

140

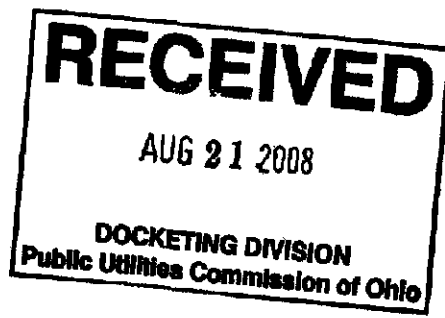
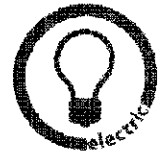


The Public Utilities  
Commission of Ohio

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

Columbia Gas of Ohio, Inc.

Case No. 08-0072-GA-AIR, et al.



This is to certify that the images appearing are an  
accurate and complete reproduction of a case file  
document delivered in the regular course of business.  
Technician SM Date Processed 8/31/08

**STAFF'S REPORT  
OF  
INVESTIGATION**

In the Matter of the Application of	)	
Columbia Gas of Ohio, Inc., for Authority	)	Case No. 08-72-GA-AIR
to Amend its Filed Tariffs to Increase the	)	
Rates and Charges for Gas Services and	)	
Related Matters.	)	
In the Matter of the Application of	)	
Columbia Gas of Ohio, Inc., for Approval	)	Case No. 08-73-GA-ALT
of an Alternative Form of Regulation and	)	
for a Change in its Rates and Charges.	)	
In the Matter of the Application of	)	
Columbia Gas of Ohio, Inc., for Approval	)	Case No. 08-74-GA-AAM
to Change Accounting Methods.	)	
In the Matter of the Application of	)	
Columbia Gas of Ohio, Inc., for Authority	)	Case No. 08-75-GA-AAM
to Revise its Depreciation Accrual Rates.	)	

Submitted  
to  
The Public Utilities Commission



**BEFORE**

**THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application of Columbia Gas of Ohio, Inc., for Authority to Amend its Filed Tariffs to Increase the Rates and Charges for Gas Services and Related Matters.	) ) ) ) )	Case No. 08-72-GA-AIR
In the Matter of the Application of Columbia Gas of Ohio, Inc., for Approval of an Alternative Form of Regulation and for a Change in its Rates and Charges.	) ) ) ) )	Case No. 08-73-GA-ALT
In the Matter of the Application of Columbia Gas of Ohio, Inc., for Approval to Change Accounting Methods.	) ) ) ) )	Case No. 08-74-GA-AAM
In the Matter of the Application of Columbia Gas of Ohio, Inc., for Authority to Revise its Depreciation Accrual Rates.	) ) ) ) )	Case No. 08-75-GA-AAM

Alan R. Schriber, Chairman  
Paul A. Centolella, Commissioner  
Ronda Hartman Fergus, Commissioner  
Valerie A. Lemmie, 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 cursive script, appearing to read "Jodi Bair".

Jodi Bair  
Assistant Director

Service Monitoring and Enforcement Department

A handwritten signature in cursive script, appearing to read "Doris E. McCarter".

Doris McCarter  
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:

### **Utilities Department**

Operating Income and Rate Base	L'Nard Tufts
Rate of Return	Jeff Hecker
Rates and Tariffs	Marchia Rutherford

### **Service Monitoring and Enforcement Department**

Reliability and Service Analysis Division	Peter Baker
Investigations and Audits Division	Dianne Doss
Facilities and Operation Division	Ed Steele



## TABLE OF CONTENTS

	Page
<b>BACKGROUND.....</b>	<b>1</b>
<b>OPERATING INCOME AND RATE BASE .....</b>	<b>2</b>
Scope of Investigation .....	2
Revenue Requirements .....	2
Allocations .....	2
Rate Base .....	3
Operating Income .....	6
<b>RATE OF RETURN .....</b>	<b>10</b>
<b>RATES AND TARIFFS .....</b>	<b>13</b>
<b>GAS PIPELINE SAFETY REVIEW.....</b>	<b>25</b>
<b>ALTERNATIVE REGULATIONS .....</b>	<b>32</b>
<b>OTHER TARIFF ISSUES .....</b>	<b>36</b>
<b>CUSTOMER SERVICE AUDIT.....</b>	<b>38</b>
<b>MANAGEMENT AND OPERATIONS REVIEW .....</b>	<b>40</b>
<b>SCHEDULES</b>	
A-1 Overall Financial Summary .....	47
A-1.1 Calculation of Gross Revenue Conversion Factor .....	48
B-1 Jurisdictional Rate Base Summary .....	49
B-2 Jurisdictional Plant in Service by Major Property Groupings.....	50
B-2.1 Plant in Service by Accounts and Subaccounts.....	51
B-2.2 Summary of Staff's Adjustments to Plant in Service .....	52
B-2.2a Elimination of Plant Sold Adjustment .....	53
B-3 Jurisdictional Reserve for Accumulated Depreciation .....	54
B-3.1 Summary of Staff's Adjustments to Reserve.....	55
B-3.1a Elimination of Plant Sold Reserve Adjustment.....	56
B-3.2 Calculation of Jurisdictional Depreciation Expense .....	57
B-3.2a Accrual Rate Comparison .....	58
B-4 Construction Work in Progress .....	59
B-5 Working Capital Allowance .....	60
B-5-1 Materials and Supplies.....	61
B-6 Other Rate Base Items .....	62
C-1 Pro forma Operating Income Statement .....	63
C-1.1 Pro forma Adjustments .....	64



# TABLE OF CONTENTS (continued)

## SCHEDULES

C-2	Adjusted Test Year Operating Income .....	65
C-3	Summary of Staff's Adjustments .....	66
C-3.1	Base Revenue Annualization .....	67
C-3.2	Gas Cost Revenue Annualization .....	68
C-3.3	Elimination of Bad Check and Late Payment Revenue .....	69
C-3.4	Elimination of Unbilled Revenue .....	70
C-3.5	Elimination of Non-traditional Revenue .....	71
C-3.6	Gas Cost Expense Annualization .....	72
C-3.7	Uncollectible Expense .....	73
C-3.8	Labor Expense .....	74
C-3.9	Pension and Benefits .....	75
C-3.10	Post In Service Carrying Charge Amortization .....	76
C-3.11	Elimination of Non-jurisdictional Expenses .....	77
C-3.12	Interest on Customers' Deposits .....	78
C-3.13	Rate Case Expense .....	79
C-3.14	Warm Choice Program Expense .....	80
C-3.15	O & M Expense Adjustment .....	81
C-3.16	Depreciation Expense .....	82
C-3.17	Taxes Other Than Income Taxes .....	83
C-3.17a	FICA Taxes .....	84
C-3.17b	FUTA Taxes .....	85
C-3.17c	SUTA Taxes .....	86
C-3.17d	Gross Receipts Taxes .....	87
C-3.17e	PUCO & OCC Assessments .....	88
C-3.17f	Distribution Tax .....	89
C-3.17g	Property Tax .....	90
C-3.17h	DOE Assessment .....	91
C-3.17i	Other Taxes .....	92
C-3.18	Federal Income Taxes .....	93
C-4	Calculation of Federal Income Taxes .....	94
D-1	Rate of Return Summary .....	96
D-1.1	Equity Issuance Cost Adjustment .....	97
D-1.2	CAPM Cost of Equity Estimate .....	98
D-1.3	DCF Cost of Equity Estimate .....	103
D-1.4	ATG Non-Constant DCF Calculation .....	108
D-1.5	ATO Non- Constant DCF Calculation .....	109
D-1.6	CNP Non- Constant DCF Calculation .....	110
D-1.7	NJR Non- Constant DCF Calculation .....	111
D-1.8	SRE Non- Constant DCF Calculation .....	112
D-1.9	WGL Non- Constant DCF Calculation .....	113
D-1.10	Growth in U.S. Gross National Product, 1929 to 2005 .....	114
D-1.11	Comparable Companies Debt-Equity Ratio .....	116
E-5	Typical Bill Comparison .....	117

## BACKGROUND

The Applicant, Columbia Gas of Ohio, Inc. (Columbia or Applicant), incorporated October 6 1961, was a subsidiary of the Columbia Gas System. Subsequently, the company merged with NiSource Inc. on November 1, 2000. Columbia Gas of Ohio is one of the 10 energy distribution companies of NiSource, Inc. Columbia Gas of Ohio is the largest local gas distribution company in Ohio and serves 1.4 Million customers in 60 of the 88 counties.

On February 1, 2008, in Case No. 08-72-GA-AIR, The Applicant filed a notice of intent to file an application for an increase in rates to be charged for gas service for its entire service area subject to the jurisdiction of the Commission. The Applicant's filing also included a notice of intent to file an application for approval of an alternative rate plan for its gas distribution service under Case No. 08-73-GA-ALT. In concert with this latter filing, the applicant reserved Case No. 08-74-GA-AAM to serve as notice of its intent to file an application seeking Commission authority to change its accounting methods.

In the alternative rate application, the Applicant seeks Commission approval of an Infrastructure Replacement Program (Rider IRP), consisting of three components. The first component provides for recovery of costs associated with the replacement of natural gas risers, the second component provides for recovery of costs associated with Columbia's Accelerated Mains Replacement Program, and the third component provides for recovery of costs associated with the installation of Automatic Meter Reading Devices. The Company is also seeking the implementation of a Demand Side Management program (Rider DSM).

In its accounting application, the Applicant requested authority to change accounting methods relative to IRP to:

- Capitalize its investment in customer-owned service lines and risers as they are replaced and to defer related costs;
- Accrue post-in-service carrying costs;
- Defer depreciation expense; and
- Defer property taxes.

The Applicant further requests accounting authority to defer expenses incurred in the development and implementation of DSM programs.

The application to increase rates was filed on March 03, 2008, together with the Standard Filing Requirements. The rates proposed by the Applicant when applied to test year sales volumes would generate approximately \$87.8 million of additional revenues. This is an increase of 6.1% over total adjusted current operating revenues.



## **OPERATING INCOME AND RATE BASE**

### **SCOPE OF INVESTIGATION**

On March 19, 2008, the Commission authorized the Staff to issue a request for proposal (RFP) to hire a consultant to attest to the accuracy of the financial data contained in the Applicant's Standard Filing Requirements Section B through Section E. The selected auditor was required to complete the guideline procedures contained in the RFP and was also charged with the responsibility of undertaking any additional procedures it deemed necessary to complete its financial review of the Applicant's filing.

On April 16, 2008, the Commission selected Blue Ridge Consulting Services, Inc. (Blue Ridge or Consultant) to conduct the financial review of the Applicant's filing. At that same time, the Commission directed Columbia to enter into a contract with Blue Ridge for the purpose of providing payment for its services. The cost of providing these services is included in the Staff's rate case expense recommendation.

Blue Ridge completed its investigation and its report has been docketed in this case.

### **REVENUE REQUIREMENTS**

The Staff and the Applicant recommended revenue requirement is shown on Schedule A-1. The Staff's determination of its revenue requirement is based on the Staff's examination of the accounts and records of the Applicant for the twelve months ended September 30, 2008, the test year in this proceeding. The results of its examination are summarized in this report, and the schedules that incorporate the staff's recommended rate of return, rate base, and adjusted test year operating income.

### **ALLOCATION**

The jurisdictional rate area affected by this application constitutes all of the Applicant's gas service area.

## **RATE BASE**

The rate base represents the net value of Applicant's plant and other assets as of the date certain, December 31, 2007, which was used and useful in providing gas 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 discussion of rate base is divided into Plant in Service, Depreciation, Construction Work In Progress, Working Capital, and Other Rate Base Items. A comparison of the Applicant's rate base and the rate base recommended by the Staff is shown on Schedule B-1. Schedules B-2 through B-6 provides additional support to the Staff's determination of rate base.

### **Plant in Service**

As a result of Blue Ridge's investigation and the Staff review of the application, the Staff recommends certain adjustments be made to the Applicant's date certain plant investment for ratemaking purposes. These adjustments are identified below, summarized on Schedule B-2.2, and are reflected in the calculation of jurisdictional plant in service figures on Schedule B-2.1.

#### **Elimination of Plant Sold**

The Staff and the Applicant adjusted several plant-in-service accounts to remove the cost of plant sold after the date certain and therefore is no longer in service. The Staff's adjustment is shown on Schedule B-2.2a.

### **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 Depreciation Expense. Each of these is discussed in detail in the following sections.

#### **Depreciation Reserve**

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 book 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 Staff's recommended accrual rates and plant and reserve balances as of December 31, 2007. The Staff determined that the overall book reserve is in very close agreement with the theoretical reserve calculation.

Therefore, it is the Staff's opinion that the actual jurisdictional reserve for depreciation, as adjusted by the Staff on Schedule B-3 is proper and adequate and should be used for purposes of this proceeding. The Staff adjusted the Applicant's depreciation reserve to exclude reserve associated with the adjustments as discussed in the Plant in Service section. These adjustments are summarized on Schedule B-3.1.

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

The Applicant's current accrual rates were prescribed by this Commission in Case No. 05-114-GA-AAM. In Case No.08-75-GA-AAM, the Applicant filed a depreciation study prepared by its consultant, Gannett Fleming Valuation and Rate Consultants, Inc. The Applicant's accrual rates for most gas plant accounts were developed using the straight-line average service life method of depreciation. For certain General Plant gas 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 Applicant's study. However, the Staff noted small differences in some accounts between the accrual rates proposed by the Applicant and those that the Staff calculated based on the parameters proposed.

The Staff recommended accrual rates are shown on Schedule B-3.2a. The Staff recommends that the Applicant be ordered to use the accrual rates shown on Schedule B-3.2a for book depreciation purposes, effective concurrently with customer rates resulting from this proceeding.

The Staff has long maintained that accrual rates should be thoroughly reviewed at least every three to five years. The Staff therefore recommends that in five years Applicant submit a depreciation study for all gas plant accounts.

The Staff's calculation of depreciation expense based on the adjusted jurisdictional plant in service balances at date certain and the accrual rates discussed above, is shown on Schedule B-3.2.

### **Construction Work In Progress**

The Applicant did not request any allowance for construction work in progress in its filing and the Staff, as shown on Schedule B-4, does not recommend an allowance.

### **Working Capital**

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

The Staff's working capital calculation is based on a formula comprised of several components. The formula contains a revenue lag allowance and an expense lag allowance, determined using lead or lag days derived from a lead/lag study, and an allowance for PIP uncollectibles, and gas stored underground.

The Applicant conducted and submitted a new lead/lag study in the current proceeding. The study was prepared using actual data for the twelve months ended September 30, 2007.

The Staff performed a detailed review of the Applicant's new lead/lag study. The review included not only testing the mathematical accuracy of the study and tracing information to source documents, but also included a detailed review of the assumptions and methodologies used by the Applicant's in its study. Based on its review, the Staff made certain adjustments to the Applicant's study to reflect the Staff's position and recent Commission decisions.

The Staff has calculated a collection lag of 25.46 days using the same methodology that the Applicant used, with the exception that the Staff has excluded PIP revenues from the Residential Revenues. The collection lag of 25.46 days plus the number of average consumption in reading days 15.20, and the number of average billing days 2.32 days, equates to a revenue lag of 42.98 days.

The Staff also made certain adjustments to the Applicant's expense lag days to reflect recent Commission decisions relative to vacation pay. For example, payroll lag days were adjusted to include vacation and incentive pay; corporate insurance, and other costs expenses were adjusted to reflect the payment date or the due date, and taxes other than income taxes were calculated based on the statutory payment dates or the due date. The Staff's revision to the Applicant's lead/lag study is shown on Schedule B-5.

### **Other Rate Base Items**

The Staff adjusted rate base by the date certain balances of various post-in-service carrying charges, deferred income taxes created by the timing differences of tax to book expense recognition, customer deposits, unclaimed funds, and other rate base items. Other rate base items are detailed on Schedule B-6.

## **OPERATING INCOME**

The Applicant's test year operating income consists of three months of actual data for the period October 1 through December 31, 2007, and nine months of forecasted data for the period January 1 through September 30, 2008. 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 pro forma operating income is the Staff's adjusted test year operating income modified to reflect the Applicant's increase in revenues and the associated increases in Ohio excise tax, 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 pro forma operating income are detailed on Schedules A-1.1, C-1.1, C-3.1 through C-3.18 and C-4.

### **Pro forma Adjustments**

Schedule C-1.1 sets forth the Applicant's proposed increase in operating revenues based on the Applicant's proposed rates and associated increases in Ohio excise taxes and federal income taxes.

### **Current Adjustments**

#### **Base Revenue**

The Staff and the Applicant annualized test year base revenues to reflect the most current rates granted by the Commission with test year normalized sales volumes. Also included in the base revenues adjustment are adjustments to the Percentage of Income Payment Plan, distribution tax, Ohio excise tax, bad debts. In addition, an adjustment to revenue was made to remove the revenue associated with the transfer of customers to Orwell. The Staff's adjustment is presented on Schedule C-3.1

#### **Gas Cost Revenue and Expense**

The Applicant and the Staff synchronized test year gas cost revenue and gas cost expense by applying the test year sales volumes to the latest Gas Cost Rate. The Staff's adjustments are shown on Schedules C-3.2 and C-3.6.



### **Bad Check and Late Payment Revenue**

The Applicant proposed eliminating bad check and late payment revenue from the test year. Columbia proposed crediting these revenues toward costs that would otherwise be recovered through its uncollectible expense adjustment mechanism. The Staff does not concur with the above proposal and presents its adjustment on Schedule C-3.3.

### **Unbilled Revenue**

The Applicant and the Staff adjusted test year revenues to eliminate unbilled revenues. The Staff's adjustment is shown on Schedule C-3.4.

### **Non-traditional Revenue**

Both the Applicant and the Staff removed non-traditional revenues from the test year that have been addressed in other proceedings. The Staff's adjustment is shown on Schedule C-3.5.

### **Uncollectible Accounts Expense**

The Applicant and the Staff synchronized test year uncollectible accounts expense and PIPP expense to include an offset or synchronization of revenue collected through the bad debt rider. The Staff's adjustment is shown on Schedule C-3.7.

### **Labor Expense**

The Applicant adjusted test year labor expenses to annualize wage increases expected to occur throughout the test year.

The Staff's labor expense adjustment reflects an annualization, which was based on the latest known actual payroll data as of June 30, 2008. For the Applicant's direct full time salaried labor, hourly labor and part-time labor, the Staff used an average hourly rate and test year actual number of hourly employees. The Staff's adjustment also includes incentive compensation while the Applicant presented its incentive compensation adjustment in a separate schedule. The Staff's adjustment for labor expense is presented on Schedule C-3.8.

### **Pension and Benefits Expense**

The Applicant and the Staff annualized pension and benefits expense to reflect adjustments to test year wage expense. The Staff's adjustment is shown on Schedule C-3.9.

### **Post In Service Carrying Costs (PISCC)**

The Applicant and the Staff included the amortization of carrying cost on deferred depreciation expenses and property taxes incurred as a result of plant investment subject to PISCC. This recovery was approved in 94-987-GA-AIR. This adjustment is detailed on Schedule C-3.10.

### **Non-jurisdictional Expenses**

The Applicant and the Staff adjusted test year expenses to remove non-jurisdictional expenses associated with advertising, lobbying, sales, dues and memberships, and charitable contributions. The Staff's adjustment is presented on Schedule C-3.11.

### **Reclassification of Interest on Customers' Deposits**

Consistent with the treatment of customers' deposits as an offset to the Applicant's rate base, the Staff reclassified the associated interest expense to operating expenses. The Staff's adjustment is shown on Schedule C-3.12.

### **Rate Case Expense**

The Applicant proposed a three-year amortization period of its estimated rate case expense.

The Staff reviewed Applicant's current estimate of and believes that it is reasonable and recommends a five-year amortization period. The Staff's adjustment is presented on Schedule C-3.13.

The Staff recommends that the Commission review the Applicant's revised estimate of this expense before making a final determination of an appropriate level. The Applicant should provide this final estimate as a late filed exhibit.

### **Warm Choice Program Expense**

The Applicant and the Staff made adjustments to annualize the cost of the warm choice program and to amortize the balance of the deferred warm choice program cost, including associated carrying cost, remaining at December 31, 2007. The Staff's adjustment is shown on Schedule C-3.14.

### **Known O&M Changes**

The Applicant and the Staff included an adjustment for known changes in the O&M expenses that have occurred subsequent to the preparation of the official operating budget. The Staff's adjustment is reflected on Schedule C-3.15.

### **Depreciation Expense**

Depreciation expense is adjusted to reflect the Staff's recommend depreciable plant in service as of date certain. This adjustment is presented on Schedule C-3.16 with supporting calculations shown 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 tax rates. For example, property taxes were computed by applying the latest known average tax rate to the date certain property valuation. Ohio Excise taxes were calculated to reflect taxes based on adjusted test year revenues. FICA, FUTA and SUTA taxes were calculated based on test year adjusted payroll. Moreover, the Applicant currently recovers a portion of Ohio Excise tax through a tax rider. The Applicant proposed that the entire Ohio Excise tax be recovered through the tax rider.

Schedule C-3.17 provides a summary of the calculated taxes and the resultant adjustment of those taxes. The supporting calculations are detailed on Schedules C-3.17a through C-3.17h.

### **Federal Income Tax**

The Staff computed test year federal income taxes to reflect the recommended adjustments to operating revenues and expenses.

The computation of Federal Income taxes reflects the inter-period interest allocation, the ratable flow-through of prior years' investment tax credits, and the normalization of accelerated tax depreciation and certain other tax to book timing differences. The Staff recommends that the Commission authorize the Applicant full deferral tax treatment for all temporary book to tax timing differences.

Schedule C-3.18 provides the calculation of the Federal Income tax adjustment. Schedule C-4 sets forth the supporting calculations of Federal Income taxes.

## **RATE OF RETURN**

The Staff recommends a rate of return in the range of 7.89% to 8.41%. The recommended rate of return was developed using a cost of capital approach which reflects a market-derived cost of equity, the Applicant's embedded cost of long-term debt, and a capital structure reflective of companies engaged in gas distribution operations.<sup>1</sup>

### **Capital Structure**

The Applicant, Columbia Gas of Ohio, is a wholly-owned subsidiary of NiSource, Inc., which is a publicly traded, public utility holding company. Given that the rates established in this case are for gas distribution services, the Staff is using a capital structure for rate of return determination that is commensurate with the risk associated with operating gas distribution services. A comparable group of publicly traded companies primarily engaged in gas distribution was developed to provide an average capital structure, as well as a cost of equity to be used in the Staff's rate of return recommendation.<sup>2</sup> The capital structure arrived at in this manner is 49.29% long-term debt and 50.71% common equity.

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

The Staff employed the embedded cost of long term debt of Columbia as of December 31, 2007, from Applicant's Schedule D-3A. In the calculation of the weighted cost of debt, the annual interest is divided by the carrying value. The embedded cost of long term debt of Columbia is 5.78% on Schedule D-1.

### **Cost of Common Equity**

The Staff considered a group of utilities which are representative of the industry for purposes of cost of equity estimation, and to determine capital structure. This group consists of companies publicly traded on the New York Stock Exchange, and are categorized as natural gas distribution companies (Standard Industrial Code = 4924) in Global Energy's Energy Velocity Suite. These companies have operating revenues greater than \$2.4 billion. These companies have paid a dividend each quarter in the past four years, and the amount of the dividends has not been flat over that period. These companies have Value Line betas of .85 to .95, and Standard & Poor's bond ratings of BBB or higher. They have Value Line market capitalizations of between

---

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

<sup>2</sup> See Schedule D-1.10.

\$1 billion and \$15 billion. Based on these criteria, the Staff selected the following comparable group of six companies:

<u>Company Name</u>	<u>Ticker</u>
AGL Resources, Inc.	ATO
Atmos Energy Corporation	ATG
CenterPoint Energy	CNP
New Jersey Resources	NJR
Sempra Energy	SRE
WGL Holdings, Inc.	WGL

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, .883, and the Ibbotson<sup>3</sup> derived 6.5% spread of arithmetic mean total returns between large company stocks and long term government bonds (i.e., "risk free return"). 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 July 3, 2007 through July 2, 2008. The weighting was done in a manner that emphasized later quarters to a greater degree. The 10-year average yield is 3.92%. The 30-year average yield is 4.56%. The average of the two is 4.24%. This was added to the product of the beta and the 6.5% spread, and resulted in a CAPM cost of equity estimate of 9.98<sup>4</sup>.

In calculating the 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, and estimates of the expected rate of growth of earnings. The stock price employed is the average daily closing price for the period from July 3, 2007 through July 2, 2008.

The DCF model assumes that earnings growth and dividend growth are the same. The Staff averaged earnings per share estimates from 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 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 growth

<sup>3</sup> Ibbotson Associates's 2007 Yearbook: Stocks, Bonds, Bills and Inflation; Valuation Edition

<sup>4</sup> See Schedule D-1.2.

<sup>5</sup> See Schedule D-1.3.

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 2007.<sup>7</sup>

Based on long-term GNP growth, the respective company's DCF growth estimate and dividends, 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 10.72%. When averaged with the 9.98% CAPM estimate, the result is 10.35%. Using a one-hundred basis point range of uncertainty, the cost of equity estimate becomes 9.85% to 10.85%.<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 1.01019. Applying this factor to the baseline cost of common equity range results in a recommendation of 9.95% to 10.96%.

In this rate proceeding, the Company has applied in most of its rate schedules for a change in its rate design to replace, after a one-year phase-in period, the current Customer Charge and volumetric rate with a fixed Monthly Delivery Charge. Additionally, in Case No. 08-0073-GA-ALT, the Company filed for approval of an Alternative Rate Plan consisting of two separate rate recovery mechanisms. The first will provide the Company with the ability to track and recover, on an annual basis, the costs of implementing an Infrastructure Replacement Program, consisting of three components: 1) costs associated with the replacement of natural gas risers that are prone to failure, along with the costs associated with the future maintenance, repair and replacement of customer service lines that have been determined by the Company to present an existing or probable hazard to persons or property; 2) costs associated with the Company's Accelerated Main Replacement Program, to provide for the accelerated replacement of cast iron mains and bare steel mains and service lines over a period of 25 years; and 3) costs associated with the Company's installation of over 380,000 Automatic Meter Reading Devices, on meters located inside individual customer's premises, as well as on inaccessible outside meters.

These measures, if adopted by the Commission, would reduce the risks that the Company faces with respect to revenues and cost recovery. Inasmuch as the costs of capital reflect risks, the reductions in business and regulatory risks should be considered.

---

<sup>6</sup> See Schedules D-1.4 through D-1.8.

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

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



## **RATES AND TARIFFS**

By its application in Case No. 08-0072-GA-AIR, Columbia Gas of Ohio, Inc. requests authority to increase rates to be charged and collected for gas service within its service territory.

The Utilities Department Commission Staff has investigated the rate and tariff matters proposed by the Applicant. The results of the Staff's investigation are reported in this section. It is Staff's intent to provide analysis with regard to the acceptability and reasonableness of the changes in revenue recovery mechanisms contained in the proposed tariffs. Proposals made by the Staff may require adjustments based on the revenue and rate structure authorized by the Commission.

Staff's Tariff Analysis addresses changes specific to individual rate schedules, changes which apply to more than one specific rate class, and tariff additions and deletions. Rate Design will analyze the Current, Applicant Proposed and Staff-Recommended mechanisms for rate recovery. Rate and Revenue Analysis is dedicated to the propriety and impact of the rate schedule proposal. Tables which portray the effects of Current, Proposed, and Staff-Recommended rates on typical bills are presented at the end of the report.

### **TARIFF ANALYSIS**

The Applicant is proposing various textual changes to its tariffs. Unless noted, Staff recommends approval of these changes as proposed by the Applicant. In addition, Staff is making recommendations to change certain language to reflect the current minimum service standard requirements of 4901:1-13 of the Ohio Administrative Code, which became effective on January 1, 2007. The proposed changes are provided as follows:

#### **SECTION II – METERING AND BILLING**

**Third Revised Sheet No. 5 – Quantity of Gas Delivered by Meter:** Paragraph 5 of this section advises that Columbia Gas of Ohio (Columbia) shall perform a meter test at the customer request in accordance with Section 4933.09 of the Ohio Revised Code and Rule 4901:1-13-04 (D) of the Ohio Administrative Code. Staff is recommending that Columbia tariff the meter test charge and reference that tariff charge in this section.

**Fourth Revised Sheet No. 6 – Billing Periods:** This section concerns the time period for rendering customer bills. Staff recommends that the company remove the language, "but may be rendered more or less frequently at Company's option", to comply with Rule 4901:1-13-11 (B), which states that bills shall be rendered at regular intervals.



### **SECTION III – PHYSICAL PROPERTY**

**Second Revised Sheet No. 9 – Extension of Distribution Mains:** This section concerns main extensions and refund agreements. Columbia proposes reducing from ten to five years the time period for refund agreements to expire. Staff recommends that Columbia retain its current term of ten years on refund agreements.

### **SECTION IV – GENERAL**

#### **Miscellaneous Charges**

Staff has historically supported cost-based miscellaneous charges, in that they are incidental costs imposed by individual customers on the Applicant and, ultimately the rest of the customers. Such costs decrease the funds available for the Applicant 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 associated with those activities

Staff believes the provisions and resulting charges should reflect the actual cost(s) incurred by the Applicant. These charges should be recovered from customers who cause the expense(s), rather than customers in general. The collection of these charges is generally not dollar-for-dollar, but a reasonable approximation of cost recovery.

The Applicant is proposing to increase the Reconnection Trip Charge from \$19.00 to \$60.00. After reviewing the response to informal data request No. 001 dated 6/18/08, Staff proposes this charge to be \$51.90. If the Applicant scheduled reconnections to occur during normal business hours, the overtime component can be eliminated. Staff suggests that the Applicant schedule reconnections to take place during normal business hours.

The Applicant is proposing to increase the Tie-In Charge from up to \$290.00 or actual cost, to up to \$475.00 or actual cost if a tie-in is required. After eliminating the overtime component, Staff proposes a Tie-In Charge of up to \$457.00 or actual cost, whichever is cheaper. Staff's proposal is based on the Applicant's ability to schedule Tie-Ins during normal business hours only to eliminate the need for overtime.

The Applicant is proposing a Theft of Service Investigation Fee of \$95.00. After analyzing data submitted to the Staff in informal data request No. 001, Staff feels the appropriate charge for this type of service is \$88.00. Staff's decision is based on the Applicant's ability to perform this operation during normal business hours only, which will eliminate the necessity for the overtime component that is used in this calculation.

**First Revised Sheet No. 14 – Miscellaneous Charge - Tie-In Charge:** This section concerns the cost of tie-ins to restore service to a customer after nonpayment disconnection at the curb stop. Staff recommends that language be added that states, "Upon customer contact to restore service, the company shall inform the customer of this charge."

