ORIGINAL

NEW APPLICATION

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SOUTHWEST GAS CORPORATION

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Arizona Corporation Commission
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Phoenix, AZ 85007-2996

G-01551A-10-0458

Subject: Docket No. G-01551A-10-____

Southwest Gas Corporation hereby submits for filing an original and thirteen (13) copies of its 2010 Arizona General Rate Case. Copies of the supporting workpapers are being submitted under separate cover to the Utilities Division Staff and the Residential Utility Consumer's Office.

Respectfully submitted,

Debra S. Gallo, Director
Government & State Regulatory Affairs

Arizona Corporation Commission
DOCKETED
NOV 12 2010
DOCKETED BY

c Mr. Ernest Johnson, ACC
Mr. Jodi Jerich, RUCO

SOUTHWEST GAS CORPORATION

Docket No. G-01551A-10-

2010
ARIZONA
GENERAL RATE CASE

Application

Application

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS
Kristin K. Mayes, Chairman
Gary Pierce
Paul Newman
Sandra D. Kennedy
Bob Stump

In the Matter of the Application of Southwest Gas Corporation for the Establishment of Just and Reasonable Rates and Charges Designed to Realize a Reasonable Rate of Return on the Fair Value of the Properties of Southwest Gas Corporation Devoted to Its Arizona Operations; Approval of Deferred Accounting Orders; and for Approval of an Energy Efficiency and Renewable Energy Resource Technology Portfolio Implementation Plan	DOCKET NO. G-01551A-10-_____ **APPLICATION**

APPLICATION

1. Introduction.

Southwest Gas Corporation ("Southwest Gas" or "Company") hereby submits its application to the Arizona Corporation Commission ("Commission") requesting approval of an increase in its retail natural gas utility service rates in its Arizona rate jurisdiction due to a revenue deficiency of $73.2 million or approximately 9.26 percent over current revenues. Southwest Gas also requests approval of two deferred accounting orders and approval of its Arizona Energy Efficiency and Renewable Energy Resource Technology Portfolio Implementation Plan (EE and RET Plan)[1], which was designed to be in accordance with the preliminary Gas Utility Energy Efficiency Standards (Standards) approved by the Commission in Decision No. 71855 (August 25, 2010), Docket No. RG-00000B-09-0428[2]. Further, Southwest Gas requests approval of its Energy Efficiency Enabling Provision (EEP), a general

[1] The Company's proposed EE and RET Plan is included as Volume II accompanying this application.

[2] The Standards are codified in Article 25 of the A.A.C., Sections R14-2-2501 through R14-2-2520.

revenues decoupling methodology that is consistent with the spirit of the Draft Policy Statement Regarding Utility Disincentives to Energy Efficiency and Decoupled Rate Structures (Decoupling Policy Statement) released by the Commission on October 18, 2010 in Docket No. G-00000C-08-0314.

This application is based upon and supported by the material facts, points and authorities, and all other information contained herein, the supporting testimony and schedules submitted herewith, and such other matters presented to the Commission at the time of any hearing on this application. In support of its application, Southwest Gas further states as follows:

2. Applicant.

2.1 Southwest Gas is a corporation in good standing under the laws of the state of Arizona, is a corporation duly organized, validly existing, and is qualified to transact intrastate business.

2.2 Southwest Gas' corporate offices are located at 5241 Spring Mountain Road, P.O. Box 98510, Las Vegas, Nevada 89193-8510. Communications regarding this application should be addressed to:

Justin Lee Brown, Esq.
Assistant General Counsel
Catherine M. Mazzeo, Esq.
Senior Counsel
Southwest Gas Corporation
P.O. Box 98510
Las Vegas, Nevada 89193-8510
Telephone: (702) 876-7183
Email: justin.brown@swgas.com
Email: catherine.mazzeo@swgas.com

Debra S. Gallo
Director/Government and
State Regulatory Affairs
Southwest Gas Corporation
P.O. Box 98510
Las Vegas, Nevada 89193-8510
Telephone: (702) 876-7163
Email: debra.gallo@swgas.com

2.3 Southwest Gas is a public utility subject to the jurisdiction of the Commission pursuant to Article XV of the Arizona Constitution and the applicable provisions of Title 40 of the Arizona Revised Statutes (A.R.S.). Southwest Gas is engaged in the retail distribution, transportation and sale of natural gas for domestic, commercial, agricultural and industrial uses. Southwest Gas currently serves approximately 1.8 million customers in the states of Arizona, California, and Nevada. Approximately 54 percent of the Company's customers are located in the state of Arizona, including portions of Cochise, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Pima, Pinal and Yuma counties. For operational purposes, Southwest Gas' Central Arizona division is headquartered in Phoenix and its Southern Arizona division is headquartered in Tucson.

3. Authority.

Southwest Gas submits this application pursuant to Article XV, Sections 3 and 14, of the Arizona Constitution, Sections 40-250 and 40-251 of the A.R.S., as well as other applicable provisions of A.R.S. Title 40, and Section R14-2-103 of the Arizona Administrative Code (A.A.C.). The application consists of four volumes, organized as follows: Volume I contains the application, proposed tariff sheets and current tariff sheets; Volume II contains the Company's EE and RET Plan; Volume III contains the prepared direct testimony supporting the relief requested herein; and Volume IV contains supporting schedules. Southwest Gas is a Class A utility, as defined by A.A.C. R14-2-103. Accordingly, the schedules required by A.A.C. R14-2-103 are included herewith as Volume IV of this application.

4. Brief Overview of Application.

4.1 Southwest Gas' requested revenue increase is necessary to maintain and provide safe and reliable natural gas service to its Arizona customers at a level they both expect and are entitled. Southwest Gas' application includes only those proposals it believes necessary to provide safe and reliable service at reasonable rates.

4.2 Southwest Gas requests authorization to increase its retail rates in Arizona to recover its revenue deficiency of approximately $73.2 million. Among other things, Southwest Gas requests authority to implement its EEP, which will enable Southwest Gas to "encourage aggressive use of demand side management programs and the achievement of Arizona's . . .Gas Energy Efficiency Standards, which will benefit ratepayers and minimize utility costs" as contemplated by the Commission's draft Decoupling Policy Statement.

4.3 In addition to Southwest Gas' request for authority to increase its retail natural gas rates, the Company seeks approval of its EE and RET Plan. The EE and RET Plan is comprised of 10 energy efficiency and renewable energy resource technology (RET) programs that afford Southwest Gas' customers, including its low-income customers, cost-effective opportunities and resources, education and training tools, all of which are designed to promote energy efficiency and conservation, and will result in lower energy bills for customers. Moreover, when combined with the Company's EEP, the EE and RET Plan positions the Company to achieve the energy efficiency goals provided for in the preliminary Standards.

4.4 Additional details regarding the circumstances and conditions justifying Southwest Gas' proposed increase, the implementation of the EEP, and the EE and RET Plan are provided later in this application, and in the supporting testimony and the schedules accompanying this application.

5. Request for Authority to Increase Rates.

5.1 Southwest Gas' current rates and charges, which were approved by the Commission in Decision No. 70665 (December 24, 2008) are no longer sufficient to produce a reasonable return on the fair value of the Company's properties devoted to public service in the state of Arizona, and are therefore no longer just and reasonable.

5.2 Southwest Gas' request is based upon a historic test period ending June 30, 2010, adjusted for changes in revenues and expenses, including its cost of capital that are known and measurable with reasonable accuracy at the time of filing. Southwest Gas requests authority to increase its natural gas utility service rates in Arizona to achieve an increase in total revenues of approximately $73.2 million to produce the Company's requested 7.50 percent fair value rate of return.

5.3 As set forth more fully in the accompanying testimony, the Company has identified three major factors that have driven the need to file this rate application: (1)

a decline in residential consumption per customer, and the need to set rates based upon current usage levels; (2) a decline in general service customer consumption per customer, and the need to set rates based upon current usage levels; and (3) changes in the Company's cost of capital. These three items comprise over sixty percent of the total revenue deficiency in the present rate application.

5.4 Additionally, changes in depreciation expense and pension expense also contribute to the Company's revenue deficiency. As set forth more fully in the accompanying testimony, the Company also proposes four adjustments that relate to events that have occurred, or will occur, after the end of the test period. By including these proposed adjustments in its application, the Company is able to present a more accurate level of costs and expenses that will be incurred once the rates approved in this proceeding become effective. The proposed adjustments include the Company's 2011 wage increase and within-grade movement; post test-year new and expired software amortizations; 2011 property tax assessment ratio; and deferred federal income taxes resulting from the post test-year enactment of bonus depreciation for the 2010 tax year qualifying capital expenditures.

5.5 Southwest Gas' requested revenue increase is based upon an 11.00 percent cost of common equity capital relative to the Company's actual capital structure at the end of the test period, consisting of a common equity ratio of 52.3 percent. The 11.00 percent cost of common equity capital reflects any reduced risk that could be attributed to the implementation of the Company's proposed EEP. Southwest Gas submits that the recommended cost of common equity capital represents a conservative estimate of investor expectations given recent financial market conditions.

5.6 Southwest Gas also requests approval of two deferred accounting orders. The first relates to the Company's request for approval of a pilot program to replace up to five thousand customer owned yard lines (COYLs). If the Commission approves this proposed pilot program, the Company requests approval of a deferred accounting order to account for the deferral of carrying costs, depreciation expense, property taxes, and other incremental expenses related to the replacement of COYLs. Additional information regarding the circumstances and conditions supporting Southwest Gas' proposal to implement a pilot program to replace COYLs with Southwest Gas facilities are provided in the supporting testimony accompanying this application.

5.7 The Company's second proposed deferred accounting order relates to the expenses and costs associated with the replacement of Aldyl HD (AHD) pipe, which is being replaced as part of the Company's plan to replace all early vintage plastic pipe. As set forth more fully in the accompanying testimony, the Company seeks to defer the depreciation expenses, carrying costs, and property taxes associated with the replacement of AHD pipe through mid-2013.

5.8 The proposed increase in revenue sought by Southwest Gas herein is necessary to provide the Company a reasonable opportunity to earn a fair and reasonable rate of return on the fair value of its Arizona investments in order to attract the capital necessary to ensure that it can continue to provide reliable service to present and future Arizona customers at reasonable rates. Additional information regarding Southwest Gas' proposed rate increase, its proposed pilot program for COYLs, and its request for deferred accounting orders, including the circumstances and conditions justifying each request, are provided in more detail in the supporting testimony and the schedules accompanying this application.

6. Request for Approval of the Company's EE and RET Plan.

6.1 Southwest Gas is also seeking approval of its EE and RET Plan, consisting of an estimated budget of $16.5 million for the first year. Southwest Gas submits that the proposed budget affords the Company a level of funding adequate to sustain the programs and allow the Company to achieve the goals set forth in the preliminary Standards. The EE and RET Plan was created in response to the preliminary energy efficiency Standards recently approved by the Commission, and in anticipation of them becoming effective in the near future. To the extent the preliminary Standards become effective while Southwest Gas' application is pending before the Commission, the Company hereby respectfully requests that the Commission treat this application as the required implementation plan to be filed 30 days following the effective date of the Standards.[3]

6.2 In developing its EE and RET Plan, Southwest Gas reviewed various energy efficiency and RET programs offered by other utilities, along with its existing portfolio of energy efficiency programs. Southwest Gas' EE and RET Plan contains 10 energy efficiency and RET programs, designed to provide benefits to all classes of customers in the Company's Arizona rate jurisdiction that participate in the Company's Demand Side Management Adjustor Mechanism (DSMAM). Southwest Gas submits that the EE and RET Plan is consistent with the spirit of the preliminary Standards, and the specific goals and objectives set forth therein.

6.3 Southwest Gas plans to continue to offer its existing energy efficiency programs until the EE and RET Plan is approved by the Commission. However, it does not anticipate that the EE and RET Plan will be approved and implemented in time for the Company to have a reasonable opportunity to achieve the .50 percent standard for calendar year 2011. Therefore, the Company requests that it be authorized to apply the 2011 standard to the first 12-month period following approval and implementation of the Company's EE and RET Plan. In addition, Southwest Gas respectfully requests that upon Commission approval of its EE and RET Plan, all existing reporting requirements be superseded by the reporting requirements enumerated in the preliminary Standards.

6.4 Since the EE and RET Plan is part of the above-captioned proceeding, the Company respectfully requests that it be permitted to provide notice of the proposed EE and RET Plan as part of the noticing requirements of the general rate case proceeding.

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[3] In requesting exceptions and other relief pursuant to the preliminary Standards, Southwest Gas assumes that the preliminary Standards will in fact be approved during the pendency of this proceeding, and that the Commission will approve the Company's request to treat the EE and RET Plan included with this application as the plan that must be filed within 30 days of the Commission's approval of the preliminary Standards.

6.5 The Company's current DSMAM for recovering the costs associated with implementing its existing portfolio was originally approved by the Commission as part of a settlement in Decision 60352. Under the current DSMAM, Southwest Gas files program costs and other data related to the calculation of its DSMAM rate in January of each year, and rates become effective in the first billing cycle the following April. Southwest Gas hereby requests approval to continue using the DSMAM and to reset it upon implementation of the EE and RET Plan.

6.6 The EE and RET Plan sets forth how the Company intends to comply with the preliminary Standards in its first 12-month period following Commission approval of the plan, and specifically describes the Company's various energy efficiency and RET programs and their estimated therm savings. The EE and RET Plan also provides sufficient information to estimate the total cost and cost per therm reduction of each program and its respective measures.

6.7 Each of the proposed programs set forth in the EE and RET Plan are cost effective, and the incremental benefits to society of the portfolio of programs exceed the incremental costs to society. Furthermore, as a portfolio, the programs have an overall benefit-cost ratio of 1.68, with targeted annual savings of 2,451,000 therms.

6.8 Additional information regarding the circumstances and conditions justifying Southwest Gas' proposed EE and RET Plan are provided in more detail in the supporting testimony and the EE and RET Plan itself, which is included herewith as Volume II to this application.

7. Request for Approval of the Company's EEP.

7.1 Southwest Gas also requests authority to implement a revenue per customer decoupling mechanism in the form of its proposed EEP. Consistent with the preliminary Standards, the draft Decoupling Policy Statement, and the numerous workshops organized by the Commission, the Company is proposing the EEP to better align utility and customer interests so Southwest Gas will be able to sharpen its focus on customer end-use efficiencies and the development of strategies to achieve the Standards established by the Commission. The prepared direct testimony of Company witness Edward B. Gieseking includes a more detailed description of the EEP, including discussion of how the EEP embodies the concepts set forth in the Commission's draft Decoupling Policy Statement.

7.2 Consistent with the spirit of the preliminary Standards, specifically R14-2-2511, Southwest Gas requests that concurrent with the Commission's review and consideration of the Company's proposed EE and RET Plan, the Commission review and address the financial disincentives, recovery of fixed costs, and other barriers faced by the Company as a result of the preliminary Standards.

8. Miscellaneous Items.

Bill Impact

8.1 Southwest Gas is very mindful of the impact rate increases have on its customers and does its best to implement cost saving strategies to minimize increases for its customers. Over the past 15 years, the non-gas portion of bills for Southwest Gas' residential customers has increased by less than the rate of inflation, or approximately $0.60 per year.

8.2 If the Company's rate application is accepted as filed, the proposed average monthly single family residential bill would be $47.05. This proposed bill is less than the average bill of $51.38 authorized in Southwest Gas' last general rate case – the difference being driven by the current cost of gas.

Rate Design

8.3 The rate design proposed by Southwest Gas strives to accomplish four objectives: (1) customer acceptance and understandability; (2) rates that work in tandem with the EEP; (3) the effect of the rate design on the promotion of the Company's energy efficiency and conservation efforts; and (4) the fair and equitable recovery of costs. Moreover, the revenue stability offered by the Company's EEP affords it the opportunity to recover its noted revenue deficiency in variable charges. As a result, Southwest Gas proposes a rate design herein that maintains basic service charges at their current levels – for example the single family residential basic service is proposed to remain at $10.70.

Tariff Changes

8.4 Southwest Gas proposes changes to its Arizona Gas Tariff to make a variety of housekeeping changes to better conform the tariff to Southwest Gas' current business practices, and to make the changes necessary to effectuate the Company's EEP. Additional information regarding the circumstances and conditions justifying Southwest Gas' proposed Tariff changes are provided in more detail in the supporting testimony.

Witnesses – Prepared Direct Testimony

8.5 This application and the requests made herein are supported by the prepared direct testimony and exhibits of the following Company witnesses, all of which are submitted in Volume III as part of this application:

- **James L. Cattanach** provides testimony supporting the methodology used by the Company to develop billing determinants for the test period under present rates, and certain adjustments made by the Company to the recorded number of bills and therms. Mr. Cattanach sponsors schedules and work papers supporting the Company's billing determinants for the test year. Mr. Cattanach also testifies regarding the trend in natural gas consumption per customer in Southwest Gas' Arizona rate jurisdiction.
- **A. Brooks Congdon** sponsors the Company's embedded class cost of service study.
- **Sandra L. Gaffin** provides testimony supporting the Company's executive compensation. Ms. Gaffin is a human resources consultant with Towers Watson, and was engaged by Southwest Gas to provide an objective assessment of the competitiveness and reasonableness of its executive compensation program. Ms. Gaffin's testimony provides an overview of the

Company's compensation philosophy and sponsors the results of the Towers Watson assessment.

- **Randi L. Aldridge** provides testimony supporting the Company's methodology for determining cost responsibility and allocation among its various rate jurisdictions and business operations. Ms. Aldridge also provides a brief overview of the Company's operations and sponsors various schedules and work papers supporting the Company's operating expense and rate base adjustments and certain financial and statistical statements and projections.
- **Jerome T. Schmitz** provides testimony supporting, from an operations perspective, the Company's request for rate relief with respect to its plan to replace early vintage plastic pipe, as well as the Company's proposed pilot program to replace COYLs with facilities owned by Southwest Gas.
- **Robert A. Mashas** provides testimony supporting the overall results of operations in Southwest Gas' Arizona rate jurisdiction, including the determination of revenue deficiencies. Mr. Mashas identifies and explains the major reasons and underlying causes of the revenue deficiencies. Mr. Mashas sponsors various schedules and work papers supporting the Company's requested revenue requirement, as well as various revenue requirement schedules. Further, Mr. Mashas' testimony supports, from a ratemaking perspective, the Company's request for rate relief with respect to its pipe replacement plan, as well as the Company's proposed pilot program concerning COYLs.
- **Theodore K. Wood** provides testimony supporting the overall rate of return requested in this proceeding. Mr. Wood testifies in support of the requested capital structure and embedded cost of long-term debt used for determining the appropriate cost of capital, including various schedules and work papers supporting the Company's request. Mr. Wood also discusses the importance of

the Company's overall rate of return on the Company's bond ratings and financial profile.

- **Robert B. Hevert** provides testimony supporting the Company's proposed cost of common equity. Mr. Hevert is the President of Concentric Energy Advisors, Inc., and was engaged by Southwest Gas to perform an analysis and provide a recommendation concerning the Company's cost of common equity, an analysis of the methodology used by the Company to calculate fair value rate base, and a recommendation concerning the Company's calculation of the fair value rate of return.
- **Edward B. Gieseking** provides testimony supporting the Company's EEP and rate design proposals, and testifies as to various "housekeeping" tariff changes necessary to correct inconsistencies and update the Company's tariff to reflect current business practices.
- **Bobbi M. Sterrett** sponsors the Company's EE and RET Plan.

9. Conclusion.

9.1 Southwest Gas believes that Commission approval of the proposed rate increase, including the requested deferred accounting orders, coupled with the approval of its EE and RET Plan and its EEP is in the public interest, and will result in just and reasonable rates.

9.2 Southwest Gas further submits that approval of this application as proposed will provide the Company with an opportunity to earn a reasonable rate of return on the fair value of its Arizona properties commensurate with other similarly situated natural gas utilities, and to achieve the Commission's gas energy efficiency Standards.

WHEREFORE, Southwest Gas respectfully requests that the Commission issue a special order pursuant to A.A.C. R14-3-101.C, to establish notice, filing, discovery and hearing procedures, and that upon conclusion of the hearing, the Commission issue a final order:

1. Authorizing a retail natural gas service rate increase in the Southwest Gas' Arizona rate jurisdiction based upon the fair value of the Company's Arizona properties and a historic test year ending June 30, 2010, of $73.2 million annually;

2. Approving a pilot program to replace COYLs with Southwest Gas owned and operated facilities;

3. Approving the requested deferred accounting orders;

4. Approving the Company's proposed EE and RET Plan, including approval of an initial annual budget of $16.5 million, and approval of the additional related relief requested herein;

5. Approving the Company's proposed EEP;

6. Authorizing the Company's proposed revisions to its Arizona Gas Tariff; and

7. For any other relief the Commission deems just and reasonable.

Dated this 12th day of November 2010.

Respectfully submitted,

SOUTHWEST GAS CORPORATION

Justin Lee Brown, Esq.
Arizona Bar No. 027937
5241 Spring Mountain Road
Las Vegas, Nevada 89150
Telephone: (702) 876-7183
Facsimile: (702) 252-7283
Email: justin.brown@swgas.com

Attorney for Southwest Gas Corporation

Proposed Tariff Sheets

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STATEMENT OF RATES
EFFECTIVE SALES RATES APPLICABLE TO ARIZONA SCHEDULES 1/ 2/

Description	Delivery Charge	3/ Rate Adjustment	Monthly Gas Cost	Currently Effective Tariff Rate	
G-5 – Single-Family Residential Gas Service					
Basic Service Charge per Month	$ 10.70			$ 10.70	
Commodity Charge per Therm:					
All Usage	$ .81112	($ .06400)	$ .70873	$ 1.45585	I
G-6 – Multi-Family Residential Gas Service					
Basic Service Charge per Month	$ 9.70			$ 9.70	
Commodity Charge per Therm:					
All Usage	$ .81112	($ .06400)	$ .70873	$ 1.45585	I
G-10– Single-Family Low Income Residential Gas Service					
Basic Service Charge per Month	$ 7.50			$ 7.50	
Commodity Charge per Therm:					
Summer (May–October):					
All Usage	$ .81112	($ .07622)	$ .70873	$ 1.44363	I
Winter (November–April):					
All Usage	$ .52239	($ .07622)	$ .70873	$ 1.15490	D/I
G-11– Multi-Family Low Income Residential Gas Service					
Basic Service Charge per Month	$ 7.50			$ 7.50	
Commodity Charge per Therm:					
Summer (May–October):					
All Usage	$ .81112	($ .07622)	$ .70873	$ 1.44363	I
Winter (November–April):					
All Usage	$ .52239	($ .07622)	$ .70873	$ 1.15490	D/I
G-15– Special Residential Gas Service for Air Conditioning					
Basic Service Charge per Month	$ 10.70			$ 10.70	
Commodity Charge per Therm:					
Summer (May–October):					
First 15 Therms	$ .81112	($ .07622)	$ .70873	$ 1.44363	I
Over 15 Therms	.12338	(.07622)	.70873	.75589	R
Winter (November–April):					
All Usage	$ .81112	($ .07622)	$ .70873	$ 1.44363	I

STATEMENT OF RATES
EFFECTIVE SALES RATES APPLICABLE TO ARIZONA SCHEDULES 1/ 2/
(Continued)

Description	Delivery Charge	3/ Rate Adjustment	Monthly Gas Cost	Currently Effective Tariff Rate	
G-20– Master-Metered Mobile Home Park Gas Service					
Basic Service Charge per Month	$ 66.00			$ 66.00	
Commodity Charge per Therm:					
All Usage	$ .44520	($ .06400)	$ .70873	$ 1.08993	I
G-25– General Gas Service					
Basic Service Charge per Month:					
Small	$ 27.50			$ 27.50	
Medium	43.50			43.50	
Large-1	80.00			80.00	N
Large-2	470.00			470.00	N
Transportation Eligible	950.00			950.00	
Commodity Charge per Therm:					
Small, All Usage	$ .72642	($ .07622)	$ .70873	$ 1.35893	I
Medium, All Usage	.42544	(.07622)	.70873	1.05795	I
Large-1, All Usage	.38890	(.07622)	.70873	1.02141	N
Large-2, All Usage	.27168	(.07622)	.70873	.90419	N
Transportation Eligible	.10409	(.07622)	.70873	.73660	I
Demand Charge per Month–					
Transportation Eligible:					
Demand Charge 4/	$ .077213			$ .077213	I
G-30– Optional Gas Service					
Basic Service Charge per Month	As specified on A.C.C. Sheet No. 27.				
Commodity Charge per Therm:					
All Usage	As specified on A.C.C. Sheet No. 28.				
G-40– Air Conditioning Gas Service					
Basic Service Charge per Month	As specified on A.C.C. Sheet No. 32.				T
Commodity Charge per Therm:					
All Usage	$ .12338	($ .07622)	$ .70873	$ .75589	I
G-45– Street Lighting Gas Service					
Commodity Charge per Therm of Rated Capacity:					
All Usage	$ .75871	($ .07622)	$ .70873	$ 1.39122	I
G-55– Gas Service for Compression on Customer's Premises 5/					
Basic Service Charge per Month:					
Small	$ 27.50			$ 27.50	
Large	250.00			250.00	
Residential	10.70			10.70	
Commodity Charge per Therm:					
All Usage	$ .20398	($ .07622)	$ .70873	$ .83549	I
G-60– Electric Generation Gas Service					
Basic Service Charge per Month	As specified on A.C.C. Sheet No. 40.				
Commodity Charge per Therm:					
All Usage	$ .14635	($ .07622)	$ .70873	$ .77886	I
G-75– Small Essential Agricultural User Gas Service					
Basic Service Charge per Month	$ 120.00			$ 120.00	
Commodity Charge per Therm:					
All Usage	$ .26509	($ .07622)	$ .70873	$ .89760	I

STATEMENT OF RATES

EFFECTIVE SALES RATES APPLICABLE TO ARIZONA SCHEDULES 1/ 2/

(Continued)

Description	Delivery Charge	3/ Rate Adjustment	Monthly Gas Cost	Currently Effective Tariff Rate
G-80 – Natural Gas Engine 6/ Water Pumping Gas Service				
Basic Service Charge per Month:				
Off-Peak Season (October–March)	$ 0.00			$ 0.00
Peak Season (April–September)	$ 125.00			$ 125.00
Commodity Charge per Therm:				
All Usage	$ .19069	$ .00378	$ .50345	$ .69792

T

1/ All charges are subject to adjustment for any applicable taxes or governmental impositions.

2/ Customers taking transportation service will pay the Basic Service Charge, the Commodity Charge per Therm less the Monthly Gas Cost, and Demand Charge, if applicable, of the Currently Effective Tariff Rate for each meter included in the transportation service agreement, plus an amount of $.00686 per therm for distribution shrinkage as defined in Rule No. 1 of this Arizona Gas Tariff. The shrinkage charge shall be updated annually effective May 1. For customers converting from sales service, an additional amount equal to the currently effective Gas Cost Balancing Account Adjustment will be assessed for a period of 12 months.

STATEMENT OF RATES
EFFECTIVE SALES RATES APPLICABLE TO ARIZONA SCHEDULES [1/ 2/]
(Continued)

3/ The Rate Adjustment applicable to each tariff rate schedule includes the following components. L

Rate Schedule	G-5, G-6, G-20	G-10, G-11	G-15	G-20	Adjustment Date
Energy Efficiency	$ 0.00000	$ 0.00000	n/a	n/a	Per Commission Order
Low Income Ratepayer Assistance	0.01222	n/a	n/a	0.01222	1st Billing Cycle in May
Demand Side Management	0.00200	0.00200	0.00200	0.00200	1st Billing Cycle in April
Gas Research Fund	0.00103	0.00103	0.00103	0.00103	1st Billing Cycle in May
Department of Transportation	0.00075	0.00075	0.00075	0.00075	1st Billing Cycle in March
Gas Cost Balancing Account	(0.08000)	(0.08000)	(0.08000)	(0.08000)	Per Commission Order
Total Rate Adjustment	$ (0.06400)	$ (0.07622)	$ (0.07622)	$ (0.06400)	

N

Rate Schedule	G-25(S), G-25(M), G-25 (L1), G-25(L2)	G-25 (TE), G-40, G-45, G-55, G-60, G-75	G-80	G-30, B-1	Adjustment Date
Energy Efficiency	$ 0.00000	n/a	n/a	n/a	Per Commission Order
Low Income Ratepayer Assistance	n/a	n/a	n/a	n/a	1st Billing Cycle in May
Demand Side Management	0.00200	0.00200	0.00200	n/a	1st Billing Cycle in April
Gas Research Fund	0.00103	0.00103	0.00103	n/a	1st Billing Cycle in May
Department of Transportation	0.00075	0.00075	0.00075	0.00075	1st Billing Cycle in March
Gas Cost Balancing Account	(0.08000)	(0.08000)	n/a	n/a	Per Commission Order
Total Rate Adjustment	$ (0.07622)	$ (0.07622)	$ 0.00378	$ 0.00075	

N
N
N

4/ The total monthly demand charge is equal to the unit rate shown multiplied by the customer's billing determinant.

5/ The charges for Schedule No. G-55 are subject to adjustment for applicable state and federal taxes on fuel used in motor vehicles.

6/ The gas cost for this rate schedule shall be updated seasonally, April 1 and October 1 of each year. L

Schedule No. G-10

SINGLE-FAMILY LOW INCOME RESIDENTIAL GAS SERVICE

APPLICABILITY

Applicable to gas service to the primary residences of low income residential customers who would otherwise be provided service under Schedule No. G-5 and who meet the criterion which establishes that a qualifying customer's household income must not exceed 150 percent of the Federal poverty level.

TERRITORY

Throughout the certificated area served by the Utility in the communities as set forth on A.C.C. Sheet No. 8 of this Arizona Gas Tariff.

RATES

The basic service charge is set forth in the currently effective Statement of Rates of this Arizona Gas Tariff and is incorporated herein by reference. The commodity charge during T
the winter season (November through April) delivered under this schedule shall reflect a 20 T
percent reduction from the commodity charge (excluding the LIRA and Gas Cost Balancing Account rate adjustments) applicable to Schedule No. G-5, the customer's otherwise T
applicable gas sales tariff schedule.

MINIMUM CHARGE

The minimum charge per meter per month is the basic service charge.

SPECIAL CONDITIONS

1. Eligibility requirements for the Low Income Residential Gas Service are set forth on the Utility's Application and Declaration of Eligibility for Low Income Ratepayer Assistance form. Customers must have an approved application form on file with the Utility. Recertification will be required prior to November 1 every two years and whenever a customer moves to a new residence within the Utility's service area.

Schedule No. G-11

MULTI-FAMILY LOW INCOME RESIDENTIAL GAS SERVICE

APPLICABILITY

Applicable to gas service to the primary residences of low income residential customers who would otherwise be provided service under Schedule No. G-6 and who meet the criterion which establishes that a qualifying customer's household income must not exceed 150 percent of the Federal poverty level.

TERRITORY

Throughout the certificated area served by the Utility in the communities as set forth on A.C.C. Sheet No. 8 of this Arizona Gas Tariff.

RATES

The basic service charge is set forth in the currently effective Statement of Rates of this Arizona Gas Tariff and is incorporated herein by reference. The commodity charge during T
the winter season (November through April) delivered under this schedule shall reflect a 20 T
percent reduction from the commodity charge (excluding the LIRA and Gas Cost Balancing Account rate adjustments) applicable to Schedule No. G-6, the customer's otherwise applicable gas sales tariff schedule.

MINIMUM CHARGE

The minimum charge per meter per month is the basic service charge.

SPECIAL CONDITIONS

1. Eligibility requirements for the Low Income Residential Gas Service are set forth on the Utility's Application and Declaration of Eligibility for Low Income Ratepayer Assistance form. Customers must have an approved application form on file with the Utility. Recertification will be required prior to November 1 every two years and whenever a customer moves to a new residence within the Utility's service area.

Schedule No. G-25

GENERAL GAS SERVICE

APPLICABILITY

Applicable to commercial, industrial, United States Armed Forces, and essential agricultural customers as defined in Rule No. 1 of this Arizona Gas Tariff. Small general gas service customers are defined as those whose average annual requirements are less than or equal to 600 therms. Medium general gas service customers are defined as those whose average annual requirements are greater than 600 therms but less than or equal to 7,200. Large-1 general gas service customers are defined as those whose average annual requirements are greater than 7,200 therms but less than or equal to 50,000. Large-2 general gas service customers are defined as those whose average annual requirements are greater than 50,000 therms but less than or equal to 180,000 therms. Transportation-Eligible general gas customers are defined as those whose average annual requirements are greater than 180,000 therms. T N T N T

TERRITORY

Throughout the certificated area served by the Utility in the communities as set forth on A.C.C. Sheet No. 8 of this Arizona Gas Tariff.

RATES

1. Small, Medium, Large-1 and Large-2 General Gas Service. N

   The basic service charge and commodity charge are set forth in the currently effective Statement of Rates of this Arizona Gas Tariff and are incorporated herein by reference.

   The minimum charge per meter per month is the basic service charge.

2. Transportation-Eligible General Gas Service

   The basic service charge, the demand charge and the commodity charge are set forth in the currently effective Statement of Rates of this Arizona Gas Tariff and are incorporated herein by reference.

   The monthly demand charge shall be the product of the demand charge rate multiplied by the customer's billing determinant. The billing determinant shall be equal to each customer's highest monthly throughput during the most recent 12-month period, ending the month prior to the current billing period. For new customers, the initial billing determinant shall be calculated by multiplying the customer's estimated average daily use by the number of days in the billing period.

Schedule No. G-40

AIR CONDITIONING GAS SERVICE T

APPLICABILITY

Applicable to gas service to customers who have installed and regularly operate gas-fired air conditioning equipment. The volume of gas used for air conditioning purposes shall be determined by metering equipment installed by the Utility. T T T D

If the customer's gas-fired air conditioning equipment is capable of providing space heating, only the metered usage during the months of March through November shall be billed under this schedule. T T

Service for any other end use of gas such as space heating, water heating, processing or boiler fuel use shall be billed under the otherwise applicable gas sales tariff schedule. Volumes billed under this schedule may not be used for purposes of establishing the customer's average monthly requirements under Schedule No. G-25.

TERRITORY

Throughout the certificated area served by the Utility in the communities as set forth on A.C.C. Sheet No. 8 of this Arizona Gas Tariff.

RATES

The basic service charge is the charge under the customer's otherwise applicable gas sales tariff schedule. The basic service charge and the commodity charge are set forth in the currently effective Statement of Rates of this Arizona Gas Tariff and are incorporated herein by reference.

MINIMUM CHARGE

The minimum charge per meter per month is the basic service charge as set forth in the customer's otherwise applicable gas sales tariff schedule.

Schedule No. G-40

AIR CONDITIONING GAS SERVICE T
(Continued)

SPECIAL CONDITIONS

1. Service to any customers served under this schedule pursuant to a written agreement executed by the customer and the Utility setting forth the estimated gas volumes to be billed under this schedule will continue until such time the Utility elects to install, or the Customer elects to pay for, metering equipment to determine the volume of gas to be billed under this schedule. T

2. Gas service under this schedule is not available for "standby" or occasional temporary service.

3. The charges specified for this schedule are subject to adjustment for the applicable proportionate part of any taxes or governmental impositions which are assessed on the basis of the gross revenues of the Utility.

4. If the customer is receiving service under this schedule in combination with another schedule, the Utility, at its sole discretion may elect to charge the customer only one basic service charge. T

PURCHASED GAS ADJUSTMENT CLAUSE

The rates specified for this schedule are subject to increases or decreases in the cost of gas purchased in accordance with those provisions set forth in the "Special Supplementary Tariff, Purchased Gas Cost Adjustment Provision," contained in this Arizona Gas Tariff.

RULES AND REGULATIONS

The standard Rules and Regulations of the Utility as authorized by the Commission shall apply where consistent with this schedule.

