
393	Stores Equipment	5,159	3.00%	155
394	Tools, Shop, & Garage Equip.	305,875	3.85%	11,776
395	Laboratory Equip.	78,475	3.62%	2,841
396	Power Operated Equip.	761,438	5.36%	40,513
397	Communication Equipment	586,579	6.15%	36,198
398	Miscellaneous Equipment	40,866	5.32%	2,174
	Total General Plant	3,034,441		188,782
	Total Water Plant in Service	\$ 86,963,807		\$ 1,882,255
<u>Serv. Center Intan. Plant:</u>				
303	Misc. Intangible Plant	2,029,769	(h)	206,161
	Total Service Center Office Intangible Plant	2,029,769		206,161
<u>Service Center General Plant:</u>				
389	Land & Land Rights	232,700		
390	Structures & Improvements	261,066	2.10%	5,482
390	Structures & Improvements			
	Leasehold Improvements (e)	358,141	2.86%	1,041
391	Office Furniture & Equip.	66,658	3.59%	2,393
391	Office Furniture & Equip.			
	Data Processing	138,978	9.12%	12,675
391	Office Furniture & Equip.			
	Computers	89,372	12.10%	10,814
392	Transportation Equipment			
	Fully Depreciated		(d)	
392	Trans. Equip. - Depreciable		10.00%	
394	Tools, Shop and Garage	27,186	3.85%	1,047
395	Laboratory Equipment	18,484	3.62%	669
397	Communication Equipment	37,883	6.15%	2,330
398	Miscellaneous Equipment	3,350	5.32%	178
	Total Service Center Office General Plant	1,233,818		36,629
	Total Service Center	3,263,587		242,790
	Total District & Service Center	\$ 90,227,394		\$ 2,125,045

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Calculation of Jurisdictional Depreciation Expense

Acct. No.	Description	Jurisdictional Plant In Service	Accrual Rate (b)	Jurisdictional Depreciation Expense (g)
	Less: CIAC (f)			
313	Lake River & Other Intakes	\$ 58,527	2.48%	\$ 1,457
321	Structures & Improvements	112,421	2.18%	2,451
325	Electric Pumping Equipment	190,320	2.84%	5,405
331	Structures & Improvements	179,637	3.96%	7,114
332	Water Treatment Equipment	825,200	2.62%	21,620
340	Land & Land Rights	1,851		
342	Distr. Reser. & Standpipes	251,996	2.27%	5,720
343	Trans. And Distr. Mains	21,643,358	1.50%	324,650
345	Services	785,511	2.50%	19,638
348	Hydrants	2,001,530	1.57%	31,424
390	Structures & Improvements	2,000	2.10%	42
	Total CIAC	26,052,151		419,521
	Net District & Service Center	\$ 64,175,243		\$ 1,705,524

- (a) Staff's Schedule B-2.1
- (b) Staff's Schedule B-3.3
- (c) Columns (a) x (b)
- (d) Fully Depreciated
- (e) Staff's Data Request No. 16 and Staff's Schedule B-3.3
- (f) Applicant's Schedule B-3.2
- (g) Columns (e) x (b)
- (h) Staff's Data Request No. 16 and Staff's Workpaper WPB - 3.1



SCHEDULE B-3.3

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Accrual Rate Comparison

Acct. No.	Description	Current			Staff Proposed		
		Avg Svc Life	Net Salv. %	Accrual Rate % (a)	Avg Svc Life	Net Salv. %	Accrual Rate % (b)
<u>Intangible Plant:</u>							
301	Organization			(c)			(c)
302	Franchises & Consents			(c)			(c)
303	Misc. Intangible Plant			(c)			(c)
<u>Source of Supply Plant:</u>							
311	Structures & Improvements	67	-2	1.52	35	-5	3.00
312	Collecting & Impounding Res.	85	0	1.18			2.10
313	Lake, River & Other Intakes	61	0	1.64			2.49
314	Wells & Springs	21	-15	5.48	30	-20	4.00
316	Supply Mains	75	0	1.33	70	-5	1.50
<u>Pumping Plant:</u>							
321	Structures & Improvements	45	-10	2.44	55	-20	2.18
323	Other Power Prod. Equip.	33	0	3.03	30	-5	3.50
325	Electric Pumping Equip.	32	-5	3.28	37	-5	2.84
326	Diesel Pumping Equipment						
328	Other Pumping Equip.						
<u>Water Treatment Plant:</u>							
331	Structures & Improvements	40	-1	2.53			3.96
332	Water Treatment Equip.	35	-5	3.00	42	-10	2.62
<u>Transmission &amp; Distribution Plant:</u>							
341	Structures & Improvements	40	0	2.50	45	-5	2.33
342	Distr. Reser. & Standpipes	50	-3	2.06	55	-25	2.27
343	Trans. and Distr. Mains	65	-10	1.69	80	-20	1.50
345	Services	40	-50	3.75	60	-50	2.50
346	Meters	18	15	4.72	27	5	3.52
347	Meter Installations	40	-10	2.75	23	0	4.35
348	Hydrants	45	-10	2.44	70	-10	1.57
<u>General Plant:</u>							
390	Structures & Improvements	40	-1	2.53	50	-5	2.10
390	Limited Term Utility Plant				35	0	2.86
391.1	Office Furniture	20	1	4.95			3.59
391.2	Computer Equip. & Software	8	0	12.50			9.12
391.3	Office Machines & Equip.	5	0	20.00			12.10
392	Transportation Equip.(Depreciated)			(d)			(d)
392	Transportation Equip.	7	0	14.29	8	20	10.00
393	Stores Equipment	20	0	5.00			3.00
394	Tools,Shop,& Garage Equip.	16	5	5.94			3.85
395	Laboratory Equip.	17	0	5.88			3.62
396	Power Operated Equip.	10	30	7.00	14	25	5.36
397	Communication Equipment	10	0	10.00			6.15
398	Miscellaneous Equipment	15	0	6.67			5.32

- (a) Case No. 93-862-WW-AAM  
(b) See Text  
(c) Actual  
(d) Fully Depreciated

**SCHEDULE B-4**

**Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Construction Work In Progress Summary**

**None**

**SCHEDULE B-5**

**Aqua Ohio, Inc.**  
**Case No. 09-1044-WW-AIR**  
**Working Capital Allowance**

**None**

SCHEDULE B-6

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Other Rate Base Items

(1) Customers' Deposits (a)	\$	
(2) Investment Tax Credits (b)		(18,806)
(3) Deferred Income Taxes - Liberalized Depreciation (b)		(7,737,131)
(4) Deferred Income Taxes - Related Facilities (c)		30,916
(5) Deferred Income Taxes - Non-Refundable Related Facilities (c)		135,302
(6) Deferred Income Taxes - Contribution in Aid of Construction (c)		3,997,146
(7) Other Reconciling Items (d)		<u>192,748</u>
(8) Total Other Rate Base Items (1) Thru (7)	\$	<u>(3,399,825)</u>

- (a) Applicant's Schedule B-5.1
- (b) Applicant's Schedule B-6
- (c) Applicant's Schedule WPB-6e
- (d) Staff's Schedule C-4

SCHEDULE C-1

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Proforma Operating Income Statement  
For The Twelve Months Ending December 31, 2009

	Adjusted Revenues & (a)	Staff Proforma Adjustments (b)	Proforma Revenues & Expenses (c)	Applicant Proforma Revenues & Expenses (d)
<u>Operating Revenues</u>				
Metered Sales	\$ 13,655,923	\$ 2,679,895	\$ 16,335,818	\$ 16,705,400
Unmetered Sales	509,167		509,167	651,060
Other Operating Revenues	632,536	131,238	763,774	215,550
Total Operating Revenues	14,797,626	2,811,133	17,608,759	17,572,010
<u>Operating Expenses</u>				
Operation and Maintenance	6,315,652	12,934	6,328,586	7,088,681
Depreciation and Amortization	1,705,524		1,705,524	1,737,497
Taxes, Other Than Income	3,954,970	132,899	4,087,869	3,943,050
Federal Income Taxes	515,570	906,202	1,421,772	1,241,207
Total Operating Expenses	12,491,716	1,052,035	13,543,751	14,010,435
Net Operating Income	\$ 2,305,910	\$ 1,759,098	\$ 4,065,008	\$ 3,561,575
Rate Base (e)	\$ 41,369,887		\$ 41,369,887	\$ 41,275,758
Rate of Return (f)	5.57%		9.83%	8.63%

- (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

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Proforma Adjustments

(1) Proposed Revenue Increase (a)	\$ 2,679,895
(2) Late Payment Revenue (1) x 0.769889% (b)	<u>131,238</u>
(3) Total Proposed Revenue Increase (1) + (2)	\$ <u>2,811,133</u>
(4) Uncollectible Accounts Expense (3) x 0.460100% (c)	\$ <u>12,934</u>
(5) Ohio Gross Receipts Tax (d)	\$ <u>132,899</u>
(6) Federal Income Tax (e)	\$ <u>906,202</u>

- (a) Applicant's Schedule E-4
- (b) Staff's Schedule C-3.3
- (c) Staff's Schedule C-3.10
- (d) Staff's Schedule C-3.20b
- (e) Staff's Schedule C-4

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
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)
<u>Operating Revenues</u>					
Metered Sales Revenues	\$ 13,789,586	\$ (133,663)	\$ 13,655,923	\$	\$ 13,655,923
Unmetered Sales Revenue	509,440	(273)	509,167		509,167
Other Operating Revenues	462,890	132,897	595,787	36,749	632,536
Total Operating Revenues	14,761,916	(1,039)	14,760,877	36,749	14,797,626
<u>Operating Expenses</u>					
Purchased Water	291,362		291,362		291,362
Other Operation and Maintenance	6,558,584	223,245	6,781,829	(757,539)	6,024,290
Total Operation and Maintenance	6,849,946	223,245	7,073,191	(757,539)	6,315,652
Depreciation	1,997,358	(259,861)	1,737,497	(31,973)	1,705,524
Taxes, Other Than Income	3,802,462	7,791	3,810,253	144,717	3,954,970
Income Taxes	303,508	5,703	309,211	206,359	515,570
Total Operating Expenses	12,953,274	(23,122)	12,930,152	(438,436)	12,491,716
Net Operating Income	\$ 1,808,642	\$ 22,083	\$ 1,830,725	\$ 475,185	\$ 2,305,910

- (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

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Summary of Staff's Adjustments

	Staff's Adjustments (a)	Applicant's Adjustments (b)	Staff's Incremental Adjustments (c)
<u>Operating Revenues</u>			
C-3.1 Metered Sales	\$ (133,663)	\$ (133,663)	
C-3.2 Unmetered Sales	(273)	(273)	
C-3.3 Other Revenues	169,646	132,897	36,749
Total Revenue Adjustments	\$ 35,710	\$ (1,039)	\$ 36,749
<u>Operating Expenses</u>			
C-3.4 Labor Expense	\$ (55,680)	\$ 50,506	(106,186)
C-3.5 Pension Expense	(231,209)	106,665	(337,874)
C-3.6 Postretirement Expense	(1,583)	(1,583)	
C-3.7 Employee Insurance Expense	(35,231)	42,620	(77,851)
C-3.8 Operating Contract Expense	(64,928)	(15,259)	(49,669)
C-3.9 Miscellaneous Water Treatment Expense	(83,840)		(83,840)
C-3.10 Uncollectible Expense	(4,006)	9,242	(13,248)
C-3.11 Rate Case Expense	15,540	27,000	(11,460)
C-3.12 Tank Painting Expense	41,868	41,868	
Billing Expense		47,797	(47,797)
C-3.13 Purchased Water Expense	(13,618)	(13,618)	
C-3.14 Sludge Hauling Expense	(72,000)	(72,000)	
C-3.15 Natural Gas Expense	(23,890)		(23,890)
C-3.16 Lobbying Expense	(1,593)		(1,593)
C-3.17 Sundry Expense	(4,003)		(4,003)
C-3.18 Cell Phone Expense	(128)		(128)
Total O & M Expenses	(534,301)	223,238	(757,539)
C-3.19 Depreciation & Amortization	(291,834)	(259,861)	(31,973)
C-3.20 Taxes Other Than Income	152,508	7,791	144,717
C-3.21 Federal Income Taxes	212,062	5,703	206,359
Total Expense Adjustments	\$ (461,565)	\$ (23,129)	\$ (438,436)

- (a) Staff's Schedules C-3.1 Through C-3.21
- (b) Applicant's Schedule C-3
- (c) Columns (a) - (b)



SCHEDULE C-3.1

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Metered Sales Revenue

(1) Adjusted Water Sales Revenues (a)	\$ 13,655,923
(2) Test Year Unmetered Sales Revenue (b)	<u>13,789,586</u>
(3) Adjustment (1) - (2)	\$ <u>(133,663)</u>

- (a) Applicant's Schedule E-4
- (b) Applicant's Schedule C-2.1a

SCHEDULE C-3.2

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Unmetered Sales Revenue

(1) Unmetered Sales Revenues (a)	\$ 509,167
(2) Test Year Unmetered Sales Revenue (b)	<u>509,440</u>
(3) Adjustment (1) - (2)	\$ <u>(273)</u>

- (a) Applicant's Schedule E-4  
(b) Applicant's Schedule C-2.1a

SCHEDULE C-3.3

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Other Operating Revenue Adjustment

System Improvement Revenue Adjustment

(1) Base Revenue (a)	\$ 14,165,090
(2) System Improvement Percentage (b)	<u>3.00%</u>
(3) Annualized System Improvement Revenue (1) x (2)	424,953
(4) Test Year System Improvement Charge (c)	<u>275,439</u>
(5) Adjustment (3) - (4)	\$ <u>149,514</u>

Other Miscellaneous Revenue Adjustment

(6) Adjusted Other Miscellaneous Revenue (d)	\$ 94,528
(7) Test Year Other Miscellaneous Revenue (c)	<u>74,669</u>
(8) Adjustment (6) - (7)	\$ <u>19,859</u>

Late Payment Adjustment

(9) Base Revenue (1)	\$ 14,165,090
(10) Annualized System Improvement Revenue (3)	424,953
(11) Adjusted Other Miscellaneous Revenue (6)	<u>94,528</u>
(12) Adjusted Revenue (9) + (10) + (11)	14,684,571
(13) Late Payment Rate (e)	<u>0.769889%</u>
(14) Late Payment Revenue (12) x (13)	113,055
(15) Test Year Late Payment Revenue (c)	<u>112,782</u>
(16) Adjustment (14) - (15)	\$ <u>273</u>
(17) Other Operating Revenue Adjustment (5) + (8) + (16)	\$ <u>169,646</u>