**Proposed Sheet No. 14 – Miscellaneous Charges – Meter Test Charge:** Columbia has proposed to delete the cost of a meter test from its miscellaneous charges. Columbia's reason for not including the meter test charge is, "because Section II, Part 1 defines the charges for the meter testing." Section II, Part 1 states, "...the customer shall pay a fee of twenty-five cents and the expense of removing it for the purpose of being tested." Staff recommends that a cost-based meter test charge be approved by the Commission and remain in the Company tariff.

## **RATE DESIGN AND REVENUE ANALYSIS**

### **Rate and Revenue Guidelines**

General guidelines and objectives are followed in Staff's review of rate schedules and design. The applicable schedules should provide the utility the opportunity of recovering an authorized revenue. The various schedules should represent a reasonable distribution of revenue between and among the various customer groups. The particular schedules should be equitable and reasonable, should provide for customer understanding and continuity of rates, and should cause minimal customer impact.

Rate design criteria are to be viewed as a package, in that they are interrelated. Although each item can be separately identified and applied to rate schedule determinations, no single standard is overriding in determining proper rate design. The rate schedules which comprise a particular utility's tariffs should provide for recovery of expenses found proper in the course of a regulatory proceeding. Normally, and to the extent sufficient information is available, cost of service studies and related expense analyses are necessary to determine the appropriate level of revenue to be generated and the appropriate recovery of such revenue.

From a practicable rate design standpoint, absolute equality between costs and revenues may be difficult to achieve in the short term. While it may be viewed as equitable to set rates at cost, if there is a substantial divergence in the current rates, the resulting impact on individual customers may be viewed as unreasonable. While desiring cost supported charges, Staff considers such items as resulting typical customer billings and resulting revenue increases which would necessarily occur. These tests help provide benchmarks with regard to reasonableness of charges in rate forms. While it is Staff's position that rate schedules reflect costs, it is also important to consider the continuity associated with current and proposed pricing structures. This

may result in movement towards more closely aligning revenue with costs rather than an absolute match at a particular time period.

In summary, gas rates should:

- Be predicated on costs.
- Be fair, equitable and reasonable.
- Cause minimal impact (sometimes called "gradualism") when changed.
- Provide continuity in pricing structures.
- Provide the utility the opportunity to recover the authorized revenue by providing for the recovery of costs found proper in a regulatory proceeding.

The preceding standards are important and each has value. They are, however subjective, and it is generally impossible to fully accomplish them all. Sometimes one standard (the most obvious being that the rates must provide the utility with the opportunity to recover its authorized revenue requirement) supersedes, to a degree, the others. Sometimes the standards are in conflict and to accomplish one, another might be set aside (e.g. in this application, the need for rates to be predicated on costs may cause changes in pricing structures resulting in greater than minimal impacts on some customers).

### **Cost of Service Analysis**

Generally, there are three capacity allocations that are commonly used – coincident demand, non-coincident demand, and average and excess demand. The standard filing requirements allow the selection of any of these approaches, or alternatives, when, in the utility's opinion, the procedure best represents the utility's system characteristics. The Applicant utilized a coincident peak demand allocation factor using the company's design day demand for allocating certain portions of the capacity related costs. Staff finds the methodology reasonable and accepts the allocation factors as provided in the class cost of service study.

The Applicant's filing provided class allocations based upon a levelized rate of return in addition to class rate of returns based upon the company's proposed revenue distribution. After reviewing several analyses evaluating moving each class toward the cost to serve on an indices basis, Staff finds the Applicant's proposal best reflects the cost to serve. Staff finds the class cost of service as a reasonable starting point and accepts the proposed revenue distribution resulting from the proposed class rate of returns based upon the Applicant's requested 79.3 million dollar increase.

In Case No. 99-994-GA-ATR, the Commission ordered, "That Murphy Gas, Inc. be authorized to transfer to Columbia Gas of Ohio, Inc., the pipeline facilities, rights-of-way, meter and regulator equipment, and the right and obligation to serve certain customers, upon the terms and conditions set forth in Exhibit A to the petition." The Finding and Order states that the joint petition proposed that the base rates of the two companies be maintained until new rates become effective following the company's next rate filing.

The Applicant is seeking approval in combining existing Columbia Gas Small General Service customers and former Murphy Gas customers. From a class cost of service perspective, Staff does not find the proposed unreasonable, therefore, recommending approval.

		Current		Applicant Proposed	
		ROR	Index	ROR	Index
Small General Service		3.01%	.63	8.50%	.93
General Service		15.96	3.34	14.97	1.64
Large General Service		3.48	.73	10.52	1.15
Full Req. Coop Trans.		(14.53)	(3.04)	(13.01)	(1.43)
Flex		1.23	.26	1.10	.12
Contract (Suburban)		14.95	3.13	13.39	1.47
Total		4.78%		9.12%	

## REVENUE ANALYSIS

Rates and charges shown in the rate schedule tables may require adjustment based on the revenue requirement granted by the Commission, and/or changes in the rate areas, or changes in rate structure approved by the Commission.

Applicant's and Staff's Current and Proposed increases are shown in Tables 1 and 2, excluding and including gas cost.

COLUMBIA GAS OF OHIO, INC.  
Case No. 08-0072-GA-AIR

TABLE 1

Total Revenue Excluding Gas Cost

	<u>Current</u>	<u>Applicant</u>	<u>Increase</u>	<u>Percent</u>	<u>Staff</u>	<u>Increase</u>	<u>Percent</u>
	<u>(\$)</u>	<u>Proposed</u>	<u>(\$)</u>	<u>Increase</u>	<u>Proposed</u>	<u>(\$)</u>	<u>Increase</u>
		<u>(\$)</u>		<u>(%)</u>	<u>(\$)</u>		<u>(%)</u>
<b>Small General Service</b>							
Sales	252,412,481	302,581,246	50,168,765	19.88%	304,019,185	51,606,707	20.45%
Transportation	143,751,993	172,326,511	28,574,518	19.88%	165,838,072	22,085,996	15.36%
<b>Total SGS</b>	<b>396,164,474</b>	<b>474,907,757</b>	<b>78,743,283</b>	<b>19.88%</b>	<b>469,857,257</b>	<b>73,692,703</b>	<b>18.60%</b>
<b>General Service</b>							
Sales	32,765,170	35,811,384	3,046,214	9.30%	34,589,861	1,825,755	5.57%
Transportation	78,713,034	81,447,253	2,734,219	3.47%	78,630,199	(115,277)	-0.15%
<b>Total GS</b>	<b>111,478,204</b>	<b>117,258,637</b>	<b>5,780,433</b>	<b>5.19%</b>	<b>113,220,060</b>	<b>1,710,478</b>	<b>1.53%</b>
<b>Large General Service</b>							
Sales	120,300	151,356	31,056	25.82%	154,709	34,409	28.60%
Transportation	13,836,280	17,082,674	3,246,394	23.46%	17,710,294	3,838,687	27.74%
<b>Total LGS</b>	<b>13,956,580</b>	<b>17,234,030</b>	<b>3,277,450</b>	<b>23.48%</b>	<b>17,865,003</b>	<b>3,873,096</b>	<b>27.75%</b>
<b>Full Req Coop</b>							
Transp	1,104	5,356	4,252	385.14%	4,057	2,953	267.48%
Flex	15,940,246	15,940,246	-	0.00%	16,110,372	-	0.00%
<b>Total Company</b>	<b>537,540,608</b>	<b>625,346,026</b>	<b>87,805,418</b>	<b>16.33%</b>	<b>617,056,749</b>	<b>79,279,230</b>	<b>14.75%</b>

COLUMBIA GAS OF OHIO, INC.  
Case No. 08-0072-GA-AIR

TABLE 2

Total Revenue Including Gas Cost

	<u>Current</u>	<u>Applicant</u>	<u>Increase</u>	<u>Percent</u>	<u>Staff</u>	<u>Increase</u>	<u>Percent</u>
	<u>(\$)</u>	<u>Proposed</u>	<u>(\$)</u>	<u>Increase</u>	<u>Proposed</u>	<u>(\$)</u>	<u>Increase</u>
		<u>(\$)</u>		<u>(%)</u>	<u>(\$)</u>		<u>(%)</u>
<b>Small General Service</b>							
<b>Sales</b>	1,021,470,912	1,071,639,877	50,168,765	4.91%	1,073,077,616	51,606,707	5.05%
<b>Transportation</b>	143,751,993	172,326,511	28,574,518	19.88%	165,838,072	22,085,996	15.38%
<b>Total SGS</b>	1,165,222,905	1,243,966,188	78,743,283	6.76%	1,238,915,688	73,692,703	6.32%
<b>General Service</b>							
<b>Sales</b>	161,438,851	164,485,065	3,046,214	1.89%	163,263,541	1,825,755	1.13%
<b>Transportation</b>	78,713,034	81,447,253	2,734,219	3.47%	78,630,199	(115,277)	-0.15%
<b>Total GS</b>	240,151,885	245,932,318	5,780,433	2.41%	241,893,740	1,710,478	0.71%
<b>Large General Service</b>							
<b>Sales</b>	1,104,841	1,135,897	31,056	2.81%	1,139,250	34,409	3.11%
<b>Transportation</b>	13,836,280	17,082,674	3,246,394	23.46%	17,710,294	3,838,687	27.74%
<b>Total LGS</b>	14,941,121	18,218,571	3,277,450	21.94%	18,849,544	3,873,096	25.92%
<b>Full Req Coop</b>							
<b>Transp</b>	1,104	5,356	4,252	385.14%	4,057	2,953	267.48%
<b>Flex</b>	15,940,246	15,940,246	-	0.00%	16,110,372	-	0.00%
<b>Total Company</b>	1,436,257,261	1,524,062,679	87,805,418	6.11%	1,515,773,401	79,279,230	5.52%

Applicant's and Staff's Current and Proposed Revenue Distribution, is shown in Tables 3 and 4, excluding and including gas costs.

COLUMBIA GAS OF OHIO, INC.  
Case No. 08-0072-GA-AIR

TABLE 3

Total Revenue Excluding Gas Cost

	<u>Current</u>	<u>Applicant Proposed</u>	<u>Staff Proposed</u>
	(%)	(%)	(%)
Small General Service			
Sales	46.96%	48.39%	49.27%
Transportation	26.74%	27.56%	26.88%
Total SGS	73.70%	75.94%	76.14%
General Service			
Sales	6.10%	5.73%	5.61%
Transportation	14.64%	13.02%	12.74%
Total GS	20.74%	18.75%	18.35%
Large General Service			
Sales	0.02%	0.02%	0.03%
Transportation	2.57%	2.73%	2.87%
Total LGS	2.60%	2.76%	2.90%
Full Req Coop Transp	0.00%	0.00%	0.00%
Flex	2.97%	2.55%	2.61%
Total Company	100.00%	100.00%	100.00%

COLUMBIA GAS OF OHIO, INC.  
Case No. 08-0072-GA-AIR

TABLE 4

Total Revenue Including Gas Cost

	<u>Current</u>	<u>Applicant Proposed</u>	<u>Staff Proposed</u>
	(%)	(%)	(%)
Small General Service			
Sales	71.12%	70.31%	70.79%
Transportation	10.01%	11.31%	10.94%
Total SGS	81.13%	81.62%	81.73%
General Service			
Sales	11.24%	10.79%	10.77%
Transportation	5.48%	5.34%	5.19%
Total GS	16.72%	16.14%	15.96%
Large General Service			
Sales	0.08%	0.07%	0.08%
Transportation	0.96%	1.12%	1.17%
Total LGS	1.04%	1.20%	1.24%
Full Req Coop Transp	0.00%	0.00%	0.00%
Flex	1.11%	1.05%	1.06%
Total Company	100.00%	100.00%	100.00%

## Rate Design

Staff has traditionally recommended and supported a rate design for the natural gas distribution component consisting of a minimal customer charge and a volumetric rate or blocks of rates. That rate structure, while not truly cost-reflective, gave the utility an opportunity to recover the recommended revenue requirement as long as gas consumption was at or above the level upon which rates were based. In recent years, due primarily to the volatile and relatively high cost of gas (recovered through the Gas Cost Recovery mechanism), gas consumption has continued to trend lower per customer. Therefore, Columbia Gas, and other gas utilities, has seen the recovery of distribution costs deteriorate as the volume of gas used decreased.

In this case, Staff recommends a rather significant change in its rate structure policy. Rather than recovery via a minimal customer charge and relatively high volumetric rates, Staff recommends that the Commission approve a rate structure primarily based on a fixed distribution service charge. In reality, most distribution-related costs are fixed



and do not vary with the volume of gas delivered by the utility. The distribution facilities required to serve a small residence are most likely the same as those required to serve a larger residence. The distribution facilities required to serve a minimum number of gas appliances in a residential unit are most likely the same as those required to serve a residence with multiple gas appliances. The costs to the utility vary only slightly, if at all, by the volume of gas used.

In addition to a better reflection of cost causation, the primarily fixed charge-based rate structure accomplishes other rate objectives. It levelizes the distribution component of a customers' bill, providing rate certainty. It reduces the revenue deterioration of a utility in a time of reduced consumption; thus, reducing the need for frequent rate cases. From the company's point of view, it eliminates its natural disincentive to promote energy conservation which, when rates are volume-based, causes revenue erosion.

Staff is keenly aware, however, of the downsides of this significant change in the design of rates. The change from a primarily volume-based rate to a primarily fixed charge rate often results in an increase of the distribution component of the bill of a customer whose gas usage is relatively low (or, if the fixed charge is "blocked," to the lower use customers in the block). A secondary disadvantage is that the fixed charge structure may reduce the incentive on the part of the customer to lower its usage. Staff, however, finds that this argument is much less relevant in the case of distribution rates. The distribution portion of a customer's bill is relatively small compared to the total bill. The cost of gas to be recovered through the Gas Cost Recovery mechanism will continue to be the main incentive for a customer to keep his usage to a minimum.

With these things in mind, Staff proposes and recommends a change in rate design that phases in the change from a primarily volumetric rate to a primarily fixed charge rate. The following table illustrates the proposed rate structures.

**COLUMBIA GAS OF OHIO**

**Rate Design- Summary of Proposed Rates**

Small General Service (SGS)						
<u>Charge</u>	<u>Basis</u>	<u>Current</u>	<u>Applicant Proposed- Year 1</u>	<u>Applicant Proposed- Year 2</u>	<u>Staff Proposed- Year 1</u>	<u>Staff Proposed- Year 2 Excludes GRT</u>
		Includes GRT	Excludes GRT	Excludes GRT	Excludes GRT	
Customer Charge	Monthly	\$6.50	\$12.97	\$19.76	\$13.00	\$19.50
Customer Charge- Schools	Monthly	\$6.19	\$12.32	\$18.77	\$12.35	\$18.53
Volumetric Charge	All mcf	\$1.3669	\$0.9479	\$0.0000	\$0.9101	\$0.0000
Volumetric Charge- Schools	All mcf	\$1.3013	\$0.9005	\$0.0000	\$0.8646	\$0.0000
General Service (GS)						
<u>Charge</u>	<u>Basis</u>	<u>Current</u>	<u>Applicant Proposed</u>	<u>Staff Proposed</u>		
		Includes GRT	Excludes GRT	Excludes GRT		
Customer Charge	Monthly	\$16.50	\$25.00	\$23.00		
Customer Charge- Schools	Monthly	\$15.71	\$23.75	\$21.85		
Volumetric Charge	First 25 mcf	\$1.3607	\$1.8969	\$1.7400		
	Next 75 mcf		\$1.3465	\$1.3100		
	All other mcf	\$1.2784	\$1.0834	\$1.0400		
Volumetric Charge- Schools	First 25 mcf	\$1.2954	\$1.8021	\$1.6530		
	Next 75 mcf		\$1.2792	\$1.2445		
	All other mcf	\$1.2170	\$1.0292	\$0.9880		
Large General Service (LGS)						
<u>Charge</u>	<u>Basis</u>	<u>Current</u>	<u>Applicant Proposed</u>	<u>Staff Proposed</u>		
		Includes GRT	Excludes GRT	Excludes GRT		
Customer Charge	Monthly	\$0.00	\$650.00	\$700.00		
Volumetric Charge	First 2,000 mcf	\$0.4614	\$0.4496	\$0.4650		
	Next 13,000 mcf	\$0.2813	\$0.2741	\$0.2850		
	Next 85,000 mcf	\$0.2513	\$0.2449	\$0.2550		
	All other mcf	\$0.1913	\$0.1884	\$0.2000		

<u>Charge</u>	<u>Basis</u>	<u>Main Line</u>		<u>Staff Proposed</u> Excludes GRT
		<u>Current</u> Includes GRT	<u>Applicant Proposed</u> Excludes GRT	
Customer Charge	Monthly	\$0.00	\$650.00	\$700.00
Volumetric Charge	All mcf	\$0.2058	\$0.1864	\$0.2000

### **Staff Discussion of Recommendation**

The above table represents a Staff "concept" of a two year phase in to a primarily fixed charge rate. While Staff recommends the adjustments to the rate design, this table should in no way be taken as a recommendation by the Staff of the Rates and Tariffs Division as to the overall revenue requirement recommended by the appropriate Staff in other sections to this report. The rates for each of the two years are meant to reflect the Applicant's proposed revenue as supported by its cost of service filing, with two relatively minor corrections in the revenue calculation as filed by the Applicant. The rates in the above tables are intended to reflect changes to the rate design that the Applicant has proposed.

There are a number of residential and general service accounts that use such small volumes of gas that it is likely that the usage is for something other than space or water heating. From a cost causation viewpoint of the distribution company, these customers are no different than other customers in their class. Staff recommends that the Applicant work with these customers to notify them that they may see a significant increase in their bill with limited consumption.

### **TYPICAL BILLS**

Monthly typical bills are shown in E-5 Schedules of the end of this report. Calculation of the typical bills uses a gas cost of \$10.9515 per Mcf.

## **GAS PIPELINE SAFETY REVIEW**

Staff conducted gas pipeline safety inspections at the Columbia Gas of Ohio, Inc. Company (Columbia) in 2005, 2006, and 2007. Specifically, Staff assessed the compliance of Columbia with the state and federal gas pipeline safety regulations (GPS) outlined in Ohio Administrative Code 4901:1-16. Under 4901:1-16-03 Staff also adopts and enforces federal regulations 49 Code of Federal Regulations (C.F.R) Parts 191, 192, 199, and 40.

The GPS inspections involved the following:

- Review of records for compliance with gas pipeline safety regulations.
- Physical site visits to verify compliance with safety inspection standards.
- Review of operations plans, emergency plans and associated standards and procedures for compliance with emergency response, construction, operations and maintenance requirements.
- Review of drug and alcohol programs for employees and contractors.
- Review of the Public Awareness Program and associated records.
- Review of Operator Qualification Program and records.
- Inspection of gas pipeline construction projects in the field for code compliance with safety regulations and operator construction procedures.
- Review of the Ohio Utilities Protection Service, and the Call Before You Dig Program.

Records and field inspections were performed of the Company's following locations on a yearly basis:

1. Columbus West Operations Center
2. Columbus East Operations Center
3. Muskingum Valley Operations Center
4. Lake Erie Operations Center
5. Toledo Operations Center
6. Three Rivers Operations Center
7. Ohio Valley Operations Center
8. Springfield Operations Center
9. North Pointe Operations Center
10. Ironton Operations Center
11. Heartland Operations Center
12. Great Trail Operations Center

Operations and maintenance manuals and drug and alcohol records and plans are reviewed for compliance every other year at the following location.

Headquarters Columbus, Ohio

The field portions of the inspections were conducted at several different pipeline sites. These inspections consisted of pressure regulator stations, pressure telemeter, critical valves, corrosion test point stations, rectifiers, leakage survey areas, odorant testing, checking material specifications, and exposed pipe locations in the Columbia pipeline system. GPS inspections are conducted on an annual basis to confirm that Columbia is complying with federal and state gas pipeline safety regulations.

### **Findings: Scheduled Annual Audit Inspections**

During the records and field inspection portion of the inspections, a number of areas are reviewed such as valve maintenance, pressure regulation, pressure telemetering, corrosion control, leakage survey, pipeline patrolling, material and pipeline specifications, drug and alcohol test records, operator qualification, public awareness, damage prevention, pressure testing, odorization, and emergency response. All records were reviewed for the appropriate timeline of inspection and maintenance on the gas pipeline system.

Staff has completed 32 inspections of Columbia's facilities in calendar years 2005 through 2007. As a result of these inspections, the Company was sent 16 enforcement action letters containing 51 notices of probable noncompliance (NPNC). The NPNC procedure provides the operator with a 30 day period in which to provide Commission Staff with an action plan to correct any cited condition. Columbia promptly responded to the enforcement actions with acceptable corrective action plans in each case. Staff conducted follow-up inspections and in almost all circumstances Columbia has met or exceeded the proposed corrective action plans. However, one enforcement action resulted in the Staff initiating a pipeline safety case, Case No. 06-1205-GA-GPS, for violation of 49 C.F.R. 192 related to odorization, atmospheric corrosion, and leak detection and repair. As part of this case, Columbia and the Staff entered into a Stipulation and Recommendation which was approved by the Commission and resulted in a corrective action plan and Columbia's agreement to incur incremental expenses of not less than \$200,000 to implement the new process and pay a forfeiture of \$250,000. Columbia is on target to correct all non-compliances in their corrective action plan.

### **Pipeline Safety Incidents and Outages**

In the calendar years 2005 through 2007, there were six incidents that occurred in the Columbia system. An incident is defined in Title 49, Part 191.3 C.F.R. and Administrative Code section 4901:1-16-01 (I) as an event that involves a release of gas from an intrastate gas pipeline facility resulting in either death, personal injury requiring hospitalization or estimated property damage of \$50,000 or more. In 2006 there were a

total of four incidents. One incident was the result of third party action and Columbia was not cited. A second incident was the result of Columbia using a power sewer snake to install a main through an unmarked sewer line. The Company was sent a NPNC and cited under C.F.R. sections 192.13(c) and 192.325 (b). As a corrective action, the Company was required to develop procedures related to damage prevention, using trenchless technology including the requirement that the Company would forbear from utilizing trenchless technology unless they can verify the location of foreign facilities. Of the remaining two incidents one involved a fire in the vicinity of a meter setting which is still under investigation and the other a pre-code mechanical coupling separation for which the Company was not cited. In 2007 there were two incidents both of which were caused by third party action and the Company was not cited.

## PIPELINE INFRASTRUCTURE REPLACEMENT PROGRAM

Columbia proposed an Accelerated Main Replacement Program (AMRP) beginning in 2009 to accelerate its current gas distribution main replacement program. Columbia is proposing to accelerate the replacement of its non-cathodically protected bare and coated steel and wrought and cast iron gas distribution mains because of their susceptibility to corrosion and leakage over time as a result of being buried in the earth.<sup>1</sup> Corrosion is an electro-chemical reaction of a metallic material with its environment including soil, water and air. Metallic pipe when not otherwise protected and exposed to oxygen and/or water – can corrode. Corrosion can result in small holes in the pipe, or loss of pressure-carrying capacity resulting in the unintended release of natural gas.<sup>2</sup>

At the end of 2006, Columbia reported 3,663 miles of bare steel, 52 miles of unprotected coated steel, and 280 miles of cast or wrought iron remaining in their distribution system.<sup>3</sup> In 2006, Columbia's replacement rate of unprotected bare steel main was 1.4% or approximately 50.6 miles of pipeline. If the Company were to continue at this rate, it would take approximately in 72 years to eliminate the problematic bare steel mains as compared to 26 years at a national average replacement rate of 3.7%. More than half of Columbia's bare steel and cast or wrought iron mains were installed before 1940. With the current rate of replacement, the last main replaced would be greater than 120 years old.<sup>4</sup> To complete the AMRP in twenty-five (25) years, 160 miles of main would need to be replaced per year.<sup>5</sup> Staff supports this accelerated replacement program to replace the trouble prone mainlines and

---

<sup>1</sup> Direct Testimony of Steven Vitale on Behalf of Columbia Gas of Ohio, pg. 6.

<sup>2</sup> Pipeline and Hazardous Materials Safety Administration website: Publication titled, *Fact sheet: Cathodic Protection*.

<sup>3</sup> Direct Testimony of Steven Vitale on Behalf of Columbia Gas of Ohio, Inc., Attachment SV-1 Black & Veatch *Comparative Analysis of the Bare and Coated Steel Distribution Piping of Columbia Gas of Ohio, Inc.*, pg. 33.

<sup>4</sup> Direct Testimony of Steven Vitale on Behalf of Columbia Gas of Ohio, pg. 7.

<sup>5</sup> Direct Testimony of Steven Vitale on Behalf of Columbia Gas of Ohio, Inc., Attachment SV-1 Black & Veatch *Comparative Analysis of the Bare and Coated Steel Distribution Piping of Columbia Gas of Ohio, Inc.* pg. 32.

believes that a pipeline replacement of program of this magnitude will enhance the safety and reliability of Columbia's pipeline system. Further by replacing the unprotected as well as ineffectively coated piping, Columbia should significantly reduce the number of leaks discovered through leak surveying, and generally reducing the amount of leakage found in the system. Staff has supported a similar program initiated by another Ohio LDC and notes that customers have realized approximately \$8.5 million in O&M savings to date that has been credited back through the LDC's AMRP rider.<sup>6</sup> Staff supports Columbia's AMRP and believes the benefits justify recovering its costs through Rider IRP.

### **Customer Owned Service Lines**

Staff in a number of previous cases has supported the concept of Company responsibility for customer service lines. In a previous case, Staff filed testimony in support of Columbia's application to establish an infrastructure replacement program<sup>7</sup> and in two other LDC rate cases Staff supported proposals to assume responsibility for the installation of new customer service lines, as well as the assumption of responsibility for maintenance of customer service lines.<sup>8</sup> Staff believes LDC assumption of responsibility for curb-to-the-meter service lines will significantly enhance pipeline safety and establish a clear line of responsibility between the utility and the consumer, with the Company continuing to have responsibility for all piping up to the outlet of the meter and the customer with responsibility for piping downstream of the meter. Staff therefore supports Columbia's proposal to assume the responsibility for the installation, maintenance, repair and replacement of customer owned service lines and believes the benefits of the AMRP justify recovering its costs through Rider IRP. As part of its AMRP project Columbia's plans to eliminate many low pressure system and install mains that operate at a higher pressure.<sup>9</sup> As a result of raising gas pressure the under C.F.R. 192.357 requires that "each regulator that might release gas in its operation must be vented to the outside atmosphere. Under the pipeline safety regulations, when raising gas pressure, Columbia has the option of moving the meter setting and regulation outside of a structure or providing proper venting to the outside atmosphere.

### **Recommendation:**

Staff recommends that the Commission require Columbia, where it plans to raise gas pressure as a result of the AMPR, to provide a cost benefit analysis of moving and where necessary replacing the meter as opposed to venting meters to the outside of the structure.

---

<sup>6</sup> Case number 07-478-GA-UNC *Duke Energy Ohio Application to increase rates* pg. 39.

<sup>7</sup> Case No. 07-478-GA-UNC, *Prepared testimony of Edward M. Steele, submitted: October 24, 2007, pgs. \_\_\_\_\_.*

<sup>8</sup> Case No. 07-589-GA-AIR. *A report by the Staff of the Public Utilities Commission of Ohio, Duke Energy Ohio, Inc. pg. 43 and in Case No. 07-689-GA-AIR. A report by the Staff of the Public Utilities Commission of Ohio, Suburban Natural Gas Company pgs. 26 and 27.*

<sup>9</sup> Direct Testimony of David Roy on Behalf of Columbia Gas of Ohio, pg. 22.

## Riser Replacement Program and Customer Owned Service Lines

In November of 2006, Staff filed its report in the Commission's riser investigation case,<sup>10</sup> and put distribution operators on notice that certain plastic risers when subjected to particular conditions, were more prone to failure.<sup>11</sup> Staff also recommended that the Commission order distribution system operators to complete a riser survey to among other things identify the number and location of these types of risers in their systems. Columbia completed its survey and determined that it had 320,000 prone to fail risers. In response to this finding Columbia proposed an Infrastructure Replacement Program and estimated it would take approximately three years to replace all of its prone to fail risers.<sup>12</sup> Staff believes a riser replacement program is necessary to address a valid safety concern and signed and testified in support of an Amended Stipulated Recommendation that allowed for the replacement of the prone to fail risers, as well as service lines that Columbia determines to be hazardous.<sup>13</sup> As part of this application Columbia has proposed to incorporate its riser replacement program and recover the cost through Rider IRP. Staff supports this proposal.

## Automated Meter Reading Devices

Another component of the Applicant's Infrastructure Replacement Program (IRP) is its plan to install automatic meter reading devices (AMRDs) on all inside gas meters, as well as on hard-to-access outside meters during years 2009 and 2010. AMRDs enable the meter reader to obtain an actual meter reading without entering the house or hard-to-access outside locations, because the visual meter reading is replaced by a radio signal. Columbia's AMRD project involves the installation of approximately 350,000 AMRDs at an estimated total cost of \$21,910,000, which would be deferred for recovery through Rider IRP along with the cost of the accelerated main and riser replacement programs.<sup>14</sup> The Applicant estimates that in 2011, after completion of the two-year program, the portion of the Rider IRP fixed monthly charge attributable to AMRDs would average about 23 cents per customer, and in subsequent years this amount would be slightly reduced.<sup>15</sup>

---

<sup>10</sup> Case No. 05-463-GA-CO1 *A Report by the Staff of the Public Utilities Commission of Ohio, In the Matter of the Investigation of the installation, Use, and Performance of Natural Gas Service Risers Throughout the State of Ohio-and Related Matters*, pgs 14,15.

<sup>11</sup> Ibid.

<sup>12</sup> Case No. 07-478-GA-UNC Amended Stipulation and Recommendation at pg. 10.

<sup>13</sup> Case No. 07-478-GA-UNC Amended Stipulation and Recommendation at pg. 6.

<sup>14</sup> Although the Applicant's filed Alternative Regulation Plan stated that Columbia's Ohio system included approximately 380,000 inside meters and that its proposed AMRD program would cost about \$23 million, the Applicant subsequently clarified, in its response to Staff Data Request No. 5, that the AMRD program would entail the installation of AMR devices on about 350,000 meters at an estimated cost of \$21,910,000. This cost estimate does not include a projected offset for future savings, nor does it include the expense of replacing meters that are incompatible with AMR devices.

<sup>15</sup> Although the Applicant's Alternative Regulation filing stated that the AMRD program would have an average impact on 2011 customer bills of approximately \$0.31 per month, the Applicant subsequently reduced that amount to \$0.23 per month in a revised Schedule G-7 (Section 1, Sheet 1 of 3), which was included in its updated response to Staff Data Request No. 5. This reduction reflects the impact of fewer AMRs as well as a projected O&M savings offset.