Schedule No. G-55

GAS SERVICE FOR COMPRESSION ON CUSTOMER'S PREMISES

APPLICABILITY

Applicable to gas service to natural gas vehicle (NGV) operators and retail distributors for the sole purpose of compressing natural gas for use as a fuel in vehicular internal combustion engines. The volume of gas used for compression purposes shall be T
determined by metering equipment installed by the Utility. Small compressed natural gas T
customers are defined as NGV operators and retail distributors whose compression equipment is rated at 30 cubic feet per minute (cfm) or less, and who receive service at 5 pounds per square inch gauge (psig) or less. Large compressed natural gas customers are defined as NGV operators and retail distributors whose compression equipment is rated above 30 cfm or receive service at a delivery pressure greater than 5 psig.

D

TERRITORY

Throughout the certificated area served by the Utility in the communities as set forth on A.C.C. Sheet No. 8 of this Arizona Gas Tariff.

RATES

The basic service charge and commodity charge are set forth in the currently effective Statement of Rates of this Arizona Gas Tariff and are incorporated herein by reference.

MINIMUM CHARGE

The minimum charge per meter per month is the basic service charge.

Schedule No. G-60

ELECTRIC GENERATION GAS SERVICE

APPLICABILITY

Applicable to gas service to customers who have installed and regularly operate gas-fired electric generation equipment. The volume of gas used for electric generation purposes shall be determined by metering equipment installed by the Utility. T T T

TERRITORY

Throughout the certificated area served by the Utility in the communities as set forth on A.C.C. Sheet No. 8 of this Arizona Gas Tariff.

RATES

The basic service charge is the charge under the customer's otherwise applicable gas sales tariff schedule. The basic service charge and the commodity charge are set forth in the currently effective Statement of Rates of this Arizona Gas Tariff and are incorporated herein by reference.

MINIMUM CHARGE

The minimum charge per meter is the basic service charge.

SPECIAL CONDITIONS

1. Gas service under this schedule is not available unless accompanied by a signed contract for a minimum of one year as the precedent to service under this schedule, and said contract shall continue in force and effect from year to year thereafter until either the Utility or the customer shall give the other written notice of a desire to terminate the same at least 30 days prior to the expiration of any such year. If the customer permanently ceases operation, such contract shall not thereafter continue in force.
2. Gas service under this schedule is not available for "standby" or occasional temporary service.
3. The charges specified for this schedule are subject to adjustment for the applicable proportionate part of any taxes or governmental impositions which are assessed on the basis of the gross revenues of the Utility.
4. If the customer is receiving service under this schedule in combination with another schedule, the Utility, at its sole discretion, may elect to charge the customer only one basic service charge. N N N

Schedule No. G-75

SMALL ESSENTIAL AGRICULTURAL USER GAS SERVICE

APPLICABILITY

Applicable to gas service to customers whose gas use is certified by the Secretary of Agriculture as an "essential agricultural use" and whose maximum annual requirements are estimated by the Utility to be less than 125,000 dekatherms. This schedule is closed N
to new customers. N

TERRITORY

Throughout the certificated area served by the Utility in the communities as set forth on A.C.C. Sheet No. 8 of this Arizona Gas Tariff.

RATES

The basic service charge and commodity charge are set forth in the currently effective Statement of Rates of this Arizona Gas Tariff and are incorporated herein by reference.

MINIMUM CHARGE

The minimum charge per meter per month is the basic service charge.

SPECIAL CONDITIONS

1. Any customer who uses or who is estimated to use in excess of 50 dekatherms in any one month may be required to sign a contract for one year as the precedent to service under this schedule, and said contract shall continue in force and effect from year to year thereafter until either the Utility or the customer shall give the other written notice of a desire to terminate the same at least 30 days prior to the expiration of any such year. If the customer permanently ceases operation, such contract shall not thereafter continue in force.

2. The charges specified for this schedule are subject to adjustment for the applicable proportionate part of any taxes or governmental impositions which are assessed on the basis of the gross revenues of the Utility.

Schedule No. G-80

NATURAL GAS ENGINE WATER PUMPING GAS SERVICE T

APPLICABILITY

Applicable to gas service to customers using gas for fuel in internal combustion engines for pumping water for agricultural, domestic and municipal purposes. T T

TERRITORY

Throughout the certificated area served by the Utility in the communities as set forth on A.C.C. Sheet No. 8 of this Arizona Gas Tariff.

RATES

The basic service charge and commodity charge are set forth in the currently effective Statement of Rates of this Arizona Gas Tariff and are incorporated herein by reference.

MINIMUM CHARGE

The minimum charge per meter per month is the basic service charge.

SPECIAL CONDITIONS

1. All gas shall be supplied at a single point of delivery and measured through one meter. No other equipment may be supplied through this meter.
2. The charges specified for this schedule are subject to adjustment for the applicable proportionate part of any taxes or governmental impositions which are assessed on the basis of the gross revenues of the Utility.

PURCHASED GAS ADJUSTMENT CLAUSE

The charges specified for this schedule are subject to increases or decreases in the cost of gas purchased by the Utility. Such change shall be reflected in the commodity charge of the currently effective tariff rates as shown on A.C.C. Sheet No. 13 of this Arizona Gas Tariff.

Schedule No. T-1

TRANSPORTATION OF CUSTOMER-SECURED NATURAL GAS
(Continued)

3. RATES *(Continued)*

The Utility may adjust from time to time the applicable charges to any individual customer, provided, however, that such adjusted rates are mutually acceptable to both the customer and the Utility. T T T

In addition to the above charges and any applicable imbalance charges, the Utility shall include on the customer's bill any charges from upstream pipeline transporters or suppliers which have been incurred by the Utility because of the transportation service rendered for the customer under this schedule.

3.2 Any customer served under this schedule who requests service under a sales schedule will be permitted to change schedules to the extent that the Utility is able to procure additional gas supply and upstream pipeline resources and services to serve the customer's incremental sales volumes. Upon switching from transportation to sales service, the customer's gas cost component of the customer's commodity charge per therm will be determined as follows:

(a) Any customer served under this schedule who switches to a gas sales schedule will be billed the higher of the following charges for the gas cost component of the customer's commodity charge per therm for a period of 12 months:

(1) The Monthly Gas Cost component of the currently effective tariff rate contained in the customer's applicable sales schedule as stated in the Statement of Rates; or

(2) The incremental cost of gas procured by the Utility to serve the customer's additional sales volumes, including upstream interstate pipeline charges,

(b) Customers electing to return to sales service may be charged all, or a portion of the cost of any upstream pipeline resources incurred by the Utility to provide such service.

Exclusive of any charges pursuant to Section 3.2 (b) above, after the conclusion of the initial 12-month period of receiving sales service, the customer shall be billed at the Currently Effective Tariff Rate.

3.3 The charges specified for this schedule are subject to adjustment for the applicable proportionate part of any taxes, assessments or governmental impositions assessed on the Utility.

Schedule No. SB-1 T

STANDBY GAS SERVICE T

APPLICABILITY

Applicable to gas service to customers for stand-by service or as a back-up energy resource when the customer's requirements cannot be adequately served under the Utility's otherwise applicable sales schedules. T T T

D

TERRITORY

Throughout the certificated area served by the Utility in the communities as set forth on A.C.C. Sheet No. 8 of this Arizona Gas Tariff.

Schedule No. SB-1 T

STANDBY GAS SERVICE T
(Continued)

RATES

D

Basic Service Charge: The basic service charge shall be that set forth in the customer's service agreement.

Reservation Charge: The reservation charge per month shall be the maximum daily therms sold to the customer under this rate schedule during the most recent 12-month period or those set forth in the customer's service agreement (hereinafter referred to as "maximum daily quantity") at an individual rate negotiated and agreed upon by the customer and the Utility times 30 days. This charge shall not be less than costs incurred by the Utility to provide this service. T–T

If, on any day, the customer exceeds the maximum daily quantity by an amount over 3 percent of such quantity, the customer will pay for such excess volumes at the above negotiated reservation charge rate. The customer's total purchased volumes for that day shall establish a new maximum daily quantity, until such time as a substitute quantity may be negotiated between customer and the Utility.

Schedule No. SB-1 T

STANDBY GAS SERVICE T
(Continued)

RATES *(Continued)*

Commodity Charge: In the event gas is taken under this schedule, the customer's commodity charge will be the Delivery Charge per therm in the customer's applicable sales schedule; plus the higher of: T T T

1. The Monthly Gas Cost component of the currently effective tariff rate contained in the customer's applicable sales schedule as stated in the Statement of Rates; or N

2. The incremental cost of gas procured by the Utility to serve the customer's additional sales volumes, including upstream interstate pipeline charges. N

The minimum charge is the sum of the Basic Service Charge and the Reservation Charge set forth in the customer's service agreement. T

SPECIAL CONDITIONS

1. Prior to the establishment of service under this schedule, the customer shall execute a service agreement. If subsequently the customer should add facilities that would increase capacity demands upon the Utility's system or exceed quantities of gas deliveries by the Utility as previously mutually agreed upon, then the customer will notify the Utility so that a revised service agreement can be executed.

2. The charges specified for this schedule are subject to adjustment for the applicable proportionate part of any taxes or governmental impositions which are assessed on the basis of the gross revenues of the Utility.

3. Nothing herein shall prevent the Utility from transferring customers served hereunder back to their otherwise applicable sales or optional schedule if costs or conditions change. However, if any customer is able to qualify for service under more than a single rate schedule, the customer may select the schedule which the customer reasons as the most advantageous for gas service by the Utility. D

Schedule No. SB-1 T

STANDBY GAS SERVICE T
(Continued)

SPECIAL CONDITIONS *(Continued)*

4. In the event any customer served under this rate schedule elects to receive service under their otherwise applicable tariff rate schedule, such customer may receive service pursuant to terms and conditions normally available to new customers under the Utility's Arizona Gas Tariff. T T D

RULES AND REGULATIONS

The standard Rules and Regulations of the Utility as authorized by the Commission shall apply where consistent with this schedule.

N

SPECIAL SUPPLEMENTARY TARIFF
ENERGY EFFICIENCY ENABLING PROVISION

APPLICABLITY

The Energy Efficiency Enabling Provision (EEP) applies to residential Rate Schedule Nos. G-5, G-6, G-10 and G-11 and to General Service Schedule Nos. G-25(Small), G-25(Medium), G-25(Large-1) and G-25(Large-2) included in this Arizona Gas Tariff. The EEP specifies the accounting procedures and rate setting adjustments necessary to assure the Utility neither over-recovers, nor under-recovers, the margin-per-customer amounts authorized in its most recent general rate case proceeding.

MONTHLY COMPONENT

The Monthly Component of the EEP adjusts customer's bills to account for variations between the actual temperatures and normal temperatures for the days in the customer's billing cycle. The Monthly Component will apply to bills during the winter season months of November through April. The process is set forth below.

1) CYCLE HEATING DEGREE DAY (HDD) VARIANCE

Determine the difference between normal and actual HDDs for each customer bill. Normal HDDs are the ten-year average HDDs for each operating district used to establish rates in the Company's last general rate case for each day during the winter season months. Actual HDDs are calculated as the number of degrees that any winter season day's average temperature is below 65 degrees.

Normal Cycle HDD	=	The sum of the ten-year average HDDs for each day in the billing cycle
Actual Cycle HDD	=	The sum of the actual HDDs for each day in the billing cycle
Cycle HDD Variance	=	The sum of Normal Cycle HDDs for each day in the billing cycle less the sum of Actual Cycle HDDs for each day in the billing cycle

N

SPECIAL SUPPLEMENTARY TARIFF
ENERGY EFFICIENCY ENABLING PROVISION
(Continued)

N

2) BASE LOAD VOLUME PER DAY

Base Load Volume per day for each customer will be used to establish monthly non-temperature sensitive usage. The Base Load Volume per Day is equal to the customer's lowest average daily use for the May through October summer billing periods. Average daily use is the customer's total monthly use divided by the number of days in the billing cycle. For new customers, Base Load Volume per Day will be the average Base Load Volume per Day in the customer's operating district. If necessary, customers' Base Load Volume per Day may be adjusted to reflect a more representative amount.

3) CYCLE USAGE PER HDD

Cycle Usage per HDD will be calculated for each customer bill by subtracting the customer's Base Load Volume (Base Load Volume per Day multiplied by the number of days in the billing cycle) from actual usage dividing the difference by the Actual Cycle HDDs. If the actual usage is less than the customer's Base Load Volume no weather adjustment will be made to the customer's bill.

4) VOLUME ADJUSTMENT

The Volume Adjustment will be calculated by multiplying the customer's Cycle Usage per HDD by the Cycle HDD Variance.

5) DOLLAR ADJUSTMENT

The Dollar Adjustment will be calculated for each customer by multiplying the customer's Volume Adjustment by Southwest's non-gas delivery charge rates. The Dollar Adjustment will be applied to the customer's non-gas revenue calculated on actual metered volumes and the resulting total shall be the Utility's billed margin.

N

SPECIAL SUPPLEMENTARY TARIFF
ENERGY EFFICIENCY ENABLING PROVISION
(Continued)

N

ANNUAL COMPONENT

The Annual Component of the EEP recovers or refunds any differences between the Utility's billed margin and the margin amounts authorized in its most recent general rate case proceeding. The process is set forth below.

1) EEP BALANCING ACCOUNT

The Utility shall maintain accounting records that accumulate the difference between authorized and actual billed margin. Entries shall be recorded to the EEP Balancing Account (EEPBA) each month as follows:

A. A debit or credit entry equal to the difference between authorized margin and actual billed margin for each rate schedule subject to this provision. Authorized margin is the product of the monthly margin-per-customer authorized in the Utility's last general rate case, as stated below, and the actual number of customers billed during the month.

	G-5	G-6	G-10	G-11
January	$ 61.59	$ 34.37	$ 57.48	$ 38.80
February	$ 53.04	$ 31.19	$ 50.24	$ 34.65
March	$ 41.87	$ 26.55	$ 37.90	$ 28.05
April	$ 29.11	$ 21.84	$ 25.78	$ 21.77
May	$ 21.97	$ 18.97	$ 18.74	$ 18.15
June	$ 21.06	$ 18.54	$ 17.86	$ 17.97
July	$ 18.90	$ 17.03	$ 15.95	$ 16.17
August	$ 17.80	$ 16.27	$ 14.95	$ 15.32
September	$ 18.38	$ 16.67	$ 15.34	$ 15.63
October	$ 19.57	$ 17.12	$ 16.25	$ 16.04
November	$ 22.22	$ 18.69	$ 19.46	$ 17.88
December	$ 43.63	$ 27.51	$ 40.64	$ 29.50

N

N

SPECIAL SUPPLEMENTARY TARIFF
ENERGY EFFICIENCY ENABLING PROVISION
(Continued)

	G-25(S)	G-25(M)	G-25(L1)	G-25(L2)
January	$ 65.11	$ 203.55	$ 832.91	$ 3,294.53
February	$ 58.08	$ 189.30	$ 773.62	$ 3,063.41
March	$ 49.33	$ 161.17	$ 667.84	$ 2,998.26
April	$ 38.29	$ 134.36	$ 588.94	$ 2,561.17
May	$ 34.40	$ 115.70	$ 504.95	$ 2,089.45
June	$ 34.14	$ 111.15	$ 469.30	$ 1,690.37
July	$ 32.79	$ 99.04	$ 398.48	$ 1,607.12
August	$ 32.24	$ 95.71	$ 376.71	$ 1,681.10
September	$ 32.50	$ 100.00	$ 393.38	$ 1,712.18
October	$ 32.92	$ 106.40	$ 433.09	$ 1,847.78
November	$ 34.63	$ 119.29	$ 507.90	$ 2,275.30
December	$ 49.19	$ 168.48	$ 710.66	$ 2,917.07

B. A debit or credit entry equal to the therms billed during the month under the schedules subject to this provision multiplied by the EEP Rate Adjustment.

C. A debit or credit entry for interest to be applied to over- and under-collected bank balances based on the monthly one-year nominal Treasury constant maturities rate.

2) EEP RATE ADJUSTMENT
The EEP Rate Adjustment applicable to each schedule subject to this provision shall be revised annually to reflect the difference between the margin-per-customer authorized in the utility's last general rate case and the margin billed. The EEP Rate Adjustment will be calculated by dividing the balance in the EEPBA by the most recent 12-month volume of natural gas for the customer class included in the EEP.

3) AMOUNTS RECOVERED AND REFUNDED
The amount of under-collected balances in the EEPBA to be recovered in any amortization period shall not exceed six-percent (6%) of the average revenue for the most recent 12-month billing period at the time the EEP Rate Adjustment is calculated. Any resulting unrecovered amounts will remain in the EEPBA and the Utility will be allowed to recover such amounts, provided the impact to customers does not exceed six-percent of customers' average revenue, in a future amortization period. One-hundred percent (100%) of over-collected balances in the EEPBA will be refunded, without limitation, over the next 12-month amortization period.

4) TIMING AND MANNER OF FILING
The Utility shall file its EEP Rate Adjustment revisions with the Commission in accordance with all statutory and regulatory requirements following twelve (12) months of activity in the EEPBA. The EEP Rate Adjustment shall be effective on the date of the first bill cycle in the month following the Commission's approval. N

RULE NO. 7

PROVISION OF SERVICE
(Continued)

B. CUSTOMER RESPONSIBILITY *(Continued)*

3. No rent or other charge whatsoever will be made by the customer against the Utility for placing or maintaining said meters, regulators, service pipe, fixtures, etc., upon the customer's premises. All meters will be sealed or soldered by the Utility, and no such seal or solder shall be tampered with or broken except by a representative of the Utility appointed for that purpose. The customer shall exercise reasonable care to prevent the meters, regulators, service pipe, fixtures, etc., of the Utility upon said premises from being injured or destroyed, and shall refrain from interfering with the same and, in case of defect therein or damage thereto shall be discovered, shall promptly notify the Utility thereof. The customer shall reimburse the Utility for the cost of repairs arising from the customer's neglect, carelessness, misuse or abuse.

4. The Utility shall have the right to refuse or to discontinue gas service if the acts of the customer or the conditions upon his premises are such as to indicate intention to defraud the Utility. When the Utility has discovered that a customer has obtained service by fraudulent means, or has used the gas service for unauthorized purposes, the service to that customer may be discontinued without notice. The Utility will not restore service to such customer until that customer has complied with all filed Rules and reasonable requirements of the Utility and the Utility has been reimbursed for the full amount of the service rendered and the actual cost to the Utility incurred by reason of the fraudulent use.

5. The customer shall immediately call 911 and the Utility upon the discovery of any gas leaks or other hazardous or potentially hazardous conditions in or upon the customer's or the Utility's natural gas meter, regulators, piping, equipment, premises, etc. The customer shall call the Utility at following numbers at any time of the day or night: T

T

Central Arizona: (800) 528-4277 N
(Areas in and around Phoenix and Wickenburg)

Southern Arizona: (800) 722-4277
(Areas in and around Tucson, Green Valley, Casa Grande, Coolidge,

Sierra Vista, Douglas, Morenci, Globe, Oracle, and Yuma)

Northwestern Arizona: (800) 447-5422
(Areas in and around Bullhead City, Parker, and Ehrenberg) N

Current Tariff Sheets

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SOUTHWEST GAS CORPORATION
P.O. Box 98510
Las Vegas, Nevada 89193-8510
Arizona Gas Tariff No. 7 — 139th Revised A.C.C. Sheet No. 11
Arizona Division — Canceling 138th Revised A.C.C. Sheet No. 11

STATEMENT OF RATES
EFFECTIVE SALES RATES APPLICABLE TO ARIZONA SCHEDULES [1/] [2/]

Description	Delivery Charge	Rate Adjustment [3/]	Monthly Gas Cost	Currently Effective Tariff Rate
G-5 – Single-Family Residential Gas Service				
Basic Service Charge per Month	$ 10.70			$ 10.70
Commodity Charge per Therm:				
All Usage	$ .57070	($ .06400)	$ .69350	$ 1.20020
G-6 – Multi-Family Residential Gas Service				
Basic Service Charge per Month	$ 9.70			$ 9.70
Commodity Charge per Therm:				
All Usage	$ .55343	($ .06400)	$ .69350	$ 1.18293
G-10– Single-Family Low Income Residential Gas Service				
Basic Service Charge per Month	$ 7.50			$ 7.50
Commodity Charge per Therm:				
Summer (May–October):				
All Usage	$ .55343	($ .07622)	$ .69350	$ 1.17071
Winter (November–April):				
First 150 Therms	$ .31929	($ .07622)	$ .69350	$ .93657
Over 150 Therms	.55343	(.07622)	.69350	1.17071
G-11– Multi-Family Low Income Residential Gas Service				
Basic Service Charge per Month	$ 7.50			$ 7.50
Commodity Charge per Therm:				
Summer (May–October):				
All Usage	$ .55343	($ .07622)	$ .69350	$ 1.17071
Winter (November–April):				
First 150 Therms	$ .31929	($ .07622)	$ .69350	$ .93657
Over 150 Therms	.55343	(.07622)	.69350	1.17071
G-15– Special Residential Gas Service for Air Conditioning				
Basic Service Charge per Month	$ 10.70			$ 10.70
Commodity Charge per Therm:				
Summer (May–October):				
First 15 Therms	$ .57070	($ .07622)	$ .69350	$ 1.18798
Over 15 Therms	.28860	(.07622)	.69350	.90588
Winter (November–April):				
All Usage	$ .57070	($ .07622)	$ .69350	$ 1.18798

Issued On October 21, 2010
Docket No. G-00000C-98-0568

Issued by
John P. Hester
Senior Vice President

Effective October 28, 2010
Decision No. 62994

SOUTHWEST GAS CORPORATION
P.O. Box 98510
Las Vegas, Nevada 89193-8510
Arizona Gas Tariff No. 7 — 142nd Revised A.C.C. Sheet No. 12
Arizona Division — Canceling 141st Revised A.C.C. Sheet No. 12

STATEMENT OF RATES
EFFECTIVE SALES RATES APPLICABLE TO ARIZONA SCHEDULES 1/ 2/
(Continued)

Description	Delivery Charge	3/ Rate Adjustment	Monthly Gas Cost	Currently Effective Tariff Rate
G-20– Master-Metered Mobile Home Park Gas Service				
Basic Service Charge per Month	$ 66.00			$ 66.00
Commodity Charge per Therm:				
All Usage	$ .40830	($ .06400)	$ .69350	$ 1.03780
G-25– General Gas Service				
Basic Service Charge per Month:				
Small	$ 27.50			$ 27.50
Medium	43.50			43.50
Large	160.00			160.00
Transportation Eligible	950.00			950.00
Commodity Charge per Therm:				
Small, All Usage	$ .57059	($ .07622)	$ .69350	$ 1.18787
Medium, All Usage	.37996	(.07622)	.69350	.99724
Large, All Usage	.29084	(.07622)	.69350	.90812
Transportation Eligible	.10776	(.07622)	.69350	.72504
Demand Charge per Month–				
Transportation Eligible:				
Demand Charge 4/	$ .062340			$ .062340
G-30– Optional Gas Service				
Basic Service Charge per Month	As specified on A.C.C. Sheet No. 27.			
Commodity Charge per Therm:				
All Usage	As specified on A.C.C. Sheet No. 28.			
G-40– Air-Conditioning Gas Service				
Basic Service Charge per Month	As specified on A.C.C. Sheet No. 32.			
Commodity Charge per Therm:				
All Usage	$ .11010	($ .07622)	$ .69350	$ .72738
G-45– Street Lighting Gas Service				
Commodity Charge per Therm of Rated Capacity:				
All Usage	$ .61050	($ .07622)	$ .69350	$ 1.22778
G-55– Gas Service for Compression on Customer's Premises 5/				
Basic Service Charge per Month:				
Small	$ 27.50			$ 27.50
Large	250.00			250.00
Residential	10.70			10.70
Commodity Charge per Therm:				
All Usage	$ .18678	($ .07622)	$ .69350	$ .80406
G-60– Electric Generation Gas Service				
Basic Service Charge per Month	As specified on A.C.C. Sheet No. 40.			
Commodity Charge per Therm:				
All Usage	$ .13535	($ .07622)	$ .69350	$ .75263
G-75– Small Essential Agricultural User Gas Service				
Basic Service Charge per Month	$ 120.00			$ 120.00
Commodity Charge per Therm:				
All Usage	$ .24396	($ .07622)	$ .69350	$ .86124

STATEMENT OF RATES
EFFECTIVE SALES RATES APPLICABLE TO ARIZONA SCHEDULES 1/ 2/
(Continued)

Description	Delivery Charge	3/ Rate Adjustment	Monthly Gas Cost	Currently Effective Tariff Rate
G-80 – Natural Gas Engine 6/ Gas Service				
Basic Service Charge per Month:				
Off-Peak Season (October–March)	$ 0.00			$ 0.00
Peak Season (April–September)	$ 125.00			$ 125.00
Commodity Charge per Therm:				
All Usage	$ .19069	$ .00378	$ .59653	$ .79100

1/ All charges are subject to adjustment for any applicable taxes or governmental impositions.

2/ Customers taking transportation service will pay the Basic Service Charge, the Commodity Charge per Therm less the Monthly Gas Cost, and Demand Charge, if applicable, of the Currently Effective Tariff Rate for each meter included in the transportation service agreement, plus an amount of $.00686 per therm for distribution shrinkage as defined in Rule No. 1 of this Arizona Gas Tariff. The shrinkage charge shall be updated annually effective May 1. For customers converting from sales service, an additional amount equal to the currently effective Gas Cost Balancing Account Adjustment will be assessed for a period of 12 months.

3/ The Rate Adjustment applicable to each tariff rate schedule includes the following components:

	G-5, G-6, G-20	G-10, G-11, G-15, G-25, G-40, G-45, G-55, G-60, G-75	G-80	G-30, B-1	Adjustment Date
Low Income Ratepayer Assistance	$ 0.01222	N/A	N/A	N/A	May 1
Demand Side Management	0.00423	$ 0.00423	$ 0.00423	N/A	1st Bill Cycle in April
Gas Research Fund	0.00103	0.00103	0.00103	N/A	May 1
Department of Transportation	0.00075	0.00075	0.00075	$ 0.00075	March 1
Gas Cost Balancing Account	(0.08000)	(0.08000)	N/A	N/A	As Required
Total Rate Adjustment	$ (0.06400)	$ (0.07622)	$ 0.00378	$ 0.00075	

4/ The total monthly demand charge is equal to the unit rate shown multiplied by the customer's billing determinant.

5/ The charges for Schedule No. G-55 are subject to adjustment for applicable state and federal taxes on fuel used in motor vehicles.

6/ The gas cost for this rate schedule shall be updated seasonally, April 1 and October 1 of each year.

HELD FOR FUTURE USE

Schedule No. G-10

SINGLE-FAMILY LOW INCOME RESIDENTIAL GAS SERVICE

APPLICABILITY

Applicable to gas service to the primary residences of low income residential customers who would otherwise be provided service under Schedule No. G-5 and who meet the criterion which establishes that a qualifying customer's household income must not exceed 150 percent of the Federal poverty level.

TERRITORY

Throughout the certificated area served by the Utility in the communities as set forth on A.C.C. Sheet No. 8 of this Arizona Gas Tariff.

RATES

The basic service charge is set forth in the currently effective Statement of Rates of this Arizona Gas Tariff and is incorporated herein by reference. The commodity charge applicable to the first 150 therms per month during the winter season (November through April) delivered under this schedule shall reflect a 20 percent reduction from the commodity charge (excluding the LIRA and Gas Cost Balancing Account rate adjustments) applicable to Schedule No. G-6, the customer's otherwise applicable gas sales tariff schedule.

MINIMUM CHARGE

The minimum charge per meter per month is the basic service charge.

SPECIAL CONDITIONS

1. Eligibility requirements for the Low Income Residential Gas Service are set forth on the Utility's Application and Declaration of Eligibility for Low Income Ratepayer Assistance form. Customers must have an approved application form on file with the Utility. Recertification will be required prior to November 1 every two years and whenever a customer moves to a new residence within the Utility's service area.

Schedule No. G-11

MULTI-FAMILY LOW INCOME RESIDENTIAL GAS SERVICE

APPLICABILITY

Applicable to gas service to the primary residences of low income residential customers who would otherwise be provided service under Schedule No. G-6 and who meet the criterion which establishes that a qualifying customer's household income must not exceed 150 percent of the Federal poverty level.

TERRITORY

Throughout the certificated area served by the Utility in the communities as set forth on A.C.C. Sheet No. 8 of this Arizona Gas Tariff.

RATES

The basic service charge is set forth in the currently effective Statement of Rates of this Arizona Gas Tariff and is incorporated herein by reference. The commodity charge applicable to the first 150 therms per month during the winter season (November through April) delivered under this schedule shall reflect a 20 percent reduction from the commodity charge (excluding the LIRA and Gas Cost Balancing Account rate adjustments) applicable to Schedule No. G-6, the customer's otherwise applicable gas sales tariff schedule.

MINIMUM CHARGE

The minimum charge per meter per month is the basic service charge.

SPECIAL CONDITIONS

1. Eligibility requirements for the Low Income Residential Gas Service are set forth on the Utility's Application and Declaration of Eligibility for Low Income Ratepayer Assistance form. Customers must have an approved application form on file with the Utility. Recertification will be required prior to November 1 every two years and whenever a customer moves to a new residence within the Utility's service area.

Schedule No. G-25

GENERAL GAS SERVICE

APPLICABILITY

Applicable to commercial, industrial, United States Armed Forces, and essential agricultural customers as defined in Rule No. 1 of this Arizona Gas Tariff. Small general gas service customers are defined as those whose average monthly requirements on an annual basis are less than or equal to 50 therms per month. Medium general gas service customers are those whose average monthly requirements on an annual basis are greater than 50 therms, but less than or equal to 600 therms per month. Large general gas service customers are those whose average monthly requirements on an annual basis are greater than 600 therms per month, but less than or equal to 15,000 therms per month. Transportation-eligible gas service customers are those whose average monthly requirements on an annual basis are greater than 15,000 therms per month.

TERRITORY

Throughout the certificated area served by the Utility in the communities as set forth on A.C.C. Sheet No. 8 of this Arizona Gas Tariff.

RATES

1. Small, Medium, and Large General Gas Service

   The basic service charge and commodity charge are set forth in the currently effective Statement of Rates of this Arizona Gas Tariff and are incorporated herein by reference.

   The minimum charge per meter per month is the basic service charge.

2. Transportation-Eligible General Gas Service

   The basic service charge, the demand charge and the commodity charge are set forth in the currently effective Statement of Rates of this Arizona Gas Tariff and are incorporated herein by reference.

   The monthly demand charge shall be the product of the demand charge rate multiplied by the customer's billing determinant. The billing determinant shall be equal to each customer's highest monthly throughput during the most recent 12-month period, ending the month prior to the current billing period. For new customers, the initial billing determinant shall be calculated by multiplying the customer's estimated average daily use by the number of days in the billing period.

Schedule No. G-40

AIR-CONDITIONING GAS SERVICE

APPLICABILITY

Applicable to gas service to commercial or industrial customers as defined in Rule No. 1 of this Arizona Gas Tariff who qualify for service under Schedule No. G-25 and who have installed and regularly operate a gas-fired air-conditioning system which meets the Utility's specifications and approval.

All of the provisions of the customer's otherwise applicable gas sales tariff schedule shall apply to this service unless specifically modified within this schedule.

The volume of gas used for air-conditioning only purposes shall be determined by metering equipment installed by the Utility, unless, a written agreement is executed by the customer and the Utility that sets forth the estimated gas volumes or the methodology to determine the volumes to be billed under this schedule.

Service for any end use of gas other than for air-conditioning purposes, such as space heating, water heating, processing or boiler fuel use, is not permitted under this schedule and shall be billed under the otherwise applicable gas sales tariff schedule. Volumes billed under this schedule may not be used for purposes of establishing the customer's average monthly requirements under Schedule No. G-25.

TERRITORY

Throughout the certificated area served by the Utility in the communities as set forth on A.C.C. Sheet No. 8 of this Arizona Gas Tariff.

RATES

The basic service charge is the charge under the customer's otherwise applicable gas sales tariff schedule. The basic service charge and the commodity charge are set forth in the currently effective Statement of Rates of this Arizona Gas Tariff and are incorporated herein by reference.

MINIMUM CHARGE

The minimum charge per meter per month is the basic service charge as set forth in the customer's otherwise applicable gas sales tariff schedule.

Schedule No. G-40

AIR-CONDITIONING GAS SERVICE
(Continued)

SPECIAL CONDITIONS

1. The customer may receive service under this schedule separately or in combination with another schedule. In either event, the customer will be required to pay only the basic service charge contained in the otherwise applicable gas sales tariff schedule. The customer shall not be required to pay more than a single basic service charge for gas service in any given month.

2. Gas service under this schedule is not available for "standby" or occasional temporary service.

3. The charges specified for this schedule are subject to adjustment for the applicable proportionate part of any taxes or governmental impositions which are assessed on the basis of the gross revenues of the Utility.

4. The term "otherwise applicable gas sales tariff schedule" as used herein excludes all optional tariff schedules.

PURCHASED GAS ADJUSTMENT CLAUSE

The rates specified for this schedule are subject to increases or decreases in the cost of gas purchased in accordance with those provisions set forth in the "Special Supplementary Tariff, Purchased Gas Cost Adjustment Provision," contained in this Arizona Gas Tariff.

RULES AND REGULATIONS

The standard Rules and Regulations of the Utility as authorized by the Commission shall apply where consistent with this schedule.

Schedule No. G-55

GAS SERVICE FOR COMPRESSION ON CUSTOMER'S PREMISES

APPLICABILITY

Applicable to gas service to natural gas vehicle (NGV) operators and retail distributors for the sole purpose of compressing natural gas for use as a fuel in vehicular internal combustion engines. Small compressed natural gas customers are defined as NGV operators and retail distributors whose compression equipment is rated at 30 cubic feet per minute (cfm) or less, and who receive service at 5 pounds per square inch gauge (psig) or less. Large compressed natural gas customers are defined as NGV operators and retail distributors whose compression equipment is rated above 30 cfm or receive service at a delivery pressure greater than 5 psig.

Service under this schedule shall be through one or more meters at the option of the Utility, provided they are located at the same premise. Service for any end use of gas other than the compression of natural gas for vehicle use, such as space heating, water heating, processing or boiler fuel use, is not permitted under this schedule nor through the meter(s) through which service under this schedule is provided.

TERRITORY

Throughout the certificated area served by the Utility in the communities as set forth on A.C.C. Sheet No. 8 of this Arizona Gas Tariff.

RATES

The basic service charge and commodity charge are set forth in the currently effective Statement of Rates of this Arizona Gas Tariff and are incorporated herein by reference.

MINIMUM CHARGE

The minimum charge per meter per month is the basic service charge.

Schedule No. G-60

ELECTRIC GENERATION GAS SERVICE

APPLICABILITY

Applicable to gas service to electric generation customers. This schedule is available for only the electric generation portion of the customer's gas purchases.

TERRITORY

Throughout the certificated area served by the Utility in the communities as set forth on A.C.C. Sheet No. 8 of this Arizona Gas Tariff.

RATES

The basic service charge is the charge under the customer's otherwise applicable gas sales tariff schedule. The basic service charge and the commodity charge are set forth in the currently effective Statement of Rates of this Arizona Gas Tariff and are incorporated herein by reference.

MINIMUM CHARGE

The minimum charge per meter is the basic service charge.

SPECIAL CONDITIONS

1. Gas service under this schedule is not available unless accompanied by a signed contract for a minimum of one year as the precedent to service under this schedule, and said contract shall continue in force and effect from year to year thereafter until either the Utility or the customer shall give the other written notice of a desire to terminate the same at least 30 days prior to the expiration of any such year. If the customer permanently ceases operation, such contract shall not thereafter continue in force.

2. Gas service under this schedule is not available for "standby" or occasional temporary service.

3. The charges specified for this schedule are subject to adjustment for the applicable proportionate part of any taxes or governmental impositions which are assessed on the basis of the gross revenues of the Utility.