- (a) Applicant's Schedule E-4
- (b) Calculated from Case No. 08-1239-WW-SIC
- (c) Applicant's WPC-2.1a
- (d) Staff Workpaper WPC-3.3a
- (e) Staff Workpaper WPC-3.3b

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Labor Expense Adjustment

	<u>Lake Erie Division</u>	<u>Service Center</u>	<u>Total</u>
(1) Annualized Labor Expense (a)	\$ 1,701,159	\$ 1,133,335	
(2) Lake Erie Division Allocation (b)	<u>100%</u>	<u>34.61%</u>	
(3) Total Labor Annualized Expense (1) x (2)	1,701,159	392,247	
(4) O&M Allocation Percentage (b)	<u>86.60%</u>	<u>100.00%</u>	
(5) Total O&M Labor Expense (3) x (4)	1,473,204	392,247	1,865,451
(6) Test Year Expense (c)	<u>1,451,185</u>	<u>469,948</u>	<u>1,921,131</u>
(7) Labor Expense Adjustment (5) - (6)	\$ <u>22,019</u>	\$ <u>(77,699)</u>	\$ <u>(55,680)</u>

- (a) Derived From Staff's Data Request No. 26  
(b) Applicant's Schedule C-3.4  
(c) Applicant's Schedule WPC-2.1a and WPC-2.1b

SCHEDULE C-3.5

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Pension Expense Adjustment

	<u>Lake Erie Division</u>	<u>Service Center</u>	<u>Total</u>
(1) Total Lake Erie Division Pension Expense (a)	\$ 207,542	\$ 45,606	\$ 253,148
(2) O&M Expense Ratio (b)			<u>100.00%</u>
(3) O&M Pension Expense (1) x (2)		\$	253,148
(4) Test Year Pension Expense (c)			<u>484,357</u>
(5) Adjustment (3) - (4)		\$	<u>(231,209)</u>

- (a) Derived from Staff Report Case No. 07-564-WW-AIR (Schedule C-3.3)  
(b) Applicant's Schedule WPC-3.10  
(c) Applicant's Schedule WPC-2.1a and WPC.2.1b

SCHEDULE C-3.6

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Post Retirement Expense Adjustment

	<u>Lake Erie Division</u>	<u>Service Center</u>	<u>Total</u>
(1) Postretirement Expense (a)	\$ 83,000	\$ 83,000	
(2) Lake Erie Division / Service Center Allocation (a)	<u>30.93%</u>	<u>15.46%</u>	
(3) Lake Erie Division Postretirement Expense (1) x (2)	\$ 25,672	\$ 12,832	
(4) Lake Erie Division Allocation (a)	<u>94.00%</u>	<u>34.61%</u>	
(5) Total Lake Erie Division Postretirement Expense (3) x (4)	\$ 24,132	\$ 4,441	\$ 28,573
(6) O&M Expense Ratio (a)			<u>100.00%</u>
(7) O&M Postretirement Expense (5) x (6)			\$ 28,573
(8) Test Year Postretirement Expense (b)			<u>30,156</u>
(9) Adjustment (7) - (8)			\$ <u>(1,583)</u>

(a) Applicant's Schedule C-3.9

(b) Applicant's Schedule WPC-2.1a and WPC-2.1b

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Employee Insurance Expense Adjustment

	<u>Lake Erie Division</u>	<u>Service Center</u>	<u>Total</u>
(1) Hospitalization Expense net of Employee Contribution (a)	\$ 287,707	\$ 141,261	
(2) Lake Erie Division Allocation (b)	<u>94.00%</u>	<u>34.61%</u>	
(3) Lake Erie Division Hospitalization Expense (1) x (2)	\$ 270,445	\$ 48,890	\$ 319,335
(4) O&M Expense Ratio (b)			<u>100.00%</u>
(5) O&M Hospitalization Expense (3) x (4)		\$	319,335
(6) Test Year Hospitalization Expense (c)			<u>354,566</u>
(7) Adjustment (5) - (6)		\$	<u>(35,231)</u>

- (a) Derived from Staff's Data Request No. 26  
(b) Applicant's Schedule C-3.8  
(c) Applicant's Schedule WPC-2.1a and b

SCHEDULE C-3.8

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Operating Contract Expense Adjustment

(1) Lake Erie Division Transportation Expense (a)	\$ 137,215
(2) Operating Contract Percentage (a)	<u>94%</u>
(3) Lake Erie Division Transportation (1) x (2)	128,982
(4) Test Year Expense (b)	<u>170,133</u>
(5) Transportation Adjustment (3) - (4)	(41,151)
(6) Lake Erie Division Workers Compensation Expense (c)	64,255
(7) Operating Contract Percentage (a)	<u>94%</u>
(8) Total Operating Contract Expense (6) x (7)	60,400
(9) Test Year Operating Contract Expense (b)	<u>84,177</u>
(10) Workers Compensation Adjustment (8) - (9)	(23,777)
(11) Total Operating Contract Adjustment (5) + (10)	<u>\$ (64,928)</u>

- (a) Staff's Data Request No. 9
- (b) Applicant's Schedule WPC-2.1a
- (c) Staff's Data Request No. 6



SCHEDULE C-3.9

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Miscellaneous Water Treatment Expense Adjustment

(1) Adjusted Miscellaneous Treatment Expense (a)	\$ 259,852
(2) Test Year Miscellaneous Treatment Expense (b)	<u>343,692</u>
(3) Adjustment (1) - (2)	\$ <u>(83,840)</u>

- (a) Staff's Data Request Nos. 6 and 29 and Staff's Workpaper WPC-3.9  
(b) Applicant's Schedule WPC-2.1a

SCHEDULE C-3.10

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Uncollectible Expense Adjustment

(1) Adjusted Operating Revenue (a)	\$ 14,797,628
(2) Uncollectible Ratio (b)	<u>0.460100%</u>
(3) Adjusted Uncollectible Expense (1) x (2)	68,084
(4) Test Year Uncollectible Expense (c)	<u>72,090</u>
(5) Adjustment (3) - (4)	\$ <u>(4,006)</u>

- (a) Staff's Schedule C-2
- (b) Staff's Data Request No. 4 and Staff's Workpaper WPC-3.10 (\$126,946 / \$27,590,426)
- (c) Applicant's Schedule C-2.1a

SCHEDULE C-3.11

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Rate Case Expense Adjustment

(1) Estimated Rate Case Expense (a)	\$ 172,000
(2) Amortization Period for Rate Case Expense (a)	<u>3</u>
(3) Annual Amortization of Rate Case Expense (1) / (2)	57,333
(4) Test Year Rate Case Expense (b)	<u>41,793</u>
(5) Adjustment (3) - (4)	\$ <u>15,540</u>

- (a) Applicant's Schedule C-3.6  
(b) Applicant's C-2.1a

SCHEDULE C-3.12

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Tank Painting Expense Adjustment

(1) Adjusted Tank Painting Expense (a)	\$ 297,560
(2) Test Year Expense (b)	<u>255,692</u>
(3) Adjustment (1) - (2)	<u>\$ 41,868</u>

(a) Applicant's Schedule C-3.7  
(b) Applicant's Schedule C-2.1a , Account 872-2

SCHEDULE C-3.13

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Purchased Water Expense Adjustment

(1) Adjusted Purchased Water Expense (a)	\$ 277,744
(2) Test Year Expense (b)	<u>291,362</u>
(3) Adjustment (1) - (2)	\$ <u>(13,618)</u>

- (a) Applicant's Schedule C-3.13  
(b) Applicant's Schedule WPC-2.1a

SCHEDULE C-3.14

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Sludge Hauling Expense Adjustment

(1) Adjusted Sludge Hauling Expense (a)	\$	45,000
(2) Test Year Sludge Expense (b)		<u>117,000</u>
(3) Adjustment (1) - (2)	\$	<u>(72,000)</u>

- (a) Applicant's Schedule C-3.14  
(b) Applicant's Schedule WPC C-2.1a, Account 642-2

SCHEDULE C-3.15

Aqua Ohio, Inc.  
Case No. 07-0564-WW-AIR  
Natural Gas Expense Adjustment

(1) Natural Gas Expense (a)	\$ 52,070
(2) Test Year Natural Gas Expense (b)	<u>75,960</u>
(3) Adjustment (1) - (2)	\$ <u>(23,890)</u>

(a) Staff's Data Request No. 6  
(b) Applicant's Schedule WPC-2.1a

SCHEDULE C-3.16

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Lobbying Expense Adjustment

(1) Elimination of Aqua Ohio Dues to NAWC (a)	\$ (27,085)
(2) Lobbying Percentage (a)	<u>17%</u>
(3) Aqua Ohio Lobbying Amount (1) x (2)	(4,604)
(4) Lake Erie Division Allocation (b)	<u>34.61%</u>
(5) Adjustment (3) - (4)	\$ <u>(1,593)</u>

(a) Staff's Data Request No. 25

(b) Applicant's Schedule WPC-3.18a



SCHEDULE C-3.17

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Sundry Expense Adjustment

(1) Elimination of Sundry Expenses (a)	\$ <u>(4,003)</u>
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(a) Staff's Data Request No. 25 and Staff's Workpaper WPC-3.17

SCHEDULE C-3.18

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Cell Phone Expense Adjustment

(1) Elimination of Cell Phone Expenses (a) \$ (128)

(a) Staff's Data Request Nos. 30 and 35

SCHEDULE C-3.19

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Depreciation and Amortization Expense Adjustment

(1) Adjusted Depreciation Expense (a)	\$ 1,705,524
(2) Test Year Depreciation Expense (b)	<u>1,997,358</u>
(3) Adjustment (1) - (2)	\$ <u>(291,834)</u>

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

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Summary of Taxes Other Than Income Adjustmenst

	<u>Schedule Reference</u>	
(1) Property Taxes	C-3.20a	\$ 3,040,497
(2) Ohio Gross Receipts Tax	C-3.20b	699,160
(3) FICA Taxes	C-3.20c	156,472
(4) Federal Unemployment Taxes	C-3.20d	1,639
(5) State Unemployment Taxes	C-3.20e	2,371
(6) PUCO & OCC Assessments	C-3.20f	22,224
(7) EPA Licenses Fee	C-3.20g	<u>32,607</u>
(8) Total Taxes Other Than Income Taxes (1) Thru (7)		3,954,970
(9) Test Year Taxes Other Than Income Tax (a)		<u>3,802,462</u>
(10) Adjustment (8) - (9)		\$ <u>152,508</u>

(a) Applicant's Schedule C-2.1

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Calculation of Property Tax

(1) Jurisdictional Plant & Service at 3/31/09 (a)	\$ 90,227,394
(2) Material & Supplies (b)	285,228
(3) Less OWDA Property - Non Taxable (b)	<u>(7,164,558)</u>
(4) Total Property (1) Thru (3)	83,348,064
(5) Assessment Valuation Percentage (c)	<u>36.96%</u>
(6) Assessed Property @ 3/31/09 (4) x (5)	30,805,444
(7) Average Property Tax Rate - Per \$1,000 (c)	<u>98.70</u>
(8) Jurisdictional Property Tax (6) x (7)	<u>\$ 3,040,497</u>

- (a) Staff's Schedule B-2.1  
(b) Applicant's Schedule WPC-3.16a  
(c) Staff's Data Request No. 34 and Staff's Workpaper WPC-3.20a

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Calculation of Ohio Gross Receipts Taxes

	Adjusted Operating Income	Performa Operating Income
(1) Adjusted Operating Revenue (a)	\$ 14,797,626	\$ 17,608,759
(2) Less: Uncollectible Accounts Expense (1) x 0.460100% (b)	68,084	81,018
(3) Less: Sales to Governmental Facilities (1) x .011430% (c)	1,891	2,013
(4) Less: Statutory Exemption: \$25,000 x 34.75% (d)	<u>8,688</u>	<u>8,688</u>
(5) Net Taxable Revenue	14,719,164	17,517,041
(6) Tax Rate	<u>4.75%</u>	<u>4.75%</u>
(7) Ohio Gross Receipts Tax	<u>\$ 699,160</u>	<u>\$ 832,059</u>

(a) Staff's Schedule C-1

(b) Staff's Schedule C-3.10

(c) Derived from Staff's Data Request 36

(d) Derived from Staff's Data Request 36, (\$14,767,798 / \$42,485,877)

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Calculation of FICA Taxes

(1) Adjusted O&M Labor Expense (a)	\$ 2,093,407
(2) O&M Wages not Subject to OASDI Taxes (b)	<u>48,014</u>
(3) O&M Wages Subject to OASDI Taxes (1) - (2)	2,045,392
(4) OASDI Taxes (3) x .0620	126,814
(5) Health Insurance Taxes (1) x .0145	<u>29,658</u>
(6) FICA Taxes (4) + (5)	\$ <u>156,472</u>

	<u>Lake Erie</u>	<u>Corp</u>	<u>Total</u>
Annual Salary (c)	\$ 1,701,159	\$ 1,133,335	
Incentive Compensation	<u>0</u>	<u>0</u>	
Total	1,701,159	1,133,335	
Payroll Subject to Social Security (d)	<u>1,693,197</u>	<u>1,014,527</u>	
Payroll Not Subject to Social Security	7,962	118,808	
Lake Erie Division Allocation Percentage (a)	<u>100.00%</u>	<u>34.61%</u>	
Lake Erie Division Wages	7,962	41,119	
O&M Percentage (a)	<u>86.60%</u>	<u>100.00%</u>	
O&M Wages Not Subject to FICA	\$ <u>6,895</u>	\$ <u>41,119</u>	\$ <u>48,014</u>

- (a) Staff's Schedule C-3.4 (\$1,701,159 + \$392,247)  
(b) Applicant's Schedule WPC-3.18  
(c) Derived from Staff's Schedule C-3.4  
(d) Derived from Staff's Data Request No. 26

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Calculation of Federal Unemployment Taxes

	<u>Lake Erie Division</u>	<u>Service Center</u>	<u>Total</u>
(1) Number of Employees (a)	30	14	
(2) Taxable Wages (1) x \$7,000	\$ 210,000	\$ 98,000	
(3) Lake Erie Division Allocation (b)	<u>94.00%</u>	<u>34.61%</u>	
(4) Lake Erie Division Taxable Wages (2) x (3)	197,400	33,918	
(5) O&M Allocation Percentage (a)	<u>86.60%</u>	<u>100.00%</u>	
(6) O&M Taxable Wages (4) x (5)	\$ 170,948	\$ 33,918	\$ 204,866
(7) Tax Rate			<u>0.8%</u>
(8) Federal Unemployment Tax (6) x (7)			\$ <u>1,639</u>