Columbia states that implementation of the AMRD program would result in benefits that include:

- Lower meter reading costs (avoided costs, estimated at \$1.8 million annually, of reading inside and hard-to access outside meters);<sup>16</sup>
- Improved customer satisfaction (avoided customer inconvenience of arranging access for Columbia to read inside and hard-to-access outside meters);
- Improved meter-reading performance (by obtaining an actual reading on a higher percentage of total meters);
- Fewer billing errors (from incorrect meter reads);
- Reduced frequency of consecutive-month estimated meter readings;
- Improved employee safety; and
- Enhanced ability to detect revenue loss (the AMRD includes a meter-tampering detector).

Staff agrees that implementing the AMRD program should produce the benefits listed above, and also expects the program to significantly reduce the number of meter-reading related billing contacts it receives from the Applicant's customers. Staff believes the benefits of the AMRD program justify recovering its costs through Rider IRP. Staff therefore recommends that the Commission approve AMRD cost recovery through Rider IRP, subject to certain restrictions and modifications as discussed in the following paragraphs.

Staff assumes that while Columbia's personnel or contractors are on the customer's premise to install AMR devices on gas meters, the Applicant may find it necessary or economical to perform other activities on the same visit. They may find, for example, that the customer's meter needs to be replaced because it is old, inoperative, or incompatible with the AMRD. They may also be instructed to perform routine testing, maintenance, or inspections while on site. While Staff has no issues with the Applicant performing such activities on the same visit or in conjunction with AMRD installation, Staff believes these routine maintenance and replacement activities should be recovered through normal rate-case cost-recovery mechanisms. Staff therefore recommends these costs be excluded from the calculation of Rider IRP.

Although Columbia states that any savings in meter reading costs resulting from the AMRD program will be reflected in the revenue requirement for Rider IRP, the Applicant

---

<sup>16</sup> In its response to Staff Data Request No.2 (Item 26), the Applicant projected that an annual meter reading savings of \$1.8 million would occur after completion of the AMRD program.

does not specify how that savings will be calculated. Staff recommends that Columbia include in each annual IRP filing a comparison of that year's Meter Reading Expense (FERC Account 902) against the meter reading expense for the test year in this case, and if that year's meter reading expense is lower than the test-year amount, the savings thus calculated should appear as a reduction to the revenue requirement.

Columbia has projected an AMR-related O&M savings amount for each of the years 2010 - 2033. Staff believes Columbia should have an incentive to achieve its projected level of savings, and therefore recommends that if its actual savings are less than the projected amount, Rider IRP should reflect the greater savings amount projected for that year.

Finally, Staff believes there may be additional savings other than reduced meter reading expense that Columbia will realize as the result of AMR installations. These savings relate to avoided phone calls, post cards, letters, and other notices related to the program Columbia developed in 2007 to obtain access to perform required actual meter readings on inside meters. The need for this program will be greatly reduced after Columbia installs AMRs on its inside and hard-to-access outside meters. Additional savings may also be realized by CGO's call center (from reduced call volume relating to meter reading issues). To the extent the AMRD program leads to other savings that are not reflected in Meter Reading Expense, Staff recommends that such savings appear as a reduction to Rider IRP.

Lastly, Staff supports Columbia's partial deployment plan but recommends the Commission order the Company to submit a study detailing Columbia's net cost of continuing the AMRD deployment to its full system, but on a less aggressive timeframe than the Company proposed in its partial deployment plan.

## **ALTERNATIVE REGULATION PLAN**

Columbia has proposed two new rate recovery mechanisms in this proceeding as part of its alternative regulation plan. Rider IRP is designed to recover the costs of an Infrastructure Replacement Program (IRP), and Rider DSM to recover the costs of an expanded set of Demand Side Management (DSM) programs. As part of its application, Columbia filed Case No. 08-74-GA-AAM requesting authority to revise its accounting procedures as necessary to implement Rider IRP and Rider DSM.

### **Infrastructure Replacement Program**

On April 13, 2005, the Commission issued an Entry in Case No. 05-463-GA-COI, initiating a Commission-ordered investigation into the type, condition and performance of gas service risers installed in the state. On April 25, 2007, Columbia filed an Application in Case No. 07-478-GA-UNC in which it proposed the initial establishment of an Infrastructure Replacement Program and the approval of an automatic adjustment mechanism designed to recover costs associated with compliance with Commission Entries issued in Case No. 05-463-GA-COI. On April 9, 2008 the Commission adopted a stipulation in Case No. 07-478-GA-UNC which included establishment of an IRP Rider for recovery of the costs of the IRP program. Those costs included:

- The Costs associated with Columbia's riser testing program, pursuant to Commission order in Case NO. 05-463-GA-COI;
- The costs associated with Columbia's inventory of risers;
- The costs of replacing Design A risers that are identified as prone to failure;
- The costs associated with reimbursement of customers for the replacement of customer service lines subsequent to November 24, 2006; and,
- The costs associated with the repair or replacement of customer-owned service lines that are constructed and installed by Columbia as risers or service lines are replaced.

In its alternative regulation application in this proceeding, Columbia proposes to expand the costs that may be recovered through Rider IRP to include the costs of an Accelerated Mains Replacement Program (AMRP) and an Automatic Meter Reading Devices Program (AMRD). Each of these programs is discussed in detail elsewhere in this Staff Report. As discussed in those sections, Staff is recommending those costs be included in the Rider IRP. Staff recommends Columbia be authorized to capitalize its investments in the AMRP program and AMRD program consistent with this Staff Report.

Staff recommends Columbia also be authorized to record as a regulatory asset, the related depreciation and incremental property taxes on all investments for which it is seeking recovery through Rider IRP between the date the property is placed into service and the date recovery of the investment commences. Columbia should also be permitted to accrue Post-in-Service Carrying Costs (PISCC) on all investment between the date the property is placed into service and the date recovery of the investment commences. The PISCC rate should be determined annually based on Columbia's weighted cost of debt and should not be compounded.

As has been done in similar Staff Reports, Staff recommends two limitations on the approval of Rider IRP. Staff does not believe it appropriate to recommend a one-time approval of an IRP rider that includes a 25 year AMRP program. Staff recommends the Commission grant approval for an initial eight years or the filing of a subsequent base rate case whichever comes first. At that time, Columbia can apply for a continuation of the AMRP program beyond that initial term. This will allow the Commission to review the operation of the program after it has been in effect for a reasonable period of time and make any adjustments it deems appropriate. Finally, Staff is recommending that the annual increases to Rider IRP be capped during this initial period. In its application and responses to subsequent data requests, Columbia has estimated that Rider IRP will be approximately \$0.93 per month per residential customer in the first year. The incremental increase for year two is \$1.11 per month and \$1.24 in year three. Beginning in year four the costs for the riser replacement program and the AMRD program begin to level off such that the total estimated incremental annual increase in Rider IRP will be less than \$1 per month. All of these estimates include the gross receipts tax. In its Alternative Regulation application, Columbia states its intent to limit the AMRP expenditures during the first year of the program in recognition of the impact the investment in risers and services may have on rates. Staff agrees with this approach and recommends Columbia similarly manage the AMRP costs in years two and three such that the annual increase in Rider IRP for residential customers can be capped at \$1 per month including excise taxes.

The stipulation approved by the Commission in its April 9, 2008 Entry in Case No. 07-478-GA-UNC contained certain procedures for processing of the annual updates to Rider IRP. Staff recommends the same general procedures apply to all three components of the IRP recommended in this Staff Report. Columbia will file a pre-filing notice by November 30 of each year containing estimated schedules for the IRP rider to become effective the following May. The schedules will contain a combination of actual and projected data for the calendar year. By the following February 28, Columbia will file an updated application in this docket with schedules supporting the proposed Rider IRP adjustment based on actual data through the prior calendar year. The Company will bear the burden of proof in its annual cost recovery filings of demonstrating the justness and reasonableness of the level of recovery of expenditures associated with the IRP program. Staff shall conduct an investigation of Columbia's filing and, unless Staff finds the filing to be unjust or unreasonable or if any other party files an objection that is not resolved by March 31 of each year, the Staff shall issue its recommendation on the increase in the rider rate to the Commission to be effective on

May 1 of that same year. If the Staff determines that Columbia's application to increase the rider is unjust or unreasonable, or if any other party that filed for intervention files an objection that is not resolved by Columbia, an expedited hearing process will be established in order to allow the parties to present evidence to the Commission for final resolution. Columbia shall continue to make such annual filings until the effective date of the Commission's order terminating or extending the program.

### **Rider DSM**

On January 23, 2008 the Commission approved a joint stipulation in case Nos. 05-221-GA-GCR *et al.* As part of that stipulation, the parties agreed that Columbia would file a DSM application, cooperatively developed by Columbia, the OCC, Commission Staff and other stakeholders. The stipulation also established a DSM funding target of up to 1% of Columbia's jurisdictional revenues by 2011. Program funding could be increased by up to an additional \$1 million per year in 2010 and 2011 provided energy efficiency targets are met. Based on those criteria, the following table would approximate annual spending levels:

	2009	2010	2011
Current Weatherization Program	\$ 5.5 million	\$ 5.5 million	\$ 5.5 million
Additional DSM Programs	\$ 7.3 million	\$ 8.3 million	\$ 9.3 million
Total Funding	\$ 12.8 million	\$ 13.8 million	\$ 14.8 million

As part of its base rate application, Columbia has proposed that funding for the current weatherization program (WarmChoice) be increased from \$5.5 million to \$7.1 million. Columbia is seeking recovery of the \$7.1 million in base rates rather than through the DSM rider. That change increases the total funding to \$16.4 million in 2011.

On July 1, 2008 Columbia filed an application for Commission approval of the specific DSM programs developed by the stakeholder group. On July 23, 2008 the Commission approved that application. Those programs are discussed in detail in the Energy Conservation and Demand Side Management section of this Staff Report. Columbia estimated in that application, that the above spending levels would result in a Rider DSM rate per Mcf of \$0.0592 in 2010, \$0.0674 in 2011 and \$0.0708 in 2012. Columbia is proposing that Rider DSM will be determined annually based on the actual costs of the program for the previous calendar year with rates to become effective the following May 1<sup>st</sup>. Columbia will provide Commission Staff with audited accounting and billing records, prepared by Columbia's external auditor, in sufficient detail to enable the Staff to analyze Columbia's filing. Columbia also proposed to calculate carrying charges on its monthly deferred balances at the Columbia's weighted cost of debt. Staff believes these cost recovery procedures are reasonable and should be adopted. Staff recommends approval of Rider DSM.

## **Commitments**

Administrative Code Section 4901:1-19-05(C)(3) requires an applicant filing an alternative rate plan to include in its application those commitments to customers, that it is willing to make in promoting the state policy as defined in Revised Code Section 4929.02. The extent of these commitments should be dependent upon the degree of freedom the applicant is requesting from traditional ratemaking procedures. As discussed elsewhere in this section of the Staff Report, Staff is recommending approval of Columbia's plan to established a DSM funding target of up to 1% of jurisdictional revenues by 2011. Consistent with our recommendations in similar cases, Staff recommends that \$1 million annually of these expenditures be funded by Columbia's shareholders. Staff believes this represents an adequate commitment to comply with 4901:1-19-05(C)(3).

## OTHER TARIFF ISSUES

### Surcredit Rider

Columbia has proposed eliminating its existing Competitive Natural Gas Surcredit Rider. This rider was established to remove from the base rates paid by Choice customers, that portion of the PUCO and OCC assessments attributable to Columbia's commodity sales service. Columbia states that, with this rate case, the amount of the assessments associated with commodity service revenues of Choice customers will have been removed from the new assessment amounts built into these rates. Staff recommends this rider be recalculated but not removed. There is still a component of the assessment that is associated with revenues from Columbia's remaining commodity sales service. That amount still needs to be credited to Choice customers to ensure they are not overpaying their share of the assessment by paying for the commodity portion through both their marketer's charges and Columbia's base rates.

### Extension of Distribution Mains

Staff is proposing new language for this section. In order to provide customers with an alternative method of payment for line extensions in excess of 100 feet, Staff is recommending the following modification (in caps) be made to the second revised paragraph of this section:

Upon application for a domestic residential service extension of main in excess of ~~two hundred (200) feet for each Class 1 Applicant, and one hundred (100) feet per for each Class 2 Applicant,~~ the Company may enter into a line extension agreement providing for a deposit with the Company of a sum deemed adequate by the Company to cover the cost to be incurred by it for that portion of the extension in excess of the footages which the Company will construct without cost to the applicant. EACH APPLICANT SHALL ALSO HAVE THE OPTION OF MAKING SUCH PAYMENT IN THE FORM OF A MONTHLY PAYMENT TO BE BILLED TO THE APPLICANT AND/OR SUBSEQUENT CUSTOMER(S) AT THE SAME PREMISES FOR A PERIOD OF SEVEN YEARS OR UNTIL THE COST OF THE MAINLINE EXTENSION IS INCLUDED IN COLUMBIA'S RATES AND CHARGES FOR SERVICE, WHICHEVER COMES FIRST. IF THE APPLICANT CHOOSES TO MAKE THE PAYMENT IN THE FORM OF A ONE-TIME DEPOSIT, the amount of deposit shall be determined by multiplying the excess footage as herein above determined by the average cost per foot to the Company of ~~two (2) inch distribution~~ similar size main installed during the preceding calendar year. The

sum so deposited shall be subject to refund on the basis of the cost per foot deposited multiplied by ~~two hundred (200) for each additional Class 1 Applicant, and one hundred (100) for each additional Class 2 Applicant~~ who becomes a bona fide customer connected to the extension but not to laterals therefrom or to further extensions thereof. ~~The classification of the applicant shall be finally determined by the Company at the time the applicant becomes a bona fide customer connected to the extension.~~ No refunds shall be paid after the expiration of ten five (105) years from the date of the agreement.

Staff recommends one other change to this paragraph. The proposed change in the provision for refunds to be for up to five rather than ten years should be modified to seven years. Staff believes five years is too short a time and seven years is the shortest time referenced in any of the other three large LDC tariffs.



## **CUSTOMER SERVICE AUDIT**

Staff completed a customer service audit in May 2008 regarding the customer service performance, practices, and procedures of the Company. Staff found that overall, the Company was in compliance with the rules and regulations set forth by the Public Utilities Commission of Ohio.

### **CUSTOMER SERVICE ASSESSMENT**

Staff reviewed the contacts made by the Company's customers to the Commission's call center for the period of January 1, 2006 through April 30, 2008. This review includes seven months of the test year that ends September 30, 2008. Of the Company's 1.4 million customers 25,715 made contact with the Commission's call center during this time period with 11,541 during 2006, 10,385 during 2007, and 3,789 during the first four months of 2008. Six thousand two hundred forty-five customers called the call center before calling the Company. Most of these customers were seeking account information and were directed back to the Company to give the Company the first opportunity to respond to their customers. "Call Company First" was the issue code with the most contacts.

The billing category contained the highest number of complaints. Two thousand twenty-three customers called about billing disputes, which would include contacts regarding an alleged incorrect bill or high bill concerns. One thousand six hundred fifty-one customers called with questions about the content of their bills. Customers calling regarding a final or initial bill numbered 1,107 and 587 accounted for back billing inquiries. One thousand four hundred one customers called about meter reading issues. These include contacts regarding if, how, and when a meter is read, remote meters, access to meters, and estimated bills. The rates and tariffs issues account for 535 inquiries where customers called about rates or to docket comments about pending rate cases.

The significant numbers in the payment issues category include disconnect issues, assistance programs, payment arrangements, and Percentage of Income Payment Plan issues. Three thousand six hundred forty-three customers called about disconnection issues. These customers had received a disconnect notice, already had service disconnected, or had issues concerning the emergency winter reconnect order or the Company's turn off procedures. Seven hundred sixty-five customers called seeking information on assistance programs. Contacts about payment arrangements numbered 458 and contacts about the Percentage of Income Payment Plan accounted for 399 inquiries. Only 103 customers contacted the call center with questions about medical certifications.

Columbia customers showed interest in competition with 642 requesting the Apples to Apples matrix to help them with their choice of a natural gas supplier and 1,115 calling to discuss issues regarding competition. Government Aggregation questions accounted for another 95 contacts in the marketing category.

The call center tracked the number of calls concerning gas risers. The total number of inquiries about the risers for 2007 and the first four months of 2008 equal 551. Customers also called about leakage and pressure issues in addition to the risers. The total number of those inquiries was 850.

The number of customers calling with concerns about the establishment of a new account was 1,330. Other service related issues about which customers contacted the call center were 602 inquiries where the customers with non- safety related issues were unable to contact the Company by telephone or reach a live representative in a timely fashion including difficulty navigating through the Company's voice response unit and 315 who voiced concerns about the quality of customer service that the Company provided.

As part of the customer service audit, Staff found that Columbia was not tracking the completion of requests for new service, that do not require installation of gas pipelines, separately from the completion of new service requests, that do require service line installation, including setting the meter, in accordance with Administrative Code 4901: 1-13-05 (A) (1) and Administrative Code 4901: 1-13-05 (A) (2). Staff recommends that the Company initiate tracking processes in compliance with the rules.

Staff recommends that the Customer Rights and Responsibilities material be more prominent on the Company's website.

Staff commends the Company for their efforts to accommodate the non-English speaking community by translating the most requested educational materials into Somali and Spanish. Staff further commends the Company for allowing small commercial customers to enter into payment plans to retain service.

## **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 1985, the Commission approved an amendment to the Standard Filing Requirements. This amendment (4901-7-01) requires medium and large utilities to include in their rate filings a concisely written summary of their management policies, practices, and organization. Among other things, the summary is to include a discussion of policy and goal setting, strategic and long range planning, organization structure, decision making and controlling, and communications for the Company's executive management process (Schedule S-4.1) as well as for numerous functional areas common to most large utility companies (Schedule S-4.2).

Staff routinely reviews the S-4.1 and S-4.2 schedules, Applicant performance, and various events relating to the Applicant's management. As a result of these review activities, Staff selects certain management topics for rate case reporting. In the current rate case, Staff reports on Columbia Gas of Ohio programs for Energy Conservation and Demand-Side Management (DSM).

### **ENERGY CONSERVATION & DEMAND-SIDE MANAGEMENT (DSM)**

Energy conservation and DSM, as a tool of utility company strategy and as a public policy direction has had an inconsistent history in Ohio over the last twenty years. Commission Staff has traditionally viewed DSM programs as organized electric utility activities that are intended to affect the amount and timing of customer electricity usage. DSM programs include peak clipping, strategic conservation, load shifting, valley filling, and strategic load growth options. A DSM program is a series of measures intended to encourage specific groups of customers to modify their energy usage patterns in a manner consistent with the utility's objectives while maintaining customer satisfaction.

DSM for natural gas utilities has not enjoyed comparable support as that for electric utility industry DSM. Natural gas as a commodity cost is directly passed to the consumer via the utility company's gas cost recovery mechanism. Thus, the consumer is directly rewarded for any conservation measures they can implement on their own. Socializing the costs of implementing individual conservation measures has been viewed as a controversial policy as only those

receiving the conservation measure benefit, while all the utility company's ratepayers pick up the costs for the programs.

In the past, natural gas conservation programs have largely been limited to only those targeted to low-income customers who would lack the resources to make efficiency improvements absent the DSM program. Nevertheless, in the last few years, the Commission has approved some conservation measures for natural gas, partly as a pilot project to test customer benefits, and partly to help customers alleviate the burden of high energy costs.

To review Columbia's current conservation and DSM programs, Staff developed a comprehensive data request to gather the significant information related to each energy conservation and DSM program. In response, Columbia supplied information relating to their energy conservation program and their proposed DSM program. Staff reviewed the Company reports and interviewed Columbia personnel for clarification and additional information. Staff also interviewed Company personnel relating to Columbia's proposed natural gas DSM program as outlined in the Company's concurrent filing for a DSM Rider.

#### **COLUMBIA'S WARMCHOICE PROGRAM**

Since 1988, Columbia Gas of Ohio has operated its WarmChoice program, a weatherization program for its low-income customers who have incomes at or below 150% of the federal poverty guidelines. The objective of the program is to decrease the natural gas used by eligible low income customers by providing for free installation of energy conservation measures such as attic, sidewall, floor, water heater, duct and pipe insulation, instrumented air sealing, replacement of defective natural gas water heaters and heating systems, limited repairs, and customer education.

Columbia contracts with five community-based organizations to implement the program at the local level. The five WarmChoice providers are: Corporation for Ohio Appalachian Development, Ground Level Solutions, Mid-Ohio Regional Planning Commission, Neighborhood Housing Services of Toledo and HHWP Community Action Commission. Columbia encourages its weatherization service providers to target high use and high arrearage customers.

The WarmChoice low-income customer weatherization program costs are currently recovered in base rates through a charge of \$0.017/Mcf. The annual WarmChoice budget of \$5,090,000 is based on the 1994 test year throughput of 302,697,000 Mcf. In addition, Columbia Shareholders contributed \$500,000 per year from 2003-2007, and have contributed the same amount for 2008. Total current funding for WarmChoice in 2008 is \$5,590,000.

Columbia constantly evaluates the WarmChoice program. Between 1991 and 2004, WarmChoice had 13 impact or process evaluations performed. In 2007, working with M. Blasnik and Associates, Columbia automated the impact evaluation process to use WarmChoice and Columbia customer data to calculate average savings per customer attributed to the WarmChoice program. The automated process produced impact evaluation results for program years 1999, 2000, 2001, 2002, 2003 and 2004. The most recent impact evaluation results from the 2004 program are approximately 320 Ccf/year/customer net (control-adjusted) savings at a 90% confidence interval. The percentage of savings is 26.4%. Evaluations for the previous five years yielded similar results. Columbia's WarmChoice program continues to be a national leader in producing natural gas savings for its low-income customer population. Current estimates of cost effectiveness for WarmChoice result in a Total Resource Cost (TRC) benefit/cost ratio of 1.23.

Finally, Columbia is proposing to increase spending on WarmChoice by \$1.6 million to \$7.1 million per year from 2009 through 2011. WarmChoice is currently funded at \$5.5 million through Columbia's base rates.

## **COLUMBIA PROPOSED DSM PROGRAM**

On January 23, 2008, the Public Utilities Commission of Ohio issued an Opinion and Order in Case Nos. 05-221-GA-GCR et. al. adopting the December 28, 2007 Joint Stipulation and Recommendation in which Columbia agreed to file by July 1, 2008 a DSM application. Columbia Gas of Ohio developed the DSM proposal with a large and diverse stakeholder group which included the OCC, Commission Staff, representatives of low-income customer advocacy groups, community-based organizations, heating and cooling and building industry groups, business advocacy groups, and government agencies. The stipulation also identified the financial commitment of Columbia's DSM program "to be up to 1% of Columbia's jurisdictional revenues by 2011." (Note: COH Annual Revenue per Schedule C-1 of this rate case filing = \$1,439,145,000; 1% = \$14,391,450).

Columbia hired two independent consultants to help develop an action plan that would be cost effective and result in meeting energy savings targets that were included in the December 2007 agreement. The proposed DSM program consists of 8 DSM measures: 3 targeted to residential customers, 4 targeting commercial customers, 1 targeting both residential and commercial customers.

## **For Residential Customers**

- **Home Performance Program** - This program provides low cost diagnostic energy audits and rebates to customers to help offset the costs of energy efficiency upgrades. The program will be operated by a program administrator contractor. Audits will be conducted by the program administrator to ensure a sound and consistent approach. All program auditors will be certified to perform advanced diagnostic audits. The audit will include installation of some lower cost measures including setback thermostats and low flow showerheads, when applicable. The audit fee will be \$50 and will be rebated to the customer if any major measures are performed.

Major program measure installations will be performed by insulation, air sealing, and HVAC contractors. Contractors must attend a program orientation to be qualified to perform work eligible for rebates. The program administrator will provide project management and oversee the contractors' work quality.

Rebates will be offered to customers for insulation, air sealing, and HVAC measures that are deemed cost-effective by the energy audit. Rebates will be equal to 40% of the insulation cost, 60% of the air sealing cost, and \$200 for a high efficiency furnace upgrade. More comprehensive retrofits will be encouraged by increasing the rebates if multiple energy conservation measures are installed to: 60% for insulation, 70% for air sealing, and \$400 for a furnace upgrade.

Customers with incomes below 80% of area median income will have a \$20 audit fee and receive rebates of 90% of the insulation and air sealing costs and \$1,000 for a high efficiency furnace upgrade. The program may also provide some type of subsidized financing.

- **Residential New Construction Program** – This program will begin by performing research on how best to build efficient homes in Columbia's territory. This research will include interviewing builders that have already built qualified homes and performing additional research to explore other options for meeting the goals. The next step will be to provide free training to builders on how to build qualifying homes, training Home Energy Raters on the program requirements, and training realtors to promote the homes.
- **Low-cost Rebate Program** - The objective of the Residential Low Cost Rebate Program is to promote the use of low cost, do-it-yourself efficiency retrofits that are cost-effective for Columbia's residential customers. Programmable setback thermostats and ultra low flow showerheads are the two products specifically included in the program design. The program will offer customers rebates of \$25 per Energy Star programmable thermostat

and \$10 per ultra low flow showerhead ( $\leq 1.8$  gallons/minute). The products and rebates will be promoted through education and marketing efforts and direct contact with retailers. The program may also provide on-line order fulfillment.

#### **For Commercial Customers**

- **Small Business Energy Efficiency Incentives Program** - This program focuses on replacing existing energy inefficient natural gas equipment, and encourages customers to move up to higher than standard efficiency models when purchasing additional equipment for their business. The program also provides incentives to improve thermal integrity of the building shell and other systems. Businesses using less than 300 Mcf (1 Mcf = 1,000 cubic feet) of gas a year would be eligible for rebates for high-efficiency heating systems, insulation upgrades, and air leakage and duct sealing. Other energy conservation measures that are recommended by a facility energy audit may be eligible for rebates if determined to be cost effective.
- **Small Business Energy Saver Audit Program** - The objective of the Small Business Energy Saver Audit program is to educate customers on how their businesses use energy and what cost-effective opportunities exist to lower their energy bills. Columbia will use the audit data base to help generate leads for businesses using  $< 300$  Mcf annually to participate in the Small Business Energy Efficiency Retrofit program and the Small Business Targeted Retrofit program. The on-line energy audit tool integrates information provided by the customer to produce customized energy saving recommendations. The tool prescribes what energy efficient actions the customer should implement in a very straightforward and customer-friendly manner that helps ensure customers have a reliable means to make energy efficiency decisions.
- **Advanced Energy Design Partnership Program** - The objective of this program is to facilitate the education and training of building industry professionals and owners on the benefits of building energy efficient small buildings that are at least 30% more efficient than the commercial energy efficiency building code in place in Ohio during the time of this program.
- **Innovative Technology Program (ITD)** - The objective of the ITD program is for Columbia to provide opportunities to support research and to showcase leading-edge natural gas conservation approaches and technologies for future program development. By providing direct funding to this program for specific Columbia customer projects and

those that have gas efficiency as a secondary benefit, Columbia will ensure that innovative customers will benefit from its DSM program portfolio. Columbia will form an advisory group to help review applications for funding assistance to implement innovative approaches to achieving natural gas usage reductions in commercial buildings.

#### **For Residential and Small Commercial Customers**

- **Energy Efficiency Loan Fund** - Columbia will work with finance experts such as Ohio's Community Development Finance Fund to design a low or zero-interest loan fund for DSM participants. The objective of the Energy Efficiency Loan Fund is to provide alternative sources of financing for energy conservation measures.

Overall, Columbia proposes to spend \$24.9 million to operate the DSM conservation programs over three years. Columbia will seek to recover these costs through a Rider DSM that would be added to residential and small commercial customer bills beginning in May 2010. Columbia estimates that the charge for the average customer would be less than 50 cents per month.

Columbia's WarmChoice Program and proposed DSM Program appear to be well conceived and designed, providing a variety of DSM measures for residential and commercial customers. The proposed DSM Program, combined with WarmChoice, appear to meet the funding level criteria set forth in the stipulation of up to 1% of revenues.

#### **Recommendation:**

Staff recognizes that conservation and energy efficiency have a positive role in controlling consumer energy costs. Thus, Staff supports Columbia's plans to increase its commitment to energy conservation and DSM, which should promote greater efficiency in the usage of natural gas in the Columbia service market while assisting customers in reducing their natural gas energy bills.

Staff recommends Columbia receive and implement its planned increase in funding for the WarmChoice low-income weatherization program at \$7.1 million (a \$1.6 million increase from past years) to be recovered through base rates. Staff also recommends that the WarmChoice program continue to be administered locally through community-based programs, yet be considered by Columbia's DSM collaborate group as part of Columbia's overall portfolio for energy conservation programs and receive similar evaluative guidance as Columbia's other DSM programs.



Further, Staff recommends that Columbia's proposed DSM Program be approved and implemented as planned with the goal of providing customers conservation measures and incentives to help restrain ratepayer energy costs. Staff recommends that Columbia's DSM Program include continued coordination with Columbia's DSM stakeholder or collaborative group for guidance in managing and implementing the DSM Program for maximum effect in reducing ratepayer energy costs. Staff recommends that Columbia's proposed DSM Program receive the funding level proposed by the Company of no greater than \$7.3 million for 2009, \$8.3 million for 2010, and \$9.3 million for 2011 which shall be accounted for in Columbia's proposed Rider DSM. As discussed elsewhere in this Staff Report, Staff also recommends that these annual DSM funding levels include \$1 million annually from Columbia shareholders as the Company's commitment to comply with 4901:1-19-05(C)(3).

In future negotiations regarding DSM funding, Staff would caution the Company against using such a potentially volatile benchmark as "percentage of revenues" from which to base DSM investment. The cost of natural gas can fluctuate dramatically, and by relation so can natural gas sales and Company revenues. Thus, using a predetermined "percent of revenues" can potentially cause significant swings in DSM funding level commitments. Staff would prefer a more reasoned approach where the Company identifies the market it wishes to reach with its DSM Program and then estimates the costs for attaining this objective. This approach should provide a more stable funding level for longer term DSM investments to accrue.

Finally, Staff recommends that the Company submit a comprehensive annual report to the Director of the Utilities Department detailing the investments, progress, and results of the Columbia's energy efficiency and DSM program efforts.