Schedule No. G-75

SMALL ESSENTIAL AGRICULTURAL USER GAS SERVICE

APPLICABILITY

Applicable to gas service to customers whose gas use is certified by the Secretary of Agriculture as an "essential agricultural use" and whose maximum annual requirements are estimated by the Utility to be less than 125,000 dekatherms.

TERRITORY

Throughout the certificated area served by the Utility in the communities as set forth on A.C.C. Sheet No. 8 of this Arizona Gas Tariff.

RATES

The basic service charge and commodity charge are set forth in the currently effective Statement of Rates of this Arizona Gas Tariff and are incorporated herein by reference.

MINIMUM CHARGE

The minimum charge per meter per month is the basic service charge.

SPECIAL CONDITIONS

1. Any customer who uses or who is estimated to use in excess of 50 dekatherms in any one month may be required to sign a contract for one year as the precedent to service under this schedule, and said contract shall continue in force and effect from year to year thereafter until either the Utility or the customer shall give the other written notice of a desire to terminate the same at least 30 days prior to the expiration of any such year. If the customer permanently ceases operation, such contract shall not thereafter continue in force.

2. The charges specified for this schedule are subject to adjustment for the applicable proportionate part of any taxes or governmental impositions which are assessed on the basis of the gross revenues of the Utility.

Schedule No. G-80

NATURAL GAS ENGINE GAS SERVICE

APPLICABILITY

Applicable to gas service to all customers using gas for fuel in internal combustion engines for pumping water for agricultural irrigation purposes, domestic, municipal, electric generation (excluding utility electric generation) or other mechanical purposes.

TERRITORY

Throughout the certificated area served by the Utility in the communities as set forth on A.C.C. Sheet No. 8 of this Arizona Gas Tariff.

RATES

The basic service charge and commodity charge are set forth in the currently effective Statement of Rates of this Arizona Gas Tariff and are incorporated herein by reference.

MINIMUM CHARGE

The minimum charge per meter per month is the basic service charge.

SPECIAL CONDITIONS

1. All gas shall be supplied at a single point of delivery and measured through one meter. No other equipment may be supplied through this meter.
2. The charges specified for this schedule are subject to adjustment for the applicable proportionate part of any taxes or governmental impositions which are assessed on the basis of the gross revenues of the Utility.

PURCHASED GAS ADJUSTMENT CLAUSE

The charges specified for this schedule are subject to increases or decreases in the cost of gas purchased by the Utility. Such change shall be reflected in the commodity charge of the currently effective tariff rates as shown on A.C.C. Sheet No. 13 of this Arizona Gas Tariff.

Schedule No. T-1

TRANSPORTATION OF CUSTOMER-SECURED NATURAL GAS
(Continued)

3. RATES *(Continued)*

The Utility may adjust from time to time the applicable unit transportation rate to any individual customer, provided, however, that such adjusted rate shall not exceed the applicable charges as specified in Section 3.1 above.

In addition to the above charges and any applicable imbalance charges, the Utility shall include on the customer's bill any charges from upstream pipeline transporters or suppliers which have been incurred by the Utility because of the transportation service rendered for the customer under this schedule.

3.2 Any customer served under this schedule who requests service under a sales schedule will be permitted to change schedules to the extent that the Utility is able to procure additional gas supply and upstream pipeline resources and services to serve the customer's incremental sales volumes. Upon switching from transportation to sales service, the customer's gas cost component of the customer's commodity charge per therm will be determined as follows:

(a) Any customer served under this schedule who switches to a gas sales schedule will be billed the higher of the following charges for the gas cost component of the customer's commodity charge per therm for a period of 12 months:

(1) The Monthly Gas Cost component of the currently effective tariff rate contained in the customer's applicable sales schedule as stated in the Statement of Rates; or

(2) The incremental cost of gas procured by the Utility to serve the customer's additional sales volumes, including upstream interstate pipeline charges,

(b) Customers electing to return to sales service may be charged all, or a portion of the cost of any upstream pipeline resources incurred by the Utility to provide such service.

Exclusive of any charges pursuant to Section 3.2 (b) above, after the conclusion of the initial 12-month period of receiving sales service, the customer shall be billed at the Currently Effective Tariff Rate.

3.3 The charges specified for this schedule are subject to adjustment for the applicable proportionate part of any taxes, assessments or governmental impositions assessed on the Utility.

Schedule No. B-1

POTENTIAL BYPASS/STANDBY GAS SERVICE

APPLICABILITY

Applicable to natural gas transportation service to customers whose requirements may be served at rates lower than the Utility's currently effective rates. As a condition precedent to qualifying for this service, the customer must establish that bypass is economically, operationally, and physically feasible and imminent, or that the customer has installed facilities capable of burning alternate fuels or energy or otherwise capable of demonstrating competitive alternatives to service at the customer's otherwise applicable rate.

AVAILABILITY

This schedule is available for the following gas services:

1. POTENTIAL BYPASS GAS SERVICE

   This service is available only for customers who have applied for sales and/or transportation service from a gas pipeline and have received a formally quoted and written rate for such service or have installed facilities capable of burning alternate fuels or energy. Both the economics and feasibility of such service are subject to verification by the Utility before qualifying for service under this schedule. Bypass gas service is available only if the Utility provides the customer's full actual gas requirements in a manner similar to that which would otherwise be provided under Schedule No. T-1.

2. STANDBY OR EMERGENCY GAS SERVICE

   This service is available to provide standby gas service for customers who have contracted for their own gas supply and completed arrangements for direct delivery by their pipeline transporter to their own facilities or are burning alternate fuels or energy, but will continue to remain connected to the service facilities of the Utility.

TERRITORY

Throughout the certificated area served by the Utility in the communities as set forth on A.C.C. Sheet No. 8 of this Arizona Gas Tariff.

Schedule No. B-1

POTENTIAL BYPASS/STANDBY GAS SERVICE
(Continued)

RATES

1. POTENTIAL BYPASS GAS SERVICE

The basic service charge and the charge per therm may vary from customer to customer based on value of the service. These charges may be revised from time to time as costs and conditions change. In no event shall the charge per therm be less than the variable cost.

The minimum charge is the sum of the fixed monthly charges as set forth in the customer's service agreement.

2. STANDBY OR EMERGENCY GAS SERVICE

Basic Service Charge: The basic service charge shall be that set forth in the customer's service agreement.

Reservation Charge: The reservation charge per month shall be the maximum daily therms sold to the customer during the most recent 12-month period or those set forth in the customer's service agreement (hereinafter referred to as "maximum daily quantity") applicable to this rate schedule at an individual rate negotiated and agreed upon by customer and the Utility, not to exceed $.06 per therm times 30 days. This charge shall not be less than costs incurred by the Utility to provide this service.

If, on any day, the customer exceeds the "maximum daily quantity" by an amount over 3 percent of such quantity, the customer will pay for such excess volumes at the above negotiated reservation charge rate. The customer's total purchased volumes for that day shall establish a new maximum daily quantity, until such time as a substitute quantity may be negotiated between customer and the Utility.

Schedule No. B-1

POTENTIAL BYPASS/STANDBY GAS SERVICE
(Continued)

RATES *(Continued)*

Commodity Charge: In the event gas is taken under this schedule, the commodity rate contained in the customer's otherwise applicable sales schedule shall apply. The commodity rates may be revised from time to time as gas costs and conditions change. In no event shall the commodity charge per therm be less than the variable commodity cost of gas purchased by the Utility.

The minimum charge is the sum of the fixed monthly charges as set forth in the customer's service agreement.

SPECIAL CONDITIONS

1. Prior to the establishment of service under this schedule, the customer shall execute a service agreement. If subsequently the customer should add facilities that would increase capacity demands upon the Utility's system or exceed quantities of gas deliveries by the Utility as previously mutually agreed upon, then the customer will notify the Utility so that a revised service agreement can be executed.

2. The charges specified for this schedule are subject to adjustment for the applicable proportionate part of any taxes or governmental impositions which are assessed on the basis of the gross revenues of the Utility.

3. Nothing herein shall prevent the Utility from transferring customers served hereunder back to their otherwise applicable sales or optional schedule if costs or conditions change so as to make that customer no longer eligible for service hereunder. However, if any customer is able to qualify for service under more than a single rate schedule, the customer may select the schedule which the customer reasons as the most advantageous for gas service by the Utility.

Schedule No. B-1

POTENTIAL BYPASS/STANDBY GAS SERVICE
(Continued)

SPECIAL CONDITIONS *(Continued)*

4. In the event any customer served by the Utility who chooses to become its own gas supplier elects to discontinue all service, including service under this schedule, provided by the Utility and is disconnected from the Utility's distribution system, the Utility shall not be obligated to take such customer back under the terms, conditions and rates normally available to customers under this Arizona Gas Tariff. Such customer may reapply for gas service and shall receive gas service only after the execution of a service agreement under terms, conditions and rates which ensure that the Utility and its customers on the regulated distribution system are compensated for costs associated with the restoration of service to such customer. The Utility shall file the executed service agreement with the Commission prior to initiating gas service to such customer.

5. The Utility will calculate any costs or charges, which the Utility determines have been incurred because of the customer's prior actions while a sales customer of the Utility or because of the transportation of gas for the customer's account hereunder. The Utility on a customer case-by-case basis will submit to the Commission, for its consideration, the aforementioned costs or charges. The customer will reimburse the Utility those costs and charges that the Commission determines should be borne by the customer.

RULES AND REGULATIONS

The standard Rules and Regulations of the Utility as authorized by the Commission shall apply where consistent with this schedule.

HELD FOR FUTURE USE

HELD FOR FUTURE USE

RULE NO. 7

PROVISION OF SERVICE
(Continued)

B. CUSTOMER RESPONSIBILITY *(Continued)*

3. No rent or other charge whatsoever will be made by the customer against the Utility for placing or maintaining said meters, regulators, service pipe, fixtures, etc., upon the customer's premises. All meters will be sealed or soldered by the Utility, and no such seal or solder shall be tampered with or broken except by a representative of the Utility appointed for that purpose. The customer shall exercise reasonable care to prevent the meters, regulators, service pipe, fixtures, etc., of the Utility upon said premises from being injured or destroyed, and shall refrain from interfering with the same and, in case of defect therein or damage thereto shall be discovered, shall promptly notify the Utility thereof. The customer shall reimburse the Utility for the cost of repairs arising from the customer's neglect, carelessness, misuse or abuse.

4. The Utility shall have the right to refuse or to discontinue gas service if the acts of the customer or the conditions upon his premises are such as to indicate intention to defraud the Utility. When the Utility has discovered that a customer has obtained service by fraudulent means, or has used the gas service for unauthorized purposes, the service to that customer may be discontinued without notice. The Utility will not restore service to such customer until that customer has complied with all filed Rules and reasonable requirements of the Utility and the Utility has been reimbursed for the full amount of the service rendered and the actual cost to the Utility incurred by reason of the fraudulent use.

5. The customer shall promptly notify the Utility of any gas leaks, hazardous, or potentially hazardous conditions in the customer's or the Utility's equipment.

SOUTHWEST GAS CORPORATION

Docket No. G-01551A-10-

2010
ARIZONA
GENERAL RATE CASE

Arizona Energy Efficiency and Renewable Energy Resource Technology Portfolio Implementation Plan

SOUTHWEST GAS CORPORATION

ARIZONA ENERGY EFFICIENCY AND RENEWABLE ENERGY RESOURCE TECHNOLOGY PORTFOLIO IMPLEMENTATION PLAN

Table of Contents

ARIZONA ENERGY EFFICIENCY AND RENEWABLE ENERGY RESOURCE TECHNOLOGY PORTFOLIO IMPLEMENTATION PLAN OVERVIEW

INTRODUCTION

Southwest Gas Corporation's (Southwest Gas or Company) Energy Efficiency (EE) and Renewable Energy Resource Technology (RET) *portfolio* (Portfolio) for the initial implementation plan year consists of ten programs designed to achieve cost-effective natural gas savings, and increase customer awareness and use of energy-efficient and renewable energy practices and technologies. The Portfolio will serve to benefit Southwest Gas' Arizona residential, non-residential and low-income customers. Consistent with the draft gas energy efficiency standards (Gas EE Standard) approved by the Commission in Decision No. 71855, the proposed implementation plan for Southwest Gas' Portfolio describes only one plan year.

Southwest Gas believes the Portfolio will advance market transformation and achieve sustainable savings, reducing the need for future market interventions. The Portfolio is comprised of the following programs and targets the residential, non-residential and low-income market sectors:

Residential Energy Management Programs

1. *Smarter Greener Better* Residential Rebates
2. *Smarter Greener Better* Homes
3. *Smarter Greener Better* Residential Energy Assessments (Pilot)

Non-Residential Energy Management Programs

4. *Smarter Greener Better* Business Rebates
5. *Smarter Greener Better* Custom Business Rebates
6. *Smarter Greener Better* Business Energy Assessments (Pilot)
7. *Smarter Greener Better* Distributed Generation

Low-Income Program

8. *Smarter Greener Better* Low-Income Energy Conservation

Educational Program

9. *Smarter Greener Better* Energy Education (Pilot)

Renewable Energy Resource Technology Program

10. *Smarter Greener Better* Solar Thermal Rebates

The Portfolio for the initial implementation plan year includes detailed program descriptions of the ten individual programs including: program rationale and objectives, targeted market sector, level of customer participation, customer eligibility, measure specifications, proposed rebate levels, program budgets, societal benefits and savings, societal costs, environmental benefits, and cost-effectiveness.

The Company's EE and RET programs are designed to influence energy decisions by residential, non-residential and low income customers through a combination of education, training, financial incentives, and technical assistance. The Portfolio is expected to produce long-term energy savings, monetary savings for customers, and positive environmental impacts.

The Company's Portfolio also results in energy savings and emissions reductions through energy-efficient products, services and/or practices. Overall energy savings include savings attributable to the reduction of natural gas, electricity and water usage. Southwest Gas has participated in, and plans to continue discussions with Arizona Public Service (APS), Tucson Electric Power (TEP), and Salt River Project (SRP), focusing on the potential for future collaborative efforts regarding EE and RET programs.

Southwest Gas currently offers several energy efficiency programs in Arizona, which the Company proposes to replace upon the approval of its new Portfolio. Although Southwest Gas will continue its current programs until the Portfolio receives Commission approval, the Company plans to implement its new Portfolio within 60 days of approval by the Commission.

Portfolio Savings, Benefits and Costs

Southwest Gas utilizes a cost-effectiveness model to determine the societal cost, as well as the societal and environmental benefits of each program. Table 1 below details the energy savings, monetary savings, societal benefits and cost-effectiveness ratios for each program in Southwest Gas' Portfolio.

Table 1 – Portfolio Annual and Lifetime Therm Savings; Lifetime Societal Benefits, Costs and Net Benefits; and Cost-Effectiveness

[illegible]	[illegible] Therm Savings	Lifetime Therm Savings	Societal Benefits	Societal Costs	Net Benefits	Cost-Effectiveness (Ratio)
			Residential			
Residential Rebates	640,000	12,799,993	$ 8,814,249	$ 6,783,333	$ 2,030,916	1.30
Homes	570,000	15,960,008	$ 11,653,145	$ 5,066,667	$ 6,586,479	2.30
Residential Energy Assessments	19,000	190,000	$ 120,432	$ 1,050,000	$ (929,568)	N/A[2]
Total Residential	**1,229,000**	**28,950,002**	**$ 20,587,826**	**$12,900,000**	**$ 7,687,826**	1.60
			Non-Residential			
Business Rebates	580,000	8,699,997	$ 5,788,535	$ 2,733,333	$ 3,055,202	2.12
Custom Business Rebates	18,000	270,000	$ 179,644	$ 161,250	$ 18,394	1.11
Business Energy Assessments	-	-	$ -	$ 1,050,000	$ (1,050,000)	N/A[2]
Distributed Generation	516,000	10,320,008	$ 7,106,498	$ 2,450,000	$ 4,656,498	2.90
Total Non-Residential	**1,114,000**	**19,290,005**	**$ 13,074,677**	**$ 6,394,583**	**$ 6,680,094**	2.04
			Low-Income			
L-I Weatherization[1]	21,000	525,000	$ 374,859	$ 450,000	$ (75,141)	0.83
			Education			
Energy Education	-	-	$ -	$ 550,000	$ (550,000)	N/A[2]
Total Energy Efficiency	**2,364,000**	**48,765,007**	**$ 34,037,363**	**$20,294,583**	**$13,742,780**	**1.68**
			Renewable Energy Resource Technology			
Solar Thermal Rebates	87,000	1,479,000	$ 997,377	$ 616,667	$ 380,711	N/A[3]
Total Portfolio	**2,451,000**	**50,244,007**	**$ 35,034,740**	**$20,911,250**	**$14,123,490**	**1.68**

[1]L-I Bill Assistance is not included in this Table because there are no therm savings attributable to the program.
[2]Pursuant to Section R14-2-2512(G) of the Gas EE Standard, cost-effectiveness is not required for pilot programs.
[3]Pursuant to the Gas EE Standard, cost-effectiveness is not required for RET programs.

The Portfolio is targeted to save an annual 2,451,000 therms of energy. The total energy savings from energy efficiency programs of 2,364,000 is equivalent to the first-year goal set forth in the Commission's draft Gas EE Standard, of achieving energy savings from energy efficiency programs of up to 0.375 percent, relevant to the total first-year energy savings goal of 0.5 percent. The Company's RET program, which is targeted to save an additional 87,000 therms, and Southwest Gas' efforts to support the adoption and implementation of the energy efficiency building codes, as well as the Company's involvement in the placement of non-Company sponsored RET projects that displace gas will contribute to the remaining 0.125 percent of the total first-year energy savings goal of 0.5 percent.

Program Baseline

Southwest Gas' Portfolio encourages energy efficiency improvements. The baseline system is the applicable code or federal minimum efficiency standards, if such standards apply. In cases where standards do not exist, the baseline is based upon standard industry practice.

Southwest Gas may adjust baseline natural gas consumption and costs to reflect any of the following: energy codes, standard practice, changes in capacity, equipment operation, changes in production or facility use, and equipment at the end of its useful life.

Portfolio Annual Budget

Southwest Gas proposes an annual budget of approximately $16.5 million for the initial implementation plan year. The proposed budget maximizes the amount of program funds going directly to customers through education, training, financial incentives and technical assistance. The budget also takes into account the realities of program start-up costs and the administrative oversight needed to plan, develop, deliver and evaluate the programs. Once the Portfolio is implemented, rebate levels and other program elements will be reviewed and modified as needed to maximize program participation and energy savings to customers.

The budget for the Portfolio applies to the ten aforementioned programs. Within each program description, Southwest Gas provides an estimated budget apportioning the dollars between five categories including: rebates, administration, outreach, delivery, and measurement, verification, and evaluation (MV&E). However, since Southwest Gas intends to utilize program funding where demand is highest it provides the apportioned budgets only as an approximation.

Table 2 below provides a summary of the estimated budgets for each program for the initial implementation plan year.

Table 2 – Portfolio Annual Estimated Budget

Program	Rebates	Administration	Outreach	[illegible]	[illegible]	[illegible]
Residential						
Residential Rebates	$ 3,850,000	$ 41,250	$ 30,000	$1,196,250	$ 82,500	$ 5,500,000
Homes	$ 3,200,000	$ 160,000	$ 480,000	$ 80,000	$ 80,000	$ 4,000,000
Residential Energy Assessments	$ 350,000	$ 17,500	$ 105,000	$ 210,000	$ 17,500	$ 700,000
Total Residential	**$ 7,400,000**	**$ 218,750**	**$ 915,000**	**$1,486,250**	**$ 180,000**	**$10,200,000**
Non-Residential						
Business Rebates	$ 1,100,000	$ 90,000	$ 225,000	$ 495,000	$ 90,000	$ 2,000,000
Custom Business Rebates	$ 39,000	$ 5,550	$ 27,750	$ 72,150	$ 5,550	$ 150,000
Business Energy Assessments	$ 350,000	$ 17,500	$ 105,000	$ 175,000	$ 52,500	$ 700,000
Distributed Generation	$ 1,200,000	$ 55,000	$ 220,000	$ 220,000	$ 55,000	$ 1,750,000
Total Non-Residential	**$ 2,689,000**	**$ 168,050**	**$ 577,750**	**$ 962,150**	**$ 203,050**	**$ 4,600,000**
Low-Income						
L-I Weatherization[1]	$ 373,500	$ 67,500	$ 9,000	$ -	$ -	$ 450,000
L-I Bill Assistance[2]	$ -	$ -	$ -	$ -	$ -	$ 200,000
Total Low-Income	**$ 373,500**	**$ 67,500**	**$ 9,000**	**$ -**	**$ -**	**$ 650,000**
Education						
Energy Education	$ -	$ -	$ 550,000	$ -	$ -	$ 550,000
Total Energy Efficiency	**$10,462,500**	**$ 454,300**	**$2,051,750**	**$2,448,400**	**$ 383,050**	**$16,000,000**
Renewable Energy Resource Technology						
Solar Thermal Rebates	$ 350,000	$ 15,000	$ 60,000	$ 67,500	$ 7,500	$ 500,000
Total Portfolio	**$10,812,500**	**$ 469,300**	**$2,111,750**	**$2,515,900**	**$ 390,550**	**$16,500,000**

[1]L-I Weatherization delivery and evaluation are performed by the Arizona Commerce Authority and community agencies and therefore, the associated costs are incorporated into the administration budget category.
[2]L-I Bill Assistance is not a rebate program and does not adhere to the above budget categories. Program administration is capped at $15,000.

The budget categories are explained in detail below:

Rebates: Includes any capital equipment rebates and technical services provided.

Administration: Includes internal administrative costs such as regulatory filings and reports, contract administration, and third-party contractor oversight.

Outreach: Includes all marketing and advertising costs related to: workshops, event booths, brochures (design and printing), retail store signage, and trade ally recruitment.

Delivery: Includes rebate processing, forms design and creation, pre-installation field and phone inspections and retailer training.

Measurement, Verification and Evaluation: Includes post-installation inspections performed by an independent third party. Such inspections are not associated with normal due diligence and program delivery, and instead serve as impact evaluations.

In order to ensure funding for actual program costs, Southwest Gas requests flexibility to transfer funds between the budget categories within each program, and between the programs within each customer class.

Southwest Gas anticipates varying levels of participation for individual program measures. Consistent with the draft Gas EE Standard, cost-effectiveness was performed at the portfolio and program levels. Southwest Gas requests flexibility to utilize program funding for measures in which customers express the most interest. This flexibility will be limited to each individual program budget, but will enable Southwest Gas to maximize energy efficiency benefits for customers by permitting Southwest Gas to reallocate funding to those measures where customers are responsive. Actual program costs will be tracked and reported within each individual program budget.

Cost Recovery of Portfolio

Recovery of program costs will be done through a non-bypassable adjustable rate applicable to all customers, unless the customer class or specific customer is exempted. Low-Income program costs shall be borne by all customer classes, except where a class is specifically exempted by Commission Order.

Pursuant to Sections R14-2-2505(B)(5) and R14-2-2506(C) of the draft Gas EE Standard, Southwest Gas requests that the Commission allow the Company to utilize its current Demand-Side Management (DSM) rate adjuster to recover the costs associated with its EE and RET programs detailed in this implementation plan. Under its current DSM rate adjuster, Southwest Gas files an application in January of each year with its program costs and other data supporting the calculation of its adjustment rate per therm, to become effective with the first billing cycle the following April. Southwest Gas seeks to continue the current filing and adjustment process.

Southwest Gas requests that the Portfolio and resulting DSM rate adjuster become effective coincident with the rates approved in the general rate case. An estimated calculation of the applicable DSM rate adjuster is provided in Table 3 below.

Table 3 – Illustrative Cost Recovery of Portfolio Costs

Program Costs	Applicable Volumes	Adjustment Rate
$16,500,000	601,273,772	$0.02661/therm[1]

[1]For illustrative purposes only. Excludes the effect of over- or under-recoveries in Southwest Gas' existing DSM rate adjuster balancing account.

Summary of Programs

In developing its Portfolio, Southwest Gas considered programs for which energy savings could be demonstrated using industry standards, and assessed each program based on technical feasibility and estimated costs.

The Portfolio will be implemented through both internal and external resources. This approach enables the Company to utilize internal resources whenever possible and to rely on external resources when necessary. In all cases, Southwest Gas will retain responsibility for program administration and reporting activities. Below is a brief overview of each proposed program.

Smarter Greener Better Residential Rebates: Rebates will be offered to residential customers on qualified program measures and mailed to participating customers upon proof-of-purchase and installation. The measures include: ENERGY STAR® water and space heating measures, ENERGY STAR® clothes washers and high efficiency natural gas clothes dryers, ENERGY STAR® dishwashers, and smart low-flow showerheads. The program also offers rebates on weatherization measures such as insulation, duct sealing and high efficiency windows.

Smarter Greener Better Homes: Rebates will be offered to homebuilders who build ENERGY STAR® certified homes and install ENERGY STAR® water and space heating measures, ENERGY STAR® clothes washers and high efficiency natural gas clothes dryers and attic insulation. The program will be available to all builders of new single-family subdivision and custom homes and individually metered multi-family homes featuring natural gas water and space heating.

Smarter Greener Better Residential Energy Assessments (Pilot): Southwest Gas proposes a joint residential energy assessment (energy audit) program with APS, SRP and/or TEP. All three of these utilities serve in Southwest Gas' Arizona service territory and have already developed their own residential energy audit programs. For all participating homes with natural gas water and space heating, Southwest Gas will pay rebates to homeowners for a portion of contractor costs and will provide direct-install measures such as smart low-flow showerheads and lavatory faucet accessories (aerators) and information for the Southwest Gas *Smarter Greener Better* Residential Rebates program.

Smarter Greener Better Business Rebates: Rebates will be offered to non-residential customers on qualified program measures and mailed to participating customers upon proof-of-purchase and installation. The measures include: high efficiency space and water heating units (including boilers and boiler tune-ups), clothes washers, a full suite of commercial kitchen high efficiency products (including dishwashers, natural gas fryers, griddles, steamers, conveyor, convection and combination ovens) and commercial weatherization measures.

Smarter Greener Better Custom Business Rebates: Rebates will be offered to non-residential customers based on achieved annual energy savings. The program does not specify eligible measures in order to provide participants maximum flexibility in identifying potential projects. Participants may propose any measure that produces a verifiable natural gas usage reduction, is installed in either existing or new construction applications, has a minimum useful life of seven years and exceeds minimum cost-effectiveness requirements. Qualifying measures include those that target cost-effective natural gas savings, such as retrofits of existing systems, improvements to existing systems and first time installations where the system's efficiency exceeds applicable codes or standard industry practice.

Smarter Greener Better Business Energy Assessments (Pilot): Rebates of up to $5,000 per non-residential customer will be provided to aid in offsetting the cost of conducting a comprehensive energy assessment (energy audit) for all, or a substantial portion of the customer's premises. The audit must meet or exceed the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) Level 2, energy audit standards. The energy audit will study a customer's existing equipment and building envelope and identify potential energy conservation measures to reduce overall energy consumption and increase energy efficiency.

Smarter Greener Better Distributed Generation: The program provides rebates to non-residential customers to achieve significant fuel savings by promoting high efficiency electric generation, providing financial benefits during peak electrical demand periods, and demonstrating the use of new natural gas technologies that are being brought to market. The rebates are based upon the size and efficiency of the system being installed and range from $400 to $500 per kW.

Smarter Greener Better Low-Income Energy Conservation: The Low-Income Energy Conservation (LIEC) program provides income-qualified residential customers with money-saving weatherization measures that reduce energy use in their homes. The program will be available to households with annual incomes less than 150 percent of the federal poverty income guidelines, and will be administered by Southwest Gas in conjunction with the Arizona Commerce Authority (ACA – formerly dba Arizona Energy Office). The ACA manages the

Department of Energy's (DOE) statewide Weatherization Assistance Program in Arizona and sub-contracts with local community agencies to install home weatherization measures. The home weatherization measures focus on four major categories: 1) duct repair; 2) infiltration control; 3) insulation (including attic, duct and floor); and 4) repair or replacement of appliances that are not operational or pose a health hazard.

Smarter Greener Better Energy Education (Pilot): The Energy Education program provides customers with energy efficiency and conservation information and recommendations to encourage the utilization of energy-efficient alternatives. In particular, the program focuses on specific energy efficiency or technology information that will help customers optimize natural gas usage. Print and radio mediums will be used to educate customers on the efficient use of natural gas and energy in general.

Smarter Greener Better Solar Thermal Rebates: Rebates will be offered to residential and non-residential customers on qualified solar thermal systems, used for water heating or pool heating, upon proof-of-purchase and installation. The program objective is to increase public awareness of the benefits of solar thermal systems and to reduce customer natural gas usage by providing economically beneficial rebates to install the systems. Long-term customer energy savings will be realized throughout the life of the solar thermal systems.

To be eligible for participation in any of Southwest Gas' EE and RET programs, all new and existing residential, non-residential and low-income customers must have active Southwest Gas accounts, and residences and facilities must be within Southwest Gas' Arizona service territory. In addition, customers must also contribute towards the funding of these programs through the DSM rate adjuster.

Marketing and Delivery Strategies (Outreach)

To maximize program participation, Southwest Gas' marketing and delivery (i.e., outreach) campaign will focus on making customers and trade allies aware of the benefits of EE products and RET. Southwest Gas plans to integrate information about its programs into a wide range of communications and outreach efforts. Outreach strategies may include:

- On-line program information placed on the Southwest Gas Web site (www.swgas.com).
- Notification of program information and availability in Company newsletters and bill inserts (when applicable).
- Cross-marketing with other Southwest Gas energy efficiency programs and activities (i.e. consumer trade shows, special promotions, direct sales and rebate check inserts).
- Targeted direct mail outreach based on the age of the home and specific market segments.

- Placement of point-of-purchase brochures and advertising with applicable appliance and equipment dealers and contractors.
- Education and awareness meetings with participating trade allies on program aspects.
- Referrals and customer awareness assistance from the Southwest Gas Key Account Management and Service Planning staff (when applicable).
- Targeted outreach to trade organizations, engineers, contractors, energy service companies, and government agencies.

Outreach will include key messages effective for the appropriate target audience, dependent on the specific program. Such messages may include:

- Financial Savings: ENERGY STAR® or high efficiency products are a great investment, lowering monthly utility bills and potentially adding value to a customer's residence or business.
- Good for the Environment: Purchasing products that use less energy decreases the overall demand for energy and water resources and leads to reductions in greenhouse gas emissions.
- Enhanced Performance: Products designed to be energy-efficient frequently have more features, are of higher quality, and perform to overall higher standards by incorporating innovative technologies and designs.
- Enhanced comfort: Enjoy a home with even temperatures throughout – warmer in winter and cooler in summer.
- Peace of Mind: Relax knowing your home has been inspected, performance tested and certified by an independent, professional home energy analyst.
- Healthier Indoor Air: Tightly sealed and performance-tested duct systems help keep the air inside your home clean.
- Enhanced Reputation (as a quality builder or property owner): ENERGY STAR® offers market differentiation with a nationally recognized and trusted label for energy efficiency and quality.
- Increased Customer Satisfaction: High performance ENERGY STAR® homes offer a high quality of living and ownership experience for homebuyers, leading to repeat customers, reduced callbacks and increased referrals.
- Technical Assistance and Best Practices: Partnering with professional home energy rates and utility field staff helps builders stay abreast of best practices based on sound building science.
- Trade Ally Partnership Benefits: By partnering with this program, retailers or installation contractors can benefit from outreach efforts, training opportunities, and technical assistance.
- Environmentally Friendly Business: By selling products and services that emphasize energy efficiency, trade allies can become associated with the image of an environmentally friendly business within their industry.
- Increased Sales: Today's consumers are more knowledgeable of energy efficiency and are more likely to replace an old model product with a new energy-efficient product to benefit from the immediate and long-term

savings. Consumers also place a higher value on energy efficiency as a feature in new appliances.

Each individual program budget includes a category for outreach that will cover specific program pieces used to promote the program. Market transformation education and awareness outreach will incorporate all programs into the overall energy efficiency outreach strategies, and will be budgeted through the *Smarter Greener Better* Energy Education program budget.

Measurement, Verification and Evaluation

All pertinent program rebate information will be tracked in a program specific database. The database will provide a near real-time listing of current customer applications, customer information, equipment information, customer costs, savings, and rebates by measure. Program related information will be tracked and available for reporting, including the number of program participants and measure participation.

Due-diligence application review activities will include verification of a variation of the following items, depending on the program:

- Customer Data: name, site address, account number.
- Sales Data: price, quantity, purchase location.
- Equipment Data: product name, installation date, capacity, efficiency rating, manufacturer, model number, serial number.
- Rebate Data: rebate amount, denial rates.
- Deemed energy savings per installed measure.
- HERS score for ENERGY STAR® Homes.
- Trade ally information.
- Savings and cost estimates.
- Adherence of Measurement and Verification methodologies to standard industry practice.

In order to maintain quality control, Southwest Gas will augment the application process with random telephone and field inspections to ensure program integrity. These verification activities will serve to confirm the following information depending on the program:

- Installation address.
- Equipment make and manufacturer.
- Equipment model number.
- Equipment size.

The verification process will balance the need for randomness, the need to maintain a robust sample size, and the need to verify the compliance of multiple equipment installers. Southwest Gas will evaluate the success of each measure annually and propose changes to the program as necessary.

Conclusion

Southwest Gas believes its Portfolio will benefit its customers, the general public, and the environment. Southwest Gas' Portfolio includes programs that serve all major customer classes – residential, non-residential, and low-income customers, including some hard-to-reach and underserved segments within those classes.

With increased program availability and customer outreach, Southwest Gas hopes to affect greater customer awareness and behavioral change with regard to energy efficiency and renewable energy resource technology. The estimated program results indicate cost-effectiveness and positive benefits for Southwest Gas' customers. The Portfolio is designed to achieve the draft Gas EE Standard and make a positive contribution in terms of saving energy resources, lowering customer utility bills, and improving air quality and water conservation.

RESIDENTIAL ENERGY MANAGEMENT PROGRAMS: *SMARTER GREENER BETTER* RESIDENTIAL REBATES

Program Description

Southwest Gas will offer the *Smarter Greener Better* Residential Rebates program to residential customers in the Company's Arizona service territory. Rebates will be offered to participating customers on qualified, energy-efficient program measures upon proof-of-purchase and installation.

Program Objective

The overall objective of this energy-efficient program is to provide cost-effective savings on customer natural gas usage by offering rebates to qualifying Southwest Gas residential customers. The program seeks to increase customer awareness and the use of energy-efficient practices and new technologies in new and existing residential homes to achieve cost-effective natural gas savings. Southwest Gas projects that approximately 11,800 rebates will be paid to customers under the program.

Qualifying Customers

All active, Southwest Gas residential customers located in the Company's Arizona service territory are eligible to participate in the program, which include single-family home customers. Owners of individually metered multi-family properties located in Southwest's Arizona service territory are also eligible.

Qualifying Measures

Qualifying measure specifications will be reviewed annually and adjusted, as necessary, to reflect changing national efficiency standards. All measures must be natural gas equipment, or be supplied by a natural gas water or space heating unit.

Water heating is the third-largest home-energy cost, after space heating and cooling, and typically accounts for 14 to 20 percent of a residential customer's energy bill. Upgrading to high-efficient water heating measures, including measures supplied by a natural gas water heater, creates the potential for significant energy savings. Additional rebates will be offered for space heating measures, including measures supplied by a natural gas space heater, to encourage the overall use of energy-efficient measures. Rebates provided as part of the *Smarter Greener Better* Residential Rebates program will help offset the incremental costs incurred by upgrading to energy-efficient measures. Qualifying water and space heating measures and specifications are shown in Table 4 below.