- (a) Derived from Staff's Data Request No. 26  
(b) Applicant's Schedule WPC-3.18a



Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Calculation of State Unemployment Taxes

	<u>Lake Erie Division</u>	<u>Service Center</u>	<u>Total</u>
(1) Number of Employees (a)	30	14	
(2) Taxable Wages (1) x \$9,000	\$ 270,000	\$ 126,000	
(3) Lake Erie Division Allocation (b)	<u>94.00%</u>	<u>34.61%</u>	
(4) Lake Erie Division Taxable Wages (2) x (3)	\$ 253,800	\$ 43,609	
(5) O&M Allocation Percentage (a)	<u>86.60%</u>	<u>100.00%</u>	
(6) O&M Taxable Wages (4) x (5)	\$ 219,791	\$ 43,609	\$ 263,400
(7) Tax Rate			<u>0.9%</u>
(8) State Unemployment Tax (6) x (7)			\$ <u>2,371</u>

(a) Staff's Data Request No. 26

(b) Applicant's Schedule WPC-3.18b

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
PUCO & OCC Maintenance Assessment

(1) PUCO Maintenance Assessment (a)	\$ 52,520
(2) OCC Maintenance Assessment (a)	<u>13,504</u>
(3) Total (1) + (2)	66,024
(4) Lake Erie Division Allocation (b)	<u>33.66%</u>
(5) Lake Erie Division Assessment (3) x (4)	\$ <u>22,224</u>

(a) Latest Known Assessments  
(b) Staff's Data Request No. 13

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Calculation of EPA License to Operate Fee

(1) 2007 EPA License to Operate Fee (a)

\$ 32,607

(a) Staff's Data Request 17

SCHEDULE C-3.21

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Federal Income Tax Expense Adjustment

(1) Adjusted Federal Income Taxes (a)	\$ 515,570
(2) Test Year Income Taxes (b)	<u>303,508</u>
(3) Adjustment (1) - (2)	\$ <u>212,062</u>

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

Aqua Ohio, Inc.  
Case No. 09-1044-WW-AIR  
Calculation of Federal Income Taxes

	Adjusted Operating Income	Proforma Operating Income
(1) Operating Income Before FIT (a)	\$ 2,821,480	\$ 5,486,780
<u>Reconciling Items:</u>		
(2) Interest Charges (b)	(1,257,645)	(1,257,645)
(3) Book Depreciation (c)	1,705,524	1,705,524
(4) Tax Accelerated Depreciation (d)	3,083,483	3,083,483
(5) Excess of Tax Over Book Depreciation (3) - (4)	(1,377,959)	(1,377,959)
<u>Other Reconciling Items:</u>		
(6) Pension Expense (e)	253,148	253,148
(7) Tank Painting Expense (f)	297,560	297,560
(8) Total Other Reconciling Items (6) + (7)	550,708	550,708
(9) Total Reconciling Items (2)+(5)+(8)	(2,084,896)	(2,084,896)
(10) Federal Taxable Income (1) + (9)	736,584	3,401,884
<u>Federal Income Taxes:</u>		
(11) First \$17,305 x 15%	2,596	2,596
(12) Next \$8,653 x 25%	2,163	2,163
(13) Next \$8,653 x 34%	2,942	2,942
(14) Next \$81,334 x 39%	31,720	31,720
(15) Next \$3,345,057 x 34%	211,018	1,117,220
(16) Next \$1,730,500 x 35%		
(17) Next \$1,153,667 x 38%		
(18) Excess of Taxable Income Over \$6,345,167 x 35%		
(19) Federal Income Taxes - Line (11) Through (18)	250,439	1,156,641
<u>Deferred Income Taxes:</u>		
(20) Tax Accelerated Depreciation (d)	3,083,483	3,083,483
(21) Tax Straight Line Depreciation (d)	1,676,846	1,676,846
(22) Excess of Tax Accelerated over Tax S/L Deprec. (20) - (21)	1,406,637	1,406,637
(23) Deferred @ 34.00% (g)	478,257	478,257
(24) Investment Tax Credit Utilized		
<u>Other Deferred Taxes:</u>		
(25) Amortization of Prior Years ITC (h)	(20,378)	(20,378)
(26) Other Reconciling Items (8) X 35%	(192,748)	(192,748)
(27) Total Other Deferred Taxes (25) + (26)	(213,126)	(213,126)
(28) Total Deferred Taxes (23) + (24) + (27)	265,131	265,131
(29) Total Federal Income Taxes (19) + (28)	\$ 515,570	\$ 1,421,772
(a) Staff's Schedule C-1		
(b) Staff's Schedule B-1, \$41,421,359 x 0.0304, Weighted Cost of Debt		
(c) Staff's Schedule B-3.2		
(d) Applicant's C-4		
(e) Staff's Schedule C-3.5		
(f) Staff's Schedule C-3.12		
(g) Line 19/ Line 10		

**Rate of Return Summary**  
**Aqua Ohio, Inc.**  
**Capital Structure as of June 30, 2009**

	Amount \$	% of Total	% Cost	Weighted Cost %
Long Term Debt	\$49,914,801	48.57%	6.27%	3.04%
Preferred Stock	\$0	0.00%	0.00%	0.00%
Common Equity	<u>\$52,844,976</u>	<u>51.43%</u>	8.89% - 9.90%	<u>4.57% - 5.09%</u>
Total Capital	\$102,759,777	100.00%		7.62% - 8.14%

Equity Issuance Cost Adjustment  
Aqua Ohio, Inc.  
June 30, 2009

(1) Retained Earnings <sup>1</sup>	\$38,407,637
(2) Total Common Equity <sup>2</sup>	\$52,844,976
(3) Ratio of (1) to (2)	0.72680
(4) Generic Issuance Cost, f	3.50%
(5) External Equity Ratio, w [1.0 - (3)]	0.27320
(6) Net Adjustment Factor, $(w/(1 - f)) + (1 - w)$	1.00991
(7) Low End Equity Cost [8.80% x (6)]	8.89%
(8) High End Equity Cost [9.80% x (6)]	9.90%

Sources:

1 Applicant's Workpaper WPD-1a

2 Applicant's Schedule D-1

Aqua Ohio, Inc.  
Cost of Long Term Debt  
June 30, 2009

	Interest Rate	Date Issued	Date Maturity	Face Amount Outstanding	Unamortized (Discount) or Premium	Unamortized Debt Expense	Unamortized Gain or (Loss)	Years To Maturity	Carrying Value	Interest Cost
Bonds:	9.50%	4/1/1988	4/1/2013	\$4,055,000	\$0	\$6,828	\$0	3.753	\$4,048,172	\$387,044
	9.80%	7/15/1990	7/15/2020	5,300,000	0	29,322	0	11.042	5,270,678	522,056
	5.00%	9/1/2001	9/1/2031	11,975,000	0	519,980	0	22.169	11,455,010	622,205
	5.00%	12/1/2002	12/1/2032	5,530,000	0	592,327	0	23.419	4,937,673	301,792
	4.90%	12/1/2002	12/1/2032	5,330,000	0	718,087	0	23.419	4,611,913	291,832
	4.50%	9/1/2005	9/1/2035	21,045,000	0	1,453,645	0	26.169	19,591,355	1,002,572
				53,235,000	0	3,320,199	0		49,914,801	3,127,502
										<u>6.27%</u>

Source: Applicant's Schedule D-3



CAPM Cost of Equity Estimate

<u>Date</u>	<u>Close 10Yr Yld</u> <u>(%)</u>	<u>Close 30Yr</u> <u>Yld (%)</u>
1-Apr-09	2.6600	3.4900
2-Apr-09	2.7500	3.5800
3-Apr-09	2.9100	3.7200
6-Apr-09	2.9400	3.7600
7-Apr-09	2.9100	3.7300
8-Apr-09	2.8500	3.6600
9-Apr-09	2.9300	3.7600
13-Apr-09	2.8500	3.6900
14-Apr-09	2.7900	3.6600
15-Apr-09	2.7600	3.6500
16-Apr-09	2.8300	3.7100
17-Apr-09	2.9300	3.7900
20-Apr-09	2.8400	3.6900
21-Apr-09	2.9000	3.7500
22-Apr-09	2.9600	3.8300
23-Apr-09	2.9300	3.8000
24-Apr-09	3.0000	3.8800
27-Apr-09	2.9200	3.8400
28-Apr-09	3.0000	3.9500
29-Apr-09	3.1000	4.0300
30-Apr-09	3.1200	4.0400
1-May-09	3.1700	4.0900
4-May-09	3.1600	4.0700
5-May-09	3.1600	4.0500
6-May-09	3.1500	4.0800
7-May-09	3.3000	4.2600
8-May-09	3.2900	4.2700
11-May-09	3.1800	4.1800
12-May-09	3.1700	4.1600
13-May-09	3.1100	4.0900
14-May-09	3.1100	4.0700
15-May-09	3.1200	4.0800
18-May-09	3.2100	4.1800
19-May-09	3.2400	4.2100
20-May-09	3.2000	4.1600

### CAPM Cost of Equity Estimate

<u>Date</u>	<u>Close 10Yr Yld (%)</u>	<u>Close 30Yr Yld (%)</u>
21-May-09	3.3500	4.3100
22-May-09	3.4500	4.3900
26-May-09	3.4900	4.4500
27-May-09	3.6900	4.6100
28-May-09	3.6700	4.5300
29-May-09	3.4600	4.3400
1-Jun-09	3.7100	4.5700
2-Jun-09	3.6400	4.4900
3-Jun-09	3.5500	4.4500
4-Jun-09	3.7200	4.5900
5-Jun-09	3.8600	4.6600
8-Jun-09	3.8900	4.6400
9-Jun-09	3.8600	4.6500
10-Jun-09	3.9400	4.7500
11-Jun-09	3.8600	4.6900
12-Jun-09	3.7900	4.6300
15-Jun-09	3.7100	4.5500
16-Jun-09	3.6700	4.5000
17-Jun-09	3.6500	4.4700
18-Jun-09	3.8300	4.6200
19-Jun-09	3.7900	4.5200
22-Jun-09	3.6900	4.4300
23-Jun-09	3.6400	4.3700
24-Jun-09	3.6800	4.4300
25-Jun-09	3.5500	4.3300
26-Jun-09	3.5100	4.3000
29-Jun-09	3.4900	4.3100
30-Jun-09	3.5200	4.3100
1-Jul-09	3.5400	4.3500
2-Jul-09	3.4900	4.3200
6-Jul-09	3.5100	4.3500
7-Jul-09	3.4600	4.3100
8-Jul-09	3.2900	4.1600
9-Jul-09	3.4100	4.3200
10-Jul-09	3.3000	4.2000
13-Jul-09	3.3500	4.2300
14-Jul-09	3.4500	4.3500

**CAPM Cost of Equity Estimate**

<u>Date</u>	<u>Close 10Yr Yld (%)</u>	<u>Close 30Yr Yld (%)</u>
15-Jul-09	3.6000	4.4900
16-Jul-09	3.5600	4.4500
17-Jul-09	3.6500	4.5300
20-Jul-09	3.5900	4.4700
21-Jul-09	3.4800	4.3700
22-Jul-09	3.5500	4.4700
23-Jul-09	3.7100	4.6000
24-Jul-09	3.6700	4.5500
27-Jul-09	3.7100	4.6100
28-Jul-09	3.6900	4.5600
30-Jul-09	3.6400	4.4500
31-Jul-09	3.5000	4.3100
3-Aug-09	3.6400	4.4200
4-Aug-09	3.6800	4.4600
5-Aug-09	3.7600	4.5600
6-Aug-09	3.7500	4.5200
7-Aug-09	3.8500	4.6000
10-Aug-09	3.7700	4.5300
11-Aug-09	3.6900	4.4500
12-Aug-09	3.7000	4.5200
13-Aug-09	3.5900	4.4200
14-Aug-09	3.5600	4.4100
17-Aug-09	3.4900	4.3500
18-Aug-09	3.5300	4.3600
19-Aug-09	3.4600	4.2900
20-Aug-09	3.4300	4.2400
21-Aug-09	3.5600	4.3600
24-Aug-09	3.4900	4.2900
25-Aug-09	3.4500	4.2300
26-Aug-09	3.4400	4.2000
27-Aug-09	3.4600	4.2300
28-Aug-09	3.4500	4.2100
31-Aug-09	3.4000	4.1800
1-Sep-09	3.3800	4.2000
2-Sep-09	3.3000	4.1000
3-Sep-09	3.3300	4.1500

**CAPM Cost of Equity Estimate**

<u>Date</u>	<u>Close 10Yr Yld (%)</u>	<u>Close 30Yr Yld (%)</u>
4-Sep-09	3.4400	4.2700
8-Sep-09	3.4700	4.3100
9-Sep-09	3.4800	4.3400
10-Sep-09	3.3400	4.1800
11-Sep-09	3.3400	4.1800
14-Sep-09	3.4100	4.2200
15-Sep-09	3.4500	4.2600
16-Sep-09	3.4700	4.2700
17-Sep-09	3.4000	4.1800
18-Sep-09	3.4700	4.2300
21-Sep-09	3.4900	4.2400
22-Sep-09	3.4600	4.2100
23-Sep-09	3.4200	4.2000
24-Sep-09	3.3800	4.1700
25-Sep-09	3.3300	4.0900
28-Sep-09	3.3000	4.0500
29-Sep-09	3.2900	4.0200
30-Sep-09	3.3100	4.0500
1-Oct-09	3.1900	3.9600
2-Oct-09	3.2200	4.0100
5-Oct-09	3.2200	4.0200
6-Oct-09	3.2500	4.0600
7-Oct-09	3.1700	3.9900
8-Oct-09	3.2600	4.0900
9-Oct-09	3.3800	4.2300
12-Oct-09	3.3800	4.2300
13-Oct-09	3.3100	4.1500
14-Oct-09	3.4200	4.2800
15-Oct-09	3.4700	4.3100
16-Oct-09	3.4200	4.2500
19-Oct-09	3.3900	4.2200
20-Oct-09	3.3400	4.1600
21-Oct-09	3.4100	4.2300
22-Oct-09	3.4200	4.2500
23-Oct-09	3.4700	4.2900
26-Oct-09	3.5500	4.3700