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
OVERALL FINANCIAL SUMMARY  
FOR THE TWELVE MONTHS ENDED SEPTEMBER 30, 2008  
\$000

Line No.	Description	Applicant (a)	Staff	
			Lower Bound	Upper Bound
(1)	Rate Base (b)	\$ 1,129,642	\$ 1,041,787	\$ 1,041,787
(2)	Adjusted Operating Income (c)	53,958	53,175	53,175
(3)	Rate of Return Earned (2) / (1)	4.78%	5.10%	5.10%
(4)	Rate of Return Recommended (d)	9.12%	7.89%	8.41%
(5)	Required Operating Income (1) x (4)	\$ 103,045	82,197	87,614
(6)	Income Deficiency (5) - (2)	49,087	29,022	34,439
(7)	Gross Revenue Conversion Factor (e)	1.615090	1.615183	1.615183
(8)	Revenue Increase Required (6) x (7)	79,280	46,876	55,626
(9)	Revenue Increase Recommended	87,805	46,876	55,626
(10)	Adjusted Operating Revenue (c)	1,439,145	1,439,908	1,439,908
(11)	Revenue Requirements (9) + (10)	\$ 1,526,950	\$ 1,486,784	\$ 1,495,534
(12)	Increase Over Current Revenue (9) / (10)	6.10%	3.26%	3.86%

- (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

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
CALCULATION OF GROSS REVENUE CONVERSION FACTOR

Line No.	Description	% of Incremental Gross Revenues
(1)	Gross Revenue	100.000000
(2)	Uncollectibles (1) x 0.000000% (a)	<u>0.000000</u>
(3)	Net Revenue (1) - (2)	100.000000
(4)	Ohio Gross Receipts Tax (3) x 4.75% (b)	<u>4.750000</u>
(5)	Income Before Federal Income Taxes (3) - (4)	95.250000
(6)	Federal Income Taxes (5) x 35%	<u>33.337500</u>
(7)	Operating Income Percentage (5) - (6)	61.912500
(8)	Gross Revenue Conversion Factor (1) / (7)	<u><u>1.615183</u></u>

- (a) Staff's Schedule C-1.1  
(b) Statutory Rate

SCHEDULE B-1

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
JURISDICTIONAL RATE BASE SUMMARY  
AS OF DECEMBER 31, 2007  
\$000

Line No.	Description	Applicant (a)	Staff
(1)	Plant in Service	\$ 1,834,480	\$ 1,834,480 (b)
(2)	Depreciation Reserve	<u>(672,347)</u>	<u>(672,347) (c)</u>
(3)	Net Plant in Service	1,162,133	1,162,133
(4)	Construction Work in Progress	0	0 (d)
(5)	Working Capital Allowance	200,550	220,669 (e)
(6)	Other Rate Base Items	<u>(233,041)</u>	<u>(341,015) (f)</u>
(7)	Rate Base (3) Thru (6)	\$ <u>1,129,642</u>	\$ <u>1,041,787</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
- (e) Staff's Schedule B-5
- (f) Staff's Schedule B-6

SCHEDULE B-2

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
JURISDICTIONAL PLANT IN SERVICE BY MAJOR PROPERTY GROUPINGS  
AS OF DECEMBER 31, 2007

Line No.	<u>Major Property Groupings</u>	Applicant (a)	Staff (b)
(1)	Intangible Plant	\$ 21,899,926	\$ 21,899,927
(2)	Distribution Plant	1,769,856,700	1,769,856,699
(3)	General	<u>42,723,859</u>	<u>42,723,859</u>
(4)	Total Plant in Service (1) Through (3)	\$ <u>1,834,480,485</u>	\$ <u>1,834,480,485</u>

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

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
PLANT IN SERVICE BY ACCOUNTS AND SUB ACCOUNTS  
AS OF DECEMBER 31, 2007

FERC Acct. No.	Description	Applicant's Unadjusted (a)	Adjustments (b)	Staff's Adjusted (c)	Jurisdictional Allocations (d)	Staff's Adjusted Jurisdictional (e)
	<u>Intangible Plant:</u>					
301	Organization	\$ 25,937	\$	25,937	100.00%	\$ 25,937
302	Franchise and Consents	68		68	100.00%	68
303	Miscellaneous Intangible Plant	21,873,922		21,873,922	100.00%	21,873,922
	<b>Total Intangible Plant</b>	<b>21,899,927</b>	<b>0</b>	<b>21,899,927</b>		<b>21,899,927</b>
	<u>Distribution Plant:</u>					
374	Land and Land Rights	26,272,974	(69,828)	26,203,146	100.00%	26,203,146
375	Structures & Improvements - Meas. & Reg.	5,236,882	(31,038)	5,205,844	100.00%	5,205,844
375	Structures & Improv. - Indust. Meas. & Reg.	69,548	0	69,548	100.00%	69,548
375	Structures & Improvements - Other Dist. Sys.	19,667,688	0	19,667,688	100.00%	19,667,688
375	Struct. & Improv. - Communications Struct.	586,735	0	586,735	100.00%	586,735
375	Structures & Improvements	2,815,790	0	2,815,790	100.00%	2,815,790
376	Mains	932,195,573	(3,164,838)	929,030,737	100.00%	929,030,737
378	Meas. & Reg. Station Equipment - General	24,133,392	(72,714)	24,060,678	100.00%	24,060,678
378	Electronic Flow Computer	30,041	0	30,041	100.00%	30,041
379	Meas. & Reg. Station Equipment - City Gate	7,749,073	(82,172)	7,666,901	100.00%	7,666,901
380	Services	491,349,914	(1,553,959)	489,795,955	100.00%	489,795,955
381	Meters	98,216,075	(233,962)	97,982,113	100.00%	97,982,113
381	Automated Meter Reading Devices	3,842,189	0	3,842,189	100.00%	3,842,189
382	Meter Installations	61,572,354	(253,947)	61,318,407	100.00%	61,318,407
383	House Regulators	39,533,955	(137,347)	39,396,608	100.00%	39,396,608
384	House Regulator Installations	32,314,086	(188,284)	32,125,802	100.00%	32,125,802
385	Industrial Meas. & Reg. Sta. Equipment	10,225,571	(4,815)	10,220,756	100.00%	10,220,756
387	Other Equipment	444,670	0	444,670	100.00%	444,670
387	Other Equipment - Customer Info. Services	19,393,091	0	19,393,091	100.00%	19,393,091
	<b>Total Distribution Plant</b>	<b>1,775,649,601</b>	<b>(5,782,902)</b>	<b>1,769,856,699</b>		<b>1,769,856,699</b>
	<u>General Plant:</u>					
390	Structures & Improvements	5,772,675		5,772,675	100.00%	5,772,675
391	Office Furniture & Equipment	7,435,662		7,435,662	100.00%	7,435,662
391	Office Furniture & Equipment - Info. Sys.	3,828,612		3,828,612	100.00%	3,828,612
392	Transportation Equipment	1,037,205		1,037,205	100.00%	1,037,205
393	Stores Equipment	435,319		435,319	100.00%	435,319
394	Tools, Shop & Garage Equipment	14,504,897		14,504,897	100.00%	14,504,897
394	CNG Equipment	2,622,849		2,622,849	100.00%	2,622,849
395	Laboratory Equipment	125,479		125,479	100.00%	125,479
396	Power Operated Equipment	5,663,858		5,663,858	100.00%	5,663,858
398	Miscellaneous Equipment	1,297,303		1,297,303	100.00%	1,297,303
	<b>Total General Plant</b>	<b>42,723,859</b>	<b>0</b>	<b>42,723,859</b>		<b>42,723,859</b>
	<b>Total Plant</b>	<b>\$ 1,840,273,387</b>	<b>\$ (5,782,902)</b>	<b>\$ 1,834,480,485</b>		<b>\$ 1,834,480,485</b>

- (a) Applicant's Schedule B-2.1  
(b) Staff's Schedule B-2.2  
(c) Columns (a) + (b)  
(d) Applicant's Schedule B-7  
(e) Columns (c) x (d)

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
SUMMARY OF STAFF'S ADJUSTMENTS TO PLANT IN SERVICE  
AS OF DECEMBER 31, 2007

FERC Acct. No.	Description	Elimination of Plant Sold (a)
<u>Intangible Plant:</u>		
301	Organization	\$
302	Franchise and Consents	
303	Miscellaneous Intangible Plant	
	Total Intangible Plant	0
<u>Distribution Plant:</u>		
374	Land and Land Rights	(69,828)
375	Structures & Improvements - Meas. & Reg.	(31,038)
375	Structures & Improv. - Indust. Meas. & Reg.	0
375	Structures & Improvements - Other Dist. Sys.	0
375	Struct. & Improv. - Communications Struct.	0
375	Structures & Improvements	0
376	Mains	(3,164,836)
378	Meas. & Reg. Station Equipment - General	(72,714)
378	Electronic Flow Computer	0
379	Meas. & Reg. Station Equipment - City Gate	(82,172)
380	Services	(1,553,959)
381	Meters	(233,962)
381	Automated Meter Reading Devices	0
382	Meter Installations	(253,947)
383	House Regulators	(137,347)
384	House Regulator Installations	(188,284)
385	Industrial Meas. & Reg. Sta. Equipment	(4,815)
387	Other Equipment	0
387	Other Equipment - Customer Info. Services	0
	Total Distribution Plant	(5,792,902)
<u>General Plant:</u>		
390	Structures & Improvements	
391	Office Furniture & Equipment	
392	Transportation Equipment	
393	Stores Equipment	
394	Tools, Shop & Garage Equipment	
395	Laboratory Equipment	
396	Power Operated Equipment	
397	Communication Equipment	
398	Miscellaneous Equipment	
	Total General Plant	0
	Total Plant	\$ (5,792,902)
(a)	Staff's Schedule B-2.2a	

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Elimination of Plant Sold Adjustment  
AS OF DECEMBER 31, 2007

FERC Acct. No.	Description	Adjustment (a)
	<u>Distribution Plant:</u>	
374	Land and Land Rights	\$ (69,828)
375	Structures & Improvements - Meas. & Reg.	(31,038)
375	Structures & Improv. - Indust. Meas. & Reg.	0
375	Structures & Improvements - Other Dist. Sys.	0
375	Struct. & Improv. - Communications Struct.	0
375	Structures & Improvements	0
376	Mains	(3,164,836)
378	Meas. & Reg. Station Equipment - General	(72,714)
378	Electronic Flow Computer	0
379	Meas. & Reg. Station Equipment - City Gate	(82,172)
380	Services	(1,553,959)
381	Meters	(233,962)
381	Automated Meter Reading Devices	0
382	Meter Installations	(253,947)
383	House Regulators	(137,347)
384	House Regulator Installations	(188,284)
385	Industrial Meas. & Reg. Sta. Equipment	(4,815)
387	Other Equipment	0
387	Other Equipment - Customer Info. Services	0
	Total Distribution Plant	\$ <u>(5,792,902)</u>

(a) Applicant's Schedule B-2.2



COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
JURISDICTIONAL RESERVE FOR ACCUMULATED DEPRECIATION  
AS OF DECEMBER 31, 2007

FERC Acct. No.	Description	Applicant's Unadjusted (a)	Adjustments (b)	Staff's Adjusted (c)	Jurisdictional Allocations (d)	Staff's Adjusted Jurisdictional (e)
<b><u>Intangible Plant:</u></b>						
301	Organization	\$ 0	\$ 0	\$ 0	100.00%	\$ 0
302	Franchise and Consents	65		65	100.00%	65
303	Miscellaneous Intangible Plant	11,681,636		11,681,636	100.00%	11,681,636
	Total Intangible Plant	11,681,701	0	11,681,701		11,681,701
<b><u>Distribution Plant:</u></b>						
374	Land and Land Rights	248,640	0	248,640	100.00%	248,640
375	Structures & Improvements	11,614,746	(13,943)	11,600,803	100.00%	11,600,803
376	Mains	294,061,858	(1,005,818)	293,056,040	100.00%	293,056,040
378	Meas. & Reg. Station Equipment - General	5,810,713	(17,630)	5,793,083	100.00%	5,793,083
379	Meas. & Reg. Station Equipment - City Gate	3,461,996	(36,229)	3,425,767	100.00%	3,425,767
380	Services	215,248,955	(686,108)	214,562,847	100.00%	214,562,847
381	Meters	42,735,771	(101,324)	42,634,447	100.00%	42,634,447
382	Meter Installations	23,747,076	(97,960)	23,649,116	100.00%	23,649,116
383	House Regulators	11,521,368	(40,714)	11,480,654	100.00%	11,480,654
384	House Regulator Installations	10,996,671	(64,074)	10,932,597	100.00%	10,932,597
385	Industrial Meas. & Reg. Sta. Equipment	2,274,120	(1,075)	2,273,045	100.00%	2,273,045
387	Other Equipment	16,581,908	0	16,581,908	100.00%	16,581,908
	Total Distribution Plant	638,303,822	(2,064,875)	636,238,947		636,238,947
<b><u>General Plant:</u></b>						
390	Structures & Improvements	3,224,923		3,224,923	100.00%	3,224,923
391	Office Furniture & Equipment	7,981,557		7,981,557	100.00%	7,981,557
392	Transportation Equipment	425,687		425,687	100.00%	425,687
393	Stores Equipment	219,064		219,064	100.00%	219,064
394	Tools, Shop & Garage Equipment	9,235,562		9,235,562	100.00%	9,235,562
395	Laboratory Equipment	91,283		91,283	100.00%	91,283
396	Power Operated Equipment	3,509,253		3,509,253	100.00%	3,509,253
398	Miscellaneous Equipment	831,061		831,061	100.00%	831,061
	Retirement Work in Progress	(1,091,910)		(1,091,910)	100.00%	(1,091,910)
	Total General Plant	24,426,480	0	24,426,480		24,426,480
	Total Gas Plant	\$ 674,412,003	\$ (2,064,875)	\$ 672,347,128		\$ 672,347,128

- (a) Applicant's Schedule B-3.3  
(b) Staff's Schedule B-3.1  
(c) Columns (a) + (b)  
(d) Applicant's Schedule B-7  
(e) Columns (c) x (d)

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Summary of Staff's Adjustments to Reserve

FERC Accl. No.	Description	Elimination of Plant Sold (a)
<u>Intangible Plant:</u>		
301	Organization	\$
302	Franchise and Consents	
303	Miscellaneous Intangible Plant	
	Total Intangible Plant	0
<u>Distribution Plant:</u>		
374	Land and Land Rights	0
375	Structures & Improvements	(13,943)
376	Mains	(1,005,818)
378	Meas. & Reg. Station Equipment - General	(17,630)
379	Meas. & Reg. Station Equipment - City Gate	(36,229)
380	Services	(686,108)
381	Meters	(101,324)
382	Meter Installations	(97,960)
383	House Regulators	(40,714)
384	House Regulator Installations	(64,074)
385	Industrial Meas. & Reg. Sta. Equipment	(1,075)
387	Other Equipment	0
	Total Distribution Plant	(2,064,875)
<u>General Plant:</u>		
389	Land	
390	Structures & Improvements	
391	Office Furniture & Equipment	
392	Transportation Equipment	
393	Stores Equipment	
394	Tools, Shop & Garage Equipment	
395	Laboratory Equipment	
396	Power Operated Equipment	
397	Communication Equipment	
398	Miscellaneous Equipment	
	Retirement Work in Progress	
	Total General Plant	0
	Total Adjustments	\$ (2,064,875)

(a) Staff's Schedule B-3.1a

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Elimination of Plant Sold Reserve Adjustment  
AS OF DECEMBER 31, 2007

FERC Acct. No.	Description	<u>Adjustment</u> (a)
	<u>Distribution Plant:</u>	
374	Land and Land Rights	\$ 0
375	Structures & Improvements	(13,943)
376	Mains	(1,005,818)
378	Meas. & Reg. Station Equipment - General	(17,630)
379	Meas. & Reg. Station Equipment - City Gate	(36,229)
380	Services	(686,108)
381	Meters	(101,324)
381	Automated Meter Reading Devices	(97,960)
382	Meter Installations	(40,714)
383	House Regulators	(64,074)
384	House Regulator Installations	(1,075)
385	Industrial Meas. & Reg. Sta. Equipment	0
387	Other Equipment	0
		<hr/>
	Total Distribution Plant	\$ <u>(2,064,875)</u>

(a) Applicant's Schedule B-3.1

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
CALCULATION OF JURISDICTIONAL DEPRECIATION EXPENSE

FERC Acct. No.	Description	Jurisdictional Plant In Service (a)	Accrual Rate (b)	Jurisdictional Depreciation Expense (c)
<u>Intangible Plant:</u>				
301	Organization	\$ 25,937	0.00%	\$ 0
302	Franchise and Consents	68	(d)	0
303	Miscellaneous Intangible Plant	21,873,922	20.00% (d)	4,374,784
	Total Intangible Plant	21,899,927		4,374,784
<u>Distribution Plant:</u>				
374	Land and Land Rights	26,203,146	0.00%	0
375	Structures & Improvements - Meas. & Reg.	5,205,844	2.73%	142,120
375	Structures & Improv. - Indust. Meas. & Reg.	69,548	3.75%	2,608
375	Structures & Improvements - Other Dist. Sys.	19,667,688	2.71%	532,994
375	Struct. & Improv. - Communications Struct.	586,735	2.00%	11,735
375	Structures & Improvements	2,815,790	(d)	0
376	Mains	929,030,737	1.86%	17,279,972
378	Meas. & Reg. Station Equipment - General	24,060,678	3.19%	767,536
378	Electronic Flow Computer	30,041	(d)	0
379	Meas. & Reg. Station Equipment - City Gate	7,666,901	3.44%	263,741
380	Services	489,795,955	3.20%	15,673,471
381	Meters	97,982,113	2.28%	2,233,992
381	Automated Meter Reading Devices	3,842,189	6.67%	256,274
382	Meter Installations	61,318,407	2.19%	1,342,873
383	House Regulators	39,396,608	3.57%	1,406,459
384	House Regulator Installations	32,125,802	3.57%	1,146,891
385	Industrial Meas. & Reg. Sta. Equipment	10,220,756	3.67%	375,102
387	Other Equipment	444,670	5.83%	25,924
387	Other Equipment - Customer Info. Services	19,393,091	4.55%	882,386
	Total Distribution Plant	1,769,856,699		42,344,078
<u>General Plant:</u>				
390	Structures & Improvements	5,772,675	12.50% (d)	721,584
391	Office Furniture & Equipment	7,435,662	5.00%	371,783
391	Office Furniture & Equipment - Info. Sys.	3,828,612	20.00%	765,722
392	Transportation Equipment	1,037,205	6.67%	69,182
393	Stores Equipment	435,319	3.33%	14,496
394	Tools, Shop & Garage Equipment	14,504,897	4.00%	580,196
394	CNG Equipment	2,622,849	10.00%	262,285
395	Laboratory Equipment	125,479	5.00%	6,274
396	Power Operated Equipment	5,663,858	5.83%	330,203
398	Miscellaneous Equipment	1,297,303	5.00%	64,865
	Total General Plant	42,723,859		3,186,590
	Total	\$ 1,834,480,485		\$ 49,905,452

- (a) Staff's Schedule B-2.1  
(b) Staff's Schedule B-3.2a  
(c) Columns (a) x (b)  
(d) Applicant's Schedule WPC-3.17

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
ACCRUAL RATE COMPARISON

FERC Acct. No.	Description	Current			Staff Proposed		
		Avg. Svc. Life	Net Salv. %	Accrual Rate % (a)	Avg. Svc. Life	Net Salv. %	Accrual Rate % (b)
	<u>Distribution Plant:</u>						
374	Land and Land Rights						
375.34	Structures & Improvements - Meas. & Reg.	55	(50)	2.73	55	(50)	2.73
375.56	Structures & Improvements - Indust. Meas. & Reg.	39	(50)	3.85	40	(50)	3.75
375.7	Structures & Improvements - Other Dist. Sys.	75	0	1.33	Lifespan (c)	0	2.51
375.7	Structures & Improvements - Other Dist. Sys. Other Small	37	(50)	4.05	37	(50)	4.05
	Composite Account 375.7				(c)		2.71
375.8	Structures & Improvements - Communications Structures	50	0	2.00	50	0	2.00
376	Mains	68	(30)	1.91	70	(30)	1.86
378	Meas. & Reg. Station Equipment - General	35	(10)	3.14	36	(15)	3.19
379	Meas. & Reg. Station Equipment - City Gate	31	(10)	3.55	32	(10)	3.44
380	Services	50	(50)	3.00	50	(60)	3.20
381	Meters	41	2	2.39	43	2	2.28
381.1	Automated Meter Reading Devices	15	0	6.67	15	0	6.67
382	Meter Installations	50	0	2.00	48	(5)	2.19
383	House Regulators	35	(25)	3.57	35	(25)	3.57
384	House Regulator Installations	35	(25)	3.57	35	(25)	3.57
385	Industrial Meas. & Reg. Sta. Equipment	30	(10)	3.67	30	(10)	3.67
387	Other Equipment - General	17	(5)	6.18	18	(5)	5.83
387.4	Other Equipment - Customer Information Services	20	0	5.00	22	0	4.55
	<u>General Plant:</u>						
391.4	Office Furniture & Equipment	20	0	5.00	20	0	5.00
391.5	Office Furniture & Equipment - Info. Sys.	5	0	20.00	5	0	20.00
392	Transportation Equipment	15	0	6.67	15	0	6.67
393	Stores Equipment	30	0	3.33	30	0	3.33
394	Tools, Shop & Garage Equipment	25	0	4.00	25	0	4.00
394.11	CNG Equipment	10	0	10.00	10	0	10.00
395	Laboratory Equipment	20	0	5.00	20	0	5.00
396	Power Operated Equipment	12	30	5.83	12	30	5.83
398	Miscellaneous Equipment	20	0	5.00	20	0	5.00

- (a) Case No. 05-114-GA-AAM  
(b) See Text  
(c) Staff's Workpaper WPB-3.2a

SCHEDULE B-4

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
CONSTRUCTION WORK IN PROGRESS

None

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
WORKING CAPITAL ALLOWANCE  
\$000

	Adjusted Revenues & Expenses (a)	Days Lag (b)	Weighted Dollar Days (c)	Working Capital Requirements (d)
(1) Revenue Lag Allowance	\$ 1,439,908	42.98	\$ 61,887,246	\$ 169,554
Operation & Maintenance Expenses:				
(2) Purchased Gas	898,716	40.17	36,101,422	98,908
(3) Labor	54,480	44.87	2,444,496	6,697
(4) OPEB	4,622	44.00	203,368	557
(5) Corporate Insurance	5,843	(152.34)	(890,123)	(2,439)
(6) Other Benefits Costs	1,809	12.70	22,974	63
(7) Uncollectibles	27,795	42.98	1,194,629	3,273
(8) PIPP Uncollectibles	68,000	42.98	2,922,640	8,007
(9) Corporate System Services	78,719	43.12	3,394,363	9,300
(10) Other Costs	62,687	23.25	1,457,480	3,993
(11) Total Operation & Maintenance (2) Thru (10)	1,202,671	39	46,851,249	128,359
(12) Depreciation	49,905	0	0	0
Federal and State Income Tax:				
(13) Current Income Tax	(28,133)	37.50	(1,054,988)	(2,890)
(14) Net ITC	0	0.00	0	0
(15) Deferred Income Taxes	45,304	0.00	0	0
(16) Total Federal Income Taxes (13) Thru (15)	17,171	(61)	(1,054,988)	(2,890)
Taxes Other Than Federal Income Tax:				
(17) Excise Tax	63,769	90.90	5,796,578	15,881
(18) Property Tax	19,674	296.30	5,829,406	15,971
(19) Distribution Tax	26,885	96.50	2,594,403	7,108
(20) Payroll Tax	4,215	8.63	36,372	100
(21) PUCO & OCC Maintenance	2,333	48.02	112,031	307
(22) DOE Assessment	111	61.08	6,778	19
(23) Sales and Use Tax	0	36.22	0	0
(24) Total Taxes Other Than Income (17) Thru (24)	116,986	123	14,375,568	39,386
(25) Interest Expense	(29,691)	91.25	(2,709,304)	(7,423)
(26) Return on Common Equity	82,866	0.00	0	0
(27) Expense Lag Allowance (11) + (12) + (16) + (24) + (25) + (26)	\$ 1,439,908	40	\$ 57,462,525	157,432
(28) PIPP Uncollectibles (e)				112,717
(29) Gas Stored Underground (f)				95,830
(30) Calculated Working Capital Allowance (1) - (27) + (28) + (29)			\$	220,669

- (a) Staff's Schedules C-2 Thru C-4  
(b) Applicant's Lead Lag Study as Adjusted by Staff, See Text  
(c) Columns (a) x (b)  
(d) Column (c) / 365  
(e) Applicant's Schedule WPB-5k  
(f) Applicant's Schedule WPB-5n

**SCHEDULE B-5.1**

**COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
MATERIALS AND SUPPLIES**

None



COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
OTHER RATE BASE ITEMS  
\$000

	Account No.	Description	Total Company (a)	Adjustments	Adjusted Jurisdiction
		<u>Other Items:</u>			
(1)	182-14208	PISCC Property Tax	\$ 4,025	\$	4,025
(2)	182-12108	PISCC Depreciation Expense	9,773		9,773
(3)	182-12745	PISCC	474		474
(4)	186-15567	Customer Advances for Construction	20,778		20,778
(5)	252	Customer Advances for Construction	(22,742)		(22,742)
(6)		Total Other	12,308	0	12,308
		<u>Deferred Income Taxes:</u>			
(7)	190-2851	Customer Advances for Construction	7,960		7,960
(8)	190-1938	LIFO Inventory Evaluation	5,006		5,006
(9)	190-1947	Inventory CAP Costs	914		914
(10)		Total Account 190	13,880	0	13,880
		<u>Deferred Income Taxes:</u>			
(11)	282-1239	Post In-service Carrying Costs	(8,007)		(8,007)
(12)	282-2205	Liberalized Depreciation	(195,704)		(195,704)
(13)	282-2211	Loss ACRS Retirement Property	(16,266)		(16,266)
(14)	282-2216	Payroll Taxes Capitalized	(886)		(886)
(15)	282-2231	Property Removal Costs	(117)		(117)
(16)	282-2232	Customer Advances for Construction	4,955		4,955
(17)	282-2234	Builder Incentives	1,493		1,493
(18)		Total Account 282	(214,532)	0	(214,532)
(19)	283-2905	Post In-service Carrying Costs - Federal Taxes	(181)		(181)
(20)	283-2951	Headquarters Building	(1,587)		(1,587)
(21)	283-2983	Post In-service Carrying Costs - Depreciation	(3,421)		(3,421)
(22)	283-2984	Post In-service Carrying Costs - Property Taxes	(1,409)		(1,409)
(23)	283-6961	Headquarters Building	672		672
(24)	283-1920	PIPP	(38,791)		(38,791)
(25)		Total Account 283	(44,697)	0	(44,697)
(26)		Customer Deposits (b)	(114,108)		(114,108)
(27)		Unclaimed Funds (c)	(1,159)		(1,159)
(28)		Deferred Bad Debt Unamortized 2001 Balance (d)	7,293		7,293
(29)		Total Other Rate Base Items	\$ (341,015)	\$ 0	\$ (341,015)

(a) Applicant's Schedule B-6

## SCHEDULE C-1

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Proforma Operating Income Statement  
For The Twelve Months Ending September 30, 2008  
\$000

Line No.	Description	Staff		Applicant	
		Adjusted Revenues & Expenses (a)	Proforma Adjustments (b)	Proforma Revenues & Expenses (c)	Proforma Revenues & Expenses (d)
(1)	<u>Operating Revenues</u>				
(2)	Base	\$ 537,541	\$ 87,805	\$ 625,346	\$ 625,346
(3)	Gas Costs	898,716		898,716	898,716
(4)	Other	3,651		3,651	2,888
(5)	Total Operating Revenues	1,439,908	87,805	1,527,713	1,526,950
(6)	<u>Operating Expenses</u>				
(7)	Operation and Maintenance	1,202,671	0	1,202,671	1,204,809
(8)	Depreciation	49,905		49,905	49,775
(9)	Taxes, Other Than Income	116,986	4,166	121,152	122,044
(10)	Federal Income Taxes	17,171	29,243	46,414	42,000
(11)	Total Operating Expenses	1,386,733	33,409	1,420,142	1,416,628
(12)	Net Operating Income	\$ 53,175	\$ 54,398	\$ 107,571	\$ 108,322
(13)	Rate Base (e)	\$ 1,041,787		\$ 1,041,787	\$ 1,129,642
(14)	Rate of Return (f)	5.10%		10.33%	9.59%

- (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

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Proforma Adjustments  
For The Twelve Months Ending September 30, 2008  
\$000

Line No.	Description	
(1)	Proposed Revenue Increase (a)	\$ <u>87,805</u>
(2)	Uncollectible Accounts Expense (1) x 0.000000% (b)	\$ <u>0</u>
(3)	Ohio Gross Receipts Tax (c)	\$ <u>4,166</u>
(4)	Federal Income Tax (d)	\$ <u>29,243</u>

- (a) Applicant's Schedule E-4  
(b) Derived From Staff's Schedule C-3.7 and C-1 (Uncollectible Expense / Total Operating Revenues)  
(c) Staff's Schedule C-3.17d  
(d) Staff's Schedule C-4

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Adjusted Test Year Operating Income  
For The Twelve Months Ending September 30, 2008  
\$000

Line No.	Description	Applicant			Staff	
		Test Year Revenues & Expenses (a)	Adjustments (b)	Adjusted Revenues & Expenses (c)	Incremental Adjustments (d)	Adjusted Revenues & Expenses (e)
<u>Operating Revenues</u>						
	Base	\$ 541,023	\$ (3,482)	\$ 537,541	\$ 0	\$ 537,541
	Unbilled Revenue	(10,223)	10,223	0	0	0
	Gas Costs	832,693	66,023	898,716	0	898,716
	Other	194,447	(191,559)	2,888	763	3,651
	Total Operating Revenues	1,557,940	(118,795)	1,439,145	763	1,439,908
<u>Operating Expenses</u>						
	Purchased Gas Cost	981,903	(83,187)	898,716	0	898,716
	Other Operation & Maintenance	308,734	(2,642)	306,092	(2,137)	303,955
	Total Operation & Maintenance	1,290,637	(85,829)	1,204,808	(2,137)	1,202,671
	Depreciation & Amortization	40,639	9,136	49,775	130	49,905
	Taxes, Other Than Income	115,679	2,199	117,878	(892)	116,986
	Income Taxes	38,201	(25,475)	12,726	4,445	17,171
	Total Operating Expenses	1,485,156	(99,969)	1,385,187	1,546	1,386,733
	Net Operating Income	\$ 72,784	\$ (18,826)	\$ 53,958	\$ (783)	\$ 53,175

- (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)

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Summary of Staff's Adjustments  
For The Twelve Months Ending September 30, 2008  
\$000

Schedule No.	Description	Staff's Adjustments (a)	Applicant's Adjustments (b)	Staff's Incremental Adjustments (c)
<u>Operating Revenues</u>				
C-3.1	Base Revenue Annualization	\$ (3,482)	\$ (3,482)	0
C-3.2	Gas Cost Annualization	66,023	66,023	0
C-3.3	Other Revenue	0	(763)	763
C-3.4	Elimination of Unbilled Revenue	10,223	10,223	0
C-3.5	Elimination of Non-traditional Revenue	(190,796)	(190,796)	0
	Total Revenue Adjustments	\$ (118,032)	\$ (118,795)	763
<u>Operating Expenses</u>				
C-3.6	Gas Cost Expense	\$ (83,187)	\$ (83,187)	0
C-3.7	Uncollectible Expense	(95)	(1,379)	1,284
C-3.8	Labor Expense	2,513	2,900	(387)
C-3.9	Pension & Benefits	(654)	(614)	(40)
C-3.10	Post In Service Carrying Charge Amortization	359	359	(0)
C-3.11	Elimination of Non-jurisdictional Expenses	(3,081)	(3,081)	0
C-3.12	Interest on Customers' Deposits	423	423	0
C-3.13	Rate Case Expense	143	236	(95)
C-3.14	Warm Choice Program Expense	4,057	4,057	0
C-3.15	O&M Expense	(8,444)	(5,545)	(2,899)
	Total O & M Expenses	(87,968)	(85,829)	(2,137)
C-3.16	Depreciation Expense	9,266	9,136	130
C-3.17	Taxes Other Than Income Taxes	1,307	2,199	(892)
C-3.18	Federal Income Taxes	(21,030)	(25,475)	4,445
	Total Expense Adjustments	\$ (98,423)	\$ (99,989)	1,546

- (a) Staff's Schedules C-3.1 Through C-3.18  
(b) Applicant's Schedule C-3  
(c) Columns (a) - (b)

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Base Revenue Annualization  
For The Twelve Months Ending September 30, 2008  
\$000

Line No.	Description	
(1)	Annualized Based Revenue (a)	\$ 537,541
(2)	Test Year Base Revenue (b)	<u>541,023</u>
(3)	Adjustment (1) - (2)	\$ <u>(3,482)</u>

- (a) Derived from Applicant's Schedule C-3.1 - 20 Year Normalized Total Adjusted Base Revenue  
plus Orwell Total Adjusted Base Revenue  
(b) Applicant's Schedule C-2

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Gas Cost Revenue Annualization  
For The Twelve Months Ending September 30, 2008  
\$000

Line No.	Description		
(1)	Annualized Gas Cost Revenue (a)	\$	898,716
(2)	Test Year Gas Cost Revenue (b)		<u>832,693</u>
(3)	Adjustment (1) - (2)	\$	<u>66,023</u>

- (a) Derived from Applicant's Schedule C-3.2 - 20 Year Normalized Gas Cost Revenue  
plus Orwell Gas Cost Revenue  
(b) Applicant's Schedule C-2

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Elimination of Bad Check and Late Payment Revenue  
\$000

Line No.	Description	
(1)	Elimination of Test Year Bad Check and Late Payment Revenue (a)	\$ <u>0</u>

(a) Applicant's Schedule C-3.3



SCHEDULE C-3.4

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Elimination of Unbilled Revenue  
\$000

Line	No.	Description	
	(1)	Elimination of Unbilled Revenue (a)	\$ <u>10,223</u>

(a) Applicant's Schedule C-2.1

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Elimination of Non-traditional Revenue  
\$000

Line No.	Description	
(1)	Elimination of Non-traditional Revenue (a)	\$ <u>(190,796)</u>

(a) Derived from Applicant's Supplemental Information (C )(8) Total Other Operating Revenue less Misc. Revenue.