Table 4 – Qualifying Measure Specifications: Water and Space Heating Measures

Measure	Specification
WATER AND SPACE HEATING MEASURES	
Storage Water Heater	ENERGY STAR® qualified
Condensing Water Heater	ENERGY STAR® qualified
Tankless Water Heater	ENERGY STAR® qualified
Smart Low-Flow Showerhead	1.5 gpm with ShowerStart Technology
Lavatory Faucet	WaterSense® qualified
Dishwasher - Standard Model (8+ place settings)	ENERGY STAR® qualified
Dishwasher - Compact Model (Less than 8 place settings)	ENERGY STAR® qualified
Clothes Washer	ENERGY STAR® qualified
Clothes Dryer	Model must have a moisture sensor
Furnace	ENERGY STAR® qualified
Boiler	ENERGY STAR® qualified

Southwest Gas will also offer rebates on weatherization measures to encourage customers to improve the energy efficiency and comfort of their homes by sealing and insulating the shell of their homes, including the walls, ceilings, windows and floors. According to the ENERGY STAR® Web site, homeowners can save up to 20 percent on their annual heating and cooling costs (or up to 10 percent on their total annual energy bill) by implementing sealing and insulating measures. Qualifying weatherization measures and specifications are shown in Table 5 below.

Table 5 – Qualifying Measure Specifications: Weatherization Measures

Measure	Specification
WEATHERIZATION MEASURES	
Window	ENERGY STAR® qualified (Southern Climate Zone)
Attic Insulation	Install increment of R-19 or higher (Final condition must be between R-38 and R-60)
Floor Insulation	Install increment of R-6 or higher (Final condition must be between R-13 and R-19)
Wall Insulation	Install increment of R-11 or higher
Duct Insulation & Duct Sealing	Duct Insulation: Install increment of R-6 or higher; Duct Sealing: Performance Tested Comfort Systems (PTCS) standards

Rebate Amounts, Incremental Costs and Annual Savings

Southwest Gas determined the rebate amounts, incremental costs and annual therm savings by reviewing the best available information on incremental cost and energy savings of each measure. Rebate amounts were maintained at the minimum rebate levels needed to constitute a feasible marketing message to positively affect customer behavior and overall program cost-effectiveness. Rebate amounts, incremental costs and annual savings in therms are provided in Tables 6 and 7 below.

Table 6 – Rebate Amounts, Incremental Customer Costs and Annual Savings: Water and Space Heating Measures

Measure	Rebate	Incremental Cost	Unit Gross Annual Savings (therms)
WATER AND SPACE HEATING MEASURES			
Storage Water Heater	$300	$400	30
Condensing Water Heater	$325	$435	57
Tankless Water Heater	$450	$605	60
Smart Low-Flow Showerhead	$30	$40	21
Lavatory Faucet	$50	$75	17
Dishwasher - Standard Model (8+ place settings)	$75	$126	1.3
Dishwasher - Compact Model (Less than 8 place settings)	$75	$100	1
Clothes Washer – Tier 1	$180	$240	12
Clothes Washer – Tier 2	$325	$457	14
Clothes Washer – Tier 3	$350	$485	15
Clothes Dryer	$30	$50	10
Furnace	$400	$550	25
Boiler	$675	$900	78

Table 7 – Rebate Amounts, Incremental Customer Costs and Annual Savings: Weatherization Measures

Measure	Rebate	Incremental Cost	Unit Gross Annual Savings (therms)
WEATHERIZATION MEASURES			
Window	$0.95/SqFt	$1.30/SqFt	0.1417/SqFt
Attic Insulation	$0.20/SqFt	$0.50/SqFt	0.0230/SqFt
Floor Insulation	$0.30/SqFt	$0.42/SqFt	0.0300/SqFt
Wall Insulation	$0.45/SqFt	$0.64/SqFt	0.0230/SqFt
Duct Insulation & Duct Sealing	$450	$657	49

Program Limitations

The following requirement applies for all measures:

- Measures must be purchased new, and may not be used or leased.

Target Audiences

Southwest Gas' primary target audience is residential customers of single-family homes and property owners of individually metered multi-family homes.

Southwest Gas' secondary target audience is trade allies including retailers, distributors, and manufacturers.

Budget

Southwest Gas proposes a total annual estimated budget for this program of $5.5 million. Table 8 below provides the budget details by category.

Table 8 – Total Estimated Budget

Residential Energy Management Programs: *Smarter Greener Better* Residential Rebates	
Description	**Estimated Budget**
Rebates	$3,850,000
Administration	$41,250
Outreach	$330,000
Delivery	$1,196,250
Evaluation	$82,500
Total	**$5,500,000**

Cost-Effectiveness Test Results

The cost-effectiveness test ratio for the *Smarter Greener Better* Residential Rebates program is 1.30. Tables 9 and 10 below show the cost-benefit overview and projected lifetime savings.

Table 9 – Cost-Benefit Overview

Cost-Benefit Overview Lifetime Savings	
Present Value of Savings	$ 8,814,249
Present Value of Costs	$ 6,783,333
Net social benefit	$ 2,030,916
Cost-Effectiveness Ratio	**1.30**

Table 10 – Projected Lifetime Savings

Energy and Environmental Benefit Overview Lifetime Savings	
Natural Gas (Therms)	CO_2 (tons)
12,799,993	74,880

RESIDENTIAL ENERGY MANAGEMENT PROGRAMS: *SMARTER GREENER BETTER* HOMES

Program Description

Southwest Gas will offer the *Smarter Greener Better* Homes program to increase participation of Arizona homebuilders in building more energy-efficient housing. Rebates will be offered to homebuilders for homes certified as ENERGY STAR®. Additional rebates will be offered to homebuilders for installing qualified water heating, space heating and weatherization measures.

ENERGY STAR® certified homes must meet the Environmental Protection Agency (EPA) National Program Requirements, Version 3.0, which will be implemented for all homes permitted and built on or after January 1, 2012. Homes may be certified using the ENERGY STAR® Prescriptive Path, which provides a single set of measures, or the ENERGY STAR® Performance Path, which provides flexibility to select a custom combination of measures. Mandatory requirements involve improvements in the thermal enclosure system, heating, ventilation, and air conditioning (HVAC) system, and water management system. The following checklists, along with verification by a third-party rater, will be utilized to determine completion of the program requirements:

- Thermal Enclosure System Rater Checklist;
- HVAC System Quality Installation Contractor Checklist;
- HVAC System Quality Installation Rater Checklist; and
- Water Management System Builder Checklist.

The ENERGY STAR® homes that meet Version 3.0 of the EPA's program requirements are estimated to be approximately 15 percent more energy efficient than homes built to the International Energy Conservation Code (IECC 2009).

Program Objective

The overall objective of this energy-efficient program is to promote greater residential energy efficiency. ENERGY STAR® has identified and designed a national cost-effective and detailed path to better home performance. Additional rebates are offered to provide cost-effective savings on customer natural gas usage. The program will seek to increase customer awareness and the use of energy-efficient practices and new technologies in new residential homes to achieve cost-effective natural gas savings. Southwest Gas expects the level of participation in this program to be approximately 2,500 homes.

Qualifying Customers

All builders of new single-family subdivision and custom homes and individually metered multi-family homes located within the Company's Arizona service territory and featuring natural gas water heating and space heating are eligible to participate in the program. Builders must register with the EPA as ENERGY

STAR® partners and agree to meet the *Smarter Greener Better* Homes program specifications.

Qualifying Measures

Qualifying measure specifications will be reviewed annually and adjusted, as necessary, to reflect changing national efficiency standards. All measures must be natural gas equipment, or be supplied by a natural gas water or space heating unit. Qualifying measures and specifications are shown in Table 11 below.

Table 11 – Qualifying Measure Specifications

Measure	Specification
ENERGY STAR® Home Certification	ENERGY STAR® qualified
Storage Water Heater	ENERGY STAR® qualified
Condensing Water Heater	ENERGY STAR® qualified
Tankless Water Heater	ENERGY STAR® qualified
Clothes Washer	ENERGY STAR® qualified
Clothes Dryer	Model must have a moisture sensor
Furnace	ENERGY STAR® qualified
Attic Insulation	Final condition must be between R-45 and R-60[1]

[1]Specification is more stringent for the *Smarter Greener Better* Homes program than for the *Smarter Greener Better* Residential Rebates program to encourage the installation of more efficient attic insulation in new homes.

Rebate Amounts, Incremental Costs and Annual Savings

Southwest Gas determined the rebate amounts, incremental costs and annual therm savings by reviewing the best available information on the incremental cost of the ENERGY STAR® home certification and measures, maintaining the minimum rebate levels needed to constitute a feasible marketing message to positively affect customer behavior, and overall program cost-effectiveness. Rebate amounts, incremental costs and annual savings in therms are provided in Table 12 below.

Table 12 – Rebate Amounts, Incremental Customer Costs and Annual Savings

Measure	Rebate	Incremental Cost	Unit Gross Annual Savings (therms)
ENERGY STAR® Home Certification	$450	$1,550	63
Storage Water Heater	$300	$400	30
Condensing Water Heater	$325	$435	57
Tankless Water Heater	$450	$605	60
Clothes Washer – Tier 1	$180	$240	12
Clothes Washer – Tier 2	$325	$457	14
Clothes Washer – Tier 3	$350	$485	15
Clothes Dryer	$30	$50	10
Furnace	$400	$550	25
Attic Insulation	$0.20/SqFt	$0.50/SqFt	0.0230/SqFt

Program Limitations

The following requirements apply:

- Homes must meet ENERGY STAR® requirements for certification.
- ENERGY STAR® home certification must be performed by an approved Residential Energy Service Network (RESNET) rater.
- Measures must be purchased new, and may not be used or leased.

Target Audiences

Southwest Gas' primary target audience is new construction builders of single-family homes and individually metered multi-family homes.

Southwest Gas' secondary target audience is *trade allies* including distributors and manufacturers to help promote the installation of high-efficient measures into residential homes.

Budget

Southwest Gas proposes a total annual estimated budget of $4 million. Table 13 below provides the budget details by category.

Table 13 – Total Estimated Budget

Residential Energy Management Programs: *Smarter Greener Better* Homes	
Description	**Estimated Budget**
Rebates	$3,200,000
Administration	$160,000
Outreach	$480,000
Delivery	$80,000
Evaluation	$80,000
Total	**$4,000,000**

Cost-Effectiveness Test Results

The cost-effectiveness test ratio for the *Smarter Greener Better* Homes program is 2.30. Tables 14 and 15 below show the cost-benefit overview and projected lifetime savings.

Table 14 – Cost-Benefit Overview

Cost-Benefit Overview Lifetime Savings	
Present Value of Savings	$ 11,653,145
Present Value of Costs	$ 5,066,667
Net social benefit	$ 6,586,479
Cost-Effectiveness Ratio	**2.30**

Table 15 – Projected Lifetime Savings

Energy and Environmental Benefit Overview Lifetime Savings	
Natural Gas (Therms)	CO_2 (tons)
15,960,008	93,366

RESIDENTIAL ENERGY MANAGEMENT PROGRAMS:
SMARTER GREENER BETTER RESIDENTIAL ENERGY ASSESSMENTS (PILOT)

Program Description

Southwest Gas will offer the *Smarter Greener Better* Residential Energy Assessments program to all residential customers in the Company's Arizona service territory. Energy assessments (energy audits) will be offered to customers for a nominal fee, with the additional costs of the audits, including direct-install measures, funded by Southwest Gas and other partnering utilities. Southwest Gas believes that partnering with other utilities that also serve in Southwest Gas' Arizona service territory for a residential energy audit program would prove more successful than trying to implement a stand-alone program offered only by Southwest Gas.

Southwest Gas has engaged in preliminary conversations with APS, SRP and TEP regarding partnership opportunities to implement a residential energy audit program in the Phoenix and Tucson areas. APS, SRP and TEP all serve in Southwest Gas' Arizona service territory and have already developed their own residential energy audit programs.

APS launched its Home Performance with ENERGY STAR® (HPwES) program on March 17, 2010, which provides customers with an energy audit for $99 with the remaining cost paid by APS. Along with a comprehensive home assessment, contractors also audit the A/C system, ductwork, insulation and building envelope; perform a blower door test; replace up to 10 incandescent light bulbs with energy-efficient compact fluorescent light bulbs (CFL); install a low-flow showerhead; and install three low-flow faucet aerators. Customers who participate in the HPwES program also have access to other APS residential rebate measures such as Consumer Products or Appliance Recycling, which are all recommended when appropriate as part of the energy audit. SRP expects to launch a program similar to that of APS in November 2010.

TEP developed a program similar to the HPwES program offered by APS, providing energy audits to customers for a nominal amount, which includes direct-install measures such as CFLs, power strips, low-flow showerheads and low-flow faucet aerators. The TEP Existing Homes program is currently awaiting Commission approval.

Southwest Gas proposes to partner with APS, SRP and/or TEP to implement a residential energy audit program available to the Company's residential customers, by funding a portion of contractor costs, providing direct-install measures such as low-flow showerheads and lavatory faucet accessories (aerators) and providing information for Southwest Gas' *Smarter Greener Better* Residential Rebates program for homes that have natural gas water heating and space heating.

Program Objective

The overall objective of this energy-efficient program is to help customers improve the comfort, energy efficiency, safety and durability of their homes while also helping to preserve the environment. The program seeks to increase customer awareness and the use of energy-efficient practices and new technologies in existing homes to achieve cost-effective natural gas savings. Approximately 500 Southwest Gas customers are expected to participate in the program.

Qualifying Customers

All active, Southwest Gas residential customers within the service territories of APS, SRP and TEP are eligible to participate in the program. Additional mutually agreed upon program terms will be further determined by Southwest, APS, SRP and TEP.

Energy audits and measure installations will only be funded by Southwest Gas for homes with gas water and space heating.

Qualifying Measures

Qualifying measures and specifications are shown in Table 16 below.

Table 16 – Qualifying Measure Specifications

Measure	Specification
Smart Low-Flow Showerhead	1.5 gpm with ShowerStart Technology
Lavatory Faucet Accessory (Aerator)	WaterSense® qualified

Rebate Amounts, Incremental Costs and Annual Savings

Southwest Gas determined the rebate amounts, incremental costs and therm savings by reviewing the best available information on incremental cost and energy savings of the measures. The measures will be installed for participating customers at no-cost. Rebate amounts, incremental costs and annual savings in therms are provided in Table 17 below.

Table 17 – Rebate Amounts, Incremental Customer Costs and Annual Savings

Measure	Rebate[1]	Incremental Cost	Unit Gross Annual Savings (therms)
Smart Low-Flow Showerhead	-	$40	21
Lavatory Faucet Accessory (Aerator)	-	$5	17

[1]Measures will be installed for participating customers at no-cost and therefore, no rebate will be paid to customers.

Program Limitations

The following requirements apply:

- Only one (1) energy audit will be provided per residence.
- Smart low-flow showerheads will be limited to one (1) per residence.
- Lavatory faucet accessories will be limited to three (3) per residence.

Additional mutually agreed upon program limitations will be further determined by Southwest, APS, SRP and TEP.

Target Audiences

Southwest Gas' primary target audience is its residential consumers in the APS, SRP and TEP service territories.

Budget

Southwest Gas proposes a total annual estimated budget for this program of $700,000. Table 18 below provides the budget details by category.

Table 18 – Total Estimated Budget

Residential Energy Management Programs: *Smarter Greener Better* Residential Energy Assessments	
Description	**Estimated Budget**
Rebates[1]	$350,000
Administration	$17,500
Outreach	$105,000
Delivery	$210,000
Evaluation	$17,500
Total	**$700,000**

[1]Rebates budget category for this program includes the cost of direct-install measures.

Cost-Effectiveness Test Results

Since this is a pilot program, Southwest Gas is not required to demonstrate cost-effectiveness test results. Notwithstanding, Southwest Gas believes participating customers will gain awareness of their energy consumption and ways to increase the energy efficiency of their homes, and will obtain information regarding all of the Southwest Gas' energy efficiency programs. As such, Southwest Gas believes that energy savings will occur as customers become more aware of how they can reduce their energy consumption by participating in any of the Company's energy efficiency programs.

NON-RESIDENTIAL ENERGY MANAGEMENT PROGRAMS: *SMARTER GREEN BETTER* BUSINESS REBATES

Program Description

Southwest Gas will offer the *Smarter Greener Better* Business Rebates program to both new and existing non-residential customers. It is designed to encourage the purchase of high efficiency equipment to reduce energy consumption. Rebates are available for purchasing and installing qualifying natural gas high efficiency measures at individually and master metered commercial properties. Qualifying measures include those that target cost-effective natural gas savings, including retrofits of existing systems and first time installations. Rebates will be paid directly to participating customers.

The equipment utilized by non-residential customers typically uses a large amount of energy; therefore, the potential for energy savings can be significant. The increased initial cost of high efficiency products is a barrier that can often be overcome with appropriate financial incentives, coupled with education on the benefits of greater energy efficiency. Southwest Gas' *Smarter Green Better* Business Rebates combined with the overall Business Energy Management programs will achieve the necessary market transformation and greater energy savings.

Program Objective

The overall objective of this energy-efficient program is to reduce customer natural gas usage by offering prescriptive rebates to non-residential customers in the Company's Arizona service territory. The program seeks to increase non-residential customer awareness of the benefits of using energy-efficient practices and new technologies to achieve cost-effective natural gas savings. Southwest Gas projects that approximately 700 rebates will be paid to customers under the program.

Qualifying Customers

All active, Southwest Gas non-residential customers located in the Company's Arizona service territory are eligible to participate in the program. Owners of master metered multi-family properties located in Southwest's Arizona service territory are also eligible.

Qualified Measures

Qualifying measure specifications will be reviewed annually and adjusted, as necessary, to reflect changing national efficiency standards. All measures must be natural gas equipment, or be supplied by a natural gas water or space heating unit.

High efficiency space and water heating units achieve greater efficiencies due to features such as: electronic ignition, which eliminates the need to have the pilot burning all the time; new combustion technologies that extract more heat from the same amount of fuel; and sealed combustion that uses outside air to fuel the burners, reducing drafts and improving safety. Qualifying water and spacing heating measures and specifications are shown below in Table 19.

Table 19 – Qualifying Measure Specifications: Water and Space Heating Measures

Measure	Specification
WATER AND SPACE HEATING MEASURES	
Storage Water Heater	90% thermal efficiency or higher
Tankless Water Heater	ENERGY STAR® qualified
Clothes Washer	ENERGY STAR® qualified
Non-condensing Boiler	85% combustion efficiency or higher; must be installed with modulating burner control and O2 trim control pad (on boilers >= 10MMBtu)
Condensing Boiler	92% thermal efficiency or higher; Certified by third party
Boiler - Tune-up	9 point inspection
Boiler - Modulating Burner Control	Modulating burner control must be installed and must have a turndown ratio of 5:1 or higher
Boiler - O2 Trim Control Pad	O2 trim control pad must be installed
Boiler - Steam Trap Survey	Steam trap survey must be performed
Boiler - Steam Trap	Steam trap must be installed, replaced or repaired to original operating function

Choosing high efficiency commercial food service equipment can help restaurant owners and operators improve the performance of their facilities and equipment while reducing energy costs. According to the ENERGY STAR® Web Site, restaurants that invest strategically can cut utility costs 10 to 30 percent annually without sacrificing service, quality, style or comfort – while making significant contributions to a cleaner environment. Qualifying commercial food service measures and specifications are shown below in Table 20.

Table 20 – Qualifying Measure Specifications: Food Service Measures

Measure	Specification
FOOD SERVICE MEASURES	
Griddle	ENERGY STAR® qualified
Steamer	ENERGY STAR® qualified
Fryer	ENERGY STAR® qualified
Large Vat Fryer	ENERGY STAR® qualified
Convection Oven	ENERGY STAR® qualified
Combination Oven	40% combustion efficiency or higher
Conveyor Oven	42% energy efficiency or higher; idle energy rate of ≤ 57,000 Btu/h, utilizing ASTM Standard F1817. Multiple-deck oven configurations are paid per qualifying oven deck.
Dishwasher (Low Temp): Under Counter	ENERGY STAR® qualified
Dishwasher (Low Temp): Door Type	ENERGY STAR® qualified
Dishwasher (Low Temp): Single Tank Conveyor	ENERGY STAR® qualified
Dishwasher (Low Temp): Multi Tank Conveyor	ENERGY STAR® qualified
Dishwasher (High Temp/Gas Booster Heater): Under Counter	ENERGY STAR® qualified
Dishwasher (High Temp/Gas Booster Heater): Door Type	ENERGY STAR® qualified
Dishwasher (High Temp/Gas Booster Heater): Single Tank Conveyor	ENERGY STAR® qualified
Dishwasher (High Temp/Gas Booster Heater): Multi Tank Conveyor	ENERGY STAR® qualified

Weatherization of business facilities leads to using less energy, and causes fewer greenhouse gas emissions. In addition, weatherized facilities are often less expensive to operate. According to the ENERGY STAR® Web site, energy use in commercial buildings and manufacturing plants accounts for nearly half of all energy consumption in the U.S. at a cost of over $200 billion per year, more than any other sector of the economy. Commercial and industrial facilities are also responsible for nearly half of U.S. greenhouse gas emissions which contribute to global warming. Qualifying weatherization measures and specifications are shown below in Table 21.

Table 21 – Qualifying Measure Specifications: Weatherization Measures

Measure	Specification
WEATHERIZATON MEASURES	
Windows	U Factor 0.29 and SHGC[1] 0.35
Insulation - Roof/Ceiling	R-38
Floor Insulation	R-24
Air Curtain	Minimum 20 hour/week usage

[1]Solar Heat Gain Coefficient

In addition to the measures shown in Tables 19, 20 and 21, all measures included in the *Smarter Greener Better* Residential Rebates program are available to non-residential Southwest Gas customers under the *Smarter Greener Better* Business Rebates program. This will allow Southwest Gas to pay rebates to small commercial customers that install residential-size equipment in their facilities, and to encourage participation across the entire non-residential market sector.

Rebate Amounts, Incremental Costs and Annual Savings

Southwest Gas determined rebate amounts, incremental costs and annual therm savings by reviewing the best available information on incremental cost and energy savings of each measure. Rebate amounts were maintained at the minimum rebate levels needed to constitute a feasible marketing message to positively affect customer behavior and overall program cost-effectiveness.

Due to the significant initial cost of high efficiency equipment, rebates equating to at least 75 percent of the incremental cost are vital to the success of this program and to the desired market transformation. Rebate amounts, incremental costs and annual savings in therms are provided in Tables 22, 23 and 24 below.

Table 22 – Rebate Amounts, Incremental Customer Costs and Annual Savings: Water and Space Heating Measures

Measure	Rebate	Incremental Customer Cost ($/unit)	Unit Gross Annual Savings (therms)
WATER AND SPACE HEATING MEASURES			
Storage Water Heater	$1,100	$1,592	266
Tankless Water Heater	$450	$605 - $1,635	78
Clothes Washer	$150	$258	22
Non-condensing Boiler	$1/MBTUH	$500 - $30,000	30 - 700
Condensing Boiler	$1.25/MBTUH	$1,600 - $100,000	94 - 2150
Boiler - Tune-up	$375	$500	780
Boiler - Modulating Burner Control	$10,000	$35,000	1,170
Boiler - O2 Trim Control Pad	$10,000	$16,000	780
Boiler - Steam Trap Survey	$750	$1,500	780
Boiler - Steam Trap	$250	$500	780

Table 23 – Rebate Amounts, Incremental Customer Costs and Annual Savings: Food Service Measures

Measure	Rebate	Incremental Customer Cost ($/unit)	Unit Gross Annual Savings (therms)
FOOD SERVICE MEASURES			
Griddle	$600	$800	149
Steamer	$2,700	$3,732	334
Fryer	$1,350	$1,800	360
Large Vat Fryer	$1,350	$1,800	360
Convection Oven	$1,100	$1,465	306
Combination Oven	$1,100	$1,519	403
Conveyor Oven	$900	$1,247	845
Dishwasher (Low Temp): Under Counter	$750	$1,000	55
Dishwasher (Low Temp): Door Type	$1,500	$2,000	554
Dishwasher (Low Temp): Single Tank Conveyor	$2,250	$3,000	520
Dishwasher (Low Temp): Multi Tank Conveyor	$3,000	$4,000	798
Dishwasher (High Temp/Gas Booster Heater): Under Counter	$750	$1,000	326
Dishwasher (High Temp/Gas Booster Heater): Door Type	$1,575	$2,100	608
Dishwasher (High Temp/Gas Booster Heater): Single Tank Conveyor	$2,250	$3,000	762
Dishwasher (High Temp/Gas Booster Heater): Multi Tank Conveyor	$3,000	$4,000	1,489

Table 24 – Rebate Amounts, Incremental Customer Costs and Annual Savings: Weatherization Measures

Measure	Rebate	Incremental Customer Cost ($/unit)	Unit Gross Annual Savings (therms)
WEATHERIZATON MEASURES			
Windows	$3.00/SqFt	$4/SqFt	0.06/SqFt
Insulation - Roof/Ceiling	$0.37/SqFt	$0.49/SqFt	0.01/SqFt
Floor Insulation	$0.37/SqFt	$0.49/SqFt	0.02/SqFt
Air Curtain	$2,625	$2800 - $5,000	1,449

Program Limitations

The following requirements apply:

- Measures must be purchased new, and may not be used or leased.
- Customers may receive one (1) boiler tune-up rebate per boiler during a two-year period.
- Skylights do not qualify for rebates. Site built window systems must have a non-metal frame or include a thermal break within the frame to qualify for a rebate.
- Rebates for retrofit installations of wall and roof insulation apply only to the first increment of R-10 insulation added to the wall or roof. Additional increments of R-10 beyond the first are not eligible to receive a rebate.

Target Audiences

Southwest Gas' primary target audience is all non-residential customers located in Southwest's Arizona service territory.

Southwest Gas' secondary target audience is trade allies including retailers, distributors, and manufacturers.

Budget

Southwest Gas proposes a total estimated annual budget for this program of $2 million. Table 25 below provides the budget details by category.

Table 25 - Total Estimated Budget

Non-Residential Energy Management Programs: *Smarter Greener Better* Business Rebates	
Description	**Estimated Budget**
Rebates	$1,100,000
Administration	$90,000
Outreach	$225,000
Delivery	$495,000
Evaluation	$90,000
Total	**$2,000,000**

Cost-Effectiveness Test Results

The cost-effectiveness test ratio for the *Smarter Greener Better* Business Rebates program is 2.12. Tables 26 and 27 show the cost-benefit overview and projected lifetime savings.

Table 26 – Cost-Benefit Overview

Cost-Benefit Overview Lifetime Savings	
Present Value of Savings	$ 5,788,535
Present Value of Costs	$ 2,733,333
Net social benefit	$ 3,055,202
Cost-Effectiveness Ratio	**2.12**

Table 27 – Projected Lifetime Savings

Energy and Environmental Benefit Overview Lifetime Savings	
Natural Gas (Therms)	CO_2 (tons)
8,699,997	50,895

NON-RESIDENTIAL ENERGY MANAGEMENT PROGRAMS: *SMARTER GREENER BETTER* CUSTOM BUSINESS REBATES

Program Description

Southwest Gas will offer the *Smarter Greener Better* Custom Business Rebates program to both new and existing non-residential customers located in the Company's Arizona service territory. The program is designed to obtain verifiable, cost-effective, and on-going natural gas savings. Program participants will provide submittals for a specific quantity of natural gas reduction through the installation of program measures in return for a fixed price per therm rebate up to a cap equal to a percentage of the eligible incurred project cost.

The program requires customers to submit specific information for each project and to conduct energy engineering and commissioning at their own cost. For purposes of this program, commissioning includes verification of the project savings and confirmation that the measures are operating as intended. All commissioning activities including verification and confirmation will be the customer's responsibility and will all be reviewed by Southwest Gas. This project information will be provided in two reports: the Pre-Installation Report (PIR) and Post-Installation Report (POR). Rebates will be paid directly to participating customers who meet the program requirements.

The program is designed to leverage the outreach and existing delivery channels of local businesses, wholesalers and retailers, as well as Southwest Gas Key Account Management and Service Planning personnel.

Program Objective

The *Smarter Greener Better* Custom Business Rebates program seeks to increase customer awareness of energy-efficient commercial and industrial technologies and to achieve cost-effective natural gas savings. Additional objectives of the program include: encouraging private sector delivery of energy efficiency products and services; achieving customer gas and cost savings; and significantly reducing barriers to participation by streamlining program procedures and measurement and verification (M&V) requirements. Approximately 15 Southwest Gas customers are expected to participate in the program.

Qualifying Customers

All active, Southwest Gas non-residential customers located in the Company's Arizona service territory are eligible to participate in the program.

Qualifying Measures

Qualifying measures include those that target cost-effective natural gas savings, including retrofits of existing systems, improvements to existing systems, and first time installations where the system's efficiency exceeds applicable codes or standard industry practice. The program does not specify eligible measures in order to provide program participants maximum flexibility in identifying potential projects. Participants may propose any measure that: produces a verifiable natural gas usage reduction, is installed in either existing or new construction applications, has a minimum useful life of seven years, and exceeds minimum cost-effectiveness.

Rebate Amounts

Subsequent to approval of a PIR, a customer will be required to enter into a Program Agreement with Southwest Gas in order to be eligible for rebates.

The program's rebate levels for the installation of measures pursuant to the Program Agreement shall be the lesser of (a) $1.00/therm per first year annual therm savings as determined solely by Southwest Gas; or (b) 50 percent of the eligible project cost as determined solely by Southwest Gas.

Commissioning Opt-Out: If a customer chooses not to conduct the commissioning activities, the annual natural gas savings and the eligible measure costs will all be reduced by 20 percent and the rebate will be re-calculated using the methodology specified above. Measures that are commissioned after a customer has "opted–out" of commissioning are not eligible for additional rebates.

Program Limitations

Measures that are excluded from this program include those that:

- Are offered through the *Smarter Greener Better* Business Rebates program.
- Rely solely on changes in customer behavior.
- Merely terminate existing processes, facilities, or operations.
- Are not fuel neutral.
- Are required by state or federal law, building or other codes, or are standard industry practice.
- Qualify for rebates through any other EE or RET program offered by Southwest Gas.

Project Identification (PIR)

The first report required prior to project installation is titled the PIR. To assess projects for eligibility and program approval, the customer must submit the following information:

- Identification of the project site and account information.
- An energy analysis report submitted by the customer, adhering to industry standard practices for energy engineering and containing the following:
    - Descriptions of the proposed set of energy efficiency measures;
    - Summary of the energy savings and eligible project costs;
    - Baseline operational conditions and energy consumption data supported by spot or short-term measurements, trended data, or accepted engineering practices for each proposed measure;
    - A description of the calculations and methodologies that support the baseline, proposed operation, natural gas savings, and eligible costs;
    - Supporting documentation for the estimated eligible measure costs;
    - Any additional information necessary for the review of the project such as calculation spreadsheets, simulation models, vendor quotes, and equipment specifications; and
    - Commissioning plan for verifying the proposed measure operation and energy savings.
- Brief summary of the anticipated project timeline.

Following the submission of a PIR but prior to project installation, the Company will conduct any site inspection activities necessary to confirm the baseline conditions and anticipated project scope. Once the PIR is reviewed and approved, the Company will send an approval letter to the customer containing project review results and the anticipated rebate amount.

If the project does not meet the eligibility requirements, or if the PIR is incomplete or of insufficient quality, the PIR will be rejected. The customer may address deficiencies in the PIR and resubmit for program consideration.

The customer is responsible for submitting the PIR and allowing time for the appropriate review prior to purchasing equipment. Projects that have been purchased or installed prior to approval of the PIR will be reviewed for program eligibility and will be subject to all program requirements before becoming eligible for rebates under the program.

Project Commissioning

This step ensures that the predicted energy savings are being achieved and that the system's operation and performance are optimized. Commissioning is the responsibility of the building owner and can be completed by the customer's internal staff or installing contractor. Commissioning is required to receive a full rebate.

Project-specific commissioning procedures may be classified according to three distinct approaches, representing increasing levels of detail and rigor.

- Deemed savings: Savings values are stipulated based on engineering calculations using typical equipment characteristics and operating schedules developed for particular applications, without on-site testing or metering.
- Simple M&V: Savings values are based on engineering calculations using typical equipment characteristics and operating schedules developed for particular applications, with some short-term testing or simple long-term metering.
- Full M&V: Savings values are estimated using a higher level of scrutiny than the deemed savings or simple M&V approaches, through the application of metering, billing analysis, and/or computer simulation.

Customers must submit a commissioning plan for each project, with the PIR. Commissioning procedures will vary in detail and thoroughness depending on the measures installed. The level of detail and rigor of the commissioning plan is determined by the project size and risk to rebates and project savings. Southwest Gas will specify the approach required in the commissioning plan.

If the customer and program administrator agree to pursue the "Full M&V" or "Simple M&V" options, the commissioning must follow the International Performance Measurement and Verification Protocol.

Commissioning must be completed when the building is fully occupied and when the system's operation can be verified. Some measures may require operation during the cooling or heating seasons and the time required to complete commissioning activities will range from a few days up to a few months.

Project Installation (POR)

After the Company approves the PIR, the customer will install the identified measures. Upon completion of each approved project, the customer will begin the commissioning phase in accordance with the commissioning plan previously approved by the Company. Thereafter, the customer must submit a POR to the Company that includes the following:

- A report summarizing the results of the commissioning activities and as-installed operation of the measures;
- Additional information necessary for the review of the project such as final calculation spreadsheets, simulation models, invoices, and equipment specifications;
- Verified natural gas reduction;
- Verified eligible project costs; and
- Estimated rebate amount.

Once the POR is reviewed and approved, the Company will send an approval letter to the customer containing project review results and the rebate amount.

If the project does not meet the eligibility requirements, if the project is not of sufficient quality, or if the POR is incomplete, the POR will be rejected. The customer may address deficiencies in the POR and resubmit for program consideration.

Target Audiences

Southwest Gas' primary target audience is all non-residential customers located in the Company's Arizona service territory.

Southwest Gas' secondary target audience is trade allies including retailers, distributors and manufacturers.

Budget

Southwest Gas proposes a total estimated annual budget for this program of $150,000. Table 28 below provides the budget details by category.

Table 28 - Total Estimated Budget

Non-Residential Energy Management Programs: *Smarter Greener Better* Custom Business Rebates	
Description	**Estimated Budget**
Rebates	$39,000
Administration	$5,550
Outreach	$27,750
Delivery	$72,150
Evaluation	$5,550
Total	**$150,000**

Cost-Effectiveness Test Results

The cost-effectiveness test ratio for the *Smarter Greener Better* Custom Business Rebates program is 1.11. Tables 29 and 30 below show the cost-benefit overview and projected lifetime savings.

Table 29 – Cost-Benefit Overview

Cost-Benefit Overview Lifetime Savings	
Present Value of Savings	$ 179,644
Present Value of Costs	$ 161,250
Net social benefit	$ 18,394
Cost-Effectiveness Ratio	**1.11**

Table 30 – Projected Lifetime Savings

Energy and Environmental Benefit Overview Lifetime Savings	
Natural Gas (Therms)	CO_2 (tons)
270,000	1,580

NON-RESIDENTIAL ENERGY MANAGEMENT PROGRAMS: *SMARTER GREENER BETTER* BUSINESS ENERGY ASSESSMENTS (PILOT)

Program Description

Southwest Gas will offer the *Smarter Greener Better* Business Energy Assessments program as a pilot program for all non-residential customers in the Company's Arizona service territory. The program provides rebates of up to $5,000 per customer to aid in offsetting the cost of conducting an energy assessment (energy audit) and implementing an energy saving project identified by the audit for all or a substantial portion of the customer's premises. It is estimated that a comprehensive energy audit for some customers in the larger customer classes could cost up to $50,000, depending on the size and complexity of the customer's operation.

The purpose of the energy audit is to identify potential energy conservation measures through the study of the customer's existing equipment and building envelope. By having this type of detailed information, the customer can make informed decisions about how to reduce energy usage through conservation, employing new technologies, replacing inefficient equipment, and/or modifying business practices.