**CAPM Cost of Equity Estimate**

<u>Date</u>	<u>Close 10Yr Yld (%)</u>	<u>Close 30Yr Yld (%)</u>
27-Oct-09	3.4600	4.2900
28-Oct-09	3.4100	4.2400
29-Oct-09	3.5000	4.3400
30-Oct-09	3.3900	4.2400
2-Nov-09	3.4200	4.2700
3-Nov-09	3.4700	4.3400
4-Nov-09	3.5500	4.4300
5-Nov-09	3.5300	4.4100
6-Nov-09	3.5000	4.3900
9-Nov-09	3.4900	4.4000
10-Nov-09	3.4800	4.4100
11-Nov-09	3.4700	4.4100
12-Nov-09	3.4500	4.3900
13-Nov-09	3.4300	4.3600
16-Nov-09	3.3300	4.2600
17-Nov-09	3.3200	4.2500
18-Nov-09	3.3700	4.3000
19-Nov-09	3.3500	4.2900
20-Nov-09	3.3600	4.3000
23-Nov-09	3.3600	4.2900
24-Nov-09	3.3200	4.2600
25-Nov-09	3.2800	4.2400
27-Nov-09	3.2300	4.2200
30-Nov-09	3.2000	4.1900
1-Dec-09	3.2800	4.2800
2-Dec-09	3.3200	4.2700
3-Dec-09	3.3800	4.3300
4-Dec-09	3.4800	4.4100
7-Dec-09	3.4500	4.4100
8-Dec-09	3.3900	4.3800
9-Dec-09	3.4200	4.4100
10-Dec-09	3.4800	4.4900
11-Dec-09	3.5400	4.5000
14-Dec-09	3.5500	4.4700
15-Dec-09	3.6000	4.5300
16-Dec-09	3.6000	4.5300

CAPM Cost of Equity Estimate

<u>Date</u>	<u>Close 10Yr Yld (%)</u>	<u>Close 30Yr Yld (%)</u>
17-Dec-09	3.4900	4.4200
18-Dec-09	3.5500	4.4600
21-Dec-09	3.6800	4.5700
22-Dec-09	3.7400	4.6100
23-Dec-09	3.7500	4.6000
24-Dec-09	3.8100	4.6900
28-Dec-09	3.8400	4.7000
29-Dec-09	3.8100	4.6500
30-Dec-09	3.7800	4.6000
31-Dec-09	3.8400	4.6400
4-Jan-10	3.8400	4.6600
5-Jan-10	3.7600	4.5900
6-Jan-10	3.8100	4.6700
7-Jan-10	3.8200	4.6900
8-Jan-10	3.8100	4.7000
11-Jan-10	3.8200	4.7300
12-Jan-10	3.7200	4.6200
13-Jan-10	3.7800	4.7100
14-Jan-10	3.7300	4.6200
15-Jan-10	3.6800	4.5700
19-Jan-10	3.7100	4.6000
20-Jan-10	3.6600	4.5400
21-Jan-10	3.6100	4.5100
22-Jan-10	3.6000	4.5100
25-Jan-10	3.6300	4.5500
26-Jan-10	3.6300	4.5700
27-Jan-10	3.6400	4.5500
28-Jan-10	3.6600	4.5700
29-Jan-10	3.6100	4.5100
1-Feb-10	3.6500	4.5700
2-Feb-10	3.6300	4.5500
3-Feb-10	3.7000	4.6300
4-Feb-10	3.6100	4.5500
5-Feb-10	3.5500	4.4900
8-Feb-10	3.5900	4.5200
9-Feb-10	3.6300	4.5700

**CAPM Cost of Equity Estimate**

<u>Date</u>	<u>Close 10Yr Yld (%)</u>	<u>Close 30Yr Yld (%)</u>
10-Feb-10	3.6900	4.6400
11-Feb-10	3.7300	4.6800
12-Feb-10	3.6900	4.6600
16-Feb-10	3.6600	4.6400
17-Feb-10	3.7400	4.7100
18-Feb-10	3.8000	4.7500
19-Feb-10	3.7800	4.7000
22-Feb-10	3.8000	4.7300
23-Feb-10	3.6900	4.6300
24-Feb-10	3.6900	4.6300
25-Feb-10	3.6400	4.5800
26-Feb-10	3.6000	4.5300
1-Mar-10	3.6100	4.5600
2-Mar-10	3.6100	4.5700
3-Mar-10	3.6200	4.5900
4-Mar-10	3.6100	4.5600
5-Mar-10	3.6800	4.6400
8-Mar-10	3.7100	4.6700
9-Mar-10	3.7000	4.6800
10-Mar-10	3.7200	4.6900
11-Mar-10	3.7200	4.6600
12-Mar-10	3.7100	4.6300
15-Mar-10	3.7000	4.6400
16-Mar-10	3.6500	4.5900
17-Mar-10	3.6400	4.5700
18-Mar-10	3.6700	4.5900
19-Mar-10	3.6900	4.5800
22-Mar-10	3.6600	4.5700
23-Mar-10	3.6800	4.6000
24-Mar-10	3.8300	4.7200
25-Mar-10	3.9000	4.7800
26-Mar-10	3.8600	4.7500
29-Mar-10	3.8600	4.7600
30-Mar-10	3.8700	4.7600
31-Mar-10	3.8300	4.7200

	<u>Close 10Yr</u> <u>Yld (%)</u>	<u>Close 30Yr</u> <u>Yld (%)</u>
Averages:		
Last 64days	3.7086	4.6250
Last 127 days	3.5688	4.4705
Last 190 days	3.5494	4.4247
Last 252 days	3.4880	4.3620

Annual Weighted Avg	3.5787	4.4705
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Avg of 10 & 30 Year Yields	4.0246
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CAPM Cost of Equity Estimate	8.1313
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$$\begin{aligned}\text{CAPM} &= \text{risk free return} + \beta(\text{large company total return} - \text{risk free return}) \\ &= 4.0246\% + .7333(5.6\%) \end{aligned}$$

Source: Yahoo.com



Stock Prices<sup>1</sup>(\$):

	AWK	AWR	CWT	WTR
04/01/09	18.2700	35.3600	40.8700	19.9100
04/02/09	18.1800	35.8100	40.4300	19.5300
04/03/09	18.3400	35.5800	40.2900	19.4700
04/06/09	18.2400	35.1400	40.2200	19.5400
04/07/09	18.1700	35.1200	39.2500	19.1200
04/08/09	18.4000	34.9900	39.0500	19.1400
04/09/09	18.2400	35.0600	38.4100	19.0400
04/13/09	17.6900	34.3900	37.4000	19.0400
04/14/09	17.6000	33.6200	36.3500	18.9300
04/15/09	17.8000	34.1600	36.9000	19.0300
04/16/09	18.6300	34.5900	37.2200	19.2300
04/17/09	18.7900	34.6400	37.2900	19.3700
04/20/09	18.4900	33.4000	36.4600	18.8800
04/21/09	18.4700	34.6100	38.0700	18.9100
04/22/09	18.1000	33.7900	37.2900	18.5400
04/23/09	18.0700	34.2000	37.4800	18.3100
04/24/09	18.0000	34.4900	37.8100	18.2900
04/27/09	18.4100	34.6900	38.7400	18.4100
04/28/09	18.2200	34.8600	39.3400	18.6400
04/29/09	18.4200	35.3800	39.9100	18.9000
04/30/09	18.0000	34.5300	39.0300	18.3500
05/01/09	17.5900	33.9000	38.2500	18.1500
05/04/09	17.6100	33.7800	37.5700	18.1000
05/05/09	17.6600	33.3400	37.5800	17.6700
05/06/09	18.1600	33.7600	36.8000	18.2400
05/07/09	18.3400	33.7000	37.0900	18.4300
05/08/09	18.5500	33.8800	37.3600	18.3600
05/11/09	18.4900	33.9600	37.2400	18.1400
05/12/09	18.1000	33.4700	36.8700	18.2100
05/13/09	17.9100	32.0500	35.8600	17.4500
05/14/09	17.6700	31.2100	35.5400	16.7800
05/15/09	17.1200	31.6100	34.9400	16.4600
05/18/09	17.2000	31.7300	35.0500	16.3800
05/19/09	17.2800	32.1100	35.0000	16.6800
05/20/09	17.2600	31.1600	34.4100	16.3000
05/21/09	17.1300	31.5100	34.0800	16.3600
05/22/09	17.0700	31.3200	33.5400	16.3700
05/26/09	17.4900	32.0600	35.1600	17.0000
05/27/09	16.9500	31.0900	34.4900	16.4500
05/28/09	17.2300	31.5500	34.4400	16.6500
05/29/09	17.2800	31.3500	34.8200	16.4900
06/01/09	16.8000	31.6900	35.2600	16.7100
06/02/09	17.0600	31.9300	35.8500	16.5600
06/03/09	17.2300	31.8100	35.2900	16.4800
06/04/09	17.4900	32.5000	35.9100	16.5100
06/05/09	17.4300	33.9500	36.2700	16.4700
06/08/09	17.7600	34.0100	36.1500	16.6000
06/09/09	18.0000	33.2900	35.8000	16.5800

Stock Prices<sup>1</sup>(\$):

	AWK	AWR	CWT	WTR
06/10/09	18.3100	33.0400	35.5800	16.5900
06/11/09	18.6200	33.3000	36.0000	16.8400
06/12/09	18.6800	33.8100	36.3900	17.1600
06/15/09	18.4800	33.1200	35.6300	16.9600
06/16/09	18.3300	32.5900	35.3600	16.7900
06/17/09	18.3600	33.1500	35.4600	16.8600
06/18/09	18.5500	33.4300	35.9000	16.8300
06/19/09	18.5800	32.6400	35.2900	16.6900
06/22/09	18.6000	32.3500	35.7300	16.7600
06/23/09	18.6300	32.2100	35.5500	16.5700
06/24/09	18.5500	32.2000	35.3600	16.6200
06/25/09	18.7900	32.5000	35.4800	16.8900
06/26/09	19.0700	33.4200	36.3400	17.0300
06/29/09	19.2600	34.4300	36.8300	17.6900
06/30/09	19.1100	34.6400	36.8400	17.9000
07/01/09	19.1100	35.3500	37.6200	17.8000
07/02/09	18.7800	33.5900	36.5000	17.4700
07/06/09	18.6200	34.6900	36.7700	17.4500
07/07/09	18.3600	34.4400	36.4300	17.2300
07/08/09	18.3900	35.1500	36.1700	17.0700
07/09/09	18.2800	34.4800	35.5200	16.8000
07/10/09	18.4000	34.7600	35.9300	17.0300
07/13/09	18.6900	35.4900	36.5000	17.4300
07/14/09	18.9300	35.9300	36.2700	17.4700
07/15/09	18.4500	36.6300	36.9400	17.4800
07/16/09	18.5900	37.0700	37.4300	17.4700
07/17/09	18.7100	36.7300	36.7200	17.2500
07/20/09	18.8600	36.1400	36.3500	17.2400
07/21/09	18.8300	36.1600	36.1900	17.4100
07/22/09	18.8500	36.3800	36.3700	17.5200
07/23/09	19.2600	36.2400	36.7800	17.8200
07/24/09	19.3600	36.5300	37.6500	18.0400
07/27/09	19.5500	36.4800	37.2800	17.9600
07/28/09	19.8300	36.4400	37.9800	18.1600
07/29/09	19.7500	36.0900	37.5000	18.1200
07/30/09	19.5700	36.6600	38.1000	18.1300
07/31/09	19.7100	36.3500	37.8700	18.0600
08/03/09	19.9400	36.5700	38.4500	17.8200
08/04/09	19.9900	36.8400	37.9900	18.1200
08/05/09	20.0000	35.8900	37.2000	17.9500
08/06/09	19.8000	34.7400	36.3900	17.7800
08/07/09	20.1300	33.4100	36.9700	17.5500

Stock Prices'(\$):

	AWK	AWR	CWT	WTR
08/10/09	20.3800	34.3800	37.8200	17.7300
08/11/09	20.2200	34.9700	38.1100	17.7300
08/12/09	19.5300	34.7100	39.0200	17.2200
08/13/09	19.3400	34.4600	37.9100	16.9200
08/14/09	19.1400	33.9700	37.6800	16.7800
08/17/09	19.2500	33.6900	37.5400	16.7900
08/18/09	19.3900	33.3300	37.5400	16.8600
08/19/09	19.8600	33.4800	38.0900	17.1300
08/20/09	20.0700	33.4700	38.1400	17.4200
08/21/09	20.0900	33.9500	38.3500	17.4700
08/24/09	19.9800	33.7600	38.0900	17.4300
08/25/09	20.2400	33.7100	37.8200	17.3700
08/26/09	20.4700	33.8500	37.9000	17.2800
08/27/09	20.3600	33.7600	37.8900	17.3100
08/28/09	20.2100	33.4100	37.6600	17.2100
08/31/09	20.1000	33.0200	37.2200	16.8500
09/01/09	19.9600	32.7900	36.9400	16.7000
09/02/09	19.8900	32.8200	36.6600	16.7300
09/03/09	19.7800	32.8900	36.5600	16.6900
09/04/09	19.8100	32.4500	36.2300	16.7600
09/08/09	19.9900	35.2300	36.7500	16.8500
09/09/09	19.9000	36.0200	37.1900	16.9100
09/10/09	19.9400	36.0500	37.2100	16.8400
09/11/09	19.8200	35.6600	36.5100	16.8000
09/14/09	19.9000	36.1500	37.0300	16.8600
09/15/09	20.1700	36.3500	38.0400	17.0000
09/16/09	20.4300	36.4800	38.3800	17.3200
09/17/09	20.4800	36.3800	38.6800	17.2500
09/18/09	20.2500	36.1800	38.9500	17.3100
09/21/09	20.2100	35.8400	38.4300	17.2400
09/22/09	20.0700	35.4100	38.4000	17.0400
09/23/09	20.1000	35.3600	38.4300	16.9500
09/24/09	19.8300	35.4400	38.4200	16.9400
09/25/09	19.7400	35.2000	38.1300	16.8000
09/28/09	20.1700	36.1300	39.1800	17.2100
09/29/09	20.1900	36.1700	39.2100	17.2000
09/30/09	19.9400	36.1800	38.9400	17.6400
10/01/09	19.7700	35.5600	38.6600	17.1100
10/02/09	19.5300	35.3200	38.6100	16.7700
10/05/09	19.4500	35.8300	38.7600	16.8900
10/06/09	19.5000	36.0600	38.6100	16.8500

Stock Prices¹(\$):