SCHEDULE C-3.6

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Gas Cost Expense Annualization  
\$000

Line No.	Description		
(1)	Annualized Gas Cost Expense (a)	\$	898,716
(2)	Test Year Gas Cost Expense (b)		<u>981,903</u>
(3)	Adjustment (1) - (2)	\$	<u>(83,187)</u>

- (a) Derived from Applicant's Schedule C-3.6 - 20 Year Normalized Gas Cost Revenue  
plus Orwell Gas Cost Revenue  
(b) Applicant's Schedule C-2.1

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Uncollectible Expense  
\$000

Line No.	Description		
(1)	Annualized Uncollectible Expense (a)	\$	27,795
(2)	Annualized PIPP Uncollectible Expense (a)		<u>68,000</u>
(3)	Adjusted Uncollectible Expense (1) + (2)		95,795
(4)	Test Year Uncollectible Expense (b)		<u>95,890</u>
(5)	Adjustment (3) - (4)	\$	<u>(95)</u>

- (a) Applicant's Schedule E-4.1 less Revenues Associated with Orwell  
(b) Applicant's Schedule C-2.1

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Labor Expense  
\$000

Line  
No. Description

(1)	Annualized Test Year Labor (a)	\$ 75,666
(2)	Operation and Maintenance Percentage (b)	<u>72.00%</u>
(3)	Annualized Test Year O&M Labor (1) x (2)	54,480
(4)	Test Year O&M Labor (c)	<u>51,967</u>
(5)	Adjustment (1) - (2)	\$ <u>2,513</u>

- (a) Derived From Staff's Workpapers WPC-3.8a and WPC-3.8b  
(b) Derived from Applicant's Schedule C-9.1 (5-Year Average of O&M Labor to Total Labor)  
(c) Applicant's Schedule WPC-3.9a

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Pension and Benefits  
\$000

Line No.	Description	
(1)	Pensions and Retirement Income (a)	\$ (2,528)
(2)	Employees' Insurance Plans (b)	8,371
(3)	OPEB (a)	4,622
(4)	Thrift Plan (a)	1,635
(5)	Amortization of SFAS 112 (a)	174
(6)	Total Pension and Benefits Expense (1) through (5)	<u>12,274</u>
(7)	Test Year Pension and Benefits Expense	<u>12,928</u>
(8)	Adjustment (6) - (7)	\$ <u>(654)</u>

- (a) Applicant's Schedule WPC-3.10a  
(b) Staff's Data Request 23

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Post In Service Carrying Charge Amortization  
\$000

Line No.	Description	
(1)	PISCC Balance Depreciation (a)	\$ 9,773
(2)	PISCC Balance Property Taxes (a)	<u>4,025</u>
(3)	Total Carrying Costs (1) + (2)	13,798
(4)	Amortization Rate (b)	<u>2.60%</u>
(5)	Total Annualized PISCC Amortization (3) x (4)	\$ <u><u>359</u></u>

- (a) Applicant's Schedule B-6 Date Certain Balance  
(b) Applicant's Schedule WPC-3.11a

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Elimination of Non-jurisdictional Expenses  
\$000

Line No.	Description		
(1)	Lobbying (a)	\$	(4)
(2)	Sales (b)		(2,361)
(3)	Advertising (a)		(445)
(4)	Dues and Memberships (c)		(267)
(5)	Charitable Contributions (a)		<u>(4)</u>
(6)	Total	\$	<u>(3,081)</u>

- (a) Applicant's Schedule WPC-3.12a  
(b) Applicant's Schedule WPC-3.12a and WPC-3.12c  
(c) Applicant's Schedule WPC-3.12a and WPC-3.12b



COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Interest on Customers' Deposits  
\$000

Line No.	Description		
(1)	Customers' Deposits (a)	\$	14,108
(2)	Interest Rate (b)		<u>3.00%</u>
(3)	Adjustment (1) x (2)	\$	<u>423</u>

- (a) Applicant's Schedule B-5  
(b) Ohio Administrative Code Section 4901:1-17-05

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Rate Case Expense  
\$000

Line No.	Description	
(1)	Estimated Rate Case Expense (a)	\$ 715
(2)	Amortization Period	<u>5</u>
(3)	Annual Amortization (1) ÷ (2)	143
(4)	Test Year Rate Case Expense (a)	<u>0</u>
(5)	Adjustment (3) - (4)	\$ <u><u>143</u></u>

(a) Applicant's Schedule C-8

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Warm Choice Program Expense  
\$000

Line No.	Description		
(1)	Warm Choice Program Balance (a)	\$	4,431
(2)	Amortization Period		<u>3</u>
(3)	Annual Amortization (1) ÷ (2)	\$	1,477
(4)	Annual Expense (a)	\$	<u>7,121</u>
(5)	Total Warm Choice Program Expense (3) + (4)	\$	<u>8,598</u>
(6)	Test Year Throughput (MMCF)		267,098
(7)	Warm Choice Rate	\$	<u>0.017</u>
(8)	Test Year Warm Choice Expense (6) x (7)	\$	<u>4,541</u>
(9)	Adjustment (5) - (8)	\$	<u>4,057</u>

(a) Applicant's Schedule C-3.15

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
O&M Expense Adjustment  
\$000

Line No.	Description		
(1)	Adjusted Non-Labor O&M Expense (a)	\$	235,395
(2)	Test Year Non-Labor O&M Expense (b)		<u>243,839</u>
(3)	Adjustment (1) - (2)	\$	<u>(8,444)</u>

- (a) Derived from Applicant's Schedule WPC-3.16a and Blue Ridge's Workpaper C(16)  
(b) Applicant's Schedule C-3.16

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Depreciation Expense  
\$000

Line No.	Description	
(1)	Adjusted Depreciation Expense (a)	\$ 49,905
(2)	Test Year Depreciation Expense (b)	<u>40,639</u>
(3)	Adjustment (1) - (2)	\$ <u>9,266</u>

- (a) Schedule B-3.2  
(b) Schedule C-2

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Taxes Other Than Income Taxes  
\$000

Line No.	Description	Supporting Schedule	Jurisdictional Amount
(1)	FICA Taxes	C-3.17a	\$ 4,153
(2)	FUTA Taxes	C-3.17b	47
(3)	SUTA Taxes	C-3.17c	15
(4)	Gross Receipts Tax	C-3.17d	63,769
(5)	PUCO and OCC Assessments	C-3.17e	2,333
(6)	Distribution Tax	C-3.17f	26,885
(7)	Property Tax	C-3.17g	19,674
(8)	DOE Assessment	C-3.17h	111
(9)	Other Taxes	C-3.17i	<u>693</u>
(10)	Total Taxes Other Than Income Taxes (1) through (8)		116,986
(11)	Test Year Taxes Other Than Income Taxes (a)		<u>115,679</u>
	Adjustment		\$ <u>1,307</u>

(a) Applicant's Schedule C-2.1

## COLUMBIA GAS OF OHIO, INC.

CASE NO. 08-0072-GA-AIR

FICA Taxes

\$000

Line No.	Description	Jurisdictional Amount
(1)	Annualize O&M Labor Expense (a)	\$ 54,480
(2)	Percentage of Wages Subject to OASDI (b)	<u>99.57%</u>
(3)	O&M Wages Subject to OASDI (1) x (2)	54,245
(4)	OASDI Rate (c)	<u>6.20%</u>
(5)	OASDI Insurance of FICA Tax (3) x (4)	3,363
(6)	Medicare Tax Rate (d)	<u>1.45%</u>
(7)	Medicare Portion of FICA Tax (1) x (6)	<u>790</u>
(8)	FICA Tax Expense (5) + (7)	\$ <u>4,153</u>

(a) Staff Schedule C-3.8

(b) Applicant's Schedule WPC-3.18d

(c) 2008 Social Security Tax Rate

(d) 2008 Medicare Tax Rate

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
FUTA Taxes  
\$000

Line No.	Description	Jurisdictional Amount
(1)	Number of Employees (a)	\$ 1,154
(2)	Federal Unemployment Tax Base (b)	<u>7</u>
(3)	Total Taxable Wages (1) x (2)	8,078
(4)	Federal Unemployment Tax Rate (c)	<u>0.80%</u>
(5)	Federal Unemployment Tax (3) x (4)	65
(6)	O&M Ratio (d)	<u>72.00%</u>
(7)	Adjusted Federal Unemployment Tax (5) x (6)	\$ <u>47</u>

- (a) Staff's Data Request 22  
(b) 2008 FUTA Earnings Base  
(c) Applicant's Schedule WPC-3.18c  
(d) Derived from Applicant's Schedule C-9.1 (5-Year Average of O&M Labor to Total Labor)



COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
SUTA Taxes  
\$000

Line No.	Description	Jurisdictional Amount
(1)	Number of Employees (a)	\$ 1,154
(2)	Federal Unemployment Tax Base (b)	<u>9</u>
(3)	Total Taxable Wages (1) x (2)	10,386
(4)	Federal Unemployment Tax Rate (c)	<u>0.20%</u>
(5)	Federal Unemployment Tax (3) x (4)	21
(6)	O&M Ratio (d)	<u>72.00%</u>
(7)	Adjusted Federal Unemployment Tax (5) x (6)	\$ <u>15</u>

(a) Staff's Data Request 22

(b) 2008 SUTA Earnings Base

(c) Applicant's Schedule WPC-3.18b

(d) Derived from Applicant's Schedule C-9.1 (5-Year Average of O&M Labor to Total Labor)

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Gross Receipts Tax  
\$000

Line No.	Description	Adjusted Operating Income	Proforma Operating Income
(1)	Total Operating Revenue (a)	\$ 1,439,908	\$ 1,527,713
(2)	Uncollectible Accounts (b)	95,795	95,795
(3)	Non-Taxable Receipts (1) x 0.1103% (c)	1,588	1,685
(4)	Statutory Exemption	<u>25</u>	<u>25</u>
(5)	Net Taxable Receipts (1) - (2) through (4)	1,342,500	1,430,208
(6)	Tax Rate	<u>4.75%</u>	<u>4.75%</u>
(7)	Ohio Gross Receipts Tax (4) x (5)	\$ <u>63,769</u>	\$ <u>67,935</u>

(a) Staff's Schedule C-1

(b) Staff's Schedule C-3.7

(c) Applicant's Schedule WPC-3.19a

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
PUCO and OCC Assessments  
\$000

Line No.	Description	Jurisdictional Amount
(1)	PUCO Assessment (a)	\$ 1,858
(2)	OCC Assessment (a)	<u>475</u>
(3)	Total PUCO/OCC Assessment (1) + (2)	\$ <u>2,333</u>

(a) Staff's Data Request

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Distribution Tax  
\$000

Line No.	Description	Jurisdictional Amount
(1)	20 Year Normalized Distribution Tax Expense (a)	\$ 26,979
(2)	Orwell Distribution Tax Expense (b)	<u>94</u>
(3)	Total Distribution Tax Adjustment (1) - (2)	\$ <u>26,885</u>

- (a) Applicant's Schedule WPC-3.1b  
(b) Applicant's Schedule WPC-3.1c

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR

Property Tax  
\$000

Line No.	Description	Jurisdictional Amount
(1)	Personal Property Taxes (a)	\$ 19,122
(2)	Real Property Taxes (b)	<u>552</u>
(3)	Total Property Taxes (1) + (2)	\$ <u>19,674</u>

- (a) Derived from Staff's Data Request 24 (Personal Property plus Stored Gas x Tax Rate)  
(b) Derived from Staff's Data Request 24 (Assessed Value x Tax Rate)

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
DOE Assessment  
\$000

Line No.	Description	Jurisdictional Amount
(1)	Annualized DOE Assessment (a)	\$ <u>111</u>

(a) Applicant's Schedule WPC-3.23a

## COLUMBIA GAS OF OHIO, INC.

CASE NO. 08-0072-GA-AIR

Other Taxes

\$000

Line No.	Description	Jurisdictional Amount
(1)	Other Taxes (a)	\$ <u>693</u>

(a) Applicant's Schedule C-2.1

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Federal Income Taxes  
\$000

Line No.	Description		
(1)	Adjusted Federal Income Taxes (a)	\$	17,171
(2)	Test Year Federal Income Taxes (b)		<u>38,201</u>
(3)	Adjustment (1) - (2)	\$	<u>(21,030)</u>

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



COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Calculation of Federal Income Taxes  
\$000

Line No.	Description	Adjusted Operating Income	Proforma Operating Income
(1)	Operating Income Before FIT (a)	\$ 70,346	\$ 153,985
	<u>Reconciling Items:</u>		
(2)	Interest Charges (b)	(29,691)	(29,691)
(3)	Book Depreciation (c)	49,905	49,905
(4)	Tax Accelerated Depreciation (d)	71,377	71,377
(5)	Excess of Tax Over Book Depreciation (3) - (4)	(21,472)	(21,472)
	<u>Other Reconciling Items:</u>		
(6)	Permanent Differences (d)	320	320
(7)	Temporary Differences (d)	(99,880)	(99,880)
(8)	Non-Ohio State Income Tax (d)	0	0
(9)	Total Other Reconciling Items (6) Thru (8)	(99,560)	(99,560)
(10)	Total Reconciling Items (2) + (5) + (9)	(150,723)	(150,723)
(11)	Federal Taxable Income (1) + (10)	(80,377)	3,262
	<u>Federal Income Taxes</u>		
(12)	First \$50 x 15%	(8)	8
(13)	Next \$25 x 25%	(6)	8
(14)	Next \$25 x 34%	(9)	9
(15)	Next \$235 x 39%	(92)	92
(16)	Next \$9,665 x 34%	(3,286)	995
(17)	Next \$5,000 x 35%	(1,750)	0
(18)	Next \$3,333 x 38%	(1,267)	0
(19)	Excess of Taxable Income Over \$18,333 x 35%	(21,715)	0
(20)	Federal Income Taxes - Current (12) Through (19)	(28,133)	1,110
	<u>Deferred Income Taxes:</u>		
(21)	Tax Accelerated Depreciation (d)	71,377	71,377
(22)	Tax Straight Line Depreciation (c)	49,905	48,905
(23)	Excess of Tax Accelerated over Tax S/L Deprec. (21) - (22)	21,472	21,472
(24)	Deferred @0.35%	7,515	7,515
	<u>Other Deferred Taxes:</u>		
(25)	Amortization of Prior Years ITC (d)	(689)	(689)
(26)	Deferred Income Tax - Temporary Differences (7) x 35%	34,958	34,958
(27)	Deferred Income Tax Adjustment - ARAM (d)	(163)	(163)

COLUMBIA GAS OF OHIO, INC.  
CASE NO. 08-0072-GA-AIR  
Calculation of Federal Income Taxes

	Adjusted Operating <u>Income</u>	Proforma Operating <u>Income</u>
<u>Other Deferred Taxes:</u>		
(28) Deferred Income Tax Adjustment - Flow-Through (d)	\$ 3,683	\$ 3,683
(29) Prior Adjustment to FIT (d)	<u>0</u>	<u>0</u>
(30) Total Other Deferred Taxes (25 Thru (29)	37,789	37,789
(31) Total Deferred Taxes (24) + (30)	<u>45,304</u>	<u>45,304</u>
(32) Total Federal Income Taxes (20) + (31)	<u>\$ 17,171</u>	<u>\$ 46,414</u>

- (a) Staff's Schedule C-1
- (b) Staff's Schedule B-1, \$1,041,787 x 0.0285, Weighted cost of Debt
- (c) Staff's Schedule B-3.2
- (d) Applicant's Schedule C-4

Rate of Return Summary  
Columbia Gas of Ohio

	% of Total	% Cost	Weighted Cost %
Long Term Debt	49.29%	5.78%	2.85%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	<u>50.71%</u>	9.95% - 10.96%	<u>5.05% - 5.56%</u>
Total Capital	100.00%		7.89% - 8.41%

Equity Issuance Cost Adjustment  
Columbia Gas of Ohio, Inc.  
December 31, 2007

(1) Retained Earnings <sup>1</sup>	\$474,871,000
(2) Total Common Equity <sup>2</sup>	\$660,296,244
(3) Ratio of (1) to (2)	0.7192
(4) Generic Issuance Cost, f	3.50%
(5) External Equity Ratio, w [1.0 - (3)]	0.28082
(6) Net Adjustment Factor, $(w/(1 - f)) + (1 - w)$	1.01019
(7) Low End Equity Cost [9.46% x (6)]	9.95%
(8) High End Equity Cost [10.46% x (6)]	10.96%

Sources:

1 Applicant's Schedule C-11.1

2 Applicant's Schedule D-1

## CAPM Cost of Equity Estimate

<u>Date:</u>	<u>Closing 10Yr Yld (%)</u>	<u>Closing 30Yr Yld (%)</u>
3-Jul-07	5.05	5.15
5-Jul-07	5.14	5.24
6-Jul-07	5.20	5.28
9-Jul-07	5.16	5.25
10-Jul-07	5.04	5.13
11-Jul-07	5.08	5.18
12-Jul-07	5.12	5.21
13-Jul-07	5.11	5.19
16-Jul-07	5.04	5.13
17-Jul-07	5.08	5.16
18-Jul-07	5.01	5.10
19-Jul-07	5.03	5.12
20-Jul-07	4.96	5.06
23-Jul-07	4.96	5.07
24-Jul-07	4.94	5.06
25-Jul-07	4.90	5.03
26-Jul-07	4.78	4.95
27-Jul-07	4.79	4.95
30-Jul-07	4.80	4.96
31-Jul-07	4.77	4.92
1-Aug-07	4.78	4.91
2-Aug-07	4.75	4.90
3-Aug-07	4.70	4.87
6-Aug-07	4.73	4.91
7-Aug-07	4.74	4.90
8-Aug-07	4.86	5.02
9-Aug-07	4.79	5.03
10-Aug-07	4.78	5.01
13-Aug-07	4.78	5.01
14-Aug-07	4.73	4.99
15-Aug-07	4.71	5.01
16-Aug-07	4.60	4.93
17-Aug-07	4.67	5.00
20-Aug-07	4.63	4.97
21-Aug-07	4.59	4.94
22-Aug-07	4.62	4.95
23-Aug-07	4.62	4.92
24-Aug-07	4.63	4.90
27-Aug-07	4.60	4.86
28-Aug-07	4.53	4.86
29-Aug-07	4.55	4.88
30-Aug-07	4.50	4.82
31-Aug-07	4.54	4.83
4-Sep-07	4.56	4.84
5-Sep-07	4.47	4.78
6-Sep-07	4.50	4.79
7-Sep-07	4.37	4.69
10-Sep-07	4.32	4.64
11-Sep-07	4.36	4.65
12-Sep-07	4.41	4.69
13-Sep-07	4.48	4.74
14-Sep-07	4.46	4.72
17-Sep-07	4.47	4.71
18-Sep-07	4.48	4.76
19-Sep-07	4.52	4.82

## CAPM Cost of Equity Estimate

<u>Date:</u>	<u>Closing 10Yr Yld (%)</u>	<u>Closing 30Yr Yld (%)</u>
20-Sep-07	4.67	4.94
21-Sep-07	4.63	4.89
24-Sep-07	4.62	4.88
25-Sep-07	4.61	4.89
26-Sep-07	4.62	4.89
27-Sep-07	4.57	4.84
28-Sep-07	4.58	4.83
1-Oct-07	4.56	4.80
2-Oct-07	4.53	4.78
3-Oct-07	4.54	4.79
4-Oct-07	4.52	4.77
5-Oct-07	4.64	4.87
8-Oct-07	4.64	4.86
9-Oct-07	4.65	4.86
10-Oct-07	4.65	4.86
11-Oct-07	4.66	4.88
12-Oct-07	4.69	4.91
15-Oct-07	4.67	4.91
16-Oct-07	4.66	4.91
17-Oct-07	4.55	4.81
18-Oct-07	4.50	4.78
19-Oct-07	4.40	4.69
22-Oct-07	4.39	4.67
23-Oct-07	4.41	4.69
24-Oct-07	4.33	4.64
25-Oct-07	4.35	4.66
26-Oct-07	4.39	4.68
29-Oct-07	4.38	4.66
30-Oct-07	4.38	4.67
31-Oct-07	4.47	4.75
1-Nov-07	4.36	4.65
2-Nov-07	4.29	4.59
5-Nov-07	4.32	4.62
6-Nov-07	4.36	4.65
7-Nov-07	4.33	4.67
8-Nov-07	4.27	4.66
9-Nov-07	4.22	4.60
12-Nov-07	4.21	4.59
13-Nov-07	4.26	4.61
14-Nov-07	4.27	4.60
15-Nov-07	4.16	4.53
16-Nov-07	4.15	4.52
19-Nov-07	4.08	4.48
20-Nov-07	4.05	4.48
21-Nov-07	4.02	4.47
23-Nov-07	4.01	4.44
26-Nov-07	3.85	4.28
27-Nov-07	3.94	4.36
28-Nov-07	4.03	4.41
29-Nov-07	3.94	4.35
30-Nov-07	3.97	4.40
3-Dec-07	3.89	4.35
4-Dec-07	3.89	4.35
5-Dec-07	3.91	4.39
6-Dec-07	4.00	4.48

CAPM Cost of Equity Estimate

<u>Date:</u>	<u>Closing 10Yr Yld (%)</u>	<u>Closing 30Yr Yld (%)</u>
7-Dec-07	4.12	4.59
10-Dec-07	4.15	4.61
11-Dec-07	3.99	4.48
12-Dec-07	4.08	4.53
13-Dec-07	4.17	4.61
14-Dec-07	4.23	4.66
17-Dec-07	4.19	4.62
18-Dec-07	4.12	4.54
19-Dec-07	4.07	4.49
20-Dec-07	4.03	4.45
21-Dec-07	4.17	4.57
24-Dec-07	4.21	4.62
26-Dec-07	4.28	4.69
27-Dec-07	4.20	4.61
28-Dec-07	4.10	4.51
31-Dec-07	4.03	4.46
2-Jan-08	3.90	4.35
3-Jan-08	3.90	4.37
4-Jan-08	3.85	4.36
7-Jan-08	3.84	4.34
8-Jan-08	3.84	4.36
9-Jan-08	3.79	4.32
10-Jan-08	3.89	4.44
11-Jan-08	3.81	4.39
14-Jan-08	3.79	4.37
15-Jan-08	3.70	4.29
16-Jan-08	3.71	4.32
17-Jan-08	3.64	4.25
18-Jan-08	3.65	4.30
22-Jan-08	3.48	4.23
23-Jan-08	3.43	4.18
24-Jan-08	3.64	4.35
25-Jan-08	3.58	4.28
28-Jan-08	3.59	4.28
29-Jan-08	3.66	4.34
30-Jan-08	3.73	4.43
31-Jan-08	3.64	4.35
1-Feb-08	3.60	4.32
4-Feb-08	3.64	4.37
5-Feb-08	3.59	4.34
6-Feb-08	3.61	4.37
7-Feb-08	3.74	4.50
8-Feb-08	3.65	4.44
11-Feb-08	3.62	4.41
12-Feb-08	3.68	4.46
13-Feb-08	3.69	4.51
14-Feb-08	3.82	4.65
15-Feb-08	3.78	4.59
19-Feb-08	3.88	4.66
20-Feb-08	3.92	4.64
21-Feb-08	3.78	4.55
22-Feb-08	3.79	4.58
25-Feb-08	3.90	4.66
26-Feb-08	3.86	4.66
27-Feb-08	3.85	4.65

CAPM Cost of Equity Estimate

<u>Date:</u>	<u>Closing 10Yr Yld (%)</u>	<u>Closing 30Yr Yld (%)</u>
28-Feb-08	3.71	4.55
29-Feb-08	3.53	4.42
3-Mar-08	3.53	4.43
4-Mar-08	3.58	4.48
5-Mar-08	3.69	4.61
6-Mar-08	3.62	4.58
7-Mar-08	3.54	4.54
10-Mar-08	3.44	4.45
11-Mar-08	3.60	4.53
12-Mar-08	3.48	4.41
13-Mar-08	3.53	4.45
14-Mar-08	3.42	4.35
17-Mar-08	3.31	4.28
18-Mar-08	3.45	4.33
19-Mar-08	3.36	4.22
20-Mar-08	3.33	4.16
24-Mar-08	3.52	4.31
25-Mar-08	3.49	4.30
26-Mar-08	3.49	4.33
27-Mar-08	3.53	4.38
28-Mar-08	3.47	4.34
31-Mar-08	3.43	4.31
1-Apr-08	3.55	4.38
2-Apr-08	3.58	4.39
3-Apr-08	3.59	4.39
4-Apr-08	3.48	4.32
7-Apr-08	3.56	4.37
8-Apr-08	3.56	4.38
9-Apr-08	3.47	4.31
10-Apr-08	3.53	4.34
11-Apr-08	3.47	4.30
14-Apr-08	3.50	4.34
15-Apr-08	3.57	4.41
16-Apr-08	3.70	4.53
17-Apr-08	3.73	4.52
18-Apr-08	3.74	4.52
21-Apr-08	3.71	4.48
22-Apr-08	3.72	4.47
23-Apr-08	3.73	4.49
24-Apr-08	3.83	4.54
25-Apr-08	3.87	4.59
28-Apr-08	3.84	4.57
29-Apr-08	3.83	4.56
30-Apr-08	3.76	4.50
1-May-08	3.75	4.48
2-May-08	3.85	4.57
5-May-08	3.85	4.58
6-May-08	3.89	4.64
7-May-08	3.87	4.62
8-May-08	3.81	4.56
9-May-08	3.77	4.52
12-May-08	3.78	4.52
13-May-08	3.91	4.62
14-May-08	3.94	4.64
15-May-08	3.84	4.58



## CAPM Cost of Equity Estimate

<u>Date:</u>	<u>Closing 10Yr Yld (%)</u>	<u>Closing 30Yr Yld (%)</u>
16-May-08	3.85	4.58
19-May-08	3.84	4.57
20-May-08	3.78	4.53
21-May-08	3.82	4.56
22-May-08	3.92	4.63
23-May-08	3.83	4.56
27-May-08	3.92	4.64
28-May-08	4.01	4.70
29-May-08	4.08	4.76
30-May-08	4.05	4.71
2-Jun-08	3.97	4.68
3-Jun-08	3.90	4.62
4-Jun-08	3.94	4.68
5-Jun-08	4.03	4.73
6-Jun-08	3.94	4.65
9-Jun-08	3.99	4.62
10-Jun-08	4.10	4.70
11-Jun-08	4.07	4.70
12-Jun-08	4.20	4.76
13-Jun-08	4.26	4.80
16-Jun-08	4.24	4.78
17-Jun-08	4.22	4.79
18-Jun-08	4.15	4.73
19-Jun-08	4.20	4.75
20-Jun-08	4.14	4.70
23-Jun-08	4.17	4.71
24-Jun-08	4.11	4.66
25-Jun-08	4.11	4.66
26-Jun-08	4.03	4.60
27-Jun-08	3.99	4.54
30-Jun-08	3.98	4.53
1-Jul-08	3.99	4.54
2-Jul-08	3.96	4.50
Averages:		
Last 63 days	3.8833	4.5800
Last 126 days	3.7617	4.4950
Last 189 days	3.9242	4.5323
Last 253 days	4.1258	4.6353
Average	3.9238	4.5607
Average of 10 and 30 Year Yields		4.2422
CAPM Cost of Equity Estimate		9.9839