Program Objective

The overall objective of the *Smarter Greener Better* Business Energy Assessments program is to provide rebates for non-residential customers to conduct a comprehensive energy audit that meets or exceeds the ASHRAE Level 2 standards. The ASHRAE Level 2 energy audit includes an energy survey and engineering analysis. This level of audit will educate the customer about reducing overall energy consumption and increasing energy efficiency.

The program has various benefits for commercial customers, including:

- Awareness of how the customer uses energy;
- Awareness of largest energy consuming processes;
- Information to justify energy-saving initiatives for company management;
- Awareness of new technologies;
- Reduced overall energy consumption;
- Lower energy costs to customer; and
- Lower environmental emissions.

The program seeks to increase customer awareness and use of energy-efficient practices and new technologies and will be promoted with the *Smarter Greener Better* Business Rebates program. Approximately 40 customers are expected to participate in the program.

Qualifying Customers

All active, Southwest Gas non-residential customers located in the Company's Arizona service territory are eligible to participate in the program.

Qualifying Measures

The scope of the audit must meet or exceed the Level 2 audit criteria set forward by ASHRAE. The audit results will be the property of the customer. However, to be eligible for the program rebate, Southwest Gas must pre-approve the auditor and the scope of the audit being performed. At the conclusion of the audit, a signed summary of the audit report must be provided to Southwest. This information will be kept confidential and will only be used by the Company as a gauge for measuring the effectiveness of the *Smarter Greener Better* Business Energy Assessments program.

Rebate Amounts, Incremental Costs and Annual Savings

Southwest Gas will reimburse customers 25 percent, up to a maximum of $2,500, of the cost of the energy audit. For customers that implement an energy saving project or projects identified by the energy audit, Southwest Gas will reimburse an additional 25 percent, up to a maximum of $2,500, of the cost of the energy audit. The incremental cost of the energy audit will depend on the size of the facility and amount of heating and cooling equipment it has. Southwest Gas is launching the *Smarter Greener Better* Business Energy Assessments program as a pilot program with no energy savings tied to it. However, the Company anticipates that the program will serve as a tool for promoting the *Smarter Green Better* Business Rebates program, to help customers identify and achieve the greatest amount of energy savings.

Program Limitations

The following requirements apply:

- Energy audits must be performed by a certified energy auditor or firm not affiliated with the customer.
- Energy audits and the energy auditors must be approved by Southwest Gas to qualify.

Target Audiences

Southwest Gas' primary target audience is all non-residential customers located in the Company's Arizona service territory.

Southwest Gas' secondary target audience is commercial audit contractors.

Budget

Southwest Gas proposes a total annual estimated budget for this program of $700,000. Table 31 below provides the budget details by category.

Table 31 – Total Estimated Budget

Non-Residential Energy Management Programs: *Smarter Greener Better* Business Energy Assessments	
Description	**Estimated Budget**
Rebates	$350,000
Administration	$17,500
Outreach	$105,000
Delivery	$175,000
Evaluation	$52,500
Total	**$700,000**

Cost-Effectiveness Test Results

Since this is a pilot program, Southwest Gas is not required to demonstrate cost-effectiveness test results. Notwithstanding, Southwest Gas believes participating customers will gain awareness of their energy consumption and ways to take advantage of many of the recommendations outlined in the energy audits, as well as obtain information regarding all of the Southwest Gas' energy efficiency programs. Ultimately, as companies replace equipment and refine business practices, many of the measures identified by the audits are likely to be implemented. Consequently, Southwest Gas believes that energy savings will occur as customers become more aware of how they can reduce their energy consumption by participating in any of the Company's energy efficiency programs.

NON-RESIDENTIAL ENERGY MANAGEMENT PROGRAMS: *SMARTER GREENER BETTER* DISTRIBUTED GENERATION

Program Description

Southwest Gas will offer the *Smarter Greener Better* Distributed Generation program to those large commercial and industrial customers in the Company's Arizona service territory. Distributed generation is defined as localized, on-site mechanical or electrical power generation, typically deployed through the use of modulating technologies. The *Smarter Greener Better* Distributed Generation program will encourage the installation of high efficiency Combined Heat and Power (CHP) technologies.

CHP describes any system that uses a primary energy source to simultaneously produce electric energy and useful process heat. Most CHP systems are configured to generate electricity, recapture the waste heat, and use that heat for space heating, water heating, industrial steam loads, air conditioning, humidity control, water cooling, product drying, or any other thermal need. Alternately, CHP may use excess heat from industrial processes and convert it into electricity.

Program Objective

The overall objective of the *Smarter Greener Better* Distributed Generation program is to provide a rebate for large energy users to achieve significant fuel savings by promoting high efficiency electric generation, providing financial benefits during peak electrical demand periods, and demonstrating the use of new natural gas technologies which are being brought to market.

The market potential for CHP is substantial and could contribute significantly to energy conservation in Arizona, and could accrue significant societal and customer benefits as well. CHP is an affordable, clean, and reliable piece of the puzzle for meeting Arizona's energy needs and should be considered a key component to economic strategies.

The program has various benefits for large commercial and industrial customers, including:

- Awareness of how the customer uses energy;
- Awareness of largest energy consuming processes;
- Information to justify energy-saving initiatives for company management;
- Awareness of new technologies;
- Reduced overall energy consumption;
- Lower energy costs to customer; and
- Lower environmental emissions.

The program seeks to increase customer awareness and use of energy-efficient practices and new technologies. Southwest Gas anticipates that approximately 2 customers will participate in the program in the first year.

Qualifying Customers

All active, Southwest Gas non-residential customers located in the Company's Arizona service territory are eligible to participate in the program, provided they contribute to the Company's DSM rate adjuster. The program will focus on large commercial and industrial customers with the potential to utilize CHP applications. Municipalities, schools, restaurants, hospitals, and hotels are all viable candidates for CHP.

To qualify for rebates, customers must complete a preliminary feasibility study. The preliminary feasibility study is necessary to identify those customers that are good candidates for a CHP system. To help customers obtain the preliminary feasibility study, Southwest Gas will be working with the U.S. Department of Energy Intermountain Clean Energy Application Center, which offers the studies at no cost.

Qualifying Measures

The program's qualifying measures are listed below:

- $500 per kW (or equivalent for mechanical power) for CHP systems with a fuel efficiency of at least 70 percent, up to a maximum of 50 percent of the installed cost of any project;

- $450 per kW (or equivalent for mechanical power) for CHP systems with a fuel efficiency of at least 65 percent, up to a maximum of 50 percent of the installed cost of any project;

- $400 per kW (or equivalent for mechanical power) for CHP systems with a fuel efficiency of at least 60 percent, up to a maximum of 50 percent of the installed cost of any project.

Currently, the American Recovery and Reinvestment Act (ARRA) funding administered by the ACA provides an additional $300 per kW (or equivalent for mechanical power) for CHP projects. The addition of the ARRA funds has begun to generate additional interest in the Company's existing Distributed Generation program. The ARRA funds are projected to be available through 2012.

Rebates Amounts, Incremental Cost and Annual Savings

Southwest Gas determined the rebate amounts, incremental costs and annual therm savings by reviewing the best available information on incremental cost and average energy savings of CHP systems. The annual energy savings of a

CHP system will vary dramatically depending upon the size and efficiency of the installed system. Rebate amounts and incremental costs are provided in Table 32 below.

Table 32 – Rebate Amounts and Incremental Customer Costs

Specification	Rebate[1]	Incremental Cost
60% minimum fuel efficiency	$400/kW	$1,000/kW
65% minimum fuel efficiency	$450/kW	$1,000/kW
70% minimum fuel efficiency	$500/kW	$1,000/kW

[1]Rebate amounts are per kW or equivalent kW for mechanical power and are up to a maximum of 50 percent of the installed cost of any project.

Additional rebates will be available for qualifying customers to perform an engineering design study. The rebate amount will be 75 percent of the cost of the engineering study, up to a maximum of $3,000.

Program Limitations

The following requirements apply:

- All facilities must be reviewed by Southwest Gas or its designee.
- Total rebates from Southwest Gas and ARRA funds shall not exceed 75 percent of the total installation costs.

Target Audiences

Southwest Gas' primary target audience is large commercial and industrial customers.

Budget

Southwest Gas proposes a total annual estimated budget for this program of $1.75 million. Table 33 below provides the budget details by category.

Table 33 – Total Estimated Budget

Non-Residential Energy Management Programs: *Smarter Greener Better* Distributed Generation	
Description	**Estimated Budget**
Rebates	$1,200,000
Administration	$55,000
Outreach	$220,000
Delivery	$220,000
Evaluation	$55,000
Total	**$1,750,000**

Cost-Effectiveness Test Results

The cost-effectiveness test ratio for the *Smarter Greener Better* Distributed Generation program is 2.90. Tables 34 and 35 below show the cost-benefit overview and projected lifetime savings.

Table 34 – Cost-Benefit Overview

Cost-Benefit Overview Lifetime Savings	
Present Value of Savings	$ 7,106,498
Present Value of Costs	$ 2,450,000
Net social benefit	$ 4,656,498
Cost-Effectiveness Ratio	**2.90**

Table 35 – Projected Lifetime Savings

Energy and Environmental Benefit Overview Lifetime Savings	
Natural Gas (Therms)	CO_2 (tons)
10,320,008	60,372

LOW-INCOME PROGRAM:
SMARTER GREENER BETTER
LOW-INCOME ENERGY CONSERVATION

Program Description

Southwest Gas will offer the Low-Income Energy Conservation (LIEC) program to income-qualified residential customers in the Company's Arizona service territory. The program targets low-income customers that require weatherization for their homes and/or emergency assistance to pay their utility bills. The program assists low-income households who lack the resources to invest in energy efficiency, and uses the most advanced technologies and testing protocols available in the housing industry.

The weatherization component of the program includes both home weatherization and consumer education, in order to cost-effectively reduce energy usage in income-qualified residences. Weatherization provides a lasting solution by addressing the causes of high energy bills. Energy improvements, such as adding insulation to the walls and roofs, can last for the lifetime of the dwelling. Furthermore, energy efficiency results can be expected year after year.

Program measures fall into four major categories: 1) duct repair; 2) infiltration control; 3) insulation (including attic, duct and floor); and 4) repair or replacement of appliances that are not operational or pose a health hazard. Typical weatherization services include installing insulation, sealing, tuning and repairing cooling and heating systems, and mitigating heat gain through windows, doors, and other infiltration points.

In addition to weatherization, there is also a bill assistance component to the LIEC program. The bill assistance funding will be available for low-income customers in emergency situations and provides up to $400 per year to pay all or a portion of their natural gas bills. The bill assistance program assists households that have experienced a sudden loss of income, utility disconnection, unexpected expenses resulting in an inability to pay, or health risks associated with the non-use of gas appliances.

Program Objective

The overall objective of this program is to reduce customer natural gas usage, and overall energy usage, by offering cost-effective weatherization measures to income-qualified residential customers. Southwest Gas also provides customer education in order to reduce energy usage and improve the health and safety of participating households.

The program seeks to increase customer awareness and use of energy-efficient practices and new technologies in existing residential homes to achieve cost-effective natural gas savings.

Qualifying Customers

All active, Southwest Gas residential customers located in the Company's Arizona service territory, with homes that are gas heated and households with an annual income less than 150 percent of the federal poverty income guidelines (as established annually by the U.S. Department of Health and Human Services) are eligible to participate in the program. Owner-occupied or rental units (with the consent of the owner) can also be weatherized if located within the Company's Arizona service territory.

To qualify for the bill assistance component of the program, a household must be gas heated and income-qualified according to the standards set forth above. The household must not have received Southwest Gas bill assistance during the previous 12 months. In addition, the household must be facing a hardship such as a sudden loss of income, utility disconnection, unexpected expenses resulting in an inability to pay, or health risks associated with the non-use of gas appliances.

Qualifying Measures

Qualifying measure specifications will be reviewed annually and adjusted, as necessary, to reflect changing national efficiency standards. Qualifying measures fall into four major categories: duct repair; infiltration control; attic insulation; and the repair or replacement of appliances that are not operational or pose a health hazard. Southwest Gas chose to evaluate these four measures, which are most likely to be installed utilizing Southwest Gas funds. Qualifying measures and specifications are shown in Table 36 below.

Table 36 – Qualifying Measure Specifications

Measure	Specification
Duct Sealing	Performance Tested Comfort System Levels (6% Leakage)
Infiltration Control	.37 ACH
Attic Insulation	Increment of R-38 or Higher
Appliance Replacement	SEER 12.0 "GAS PAC"
	Domestic Water Heater .62 EF and greater

Program Limitations

Costs required to complete the necessary measures (excluding all administrative costs) shall not exceed $3,000 per household, unless prior Commission approval is granted. Approval will only be granted if the total investment meets program cost-effectiveness requirements.

Program Administration

This weatherization program will be administered by Southwest Gas, in conjunction with the ACA, community action agencies (agencies), and other Arizona utilities. The ACA manages the DOE's Weatherization Assistance Program for Arizona and leverages funding from federal, state and utility programs. For the LIEC program, the ACA will expand its current contracts with community agencies to include funding from Southwest Gas.

To participate in the program, customers must request assistance through the agencies, which screen applicants based upon program criteria. Once qualifying customers are identified, the agencies conduct energy audits to gather, record, and analyze data on the residences. While in the home, agency personnel explain the measures that will be installed and offer a variety of no-cost/low-cost energy conservation tips.

The current statewide weatherization program administered by the ACA uses very detailed guidelines to optimize investment in energy efficiency through a systems approach. The state of Arizona is divided into six climate zones. Each of these zones has a corresponding priority list of known cost-effective weatherization materials/measures that can be installed. In cases where potentially cost-effective energy upgrades are not listed or are not approved safety measures, a computerized audit must be completed to develop a ranking of the energy upgrades, based on their savings-to-investment ratio. Diagnostic tools, such as a blower door and manometer, are used to detect and mitigate air infiltration and pressure imbalances. Crews also test heating and cooling units for carbon monoxide.

The DOE requires inspections on ten percent of qualified homes. The improper installation of weatherization measures can significantly reduce potential energy savings. The ACA strongly focuses on the proper installation techniques for weatherization measures. This greatly reduces the number of "call backs" and failed inspections.

The ACA will invoice Southwest Gas monthly for the weatherization projects completed during the prior month. The ACA will also provide monthly statistics, including the number of customers served, the type of activities completed, and detailed activity costs by measure.

The Arizona Community Action Association (ACAA) partners with community-based agencies to distribute bill assistance funds throughout the Company's

Arizona service territory. These agencies provide easy access to families in need. Many of these agencies subcontract with multiple community agencies in their service territories to assist the greatest number of clients. The agencies are adept at managing a variety of assistance programs and most offer an array of services, including food, shelter, rent and mortgage assistance, clothing, job training, healthcare and other vital programs for those in need.

Southwest Gas will also request monthly reports from the ACAA for the bill assistance portion of the LIEC program. These reports, categorized by agency, will list names and account numbers of the customers receiving bill assistance money, and the amount they received. The ACAA will allocate the funds throughout its service territory in the state, based on the demographics of each area.

Both LIEC program components operate on a program year from July through June, as do the other federally-funded programs administered by the ACA.

Program Outreach

Southwest Gas combines the promotion and outreach activities for both the weatherization and bill assistance components of the LIEC program with its Low-Income Residential Assistance (LIRA) program. The LIRA program provides discounted rates for natural gas service to income-qualified customers from November through April, and year-round on the service establishment charge. Southwest Gas provides bill inserts in English and Spanish, provides program information on its website, meets annually with community action agencies, and attends a variety of community events. In addition, an annual supply of LIRA applications, which include LIEC program information, is sent to approximately 150 community agencies statewide.

Budget

Southwest Gas proposes a total estimated annual budget of $650,000. Table 37 below provides the details for both the weatherization and bill assistance program components.

Table 37 – Total Estimated Budget

Low-Income Energy Conservation Program	
Description	**Program Year 1**
Weatherization/Health/Safety Components of LIEC Program	
Weatherization	$ 200,500
Health & Safety	93,000
Special Project	60,000
Training and Monitoring Costs	20,000
Subtotal	**$ 373,500**
Administration-Arizona Energy Office	$ 22,500
Community Action Agencies	45,000
Information/Outreach – Southwest Gas	9,000
Subtotal	**$ 76,500**
Total	**$ 450,000**
Emergency Bill Assistance Component of LIEC Program	
Emergency Bill Assistance	$ 185,000
Administration-ACAA	$ 15,000
Subtotal	**$ 200,000**
Total	**$ 650,000**

Weatherization Special Projects Budget

The LIEC Special Projects category is designed to make funds available for large, multi-family projects. All projects must adhere to the established program guidelines. The savings from these projects will help offset the less energy-efficient health and safety measures included in the program, and assist in keeping the LIEC program cost-effective overall.

Distribution of these funds is based on a competitive basis, using the following criteria: 1) cost-effectiveness of the projects; 2) partnerships with additional entities; and 3) agency production to date. A review committee, consisting of housing professionals from ACA and Southwest Gas who are not directly administering the program, carefully reviews all applications and determines which projects will be funded each program year.

Health and Safety Budget

In addition to the energy conservation measures, community service referrals are made to appropriate agencies to address other health and safety needs observed in the participants' homes.

The ACA requires agency personnel to conduct a thorough safety check of each home and its appliances. Agency personnel follow strict health and safety procedures while performing all weatherization activities, for the protection of the occupants and themselves.

Cost-Effectiveness Test Results

The cost-effectiveness test ratio for the weatherization component of the *Smarter Greener Better* LIEC program is 0.83. Tables 38 and 39 below show the cost-benefit overview and projected lifetime savings for the LIEC program.

Table 38 – Cost-Benefit Overview

Cost-Benefit Overview Lifetime Savings	
Present Value of Savings	$374,859
Present Value of Costs	$450,000
Net social benefit	($75,141)
Cost-Effectiveness Ratio	**0.83**

Table 39 – Projected Lifetime Savings

Energy and Environmental Benefit Overview Lifetime Savings	
Natural Gas (Therms)	CO_2 (tons)
525,000	3,071

According to the DOE, when the energy and non-energy related benefits are combined, the cost-benefit ratio of energy reduction is $3.71 for every $1.00 invested in the program. This cost-effective approach ensures the proper investment of utility customer resources. Not only is this an investment in the lives of those in need, but an investment in the economic and environmental well-being of the community.

Energy expenses represent an economic drain on low-income communities. The DOE reports that, on average, low-income households typically spend 14 percent of their total annual income on energy, compared to 3.5 percent for other households. Since weatherization reduces home energy consumption on a continuing basis, it provides a long-lasting boost to the household's budget.

EDUCATIONAL PROGRAM:
SMARTER GREEN BETTER ENERGY EDUCATION (PILOT)

Program Description

Southwest Gas will offer the *Smarter Greener Better* Energy Education program as a pilot program to provide customers with energy efficiency and conservation information, along with recommendations to encourage the utilization of energy-efficient alternatives in the Company's Arizona service territory.

The program will provide targeted conservation and energy efficiency information of interest to all of the Company's Arizona customers. In particular, it will focus on specific energy efficiency or technology information that will help customers optimize natural gas resources. Sample education messages may include:

- Thermostat settings;
- Water heating settings;
- Household appliance efficiency;
- Commercial kitchen cooking efficiency;
- Building shell efficiency; and
- Industrial plant process efficiency.

Program Objective

The overall objective of the *Smarter Greener Better* Energy Education program is to provide customers in Southwest Gas' Arizona service territory with information to encourage the efficient use of natural gas, and energy in general. Additional objectives of this pilot program are to instill conservation behaviors that generate savings for Portfolio objectives, and promote efficient building operations and lower energy bills for the consumer.

Technology-based energy efficiency achieves only a small amount of efficiency potential. The barriers to wider spread implementation of energy efficiency are often sociological, not technological. One of the most efficient and cost effective ways to encourage energy efficiency on a large scale is to help customers make small modifications to their daily consumption habits. According to the American Council for an Energy-Efficient Economy (ACEEE), the potential for behavior-related energy savings in the residential sector represents roughly 25 percent of the current residential sector energy consumption.

As consumer awareness regarding energy efficiency increases, larger numbers of people express a willingness to take action. However, there is often confusion about energy efficiency terms, what specific steps can be taken and how much of an impact they will have which leads to a significant gap between awareness and action. Many people believe they are doing their part, while in reality there are many more cost effective steps that could be taken to save more energy.

In addition, positive outlooks toward energy efficiency do not necessarily translate into the purchase of energy-efficient products or a commitment to energy-efficient actions. The primary barriers to wider spread implementation of energy efficiency behaviors are:

- Uncertainty as to how to begin saving;
- Not knowing where to obtain energy-efficient products and services;
- The misconception that nothing more can be done to be energy-efficient; and
- Doubt regarding the ability to make a significant difference in energy use and cost.

Qualifying Customers

This program will be available to all customers located in the Company's Arizona service territory.

Qualifying Measures

No rebates will be offered in this program. Customers receive free energy efficiency and conservation tips.

Program Outreach

Southwest Gas will utilize both print and radio mediums to educate its Arizona customers on energy efficiency and conservation. Southwest Gas will utilize the medium that is most cost-effective to reach the largest audience. In addition, Southwest Gas will explore outreach collaborative with other utilities and seek innovative ways to reach each market segment.

Southwest Gas will also explore possible partnerships with other utilities to implement a Residential Conservation Behavior program. The program would drive customer conservation behavior by providing participating residential customers with periodic reports showing how their homes compare with similar homes, and recommending specific actions that the household can take to save energy. Southwest Gas is monitoring APS's recently-approved application to implement a similar program on a pilot basis.

One successful method Southwest Gas currently utilizes to reach commercial and industrial customers is the Technology Information Center (TIC). Southwest Gas will continue this program within the confines of the Energy Education program. TIC is intended primarily for industrial and large/transportation-eligible general service customers. Through the program, an e-mail newsletter containing technical information is sent to customers to provide advice on using energy efficiently, reducing energy usage and lowering utility bills, answering questions about energy-efficient technologies, and increasing awareness of general environmental and energy issues. The newsletter also provides general natural gas information of interest to large customers, but focuses primarily on specific energy savings or technology information that will help customers optimize natural gas resources. The information may be generic or may apply specifically to customers in Southwest Gas' Arizona service territory. The newsletter also contains a link to the Company's "Ask an Expert" hotline, an electronic research library that allows customers to request a contact for a commercial audit.

Budget

Southwest Gas proposes a total estimated annual budget for this program of $550,000. Table 40 below provides the budget details by category.

Table 40 – Total Estimated Budget

Educational Program: *Smarter Greener Better* Energy Education	
Description	**Estimated Budget**
Rebates	-
Administration	-
Outreach	$550,000
Delivery	-
Evaluation	-
Total	**$550,000**

Cost-Effectiveness Test Results

Since this is a pilot program, Southwest Gas is not required to demonstrate cost-effectiveness test results. Notwithstanding, Southwest Gas believes participating customers will gain awareness of their energy consumption and ways to implement energy efficiency measures, and will obtain information regarding all of the Southwest Gas' energy efficiency programs. As such, Southwest Gas believes that energy savings will occur as customers become more aware of how they can reduce their energy consumption by participating in any of the Company's energy efficiency programs. Southwest Gas will leverage efforts from the Energy Education program to increase participation in its Portfolio.

Human, Economic, and Societal Benefits

As with the estimated energy savings, Southwest Gas is unable to provide an accurate estimate of related societal benefits for this program. However, programs that reduce the need for energy have an impact on the economics of energy production and delivery, as well as on the energy supply infrastructure. Reduced energy requirements slow the need for additional infrastructure and the resources required to produce and deliver energy.

Less energy production and use reduce the impact on Arizona's resources – land, water, air quality, and human health – encouraging a better quality of life for all consumers, as well as reducing Arizona's carbon footprint. By slowing the increasing demand for energy, the corresponding energy costs are also reduced. Consumers with lower energy bills have more disposable income, and spend a lower percentage of their income on energy. Reduced energy requirements resulting from energy efficiency and conservation programs also provide quantifiable societal benefits in terms of water savings and pollution reduction, thereby creating a better quality of life for Arizonans.

Further, reducing the demand for electricity can result in an incrementally lower demand for the natural gas that is increasingly used to generate it. These two forms of energy are inextricably tied together when the total energy picture is considered.

RENEWABLE ENERGY RESOURCE TECHNOLOGY PROGRAM: *SMARTER GREENER BETTER* SOLAR THERMAL REBATES

Program Description

Southwest Gas will offer the *Smarter Greener Better* Solar Thermal Rebates program to residential and non-residential customers in Southwest's Arizona service territory. Rebates will be offered to participating customers on qualified solar thermal systems upon proof-of-purchase and installation.

Program Objective

The overall objective of this energy-efficient program is to increase public awareness of the benefits of using renewable energy and installing solar thermal systems and to reduce customer natural gas usage by providing economically beneficial rebates to install the systems. Long-term customer energy savings will be realized throughout the life of the solar thermal systems. Southwest Gas projects that approximately 75 rebates will be paid to customers under the program.

Qualifying Customers

All active, Southwest Gas residential and non-residential customers located in Southwest's Arizona service territory are eligible to participate in the program.

Qualifying Measures

Qualifying measure specifications will be reviewed annually and adjusted, as necessary, to reflect changing national efficiency standards. All measures must be supplied by a natural gas water heating unit.

According to the DOE, solar water and pool heating systems last much longer than standard gas water or pool heaters and can significantly reduce heating costs. Qualifying solar thermal measures and specifications, which are applicable to both residential and non-residential customers, are shown in Table 41 below.

Table 41 – Qualifying Measure Specifications

Measure	Specification
Solar Water Heating System	Collectors must be SRCC[1] OG-100 certified
Solar Pool Heating System	Collectors must be SRCC[1] OG-100 certified

[1] Solar Rating and Certification Corporation

Rebate Amounts, *Incremental* Costs and Annual Savings

Southwest Gas determined the amounts and savings by reviewing the best available information on incremental cost and energy savings of the measure. Rebate amounts were maintained at the minimum rebate levels needed to constitute a feasible marketing message to positively affect customer behavior and overall program cost-effectiveness. Rebate amounts, incremental costs and annual savings in therms are provided in Table 42 below.

Table 42 – Rebate Amounts, Incremental Customer Costs and Annual Savings

Measure	Rebate[1]	Incremental Cost	Unit Gross Annual Savings (therms)
Residential Solar Water Heating System	$15.00/therm	$3,850	75
Residential Solar Pool Heating System	$15.00/therm	$3,500	90
Non-Residential Solar Water Heating System	$15.00/therm	$9,625	190
Non-Residential Solar Pool Heating System	$15.00/therm	$60,000	20,000

[1]Rebate amounts are per first year annual therm savings as determined by the SRCC rating and are up to a maximum of 50 percent of the installed cost of the system.

Program Limitations

The following requirement applies for all measures:

- Measures must be purchased new, and may not be used or leased.

Target Audiences

Southwest's primary target audience is residential and non-residential customers.

Southwest's secondary target audience is trade allies including contractors, distributors, and manufacturers of solar thermal systems.

Budget

Southwest Gas proposes a total annual estimated budget for this program of $500,000. Table 43 below provides the budget details by category.

Table 43 – Total Estimated Budget

Residential Energy Management Programs: *Smarter Greener Better* Solar Thermal Rebates	
Description	**Estimated Budget**
Rebates	$350,000
Administration	$15,000
Outreach	$60,000
Delivery	$67,500
Evaluation	$7,500
Total	**$500,000**

Cost-Effectiveness Test Results

Since this is an RET program, Southwest Gas is not required to demonstrate cost-effectiveness test results. Notwithstanding, participating customers will be able to offset some of their energy usage by generating their own, using renewable energy such as the sun. Energy savings will therefore occur as customers reduce their net energy usage. Southwest Gas believes that participating customers will be interested in ways to increase the energy efficiency of their homes to further reduce their energy usage and will participate in any of the Company's energy efficiency programs.

SOUTHWEST GAS CORPORATION

Docket No. G-01551A-10-

2010
ARIZONA
GENERAL RATE CASE

Testimony

SOUTHWEST GAS CORPORATION

ARIZONA GENERAL RATE CASE

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TAB 1

IN THE MATTER OF
SOUTHWEST GAS CORPORATION
Docket No. G-01551A-10___

PREPARED DIRECT TESTIMONY
OF
JAMES L. CATTANACH

ON BEHALF OF
SOUTHWEST GAS CORPORATION

NOVEMBER 12, 2010

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of
James L. Cattanach

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BEFORE THE ARIZONA CORPORATION COMMISSION

Prepared Direct Testimony
of
JAMES L. CATTANACH

I. INTRODUCTION.

Q. 1 Please state your name and business address.

A. 1 My name is James L. Cattanach. My business address is 5241 Spring Mountain Road, Las Vegas, Nevada 89150.

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

A. 2 I am employed by Southwest Gas Corporation (Southwest Gas or the Company) in the Systems Planning department. My title is Manager/Demand Planning.

Q. 3 Please summarize your educational background and relevant business experience.

A. 3 My educational background and relevant business experience are summarized in Appendix A to this testimony.

Q. 4 Have you previously testified before any regulatory commission?

A. 4 Yes, I have previously testified before the Arizona Corporation Commission (Commission), the California Public Utilities Commission (CPUC), the Federal Energy Regulatory Commission (FERC), and the Public Utilities Commission of Nevada (PUCN).

Q. 5 What is the purpose of your prepared direct testimony in this proceeding?

A. 5 I sponsor the Company's billing determinants (number of bills and therms) for the test year, and the associated adjustments to the recorded bills and therms.

Q. 6 Please summarize your prepared direct testimony.

A. 6 My prepared direct testimony addresses the following key issues:

- The methodology used to develop the billing determinants for the test year under present rates.
- The five adjustments made by Southwest Gas to the recorded number of bills and therms.
- The continuing downward trend in residential consumption per customer in Southwest Gas's Arizona rate jurisdiction.
- The future trend in residential consumption per customer in Arizona.

II. METHODOLOGY USED TO DEVELOP BILLING DETERMINANTS.

Q. 7 Please describe the methodology Southwest Gas utilized to develop the billing determinants for the test year under present rates.

A. 7 The development of the billing determinants commenced with the compilation of the monthly recorded number of bills and therms by rate schedule for the 12 months ended June 30, 2010.

After compiling the recorded number of bills and therms for the test year, Southwest Gas made the following adjustments in order to derive the adjusted test year billing determinants: (1) billing adjustments; (2) customer-specific volume annualizations; (3) customer reclassifications; (4) weather normalizations; (5) customer annualizations. The details supporting these adjustments are set forth more fully below, and are shown in the H-2 Workpapers.

Q. 8 Why were adjustments made to the recorded number of bills and therms for the test year?

A. 8 The purpose of the five adjustments is to ensure that Southwest Gas's test year number of bills and volumes accurately reflect a full 12 months of consumption under normal weather conditions for the development of revenues and proposed rates.

Q. 9 Has Southwest Gas made any changes to the general methodology for developing the billing determinants for the test year?

A. 9 No. In fact, Southwest Gas utilized the same general methodology to develop the billing determinants for its 2000 (Docket No. G-01551A-00-0309), 2004 (Docket No. G-01551A-04-0876), and 2007 (Docket No. G-015551A-07-0504) general rate cases in Arizona, and this methodology was approved in Decision Nos. 64172, 68487, and 70665, respectively.

III. ADJUSTMENTS TO RECORDED NUMBER OF BILLS AND THERMS

Q. 10 Please explain Southwest Gas's proposed billing adjustments.

A. 10 After compiling recorded test year billing determinants, significant billing anomalies were investigated to ensure that the correct consumption level is reflected for each month in the test year. A majority of the corrections for billing adjustments involved restating the monthly consumption levels for customer bills to reflect actual monthly usage with no impact upon the total test year sales. This adjustment is necessary to ensure that the monthly adjusted volumes accurately reflect actual test year consumption. Otherwise, distorted monthly values would reduce the reliability of the regression analysis associated with the weather normalization adjustments, which is addressed later in my testimony.

Q. 11 Please explain Southwest Gas's proposed volume annualization adjustments.

A. 11 After completing the corrections for billing adjustments, customer-specific volume annualization adjustments were performed to reflect a full year of consumption for each active customer (excluding residential and small commercial customers) billed during June 2010. This process involves estimating additional consumption for months during the test year where a new customer was not on-line or was clearly in a start-up phase, as well as removing consumption attributable to specific customers who discontinued service during the test year.

Q. 12 Please explain Southwest Gas's proposed customer reclassification adjustments.

A. 12 Customer reclassification adjustments move customers within or between rate schedules. These adjustments are performed to ensure that customer-specific consumption reflects a full 12 months of usage under the correct rate schedule at the end of the test year. Reclassification adjustments do not impact the overall number of bills or volumes for the test year.

Q. 13 Please explain Southwest Gas's proposed weather normalization adjustments.

A. 13 Weather normalization adjustments provide an accurate depiction of monthly test year volumes under normal (average) weather conditions. To the extent that weather for the test year deviates from normal weather conditions, heat-sensitive consumption per customer should be adjusted to provide an accurate representation of monthly test year volumes under normal weather conditions.

For the test year in this case, actual billing cycle heating degree days were approximately 7.1 percent colder than normal in Tucson, and approximately 6.6 percent colder than normal in Phoenix. As a result of these deviations from normal weather, adjustments to test year volumes were computed to reflect anticipated volumes under normal weather conditions.

Weather normalization adjustments were completed for the following rate schedules: single-family residential; multi-family residential; single-family low income residential; multi-family low income residential; special residential; master-metered mobile home park; the master-metered apartment, small commercial, armed forces and large commercial classes within the general service-small, medium and large; the large commercial and armed forces within the general service-transportation eligible; and weather-sensitive customers whose volumes are aggregated under a single transportation service agreement.

Q. 14 What heating degree day normal did Southwest Gas use to weather normalize the heat-sensitive volumes for the test year?

A. 14 Southwest Gas used a ten-year average (120 months ended June 2010) of heating degree days, adjusted for a number of outliers (atypical values) in the historical data, to represent normal weather conditions.

Q. 15 Please explain the adjustment to the normal heating degree day calculation for outliers or atypical values in the historical data.

A. 15 Southwest Gas conducted a statistical evaluation of the monthly heating degree days used in the calculation of the monthly normal heating degree days to identify any outliers in the data. An outlier is defined as a data value inconsistent with the rest of the data. Based on a number of statistical tests utilized to identify outliers, which included z-scores, boxplots, and modified z-scores, three outliers were identified in the historical data. In Phoenix, November 2000 and May 2001 were identified as statistical outliers. In Tucson, November 2000 was identified as an outlier. Based on the results of the statistical outlier evaluation, the November 2000 heating degree days in Phoenix and Tucson were replaced with November 1999. The May 2001 outlier in Phoenix was replaced with May 2000. The outliers identified in the analyses are graphically depicted in the box-plots presented in Exhibit No.__(JLC-1). The box-plot breaks the historical data into quartiles and any data points outside the whiskers (extended lines from the box) are indicative of an outlier.

Q. 16 Is the use of ten-year average heating degree days to weather normalize the heat-sensitive volumes consistent with Southwest Gas's prior practices for general rate cases in Arizona?

A. 16 Yes. Southwest Gas has consistently utilized ten-year average heating degree days to weather normalize test year volumes in every general rate case filed in Arizona since 1986 (see U-1551-86-300, U-1551-86-301, U-1551-89-102, U-1551-89-103, U-1551-90-322, U-1551-92-253, U-1551-93-272, U-1551-96-596, G-01551A-00-0309, G-01551A-04-0876, G-015551A-07-0504).

Q. 17 Please explain Southwest Gas's procedure for calculating the weather normalization adjustments.

A. 17 Southwest Gas conducted a regression analysis to quantify the historical relationships between actual monthly consumption per customer and heating degree days for each heat-sensitive customer class. The monthly consumption per heating degree day factors (regression coefficients) quantified in the regression analysis were then applied to monthly heating degree day deviations from normal to quantify the corresponding adjustments to consumption per customer.