	AWK	AWR	CWT	WTR
10/07/09	19.5800	36.5100	38.7900	16.8600
10/08/09	19.6800	36.6500	39.1300	16.7000
10/09/09	19.7900	36.8000	39.5500	16.6100
10/12/09	20.1000	36.3900	39.4400	16.6300
10/13/09	20.0500	36.0400	39.5200	16.6500
10/14/09	19.8200	36.2900	39.5500	16.8100
10/15/09	19.7600	36.2600	39.6300	16.5900
10/16/09	19.9500	36.0800	39.5600	16.6500
10/19/09	19.9100	35.9300	40.1100	16.7000
10/20/09	19.8700	35.1500	40.0400	16.2500
10/21/09	19.7800	35.0300	39.8700	16.0800
10/22/09	19.9000	35.2600	39.7400	16.0800
10/23/09	19.4900	34.6600	38.8900	15.8900
10/26/09	19.2800	34.5300	38.4700	15.8700
10/27/09	19.0600	34.7500	38.5400	15.8600
10/28/09	19.0500	34.5800	38.1700	15.6400
10/29/09	19.2100	33.9100	37.7700	15.6400
10/30/09	18.9700	33.1500	36.5700	15.4500
11/02/09	19.0400	32.9500	36.5300	15.6800
11/03/09	19.3300	33.4200	36.5900	15.7400
11/04/09	19.2800	32.8400	35.7500	15.7100
11/05/09	19.5900	34.4600	36.6200	16.2400
11/06/09	19.5600	34.7100	36.3200	16.1600
11/09/09	20.5000	34.4100	36.2700	16.1700
11/10/09	20.1400	33.6200	35.5300	15.8300
11/11/09	19.9100	33.6500	35.7900	16.1300
11/12/09	20.2700	32.5900	35.1800	15.7300
11/13/09	20.2900	32.3300	35.2800	15.8400
11/16/09	20.4200	33.1700	36.2200	16.1000
11/17/09	21.6300	33.7600	36.6600	16.2400
11/18/09	21.4300	33.3000	36.4300	16.4100
11/19/09	21.4700	32.1300	35.8400	15.9800
11/20/09	21.2900	31.9400	35.7800	15.8800
11/23/09	21.2900	32.8400	36.5000	16.2100
11/24/09	21.8400	33.0400	36.9500	16.2300
11/25/09	22.0100	32.7900	36.7700	16.3500
11/27/09	22.0100	32.1200	36.2600	16.0900
11/30/09	22.2400	33.0800	36.5800	16.3200
12/01/09	22.2800	33.5500	36.5700	16.7600
12/02/09	22.0800	33.7700	37.1900	16.8500
12/03/09	21.8000	33.4600	36.9600	16.8600

Stock Prices¹(\$):

	AWK	AWR	CWT	WTR
12/04/09	21.8000	34.4100	37.6700	16.8100
12/07/09	21.7600	35.9600	37.9700	16.9200
12/08/09	21.6000	34.8900	37.7300	16.9800
12/09/09	21.7400	34.9700	37.3800	16.8600
12/10/09	21.7600	34.7900	37.3500	16.8100
12/11/09	22.0700	34.8700	37.6000	17.0200
12/14/09	22.0900	35.2200	37.7900	17.1000
12/15/09	22.0600	34.9900	37.5800	17.3700
12/16/09	22.3200	34.9700	37.6200	17.4400
12/17/09	22.5400	34.4500	37.1700	17.2800
12/18/09	22.4100	34.5100	36.6600	17.2900
12/21/09	22.6800	34.9900	36.7900	17.6300
12/22/09	22.2100	35.1000	36.8300	17.6900
12/23/09	22.2500	35.4600	37.0500	17.6300
12/24/09	22.4000	35.7100	37.0700	17.6900
12/28/09	22.3400	35.6600	37.1500	17.6500
12/29/09	22.4700	36.5000	37.4400	17.7400
12/30/09	22.5500	36.2700	37.1800	17.7500
12/31/09	22.4100	35.4100	36.8200	17.5100
01/04/10	22.6500	36.2200	36.9800	17.4800
01/05/10	22.8800	35.4000	35.9000	17.5300
01/06/10	23.0000	35.1900	35.6200	17.5600
01/07/10	23.0500	34.9800	35.8500	17.5900
01/08/10	23.0000	34.8300	36.4700	17.6700
01/11/10	23.2300	34.7000	36.8100	17.5900
01/12/10	23.1200	34.7500	36.8300	17.5700
01/13/10	23.2200	34.7900	37.0400	17.7400
01/14/10	22.9800	35.0300	37.8000	17.7800
01/15/10	22.6000	34.4900	37.7000	17.5900
01/19/10	22.5000	34.5200	37.8700	17.5800
01/20/10	22.4500	34.1500	37.2800	17.3700
01/21/10	22.1100	33.6800	36.6800	17.3600
01/22/10	22.0600	33.5200	36.4700	17.1400
01/25/10	22.1500	33.6300	36.6900	17.1300
01/26/10	22.0200	33.2300	36.1900	16.9200
01/27/10	22.0200	33.5500	36.2400	16.8400
01/28/10	21.6600	33.2900	35.9900	16.6400
01/29/10	21.8000	33.2200	36.3200	16.5900
02/01/10	22.1400	33.3600	36.3300	16.7800

Stock Prices<sup>1</sup>(\$):

	AWK	AWR	CWT	WTR
02/02/10	22.1000	33.3700	36.2200	17.2000
02/03/10	22.3600	33.1300	36.5200	17.1700
02/04/10	21.7500	32.5500	36.0500	16.8800
02/05/10	21.6800	32.7400	36.0300	16.9200
02/08/10	21.6100	32.0800	35.6000	16.7300
02/09/10	21.4000	32.1500	35.4700	16.7500
02/10/10	21.5700	31.7600	35.5900	16.8000
02/11/10	21.8200	31.8900	35.8600	16.6900
02/12/10	22.1600	32.0500	35.9200	16.5900
02/16/10	22.1200	32.4900	36.4100	16.8500
02/17/10	22.2100	32.5900	36.5500	17.0500
02/18/10	22.5100	32.9300	36.9900	17.3400
02/19/10	22.8800	33.3200	37.4100	17.3800
02/22/10	22.6900	33.3200	37.2700	17.3000
02/23/10	22.4500	33.4100	37.2700	17.2700
02/24/10	22.2600	33.5000	37.2400	17.2700
02/25/10	22.3100	33.3300	36.7600	17.4900
02/26/10	22.2600	32.1600	35.8800	17.1200
03/01/10	21.0800	32.4400	35.6000	16.6600
03/02/10	20.7500	32.7000	35.4800	16.6200
03/03/10	20.9200	33.5200	36.5500	16.8300
03/04/10	21.2500	34.0900	36.5200	16.7100
03/05/10	21.4100	34.6200	36.9000	16.7500
03/08/10	21.3500	34.3300	36.6100	16.7600
03/09/10	21.2200	33.9100	36.6700	16.7300
03/10/10	21.0700	33.8000	36.5600	16.7500
03/11/10	21.0200	33.7400	36.7100	16.8400
03/12/10	20.9600	32.5000	36.5500	16.8800
03/15/10	21.1000	32.5400	36.7600	16.9200
03/16/10	21.0700	33.0500	36.8200	17.0600
03/17/10	21.2700	34.1400	37.1800	17.3400
03/18/10	21.4000	34.3400	37.2300	17.5800
03/19/10	21.2500	34.1700	37.0700	17.5300
03/22/10	21.1100	34.0700	37.0000	17.4800
03/23/10	21.6100	34.5300	37.1100	17.4600
03/24/10	21.7000	34.1100	36.7100	17.3400
03/25/10	21.5100	34.0700	36.4000	17.2100
03/26/10	21.2500	34.0700	36.8100	17.2000
03/29/10	21.4300	34.4900	37.5400	17.4200
03/30/10	21.3700	35.0600	37.7100	17.6300
03/31/10	21.7600	34.7000	37.6100	17.5700

AVERAGE (\$)	20.0895	34.2039	37.0892	17.1797
QUARTERLY DIV. <sup>2</sup> (\$)	0.2000	0.2500	0.2950	0.1350
	0.2100	0.2500	0.2950	0.1350
	0.2100	0.2600	0.2950	0.1350
	0.2100	0.2600	0.2950	0.1450
ANNUAL DIVIDEND (\$)	0.8300	1.0200	1.1800	0.5500
YIELD	4.13%	2.98%	3.18%	3.20%
REUTERS <sup>3</sup>	10.29%	4.00%	6.00%	8.60%
MSN <sup>4</sup>	8.40%	4.00%	6.70%	7.70%
YAHOO <sup>5</sup>	9.93%	4.00%	6.00%	8.33%
VALUE LINE <sup>6</sup> :	9.83%	4.00%	6.23%	8.21%
'09 EARNINGS (\$)	1.28	1.85	1.99	0.80
'13 EARNINGS (\$)	1.60	2.60	2.60	1.25
	5.58%	8.51%	6.68%	11.16%
VALUE LINE, "BOXED"	NA	9.50%	8.50%	10.00%
VALUE LINE	5.58%	9.00%	7.59%	10.58%
DCF GROWTH ESTIMATE	8.55%	5.25%	6.57%	8.80%
DCF COST OF EQUITY ESTIMATE	11.98%	9.40%	10.05%	10.94%
DCF AVERAGE				10.48%
CAPM COST OF EQUITY ESTIMATE				8.13%
COST OF EQUITY ESTIMATE				9.30%

Sources:

- 1 MSN Investor
- 2 MSN Investor & Value Line Investment Guide
- 3 investor.reuters.com
- 4 moneycentral.msn.com
- 5 finance.yahoo.com
- 6 Value Line Investment Guide

AWK Non-Constant DCF Calculation

		non const			const
g=	8.21%	dcf=	11.81%	dcf=	12.68%
D=	\$0.83			g(e)=	6.70%
		P=	-\$20.09		

GROWTH		
<u>YEAR</u>	<u>RATE</u>	<u>DIVIDEND</u>
1	8.21%	\$0.90
2	8.21%	\$0.97
3	8.21%	\$1.05
4	8.21%	\$1.14
5	8.21%	\$1.23
6	8.13%	\$1.33
7	8.06%	\$1.44
8	7.98%	\$1.55
9	7.91%	\$1.68
10	7.83%	\$1.81
11	7.76%	\$1.95
12	7.68%	\$2.10
13	7.61%	\$2.26
14	7.53%	\$2.43
15	7.45%	\$2.61
16	7.38%	\$2.80
17	7.30%	\$3.01
18	7.23%	\$3.22
19	7.15%	\$3.45
20	7.08%	\$3.70
21	7.00%	\$3.96
22	6.93%	\$4.23
23	6.85%	\$4.52
24	6.77%	\$4.83
25	6.70%	\$5.15
26	6.70%	\$5.49
27	6.70%	\$5.86
28	6.70%	\$6.26
29	6.70%	\$6.67
30	6.70%	\$7.12

This schedule is truncated; the calculation extends to 400 years to ensure the stability of the calculation.

g, D, P are from Schedule D-1.4

g(e) is from Schedule D-1.9



AWR Non-Constant DCF Calculation

g=	5.25%	non const dcf=	9.40%	const dcf=	8.39%
D=	\$1.02			g(e)=	6.70%
		P=	-\$34.20		

<u>YEAR</u>	<u>GROWTH RATE</u>	<u>DIVIDEND</u>
1	5.25%	\$1.07
2	5.25%	\$1.13
3	5.25%	\$1.19
4	5.25%	\$1.25
5	5.25%	\$1.32
6	5.32%	\$1.39
7	5.40%	\$1.46
8	5.47%	\$1.54
9	5.54%	\$1.63
10	5.61%	\$1.72
11	5.69%	\$1.82
12	5.76%	\$1.92
13	5.83%	\$2.03
14	5.90%	\$2.15
15	5.98%	\$2.28
16	6.05%	\$2.42
17	6.12%	\$2.57
18	6.19%	\$2.73
19	6.26%	\$2.90
20	6.34%	\$3.08
21	6.41%	\$3.28
22	6.48%	\$3.49
23	6.55%	\$3.72
24	6.63%	\$3.97
25	6.70%	\$4.23
26	6.70%	\$4.52
27	6.70%	\$4.82
28	6.70%	\$5.14
29	6.70%	\$5.49
30	6.70%	\$5.85

This schedule is truncated; the calculation extends to 400 years to ensure the stability of the calculation.

g, D, P are from Schedule D-1.4  
g(e) is from Schedule D-1.9

CWT Non-Constant DCF Calculation

		non const		const	
g=	6.57%	dcf=	10.05%	dcf=	9.96%
D=	\$1.18			g(e)=	6.70%
		P=	-\$37.09		

<u>YEAR</u>	<u>GROWTH RATE</u>	<u>DIVIDEND</u>
1	6.57%	\$1.26
2	6.57%	\$1.34
3	6.57%	\$1.43
4	6.57%	\$1.52
5	6.57%	\$1.62
6	6.58%	\$1.73
7	6.59%	\$1.84
8	6.59%	\$1.96
9	6.60%	\$2.09
10	6.60%	\$2.23
11	6.61%	\$2.38
12	6.62%	\$2.54
13	6.62%	\$2.71
14	6.63%	\$2.88
15	6.64%	\$3.08
16	6.64%	\$3.28
17	6.65%	\$3.50
18	6.65%	\$3.73
19	6.66%	\$3.98
20	6.67%	\$4.25
21	6.67%	\$4.53
22	6.68%	\$4.83
23	6.69%	\$5.15
24	6.69%	\$5.50
25	6.70%	\$5.87
26	6.70%	\$6.26
27	6.70%	\$6.68
28	6.70%	\$7.13
29	6.70%	\$7.60
30	6.70%	\$8.11

This schedule is truncated; the calculation extends to 400 years to ensure the stability of the calculation.

g, D, P are from Schedule D-1.4  
g(e) is from Schedule D-1.9

WTR Non-Constant DCF Calculation

g=	8.80%	non const dcf=	10.94%	const dcf=	12.29%
D=	\$0.55			g(e)=	6.70%
		P=	-\$17.18		

<u>YEAR</u>	<u>GROWTH RATE</u>	<u>DIVIDEND</u>
1	8.80%	\$0.60
2	8.80%	\$0.65
3	8.80%	\$0.71
4	8.80%	\$0.77
5	8.80%	\$0.84
6	8.70%	\$0.91
7	8.59%	\$0.99
8	8.49%	\$1.07
9	8.38%	\$1.16
10	8.28%	\$1.26
11	8.17%	\$1.36
12	8.07%	\$1.47
13	7.96%	\$1.59
14	7.86%	\$1.72
15	7.75%	\$1.85
16	7.65%	\$1.99
17	7.54%	\$2.14
18	7.44%	\$2.30
19	7.33%	\$2.47
20	7.22%	\$2.65
21	7.12%	\$2.83
22	7.01%	\$3.03
23	6.91%	\$3.24
24	6.80%	\$3.46
25	6.70%	\$3.69
26	6.70%	\$3.94
27	6.70%	\$4.21
28	6.70%	\$4.49
29	6.70%	\$4.79
30	6.70%	\$5.11