Source: Yahoo.com

$$\text{CAPM}_1 + \beta(\text{large company total return} - \text{risk free return})$$

$$= 4.242216693\% + .88333(6.5\%)$$

## Value Line Betas:

ATG	0.85
ATO	0.85
CNP	0.95
NJR	0.85
SRE	0.90
WGL	0.90
AVG	0.88333

DCF Cost of Equity Estimate

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

	ATG	ATO	CNP	NJR	SRE	WGL
07/03/07	41.0400	30.5200	17.7100	34.2670	60.2600	33.0800
07/05/07	40.7800	30.3400	17.6800	34.3330	59.6200	32.9200
07/06/07	40.8300	30.2900	17.7800	34.1730	59.3000	32.5600
07/09/07	40.9500	30.3900	17.6400	34.2730	60.7400	32.9800
07/10/07	40.1400	30.2400	17.3500	34.0670	59.3100	32.3200
07/11/07	40.4200	30.1700	17.3100	34.1270	58.2500	32.6500
07/12/07	41.1800	30.6600	17.5100	34.4200	58.8200	33.2200
07/13/07	41.3000	30.6400	17.8800	34.4130	58.8100	33.2600
07/16/07	41.0000	30.2000	17.4600	33.9670	58.4000	32.8300
07/17/07	40.8300	30.0500	17.1100	33.9600	58.0400	32.9100
07/18/07	40.7700	30.1100	17.1100	33.9070	57.8900	33.0300
07/19/07	40.9300	30.2400	17.5600	34.2930	59.6800	33.3300
07/20/07	40.3800	29.8500	17.2300	33.5800	58.7100	32.7000
07/23/07	40.6800	30.1700	17.1800	33.6930	58.5200	32.6400
07/24/07	39.3600	29.4100	16.9800	32.6600	56.6700	31.5600
07/25/07	39.7500	29.5800	17.0400	32.7670	56.9000	31.5000
07/26/07	38.6800	29.2100	16.7700	31.6930	54.5400	30.6000
07/27/07	37.9000	28.4500	16.4600	30.8330	53.1000	29.9800
07/30/07	38.0900	28.4400	16.6400	31.1930	53.1500	30.2700
07/31/07	37.7000	28.0700	16.4800	31.3330	52.7200	29.9400
08/01/07	38.3700	28.4500	17.0700	32.5730	54.8500	30.7100
08/02/07	39.0500	28.3700	16.8000	32.8330	56.3500	31.5800
08/03/07	37.7900	27.3100	16.0100	31.2930	53.9300	30.1400
08/06/07	38.0100	27.6900	16.4400	31.9070	55.6900	31.3900
08/07/07	38.2200	27.8800	16.7800	32.2730	56.1200	31.9800
08/08/07	37.0700	26.7300	16.5800	32.1470	56.1400	31.8900
08/09/07	36.2700	26.4700	16.1600	32.5270	53.6000	30.9900
08/10/07	38.3500	27.8000	16.1700	33.9330	53.4800	33.0900
08/13/07	38.3500	27.4200	16.1200	32.3670	54.7000	32.0100
08/14/07	37.5500	27.0100	15.5600	32.0930	53.2800	31.5700
08/15/07	36.5100	26.6900	15.1500	32.1730	52.2100	31.3900
08/16/07	37.9500	26.8500	15.4800	33.4530	52.6300	33.0200
08/17/07	37.7900	27.2300	15.9700	34.1400	53.6800	33.6500
08/20/07	37.7900	27.3500	16.7000	34.3800	54.0000	33.2400
08/21/07	38.1000	27.4800	16.8000	34.0930	53.8600	33.0400
08/22/07	38.8100	27.5700	16.8900	33.8600	54.1300	33.0600
08/23/07	39.0400	27.3500	17.0900	33.7330	54.5300	33.0700
08/24/07	39.5800	27.8400	17.0400	33.9270	55.9700	33.6400
08/27/07	39.0500	27.8500	16.4300	33.0800	53.9400	32.7700
08/28/07	38.3000	27.5300	16.1900	32.6670	53.6000	31.8500
08/29/07	39.4500	27.9800	16.4900	33.2670	54.8700	32.8400
08/30/07	39.5100	27.9100	16.2000	32.6400	54.5600	32.7800
08/31/07	39.7100	28.1100	16.2200	32.6530	55.0300	32.8900
09/04/07	40.1100	28.1800	16.3300	32.2200	55.3500	33.3400
09/05/07	39.2500	27.9200	16.2100	32.0930	54.4900	32.6200
09/06/07	39.3800	27.8300	16.3600	31.9730	54.8600	32.7300
09/07/07	39.0100	27.5400	16.0000	31.4070	54.5100	31.9000
09/10/07	38.9700	27.6800	15.9800	31.4400	55.0300	32.0000
09/11/07	39.3200	28.2000	16.2000	31.3200	56.2300	32.2000
09/12/07	39.6900	28.1200	16.2200	31.2800	56.0800	32.5100
09/13/07	39.7300	27.7600	16.0700	31.2800	55.8500	32.3300
09/14/07	39.9500	27.5900	16.1400	31.3000	56.2900	32.6000
09/17/07	39.4400	27.4200	16.0600	31.1330	56.5100	32.3000
09/18/07	39.8700	27.8700	16.2700	32.1000	58.2600	32.9100
09/19/07	39.8800	28.1800	16.5900	32.8930	59.4500	33.6100
09/20/07	39.7300	28.2300	16.3200	32.7270	59.1300	33.5800
09/21/07	40.0400	28.3000	16.5700	32.7670	59.8400	33.7400
09/24/07	39.9500	28.3200	16.4500	32.6600	59.2500	33.5300
09/25/07	39.8400	28.2500	16.3600	32.6800	58.7000	33.5600
09/26/07	39.7700	28.5000	16.4600	33.5130	59.0000	34.2200
09/27/07	39.8000	28.4400	16.3200	33.4730	58.9000	34.4000
09/28/07	39.6200	28.3200	16.0300	33.0600	58.1200	33.8900
10/01/07	40.0300	28.9200	16.4000	33.5670	58.9800	34.2900
10/02/07	39.9900	28.8300	16.4700	33.6200	58.2500	34.0600

DCF Cost of Equity Estimate

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

	ATG	ATO	CNP	NJR	SRE	WGL
10/03/07	40.1000	28.9200	16.4700	33.5730	58.3200	34.4000
10/04/07	40.4300	29.0000	16.4700	33.8000	58.6400	34.4200
10/05/07	40.6800	29.2800	16.8700	34.1130	58.6000	34.2900
10/08/07	40.6500	29.1700	17.0000	33.8800	58.1400	34.4800
10/09/07	41.0000	29.4400	17.1700	34.0000	58.9400	34.9200
10/10/07	40.4100	29.3200	16.9400	33.5530	58.3700	34.5400
10/11/07	40.3800	29.4600	16.7900	33.4270	59.3400	34.8300
10/12/07	40.0600	29.3800	16.9200	33.2800	59.2700	34.8700
10/15/07	39.8100	28.8500	16.6500	32.4730	59.7800	34.0600
10/16/07	39.2000	28.6300	16.4400	32.1930	59.8800	33.8700
10/17/07	38.8900	28.2700	16.3800	32.0400	59.6100	33.8500
10/18/07	38.8500	28.2900	16.3600	31.7800	59.5100	33.6400
10/19/07	38.2500	27.7800	15.9700	31.1670	58.1600	32.7800
10/22/07	37.2300	27.9200	16.1600	31.5330	58.5300	32.9400
10/23/07	37.4100	28.0800	16.0500	32.0330	58.7200	32.8200
10/24/07	37.6400	28.1200	16.0400	31.6200	58.5600	32.5700
10/25/07	38.0400	28.0800	16.2600	31.8670	59.5500	32.8800
10/26/07	38.7200	28.1200	16.4300	32.2330	60.0500	33.6000
10/29/07	38.7700	27.9600	16.4400	32.2000	60.6000	33.4800
10/30/07	38.7300	27.7700	16.5700	32.0870	60.3400	33.3000
10/31/07	39.5300	28.0500	16.7600	32.8330	61.5100	33.9200
11/01/07	38.7700	27.7600	16.6700	31.6470	60.2000	32.8400
11/02/07	38.2600	28.0800	17.1100	31.5330	61.2100	32.9100
11/05/07	37.7800	27.8300	17.6400	31.7000	62.0200	32.9400
11/06/07	38.1900	27.8400	18.2100	32.4130	62.3300	33.1400
11/07/07	37.1600	26.9500	18.0600	31.2470	60.1600	32.3600
11/08/07	38.3300	26.9600	18.5100	32.3800	61.5400	33.5800
11/09/07	38.0100	26.8000	18.2200	31.9070	60.0000	32.8000
11/12/07	37.6400	26.7700	17.6700	31.8200	59.2600	32.7200
11/13/07	37.7500	27.1200	17.9200	31.9870	59.5100	33.5000
11/14/07	36.6300	27.0200	17.8300	31.8400	58.9600	33.2200
11/15/07	36.8100	27.2100	17.8400	32.6070	58.9500	33.3900
11/16/07	36.9300	26.9000	17.6600	32.4870	60.1100	33.0000
11/19/07	36.6700	26.9000	17.5700	32.6200	60.9000	32.9100
11/20/07	36.7200	26.9200	17.7800	32.9330	61.1600	33.0400
11/21/07	36.4000	26.4700	17.4600	33.2130	60.5600	32.9400
11/23/07	36.1400	26.5800	17.4900	33.2400	60.5800	33.1800
11/26/07	36.1200	26.2100	17.4400	32.6930	60.9700	32.7400
11/27/07	36.6700	26.1300	17.4000	33.2200	61.4000	33.2400
11/28/07	37.6400	26.2000	17.6300	34.1400	62.4800	33.3900
11/29/07	36.9400	26.1100	17.6000	33.6130	62.2600	33.0300
11/30/07	37.0800	26.1900	17.8500	33.6330	62.6200	33.0400
12/03/07	37.1500	26.1800	17.9400	33.2470	62.3000	32.6800
12/04/07	37.5400	26.4900	18.0700	33.3670	62.8300	33.1300
12/05/07	38.1100	26.8200	18.2700	33.7930	63.8900	33.3200
12/06/07	38.5100	27.3900	18.0800	34.5470	63.8200	33.9100
12/07/07	38.3200	27.0700	18.1600	34.2530	63.5900	33.5300
12/10/07	38.2200	27.1900	18.2500	34.1270	63.8600	33.5700
12/11/07	37.6400	27.0300	18.0200	33.2930	62.1500	32.8800
12/12/07	37.3100	26.9400	18.0000	33.3330	62.1600	32.7400
12/13/07	37.1300	27.2800	18.3700	33.7730	62.6300	33.1400
12/14/07	36.2500	26.8800	18.3300	32.6600	61.1800	32.2100
12/17/07	35.8100	26.7400	18.1600	32.6730	61.0200	32.0500
12/18/07	36.1500	27.1500	18.2000	33.2730	61.7800	32.4300
12/19/07	36.2400	27.4300	18.1000	33.2400	61.3400	32.5500
12/20/07	36.2900	28.0000	17.3400	33.2330	61.4000	33.0100
12/21/07	37.1700	28.6500	17.3800	34.0000	62.7200	34.0200
12/24/07	37.2600	28.7600	17.6500	34.3000	63.0700	34.2200
12/26/07	37.2700	28.3900	17.8000	34.0130	62.3200	33.9400
12/27/07	37.3800	28.2100	17.5200	33.3330	61.7800	33.4100
12/28/07	37.4200	28.1000	17.4700	33.3470	62.2600	33.2300
12/31/07	37.6400	28.0400	17.1300	33.3470	61.8800	32.7600
01/02/08	37.3000	27.9500	16.8700	32.5870	61.4100	32.5500
01/03/08	36.9300	27.7900	16.6800	32.4670	60.8500	32.5000

DCF Cost of Equity Estimate

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

	ATG	ATO	CNP	NJR	SRE	WGL
01/04/08	36.8000	27.6700	16.5200	32.4730	60.2500	32.2200
01/07/08	37.2700	27.9400	16.6200	32.9070	60.6000	32.6300
01/08/08	37.3700	28.0000	16.7000	32.4200	60.9800	31.5900
01/09/08	38.0000	28.1700	16.9800	33.0930	61.9500	32.8200
01/10/08	38.0800	28.0200	16.9700	33.3470	61.7800	34.2800
01/11/08	38.3900	27.8500	16.8200	33.1730	62.5700	33.9700
01/14/08	37.9600	27.8700	16.7500	33.0800	62.4500	34.1400
01/15/08	37.3900	27.5600	16.4300	32.7070	61.6500	33.4200
01/16/08	37.7200	27.6000	16.5500	32.8130	60.4400	33.7900
01/17/08	37.1300	27.3600	16.0100	32.0670	58.5500	33.2800
01/18/08	36.6900	26.9200	15.8800	31.0930	57.3000	32.6200
01/22/08	36.3800	26.9100	15.4600	30.1270	55.0900	32.2200
01/23/08	37.6700	27.8500	15.8500	31.4070	56.1600	33.1400
01/24/08	36.8200	27.5600	15.4100	30.5730	54.9800	32.2600
01/25/08	36.8800	27.4700	15.3300	30.4470	54.0900	31.8100
01/28/08	37.2200	27.8000	15.8000	31.0000	54.7900	32.2100
01/29/08	37.4900	28.3200	15.7500	30.9400	54.9900	32.0500
01/30/08	36.9800	28.2500	15.7700	30.4600	54.8500	31.7900
01/31/08	37.8500	28.7200	16.0100	31.2600	55.9000	32.2400
02/01/08	38.4600	28.9600	16.1500	31.4930	56.9800	32.3300
02/04/08	39.0300	28.9100	16.3400	32.3730	58.1100	32.8000
02/05/08	37.8400	28.3300	15.8900	31.5070	56.1500	32.1200
02/06/08	37.6300	27.6300	15.8500	32.1600	56.1700	32.0800
02/07/08	36.7600	27.4600	15.7800	32.7200	55.8600	32.2400
02/08/08	36.9200	27.5100	15.5800	32.3800	55.6100	32.2100
02/11/08	36.8800	27.9600	15.4700	32.3270	55.1200	31.8000
02/12/08	37.1000	27.6300	15.6800	32.1800	56.5500	31.7800
02/13/08	36.4400	27.5100	15.4900	33.2400	56.3800	31.8900
02/14/08	36.4300	27.2400	15.2800	32.7470	55.7300	32.2300
02/15/08	36.3800	27.0400	15.3000	32.6200	55.5400	32.4300
02/19/08	36.2700	27.2300	15.4500	32.7330	55.3200	32.7100
02/20/08	36.5000	27.6500	15.5300	32.7200	55.2100	33.1000
02/21/08	35.7700	26.8500	15.1800	31.9870	54.4200	32.5100
02/22/08	35.6500	26.7200	15.3400	32.0130	54.4500	32.5100
02/25/08	36.4200	27.0700	15.3900	32.4200	54.8700	33.0400
02/26/08	36.4400	27.1300	15.3300	32.0730	55.7700	33.2600
02/27/08	36.1600	26.7400	15.2400	32.0330	54.9500	32.9300
02/28/08	35.8000	26.6100	15.2700	31.6270	54.8600	32.3400
02/29/08	34.6800	26.0000	14.6800	30.6730	53.1300	31.1900
03/03/08	35.0300	26.0700	14.5100	31.1000	52.7600	31.3300
03/04/08	35.5400	26.3400	14.5800	31.2700	52.5700	31.8300
03/05/08	35.3300	26.2400	14.5000	30.7500	52.7500	31.6800
03/06/08	34.4400	25.8700	14.2600	30.0400	52.1900	30.7600
03/07/08	34.5500	25.7800	14.2000	29.8200	52.1000	30.7800
03/10/08	34.3600	25.6000	14.2800	29.8100	51.6700	31.2500
03/11/08	34.7800	26.0300	14.5600	30.4700	52.8000	32.2000
03/12/08	34.4600	25.6700	14.2000	30.4200	52.6500	31.8200
03/13/08	34.7300	25.8500	14.0000	31.1200	52.7000	32.3500
03/14/08	34.4300	25.9000	13.9100	30.9400	52.7800	32.3000
03/17/08	33.8200	25.6100	13.8400	30.9600	51.0000	32.0100
03/18/08	34.3900	25.6800	14.1700	31.8300	51.2700	33.0800
03/19/08	33.9800	25.2800	13.9600	31.1800	50.1100	32.2000
03/20/08	33.9600	25.2200	14.1600	30.9400	49.5200	32.2400
03/24/08	34.1900	25.1100	13.9100	30.9100	50.2500	31.9000
03/25/08	34.5100	25.1000	14.2400	30.8300	50.7500	31.8500
03/26/08	33.8000	25.2400	14.2200	30.8500	51.0200	31.8600
03/27/08	34.0500	25.3000	14.1900	30.6500	53.0000	31.8000
03/28/08	33.8500	25.0900	14.0500	30.5500	52.9800	31.6500
03/31/08	34.3200	25.5000	14.2700	31.0500	53.2800	32.0600
04/01/08	35.2700	26.2700	14.6600	31.9000	54.3100	32.7600
04/02/08	34.9100	26.7800	15.0400	32.4300	55.2900	33.1800
04/03/08	34.6000	26.7200	14.8200	31.6200	54.6500	32.9500
04/04/08	34.0500	26.4400	14.9400	31.0300	54.3000	32.4800
04/07/08	34.6000	26.8200	15.1400	31.4200	55.1700	32.5600

DCF Cost of Equity Estimate

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

	ATG	ATO	CNP	NJR	SRE	WGL
04/08/08	34.6200	26.4100	15.1500	31.5900	55.1600	32.3200
04/09/08	34.2700	26.2500	15.1500	31.4900	54.4600	32.3000
04/10/08	34.0300	26.0500	15.0300	31.6700	54.6400	32.3100
04/11/08	33.8500	25.8100	15.0900	31.1300	55.0200	31.9100
04/14/08	33.9200	25.8300	15.1400	31.5300	55.0700	32.2500
04/15/08	34.2000	26.3000	15.2600	32.2100	55.4900	32.6700
04/16/08	35.2700	27.0700	15.4500	33.2000	56.8600	33.6900
04/17/08	35.2000	27.1100	15.4700	32.7500	56.7800	33.5400
04/18/08	35.3900	27.3600	15.6900	32.9900	57.2400	33.9000
04/21/08	35.0700	27.0100	15.4800	32.6900	56.7700	33.4800
04/22/08	34.7300	26.8100	15.4100	32.1600	56.5200	33.0600
04/23/08	34.8600	27.3100	15.4700	32.6300	57.5000	33.4600
04/24/08	35.0800	27.6400	15.4400	32.8000	57.2400	33.6200
04/25/08	35.1000	27.8800	15.5700	33.0500	57.0400	33.3600
04/28/08	35.0900	28.0700	15.6900	32.6100	56.9800	33.3900
04/29/08	35.0000	27.9400	15.6200	32.4100	56.6700	32.9800
04/30/08	34.0000	27.6800	15.2200	31.8500	56.6700	32.8000
05/01/08	35.1600	28.1000	15.5500	32.7100	56.8800	34.7900
05/02/08	34.9700	27.9700	15.7200	32.6700	58.8000	34.4800
05/05/08	35.5500	28.4400	15.5400	32.7100	57.7300	34.6800
05/06/08	35.8200	28.4300	15.4400	32.8000	57.8900	34.4500
05/07/08	35.6600	27.9000	15.1600	32.3300	57.2700	34.0100
05/08/08	35.7100	27.6500	15.3900	32.3700	57.1600	33.9300
05/09/08	35.8200	27.8600	15.2300	32.6700	57.1600	34.0000
05/12/08	36.2500	27.9800	15.5000	33.1700	57.8900	34.5100
05/13/08	36.3300	28.1300	15.6300	33.4900	58.3100	34.9700
05/14/08	36.4400	28.5400	15.7800	33.5500	58.9700	35.1000
05/15/08	36.2400	28.3400	15.7100	33.8900	58.7900	34.7600
05/16/08	35.7200	28.2800	15.8500	33.6400	59.1900	34.8500
05/19/08	35.8900	28.2100	15.8700	33.6200	59.3500	34.7900
05/20/08	35.7500	28.0500	16.0300	33.7000	59.2700	34.9500
05/21/08	35.6000	28.0200	15.9800	33.9300	59.3000	34.8400
05/22/08	35.7000	27.5300	16.3100	34.3300	59.1500	35.2500
05/23/08	35.2000	27.3100	16.3300	33.5900	57.5400	34.7300
05/27/08	35.4600	27.5400	16.7200	34.2300	58.5800	35.5000
05/28/08	35.6600	27.5600	16.8800	34.0100	58.2200	35.4800
05/29/08	36.0500	27.4000	17.1600	33.8800	58.0000	35.2700
05/30/08	35.7000	27.3900	16.9400	33.3100	57.8100	34.8900
06/02/08	35.7300	27.1600	16.8700	33.1900	57.2400	34.5800
06/03/08	35.7000	27.0600	16.7000	32.8800	56.7500	34.7600
06/04/08	35.9500	27.2200	16.9700	33.2700	57.3300	35.3800
06/05/08	36.4200	27.4100	17.1000	34.0000	58.0100	36.0100
06/06/08	35.8900	27.0600	16.6400	33.4600	56.2600	35.1100
06/09/08	35.8800	27.1500	16.9100	33.5800	56.4800	35.2300
06/10/08	35.3600	27.0500	16.8300	33.5700	56.4100	35.2000
06/11/08	34.8500	26.8500	16.5300	32.8200	55.9200	34.8300
06/12/08	34.2900	26.5500	16.4500	32.9200	55.9600	34.8100
06/13/08	34.2300	26.4300	16.5800	33.2500	56.4000	34.9800
06/16/08	34.0800	26.6700	16.5600	33.5200	56.8500	35.2500
06/17/08	34.1500	26.8800	16.5200	33.4600	56.5700	35.7100
06/18/08	34.6200	27.3200	16.4900	33.9100	56.2000	35.5800
06/19/08	34.5600	27.4400	16.5200	33.7900	56.2300	35.1900
06/20/08	34.2900	27.2000	16.1500	33.7600	55.3700	34.7900
06/23/08	34.1600	27.6700	16.2100	33.9200	55.6000	35.6100
06/24/08	33.5300	27.2800	16.0300	33.1900	55.4200	35.1600
06/25/08	33.9300	27.4400	16.2100	33.5300	55.9800	35.6500
06/26/08	33.9400	27.0800	15.8900	32.8500	55.1900	35.0400
06/27/08	33.9400	26.8000	15.5400	32.1400	55.2200	34.6000
06/30/08	34.5800	27.5700	16.0500	32.6500	56.4500	34.7400
07/01/08	34.2200	27.7500	16.0300	32.9200	57.7600	35.1100
07/02/08	33.5600	27.7300	16.0100	32.4700	56.8100	34.7700

DCF Cost of Equity Estimate

Stock Prices <sup>1</sup> (\$)	ATG	ATO	CNP	NJR	SRE	WGL
AVERAGE (\$)	37.1023	27.5930	16.2986	32.5958	57.3419	33.1434
QUARTERLY DIV. <sup>2</sup> (\$)	0.4100	0.3200	0.1700	0.2530	0.3100	0.3430
	0.4100	0.3200	0.1700	0.2660	0.3100	0.3420
	0.4200	0.3250	0.1820	0.2800	0.3200	0.3420
	0.4200	0.3250	0.1820	0.2800	0.3500	0.3450
ANNUAL DIVIDEND (\$)	1.6600	1.2900	0.7040	1.0790	1.2900	1.3720
YIELD	4.47%	4.68%	4.32%	3.31%	2.25%	4.14%
EARNINGS GROWTH ESTIMATES:						
MSN <sup>4</sup>	4.80%	5.30%	9.00%	7.30%	6.70%	7.30%
YAHOO <sup>5</sup>	5.25%	4.67%	12.50%	6.00%	8.16%	5.50%
VALUE LINE <sup>6</sup> :						
'07 EARNINGS (\$)	2.75	2.00	1.20	1.95	3.75	2.40
'11 EARNINGS (\$)	3.20	2.45	1.50	2.50	5.75	2.55
VALUE LINE CALCULATED	3.79%	6.76%	7.44%	8.28%	10.69%	1.52%
VALUE LINE, "BOXED"	3.50%	4.50%	6.00%	6.50%	6.00%	3.50%
VALUE LINE (AVERAGE)	3.64%	5.63%	6.72%	7.39%	8.34%	1.52%
DCF GROWTH ESTIMATE	4.56%	5.20%	9.41%	6.90%	7.73%	4.77%
DCF COST OF EQUITY ESTIMATE	10.55%	11.01%	12.67%	10.33%	9.42%	10.33%
DCF AVERAGE				10.72%		
CAPM COST OF EQUITY ESTIMATE				9.96%		
COST OF EQUITY ESTIMATE				10.35%		

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

## Schedule D-1.4

## ATG Non-Constant DCF Calculation

g=	4.56%	non const dcf=	10.55%	const dcf=	9.24%
D=	\$1.66	P=	\$37.10	g(e)=	6.74%

<u>YEAR</u>	<u>GROWTH RATE</u>	<u>DIVIDEND</u>
1	4.56%	\$1.74
2	4.56%	\$1.82
3	4.56%	\$1.90
4	4.56%	\$1.98
5	4.56%	\$2.08
6	4.67%	\$2.17
7	4.78%	\$2.28
8	4.89%	\$2.39
9	5.00%	\$2.51
10	5.11%	\$2.63
11	5.22%	\$2.77
12	5.32%	\$2.92
13	5.43%	\$3.08
14	5.54%	\$3.25
15	5.65%	\$3.43
16	5.76%	\$3.63
17	5.87%	\$3.84
18	5.98%	\$4.07
19	6.08%	\$4.32
20	6.19%	\$4.59
21	6.30%	\$4.88
22	6.41%	\$5.19
23	6.52%	\$5.53
24	6.63%	\$5.89
25	6.74%	\$6.29
26	6.74%	\$6.72
27	6.74%	\$7.17
28	6.74%	\$7.65
29	6.74%	\$8.17
30	6.74%	\$8.72

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

g, D, P are from Schedule D-1.3  
g(e) is from Schedule D-1.10

## ATO Non-Constant DCF Calculation

g=	5.20%	non const dcf=	11.01%	const dcf=	10.12%
D=	\$1.29			g(e)=	6.74%
		P=	\$27.59		

<u>YEAR</u>	<u>GROWTH RATE</u>	<u>DIVIDEND</u>
1	5.20%	\$1.36
2	5.20%	\$1.43
3	5.20%	\$1.50
4	5.20%	\$1.58
5	5.20%	\$1.66
6	5.28%	\$1.75
7	5.35%	\$1.84
8	5.43%	\$1.94
9	5.51%	\$2.05
10	5.58%	\$2.17
11	5.66%	\$2.29
12	5.74%	\$2.42
13	5.81%	\$2.56
14	5.89%	\$2.71
15	5.97%	\$2.87
16	6.05%	\$3.05
17	6.12%	\$3.23
18	6.20%	\$3.43
19	6.28%	\$3.65
20	6.35%	\$3.88
21	6.43%	\$4.13
22	6.51%	\$4.40
23	6.58%	\$4.69
24	6.66%	\$5.00
25	6.74%	\$5.34
26	6.74%	\$5.70
27	6.74%	\$6.08
28	6.74%	\$6.49
29	6.74%	\$6.93
30	6.74%	\$7.39

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

g, D, P are from Schedule D-1.3  
g(e) is from Schedule D-1.10



## Schedule D-1.6

## CNP Non-Constant DCF Calculation

g=	9.41%	non const dcf=	12.67%	const dcf=	14.13%
D=	\$0.70			g(e)=	6.74%
		P=	\$16.30		

<u>YEAR</u>	<u>GROWTH RATE</u>	<u>DIVIDEND</u>
1	4.56%	\$1.74
2	4.56%	\$1.82
3	4.56%	\$1.90
4	4.56%	\$1.98
5	4.56%	\$2.08
6	4.67%	\$2.17
7	4.78%	\$2.28
8	4.89%	\$2.39
9	5.00%	\$2.51
10	5.11%	\$2.63
11	5.22%	\$2.77
12	5.32%	\$2.92
13	5.43%	\$3.08
14	5.54%	\$3.25
15	5.65%	\$3.43
16	5.76%	\$3.63
17	5.87%	\$3.84
18	5.98%	\$4.07
19	6.08%	\$4.32
20	6.19%	\$4.59
21	6.30%	\$4.88
22	6.41%	\$5.19
23	6.52%	\$5.53
24	6.63%	\$5.89
25	6.74%	\$6.29
26	6.74%	\$6.72
27	6.74%	\$7.17
28	6.74%	\$7.65
29	6.74%	\$8.17
30	6.74%	\$8.72

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

g, D, P are from Schedule D-1.3  
g(e) is from Schedule D-1.10

## Schedule D-1.7

## NJR Non-Constant DCF Calculation

g=	6.90%	non const dcf=	10.33%	const dcf=	10.44%
D=	\$1.08			g(e)=	6.74%
		P=	\$32.60		

<u>YEAR</u>	<u>GROWTH RATE</u>	<u>DIVIDEND</u>
1	6.90%	\$1.15
2	6.90%	\$1.23
3	6.90%	\$1.32
4	6.90%	\$1.41
5	6.90%	\$1.51
6	6.89%	\$1.61
7	6.88%	\$1.72
8	6.87%	\$1.84
9	6.86%	\$1.97
10	6.86%	\$2.10
11	6.85%	\$2.24
12	6.84%	\$2.40
13	6.83%	\$2.56
14	6.82%	\$2.74
15	6.82%	\$2.92
16	6.81%	\$3.12
17	6.80%	\$3.33
18	6.79%	\$3.56
19	6.78%	\$3.80
20	6.78%	\$4.06
21	6.77%	\$4.33
22	6.76%	\$4.63
23	6.75%	\$4.94
24	6.74%	\$5.27
25	6.74%	\$5.63
26	6.74%	\$6.01
27	6.74%	\$6.41
28	6.74%	\$6.84
29	6.74%	\$7.30
30	6.74%	\$7.80

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

g, D, P are from Schedule D-1.3  
g(e) is from Schedule D-1.10

## SRE Non-Constant DCF Calculation

g=	7.73%	non const dcf=	9.42%	const dcf=	10.16%
D=	\$1.29			g(e)=	6.74%
		P=	\$57.34		