Q. 18 What was the impact of the weather normalization adjustments upon test year volumes?

A. 18 The net result of the weather normalization adjustments was a decrease in test year volumes of 16,064,337 therms.

Q. 19 Please explain Southwest Gas's proposed customer annualization adjustments.

A. 19 Customer annualization adjustments were computed for the single-family residential and multi-family residential rate schedules and small commercial customers within the small, medium, and large general service rate schedules.

Q. 20 What method was used to develop the customer annualization adjustments?

A. 20 Southwest Gas utilized the same methodology adopted by the Commission in Southwest Gas's last four general rate cases – see Decision Nos. 60352, 64172, 68487, and 70665. This method captures the seasonal nature of test year customer growth by comparing the number of customers in the last month of the test year, June 2010, to the same month of the prior year, June 2009. The growth in customers is then prorated across the test year in declining intervals with 11/12ths of the adjustment in the first month of the test year (July 2009), 10/12ths in the second month (August 2009) and so forth. Adjustments to annualize volumes were made by multiplying the monthly customer additions by the respective monthly weather-adjusted average use per customer. Customer and volume adjustments are then added to the weather-normalized monthly bills and volumes to produce annualized test year monthly bills and volumes.

Q. 21 Why were the customer annualization adjustments only performed for the residential and small commercial customer classes?

A. 21 With the exception of the residential rate schedules and the small commercial class within the general service rate schedules, all other rate schedules were annualized by individual customers, based upon customer-specific information. These customer-specific annualization adjustments were covered under the volume annualization adjustments previously discussed in this testimony. Because of the sheer magnitude of the number of customers in the residential and small commercial customer classes, which include thousands of billing records, tracking each individual's billing history to perform customer-specific billing or annualization adjustments is impractical. Accordingly, customer annualization adjustments were performed using the outlined methodology for the residential and small commercial customer classes.

Q. 22 Please summarize the impact of the adjustments performed for the preparation of the annualized number of bills and therms for the test year under present rates.

A. 22 The impacts of each of the adjustments upon the number of bills and volumes for the test year are indicated by rate schedule in Schedule H-2, Sheets 5-8. All of the adjustments (billing adjustments, customer-specific volume annualizations, customer reclassifications, weather normalization, and customer annualizations) were conducted to ensure the accuracy and propriety of the number of bills and therms used to establish rates.

IV. DECLINING RESIDENTIAL CONSUMPTION PER CUSTOMER

Q. 23 Please describe the historical trend in residential consumption per customer in Arizona.

A. 23 Southwest Gas has experienced significant declines in residential consumption per customer over the last 24 years in Arizona.

Q. 24 Were the declines in residential consumption per customer reflected in the general rate cases Southwest Gas filed over the last 24 years?

A. 24 Yes. In each general rate case filed in Arizona since 1986, weather-normalized residential consumption per customer was lower than the previous rate case. Weather-normalized residential consumption per customer declined from 556 therms in the 1986 rate case (Docket Nos. U-1551-86-300, U-1551-86-301) to 297 therms in the current case, resulting in a decline of 259 therms or 47 percent. Between Southwest Gas's 2007 (Docket No. G-01551A-07-0504) and 2010 rate cases, weather-normalized residential consumption per customer dropped from 332 therms to 297 therms, resulting in a decline of 35 therms or 10.5 percent. This equates to an approximate decline of 12 therms per year between Southwest Gas's 2007 and 2010 rate cases. The declines in annual residential consumption per customer utilized in Southwest Gas's general rate case proceedings between 1986 and 2010 are graphically presented in Exhibit No.__(JLC-2).

Q. 25 What has been the trend in residential baseload consumption per customer over the last 24 years?

A. 25 Between Southwest Gas's 1986 rate case and the current case, August consumption per customer has declined from 16.4 therms to 8.8 therms, respectively. This is a decline of 7.6 therms or 46.4 percent. The month of August is the ideal month to isolate the trend in baseload consumption (e.g. water heating, clothes drying, cooking) per customer since both Phoenix and Tucson experience zero heating degree days during the month. August consumption per customer has dropped eight-tenths of a therm or 8 percent since the 2007 rate case. The significant downward trend in August consumption per customer is graphically depicted in attached Exhibit No.__(JLC-3). This data suggests that declining residential consumption per customer is occurring with both space heating (seasonal) and baseload consumption.

Q. 26 What are the primary reasons for the long-term downward trend in residential consumption per customer over the last 24 years?

A. 26 The significant long-term decline in residential consumption per customer occurred primarily because of continued improvements in the dwelling and appliance efficiencies of Southwest Gas's customer base. Improvements in energy efficiencies over the past 24 years are reflected in both new customer growth and the replacement, by existing customers, of older appliances with newer, more efficient appliances. Therefore, the improved energy efficiencies of natural gas appliances and dwellings for both new customer additions and existing customers contributed to the overall decline in residential consumption per customer.

V. FUTURE TREND IN RESIDENTIAL CONSUMPTION PER CUSTOMER IN ARIZONA

Q. 27 What is your expectation regarding future declines in residential consumption per customer?

A. 27 I expect that residential consumption per customer will continue to decline. The continued emphasis on energy conservation to reduce energy expenditures and greenhouse gas emissions makes this a plausible scenario. Indeed, the Commission's recently approved gas energy efficiency standard will be another factor putting increased downward pressure on consumption per customer in the future.

Q. 28 Has Southwest Gas included a proposal in this case to mitigate the adverse impact on its margin recovery associated with the anticipated continued downward pressure on consumption per customer?

A. 28 Yes. Southwest Gas has requested implementation of a revenue decoupling proposal to mitigate the adverse impact on its margin recovery due to the expected continued decline in consumption per customer, and the additional downward pressure on consumption per customer resulting from the Company's efforts to achieve the Commission's recently approved gas energy efficiency standard. Please refer to Company witnesses Edward Gieseking and Bobbi Sterrett for additional information regarding the Company's revenue decoupling proposal and compliance with the energy efficiency standard, respectively.

Q. 29 Does this conclude your prepared direct testimony?

A. 29 Yes.

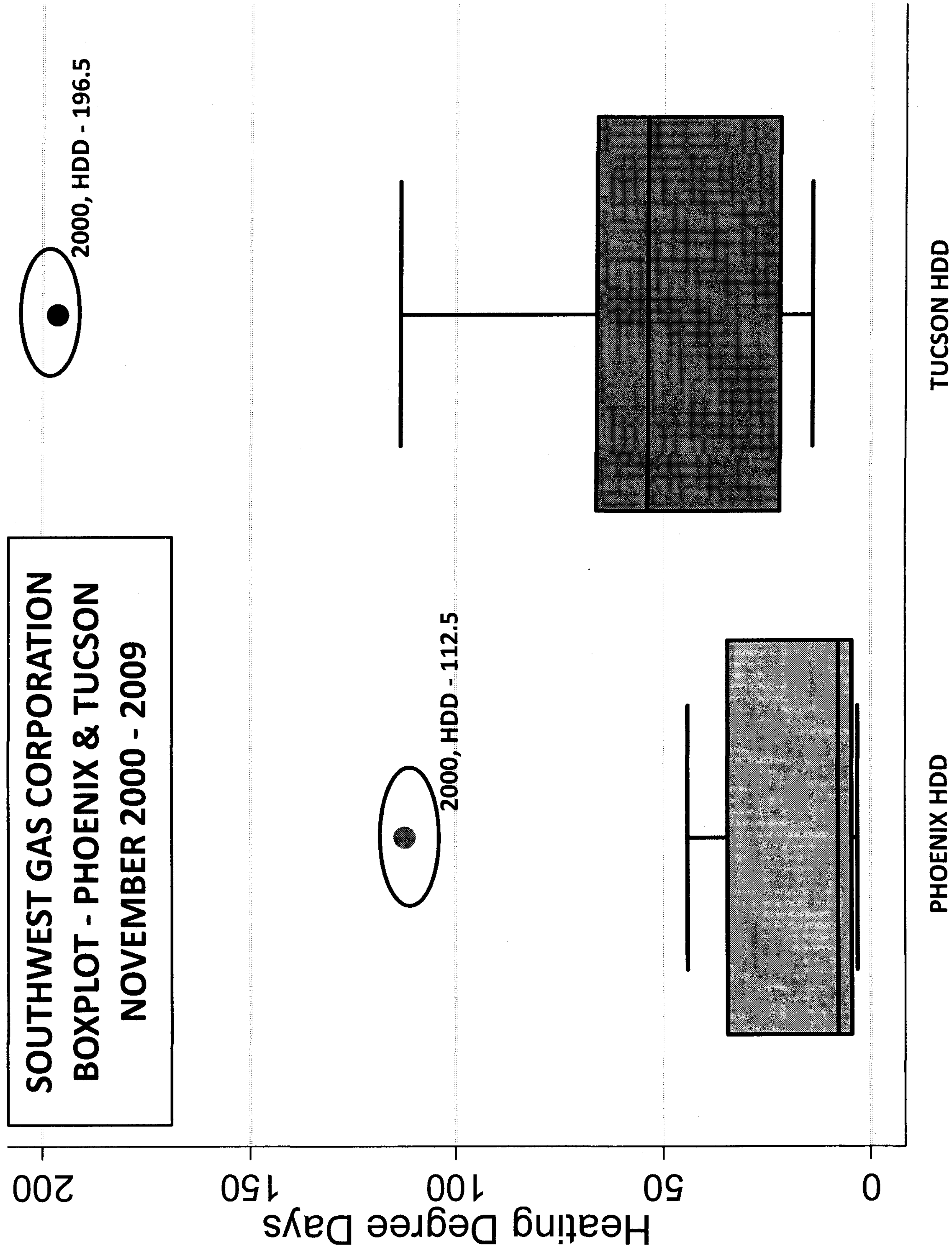
SUMMARY OF QUALIFICATIONS
JAMES L. CATTANACH

I graduated from Utah State University, Logan, Utah, with a Bachelor of Science degree in Economics in 1983. Thereafter in 1990, I graduated from the University of Nevada, Las Vegas with a Master of Arts degree in Economics.

In 1984, I joined Southwest Gas Corporation as a Load Research Analyst in the Rate Department. In September 1985, I was promoted to the position of Economist in the Resource Planning Department. In November 1993, I was promoted to Senior Economist in the Revenue Requirements and Resource Planning Department. In August 2002, I was promoted to Supervisor in the Systems Planning Department. In July 2003, I was promoted to my current position as Manager/Demand Planning in the Systems Planning Department. I am responsible for the development of weather normalized billing determinants for rate cases, the development of short- and long-range demand forecasts for rate cases and systems planning, analysis and monitoring of the regional economy in each of Southwest's rate jurisdictions, assorted load research activities, and the ongoing review of weather normalization procedures and heating degree days. I supervise three analysts and two economists in the Systems Planning Department.

Since 1989, I have held the position of Adjunct Lecturer in the College of Business, Department of Economics, at the University of Nevada, Las Vegas. I currently teach an Applied Regression Analysis and Forecasting course each Fall and Spring Semester. I have previously taught courses in Business Statistics, Microeconomics, and Macroeconomics. Since 2009, I have held the position of Adjunct Lecturer in the Social Sciences Department, at the College of Southern Nevada where I teach statistics.

In addition to receiving my formal degrees in the study of Economics, I have attended seminars related to both public utility ratemaking and load forecasting. I am a member of the American Statistical Association, International Association for Energy Economics, National Association of Business Economics, National Association of Forensic Economics, Institute of Business Forecasting, and Southern Nevada Population Projection and Estimation Committee. I am also a contributing panel member of the Western Blue Chip Economic Forecast published by the Bank One Economic Outlook Center, W.P. Carey College of Business, Arizona State University. Between 1997 and 2000, I was an advising member of the Energy Economics Project Advisors Group, at The Gas Research Institute.


SOUTHWEST GAS CORPORATION
BOXPLOT - PHOENIX & TUCSON
NOVEMBER 2000 - 2009
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2000, HDD - 112.5
PHOENIX HDD
TUCSON HDD
Heating Degree Days
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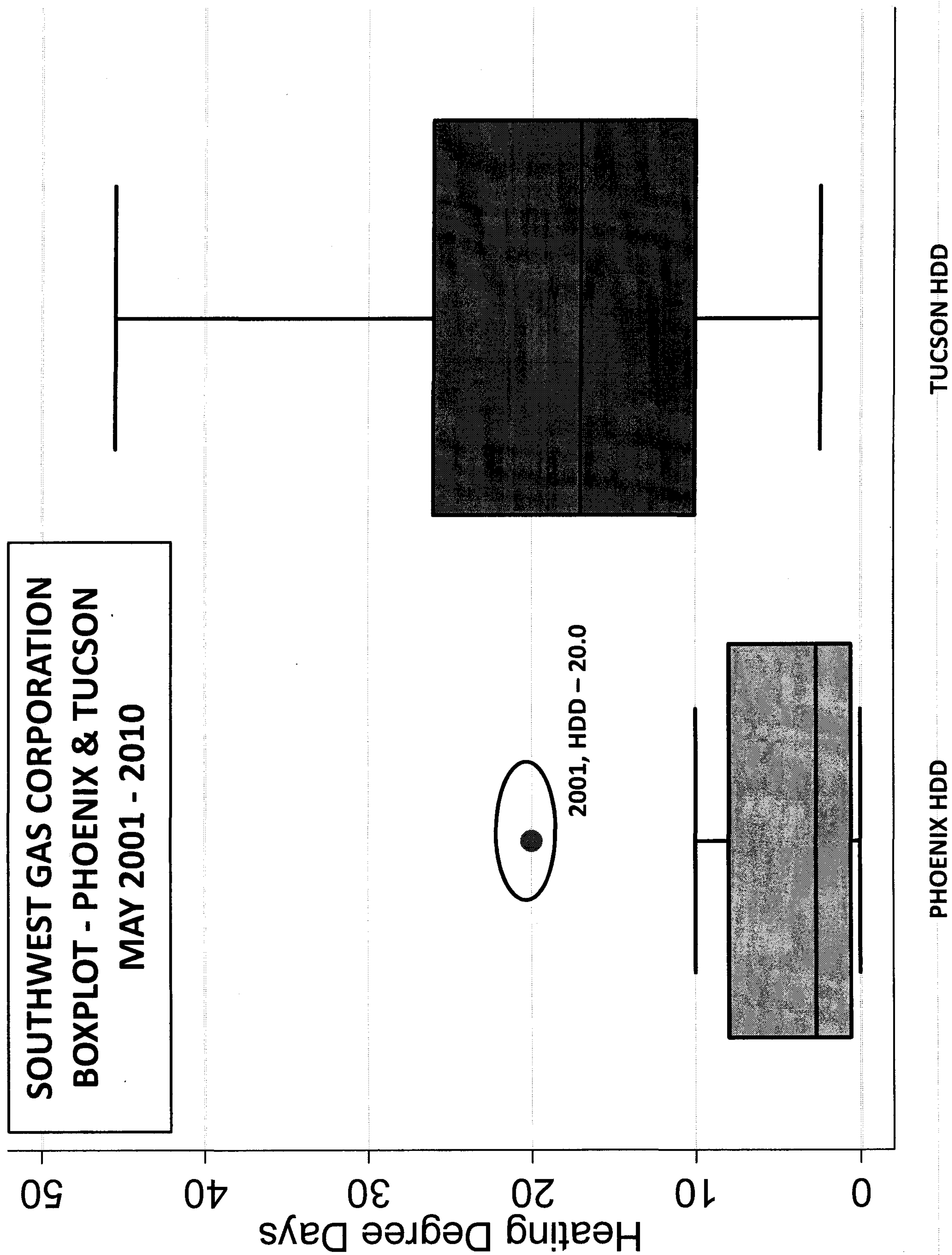
100
150
200


SOUTHWEST GAS CORPORATION
BOXPLOT - PHOENIX & TUCSON
MAY 2001 - 2010
2001, HDD – 20.0
Heating Degree Days
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10
20
30
40
50
PHOENIX HDD
TUCSON HDD

ARIZONA
RESIDENTIAL GAS SERVICE (G-5 & G-6)
ANNUAL RATE CASE CONSUMPTION PER CUSTOMER
1986 - 2010

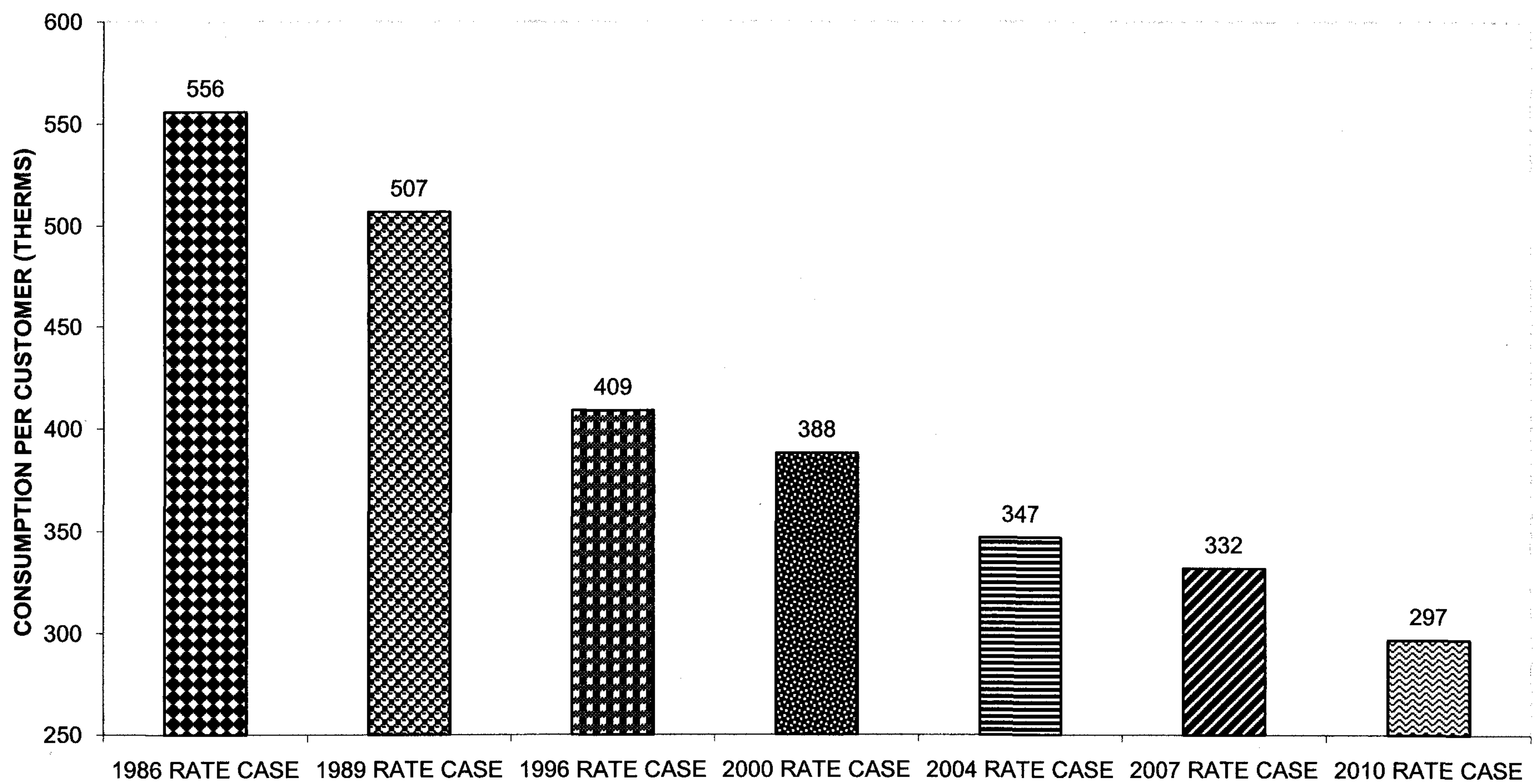
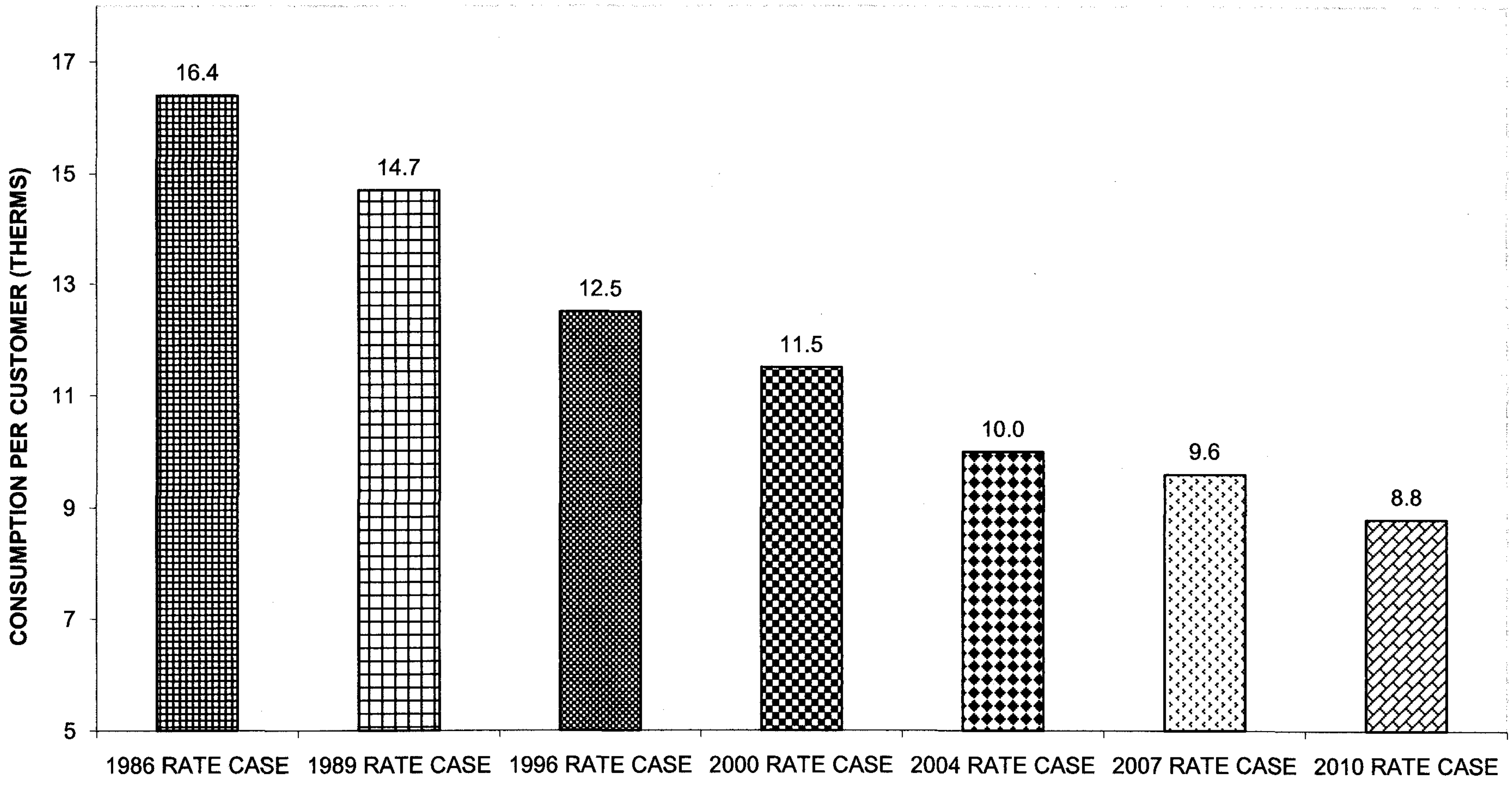


Exhibit No.__(JLC-3)
Sheet 1 of 1

ARIZONA
RESIDENTIAL GAS SERVICE (G-5 & G-6)
AUGUST RATE CASE CONSUMPTION PER CUSTOMER
1986 - 2010



TAB 2

IN THE MATTER OF
SOUTHWEST GAS CORPORATION
Application No. G-01551A-10___

PREPARED DIRECT TESTIMONY
OF
A. BROOKS CONGDON

ON BEHALF OF
SOUTHWEST GAS CORPORATION

NOVEMBER 12, 2010

Table of Contents
of
Prepared Direct Testimony
of
A. BROOKS CONGDON

BEFORE THE ARIZONA CORPORATION COMMISSION

Prepared Direct Testimony
of
A. Brooks Congdon

I. INTRODUCTION

Q. 1 Please state your name and business address.

A. 1 My name is A. Brooks Congdon. My business address is 5241 Spring Mountain Road, Las Vegas, Nevada 89150.

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

A. 2 I am employed by Southwest Gas Corporation (Southwest Gas or the Company) in the Pricing and Tariffs department. My title is Manager.

Q. 3 Please summarize your educational background and relevant business experience.

A. 3 My educational background and relevant business experience are summarized in Appendix A to this testimony.

Q. 4 Have you previously testified before any regulatory commission?

A. 4 Yes, I have previously testified before the Arizona Corporation Commission (Commission), the California Public Utilities Commission (CPUC), the Kansas Corporation Commission (KCC), and the Public Utilities Commission of Nevada (PUCN).

Q. 5 What is the purpose of your prepared direct testimony in this proceeding?

A. 5 I am sponsoring the Company's embedded class cost of service study (CCOSS) reflected in Schedule G and the associated workpapers. I am also sponsoring certain portions of Schedules A, C and E, as indentified in the

Table of Contents for Volume IV of the application.

Q. 6 Please summarize your prepared direct testimony.

A. 6 My prepared direct testimony addresses the following key issues:

- The purpose of a CCOSS and the CCOSS study utilized by the Company in this proceeding: specifically Schedule G, Sheets 1 through 3.
- The process used to develop the CCOSS.
- The two changes Southwest Gas has made to its CCOSS study vis-à-vis the CCOSS filed by Southwest Gas, and accepted by the Commission, in the Company's last Arizona general rate case, Docket No. G-01551A-07-0504.

II. PURPOSE OF A CCOSS

Q. 7 What is the purpose of preparing a CCOSS?

A. 7 The purpose of preparing a CCOSS is to determine the cost of providing service and the return on rate base for each rate class.

Q. 8 Please describe the CCOSS study you are sponsoring.

A. 8 The CCOSS Study I am sponsoring is summarized in Schedule G, Sheets 1 through 3. The CCOSS summarized in Schedule G, Sheet 1 was performed using Southwest Gas' currently effective rates and rate schedules. Schedule G, Sheet 2 has been prepared in a manner consistent with each rate class providing the rate of return requested in this application and Sheet 3 reflects the rate of return at Southwest Gas' proposed rates.

Q. 9 How is the CCOSS used in this case?

A. 9 The results of the CCOSS are used as a guide in establishing proposed class revenues and developing proposed rates for each customer class. This is discussed more fully in the prepared direct testimony of Company witness Edward Gieseking.

III. DEVELOPMENT OF THE CCOSS

Q. 10 Please describe the process used to develop the CCOSS.

A. 10 The CCOSS involves a three-step process where costs are functionalized, classified and then allocated to the customer classes included in Southwest Gas' proposed rate design.

Q. 11 What is meant by cost functionalization?

A. 11 Cost functionalization is the process of assigning plant investment and expenses to the appropriate operating functions. The major operating functions are production, storage, transmission and distribution. Southwest Gas' functionalization follows the FERC uniform system of accounts. Southwest Gas has no production, storage or transmission facilities in its Arizona service areas.

Q. 12 What is meant by cost classification?

A. 12 Cost classification is the process of determining whether Southwest Gas' investments in plant and incurrence of expenses are related to: 1) providing capacity, i.e. sizing its facilities to serve customers' maximum demands; 2) the annual volume of gas actually delivered; or 3) simply providing customers with access to Southwest Gas' system, including the related meter reading and billing expenses.

Q. 13 What is meant by cost allocation?

A. 13 Cost allocation is the process of apportioning classified costs to each rate class based on distinct characteristics of class demand, class consumption and the number of customers contained within each class. This is accomplished through the development of allocation factors that appropriately quantify each customer class' relative contribution to Southwest Gas' cost of providing service. Capacity or demand-related allocations are based on relative customer class demands. Commodity allocations are based on relative customer class annual natural gas consumption. Customer allocations are related to the number of customers in each class weighted to recognize cost variations in providing service, such as meter and service cost and billing expenses.

IV. CHANGES TO SOUTHWEST GAS' CCOSS

Q. 14 Has Southwest Gas made any changes to the CCOSS accepted by the Commission in its last general rate case Docket No. G-01551A-07-0504?

A. 14 Yes. Southwest Gas made two changes to the CCOSS presented in Docket No. G-01551A-07-0504. The first change is to the allocation of Other Operating Revenues. In this case, Southwest Gas is able to utilize a newly available report to assign revenue from Service Establishment and Reconnect Charges, Late Charges, Field Collection Charges and Return Item Charges to customer classes. This results in a more accurate crediting of Other Operating Revenues back to customers.

The second change is to the allocation of meter reading expenses. In Docket No. G-01551A-07-0504, and in its other prior cases, Southwest Gas developed weighted meter reading expenses that recognized the difference in the amount of time required to read meters for different customer classes; specifically, the time spent reading meters for residential customers versus other customer classes. Now that Southwest Gas utilizes electronic meter reading technology for all of its customers, there are no longer any discernable differences in the amount of time spent reading meters for different customer classes.

Q. 15 Does this conclude your prepared direct testimony?

A. 15 Yes.

SUMMARY OF QUALIFICAITONS
A. BROOKS CONGDON

I received a Bachelor of Science degree in Economics from Iowa State University in 1975.

From 1976 to 1980, I was employed as a Forecasting Analyst for General Telephone of the Midwest in the Company's Columbus, Nebraska office. My responsibilities there primarily involved projecting growth in demand for telephone service in eastern Nebraska and western Iowa.

From 1980 to 1984, I was employed as a Rate Analyst in the Rate Department of Pacific Power and Light Company in Portland, Oregon where my primary responsibilities involved performing cost-of-service studies and designing rates for electric and water utilities.

In 1984, I accepted a position at Kansas Electric Power Cooperative in Topeka, Kansas where my primary responsibilities included coordination of intervention in wholesale power rate cases at the Federal Energy Regulatory Commission and preparation of the cooperatives' rate case activity before the Kansas Corporation Commission.

I began my employment with Southwest in 1987 in the Rate Department (now the Pricing and Tariffs Department) as a Rate Specialist. Since that time, I have held positions of increasing responsibility. My present position is Manager/Pricing and Tariffs. I report to the Director/Pricing and Tariffs. I am responsible for the development of rate design and tariff proposals for Southwest in its three-state retail rate jurisdictions.

I have submitted prepared written testimony and oral testimony before the Public Utilities Commission of Nevada, the California Public Utilities Commission, the Arizona Corporation Commission, and the Kansas Corporation Commission.

TAB 3

IN THE MATTER OF

SOUTHWEST GAS CORPORATION

Application No. G-01551A-10___

PREPARED DIRECT TESTIMONY

OF

SANDRA L. GAFFIN

ON BEHALF OF

SOUTHWEST GAS CORPORATION

November 12, 2010

Table of Contents
of
Prepared Direct Testimony
of
SANDRA L. GAFFIN

Southwest Gas Corporation
Docket No. G-01551A-10-___

BEFORE THE ARIZONA CORPORATION COMMISSION

Prepared Direct Testimony
Of
SANDRA L. GAFFIN

I. INTRODUCTION AND PURPOSE

Q. 1 Please state your name and business address.

A. 1 My name is Sandra L. Gaffin. My business address is 950 17th Street, Suite 1400, Denver, Colorado 80202.

Q. 2 By whom are you currently employed?

A. 2 I am a Compensation Consultant, and Southwest and Denver Line of Business Leader in Towers Watson's Rewards, Talent and Communication practice.

Q. 3 Please provide a brief statement of your educational background, work experience and professional involvements.

A. 3 Appendix A to my testimony is a brief statement of my educational background, work experience and professional involvements.

Q. 4 What is the purpose of your testimony in this proceeding?

A. 4 The purpose of my testimony in this proceeding is twofold. First, I provide an overview of the executive compensation programs I reviewed at Southwest Gas and the practices used internally to assess these programs. Second, I sponsor the results of an independent assessment performed by Towers Watson of the executive compensation levels at Southwest Gas. Towers Watson was engaged by Southwest Gas to provide an objective external assessment of the competitiveness of the following aspects of these executive compensation programs:

- Base Pay
- Total Cash Compensation:
  - o Survey data - base salary plus actual annual variable at-risk pay.
  - o Proxy data - base salary plus target annual variable at-risk pay.
  - o For Southwest Gas executives - base salary and target cash portion (40 percent) of the short term variable at-risk pay award.
- Total Direct Compensation:
  - o Total cash compensation plus the target value of any long term variable at-risk pay, if available, otherwise actual grant value.
  - o For Southwest Gas executives - base salary and the full target value of the short and long-term variable at-risk pay awards. Towers Watson reviewed actual long term values at Southwest Gas as well.
- Variable at-risk pay program practices - Towers Watson reviewed the structure of the variable at-risk pay program of Southwest Gas in comparison with the structures found in the peer group companies.

- Supplemental Executive Retirement Program - Towers Watson reviewed the structures of the supplemental retirement programs of Southwest Gas in comparison with the structures found in the peer group companies.
- Non-qualified deferred compensation plan - Towers Watson reviewed the structures of the non-qualified deferred compensation plan of Southwest Gas in comparison with the arrangements found in available survey information on comparable market offerings of non-qualified deferred compensation.

Q. 5 Was a written report of this assessment prepared?

A. 5 Yes. Confidential Exhibit (SLG-1) to my testimony is a copy of the written report.

Q. 6 Please summarize the results of Towers Watson's assessment.

A. 6 Towers Watson concluded that executive compensation at Southwest Gas is within or below the range of competitive practice for the defined labor market; that metrics within the at-risk variable pay plans are common to other companies in the utility industry; that the SERP and EDP offered by Southwest Gas are majority practice among its peer group; and that the level of benefits offered by Southwest Gas is comparable to those reported by other similarly sized companies in the utility industry. The compensation for the executives is in-line with or below market median values, reasonable, and should be recovered in rates as a cost of business reasonably necessary to ensure the successful operations of the organization by attracting and retaining a competent executive team. Maintaining a consistent executive team benefits customers through sound strategic decisions with a focus on strong levels of customer service, the financial soundness of the company, and improvement of operating efficiencies, which when taken together lead to safe and reliable natural gas service, at reasonable rates, for the customers.

II. OVERVIEW OF SOUTHWEST GAS' EXECUTIVE COMPENSATION PHILOSOPHY

Q. 7 Please describe your understanding of the Company's philosophy regarding executive compensation.

A. 7 Southwest Gas' overall compensation philosophy is to provide executives with a base salary consistent with the median of the market, and then provide additional at-risk variable compensation for total direct compensation that is competitive with the market. This philosophy is consistent with approaches followed by several of Southwest Gas' peers (e.g., Equitable Resources, Nicor, UGI, UniSource, and Washington Gas Light). Southwest Gas believes that such a philosophy ensures that executives are not paid in excess of what their performance merits and aligns the interests of executives with the customers and shareholders –

ensuring the executive team is motivated to perform effectively and efficiently.

Q. 8 How does Southwest Gas determine the appropriate level of executive compensation?

A. 8 As previously noted, the Company provides executives with a base salary that is consistent with the median of the market, and then provides additional at-risk variable compensation for total direct compensation that is competitive with the market. The Company periodically checks the marketplace to ensure compensation is properly aligned with the philosophy being employed. For instance, the Company on an on-going basis utilizes several peer surveys, including the American Gas Association's (AGA) "Executive Compensation" survey and Towers Watson's "Top Management Compensation" survey to ensure compensation is consistent with the Company philosophy regarding competitive pay. In addition, at the Company's request, Towers Watson recently conducted its own analysis of Southwest Gas' executive compensation program as part of this rate proceeding.