This schedule is truncated; the calculation extends to 400 years to ensure the stability of the calculation.

g, D, P are from Schedule D-1.4  
g(e) is from Schedule D-1.9

Growth in U.S. Gross National Product, 1929 to  
2008

Year	GNP ( \$billion )	Change ( \$billion )	Growth%
1929	103.6		
1930	91.2	-12.4	-11.97%
1931	76.5	-14.7	-16.12%
1932	58.7	-17.8	-23.27%
1933	56.4	-2.3	-3.92%
1934	66	9.6	17.02%
1935	73.3	7.3	11.06%
1936	83.8	10.5	14.32%
1937	91.9	8.1	9.67%
1938	86.1	-5.8	-6.31%
1939	92.2	6.1	7.08%
1940	101.4	9.2	9.98%
1941	126.7	25.3	24.95%
1942	161.9	35.2	27.78%
1943	198.6	36.7	22.67%
1944	219.8	21.2	10.67%
1945	223	3.2	1.46%
1946	222.2	-0.8	-0.36%
1947	244.1	21.9	9.86%
1948	269.1	25	10.24%
1949	267.2	-1.9	-0.71%
1950	293.7	26.5	9.92%
1951	339.3	45.6	15.53%
1952	358.3	19	5.60%
1953	379.3	21	5.86%
1954	380.4	1.1	0.29%
1955	414.7	34.3	9.02%
1956	437.4	22.7	5.47%
1957	461.1	23.7	5.42%
1958	467.2	6.1	1.32%
1959	506.6	39.4	8.43%
1960	526.4	19.8	3.91%
1961	544.8	18.4	3.50%
1962	585.7	40.9	7.51%
1963	617.8	32.1	5.48%
1964	663.6	45.8	7.41%
1965	719.1	55.5	8.36%
1966	787.7	68.6	9.54%
1967	832.4	44.7	5.67%
1968	909.8	77.4	9.30%

Growth in U.S. Gross National Product,  
1929 to 2008

Year	GNP (\$billion)	Change (\$billion)	Growth%
1969	984.4	74.6	8.20%
1970	1038.3	53.9	5.48%
1971	1126.8	88.5	8.52%
1972	1237.9	111.1	9.86%
1973	1382.3	144.4	11.66%
1974	1499.5	117.2	8.48%
1975	1637.7	138.2	9.22%
1976	1824.6	186.9	11.41%
1977	2030.1	205.5	11.26%
1978	2293.8	263.7	12.99%
1979	2562.2	268.4	11.70%
1980	2788.1	225.9	8.82%
1981	3126.8	338.7	12.15%
1982	3253.2	126.4	4.04%
1983	3534.6	281.4	8.65%
1984	3930.9	396.3	11.21%
1985	4217.5	286.6	7.29%
1986	4460.1	242.6	5.75%
1987	4738.4	278.3	6.19%
1988	5100.4	364	7.69%
1989	5482.1	381.7	7.48%
1990	5800.5	318.4	5.81%
1991	5992.1	191.6	3.30%
1992	6342.3	350.2	5.84%
1993	6667.4	325.1	5.13%
1994	7085.2	417.8	6.27%
1995	7414.7	329.5	4.65%
1996	7838.5	423.8	5.72%
1997	8332.4	493.9	6.30%
1998	8793.5	461.1	5.53%
1999	9353.5	560	6.37%
2000	9951.5	598	6.39%
2001	10286.2	334.7	3.36%
2002	10642.3	356.1	3.46%
2003	11142.1	499.8	4.70%
2004	11867.8	725.7	6.51%
2005	12638.4	770.6	6.49%
2006	13398.9	760.5	6.02%
2007	14077.6	678.7	5.07%
2008	14441.4	363.8	2.58%
Average			6.70%

Sources: ( 1 ) National Income and Product Accounts ( NIPA ) from the U. S. Bureau of Economic Analysis and Econostats; BEA Data; NIPA Index; Section 1. Domestic Product and Income Table 1.7.5 Relation of Gross Domestic Product, Gross National Product, Net National Product, National Income, and Personal Income. ( 2 ) U. S. Department of Commerce; Survey of Current of the United States Business and Historical Statistics

Aqua Ohio, Inc.  
Lake Erie Division  
Case No. 09-1044-WW-AIR  
Typical Bill Comparison

Applicant Proposed

Schedule E-5  
Page 1 of 4

Lake Erie Division -West

LINE NO.	RATE BLOCK LIMITS (A)	MOST CURRENT RATE (B)	PRPSD. RATE (C)	DOLLAR INCREASE (D)	% INCREASE (E)	LEVEL OF USAGE (F)	CURRENT BILL (G)	PROPOSED BILL (H)	DOLLAR INCREASE (I)	% INCREASE (J-I-G)
Per one hundred cubic feet										
1	For the first 2,000 c.f.									
2	or any part thereof									
3	For the next 8,000 c.f.	3.0870	3.7125	0.625	20.26%					
4	For all over 10,000 c.f.	2.6239	3.1555	0.532	20.26%					
5		2.4696	2.9012	0.432	17.48%					
6										
7										
8		\$8.24	\$9.52	1.28	15.53%					
9		\$8.24	\$9.52	1.28	15.53%					
10		15.83	23.80	7.97	50.34%					
11		31.53	47.60	16.07	50.98%					
12		53.34	76.16	22.82	42.77%					
13		116.20	142.80	26.60	22.89%					
14		204.02	238.00	33.98	16.65%					
15		455.22	478.00	20.78	4.57%					
16										
17										
18										
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33										
34										
35										
36										
5/8" & 5/8" x 3/4" Meter Residential and Commercial										
							8.24	9.52	1.28	15.53
						0	11.33	13.23	1.90	16.77
						100	14.41	18.95	2.54	17.83
						200	20.59	24.37	3.78	18.36
						400	30.94	36.32	5.38	19.00
						600	32.94	39.22	6.28	19.06
						800	36.02	42.93	6.91	19.18
						1,000	39.11	46.65	7.54	19.28
						1,500	54.56	65.21	10.65	19.54
						2,000	69.98	83.77	13.79	19.71
						3,000	96.22	115.33	19.11	19.86
						5,000	148.70	178.44	29.74	20.00
						7,500	214.30	257.32	43.02	20.07
						10,000	279.89	338.21	58.32	20.12
						12,500	341.64	408.74	67.10	19.64
						15,000	403.36	481.27	77.91	19.31
						17,500	465.12	553.80	88.68	19.07
						20,000	526.86	626.39	99.47	18.88
						25,000	650.34	771.39	121.05	18.61
						38,500	983.74	1,163.05	179.31	18.23

Residential 2" Commercial 1" Water Meters 1/2" Consumption in cubic feet



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Aqua Ohio, Inc.  
Lake Erie Division  
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Lake Erie Division -West										
BILL DATA - ALL METERS - NON MULTI UNIT										
LINE NO.	RATE BLOCK LIMITS (A)	RATE DATA				BILL DATA - ALL METERS - NON MULTI UNIT				
		MOST CURRENT RATE (B)	PRPSD. RATE (C)	DOLLAR INCREASE (D)	% INCREASE (E)	LEVEL OF USAGE (F)	CURRENT BILL (G)	PROPOSED BILL (H)	DOLLAR INCREASE (I)	% INCREASE (J=I/G)
4" Meter										
1						0	204.02	238.00	33.98	16.65
2						2,000	265.76	312.25	46.49	17.49
3						5,000	344.48	406.92	62.44	18.13
4						10,000	475.67	564.69	89.02	18.71
5						29,000	944.90	1,115.92	171.02	18.10
6						50,000	1,463.53	1,725.17	261.64	17.88
7						60,000	1,710.49	2,015.29	304.80	17.82
8						70,000	1,957.45	2,305.41	347.96	17.78
9						80,000	2,204.42	2,595.53	391.11	17.74
10						100,000	2,698.34	3,175.77	477.43	17.89
11						125,000	3,315.75	3,901.07	585.32	17.65
12						150,000	3,933.16	4,626.37	693.21	17.62
13						175,000	4,550.57	5,351.67	801.10	17.80
14						200,000	5,167.97	6,076.97	909.00	17.59
15						215,000	5,538.42	6,512.15	973.73	17.58
16										
17										
18										
19										
20										
21						588,000	15,001.34	17,571.63	2,570.29	17.13
22						624,000	15,890.41	18,616.06	2,725.65	17.15
23						649,000	16,507.82	19,341.36	2,833.64	17.16
24						668,000	16,977.05	19,892.59	2,915.54	17.17
25						678,000	17,224.01	20,182.71	2,958.70	17.18
26						686,000	17,421.58	20,414.80	2,993.22	17.18
27						691,000	17,545.06	20,559.86	3,014.80	17.18
28						705,700	17,908.10	20,986.34	3,078.24	17.19
29						740,000	18,765.18	21,981.46	3,226.27	17.20
30						744,500	18,866.31	22,112.00	3,245.69	17.20
31						764,000	19,347.89	22,677.74	3,329.85	17.21
32						765,000	19,372.59	22,706.75	3,334.16	17.21
						871,500	22,002.75	25,796.53	3,793.78	17.24

4" Meter

6" Meter

Aqua Ohio, Inc.  
 Lake Erie Division  
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Former Lake Erie East Division			RATE DATA			BILL DATA - ALL METERS - NON MULTI UNIT					
LINE NO.	RATE BLOCK LIMITS (A)	MOST CURRENT RATE (B)	PRPSD. RATE (C)	DOLLAR INCREASE (D)	% INCREASE (E)	LEVEL OF USAGE (F)	CURRENT BILL (G)	PROPOSED BILL (H)	DOLLAR INCREASE (I)	% INCREASE (J=I-G)	
<u>Per one hundred cubic feet</u>											
1	For the first 2,000 c.f. or any part thereof For the next 8,000 c.f. For all over 10,000 c.f.	4.3906	4.8296	0.439	10.00%						
2		4.1331	4.5463	0.413	10.00%						
3		2.6375	2.9012	0.264	10.00%						
4											
5											
6											
7											
8	Meter Size										
9	5/8"	\$9.53	\$9.52	(0.01)	-0.06%						
10	5/8x3/4"	\$9.53	\$9.52	(0.01)	-0.06%						
11	1"	18.31	23.80	5.49	29.96%						
12	1-1/2"	36.46	47.60	11.14	30.55%						
13	2"	61.68	76.16	14.48	23.48%						
14	3"	134.35	142.80	8.45	6.29%						
15	4"	235.90	238.00	2.10	0.89%						
16	6"	526.35	476.00	(50.35)	-9.57%						
17											
18	5/8" & 5/8" x 3/4" Meter										
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											

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Former Lake Erie East Division

RATE DATA - ALL METERS - NON MULTI UNIT										
LINE NO.	RATE BLOCK LIMITS (A)	RATE DATA				BILL DATA - ALL METERS - NON MULTI UNIT				
		MOST CURRENT RATE (B)	PRPSD. RATE (C)	DOLLAR INCREASE (D)	% INCREASE (E)	LEVEL OF USAGE (F)	CURRENT BILL (G)	PROPOSED BILL (H)	DOLLAR INCREASE (I)	% INCREASE (J-I-G)
2" Meter										
1						0	61.69	76.16	14.48	23.48
2						2,000	149.49	172.75	23.26	15.56
3						2,500	170.16	195.48	25.32	14.88
4						3,300	203.22	231.85	28.63	14.09
5						5,000	273.48	308.14	34.66	13.04
6						10,000	480.14	536.46	56.32	11.73
7						13,000	559.28	623.49	64.21	11.49
8						16,000	638.38	710.53	72.14	11.30
9						22,000	796.64	894.60	97.96	11.04
10						24,000	849.39	942.62	93.23	10.98
11						26,000	902.14	1,000.65	98.51	10.92
12						28,000	954.89	1,058.67	103.78	10.87
13						31,000	1,034.02	1,145.71	111.69	10.80
14						34,000	1,113.14	1,232.74	119.60	10.74
15						37,000	1,192.27	1,319.78	127.51	10.70
16						40,000	1,271.39	1,406.82	135.43	10.65
17						42,000	1,324.14	1,464.84	140.70	10.63
18										
19										
20										
3" Meter										
21						0	134.35	142.80	8.45	6.29
22						2,000	222.16	238.39	16.23	7.75
23						2,500	242.83	262.12	19.29	7.94
24						5,000	346.15	375.78	29.63	8.56
25						8,500	490.81	534.90	44.09	8.98
26						10,000	552.81	603.10	50.29	9.10
27						12,000	605.58	661.12	55.56	9.17
28						16,000	711.08	777.17	66.11	9.30
29						18,000	763.81	835.19	71.38	9.34
30						23,000	895.69	980.25	84.56	9.44
31						26,000	974.81	1,067.29	92.48	9.49
32						29,000	1,053.94	1,154.32	100.38	9.52
33						32,000	1,133.06	1,241.36	108.30	9.56

Aqua Ohio, Inc.  
Lake Erie Division  
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Former Lake Erie East Division		BILL DATA - ALL METERS - NON MULTI UNIT									
LINE NO.	RATE BLOCK LIMITS (A)	RATE DATA					BILL DATA - ALL METERS - NON MULTI UNIT				
		MOST CURRENT RATE (B)	PRPSD. RATE (C)	DOLLAR INCREASE (D)	% INCREASE (E)	LEVEL OF USAGE (F)	CURRENT BILL (G)	PROPOSED BILL (H)	DOLLAR INCREASE (I)	% INCREASE (J-I-G)	
4" Meter											
1						0	235.90	238.00	2.10	0.89	
2						2,500	344.38	357.32	12.94	3.76	
3						5,000	447.70	470.98	23.28	5.20	
4						10,000	654.38	698.30	43.94	6.71	
5						14,000	759.86	814.34	54.48	7.17	
6						18,000	865.38	930.39	65.03	7.51	
7						21,000	944.49	1,017.43	72.94	7.72	
8						24,000	1,023.61	1,104.46	80.85	7.90	
9						28,000	1,129.11	1,220.51	91.40	8.09	
10						30,000	1,181.86	1,278.54	96.68	8.18	
11						34,000	1,287.36	1,394.58	107.22	8.33	
12						36,000	1,340.11	1,452.61	112.50	8.39	
13						38,000	1,392.66	1,510.63	117.77	8.46	
14						40,000	1,445.81	1,569.66	123.85	8.51	
15						42,000	1,498.36	1,626.68	128.32	8.58	
16											
17											
18											
19											
6" Meter											
20						1,000	570.26	524.50	(45.76)	(8.06)	
21						4,000	696.82	663.52	(33.30)	(4.78)	
22						7,000	820.82	788.81	(20.91)	(2.55)	
23						10,000	944.81	936.30	(8.51)	(0.90)	
24						12,000	997.66	984.32	(3.24)	(0.32)	
25						16,000	1,103.06	1,110.37	7.31	0.66	
26						18,000	1,155.81	1,168.39	12.58	1.09	
27						20,000	1,208.56	1,226.42	17.86	1.48	
28						23,000	1,287.69	1,313.45	25.76	2.00	
29						25,000	1,340.44	1,371.48	31.04	2.32	
30						27,000	1,393.19	1,429.50	36.31	2.61	
31						30,000	1,472.31	1,516.54	44.23	3.00	
32						33,000	1,561.44	1,603.57	52.13	3.36	