<u>YEAR</u>	<u>GROWTH RATE</u>	<u>DIVIDEND</u>
1	7.73%	1.39
2	7.73%	1.50
3	7.73%	1.61
4	7.73%	1.74
5	7.73%	1.87
6	7.68%	2.02
7	7.63%	2.17
8	7.58%	2.33
9	7.53%	2.51
10	7.48%	2.70
11	7.43%	2.90
12	7.38%	3.11
13	7.33%	3.34
14	7.29%	3.58
15	7.24%	3.84
16	7.19%	4.12
17	7.14%	4.41
18	7.09%	4.73
19	7.04%	5.06
20	6.99%	5.41
21	6.94%	5.79
22	6.89%	6.19
23	6.84%	6.61
24	6.79%	7.06
25	6.74%	7.53
26	6.74%	8.04
27	6.74%	8.58
28	6.74%	9.16
29	6.74%	9.78
30	6.74%	10.44

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

g, D, P are from Schedule D-1.3  
g(e) is from Schedule D-1.10

## Schedule D-1.9

## WGL Non-Constant DCF Calculation

g=	4.77%	non const dcf=	10.33%	const dcf=	9.11%
D=	\$1.37			g(e)=	6.74%
		P=	\$33.14		

<u>YEAR</u>	<u>GROWTH RATE</u>	<u>DIVIDEND</u>
1	4.77%	\$1.44
2	4.77%	\$1.51
3	4.77%	\$1.58
4	4.77%	\$1.65
5	4.77%	\$1.73
6	4.87%	\$1.82
7	4.97%	\$1.91
8	5.07%	\$2.00
9	5.16%	\$2.11
10	5.26%	\$2.22
11	5.36%	\$2.34
12	5.46%	\$2.46
13	5.56%	\$2.60
14	5.66%	\$2.75
15	5.75%	\$2.91
16	5.85%	\$3.08
17	5.95%	\$3.26
18	6.05%	\$3.46
19	6.15%	\$3.67
20	6.24%	\$3.90
21	6.34%	\$4.15
22	6.44%	\$4.41
23	6.54%	\$4.70
24	6.64%	\$5.01
25	6.74%	\$5.35
26	6.74%	\$5.71
27	6.74%	\$6.10
28	6.74%	\$6.51
29	6.74%	\$6.94
30	6.74%	\$7.41

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

g, D, P are from Schedule D-1.3  
g(e) is from Schedule D-1.10

Growth in U.S. Gross National Product, 1929 to 2007

Year	GNP ( \$billion )	Change ( \$billion )	Growth%
1929	104.40		
1930	91.90	-12.70	-12.32%
1931	77.00	-14.60	-16.15%
1932	59.10	-17.80	-23.48%
1933	56.70	-2.40	-4.14%
1934	66.30	9.50	17.09%
1935	73.60	7.10	10.91%
1936	84.00	10.30	14.27%
1937	92.20	7.90	9.58%
1938	86.50	-5.70	-6.31%
1939	92.50	6.60	7.79%
1940	101.70	9.10	9.97%
1941	127.20	25.10	25.00%
1942	162.30	33.50	26.69%
1943	198.90	33.70	21.19%
1944	220.10	18.70	9.70%
1945	223.40	2.00	0.95%
1946	222.90	-1.00	-0.47%
1947	245.30	22.80	10.73%
1948	270.60	26.40	11.22%
1949	268.60	-1.20	-0.46%
1950	295.20	27.90	10.71%
1951	341.20	45.10	15.64%
1952	360.30	18.20	5.46%
1953	381.30	20.00	5.69%
1954	382.50	0.90	0.24%
1955	417.20	33.40	8.97%
1956	440.30	22.30	5.49%
1957	464.10	22.80	5.32%
1958	469.80	5.80	1.29%
1959	509.30	53.50	11.71%
1960	529.50	20.30	3.98%
1961	548.20	18.70	3.52%
1962	589.70	41.40	7.54%
1963	622.20	32.50	5.50%
1964	668.50	46.20	7.41%
1965	724.40	56.10	8.38%
1966	792.90	69.00	9.51%
1967	838.00	45.00	5.66%
1968	916.10	78.10	9.30%
1969	990.70	73.90	8.05%
1970	1,044.90	54.60	5.51%
1971	1,134.70	90.10	8.61%
1972	1,246.80	112.90	9.94%
1973	1,395.30	149.10	11.94%
1974	1,515.50	118.50	8.48%
1975	1,651.30	131.70	8.68%

Growth in U.S. Gross National Product, 1929 to 2007

Year	GNP ( \$billion )	Change ( \$billion )	Growth%
1976	1,842.10	192.60	11.68%
1977	2,051.20	211.10	11.47%
1978	2,316.30	265.90	12.96%
1979	2,595.30	281.30	12.14%
1980	2,823.70	231.50	8.91%
1981	3,161.40	335.30	11.84%
1982	3,291.50	129.60	4.09%
1983	3,573.80	276.10	8.38%
1984	3,969.50	396.30	11.10%
1985	4,246.80	270.30	6.81%
1986	4,480.60	229.90	5.42%
1987	4,757.40	287.90	6.44%
1988	5,127.40	370.60	7.79%
1989	5,510.60	382.60	7.46%
1990	5,837.90	322.80	5.86%
1991	6,026.30	178.70	3.06%
1992	6,367.40	331.40	5.51%
1993	6,689.30	324.40	5.11%
1994	7,098.40	404.40	6.07%
1995	7,433.40	349.80	4.95%
1996	7,851.90	410.30	5.53%
1997	8,337.30	473.80	6.05%
1998	8,768.30	445.00	5.36%
1999	9,302.20	486.20	5.56%
2000	9,855.90	553.70	5.95%
2001	10,171.60	315.70	3.20%
2002	10,500.20	328.60	3.23%
2003	11,017.60	517.40	4.93%
2004	11,762.10	744.50	6.76%
2005	12,502.40	740.30	6.29%
2006	13,252.70	750.30	6.00%
2007	13,937.10	684.40	5.16%
Average			6.74%

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

Comparable Companies  
Debt-Equity Ratio  
2007 Balances

<u>Company Name</u>	<u>Long Term Debt \$</u>	<u>Total Equity \$</u>	<u>Total Capitalization \$</u>	<u>LT Debt %</u>	<u>Equity %</u>
AGL Resources Inc	1,674,000,000	1,661,000,000	3,335,000,000	50.19490%	49.80510%
Atmos Energy Corp	2,126,315,000	1,965,754,000	4,092,069,000	51.96186%	48.03814%
CenterPoint Energy Inc	8,364,000,000	1,810,000,000	10,174,000,000	82.20955%	17.79045%
New Jersey Resources Corp	383,184,000	644,797,000	1,027,981,000	37.27540%	62.72460%
Sempra Energy	4,732,000,000	8,339,000,000	13,071,000,000	36.20228%	63.79772%
WGL Holdings Inc	616,419,000	1,008,940,000	1,625,359,000	37.92510%	62.07490%
				49.29485%	50.70515%

Source: Ventyx Velocity Suite, Fuels Dataset, SEC 10K

**Rate Schedule SGS**  
**Typical Bill Comparison – 1st year**

<u>Usage</u>	<u>Applicant Current</u>	<u>Applicant Proposed</u>	<u>Percent Increase</u>	<u>Staff Proposed</u>	<u>Percent Increase</u>
0	6.60	13.62	7.12	109.5%	13.65
1	19.75	26.51	6.76	34.2%	26.50
5	72.76	78.07	5.31	7.3%	77.91
10	139.02	142.53	3.51	2.5%	142.16
15	205.28	206.99	1.71	0.8%	206.42
20	271.54	271.44	(0.10)	0.0%	270.68
25	337.80	335.90	(1.90)	-0.6%	334.94
30	404.06	400.35	(3.70)	-0.9%	399.20
35	470.32	464.81	(5.50)	-1.2%	463.45
40	536.57	529.27	(7.31)	-1.4%	527.71
45	602.83	593.72	(9.11)	-1.5%	591.97
50	669.09	658.18	(10.91)	-1.6%	656.23
60	801.61	787.09	(14.52)	-1.8%	784.74
70	934.13	916.00	(18.13)	-1.9%	913.26
80	1,066.65	1,044.92	(21.73)	-2.0%	1,041.77
90	1,199.17	1,173.83	(25.34)	-2.1%	1,170.29
100	1,331.69	1,302.74	(28.94)	-2.2%	1,298.80
125	1,661.19	1,623.14	(38.05)	-2.3%	1,618.21
150	1,990.70	1,943.55	(47.15)	-2.4%	1,937.62
175	2,320.21	2,263.95	(56.26)	-2.4%	2,257.03
200	2,649.71	2,584.35	(65.36)	-2.5%	2,576.44
225	2,979.22	2,904.75	(74.47)	-2.5%	2,895.85
250	3,308.73	3,225.15	(83.57)	-2.5%	3,215.26
300	3,967.74	3,865.96	(101.78)	-2.6%	3,854.08

**Rate Schedule SGS**  
**Typical Bill Comparison -- 2nd year**

<u>Usage</u>	<u>Applicant Current</u>	<u>Applicant Proposed</u>	<u>Percent Increase</u>	<u>Staff Proposed</u>	<u>Percent Increase</u>
0	13.62	20.75	7.13	52.4%	20.47
1	26.51	32.64	6.13	23.1%	32.37
5	78.07	80.23	2.15	2.8%	79.95
10	142.53	139.71	(2.82)	-2.0%	139.43
15	206.99	199.19	(7.80)	-3.8%	198.91
20	271.44	258.67	(12.77)	-4.7%	258.39
25	335.90	318.15	(17.75)	-5.3%	317.87
30	400.35	377.63	(22.73)	-5.7%	377.35
35	464.81	437.11	(27.70)	-6.0%	436.84
40	529.27	496.59	(32.68)	-6.2%	496.32
45	593.72	556.07	(37.65)	-6.3%	555.80
50	658.18	615.55	(42.63)	-6.5%	615.28
60	787.09	734.51	(52.58)	-6.7%	734.24
70	916.00	853.47	(62.53)	-6.8%	853.20
80	1,044.92	972.43	(72.49)	-6.9%	972.16
90	1,173.83	1,091.39	(82.44)	-7.0%	1,091.12
100	1,302.74	1,210.35	(92.39)	-7.1%	1,210.08
125	1,623.14	1,505.88	(117.27)	-7.2%	1,505.60
150	1,943.55	1,801.40	(142.15)	-7.3%	1,801.13
175	2,263.95	2,096.92	(167.03)	-7.4%	2,096.65
200	2,584.35	2,392.44	(191.91)	-7.4%	2,392.17
225	2,904.75	2,687.97	(216.79)	-7.5%	2,687.69
250	3,225.15	2,983.49	(241.66)	-7.5%	2,983.22
300	3,865.96	3,574.53	(291.42)	-7.5%	3,574.26



**Rate Schedule SGS - Schools**  
**Typical Bill Comparison -- 1st year**

<u>Usage</u>	<u>Applicant Current</u>	<u>Applicant Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>
0	6.19	12.93	6.75	109.0%	12.97	6.78	109.5%
1	19.37	25.78	6.40	33.0%	25.77	6.40	33.0%
5	72.12	77.14	5.02	7.0%	76.98	4.87	6.7%
10	138.05	141.35	3.30	2.4%	141.00	2.96	2.1%
15	203.98	205.56	1.58	0.8%	205.02	1.05	0.5%
20	269.91	269.76	(0.14)	-0.1%	269.04	(0.87)	-0.3%
25	335.84	333.97	(1.87)	-0.6%	333.06	(2.78)	-0.8%
30	401.77	398.18	(3.59)	-0.9%	397.08	(4.69)	-1.2%
35	467.70	462.39	(5.31)	-1.1%	461.10	(6.60)	-1.4%
40	533.63	526.59	(7.03)	-1.3%	525.12	(8.51)	-1.6%
45	599.56	590.80	(8.75)	-1.5%	589.14	(10.42)	-1.7%
50	665.49	655.01	(10.48)	-1.6%	653.16	(12.33)	-1.9%
60	797.35	783.42	(13.92)	-1.7%	781.19	(16.15)	-2.0%
70	929.20	911.84	(17.37)	-1.9%	909.23	(19.97)	-2.1%
80	1,061.06	1,040.25	(20.81)	-2.0%	1,037.27	(23.79)	-2.2%
90	1,192.92	1,168.67	(24.26)	-2.0%	1,165.31	(27.62)	-2.3%
100	1,324.78	1,297.08	(27.70)	-2.1%	1,293.35	(31.44)	-2.4%
125	1,652.64	1,616.24	(36.40)	-2.2%	1,611.56	(41.08)	-2.5%
150	1,980.50	1,935.40	(45.10)	-2.3%	1,929.78	(50.72)	-2.6%
175	2,308.36	2,254.56	(53.80)	-2.3%	2,247.99	(60.37)	-2.6%
200	2,636.22	2,573.71	(62.50)	-2.4%	2,566.21	(70.01)	-2.7%
225	2,964.08	2,892.87	(71.20)	-2.4%	2,884.42	(79.65)	-2.7%
250	3,291.94	3,212.03	(79.91)	-2.4%	3,202.64	(89.30)	-2.7%
300	3,947.65	3,850.35	(97.31)	-2.5%	3,839.07	(108.58)	-2.8%

**Rate Schedule SGS - Schools**  
**Typical Bill Comparison -- 2nd year**

<u>Usage</u>	<u>Applicant Current</u>	<u>Applicant Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>
0	12.93	19.71	6.77	52.4%	19.45	6.52	50.4%
1	25.78	31.60	5.83	22.6%	31.35	5.57	21.6%
5	77.14	79.19	2.04	2.7%	78.93	1.79	2.3%
10	141.35	138.67	(2.68)	-1.9%	138.41	(2.93)	-2.1%
15	205.56	198.15	(7.41)	-3.6%	197.90	(7.66)	-3.7%
20	269.76	257.63	(12.14)	-4.5%	257.38	(12.39)	-4.6%
25	333.97	317.11	(16.86)	-5.0%	316.86	(17.12)	-5.1%
30	398.18	376.59	(21.59)	-5.4%	376.34	(21.84)	-5.5%
35	462.39	436.07	(26.32)	-5.7%	435.82	(26.57)	-5.7%
40	526.59	495.55	(31.04)	-5.9%	495.30	(31.30)	-5.9%
45	590.80	555.03	(35.77)	-6.1%	554.78	(36.02)	-6.1%
50	655.01	614.51	(40.50)	-6.2%	614.26	(40.75)	-6.2%
60	783.42	733.47	(49.95)	-6.4%	733.22	(50.20)	-6.4%
70	911.84	852.43	(59.41)	-6.5%	852.18	(59.66)	-6.5%
80	1,040.25	971.39	(68.86)	-6.6%	971.14	(69.11)	-6.6%
90	1,168.67	1,090.35	(78.32)	-6.7%	1,090.10	(78.57)	-6.7%
100	1,297.08	1,209.31	(87.77)	-6.8%	1,209.06	(88.02)	-6.8%
125	1,616.24	1,504.84	(111.40)	-6.9%	1,504.58	(111.66)	-6.9%
150	1,935.40	1,800.36	(135.04)	-7.0%	1,800.11	(135.29)	-7.0%
175	2,254.56	2,095.88	(158.67)	-7.0%	2,095.63	(158.93)	-7.0%
200	2,573.71	2,391.40	(182.31)	-7.1%	2,391.15	(182.56)	-7.1%
225	2,892.87	2,686.93	(205.95)	-7.1%	2,686.68	(206.20)	-7.1%
250	3,212.03	2,982.45	(229.58)	-7.1%	2,982.20	(229.83)	-7.2%
300	3,850.35	3,573.50	(276.85)	-7.2%	3,573.24	(277.10)	-7.2%

**Rate Schedule SGTs**  
**Typical Bill Comparison – 1st year**

<u>Usage</u>	<u>Applicant Current</u>	<u>Applicant Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>
0	12.50	13.62	1.12	8.9%	13.65	1.15	9.2%
1	14.60	15.36	0.77	5.3%	15.35	0.76	5.2%
5	22.98	22.35	(0.63)	-2.8%	22.18	(0.80)	-3.5%
10	33.46	31.08	(2.38)	-7.1%	30.71	(2.75)	-8.2%
15	43.94	39.80	(4.14)	-9.4%	39.24	(4.70)	-10.7%
20	54.42	48.53	(5.89)	-10.8%	47.77	(6.65)	-12.2%
25	64.90	57.26	(7.64)	-11.8%	56.30	(8.60)	-13.2%
30	75.38	65.99	(9.39)	-12.5%	64.83	(10.55)	-14.0%
35	85.86	74.72	(11.14)	-13.0%	73.36	(12.50)	-14.6%
40	96.34	83.45	(12.89)	-13.4%	81.89	(14.45)	-15.0%
45	106.82	92.18	(14.64)	-13.7%	90.42	(16.40)	-15.3%
50	117.30	100.91	(16.39)	-14.0%	98.96	(18.34)	-15.6%
60	138.26	118.37	(19.89)	-14.4%	116.02	(22.24)	-16.1%
70	159.22	135.82	(23.40)	-14.7%	133.08	(26.14)	-16.4%
80	180.18	153.28	(26.90)	-14.9%	150.14	(30.04)	-16.7%
90	201.14	170.74	(30.40)	-15.1%	167.20	(33.94)	-16.9%
100	222.10	188.20	(33.90)	-15.3%	184.26	(37.84)	-17.0%
125	272.71	229.97	(42.74)	-15.7%	225.04	(47.67)	-17.5%
150	323.32	271.73	(51.59)	-16.0%	265.81	(57.51)	-17.8%
175	373.93	313.50	(60.43)	-16.2%	306.59	(67.34)	-18.0%
200	424.54	355.27	(69.27)	-16.3%	347.36	(77.18)	-18.2%
225	475.15	397.03	(78.12)	-16.4%	388.13	(87.02)	-18.3%
250	525.76	438.80	(86.96)	-16.5%	428.91	(96.85)	-18.4%
300	626.98	522.33	(104.65)	-16.7%	510.46	(116.52)	-18.6%

**Rate Schedule SGTs**  
**Typical Bill Comparison – 2nd year**

<u>Usage</u>	<u>Applicant Current</u>	<u>Applicant Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>
0	13.62	20.75	7.13	52.4%	20.47	6.86	50.3%
1	15.36	21.50	6.13	39.9%	21.22	5.86	38.1%
5	22.35	24.50	2.15	9.6%	24.23	1.88	8.4%
10	31.08	28.25	(2.82)	-9.1%	27.98	(3.10)	-10.0%
15	39.80	32.01	(7.80)	-19.6%	31.73	(8.07)	-20.3%
20	48.53	35.76	(12.77)	-26.3%	35.49	(13.05)	-26.9%
25	57.26	39.51	(17.75)	-31.0%	39.24	(18.02)	-31.5%
30	65.99	43.27	(22.73)	-34.4%	42.99	(23.00)	-34.9%
35	74.72	47.02	(27.70)	-37.1%	46.75	(27.98)	-37.4%
40	83.45	50.77	(32.68)	-39.2%	50.50	(32.95)	-39.5%
45	92.18	54.52	(37.65)	-40.8%	54.25	(37.93)	-41.1%
50	100.91	58.28	(42.63)	-42.2%	58.01	(42.90)	-42.5%
60	118.37	65.78	(52.58)	-44.4%	65.51	(52.85)	-44.7%
70	135.82	73.29	(62.53)	-46.0%	73.02	(62.81)	-46.2%
80	153.28	80.80	(72.49)	-47.3%	80.53	(72.76)	-47.5%
90	170.74	88.30	(82.44)	-48.3%	88.03	(82.71)	-48.4%
100	188.20	95.81	(92.39)	-49.1%	95.54	(92.66)	-49.2%
125	229.97	112.70	(117.27)	-51.0%	112.43	(117.54)	-51.1%
150	271.73	129.59	(142.15)	-52.3%	129.31	(142.42)	-52.4%
175	313.50	146.47	(167.03)	-53.3%	146.20	(167.30)	-53.4%
200	355.27	163.36	(191.91)	-54.0%	163.09	(192.18)	-54.1%
225	397.03	180.25	(216.79)	-54.6%	179.97	(217.06)	-54.7%
250	438.80	197.13	(241.66)	-55.1%	196.86	(241.94)	-55.1%
300	522.33	230.91	(291.42)	-55.8%	230.64	(291.70)	-55.8%

**Rate Schedule FRSGTS**  
**Typical Bill Comparison -- 1st year**

<u>Usage</u>	<u>Applicant Current</u>	<u>Applicant Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>
0	6.50	13.62	7.12	109.5%	13.65	7.15	110.0%
1	8.25	15.01	6.76	81.8%	15.00	6.75	81.7%
5	15.27	20.58	5.31	34.8%	20.42	5.14	33.7%
10	24.05	27.55	3.51	14.6%	27.19	3.14	13.1%
15	32.82	34.52	1.70	5.2%	33.96	1.14	3.5%
20	41.59	41.49	(0.10)	-0.2%	40.73	(0.87)	-2.1%
25	50.37	48.46	(1.91)	-3.8%	47.50	(2.87)	-5.7%
30	59.14	55.42	(3.71)	-6.3%	54.27	(4.87)	-8.2%
35	67.91	62.39	(5.52)	-8.1%	61.04	(6.88)	-10.1%
40	76.68	69.36	(7.32)	-9.5%	67.80	(8.88)	-11.6%
45	85.46	76.33	(9.13)	-10.7%	74.57	(10.88)	-12.7%
50	94.23	83.30	(10.93)	-11.6%	81.34	(12.89)	-13.7%
60	111.78	97.23	(14.54)	-13.0%	94.88	(16.89)	-15.1%
70	129.32	111.17	(18.15)	-14.0%	108.42	(20.90)	-16.2%
80	146.87	125.10	(21.76)	-14.8%	121.96	(24.91)	-17.0%
90	164.41	139.04	(25.37)	-15.4%	135.50	(28.91)	-17.6%
100	181.96	152.98	(28.98)	-15.9%	149.04	(32.92)	-18.1%
125	224.04	185.94	(38.10)	-17.0%	181.01	(43.03)	-19.2%
150	266.11	218.90	(47.21)	-17.7%	212.98	(53.13)	-20.0%
175	308.19	251.86	(56.33)	-18.3%	244.95	(63.24)	-20.5%
200	350.26	284.82	(65.44)	-18.7%	276.91	(73.35)	-20.9%
225	392.34	317.78	(74.56)	-19.0%	308.88	(83.45)	-21.3%
250	434.41	350.74	(83.67)	-19.3%	340.85	(93.56)	-21.5%
300	518.56	416.66	(101.90)	-19.7%	404.79	(113.77)	-21.9%

**Rate Schedule FRSGTS**  
**Typical Bill Comparison -- 2nd year**

<u>Usage</u>	<u>Applicant Current</u>	<u>Applicant Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>
0	13.62	20.75	7.13	52.4%	20.47	6.86	50.3%
1	15.01	21.14	6.13	40.9%	20.87	5.86	39.0%
5	20.58	22.74	2.15	10.5%	22.46	1.88	9.1%
10	27.55	24.73	(2.82)	-10.2%	24.46	(3.10)	-11.2%
15	34.52	26.72	(7.80)	-22.6%	26.45	(8.07)	-23.4%
20	41.49	28.71	(12.77)	-30.8%	28.44	(13.05)	-31.4%
25	48.46	30.71	(17.75)	-36.6%	30.43	(18.02)	-37.2%
30	55.42	32.70	(22.73)	-41.0%	32.43	(23.00)	-41.5%
35	62.39	34.69	(27.70)	-44.4%	34.42	(27.98)	-44.8%
40	69.36	36.68	(32.68)	-47.1%	36.41	(32.95)	-47.5%
45	76.33	38.67	(37.65)	-49.3%	38.40	(37.93)	-49.7%
50	83.30	40.67	(42.63)	-51.2%	40.39	(42.90)	-51.5%
60	97.23	44.65	(52.58)	-54.1%	44.38	(52.85)	-54.4%
70	111.17	48.64	(62.53)	-56.3%	48.36	(62.81)	-56.5%
80	125.10	52.62	(72.49)	-57.9%	52.35	(72.76)	-58.2%
90	139.04	56.60	(82.44)	-59.3%	56.33	(82.71)	-59.5%
100	152.98	60.59	(92.39)	-60.4%	60.32	(92.66)	-60.6%
125	185.94	68.67	(117.27)	-63.1%	68.40	(117.54)	-63.2%
150	218.90	76.75	(142.15)	-64.9%	76.48	(142.42)	-65.1%
175	251.86	84.83	(167.03)	-66.3%	84.56	(167.30)	-66.4%
200	284.82	92.91	(191.91)	-67.4%	92.64	(192.18)	-67.5%
225	317.78	100.99	(216.79)	-68.2%	100.72	(217.06)	-68.3%
250	350.74	109.08	(241.66)	-68.9%	108.80	(241.94)	-69.0%
300	416.66	125.24	(291.42)	-69.9%	124.97	(291.70)	-70.0%

**Rate Schedule MGS**  
**Typical Bill Comparison -- 1st year**

<u>Usage</u>	<u>Applicant</u> <u>Current</u>	<u>Applicant</u> <u>Proposed</u>	<u>Increase</u>	<u>Percent</u> <u>Increase</u>	<u>Staff</u> <u>Proposed</u>	<u>Increase</u>	<u>Percent</u> <u>Increase</u>
0	3.25	13.62	10.37	319.0%	13.65	10.40	319.9%
1	15.34	26.51	11.17	72.8%	26.50	11.16	72.7%
5	63.70	78.07	14.37	22.6%	77.91	14.21	22.3%
10	124.15	142.53	18.38	14.8%	142.16	18.01	14.5%
15	184.60	206.99	22.38	12.1%	206.42	21.82	11.8%
20	245.05	271.44	26.39	10.8%	270.68	25.63	10.5%
25	305.51	335.90	30.39	9.9%	334.94	29.43	9.6%
30	365.96	400.35	34.40	9.4%	399.20	33.24	9.1%
35	426.41	464.81	38.40	9.0%	463.45	37.05	8.7%
40	486.86	529.27	42.41	8.7%	527.71	40.85	8.4%
45	547.31	593.72	46.41	8.5%	591.97	44.66	8.2%
50	607.76	658.18	50.42	8.3%	656.23	48.47	8.0%
60	728.66	787.09	58.43	8.0%	784.74	56.08	7.7%
70	849.56	916.00	66.44	7.8%	913.26	63.69	7.5%
80	970.47	1,044.92	74.45	7.7%	1,041.77	71.31	7.3%
90	1,091.37	1,173.83	82.46	7.6%	1,170.29	78.92	7.2%
100	1,212.27	1,302.74	90.47	7.5%	1,298.80	86.53	7.1%
125	1,512.74	1,623.14	110.41	7.3%	1,618.21	105.48	7.0%
150	1,813.20	1,943.55	130.35	7.2%	1,937.62	124.42	6.9%
175	2,113.67	2,263.95	150.28	7.1%	2,257.03	143.37	6.8%
200	2,414.13	2,584.35	170.22	7.1%	2,576.44	162.31	6.7%
225	2,714.60	2,904.75	190.16	7.0%	2,895.85	181.26	6.7%
250	3,015.06	3,225.15	210.09	7.0%	3,215.26	200.20	6.6%
300	3,615.99	3,865.96	249.97	6.9%	3,854.08	238.09	6.6%

**Rate Schedule MGS**  
**Typical Bill Comparison -- 2nd year**

<u>Usage</u>	<u>Applicant</u> <u>Current</u>	<u>Applicant</u> <u>Proposed</u>	<u>Increase</u>	<u>Percent</u> <u>Increase</u>	<u>Staff</u> <u>Proposed</u>	<u>Increase</u>	<u>Percent</u> <u>Increase</u>
0	13.62	20.75	7.13	52.4%	20.47	6.86	50.3%
1	26.51	32.64	6.13	23.1%	32.37	5.86	22.1%
5	78.07	80.23	2.15	2.8%	79.95	1.88	2.4%
10	142.53	139.71	(2.82)	-2.0%	139.43	(3.10)	-2.2%
15	206.99	199.19	(7.80)	-3.8%	198.91	(8.07)	-3.9%
20	271.44	258.67	(12.77)	-4.7%	258.39	(13.05)	-4.8%
25	335.90	318.15	(17.75)	-5.3%	317.87	(18.02)	-5.4%
30	400.35	377.63	(22.73)	-5.7%	377.35	(23.00)	-5.7%
35	464.81	437.11	(27.70)	-6.0%	436.84	(27.98)	-6.0%
40	529.27	496.59	(32.68)	-6.2%	496.32	(32.95)	-6.2%
45	593.72	556.07	(37.65)	-6.3%	555.80	(37.93)	-6.4%
50	658.18	615.55	(42.63)	-6.5%	615.28	(42.90)	-6.5%
60	787.09	734.51	(52.58)	-6.7%	734.24	(52.85)	-6.7%
70	916.00	853.47	(62.53)	-6.8%	853.20	(62.81)	-6.9%
80	1,044.92	972.43	(72.49)	-6.9%	972.16	(72.76)	-7.0%
90	1,173.83	1,091.39	(82.44)	-7.0%	1,091.12	(82.71)	-7.0%
100	1,302.74	1,210.35	(92.39)	-7.1%	1,210.08	(92.66)	-7.1%
125	1,623.14	1,505.88	(117.27)	-7.2%	1,505.60	(117.54)	-7.2%
150	1,943.55	1,801.40	(142.15)	-7.3%	1,801.13	(142.42)	-7.3%
175	2,263.95	2,096.92	(167.03)	-7.4%	2,096.65	(167.30)	-7.4%
200	2,584.35	2,392.44	(191.91)	-7.4%	2,392.17	(192.18)	-7.4%
225	2,904.75	2,687.97	(216.79)	-7.5%	2,687.69	(217.06)	-7.5%
250	3,225.15	2,983.49	(241.66)	-7.5%	2,983.22	(241.94)	-7.5%
300	3,865.96	3,574.53	(291.42)	-7.5%	3,574.26	(291.70)	-7.5%