Q. 9 Does Southwest Gas provide compensation in addition to total direct compensation (TDC)?

A. 9 Yes. In addition to TDC, Southwest Gas offers an executive retirement benefits package, which consists of three components: the Defined Benefit Retirement Plan, the Supplemental Executive Retirement Plan (SERP), and the Executive Deferral Plan (EDP).

III. COMPONENTS OF TOTAL DIRECT COMPENSATION

Q. 10 Please identify and describe the Company's TDC.

A. 10 Southwest Gas' TDC consists of two components: (1) base salary, and (2) variable at-risk pay. For several years, the Company has adhered to a consistent process to determine fair and competitive salary levels for executives (officers). Salaries are first established through the widely used Hay Group (Hay) method. Various surveys and peer comparisons, including the AGA and Towers Watson surveys previously mentioned, are then reviewed annually to provide market comparisons for base salaries and TDC. These reviews have consistently demonstrated that the Company's salary evaluations made under the Hay method have been fair and reasonable while remaining within established parameters.

Q. 11 Please explain the Company's variable at-risk pay component of TDC.

A. 11 Southwest Gas' variable at-risk pay is comprised of two plans: the Management Incentive Plan (MIP) and the Restricted Stock Unit Plan (RSUP). These plans provide the Company with a strategic tool to attract, retain and motivate skilled and qualified management. The MIP and RSUP provide variable at-risk compensation to executives based on specific goals and performance objectives vital to the Company's short and long-term priority of providing customers with safe and reliable service at reasonable rates. The measures defining the plan are structured to foster a common interest among customers, Southwest Gas management and shareholders, and are designed to only reward management when mutually beneficial results are achieved - thus ensuring management is not rewarded for unsatisfactory performance to the detriment of customers.

Q. 12 Please describe Southwest Gas' MIP.

A. 12 The MIP provides variable at-risk compensation to executives for the achievement of specific goals and benchmarks important to both the short- and long-term success of the Company. The MIP is at risk each year based on performance of four measures - (1) customer satisfaction; (2) customer-to-employee ratio; (3) return on equity (ROE); and (4) operating costs. These metrics provide a solid balance over a period of time, maintaining focus on customer service, operational efficiency, and financial soundness (which allows Southwest Gas to make capital investments and improvements needed for continued and improved customer service).

Forty percent of the total earned under the MIP is paid in cash immediately following the financial close of the most recent calendar year. The remaining 60 percent is issued as performance shares. These performance shares vest 3 years after the grant date, and act as a retention tool to encourage management continuity.

Q. 13 Please explain the second component of the Company's variable at-risk pay included in TDC - the RSUP.

A. 13 The RSUP replaced the Company's predecessor long-term pay program in 2007, and is designed to maintain a reasonably competitive position of TDC and further align customer, management, and shareholder interests, while at the same time sustaining a strong commitment to the long-term financial success of the Company and better aligning pay for performance and increasing retention of the core executive team.

Q. 14 Please describe the goals and benchmarks that determine the RSUP payout.

A. 14 As a measurement of long-term sustained performance, the RSUP is available to officers and other key management employees. The average MIP percent of target achieved over the three-year period ending before the award date is used to calculate the distribution for RSUP participants. Amounts granted pursuant to the RSUP range from 50 to 150 percent of the target for each participant. The minimum three-year average MIP achievement required to receive a distribution under the RSUP is 90 percent. The dollar amount distributed under the RSUP is converted to restricted share units using the market price on the date such distributions are approved by the Company's Board of Directors. The units vest over a three-year period, with 40 percent for the first year, and 30 percent for the second and third years.

IV. BENEFIT COMPONENTS OF EXECUTIVE COMPENSATION

Q. 15 What are the benefit components of executive compensation?

A. 15 The benefit components of executive compensation include the Defined Benefit Retirement Plan, the SERP and the EDP.

Q. 16 Please describe the Defined Benefit Retirement Plan.

A. 16 Executives participate in the Company's non-contributory, qualified defined benefit retirement plan, which is also available to all employees of the Company. Benefits are based on an employee's years of service, up to a maximum of 30 years, and the 12-month average of the employee's highest five consecutive years' salaries, excluding bonuses, within the final 10 years of service. The Internal Revenue Service (IRS) does place a limit on the amount of annual compensation that can be considered in determining benefits under the basic plan. For 2010, the maximum annual compensation that can be considered is $245,000. In future years, the maximum annual compensation will be adjusted to reflect changes in the cost of living as established by the IRS.

Q. 17 Please describe the SERP.

A. 17 Because the IRS places limits on the amount of compensation that can be considered for benefits under the Defined Benefit Retirement Plan, executives also participate in the Company's SERP. Currently, there are only four officers who are compensated at or above the IRS limit. Benefits from the plan, when added to the benefits received under the basic retirement plan, equal 60 percent of annual salary for senior executives, and 50 percent of annual salary for all other officers. Generally, officers must be at least 55 years of age with 20 or more years of service to receive SERP benefits. Some reductions may apply, depending on an officer's age and years of service at the retirement date.

The SERP is a non-qualified plan and, as such, payments are not guaranteed (i.e., participants are general creditors of the Company).

Q. 18 Please describe the EDP.

A. 18 The final component of the benefits component of Southwest Gas' compensation program is the EDP. Executives at the vice president level and above may defer up to 100 percent of their salary and 100 percent of the cash portion of their at-risk variable pay. As a part of the EDP, the Company provides matching contributions that parallel the matching contributions made under the Company's 401(k) plan (which is available to all employees, and equal to one-half the deferred amount up to 7 percent of their annual salary). Payouts under the EDP begin upon retirement based on pre-selected time periods, or at some other employment terminating event. Interest on EDP deferrals and the matching contributions is accrued annually at 150 percent of the Moody's Seasoned Corporate Bond Rate. The EDP is a non-qualified plan and, as such, participant balances are not guaranteed (i.e., participants are general creditors of the Company and their contributions to this account are at risk).

Q. 19 What is the purpose of the SERP and the EDP?

A. 19 In addition to providing Southwest Gas with tools to compete in the marketplace to recruit and retain quality executives, another reason for offering a deferred compensation plan to senior management is to provide a parity of benefits. All employees of Southwest Gas are offered the opportunity to participate in the Employees' Investment Plan (EIP), a 401(k) tax deferred plan. Employees may choose to contribute anywhere from 2 percent to 60 percent of their salaries, up to an IRS imposed limit of $16,500 per year, plus a $5,500 catch-up amount for participants that are age 50 and above. The $22,000 cap imposed by the IRS limits the percentage of compensation an executive can defer from his/her income relative to other Southwest Gas employees; consequently, the EDP places the executives on par with other employees with respect to the percent of salary that can be deferred and the related match. The Defined Benefit Retirement Plan provides fully-vested employees (30 or more years of service and 55 years of age) a retirement benefit that is approximately 52.5 percent of their final average salary. The SERP puts the officers on approximately the same footing as other employees with respect to retirement benefits.

Q. 20 Does salary deferred under the EDP negatively impact an officer's Defined Benefit Retirement Plan calculation?

A. 20 Yes. Salary deferred under the EDP is not included in base salary when computing the officer's basic pension benefit. The limitation is required by IRS regulation. The Company's standard 401(k) plan does not have similar limitations for employee contributions which are deferred into the 401(k); consequently, employees' 401(k) contributions count towards their Defined Benefit Retirement Plan calculation. These two plans work in tandem to put the executives on approximately equal footing with other Southwest Gas employees with respect to retirement benefits.

V. TOWERS WATSON STUDY

Q. 21 Please explain the process employed by Towers Watson to make its assessment of the executive compensation levels at Southwest Gas.

A. 21 The assessment of Southwest Gas' executive compensation levels consisted of two primary analyses:

(1) Towers Watson identified Southwest Gas' top five highest paid (named executive officers), and matched them to the most similar positions at public company peer organizations where adequate

data were available in public company filings. That is, the Chief Executive Officer (CEO) was matched to the CEO median in the peer group, the Chief Financial Officer (CFO) to the CFO median in the peer group and the President was matched to the President or Chief Operating Officer median in the peer group. The Executive Vice President was matched to the third highest paid position median in the peer group, and the Senior Vice President, Regulatory Affairs and Energy Resources to the fourth highest paid position median in the peer group, as the proxy filings are only required to report the top five positions at the peer companies and a direct position match is neither always possible nor always prudent.

(2) Towers Watson also matched 20 Southwest Gas executive positions (including the positions noted above) to published surveys. Position matches from the survey sources were made using the closest match for the Southwest Gas position title and job responsibilities, and each survey source used was equally weighted. Towers Watson utilized a Utilities industry match from the surveys. Where appropriate for selected positions, Towers Watson compared Southwest Gas executive positions to both General Industry and Utilities industry matches and found little difference in the data. The published

survey analysis is based on comparing the scope and level of responsibility of each individual Southwest Gas executive position to comparable jobs, based on their scope and level of responsibility in a variety of published compensation surveys. Towers Watson was generally able to find multiple survey matches for the Southwest Gas executive positions. Typically, the published surveys provide more consistent data on a larger population size than the proxy peer group. However, the proxy peer group is reflective of public company pay practices whereas the survey data may reflect a combination of private and public organizations.

In addition, Towers Watson reviewed the proxy data in order to determine the prevalence and nature of the proxy group's variable at-risk pay practices and SERP practices/plan design, and gathered available survey information on comparable market offerings of non-qualified deferred compensation.

Q. 22 Please describe Towers Watson's practice for interpreting a client's compensation level compared to proxy/published survey data?

A. 22 In interpreting a client's compensation levels compared to proxy/published survey data, it is rare to find the client precisely at the market level. Rather, Towers Watson's standard practice is to utilize a normative range of plus or minus 15 percent (85 percent to 115 percent compared to the market median) to determine if individual compensation is within a "competitive range" of the market. In those cases where individuals are outside this band, the facts and circumstances should be examined independently to determine if pay levels are appropriate. In many situations the internal value of a position or the experience, performance level, and tenure of an incumbent justifies his/her pay (either high or low) relative to the market.

Q. 23 What were the findings based on the assessment of the peer group analysis?

A. 23 The peer group analysis revealed the following:

- Base pay for the group of named executives was 6 percent below the peer group median. Results for individual executives ranged from 9 percent above to 41 percent below the median.
- Total cash compensation (base salary plus target total cash) for the group of named executives was 22 percent below the peer group median. Results for individual executives ranged from 6 percent below to 51 percent below the median.
- Total direct compensation for the group of named executives was 25 percent below the peer group median. Results for individual executives ranged from 12 percent below to 53 percent below the median.

Q. 24 What were the findings based on the assessment of the survey analysis?

A. 24 In the survey analysis Towers Watson was able to match 17 of the 20 Southwest Gas executives to comparable positions in the published survey data.

- Base pay for the surveyed executive group was 9 percent below the market median. Results for individual positions ranged from 16 percent above to 42 percent below the market median.
- Total cash compensation for the surveyed executive group was 22 percent below the market median. Results for individual positions ranged from 11 percent above to 56 percent below the market median.
- Total direct compensation for the surveyed executive group was 26 percent below the market median. Results for individual positions ranged from 22 percent above to 61 percent below the market median.

Q. 25 Please describe your assessment of the Southwest Gas variable at-risk pay plan metrics.

A. 25 Among peer group companies, variable at-risk pay plans varied widely in the metrics used to measure success. Some measure of earnings or income was nearly universal (90 percent prevalence), and customer satisfaction (65 percent) and safety (45 percent) were also quite prevalent. Other than a direct comparison of earnings (which Southwest Gas does not use), the current variable at-risk pay metrics at Southwest Gas cover the major categories of metrics used by the peer group companies.

Q. 26 Does the Towers Watson assessment include any specific findings regarding SERPs and deferred compensation plans?

A. 26 Yes. First, as noted, Southwest Gas provides a pension and a SERP to its executives. For the top executives, this is an annuity benefit of up to 60 percent of average base salary accruing over a 30 year period and 50 percent for the next level of executives. 80 percent of the peer group companies offer SERPs to their executive group, with an average annuity benefit of up to 45 percent of total cash compensation accruing over a 30 year period. Though the raw percentage offered by Southwest Gas is larger, denominating the award on "base salary" rather than "total cash compensation" - which is base salary plus annual variable at-risk pay - places the overall value of the Southwest Gas program at market level, and results in a SERP benefit that is in line with the offerings of the Company's peer group. Please note that while the benefit level as a percent of salary at Southwest Gas is at market level, the slightly below market salaries at the Company move the actual value of this benefit to slightly below market levels, but still within a competitive range.

Second, our review of survey data on non-qualified deferred compensation plans found that the majority of companies surveyed have a non-qualified deferred compensation plan of some sort for their executive group. The survey data varied widely, but most of these companies allow participants to defer base salary and annual variable at risk pay, with roughly 40 percent of companies allowing participants to defer long-term variable at-risk pay. About 70 percent of the utility companies surveyed that have a deferred compensation plan also have a matching component, with the most common formula reported being 401(k) restoration plans. The Southwest Gas executive deferral plan, as a 401(k) restoration plan, is a common practice.

Q. 27 Please outline the conclusions reached based on the Towers Watson assessment.

A. 27 As a group, the named executive officers at Southwest Gas are on the low end of or below the competitive range relative to the median of their proxy peer group.

On average, base salaries for the 20 executives for which data were found are at the low end of the competitive range of the 50th percentile of the market.

On average, total cash compensation for the 20 executives for which data were found is below the competitive range in comparison to the 50th percentile of the market.

On average, total direct compensation for the 20 executives is below the competitive range in comparison to the 50th percentile of the market.

For each element of compensation examined, and as an aggregate, executive compensation levels at Southwest Gas are within or below the range of competitive practice.

Southwest Gas' SERP and EDP are in line with and competitive with contemporary utility industry practice. Based on their peer group prevalence, the SERP and EDP programs serve as key components in the Company's executive compensation package and support the critical need to attract and retain executive talent.

Q. 28 You have determined that Southwest Gas' executive compensation programs are reasonable and in-line with market practices, but why should these costs be included in rates?

A. 28 The compensation packages for executives are driven by market practice and are necessary for an organization to maintain a dedicated and consistent executive team over a period of time to ensure the operations and strategic plans of the organization are implemented. The packages are reasonable and well-balanced with below market base salaries, well-designed variable pay at risk plans, and sufficiently competitive retirement benefits. All of the components of the package are reasonable individually and as a whole. Subtracting any significant component from the package would significantly diminish the competitiveness of the overall compensation package of the executive team at

Southwest Gas, which is well-designed and balanced. There is nothing in the pay programs for executives that would cause any undue burden on Southwest Gas' customers and thus the cost of the executive package should be fully recovered in rates.

Q. 29 Does this conclude your prepared direct testimony?

A. 29 Yes.

SANDRA L. GAFFIN

Sandra Gaffin is the Southwest & Denver Line of Business Leader for the Rewards Talent & Communication Practice at Towers Watson. She has over 25 years experience as a human resource professional. Her areas of expertise include executive compensation, global compensation, and total rewards strategy and optimization.

In the area of executive compensation, Sandra has developed compensation philosophy, structured annual and longer-term incentive plans and designed Board of Director compensation programs. Additionally, she supports the development of proxy disclosures, Compensation Committee charters and processes, and executive and Board evaluation tools and processes. In the course of her consulting with clients, she frequently assesses the effect of tax, accounting and legislative regulations.

Sandra's client work also includes broad based compensation systems such as job leveling and career frameworks, the design of salary structures and variable pay plans, and the development of alternative reward programs.

Prior to joining Watson Wyatt, Sandra was a partner at Ernst & Young and Arthur Andersen. She also served as a senior HR executive in the financial services industry and a higher education institution.

Sandra has:

- Served on the Board of Directors, Society for Human Resource Management (SHRM)
- Been a member of the Research Advisory Board, WorldatWork (formerly the American Compensation Association)
- Provided testimony before U.S. Congressional Committee on Civil Service reform

Sandra graduated magna cum laude from the University of Colorado with a Bachelor's Degree in Business. She holds certifications from the Human Resource Certification Institute (Senior Professional in Human Resources) and from WorldatWork (Certified Compensation Professional.

Exhibit SLG-1

CONFIDENTIAL

Filed Under Seal

TAB 4

IN THE MATTER OF
SOUTHWEST GAS CORPORATION
Docket No. G-01551A-10-___

PREPARED DIRECT TESTIMONY
OF
RANDI L. ALDRIDGE

ON BEHALF OF
SOUTHWEST GAS CORPORATION

NOVEMBER 12, 2010

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of
Prepared Direct Testimony
of
RANDI L. ALDRIDGE

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Southwest Gas Corporation
Docket No. G-01551A-10-___

BEFORE THE ARIZONA CORPORATION COMMISSION

Prepared Direct Testimony
of
RANDI L. ALDRIDGE

I. INTRODUCTION

Q. 1 Please state your name and business address.

A. 1 My name is Randi L. Aldridge. My business address is 5241 Spring Mountain Road, Las Vegas, Nevada 89150.

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

A. 2 I am employed by Southwest Gas Corporation (Southwest Gas or the Company) in the Revenue Requirements department. My title is Manager/Revenue Requirements.

Q. 3 Please summarize your educational background and relevant business experience.

A. 3 My educational background and relevant business experience are summarized in Appendix A to this testimony.

Q. 4 Have you previously testified before any regulatory commission?

A. 4 Yes. I have previously testified before the Arizona Corporation Commission (Commission), the California Public Utilities Commission (CPUC), and the Public Utilities Commission of Nevada (PUCN).

Q. 5 What is the purpose of your prepared direct testimony in this proceeding?

A. 5 I describe Southwest Gas' operations and cost allocation methods, and sponsor several schedules related to the development of the Company's operating expenses within Schedule C, the financial statements and statistical schedules in Schedule E, from Schedule E-1 to E-6 and E-8 and

E-9, and the projections and forecasts in Schedule F.

Q. 6 Please summarize your prepared direct testimony.

A. 6 My prepared direct testimony addresses the following key issues:

- A summary of Southwest Gas' natural gas utility operations, including an overview of its state and federal ratemaking jurisdictions.
- The methodologies employed by Southwest Gas for cost responsibility and allocation (excluding the Company's class cost of service study) contained in Schedule C-1.
- Southwest Gas' adjusted test year income statements included in Schedule C-1 with the exception of Sheet 2, and several of Southwest Gas' pro forma adjustments included in Schedule C-2; specifically:

  Adjustment No. 3 – Labor and Labor Loading Annualization;
  Adjustment No. 4 – Call Center and Customer Support Allocation and Annualization;
  Adjustment No. 5 – Cost of Service Analysis;
  Adjustment No. 6 – Employee Vehicle Compensation;
  Adjustment No. 7 – Uncollectible Expense Annualization;
  Adjustment No. 8 – Leak Survey and Repair;
  Adjustment No. 9 – Injuries and Damages;
  Adjustment No. 10 – AGA Dues;
  Adjustment No. 11 – Paiute Pipeline/SGTC Allocation Annualization;
  Adjustment No. 12 – Rate Case Expense;
  Adjustment No. 13 – Depreciation and Amortization Annualization;
  Adjustment No. 14 – Property Tax Annualization;
  Adjustment No. 15 – Interest on Customer Deposits;
  Adjustment No. 16 – Surcharge Adjustment;
  Adjustment No. 17 – Completed Construction not Classified.

- The computation of the gross revenue conversion factor and state and federal income tax rates included in Schedule C-3.

II. OVERVIEW OF NATURAL GAS UTILITY OPERATIONS

Q. 7 Please provide a brief summary of Southwest Gas' natural gas operations.

A. 7 Southwest Gas is primarily a natural gas local distribution company, providing service to over 1.8 million customers in three states. At the end of the test year, Southwest Gas served over 976,000 customers in Arizona, comprising nearly 54 percent of its total customer base. Southwest Gas has eight (8) ratemaking jurisdictions subject to the regulation of the Commission, the PUCN, the CPUC, and the Federal Energy Regulatory Commission (FERC).

Southwest Gas' operations are divided geographically into five operating divisions: Southern California, Northern Nevada, Southern Nevada, Central Arizona, and Southern Arizona. Each division operates independently of the others and may include portions of multiple ratemaking jurisdictions. All divisions are supported by staff located at the Company's Corporate Headquarters in Las Vegas, Nevada.

At the state level, Southwest Gas' retail gas utility operations currently consist of six rate jurisdictions: Arizona, Southern Nevada, Northern Nevada, Southern California, Northern California, and South Lake Tahoe, California. Southwest Gas' remaining two rate jurisdictions, Paiute Pipeline Company (Paiute) and Southwest Gas Transmission Company (SGTC), are regulated by the FERC.

III. JURISDICTIONAL COST RESPONSIBILITY AND ALLOCATIONS

Q. 8 Briefly describe how costs associated with Southwest Gas' natural gas operations are treated in this rate application.

A. 8 Both operating and capital costs are incurred at the Arizona division level and at the corporate level. Costs incurred at the division level are charged directly to the rate jurisdiction incurring them. Costs at the corporate level may be charged to one or more rate jurisdictions if the cost/activity was incurred on its behalf (i.e., "corporate direct" costs). In instances where corporate costs are beneficial to all of the Company's rate jurisdictions, or where the effort of tracking the jurisdictional allocation of the costs is burdensome and not cost justified, such costs are allocated to all rate jurisdictions (i.e. "common" or "system allocable" costs).

Q. 9 What do system allocable costs consist of?

A. 9 System allocable costs consist primarily of corporate administrative and general (A&G) expenses, the costs associated with intangible plant (mainly software) and general plant used to support the corporate administrative staff.

Q. 10 How does the Company allocate system allocable costs to Paiute and SGTC?

A. 10 System allocable A&G expenses (except Account 924, Property Insurance) are first allocated to Paiute and SGTC using the Modified Massachusetts Formula (MMF), a FERC-authorized methodology that is calculated on Schedule C-1, Sheet 18. Property insurance is allocated using an insurable property factor (WP Schedule C-2, Adjustment No. 11, Sheets 3-4). Paiute is also charged a rental fee for its use of system allocable intangible and general plant.

System allocable costs that are allocated and charged to Paiute are transferred to and recorded on Paiute's books monthly. Consequently, system allocable A&G expenses shown on Southwest Gas' books are net of the allocations to Paiute.

For this rate application, the MMF, the insurable property factor, and the Paiute rental charge were recalculated using end of test year data. The resulting pro forma adjustment is presented in Adjustment No. 11, which is discussed in further detail later in my testimony.

Q. 11 After system allocable costs are allocated to Paiute and SGTC, how are the remaining costs allocated to Southwest Gas' retail rate jurisdictions?

A. 11 Property Insurance costs are allocated to each retail rate jurisdiction using the same insurable property factor discussed previously, and the remaining system allocable costs are allocated using the 4-Factor Allocation Methodology (4-Factor) described below.

Q. 12 Please describe the 4-Factor methodology.

A. 12 The 4-Factor is based on the average of four equally-weighted components: (a) direct operating expense; (b) average gross plant; (c) direct operating labor; and (d) average number of customers. The 4-Factor has been used for ratemaking purposes by Southwest Gas since the 1950s, and has been accepted and approved by each of the Company's state regulatory commissions. Schedule C-1, Sheet 17 provides the development of the 4-Factor allocation percentages for the test year.

IV. RATE CASE ADJUSTMENTS

Adjustment No. 3 – Labor and Labor Loading Annualization

Q. 13 Please explain the adjustments you are supporting, starting with Adjustment No. 3, Labor and Labor Loading Annualization.

A. 13 Adjustment No. 3 annualizes the labor and related labor loadings of Arizona and Corporate employees employed by the Company at the end of the test period - June 30, 2010. This adjustment increases operating expenses by $7,852,483.

The labor and labor loading annualization adjustment includes three components. First, a salary annualization is made for all Arizona and Corporate employees with salaries in effect at the end of the last pay period beginning prior to June 30, 2010. Second, labor loadings are annualized at the end of the test year and those costs are applied to the employees on Southwest Gas' payroll at the end of the test year. Finally, the labor adjustment reflects an estimated 1.5 percent general wage increase to be effective in June 2011, along with additional wage increases as a result of within-grade movement during the twelve months subsequent to the end of the test year (i.e., through June 2011).

Q. 14 Why is it appropriate to adjust labor expense for the 2011 general wage increase and within-grade movement?

A. 14 Under current Commission guidelines for processing major rate applications, it is expected that the hearing in this proceeding will not be conducted before June 2011. Historically, the Company has granted general wage increases effective each June, after being approved by the Company's Board of Directors in May. Therefore, the 2011 general wage increase and post-test year within-grade wage increases will be known and measurable prior to the hearing in this proceeding. As such, Staff and other intervenors will have an opportunity to verify and quantify the 2011 general wage increase and post-test year within grade movement.

Q. 15 Does this post-test year adjustment violate the matching principle?

A. 15 No. This adjustment only applies to employees on the Company's payroll at June 30, 2010, the end of the test year. It does not apply to any employees hired after June 30, 2010 to meet customer growth, changes to work requirements, *etc.* Therefore, the number of employees at the end of the test year is synchronized with test year customers that those employees serve. Indeed, this adjustment preserves the matching principle by ensuring rates approved in this proceeding better reflect the costs that will be incurred by the Company during the period rates will be effective. This adjustment simply recognizes that by the time rates become effective, test year customers will be served by test year employees who, on average, will be paid more than the wages that were in effect at the end of the test year.

Q. 16 Have previous Commission rulings in the Company's rate applications addressed this adjustment?

A. 16 Yes. The Commission has consistently allowed Southwest Gas' post-test year wage increases. Most recently, in Decision No. 70665, the Commission found that the post-test year wage increase ". . . should be allowed because it is a known and measurable expense that is being incurred by the Company on a going-forward basis. Because the post-test year wage increase has been applied only to employees who were employed during the test year, there is no resulting mismatch of revenue and expenses."

Q. 17 Please describe the labor loading process.

A. 17 Pensions, benefits and payroll taxes are accumulated at the corporate level. These costs are then distributed among the various rate jurisdictions through a labor loading process. The labor loading rate is adjusted at the beginning of each year, based on budgeted pensions, benefits, paid time off, payroll taxes, and expected employee levels. The labor loading process applies the labor loading rate to each labor dollar, assigning an appropriate amount of pensions, benefits, paid time off, and payroll taxes to each account to which labor has been charged.

Q 18 How were labor loadings for Arizona and corporate employees annualized in this proceeding?

A. 18 For benefits with premiums or regular monthly payments, the amount recorded in June 2010 was multiplied by twelve months to more accurately reflect current expenses. Southwest Gas used an actuarial study incorporating data as of June 30, 2010 as the basis for annualizing pension costs. The Company removed certain items recorded in the Miscellaneous Benefits subaccount from the cost of service, such as costs related to service awards, employee events, and employee recognition. This is consistent with prior Commission decisions. In addition, payroll taxes, 401k match, and indirect time were adjusted for the impact of annualizing payroll and overtime. For the remaining costs in Account 926, recorded test year costs were used as the basis for the annualization. This is also consistent with prior Commission decisions.

There were two methods used to allocate labor loading costs to Arizona. First, the total cost of pensions, post-retirement benefits other than pension (PBOP), Supplemental Executive Retirement Plan (SERP), executive deferred compensation, and employee investment plan (401k) was allocated based on each rate jurisdiction's labor cost as a percentage of total Company labor. Second, for the remaining benefits, a cost per employee was calculated based on the adjusted costs divided by the total number of Company employees at the end of the test year. The cost per employee was multiplied by the number of Arizona jurisdictional employees at the end of the test year to determine the amount allocated to Arizona for ratemaking purposes.

Q. 19 Once the annualized labor and labor loadings were calculated, how was the adjustment determined?

A. 19 The annualized labor and labor loadings were assigned to each account based on the historical test year relationships. For example, during the test year, approximately 81 percent of Arizona direct labor and loadings were charged to operations and maintenance (O&M) accounts. Therefore, 81 percent of the annualized Arizona direct labor and loadings were assigned to O&M accounts. The difference between the annualized labor and loadings assigned to the O&M accounts and the recorded labor and loadings is the adjustment for that account. Since 81 percent of the annualized Arizona direct labor and loadings were assigned to O&M, the remaining 19 percent were assigned to capital and deferred accounts, and do not impact the revenue requirement requested in this rate application. A similar assignment was performed for corporate staff annualized labor and loadings to determine the adjustment required.

Adjustment No. 4 – Call Center and Customer Support Allocation and Annualization

Q. 20 Please explain Adjustment No. 4, Call Center and Customer Support Allocation and Annualization.

A. 20 There are two parts to this adjustment. The call center and customer support allocation portion of Adjustment No. 4 allocates the proper percentage of this function to Arizona customers. The call center annualization reflects a full year of contract employees at the end of the test year, to synchronize with the number of Company call center employees at the end of the test year. This adjustment increases operating expenses by $690,350.

Q. 21 Please describe the Company's call center and customer support function.

A. 21 There are presently three customer assistance call centers in Southwest Gas' service territory: Phoenix, Tucson, and Las Vegas, Nevada. Customers call a toll-free telephone number, and the call is routed to the next available agent, no matter where that agent is located. The agents are trained to respond to customer inquiries regardless of where the customer is located. There are also Company employees who provide back office customer support in Victorville, California and Carson City, Nevada. All call centers and both customer support locations handle customer inquiries and reporting for the entire Company. However, to better manage the workload during peak hours, the Company recently began utilizing contract employees as remote call center agents in addition to the Company employees that physically staff the call centers.

Q. 22 Why is an adjustment necessary to properly allocate these costs to Arizona?

A. 22 Call center and customer support function costs are aggregated on Southwest Gas' books by operating division for cost management purposes.

However, since Southwest Gas is requesting recovery for Arizona jurisdiction-related costs in this proceeding, an adjustment is necessary. These costs are therefore aggregated on a total company basis, and then reallocated to Arizona based on number of customers, which is the Factor IV component of the 4-Factor methodology discussed earlier in my testimony, and is calculated on Schedule C-1, Sheet 17, Line 8. The adjustment reflects the difference between the amount recorded on Southwest Gas' books and the reallocated amount.

Adjustment No. 5 – Cost of Service Analysis

Q. 23 Please explain Adjustment No. 5, Cost of Service Analysis.

A. 23 Southwest Gas conducted an analysis of its operating expenses to: 1) determine if there were costs recorded during the test year for which Southwest Gas is not requesting recovery in this proceeding; 2) adjust recorded expenses so a full year's worth of expense is reflected, no more and no less; 3) annualize items with significant cost changes; and 4) determine whether the test year contains material, non-recurring costs. Adjustment No. 5 reflects the results of this analysis. The amounts removed from and added to the cost of service are summarized by account in Schedule C-2, Adjustment No. 5, and the supporting workpapers categorize all transactions by the type of cost. This adjustment reduces operating expenses by $252,777.

Adjustment No. 6 – Employee Vehicle Compensation

Q. 24 Please explain Adjustment No. 6, Employee Vehicle Compensation.

A. 24 Adjustment No. 6 removes from test year expenses the cost of Company vehicles related to personal use by employees. This adjustment is consistent with Southwest Gas' proposal in its most recent general rate case, which was approved by the Commission - Decision No. 70665. This adjustment reduces operating expenses by $227,232.

Adjustment No. 7 – Uncollectible Expense Annualization

Q. 25 Please explain Adjustment No. 7, Uncollectible Expense Annualization.

A. 25 Adjustment No. 7 annualizes the recorded amounts in Account 904, Uncollectibles Expenses, to reflect the test year net closing bill write-offs as a percentage of gross revenues. The write-off percent applied to present revenues determines the annualized amount, which is then compared to the recorded uncollectible expense to determine the adjustment amount. This is consistent with Southwest Gas' proposal in its 2004 general rate case, which was approved by the Commission – Decision No. 68487. This adjustment increases operating expenses by $436,181.

Adjustment No. 8 – Leak Survey and Repair

Q. 26 Please explain Adjustment No. 8, Leak Survey and Repair.

A. 26 Adjustment No. 8, Leak Survey and Repair, reduces test year accelerated leak survey and leak repair expense related to both Aldyl A and Aldyl HD pipe consistent with prior Commission decisions. This adjustment reduces operating expenses by $178,871.

Q. 27 Has the Company written-off a portion of the capital expenditures required to replace Aldyl A and Aldyl HD through the end of the test year?

A. 27 Yes. This is discussed in further detail in the prepared direct testimony of Company witness Robert A. Mashas.

Adjustment No. 9 – Injuries and Damages

Q. 28 Please explain Adjustment No. 9, Injuries and Damages.

A. 28 Adjustment No. 9 adjusts the recorded self-insured accruals charged to Account 925 during the test year to a normalized level.

Q. 29 Please describe the types of charges included in Account 925, Injuries and Damages.

A. 29 Account 925 includes four types of charges: 1) insurance premiums; 2) the reserve for the self-insured portion of liability claims; 3) legal and other related expenses necessary to defend and process claims; and 4) workers compensation claims.

Q. 30 What was the Company's level of self-insurance for general liability claims at the end of the test year?

A. 30 The Company is self-insured for up to $1 million of claims expense for each occurrence (per occurrence component). To the extent that a specific claim exceeds $1 million, the Company is self-insured for the excess over $1 million up to an aggregate of $5 million. Once the $5 million aggregate is reached, any amount paid above the $5 million is the responsibility of the insurance carrier. The $5 million aggregate can be the result of payouts from more than one incident that may occur in more than one rate jurisdiction. Given the potential multi-jurisdictional nature of amounts recorded beyond the $1 million per occurrence component and up to the $5 million aggregate (aggregate component), the Company treats the aggregate component as a system allocable expense. The $5 million aggregate results in a lower insurance premium expense than if the Company maintained a lower aggregate component, or had no aggregate component. Accordingly, any amounts recorded under the aggregate component of injuries and damages expense should be treated similarly as the insurance premium expense and be recorded as a system allocable expense. The up to $1 million per occurrence component has no annual limit as to the number of claims, is claim specific, and does not include costs emanating from more than one rate jurisdiction. Indeed, the per occurrence component of injuries and damages expense should be treated as a direct jurisdictional expense.

Q. 31 Please explain the accounting for the self-insured portion of liability claims.

A. 31 When an incident is identified that may require payment, the Company accrues the estimated payment as a self-insured retention expense. The entry is a debit to Account 925, Injuries and Damages, and a credit to Account 228.2, Accumulated Provision for Injuries and Damages. Once the outcome of the claim becomes final, any costs paid are charged against the accrual in Account 228.2. If the amounts paid are different than the amount accrued, then the net difference is removed from Account 228.2 and charged back against Account 925.

Q. 32 Given the method used to account for the self-insured portion of liability claims, does the test year expense reflect on-going operations?

A. 32 No. It is not unusual to have fluctuations in the net charges to Account 925 from period-to-period because of the nature of the method used to account for this process. This can result in Account 925 having an expense level during any given recorded period not being representative of on-going operations.

Q. 33 Please explain the normalized adjustment to self-insured expense.

A. 33 The Company uses a ten-year average of self-insured amounts to normalize this expense for ratemaking purposes. Schedule C-2, Adjustment No. 9, shows that the ten-year average of Arizona direct claims is $834,961 compared to the test year amount of $537,500, requiring a $297,461 adjustment. The ten-year average system allocable expense is $1,000,000 compared to the test year amount of $275,000, requiring a $725,000 adjustment. After allocating a portion of this expense to Paiute, the Arizona portion of this adjustment is an increase of $392,160. The total impact of this adjustment on Arizona's operating expenses is $689,621.

Adjustment No. 10 – AGA Dues

Q. 34 Please explain Adjustment No. 10, AGA Dues.

A. 34 Adjustment No. 10 removes $16,324 from operating expenses, which is the portion of the Company's dues to the American Gas Association ("AGA") identified as lobbying in nature.

Q. 35 Is Southwest Gas requesting recovery for activities performed by AGA supported by member dues that would be disallowed if the Company had performed the activities itself?