Aqua Ohio, Inc.  
Lake Erie Division  
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Former Norlick Division		RATE DATA								
LINE NO.	RATE BLOCK LIMITS (A)	MOST		PRPSD. RATE (C)	DOLLAR INCREASE (D)	% INCREASE (E)	LEVEL OF CURRENT USAGE (F)	PROPOSED		% INCREASE (J-I-G)
		CURRENT RATE (B)	BILL (G)					BILL (H)	DOLLAR INCREASE (I)	
Flat Rate-Unmetered										
1										
2	Monthly flat rate unmetered	30.90		36.00	5.10	16.50%				
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

Aqua Ohio, Inc.  
Lake Erie Division  
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Former Seneca Division

RATE DATA

LINE NO.	RATE BLOCK LIMITS (A)	MOST CURRENT RATE (B)		PRPSD. RATE (C)		DOLLAR INCREASE (D)		% INCREASE (E)		LEVEL OF USAGE (F)		CURRENT BILL (G)		PROPOSED BILL (H)		DOLLAR INCREASE (I)		% INCREASE (J=I-G)	

Monthly Unmetered Service

1																			
2	Residential		30.90	36.00	5.10	16.50%													
3	Commercial		38.73	49.00	9.27	23.34%													
4	Yard Hydrant		11.05	11.05	(0.00)	-0.02%													
5	Availability	Eliminated	5.90	0.00	(5.90)	-100.00%													
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			

Aqua Ohio, Inc.  
Lake Erie Division  
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**Auburn Lakes**

RATE DATA										
LINE NO.	RATE BLOCK LIMITS (A)	MOST CURRENT RATE (B)	PRPSD. RATE (C)	DOLLAR INCREASE (D)	% INCREASE (E)	LEVEL OF USAGE (F)	CURRENT BILL (G)	PROPOSED BILL (H)	DOLLAR INCREASE (I)	% INCREASE (J-I-G)
Monthly Unmetered Service per Unit										
1	Special Contract									
2	Auburn Lakes Condominium Associatic	\$39.99	\$39.99	\$0.00	0.00%					
3	Woods at Auburn Lakes	\$39.99	\$39.99	\$0.00	0.00%					
4	Auburn Crossing	\$39.99	\$39.99	\$0.00	0.00%					
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										



Aqua Ohio, Inc.  
Lake Erie Division  
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Lake Erie Division -West						Staff Proposed				
LINE NO.	RATE BLOCK LIMITS (A)	MOST CURRENT RATE (B)	PRPSD. RATE (C)	DOLLAR INCREASE (D)	% INCREASE (E)	LEVEL OF USAGE (F)	CURRENT BILL (G)	PROPOSED BILL (H)	DOLLAR INCREASE (I)	% INCREASE (J-I/G)
<u>Per one hundred cubic feet</u>										
1	For the first 2,000 c.f. or any part thereof For the next 8,000 c.f. For all over 10,000 c.f.	3.0870	3.7800	0.693	22.45%					
2		2.6239	3.2162	0.592	22.57%					
3		2.4896	2.9670	0.497	20.14%					
4										
5										
6										
7										
8		\$8.24	\$9.38	1.14	13.83%					
9		\$8.24	\$11.66	3.42	41.50%					
10		15.83	17.61	1.78	11.24%					
11		31.53	34.61	3.08	9.77%					
12		53.34	58.24	4.90	9.18%					
13		116.20	126.32	10.12	8.70%					
14		204.02	221.44	17.42	8.54%					
15		455.22	493.51	38.29	8.41%					
16										
17	5/8" & 5/8" x 3/4" Meter						8.24	11.66	3.42	41.50
18	Residential and Commercial For 5/8" & 5/8" x 3/4" Meter For 1" & 1" x 1" Meter For 1 1/2" & 1 1/2" x 1 1/2" Meter For 2" & 2" x 2" Meter For 2 1/2" & 2 1/2" x 2 1/2" Meter For 3" & 3" x 3" Meter For 3 1/2" & 3 1/2" x 3 1/2" Meter For 4" & 4" x 4" Meter For 4 1/2" & 4 1/2" x 4 1/2" Meter For 5" & 5" x 5" Meter For 5 1/2" & 5 1/2" x 5 1/2" Meter For 6" & 6" x 6" Meter For 6 1/2" & 6 1/2" x 6 1/2" Meter For 7" & 7" x 7" Meter For 7 1/2" & 7 1/2" x 7 1/2" Meter For 8" & 8" x 8" Meter For 8 1/2" & 8 1/2" x 8 1/2" Meter For 9" & 9" x 9" Meter For 9 1/2" & 9 1/2" x 9 1/2" Meter For 10" & 10" x 10" Meter For 10 1/2" & 10 1/2" x 10 1/2" Meter For 11" & 11" x 11" Meter For 11 1/2" & 11 1/2" x 11 1/2" Meter For 12" & 12" x 12" Meter For 12 1/2" & 12 1/2" x 12 1/2" Meter For 13" & 13" x 13" Meter For 13 1/2" & 13 1/2" x 13 1/2" Meter For 14" & 14" x 14" Meter For 14 1/2" & 14 1/2" x 14 1/2" Meter For 15" & 15" x 15" Meter For 15 1/2" & 15 1/2" x 15 1/2" Meter For 16" & 16" x 16" Meter For 16 1/2" & 16 1/2" x 16 1/2" Meter For 17" & 17" x 17" Meter For 17 1/2" & 17 1/2" x 17 1/2" Meter For 18" & 18" x 18" Meter For 18 1/2" & 18 1/2" x 18 1/2" Meter For 19" & 19" x 19" Meter For 19 1/2" & 19 1/2" x 19 1/2" Meter For 20" & 20" x 20" Meter For 20 1/2" & 20 1/2" x 20 1/2" Meter For 21" & 21" x 21" Meter For 21 1/2" & 21 1/2" x 21 1/2" Meter For 22" & 22" x 22" Meter For 22 1/2" & 22 1/2" x 22 1/2" Meter For 23" & 23" x 23" Meter For 23 1/2" & 23 1/2" x 23 1/2" Meter For 24" & 24" x 24" Meter For 24 1/2" & 24 1/2" x 24 1/2" Meter For 25" & 25" x 25" Meter For 25 1/2" & 25 1/2" x 25 1/2" Meter For 26" & 26" x 26" Meter For 26 1/2" & 26 1/2" x 26 1/2" Meter For 27" & 27" x 27" Meter For 27 1/2" & 27 1/2" x 27 1/2" Meter For 28" & 28" x 28" Meter For 28 1/2" & 28 1/2" x 28 1/2" Meter For 29" & 29" x 29" Meter For 29 1/2" & 29 1/2" x 29 1/2" Meter For 30" & 30" x 30" Meter For 30 1/2" & 30 1/2" x 30 1/2" Meter For 31" & 31" x 31" Meter For 31 1/2" & 31 1/2" x 31 1/2" Meter For 32" & 32" x 32" Meter For 32 1/2" & 32 1/2" x 32 1/2" Meter For 33" & 33" x 33" Meter For 33 1/2" & 33 1/2" x 33 1/2" Meter For 34" & 34" x 34" Meter For 34 1/2" & 34 1/2" x 34 1/2" Meter For 35" & 35" x 35" Meter For 35 1/2" & 35 1/2" x 35 1/2" Meter For 36" & 36" x 36" Meter For 36 1/2" & 36 1/2" x 36 1/2" Meter	100	15.44	4.11	36.28	41.50				
19		200	14.41	19.22	4.81	33.38	36.28			
20		400	20.59	26.78	6.19	30.06	30.06			
21		800	30.94	39.46	8.51	27.50	27.50			
22		900	32.94	41.90	8.96	27.20	27.20			
23		1,000	36.02	45.68	9.66	26.82	26.82			
24		1,000	39.11	48.48	10.36	26.46	26.46			
25		1,500	54.55	66.36	13.81	25.32	25.32			
26		2,000	69.98	87.26	17.28	24.69	24.69			
27		3,000	96.22	119.42	23.20	24.11	24.11			
28		5,000	148.70	183.75	35.05	23.67	23.67			
29		7,500	214.30	264.15	49.85	23.26	23.26			
30		10,000	278.89	344.56	64.67	23.11	23.11			
31		12,500	341.64	418.73	77.09	22.56	22.56			
32		15,000	403.38	482.81	89.53	22.19	22.19			
33		17,500	465.12	567.08	101.96	21.92	21.92			
34		20,000	526.86	641.26	114.40	21.71	21.71			
35	25,000	650.34	789.61	139.27	21.41	21.41				
36	38,500	963.74	1,190.15	206.41	20.98	20.98				

Aqua Ohio, Inc.  
Lake Erie Division  
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Staff Proposed

Lake Erie Division -West		RATE DATA					BILL DATA - ALL METERS - NON MULTI UNIT				
LINE NO.	RATE BLOCK LIMITS (A)	MOST		PRPSD. RATE (C)	DOLLAR INCREASE (D)	% INCREASE (E)	LEVEL OF USAGE (F)	CURRENT BILL (G)	PROPOSED BILL (H)	DOLLAR INCREASE (I)	% INCREASE (J-I/G)
		CURRENT RATE (B)	INCREASE (A-B)								
1	1" Meter										
2							0	15.83	17.61	1.78	11.24
3							200	22.00	25.17	3.17	14.40
4							500	31.27	36.51	5.24	16.75
5							800	40.53	47.85	7.32	18.06
6							1,000	48.70	56.41	7.71	18.65
7							2,000	77.57	93.21	15.64	20.16
8							2,700	96.84	115.72	18.88	20.62
9							4,000	130.05	157.53	27.48	21.13
10							5,000	156.29	189.70	33.41	21.38
11							7,500	221.89	270.10	48.21	21.73
12							10,000	287.48	360.61	73.13	21.92
13							12,500	349.23	424.68	75.45	21.80
14							15,000	410.97	498.86	87.89	21.39
15							17,500	472.71	573.03	100.32	21.22
16							20,000	534.45	647.21	112.76	21.10
17							25,000	657.93	796.56	138.63	20.92
18							30,000	781.41	943.91	162.50	20.80
19							35,000	904.88	1,092.28	187.37	20.71
20							40,000	1,028.37	1,240.61	212.24	20.64
21							45,100	1,154.32	1,391.92	237.60	20.58
22	1 1/2" Meter										
24							0	31.63	34.61	3.08	9.77
25							1,000	62.40	72.41	10.01	16.04
26							1,500	77.84	91.31	13.47	17.31
27							1,770	86.17	101.52	15.35	17.82
28							2,000	93.27	110.21	16.94	18.16
29							5,000	171.99	206.70	34.71	20.18
30							7,500	237.59	287.10	49.51	20.84
31							9,300	284.82	344.99	60.17	21.13
32							10,000	303.18	367.51	64.33	21.22
33							12,000	352.58	426.85	74.27	21.07
34							15,000	426.67	515.86	89.19	20.90
35							20,000	550.15	664.21	114.06	20.73
36							30,000	797.11	960.91	163.80	20.55
37							50,000	1,291.04	1,554.31	263.27	20.39
38							75,000	1,808.44	2,236.06	387.62	20.31
39							100,000	2,525.85	3,037.51	511.66	20.27

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Lake Erie Division  
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Staff Proposed

Lake Erie Division -West										
LINE NO.	RATE BLOCK LIMITS (A)	RATE DATA								
		MOST CURRENT RATE (B)	PRPSD. RATE (C)	DOLLAR INCREASE (D)	% INCREASE (E)	LEVEL OF USAGE (F)	CURRENT BILL (G)	PROPOSED BILL (H)	DOLLAR INCREASE (I)	% INCREASE (J-I-G)
<u>2" Meter</u>										
1		0					53.34	56.24	4.90	9.18
2		2,000					115.08	133.84	18.76	16.30
3		2,500					128.20	149.92	21.72	16.94
4		3,000					149.19	175.65	26.46	17.73
5		5,000					193.80	230.33	36.53	18.85
6		10,000					324.99	391.14	66.15	20.35
7		15,000					448.48	539.49	91.01	20.29
8		20,000					571.96	687.84	115.88	20.26
9		30,000					818.92	984.54	165.62	20.22
10		40,000					1,065.88	1,281.24	215.36	20.20
11		50,000					1,312.85	1,577.94	265.09	20.19
12		75,000					1,930.25	2,319.89	389.44	20.16
13		100,000					2,547.66	3,061.44	513.78	20.17
14		125,000					3,165.07	3,803.19	638.12	20.16
15		140,000					3,535.51	4,248.24	712.73	20.16
16		148,100					3,735.55	4,486.56	753.01	20.16
17		151,000					3,807.17	4,574.81	767.44	20.16
18										
19										
20										
<u>3" Meter</u>										
21		0					116.20	126.32	10.12	8.70
22		2,000					177.94	201.92	23.98	13.47
23		2,500					191.06	218.00	26.94	14.10
24		5,000					256.66	298.41	41.75	16.26
25		8,500					348.50	410.97	62.47	17.92
26		10,000					387.85	459.22	71.37	18.40
27		15,000					511.34	607.57	96.23	18.82
28		20,000					634.82	755.92	121.10	19.08
29		25,000					758.30	904.27	145.97	19.25
30		40,000					1,128.74	1,349.32	220.58	19.54
31		50,000					1,375.71	1,646.02	270.31	19.65
32		75,000					1,993.11	2,387.77	394.66	19.80
33		100,000					2,610.52	3,129.52	519.00	19.88

Aqua Ohio, Inc.  
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Staff Proposed