**Rate Schedule FRMGTS**  
**Typical Bill Comparison -- 1st year**

<u>Usage</u>	<u>Applicant</u> <u>Current</u>	<u>Applicant</u> <u>Proposed</u>	<u>Increase</u>	<u>Percent</u> <u>Increase</u>	<u>Staff</u> <u>Proposed</u>	<u>Increase</u>	<u>Percent</u> <u>Increase</u>
0	3.25	13.62	10.37	319.0%	13.65	10.40	319.9%
1	4.23	15.01	10.78	255.2%	15.00	10.78	255.0%
5	8.13	20.58	12.46	153.3%	20.42	12.29	151.2%
10	13.01	27.55	14.55	111.9%	27.19	14.18	109.1%
15	17.88	34.52	16.64	93.0%	33.96	16.07	89.9%
20	22.76	41.49	18.73	82.3%	40.73	17.97	78.9%
25	27.64	48.46	20.82	75.3%	47.50	19.86	71.9%
30	32.52	55.42	22.91	70.5%	54.27	21.75	66.9%
35	37.39	62.39	25.00	66.9%	61.04	23.64	63.2%
40	42.27	69.36	27.09	64.1%	67.80	25.53	60.4%
45	47.15	76.33	29.18	61.9%	74.57	27.43	58.2%
50	52.03	83.30	31.27	60.1%	81.34	29.32	56.4%
60	61.78	97.23	35.45	57.4%	94.88	33.10	53.8%
70	71.54	111.17	39.63	55.4%	108.42	36.89	51.6%
80	81.29	125.10	43.81	53.9%	121.96	40.67	50.0%
90	91.05	139.04	48.00	52.7%	135.50	44.46	48.8%
100	100.80	152.98	52.18	51.8%	149.04	48.24	47.9%
125	123.40	185.94	62.54	50.7%	181.01	57.61	46.7%
150	125.68	218.90	93.22	74.2%	212.98	87.30	69.5%
175	168.59	251.86	83.27	49.4%	244.95	76.35	45.3%
200	191.19	284.82	93.63	49.0%	276.91	85.72	44.8%
225	213.79	317.78	103.99	48.6%	308.88	95.09	44.5%
250	236.39	350.74	114.36	48.4%	340.85	104.47	44.2%
300	281.58	416.66	135.08	48.0%	404.79	123.21	43.8%

**Rate Schedule FRMGTS**  
**Typical Bill Comparison -- 2nd year**

<u>Usage</u>	<u>Applicant</u> <u>Current</u>	<u>Applicant</u> <u>Proposed</u>	<u>Increase</u>	<u>Percent</u> <u>Increase</u>	<u>Staff</u> <u>Proposed</u>	<u>Increase</u>	<u>Percent</u> <u>Increase</u>
0	13.62	20.75	7.13	52.4%	20.47	6.86	50.3%
1	15.01	21.14	6.13	40.9%	20.87	5.86	39.0%
5	20.58	22.74	2.15	10.5%	22.46	1.88	9.1%
10	27.55	24.73	(2.82)	-10.2%	24.46	(3.10)	-11.2%
15	34.52	26.72	(7.80)	-22.6%	26.45	(8.07)	-23.4%
20	41.49	28.71	(12.77)	-30.8%	28.44	(13.05)	-31.4%
25	48.46	30.71	(17.75)	-36.6%	30.43	(18.02)	-37.2%
30	55.42	32.70	(22.73)	-41.0%	32.43	(23.00)	-41.5%
35	62.39	34.69	(27.70)	-44.4%	34.42	(27.98)	-44.8%
40	69.36	36.68	(32.68)	-47.1%	36.41	(32.95)	-47.5%
45	76.33	38.67	(37.65)	-49.3%	38.40	(37.93)	-49.7%
50	83.30	40.67	(42.63)	-51.2%	40.39	(42.90)	-51.5%
60	97.23	44.65	(52.58)	-54.1%	44.38	(52.85)	-54.4%
70	111.17	48.64	(62.53)	-56.3%	48.36	(62.81)	-56.5%
80	125.10	52.62	(72.49)	-57.9%	52.35	(72.76)	-58.2%
90	139.04	56.60	(82.44)	-59.3%	56.33	(82.71)	-59.5%
100	152.98	60.59	(92.39)	-60.4%	60.32	(92.66)	-60.6%
125	185.94	68.67	(117.27)	-63.1%	68.40	(117.54)	-63.2%
150	218.90	76.75	(142.15)	-64.9%	76.48	(142.42)	-65.1%
175	251.86	84.83	(167.03)	-66.3%	84.56	(167.30)	-66.4%
200	284.82	92.91	(191.91)	-67.4%	92.64	(192.18)	-67.5%
225	317.78	100.99	(216.79)	-68.2%	100.72	(217.06)	-68.3%
250	350.74	109.08	(241.66)	-68.9%	108.80	(241.94)	-69.0%
300	416.66	125.24	(291.42)	-69.9%	124.97	(291.70)	-70.0%

**Rate Schedule GS  
Typical Bill Comparison**

<u>Usage</u>	<u>Applicant Current</u>	<u>Applicant Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>
0	16.50	26.25	9.75	59.1%	24.15	7.65	46.3%
1	29.75	40.13	10.39	34.9%	37.87	8.12	27.3%
5	82.73	95.68	12.96	15.7%	92.76	10.04	12.1%
10	148.95	165.12	16.17	10.9%	161.38	12.42	8.3%
15	215.18	234.56	19.38	9.0%	229.99	14.81	6.9%
20	281.40	304.00	22.59	8.0%	298.60	17.20	6.1%
25	347.63	373.44	25.81	7.4%	367.22	19.59	5.6%
30	413.44	439.98	26.54	6.4%	433.58	20.13	4.9%
35	479.26	506.53	27.28	5.7%	499.93	20.67	4.3%
40	545.07	573.08	28.01	5.1%	568.29	21.22	3.9%
45	610.89	639.63	28.74	4.7%	632.65	21.76	3.6%
50	676.70	706.18	29.48	4.4%	699.00	22.30	3.3%
60	808.33	839.28	30.95	3.8%	831.72	23.39	2.9%
70	939.96	972.37	32.42	3.4%	964.43	24.47	2.6%
80	1,071.59	1,105.47	33.88	3.2%	1,097.15	25.56	2.4%
90	1,203.22	1,238.57	35.35	2.9%	1,229.86	26.64	2.2%
100	1,334.84	1,371.67	36.82	2.8%	1,362.57	27.73	2.1%
125	1,662.13	1,695.62	33.50	2.0%	1,685.39	23.27	1.4%
150	1,989.41	2,019.58	30.18	1.5%	2,008.21	18.81	0.9%
175	2,316.69	2,343.54	26.85	1.2%	2,331.03	14.34	0.6%
200	2,643.97	2,667.50	23.53	0.9%	2,653.85	9.88	0.4%
225	2,971.25	2,991.46	20.21	0.7%	2,976.67	5.42	0.2%
250	3,298.53	3,315.42	16.88	0.5%	3,299.49	0.96	0.0%
300	3,953.10	3,963.33	10.24	0.3%	3,945.13	(7.97)	-0.2%
400	5,262.22	5,259.17	(3.06)	-0.1%	5,236.41	(25.82)	-0.5%
500	6,571.35	6,555.00	(16.35)	-0.2%	6,527.68	(43.67)	-0.7%
600	7,880.48	7,850.83	(29.64)	-0.4%	7,818.96	(61.52)	-0.8%
700	9,189.60	9,146.67	(42.94)	-0.5%	9,110.24	(79.37)	-0.9%
800	10,498.78	10,442.50	(56.23)	-0.5%	10,401.51	(97.22)	-0.9%
900	11,807.86	11,738.33	(69.52)	-0.6%	11,692.79	(115.07)	-1.0%
1,000	13,116.98	13,034.17	(82.82)	-0.6%	12,984.07	(132.91)	-1.0%
1,500	19,662.62	19,513.34	(149.28)	-0.8%	19,440.45	(222.16)	-1.1%

**Rate Schedule GS Schools  
Typical Bill Comparison**

<u>Usage</u>	<u>Applicant Current</u>	<u>Applicant Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>
0	15.71	24.93	9.23	58.7%	22.94	7.23	46.0%
1	28.89	38.73	9.84	34.1%	36.57	7.68	26.6%
5	81.61	93.90	12.29	15.1%	91.10	9.49	11.6%
10	147.50	162.86	15.36	10.4%	159.25	11.75	8.0%
15	213.40	231.82	18.42	8.6%	227.41	14.01	6.6%
20	279.30	300.79	21.49	7.7%	295.57	16.27	5.8%
25	345.20	369.75	24.55	7.1%	363.73	18.53	5.4%
30	410.70	435.97	25.27	6.2%	429.74	19.04	4.6%
35	476.21	502.19	25.98	5.5%	495.75	19.54	4.1%
40	541.72	568.41	26.69	4.9%	561.77	20.05	3.7%
45	607.22	634.62	27.40	4.5%	627.78	20.56	3.4%
50	672.73	700.84	28.12	4.2%	693.79	21.07	3.1%
60	803.74	833.28	29.54	3.7%	825.82	22.08	2.7%
70	934.75	965.72	30.96	3.3%	957.85	23.09	2.5%
80	1,065.76	1,098.15	32.39	3.0%	1,089.87	24.11	2.3%
90	1,196.78	1,230.59	33.81	2.8%	1,221.90	25.12	2.1%
100	1,327.79	1,363.03	35.24	2.7%	1,353.93	26.14	2.0%
125	1,653.53	1,685.56	32.03	1.9%	1,675.38	21.85	1.3%
150	1,979.27	2,008.10	28.83	1.5%	1,996.83	17.56	0.9%
175	2,305.01	2,330.64	25.62	1.1%	2,318.29	13.28	0.6%
200	2,630.75	2,653.17	22.42	0.9%	2,639.74	8.99	0.3%
225	2,956.49	2,975.71	19.21	0.6%	2,961.20	4.71	0.2%
250	3,282.23	3,298.24	16.01	0.5%	3,282.65	0.42	0.0%
300	3,933.71	3,943.31	9.60	0.2%	3,925.56	(8.15)	-0.2%
400	5,236.68	5,233.46	(3.22)	-0.1%	5,211.36	(25.30)	-0.5%
500	6,539.64	6,523.60	(16.04)	-0.2%	6,497.20	(42.44)	-0.6%
600	7,842.60	7,813.74	(28.86)	-0.4%	7,783.01	(59.59)	-0.8%
700	9,145.56	9,103.89	(41.68)	-0.5%	9,088.83	(76.73)	-0.8%
800	10,448.53	10,394.03	(54.49)	-0.5%	10,354.65	(93.88)	-0.9%
900	11,751.49	11,684.17	(67.31)	-0.6%	11,640.47	(111.02)	-0.9%
1,000	13,054.45	12,974.32	(80.13)	-0.6%	12,926.29	(128.16)	-1.0%
1,500	19,569.26	19,425.03	(144.23)	-0.7%	19,355.37	(213.89)	-1.1%

**Rate Schedule GTS  
Typical Bill Comparison**

Usage	Applicant Current	Applicant Proposed	Percent Increase	Staff Proposed	Percent Increase
0	22.50	26.25	3.75	16.7%	24.15
1	24.59	28.99	4.40	17.9%	26.72
5	32.95	38.96	7.01	21.3%	37.03
10	43.39	53.67	10.28	23.7%	49.92
15	53.84	67.38	13.54	25.1%	62.81
20	64.29	81.09	16.80	26.1%	75.70
25	74.73	94.80	20.07	26.9%	88.58
30	84.77	105.62	20.85	24.6%	99.21
35	94.80	116.44	21.64	22.8%	109.84
40	104.84	127.27	22.43	21.4%	120.47
45	114.87	138.09	23.21	20.2%	131.10
50	124.91	148.91	24.00	19.2%	141.73
60	144.98	170.55	25.57	17.6%	162.99
70	165.05	192.19	27.15	16.4%	184.25
80	185.12	213.84	28.72	15.5%	205.51
90	205.19	235.48	30.29	14.8%	226.77
100	225.26	257.12	31.87	14.1%	248.03
125	273.64	302.45	28.80	10.5%	292.22
150	322.03	347.77	25.74	8.0%	336.40
175	370.41	393.09	22.68	6.1%	380.58
200	418.80	438.42	19.62	4.7%	424.77
225	467.18	483.74	16.56	3.5%	468.95
250	515.57	529.06	13.49	2.6%	513.13
300	612.34	619.71	7.37	1.2%	601.50
400	805.88	801.00	(4.88)	-0.6%	778.24
500	999.42	982.29	(17.13)	-1.7%	954.97
600	1,192.96	1,163.58	(29.38)	-2.5%	1,131.71
700	1,386.50	1,344.87	(41.62)	-3.0%	1,308.44
800	1,580.04	1,526.16	(53.87)	-3.4%	1,485.18
900	1,773.58	1,707.48	(66.12)	-3.7%	1,661.91
1,000	1,967.12	1,888.75	(78.37)	-4.0%	1,838.85
1,500	2,934.82	2,795.21	(139.61)	-4.8%	2,722.32

**Rate Schedule GTS Schools  
Typical Bill Comparison**

Usage	Applicant Current	Applicant Proposed	Percent Increase	Staff Proposed	Percent Increase
0	16.71	24.93	9.23	58.7%	22.94
1	17.73	27.58	9.85	55.5%	25.43
5	25.83	38.15	12.32	47.7%	35.37
10	35.95	51.38	15.42	42.9%	47.80
15	46.06	64.57	18.51	40.2%	60.23
20	56.18	77.79	21.60	38.5%	72.66
25	66.30	91.00	24.70	37.3%	85.09
30	76.03	101.47	25.44	33.5%	95.38
35	85.75	111.94	26.18	30.5%	105.66
40	95.48	122.40	26.92	28.2%	115.95
45	105.21	132.87	27.67	26.3%	126.24
50	114.93	143.34	28.41	24.7%	136.52
60	134.39	164.28	29.89	22.2%	157.09
70	153.84	185.21	31.37	20.4%	177.67
80	173.30	206.15	32.86	19.0%	198.24
90	192.75	227.09	34.34	17.8%	218.81
100	212.20	248.02	35.82	16.9%	239.38
125	259.05	291.92	32.88	12.7%	282.20
150	305.89	335.82	29.93	9.8%	325.02
175	352.73	379.72	26.99	7.7%	367.84
200	399.58	423.63	24.05	6.0%	410.66
225	446.42	467.53	21.10	4.7%	453.48
250	493.27	511.43	18.16	3.7%	496.30
300	586.95	599.23	12.27	2.1%	581.94
400	774.33	774.83	0.50	0.1%	753.21
500	961.71	950.43	(11.28)	-1.2%	924.49
600	1,149.08	1,126.03	(23.05)	-2.0%	1,095.76
700	1,336.46	1,301.63	(34.83)	-2.6%	1,267.04
800	1,523.83	1,477.23	(46.60)	-3.1%	1,438.31
900	1,711.21	1,652.83	(58.38)	-3.4%	1,609.59
1,000	1,898.59	1,828.44	(70.15)	-3.7%	1,780.87
1,500	2,835.46	2,706.44	(129.02)	-4.6%	2,637.24

**Rate Schedule FGTS  
Typical Bill Comparison**

<u>Usage</u>	<u>Applicant Current</u>	<u>Applicant Proposed</u>	<u>Percent Increase</u>	<u>Staff Proposed</u>	<u>Percent Increase</u>
0	16.50	26.25	9.75	24.15	7.65
1	18.25	28.99	10.74	26.37	8.12
5	25.24	39.96	14.72	35.27	10.03
10	33.98	53.67	19.69	46.40	12.42
15	42.72	67.38	24.66	57.53	14.81
20	51.46	81.09	29.63	68.65	17.19
25	60.20	94.80	34.60	79.78	19.58
30	68.53	105.62	37.10	88.65	20.12
35	76.85	116.44	39.59	97.51	20.86
40	85.18	127.27	42.08	106.38	21.20
45	93.51	138.09	44.58	115.25	21.74
50	101.84	148.91	47.07	124.12	22.28
60	118.49	170.55	52.06	141.86	23.36
70	135.15	192.19	57.04	159.60	24.45
80	151.81	213.84	62.03	177.33	25.53
90	168.46	235.48	67.02	195.07	26.61
100	185.12	257.12	72.01	212.81	27.69
125	224.97	302.45	77.48	248.19	23.22
150	264.82	347.77	82.95	283.56	18.75
175	304.67	393.09	88.42	318.94	14.28
200	344.52	438.42	93.90	354.32	9.80
225	384.37	483.74	99.37	389.70	5.33
250	424.22	529.06	104.84	425.08	0.66
300	503.92	619.71	115.79	495.83	(8.08)
400	663.32	801.00	137.68	637.34	(25.97)
500	822.72	982.29	159.57	778.66	(43.86)
600	982.12	1,163.58	181.46	920.37	(61.75)
700	1,141.52	1,344.87	203.36	1,061.88	(79.64)
800	1,300.92	1,526.16	225.25	1,203.39	(97.53)
900	1,460.32	1,707.48	247.14	1,344.90	(115.41)
1,000	1,619.72	1,888.75	269.03	1,486.42	(133.30)
1,500	2,416.72	2,795.21	378.49	2,193.98	(222.74)

**Rate Schedule FRGTS Schools  
Typical Bill Comparison**

<u>Usage</u>	<u>Applicant Current</u>	<u>Applicant Proposed</u>	<u>Percent Increase</u>	<u>Staff Proposed</u>	<u>Percent Increase</u>
0	15.71	24.93	9.23	22.94	7.23
1	17.39	27.58	10.19	25.06	7.67
5	24.12	38.15	14.03	33.56	9.44
10	32.53	51.38	18.83	44.18	11.64
15	40.95	64.57	23.63	54.80	13.85
20	49.36	77.79	28.43	65.42	16.06
25	57.77	91.00	33.23	76.04	18.26
30	65.79	101.47	35.67	84.56	18.77
35	73.82	111.94	38.12	93.09	19.27
40	81.84	122.40	40.57	101.61	19.78
45	89.86	132.87	43.02	110.14	20.28
50	97.88	143.34	45.46	118.66	20.78
60	113.92	164.28	50.36	135.71	21.79
70	129.96	185.21	55.25	152.76	22.80
80	146.01	206.15	60.14	169.81	23.81
90	162.05	227.09	65.04	186.86	24.81
100	178.09	248.02	69.93	203.91	25.82
125	216.41	292.13	75.72	238.13	21.72
150	254.72	336.23	81.51	272.35	17.62
175	293.04	380.34	87.30	306.56	13.53
200	331.36	424.44	93.09	340.78	9.43
225	369.67	468.55	98.88	375.00	5.33
250	407.99	512.65	104.67	409.22	1.23
300	484.62	600.86	116.25	477.65	(6.97)
400	637.88	777.28	139.40	614.53	(23.36)
500	791.15	953.70	162.56	751.40	(39.75)
600	944.41	1,130.12	185.71	888.27	(56.14)
700	1,097.68	1,306.54	208.87	1,025.14	(72.54)
800	1,250.94	1,482.96	232.02	1,162.01	(88.93)
900	1,404.20	1,659.39	255.18	1,298.88	(105.32)
1,000	1,557.47	1,835.81	278.34	1,435.75	(121.71)
1,500	2,323.79	2,717.91	394.12	2,120.11	(203.68)



**Rate Schedule LGS**  
**Typical Bill Comparison**

<u>Usage</u>	<u>Applicant Current</u>	<u>Applicant Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>
0	804.45	650.00	(154.45)	-19.2%	700.00	(104.45)	-13.0%
1,000	12,390.68	12,819.82	429.14	3.5%	12,888.48	497.80	4.0%
1,500	18,180.21	18,884.76	704.55	3.9%	18,961.50	781.29	4.3%
2,000	24,237.89	24,949.70	711.81	2.9%	25,034.53	796.64	3.3%
3,000	36,126.56	36,846.41	719.85	2.0%	36,942.68	816.12	2.3%
5,000	59,903.89	60,639.82	735.93	1.2%	60,758.98	855.09	1.4%
10,000	119,347.21	120,123.35	776.14	0.7%	120,299.73	952.52	0.8%
15,000	178,790.54	179,606.89	816.35	0.5%	179,840.48	1,049.95	0.6%
17,500	208,437.20	209,272.01	834.81	0.4%	209,532.12	1,094.92	0.5%
20,000	238,083.86	238,937.14	853.28	0.4%	239,223.76	1,139.89	0.5%
50,000	593,843.82	594,918.66	1,074.85	0.2%	595,523.39	1,679.57	0.3%
70,000	831,017.12	832,239.68	1,222.56	0.1%	833,056.47	2,039.35	0.2%
85,000	1,007,003.24	1,008,242.13	1,238.89	0.1%	1,009,217.98	2,214.75	0.2%
100,000	1,184,566.71	1,185,900.61	1,333.89	0.1%	1,187,035.52	2,468.80	0.2%
150,000	1,773,444.97	1,775,024.66	1,579.69	0.1%	1,776,873.48	3,428.51	0.2%
200,000	2,362,323.23	2,364,148.71	1,825.48	0.1%	2,366,711.44	4,388.21	0.2%
250,000	2,951,201.49	2,953,272.76	2,071.28	0.1%	2,956,549.41	5,347.92	0.2%
300,000	3,540,079.74	3,542,396.81	2,317.07	0.1%	3,546,387.37	6,307.63	0.2%
350,000	4,128,958.00	4,131,520.87	2,562.86	0.1%	4,136,225.33	7,267.33	0.2%
400,000	4,717,836.26	4,720,644.92	2,808.66	0.1%	4,726,063.30	8,227.04	0.2%
450,000	5,306,714.51	5,309,768.97	3,054.45	0.1%	5,315,901.26	9,186.74	0.2%
500,000	5,895,592.77	5,898,893.02	3,300.25	0.1%	5,905,739.22	10,146.45	0.2%

**Rate Schedule LGTS**  
**Typical Bill Comparison**

<u>Usage</u>	<u>Applicant Current</u>	<u>Applicant Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>
0	1,307.70	650.00	(657.70)	-50.3%	700.00	(607.70)	-46.5%
1,000	1,402.56	1,674.40	271.84	19.4%	1,743.06	340.50	24.3%
1,500	1,446.41	2,166.63	720.22	49.8%	2,243.37	796.96	55.1%
2,000	1,926.16	2,658.86	732.70	38.0%	2,743.69	817.53	42.4%
3,000	2,658.96	3,410.15	751.19	28.3%	3,506.42	847.46	31.9%
5,000	4,124.56	4,912.72	788.16	19.1%	5,031.88	907.32	22.0%
10,000	7,788.56	8,669.15	880.59	11.3%	8,845.53	1,056.97	13.6%
15,000	11,452.56	12,425.59	973.03	8.5%	12,659.19	1,206.63	10.5%
17,500	13,209.56	14,227.17	1,017.61	7.7%	14,487.27	1,277.71	9.7%
20,000	14,966.56	16,028.74	1,062.18	7.1%	16,315.36	1,348.80	9.0%
50,000	36,050.56	37,647.67	1,597.11	4.4%	38,252.39	2,201.83	6.1%
70,000	50,106.56	52,060.28	1,953.72	3.9%	52,877.08	2,770.52	5.5%
85,000	58,754.70	60,881.44	2,126.74	3.6%	61,857.29	3,102.59	5.3%
100,000	68,980.20	71,358.61	2,378.41	3.4%	72,493.52	3,513.32	5.1%
150,000	100,065.20	103,211.67	3,146.47	3.1%	105,060.49	4,995.29	5.0%
200,000	131,150.20	135,064.73	3,914.53	3.0%	137,627.46	6,477.26	4.9%
250,000	162,235.20	166,917.78	4,682.58	2.9%	170,194.43	7,959.23	4.9%
300,000	193,320.20	198,770.84	5,450.64	2.8%	202,761.39	9,441.19	4.9%
350,000	224,405.20	230,623.89	6,218.69	2.8%	235,328.36	10,923.16	4.9%
400,000	255,490.20	262,476.95	6,986.75	2.7%	267,895.33	12,405.13	4.9%
450,000	286,575.20	294,330.00	7,754.80	2.7%	300,462.30	13,887.10	4.8%
500,000	317,660.20	326,183.06	8,522.86	2.7%	333,029.26	15,369.06	4.8%

**Rate Schedule FRLGTS**  
**Typical Bill Comparison**

<u>Usage</u>	<u>Applicant Current</u>	<u>Applicant Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>
0	795.60	650.00	(145.60)	-18.3%	700.00	(95.60)	-12.0%
1,000	890.46	1,322.16	431.70	48.5%	1,390.83	500.37	56.2%
1,500	934.31	1,638.28	703.97	75.3%	1,715.03	780.72	83.6%
2,000	1,243.36	1,954.40	711.04	57.2%	2,039.23	795.87	64.0%
3,000	1,634.76	2,353.45	718.69	44.0%	2,449.72	814.96	49.9%
5,000	2,417.56	3,151.56	734.00	30.4%	3,270.72	853.16	35.3%
10,000	4,374.56	5,146.84	772.28	17.7%	5,323.22	948.66	21.7%
15,000	6,331.56	7,142.12	810.56	12.8%	7,375.71	1,044.15	16.5%
17,500	7,235.06	8,063.12	828.06	11.4%	8,323.22	1,088.16	15.0%
20,000	8,138.56	8,984.12	845.56	10.4%	9,270.73	1,132.17	13.9%
50,000	18,980.56	20,036.10	1,055.54	5.6%	20,640.82	1,660.26	8.7%
70,000	26,208.56	27,404.08	1,195.52	4.6%	28,220.88	2,012.32	7.7%
85,000	29,735.70	30,941.77	1,206.07	4.1%	31,917.62	2,181.92	7.3%
100,000	34,840.20	36,135.48	1,295.28	3.7%	37,270.39	2,430.19	7.0%
150,000	48,855.20	50,376.96	1,521.76	3.1%	52,225.78	3,370.58	6.9%
200,000	62,870.20	64,618.45	1,748.25	2.8%	67,181.18	4,310.98	6.9%
250,000	76,885.20	78,859.94	1,974.74	2.6%	82,136.58	5,251.38	6.8%
300,000	90,900.20	93,101.42	2,201.22	2.4%	97,091.98	6,191.78	6.8%
350,000	104,915.20	107,342.91	2,427.71	2.3%	112,047.38	7,132.18	6.8%
400,000	118,930.20	121,584.39	2,654.19	2.2%	127,002.77	8,072.57	6.8%
450,000	132,945.20	135,825.88	2,880.68	2.2%	141,958.17	9,012.97	6.8%
500,000	146,960.20	150,067.37	3,107.17	2.1%	156,913.57	9,953.37	6.8%

**Rate Schedule LGTS Mainline**  
**Typical Bill Comparison**

<u>Usage</u>	<u>Applicant Current</u>	<u>Applicant Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Staff Proposed</u>	<u>Increase</u>	<u>Percent Increase</u>
0	153.91	151.40	(2.51)	-1.6%	368.72	368.72	239.6%
1,000	300.66	295.29	(5.37)	-1.8%	729.93	729.93	242.8%
1,500	447.41	439.17	(8.24)	-1.8%	1,091.14	1,091.14	243.9%
2,000	594.16	583.06	(11.10)	-1.9%	1,452.35	1,452.35	244.4%
3,000	841.06	821.90	(19.16)	-2.3%	2,125.84	2,125.84	252.8%
5,000	1,334.86	1,299.59	(35.27)	-2.6%	3,472.82	3,472.82	260.2%
10,000	2,569.36	2,493.82	(75.54)	-2.9%	6,840.28	6,840.28	266.2%
15,000	3,803.86	3,688.05	(115.81)	-3.0%	10,207.74	10,207.74	268.4%
17,500	4,421.11	4,285.16	(135.95)	-3.1%	11,891.47	11,891.47	269.0%
20,000	5,038.36	4,882.27	(156.09)	-3.1%	13,575.20	13,575.20	269.4%
50,000	12,445.36	12,047.64	(397.72)	-3.2%	33,779.95	33,779.95	271.4%
70,000	17,383.36	16,824.54	(558.82)	-3.2%	47,249.78	47,249.78	271.8%
85,000	19,193.00	18,418.92	(774.08)	-4.0%	55,363.84	55,363.84	288.5%
100,000	22,580.00	21,669.32	(910.68)	-4.0%	65,133.93	65,133.93	288.5%
150,000	33,870.00	32,503.98	(1,366.02)	-4.0%	97,700.90	97,700.90	288.5%
200,000	45,160.00	43,338.63	(1,821.37)	-4.0%	130,267.87	130,267.87	288.5%
250,000	56,450.00	54,173.29	(2,276.71)	-4.0%	162,834.84	162,834.84	288.5%
300,000	67,740.00	65,007.95	(2,732.05)	-4.0%	195,401.80	195,401.80	288.5%
350,000	79,030.00	75,842.61	(3,187.39)	-4.0%	227,968.77	227,968.77	288.5%
400,000	90,320.00	86,677.27	(3,642.73)	-4.0%	260,535.74	260,535.74	288.5%
450,000	101,610.00	97,511.93	(4,098.07)	-4.0%	293,102.71	293,102.71	288.5%
500,000	112,900.00	108,346.58	(4,553.42)	-4.0%	325,669.67	325,669.67	288.5%

**Rate Schedule FRCTS**  
**Typical Bill Comparison**

<u>Usage</u>	<u>Applicant</u> <u>Current</u>	<u>Applicant</u> <u>Proposed</u>	<u>Increase</u>	<u>Percent</u> <u>Increase</u>	<u>Staff</u> <u>Proposed</u>	<u>Increase</u>	<u>Percent</u> <u>Increase</u>
1.0	1.06	158.57	157.51	14859.6%	1.06	-	0.0%
12.0	12.72	170.57	157.85	1241.0%	12.72	-	0.0%
25.0	26.50	184.78	158.26	597.2%	26.50	-	0.0%
30.0	31.40	190.21	158.81	505.8%	31.40	-	0.0%
35.0	36.30	195.67	159.37	439.0%	36.30	-	0.0%
40.0	41.20	201.13	159.93	388.2%	41.20	-	0.0%
45.0	46.10	206.58	160.48	348.1%	46.10	-	0.0%
50.0	51.00	212.04	161.04	315.8%	51.00	-	0.0%
60.0	60.80	222.95	162.15	266.7%	60.80	-	0.0%
70.0	70.60	233.86	163.26	231.2%	70.60	-	0.0%
80.0	80.40	244.77	164.37	204.4%	80.40	-	0.0%
90.0	90.20	255.68	165.48	183.5%	90.20	-	0.0%
100.0	100.00	266.59	166.59	166.6%	100.00	-	0.0%
125.0	124.50	291.99	167.49	134.5%	124.50	-	0.0%
150.0	149.00	317.39	168.39	113.0%	149.00	-	0.0%
175.0	173.50	342.79	169.29	97.6%	173.50	-	0.0%
200.0	198.00	368.19	170.19	86.0%	198.00	-	0.0%
225.0	222.50	393.59	171.09	76.9%	222.50	-	0.0%
250.0	247.00	418.99	171.99	69.6%	247.00	-	0.0%
300.0	296.00	469.79	173.79	58.7%	296.00	-	0.0%
400.0	394.00	571.38	177.38	45.0%	394.00	-	0.0%
500.0	492.00	672.98	180.98	36.8%	492.00	-	0.0%
600.0	590.00	774.57	184.57	31.3%	590.00	-	0.0%
700.0	688.00	876.17	188.17	27.4%	688.00	-	0.0%
800.0	786.00	977.76	191.76	24.4%	786.00	-	0.0%
900.0	884.00	1,079.36	195.36	22.1%	884.00	-	0.0%
1,000.0	982.00	1,180.96	198.96	20.3%	982.00	-	0.0%
1,500.0	1,472.00	1,688.94	216.94	14.7%	1,472.00	-	0.0%