Lake Erie Division -West										
RATE DATA						BILL DATA - ALL METERS - NON MULTI UNIT				
LINE NO.	RATE BLOCK LIMITS (A)	MOST CURRENT RATE (B)	PRPSD. RATE (C)	DOLLAR INCREASE (D)	% INCREASE (E)	LEVEL OF USAGE (F)	CURRENT BILL (G)	PROPOSED BILL (H)	DOLLAR INCREASE (I)	% INCREASE (J=I-G)
4" Meter										
1						0	204.02	221.44	17.42	8.54
2						2,000	266.76	287.04	31.28	11.77
3						5,000	344.48	383.53	49.05	14.24
4						10,000	475.67	554.34	78.67	16.54
5						25,000	944.90	1,118.07	173.17	18.33
6						50,000	1,463.53	1,741.14	277.61	18.97
7						60,000	1,710.49	2,037.84	327.35	19.14
8						70,000	1,957.45	2,334.54	377.09	19.26
9						80,000	2,204.42	2,631.24	426.82	19.36
10						100,000	2,698.34	3,224.64	526.30	19.50
11						125,000	3,315.75	3,866.39	550.64	19.62
12						150,000	3,933.16	4,708.14	774.98	19.70
13						175,000	4,550.57	5,449.89	899.32	19.76
14						200,000	5,167.97	6,191.84	1,023.87	19.81
15						215,000	5,538.42	6,636.69	1,098.27	19.83
16										
17										
18										
19										
5" Meter										
20						588,000	15,001.34	17,975.67	2,974.33	19.83
21						624,000	15,890.41	19,043.79	3,153.38	19.84
22						649,000	16,507.82	18,786.54	3,277.72	19.86
23						668,000	16,977.05	20,349.27	3,372.22	19.86
24						678,000	17,224.01	20,645.97	3,421.96	19.87
25						686,000	17,421.58	20,883.33	3,461.75	19.87
26						691,000	17,546.06	21,031.68	3,486.62	19.87
27						705,700	17,908.10	21,467.83	3,559.73	19.88
28						740,000	18,755.18	22,485.51	3,730.33	19.89
29						744,500	18,866.31	22,619.02	3,752.71	19.89
30						764,000	19,347.89	23,197.59	3,849.70	19.90
31						765,000	19,372.59	23,227.26	3,854.67	19.90
32						871,500	22,002.75	26,387.11	4,384.36	19.93

6" Meter

Aqua Ohio, Inc.  
Lake Erie Division  
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Slaff Proposed

Former Lake Erie East Division		BILL DATA - ALL METERS - NON MULTI UNIT												
LINE NO.	RATE BLOCK LIMITS (A)	MOST CURRENT RATE (B)		PRPSD. RATE (C)		DOLLAR INCREASE (D)		% INCREASE (E)		LEVEL OF USAGE (F)	CURRENT BILL (G)	PROPOSED BILL (H)	DOLLAR INCREASE (I)	% INCREASE (J=I/G)
		Per one hundred cubic feet												
1	For the first 2,000 c.f. or any part thereof For the next 8,000 c.f. For all over 10,000 c.f.	4.3906	4.8694	4.8694	0.479	0.479	10.91%							
2		4.1331	4.9466	4.9466	0.814	0.814	19.69%							
3		2.6375	2.9262	2.9262	0.288	0.288	10.91%							
4														
5														
6														
7														
8	Meter Size 5/8" 5/8x3/4"	\$9.53	\$9.38	\$9.38	(0.15)	(0.15)	-1.55%							
9		\$9.53	\$11.66	\$11.66	2.13	2.13	22.38%							
10														
11		18.31	17.61	17.61	(0.70)	(0.70)	-3.84%							
12		36.46	34.61	34.61	(1.85)	(1.85)	-5.08%							
13		61.68	58.24	58.24	(3.44)	(3.44)	-5.57%							
14	134.35	126.32	126.32	(8.03)	(8.03)	-5.98%								
15	235.90	221.44	221.44	(14.46)	(14.46)	-6.13%								
16	526.35	493.51	493.51	(32.84)	(32.84)	-6.24%								
17														
18	5/8" & 5/8" x 3/4" Meter  Residential and Commercial									0	9.53	11.86	2.13	22.38
19										100	13.82	16.53	2.61	18.77
20										200	18.31	21.40	3.09	16.89
21										400	27.09	31.14	4.05	14.96
22										600	33.01	37.70	4.69	14.22
23										800	44.66	50.62	5.97	13.38
24										900	49.05	55.48	6.43	13.11
25										1,000	53.44	60.35	6.91	12.94
26										1,500	75.39	84.70	9.31	12.35
27										2,000	97.34	109.05	11.71	12.03
28	Residential & Commercial Average: 5/8" x 3/4" Consumption in cubic feet	3,000								139.67	159.51	19.84	14.31	16.32
29		5,000								221.33	257.45	36.12	16.32	17.39
30		7,500								324.66	391.11	66.45	17.39	17.94
31		10,000								427.99	504.78	76.79	17.94	17.00
32		12,500								493.93	577.91	83.98	17.00	15.72
33		15,000								559.86	651.04	91.18	15.72	15.26
34		17,500								625.80	724.17	98.37	15.26	13.46
35		20,000								691.74	797.30	105.56	13.46	13.46
36		25,000								823.62	943.56	119.94	13.46	13.46
37		30,500								1,179.68	1,338.46	158.78	13.46	13.46

Residential & Commercial Average: 5/8" x 3/4" Consumption in cubic feet

Residential and Commercial

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Staff Proposed										
Former Lake Erie East Division		BILL DATA - ALL METERS - NON MULTI UNIT								
		RATE DATA								
LINE NO.	RATE BLOCK LIMITS (A)	MOST CURRENT RATE (B)	PRPSD. RATE (C)	DOLLAR INCREASE (D)	% INCREASE (E)	LEVEL OF USAGE (F)	CURRENT BILL (G)	PROPOSED BILL (H)	DOLLAR INCREASE (I)	% INCREASE (J=I/G)
1" Meter										
1						0	18.31	17.61	(0.70)	(3.84)
2						200	27.09	27.35	0.26	0.95
3						500	40.26	41.96	1.70	4.21
4						800	53.43	56.57	3.14	5.87
5						1,000	62.22	66.30	4.08	6.55
6						2,000	106.12	115.00	8.88	8.36
7						2,800	139.19	154.57	15.38	11.05
8						4,000	188.78	213.93	25.15	13.32
9						5,000	230.11	263.40	33.29	14.47
10						7,500	333.44	387.06	53.62	16.06
11						10,000	436.77	510.73	73.96	16.93
12						12,500	502.71	583.86	81.15	16.14
13						15,000	568.64	656.88	88.24	15.54
14						17,500	634.58	730.12	95.54	15.06
15						20,000	700.52	803.26	102.73	14.66
16						25,000	832.40	949.51	117.11	14.07
17						30,000	964.27	1,085.77	121.50	12.64
18						35,000	1,096.15	1,242.03	145.88	13.31
19						40,000	1,228.02	1,398.29	170.27	13.85
20						45,100	1,362.54	1,537.47	174.93	12.84
1 1/2" Meter										
21						0	36.46	34.61	(1.85)	(5.08)
22						1,000	80.37	83.30	2.93	3.64
23						1,500	102.32	107.65	5.33	5.21
24						1,770	114.17	120.80	6.63	5.81
25						2,500	144.94	156.73	11.79	8.13
26						5,000	248.26	280.40	32.14	12.95
27						7,500	351.59	404.06	52.47	14.92
28						8,100	378.39	433.74	55.35	15.24
29						10,000	454.82	527.73	72.91	16.00
30						12,000	507.87	586.23	78.36	15.47
31						15,000	586.79	673.99	87.20	14.86
32						20,000	718.67	820.26	101.58	14.13
33						30,000	982.42	1,112.77	130.35	13.27
34						50,000	1,509.93	1,697.81	187.88	12.44
35						75,000	2,169.31	2,428.11	258.80	11.96
36						100,000	2,828.69	3,160.41	331.72	11.73

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Former Lake Erie East Division		BILL DATA - ALL METERS - NON MULT UNIT									
LINE NO.	RATE BLOCK LIMITS (A)	RATE DATA					BILL DATA - ALL METERS - NON MULT UNIT				
		MOST CURRENT RATE (B)	PRPSD. RATE (C)	DOLLAR INCREASE (D)	% INCREASE (E)	LEVEL OF USAGE (F)	CURRENT BILL (G)	PROPOSED BILL (H)	DOLLAR INCREASE (I)	% INCREASE (J=I-G)	
<u>2" Meter</u>											
1						0	61.68	58.24	(3.44)	(5.57)	
2						2,000	149.49	155.63	6.14	4.11	
3						2,500	170.16	180.36	10.20	6.00	
4						3,300	203.22	219.93	16.71	8.22	
5						5,000	273.48	304.03	30.55	11.17	
6						10,000	480.14	551.36	71.22	14.83	
7						13,000	559.26	639.11	79.85	14.28	
8						16,000	638.39	726.87	88.48	13.86	
9						22,000	796.64	902.38	105.74	13.27	
10						24,000	849.39	960.88	111.48	13.13	
11						26,000	902.14	1,019.39	117.25	13.00	
12						28,000	954.89	1,077.89	123.00	12.88	
13						31,000	1,034.02	1,165.65	131.63	12.73	
14						34,000	1,113.14	1,253.40	140.26	12.60	
15						37,000	1,192.27	1,341.16	148.89	12.48	
16						40,000	1,271.39	1,428.92	157.53	12.39	
17						42,000	1,324.14	1,487.42	163.28	12.33	
18											
19											
20											
<u>3" Meter</u>											
21						0	134.35	128.32	(6.03)	(5.98)	
22						2,000	222.16	223.71	1.55	0.70	
23						2,500	242.63	248.44	5.81	2.31	
24						5,000	346.15	372.11	25.96	7.50	
25						8,500	490.81	545.24	54.43	11.09	
26						10,000	552.81	619.44	66.63	12.05	
27						12,000	605.56	677.94	72.38	11.95	
28						16,000	711.06	794.95	83.89	11.80	
29						18,000	763.81	853.45	89.64	11.74	
30						23,000	895.89	999.71	104.02	11.61	
31						26,000	974.81	1,087.47	112.66	11.56	
32						29,000	1,053.94	1,175.22	121.28	11.51	
33						32,000	1,133.06	1,262.88	129.82	11.47	

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Staff Proposed

Former Lake Erie East Division		BILL DATA - ALL METERS - NON MULTI UNIT									
LINE NO.	RATE BLOCK LIMITS (A)	RATE DATA				BILL DATA - ALL METERS - NON MULTI UNIT					
		MOST CURRENT RATE (B)	PRPSD. RATE (C)	DOLLAR INCREASE (D)	% INCREASE (E)	LEVEL OF USAGE (F)	CURRENT BILL (G)	PROPOSED BILL (H)	DOLLAR INCREASE (I)	% INCREASE (J=I-G)	
<u>4" Meter</u>											
1						0	235.90	221.44	(14.46)	(6.13)	
2						2,500	344.38	343.56	(0.82)	(0.24)	
3						5,000	447.70	447.23	19.53	4.36	
4						10,000	654.36	714.56	60.20	9.20	
5						14,000	759.86	831.56	71.70	9.44	
6						18,000	865.36	948.57	83.21	9.62	
7						21,000	944.49	1,036.33	91.84	9.72	
8						24,000	1,023.61	1,124.08	100.47	9.82	
9						28,000	1,129.11	1,241.09	111.98	9.92	
10						30,000	1,181.86	1,299.80	117.94	9.96	
11						34,000	1,287.36	1,416.60	129.24	10.04	
12						36,000	1,340.11	1,475.11	135.00	10.07	
13						38,000	1,392.86	1,533.61	140.76	10.11	
14						40,000	1,446.61	1,592.12	145.51	10.13	
15						42,000	1,498.36	1,650.62	152.26	10.16	
16											
17											
18											
19											
20						1,000	570.26	542.20	(28.06)	(4.92)	
21						4,000	696.82	699.83	(6.99)	(1.00)	
22						7,000	820.82	838.23	17.41	2.12	
23						10,000	944.81	998.63	41.82	4.43	
24						12,000	997.58	1,045.13	47.57	4.77	
25						16,000	1,103.06	1,182.14	79.08	6.36	
26						18,000	1,155.81	1,220.64	64.83	5.61	
27						20,000	1,208.56	1,278.15	69.59	5.84	
28						23,000	1,287.69	1,366.90	79.21	6.15	
29						25,000	1,340.44	1,425.41	84.97	6.34	
30						27,000	1,393.18	1,483.91	90.72	6.51	
31						30,000	1,472.31	1,571.67	99.36	6.75	
32						33,000	1,551.44	1,659.42	107.98	6.96	
<u>6" Meter</u>											



Aqua Ohio, Inc.  
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Applicant & Staff Proposed

Former Norlick Division										
RATE DATA										
LINE NO.	RATE BLOCK LIMITS (A)	MOST CURRENT RATE (B)	PRPSD. RATE (C)	DOLLAR INCREASE (D)	% INCREASE (E)	LEVEL OF CURRENT USAGE (F)	CURRENT BILL (G)	PROPOSED BILL (H)	DOLLAR INCREASE (I)	% INCREASE (J=I-G)
<u>Flat Rate-Unmetered</u>										
1										
2	Monthly flat rate unmetered	30.90	36.00	5.10	16.50%					
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										

Aqua Ohio, Inc.  
Lake Erie Division  
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Former Seneca Division		Applicant & Staff Proposed									
		RATE DATA									
LINE NO.	RATE BLOCK LIMITS (A)	MOST CURRENT RATE (B)		PRPSD. RATE (C)	DOLLAR INCREASE (D)	% INCREASE (E)	LEVEL OF USAGE (F)	CURRENT BILL (G)	PROPOSED BILL (H)	DOLLAR INCREASE (I)	% INCREASE (J=I-G)
<u>Monthly Unmetered Service</u>											
1											
2	Residential		30.90	36.00	5.10	16.50%					
3	Commercial		39.73	49.00	9.27	23.34%					
4	Yard Hydrant		11.05	11.05	(0.00)	-0.02%					
5	Availability		5.90	0.00	(5.90)	-100.00%					
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

Aqua Ohio, Inc.  
Lake Erie Division  
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Applicant & Staff Proposed

Auburn Lakes											
RATE DATA											
LINE NO.	RATE BLOCK LIMITS (A)	MOST		PRPSD. RATE (C)	DOLLAR INCREASE (D)	% INCREASE (E)	LEVEL OF USAGE (F)	CURRENT BILL (G)	PROPOSED BILL (H)	DOLLAR INCREASE (I)	% INCREASE (J=I-G)
		CURRENT RATE (B)									
Monthly Unmetered Service per Unit											
1	Special Contract										
2	Auburn Lakes Condominium Association	\$39.99		\$39.99	\$0.00	0.00%					
3	Woods at Auburn Lakes	\$39.99		\$39.99	\$0.00	0.00%					
4	Auburn Crossing	\$39.99		\$39.99	\$0.00	0.00%					
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											