A. 35 No. Consistent with prior practice, the Company removed the percentage of dues related to lobbying from its cost of service.

Q. 36 In prior rate cases, Southwest Gas removed costs for promotional advertising and/or marketing expenses. Does AGA still engage in these activities?

A. 36 No, not as separate functions. Over the years, AGA has transitioned to a more service-oriented organization that provides member companies assistance with safety and operations issues. A large portion of AGA's marketing and promotional budget was eliminated in the late 1990s, and AGA does not currently maintain a separate function for marketing or promotional activities. The only promotional advertising and/or marketing that AGA currently engages in is lobbying-related. As such, there is no longer a need for a second line item in this adjustment to remove promotional advertising and/or marketing expenses, and the removal of additional amounts from the dues Southwest Gas pays to AGA is not warranted.

Q. 37 How does Southwest Gas' membership in AGA benefit the Company and its customers?

A. 37 Southwest Gas' AGA membership provides the Company with unparalleled access to industry-specific experts and organizations, other member gas utilities, and industry-specific information pertaining to industry best practices, compliance, safety, gas operations, conservation and energy efficiency, and environmental matters. The focus and the goal of sharing, exchanging, and providing member companies access to this information is to improve the quality of service and lower the cost of service of its member companies. By leveraging the dues and resources of over 200 member companies, AGA is able to provide these benefits at a lower cost to member companies than if each member company had worked to obtain these benefits on its own.

Q. 38 Can you provide some specific examples of how Southwest Gas' membership in AGA benefits the Company and its customers from a best practices and compliance perspective?

A. 38 Yes. The AGA Best Practices Program provides a forum for natural gas utilities to share effective business processes and procedures with other utilities in the industry. The Company's participation in this program has resulted in Company-wide improvements that have increased productivity and reduced operating costs. For example, Southwest Gas utilized this program when it was looking to automate its scheduling processes to increase field productivity and customer service. The new system will reduce fuel costs and improve customer service. From a compliance perspective, the AGA keeps member companies informed about the nuances of proposed legislation and helps educate/train member companies regarding the implications of new legislation. For example, in the Pipeline and Hazardous Material Safety Administration's ("PHMSA") proposed rule-making for the Distribution Integrity Management Program, the proposed rule included a program requiring a costly and very burdensome process for reporting material failures to PHMSA. Southwest Gas and others were able to refer PHMSA to the work initiatives of the AGA's Plastic Pipe Database Committee ("PPDC"), which resulted in the elimination of the reporting requirements in PHMSA's final rule. Initiatives such as this, that result in sensible, consensus work processes, contain operating costs and reduce the cost of service increases that are passed along to customers as a result of complying with new rules and regulations. .

Q. 39 Can you provide some specific examples of how Southwest Gas' membership in AGA benefits the Company and its customers from a safety and gas operations perspective?

A. 39 Yes. The AGA created the afore-mentioned PPDC as a result of a National Transportation Safety Board recommendation to the Office of Pipeline Safety in 1998. PPDC is a voluntary program that compiles and trends in-service plastic pipe and component material failures. PPDC works to identify material failure trends and communicates those observations through AGA. The trends are monitored and used to proactively alert the natural gas industry of materials posing a potential threat to their systems. The PPDC is comprised of both industry and regulatory members. Southwest Gas has supported and participated in the PPDC since its inception. Anita Romero, Southwest Gas Vice President, Southern Nevada Division, serves as the co-chair for the committee. Robert Miller of the Arizona Corporate Commission is also a member on the committee representing the National Association of Regulatory Utility Commissioners.

In addition, the Company has developed, implemented, and refined its practices regarding damage prevention, as well as the Company's application of excess flow valves; utilization of keyhole technology and split and pull pipe replacement practices; transmission integrity management and distribution integrity management practices; and safety processes for purging customer house lines as a result of information received through its membership with AGA. Absent the Company's involvement with AGA, it likely would not have had the opportunity to take advantage of these efficiencies and best practices because it may not have otherwise been aware of them.

Q. 40 Can you provide some specific examples of how Southwest Gas' membership in AGA benefits the Company and its customers from an environmental and conservation and energy efficiency perspective?

A. 40 Yes. The AGA has worked with member companies to pursue increased funding of the Low Income Home Energy Assistance Program (LIHEAP) by the federal government, a program which reduces the financial burden of those on low or fixed incomes for energy services by providing assistance towards home energy bills, low cost weatherization, or other energy-related home repairs. In addition, the AGA's Building Energy Codes and Standards Committee has been instrumental in the adoption of new building safety code provisions that have helped the building industry provide more energy efficient, safely constructed buildings. AGA has partnered with many organizations and contributed to the funding of many research and testing projects that have provided the technical data to support the many new building safety and energy conservation code changes. These new and improved standards have also been adopted by the Arizona Department of Energy and by local municipal and county building departments throughout the state of Arizona for all new construction.

Adjustment No. 11 – Paiute Pipeline/SGTC Allocation Annualization

Q. 41 Please explain Adjustment No. 11, Paiute Pipeline/SGTC Allocation Annualization, which you previously referred to in your response to Question No. 10.

A. 41 Adjustment No. 11 annualizes the system allocable A&G amounts allocated to Paiute through the MMF allocation methodology, the insurable property factor, and the rent revenue that Southwest Gas receives from Paiute for the test year ended June 30, 2010. The supporting workpapers to Adjustment No. 11 show the detailed calculations needed to derive the Paiute rent expense and insurable property factor at June 30, 2010. This adjustment is consistent with the methodology approved by the Commission in the Company's last several rate cases.

The annualized MMF allocation factors are also used in the pro forma adjustments that impact system allocable A&G costs, in order to allocate a portion of the adjustment to Paiute and SGTC before calculating the portion that is allocated to Arizona. This adjustment increases operating expenses by $44,593.

Adjustment No. 12 – Rate Case Expense

Q. 42 Please explain Adjustment No. 12, Rate Case Expense.

A. 42 The Company estimated the incremental costs that would be incurred to prepare and process this general rate case, including printing, postage, court reporting, noticing, publication, travel, and outside consultants. The total incremental costs are divided by three, which is roughly equal to the number of years in one rate case cycle, to calculate an annual amortization to Account 928. The adjustment, which increases operating expenses by $33,386, is the difference between this new amortization amount and the amount of rate case expense amortized on the Company's books during the test year. This adjustment is consistent with Southwest Gas' proposal in its most recent general rate case, which was approved by the Commission.

Adjustment No. 13 – Depreciation and Amortization Expense Annualization

Q. 43 Please explain Adjustment No. 13, Depreciation and Amortization Expense Annualization.

A. 43 Adjustment No. 13 annualizes depreciation and amortization expense based on adjusted plant in service at June 30, 2010, using currently approved depreciation rates. This adjustment increases operating expenses by $3,135,777.

Q. 44 Please explain why an adjustment is necessary to annualize depreciation and amortization expense for the test year.

A. 44 This adjustment is necessary to synchronize the depreciation and amortization expense with the plant in service at the end of the test year, as adjusted. Like many utilities, Southwest Gas employs a depreciation convention based on the month the plant is actually placed into service. Southwest Gas begins depreciation on plant the month subsequent to the month it is first placed in service, and in turn, takes a full month's depreciation in the month it is removed or retired from service. As a result, plant that is placed in service or retired after the beginning of the test year has a partial year's depreciation expense recorded on the books of the Company. To allow Southwest Gas the opportunity to recover its reasonable and necessary operating expenses and to avoid charging customers for assets removed or retired from service, depreciation and amortization must be annualized based on end of test year plant balances, as adjusted. This adjustment accomplishes those objectives, and is consistent with the methodology approved by the Commission in the Company's previous rate cases.

Adjustment No. 14 – Property Tax Annualization

Q. 45 Please explain Adjustment No. 14, Property Tax Annualization.

A. 45 Adjustment No. 14 annualizes property taxes on the Company's adjusted investment in plant and materials as of the end of the test year. For Arizona properties, the Company determines an estimated full cash value by using adjusted net plant in service at June 30, 2010, adding materials and supplies, and subtracting transportation equipment and land rights. The estimated full cash value is then multiplied by the 2011 assessment rate of 20 percent to determine the assessed value. The assessed value is then multiplied by the currently effective property tax rate of 10.1263 percent to determine the annualized property tax expense. This adjustment increases operating expenses by $1,457,495.

Q. 46 Why is Southwest Gas proposing to use the statutory assessment rate for 2011 in its property tax annualization, rather than the assessment rate applicable for 2010?

A. 46 The 2011 statutory assessment rate has already been established and is a known and measurable change that will be applicable in 2012, when rates from this proceeding are expected go into effect. Utilizing the 2011 statutory assessment rate, which is the same assessment rate that will apply in 2012, is consistent with the methodology approved by the Commission in Southwest Gas' last general rate case.

Adjustment No. 15 – Interest on Customer Deposits

Q. 47 Please explain Adjustment No. 15, Interest on Customer Deposits.

A. 47 Adjustment No. 15 synchronizes interest expense on customer deposits with the amount of customer deposits used as a rate base reduction. The customer deposit balance used as a rate base reduction is multiplied by the customer deposit rate of six percent to determine the adjusted interest on customer deposit balance expense. The difference between the adjusted amount and the recorded amount is the adjustment. Consistent with prior Commission decisions, interest expense is treated as an above-the-line expense. This adjustment increases operating expenses by $292,612.

Adjustment No. 16 – Surcharge Adjustment

Q. 48 Please explain Adjustment No. 16, Surcharge Adjustment.

A. 48 Adjustment No. 16 removes expenses from base rates that are recovered through various surcharges, including the Research and Development surcharge, the Demand Side Management Program surcharge, and the Transmission Integrity Management Program surcharge. This adjustment reduces operating expenses by $3,798,881.

Adjustment No. 17 – Completed Construction not Classified

Q. 49 Describe Adjustment No. 17, Completed Construction Not Classified (CCNC).

A. 49 Adjustment No. 17, CCNC, is consistent with Commission decisions in Southwest Gas' last three general rate cases. There are two parts to this adjustment. First, gas plant is adjusted for plant serving customers but not recorded in Account 101, Gas Plant in Service (GPIS), at the end of the test year. The gas plant included in this adjustment reflects construction expenditures made before the end of the test year. No expenditures for tangible plant incurred after June 30, 2010 are included in the adjustment. The tangible plant represented by these expenditures (i.e., CCNC) was either in-service at the end of the test year or shortly thereafter. However, the actual closing to GPIS was made after the end of the test year, largely due to delays in entering the required information into the Company's computer systems.

The CCNC requested to be included in rate base is non-revenue producing plant. In other words, it represents plant that was constructed to improve service or enhance reliability and safety for existing customers, and the Company will not realize any incremental operating revenues from the construction and addition of this plant. Examples of the CCNC included in the adjustment are: replacement mains, franchise related replacements, pressure reinforcements, measuring and regulating station equipment, and general plant.

Customers in Southwest Gas' system at the end of the test year are the primary beneficiaries of these construction expenditures. Consequently, the inclusion of CCNC in rate base more accurately matches the Company's investment needed to serve the customers in its system at the end of the test year.

Second, system allocable miscellaneous intangible plant was adjusted. Most of the items in system allocable miscellaneous intangible plant (Account 101) are software projects with three to five-year amortization periods. These amortization periods are roughly equivalent to the Company's Arizona rate case cycle. Absent an adjustment, customers may end up double-paying for certain projects through rates, while never paying for other projects. To mitigate this phenomenon, the Company proposes an adjustment to remove all projects with an amortization period expiring March 31, 2011 or earlier from rate base, and to add estimated amounts for projects to be closed to plant prior to March 31, 2011 to rate base. This is a conservative adjustment because many small software projects spend a relatively short time in construction work in progress before being transferred to plant. Consequently, between the date this rate case was prepared and March 2011, more projects may close to plant than are indicated by the estimated balances included in this rate case application. Indeed, this adjustment strikes a fair balance between project amortizations that will expire shortly after the end of the test year, and projects commencing amortization and serving customers approximately one year prior to rates from this proceeding going into effect. Further, the Company's estimated amounts can be verified by intervening parties prior to the hearing in this proceeding.

Q. 50 What is the total impact of the CCNC adjustment on rate base?

A. 50 This adjustment increases rate base by $6,090,567.

Q. 51 Does this conclude your prepared direct testimony?

A. 51 Yes.

SUMMARY OF QUALIFICATIONS
RANDI L. ALDRIDGE

I graduated from the University of Washington in Seattle, Washington with a Bachelor of Arts in Business Administration, Accounting. My areas of concentration were accounting and finance. I graduated from the University of Nevada, Las Vegas with a Masters in Business Administration (MBA), with Beta Gamma Sigma honors. I am a Certified Management Accountant (CMA) and a member of the Institute of Management Accountants.

One year before completing my bachelor's degree, I accepted employment at Washington Mutual Savings Bank in Seattle, Washington as an Asset/Liability Management intern. Upon graduation in 1993, I accepted a full-time position as a Financial Analyst Trainee in the Financial Forecasting Department. In 1994, I was promoted to Financial Analyst I. My responsibilities included assisting in the budget and forecasting process, and various financial analyses.

In February 1995, I accepted a position as a Budget Analyst in the Budget and Forecasting Department at PriMerit Bank in Las Vegas, Nevada. In April 1996, I transferred to Southwest as a Corporate Accountant I in the Accounting Control Department. In January 1998, I was promoted to Analyst I/Accounting. In February 1998, I transferred to the Revenue Requirements department as an Analyst. In January 2001 I was promoted to Specialist, in July 2003 I was promoted to Senior Specialist, in May 2007 I was promoted to Supervisor, and in April 2009 I was promoted to my present position. In my present position, I am responsible for managing the activities of junior-level staff, as well as the preparation of general rate case filings for state and federal jurisdictions, the research, preparation, and presentation of various regulatory and financial analyses, studies, and reports, as well as other special projects.

I have attended numerous training and technical conferences related to utility ratemaking, regulatory, and accounting issues.

I have taught the Cost of Service Problem for "The Basics" conference presented by the Center for Public Utilities at New Mexico State University and the National Association of Regulatory Utility Commissioners since 2003.

TAB 5

IN THE MATTER OF
SOUTHWEST GAS CORPORATION
Docket No. G-01551A-10___

PREPARED DIRECT TESTIMONY
OF
JEROME T. SCHMITZ

ON BEHALF OF
SOUTHWEST GAS CORPORATION

NOVEMBER 12, 2010

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of
Prepared Direct Testimony
of
Jerome T. Schmitz

BEFORE THE ARIZONA CORPORATION COMMISSION

Prepared Direct Testimony
of
JEROME T. SCHMITZ

I. INTRODUCTION

Q. 1 Please state your name and business address.

A. 1 My name is Jerome Schmitz. My business address is 5241 Spring Mountain Road, Las Vegas, Nevada 89150.

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

A. 2 I am employed by Southwest Gas Corporation (Southwest Gas or the Company) in the Corporate Engineering Staff department. My title is Director/Engineering Staff.

Q. 3 Please summarize your educational background and relevant business experience.

A. 3 My educational background and relevant business experience are summarized in Appendix A to this testimony.

Q. 4 Have you previously testified before any regulatory commission?

A. 4 Yes. I have previously testified before the Arizona Corporation Commission (Commission).

Q. 5 What is the purpose of your prepared direct testimony in this proceeding?

A. 5 I sponsor testimony from an operations perspective supporting the Company's request for rate relief for its pipe replacement program and for a pilot program to replace customer-owned yard lines.

Q. 6 Please summarize your prepared direct testimony.

A. 6 My prepared direct testimony addresses the following key issues:

- Pipe Replacement, including Southwest Gas' request for rate relief supporting its 20-year plan for the replacement of early vintage plastic pipe ("EVPP"), and
- Customer-owned yard lines, including Southwest Gas' request to implement a pilot program to assist customers in managing their aging facilities.

II. PIPE REPLACEMENT

Q. 7 What is Southwest Gas proposing in this case with respect to pipe replacement?

A. 7 Southwest Gas is requesting specific rate treatment consistent with its distribution pipeline integrity management program and its EVPP.

Q. 8 What is distribution pipeline integrity management?

A. 8 Distribution pipeline integrity management is a risk-based process to gather and evaluate information about gas distribution systems and to prioritize and implement actions based on that information to maintain the safety and integrity of those systems.

Q. 9 Please briefly describe Southwest Gas' distribution pipeline integrity management process?

A. 9 Southwest Gas has had some form of distribution pipeline integrity management since the mid-1980s. In the mid-1980s, Southwest Gas implemented a process for the prioritization of its Aldyl A ("AA") pipe replacement in Tucson. Then, in 2000, Southwest Gas implemented a more structured approach to evaluate its distribution pipe using a relative risk-ranking algorithm known as the Distribution Pipeline Integrity ("DPI") process.

Q. 10 What is the DPI process?

A. 10 The DPI process is an annual evaluation and assessment for distribution pipe outlined in Southwest Gas' Operations Manual. From the DPI assessment, Southwest Gas determines whether to schedule a particular segment of pipe for replacement or whether to implement other risk control practices. The assessment criteria for the DPI include: type of pipe; operating pressure; pipe coating; leakage; class location of pipe, such as proximity to buildings; environmental conditions, such as coating condition; pipe condition; pipe cover; potential for external damage; soil conditions; cathodic protection system effectiveness; and type of customer(s) served.

Q. 11 Are there federal and/or state regulations for distribution pipeline integrity management?

A. 11 Yes. There are new federal regulations for a Distribution Integrity Management Program ("DIMP"), which are expected to be adopted by the state.

Q. 12 What are the new DIMP regulations?

A. 12 On December 4, 2009, Pipeline and Hazardous Material Safety Administration ("PHMSA") issued its new DIMP regulations (49 CFR Subpart P). The regulations prescribe the elements of a distribution integrity management program including:

- system knowledge;
- identification of integrity threats;
- evaluation and ranking of risks;
- identification and implementation of measures to address the risks;
- measurement of performance;
- periodic evaluation and improvement of the program; and
- reporting results.

There are other requirements as well, such as mandatory excess flow valve installations on new and replaced services lines to single family residences, enhanced reporting for mechanical fitting failures and provisions for adopting alternative inspection intervals to improve the overall safety of the distribution system. The core DIMP elements, however, reflect the elements of Southwest Gas' longstanding distribution pipeline integrity management and DPI processes.

Q. 13 Was Southwest Gas involved in the development of the federal DIMP regulations?

A. 13 Yes. Southwest Gas' extensive experience with its own form of distribution pipeline integrity management proved to be a valuable contribution to the efforts made by PHMSA and the gas industry in developing the requirements for the federal DIMP regulations. I served on the Distribution Infrastructure Government-Industry Team that oversaw the production of the American Gas Foundation report, *Safety Performance and Integrity of the Natural Gas Distribution Infrastructure*. I also served on the Risk Control Practices Group of the Distribution Integrity Management Quality Action Team sponsored by PHMSA. The responsibility of the team was to collect and analyze available distribution pipeline information and to reach findings and conclusions in order to inform PHMSA for future work relative to implementing integrity management principles for gas distribution pipelines. The work of this group culminated in a fundamental document for DIMP entitled, *Integrity Management for Gas Distribution, Report of Phase I Investigations ("DIMP Phase I Investigation")*. In addition, Marti Marek, Southwest Gas' Director, Engineering and Project Support Staff, served as chairman of the Gas Piping Technology Committee, which developed the guide material to assist operators to comply with the DIMP regulations. Furthermore, Jim Wunderlin, Southwest Gas' Senior Vice President, Engineering and Business Operations and Technology Support, served on the Technical Pipeline Safety Standards Committee, which is an advisory committee to PHMSA during the development of new regulations. All in all, Southwest Gas was very involved in the rulemaking process.

Q. 14 How does Southwest Gas' DPI process compare to the new DIMP regulations?

A. 14 The new DIMP regulations are broader than the DPI process and have more documentation and reporting requirements; however, the new regulations are based largely on the same core principles as Southwest Gas' DPI process. Southwest Gas is now refining its DPI policies and procedures to conform to the new DIMP regulations and expects to implement a formal plan compliant with the new DIMP regulations prior to August 2011.

Q. 15 Please explain how distribution pipe is prioritized and scheduled for replacement at Southwest Gas.

A. 15 First, unsafe pipe, regardless of age or pipe type, is replaced immediately in accordance with the Company's Operations Manual. Second, on an annual basis since 2000, Southwest Gas has evaluated and assessed its distribution pipe using the DPI process. From the DPI assessments, Southwest Gas determines a relative risk rank for various pipe segments. Pipe segments, including some EVPP, are identified and scheduled for replacement. Third, in addition to those segments of EVPP identified by the DPI process, Southwest Gas initiated a 20-year plan for the replacement of all EVPP based on general leak rates. Both the DPI process and the 20-year EVPP replacement plan are risk control practices designed to replace pipe before it becomes unsafe, and both are part of Southwest Gas' broader distribution pipeline integrity management program.

Q. 16 Please describe the Company's 20-year plan for the replacement of EVPP.

A. 16 The 20-year plan for the replacement of EVPP focuses on replacing the Company's plastic pipe that was installed from the late 1950's through the early 1980's. The program time frame for replacement is the 20 year period beginning in 2007 and ending in 2026.

Q. 17 What type of pipe does Southwest Gas consider to be EVPP?

A. 17 Southwest Gas characterizes the following pipe types as EVPP:

- ABS—Acrylonitrile Butadiene Styrene pipe;
- AA—Aldyl A pipe;
- AHD—Aldyl High Density pipe; and
- PVC—Polyvinyl Chloride pipe.

Q. 18 Why did Southwest Gas initiate its 20-year plan?

A. 18 Several key events occurred between 2005 and 2007 that ultimately resulted in the development of the 20-year plan. Although PHMSA had implemented integrity management requirements for hazardous liquid and gas transmission pipelines, no similar requirements existed for gas distribution pipelines and a number of industry observers suggested that such requirements were needed. Several multi-stakeholder work/study groups were established to collect and analyze available information and to reach findings and conclusions to inform future work by the PHMSA relative to implementing integrity management principles for gas distribution pipelines. The result of this work/study process was the publication of the *DIMP Phase I Investigation* in December 2005. This investigation concluded that it would be appropriate for PHMSA to modify its regulations to implement the concept of a risk-based distribution pipeline integrity management process. In 2006, Southwest Gas created a Manager position in Engineering Staff to establish a DIMP work group in preparation for the planned release of federal DIMP regulations that were mandated in the *Pipeline Inspection, Protection, Enforcement and Safety* ("*PIPES*") Act of 2006. One of the first tasks for this newly formed DIMP group was to evaluate all of Southwest Gas' plastic pipe and propose a long-range strategy for pipe replacement. This strategy was approved in February of 2007 and set in motion the 20-year plan for the replacement of EVPP.

Q. 19 What is Southwest Gas' overall strategy for pipe replacement under its 20-year plan?

A. 19 Southwest Gas' overall risk-based strategy is based on evaluating threats to the integrity of its pipeline system so that it can apply available resources to mitigate risk in a cost-effective and efficient manner. Since 1986, Southwest Gas has been monitoring leak rates of various distribution pipe types. While this leak analysis has provided performance measures for all types of pipe in the overall DPI process, it has provided the basis for the pipe replacement strategy for the 20-year plan to replace all EVPP. ABS pipe was a top priority pipe based on its historically poor performance. All of the ABS pipe has now been replaced. Considering all risk factors including leak rates AHD pipe has the highest replacement priority of the remaining EVPP. Both AA and PVC pipe will continue to be replaced as well, driven by DPI assessments. Once the AHD pipe replacement is completed, the AA and PVC pipe replacement will occur similar to the AHD replacement based on the relative risk of each of those pipe types at that time.

Q. 20 How much pipe has been replaced in Southwest Gas' Arizona service territory under the 20-year plan?

A. 20 Please refer to Company witness Robert A. Mashas' testimony for the amount of pipe that has been replaced consistent with the 20-year plan, specifically Exhibit No.__(RAM-5).

III. CUSTOMER-OWNED YARD LINES

Q. 21 What is Southwest Gas proposing in this case regarding customer-owned yard lines ("COYL")?

A. 21 In an effort to help customers manage their COYLs, Southwest Gas is proposing a pilot program to replace up to 5,000 COYLs in its Arizona service territory.

A. 22 What is a COYL?

A. 22 A COYL typically begins from a point of delivery connection at the outlet of the Company's meter at the property line or public right-of-way, and extends underground from the meter to the house, building or gas utilization equipment where gas is consumed. Since Southwest Gas does not own this piping, the customer is solely responsible for inspecting and maintaining that yard line.

Q. 23 Does the Company install facilities today that require COYLs?

A. 23 The Company does not install facilities today that require a COYL unless the customer restricts the Company's access to the property. The Company's long-standing construction practice is to select a meter location that is satisfactory to the Company. This location is generally found at the building or structure wall to avoid damage to the Company's facilities, eliminating the need for a COYL.

Q. 24 What is Southwest Gas' responsibility for COYLs?

A. 24 As reflected in Southwest Gas's Tariff, Rule No. 7, Southwest Gas has no obligation to inspect or maintain facilities beyond the point of delivery, including COYLs which are owned and operated by the customer. However, Southwest Gas is required by federal regulation (49 C F R §192.16) to notify a customer at least once in writing of the following information:

- Southwest Gas does not maintain the customer's buried piping;
- If the customer's piping is not maintained, it may be subject to the potential hazards of corrosion and leakage;
- Buried gas piping should be:

  - Periodically inspected for leaks;
  - Periodically inspected for corrosion if the piping is metallic; and
  - Repaired if any unsafe condition is discovered.
- When excavating near buried gas piping, the piping should be located in advance, and the excavation done by hand; and
- Resources for locating, inspecting and repairing customer's buried piping.

Southwest Gas notifies new customers of the above information through a new customer brochure. Although it is only required to notify a customer once, Southwest Gas also reminds customers about COYLs once per month through the notice on the back of a bill or through Southwest Gas' website links (for electronic bills). In addition, Southwest Gas sent a first class bulletin/letter during 2009 and 2010 to approximately 108,000 customers in Arizona who are responsible for the operation and maintenance of their COYLs. Southwest Gas clearly exceeds all code requirements when it comes to keeping customers informed regarding their responsibilities associated with ownership and maintenance of a COYL.

Q. 25 Why is Southwest Gas proposing a pilot program to replace COYLs?

A. 25 Southwest Gas responds to all odor calls, and as information collection practices have improved over the past few years, the Company has noticed an upward trend in odor calls resulting from COYLs. In addition, the Company's public awareness programs and information collection practices indicate that many customers are not managing their aging COYLs. As a result, the Company is requesting that the Commission authorize approval of a pilot program to assist interested customers in managing their COYLs. Such a program would result in the replacement of the COYLs with a Southwest Gas owned and maintained service line extension.

Q. 26 Has Southwest Gas calculated an estimate of the costs to replace a COYL and relocate the meter next to the customer's residence – similar to current construction practices?

A. 26 Yes. Southwest Gas estimates that for a majority of the customers that have COYLs, the yard line can be replaced and the meter relocated without the need for major construction activity for approximately $2,000 per location. The estimate varies and is typically higher for customers that have significant exterior obstacles to work around such as foundations, pools, fences or extremely difficult terrain or landscaping.

Q. 27 What options do customers currently have when leaks are found on COYLs?

A. 27 Currently, the customers' options when leaks are found on COYLs include replacing the COYL with a Southwest Gas-owned facility and relocating the meter, calling a licensed plumber to replace or repair the COYL, or discontinuing gas service. Based on 2009 data, only 15% of customers who experienced leaks on COYLs elected to replace their COYL and relocate their meters. Approximately 70% of the customers who experienced leaks on COYLs contacted a licensed plumber who repaired the leak, leaving the meter and COYL in place. Less than 1% of the customers who experienced leaks on COYLs discontinued gas service. The data for the remaining customers who experienced leaks on COYLs was inconclusive.

Q. 28 Please explain the scope of Southwest Gas' proposal.

A. 28 Upon Commission approval of the pilot program, Southwest Gas proposes the following:

1) Establish a two-year pilot program for COYL replacements;
2) Establish a deferred account to allow Southwest Gas to recover, between rate cases, the incremental costs associated with the pilot program. The prepared direct testimony of Company witness Robert

A. Mashas describes in detail the Company's deferred accounting proposal for the pilot program;

3) Visually inspect selected COYLs;

4) Cap the total pilot program costs at either $10,000,000, the total estimated cost associated with completing the COYL replacement and meter relocation for 5,000 customers, or the total incremental cost associated with the pilot program incurred within two years, whichever occurs first.

Southwest Gas will review COYL accounts based upon the visual inspection results, and offer selected customers the opportunity to participate and to have their COYLs replaced and meters relocated according to the standard practice for all such services offered by Southwest Gas. Southwest Gas intends to re-evaluate these measures once the pilot program is complete before considering further actions that may apply to the balance of customers who own COYLs. Southwest Gas will report findings and recommendations to the Commission at the conclusion of the pilot program.

Q. 29 Does this conclude your testimony?

A. 29 Yes.

SUMMARY OF QUALIFICATIONS
JEROME T. SCHMITZ, P.E.

Jerome T. Schmitz is the director/Engineering Staff for Southwest Gas Corporation (Southwest). He directs and coordinates support to five operating divisions for pipeline safety code compliance; distribution integrity management; material specifications and approval; environmental compliance; proper energy measurement; pipeline cathodic protection; SCADA support; project design; and the training and qualification of technical services personnel.

Schmitz joined Southwest in 1989 as an engineer in Phoenix. He was subsequently promoted to distribution engineer in 1991; distribution engineer/Compliance and Operations Audit Staff in Engineering Staff later that year; supervisor/Engineering in the Central Arizona Division in 1993; manager/Operational Quality Assurance for Engineering Staff in 1998; and director/Gas Operations Support in 2003. He holds a bachelor of science degree in Genetics from the University of California, Davis, and a bachelor of science degree in Mechanical Engineering from Arizona State University. He is a registered Professional Engineer in the State of Arizona with a proficiency in Mechanical Engineering, and is certified as a Quality Auditor with the American Society for Quality. He also served on the Distribution Integrity Government Industry Team (DIGIT) that oversaw the production of the American Gas Foundation report, *Safety Performance and Integrity of the Natural Gas Distribution Infrastructure*. In addition, he served on the Risk Control Practices Group of the Distribution Integrity Management Quality Action Team sponsored by the Pipeline and Hazardous Materials Safety Administration (PHMSA). These groups were designed to collect and analyze available information and to reach findings and conclusions to inform future work by the PHMSA relative to implementing integrity management principles for gas distribution pipelines.

Schmitz currently serves as the chairman of the ASME B31Q Qualification of Pipeline Personnel Technical Committee. He also serves on the AGA Distribution and Transmission Engineering Committee as well as the Operations Safety Regulatory Action Committee.

TAB 6

IN THE MATTER OF
SOUTHWEST GAS CORPORATION
Docket No. G-01551A-10

PREPARED DIRECT TESTIMONY
OF
ROBERT A. MASHAS

ON BEHALF OF
SOUTHWEST GAS CORPORATION

NOVEMBER 12, 2010

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of
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of
Robert A. Mashas

BEFORE THE ARIZONA CORPORATION COMMISSION

Prepared Direct Testimony
Of
ROBERT A. MASHAS

I. INTRODUCTION

Q. 1 Please state your name and business address.

A. 1 My name is Robert A. Mashas. My business address is 5241 Spring Mountain Road, Las Vegas, Nevada 89150.

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

A. 2 I am employed by Southwest Gas Corporation (Southwest Gas or the Company) in the Revenue Requirements department. My title is Director/Revenue Requirements.

Q. 3 Please summarize your educational background and relevant business experience.

A. 3 My educational background and relevant business experience are summarized in Appendix A to this testimony.

Q. 4 Have you previously testified before any regulatory commission?

A. 4 Yes. I previously testified before the Arizona Corporation Commission (Commission), the Public Utilities Commission of Nevada (PUCN), and the California Public Utilities Commission (CPUC). I have also provided written testimony to the Federal Energy Regulatory Commission (FERC).

Q. 5 What is the purpose of your prepared direct testimony in this proceeding?

A. 5 I provide a broad overview of the test year results and the major components driving the Company's deficiency. I also discuss the impact that the Company's current and previous four rate cases have had on residential margin per customer. In addition, I address the Company's proposals regarding its 20-year plan to replace its Early Vintage Plastic Pipe (EVPP) and sponsor Statement B, Rate Base along with the supporting schedules and workpapers.

Q. 6 Please summarize your prepared direct testimony.

A. 6 My direct testimony addresses the following key issues:

- An overview of the current proceeding, including test year results, the revenue deficiency, and the fair value rate of return (FVROR) requested by the Company.
- The major reasons and underlying causes driving the need for Southwest Gas to file its rate case application.
- Support from a rate making perspective for rate relief associated with the Company's 20-year plan for the replacement of EVPP.
- Support for the Company's request for a deferred accounting order in conjunction with the replacement of EVPP.
- Support for the Company's request for a deferred accounting order in conjunction with its proposal to implement a pilot program to assist customers in managing their aging facilities.
- Support for rate base inclusion of the remaining 50 percent of the cost to replace aging steel pipe first installed in the Yuma Manors subdivision in the mid-1950's.
- Support for the Company's main and service line extension policies set forth in its Arizona Tariff Rule No. 6 and the Incremental Contribution Method (ICM), which calculates the economic feasibility of new customer additions.
- Sponsor Southwest Gas' Schedule B, Rate Base and the workpapers that support the computation of the rate base required to provide

service to the Company's Arizona customers.

II. RATE CASE OVERVIEW

Q. 7 What is the test year for this rate application?

A. 7 The test year is the 12-month period ended June 30, 2010. The test year results were adjusted to normalize and annualize the effects of known and measurable changes that occurred through June 30, 2010 and certain known and measurable events that took effect after the test year.

Q. 8 How does the Company determine if a revenue deficiency exists?

A. 8 A revenue deficiency occurs when the Company's annualized and normalized revenue, at its current rates, is less than the Company's annualized and adjusted cost of service, including the cost of capital. If the resulting rate of return (ROR) is either less than that authorized in the Company's last rate case, or less than the ROR that would be deemed reasonable given current market conditions and the Company's overall cost of capital, a revenue deficiency exists.

Q. 9 What is Southwest Gas' current revenue deficiency in its Arizona operations?

A. 9 Schedule A-1, Sheet 2, Column (d) illustrates that the adjusted revenue of approximately $410.9 million at present rates yields a ROR of 6.06 percent. In this proceeding, Southwest Gas requests a FVROR of 7.50 percent on fair value rate base (FVRB). In order to produce the 7.50 percent FVROR, a revenue increase of approximately $73.2 million is required.

Q. 10 What does the term revenue refer to in the context of the Company's revenue deficiency?

A. 10 The term revenue refers to the non-gas revenues (or margin) Southwest Gas receives through base rates. Because there is a separate purchased gas adjustment mechanism to ensure that Southwest Gas' customers pay the actual cost incurred by the Company to purchase natural gas (i.e., Southwest

Gas earns no profit on the natural gas itself), revenues and costs associated with the gas commodity are excluded from the general rate case. Another term that is used interchangeably with revenue in this context is margin.

Q. 11 Does the Company propose any adjustments to the recorded test year amounts?

A. 11 Yes. There are 17 proposed adjustments (including four post-test year adjustments) to the test year data. These adjustments are listed on Schedule C-2, Sheets 1 through 2. Company witness A. Brooks Congdon supports Adjustment Nos. 1 and 2, Company witness Randi L. Aldridge supports Adjustment Nos. 3 through 17.

III. MAJOR REASONS AND UNDERLYING CAUSES DRIVING THE NEED FOR SOUTHWEST GAS TO FILE ITS RATE CASE

Q. 12 Please identify the major reasons and underlying causes driving the need for Southwest Gas' current revenue deficiency.

A. 12 The Company has identified three major factors that have driven the need to file this rate application: 1) declining residential use ($18.6 million); 2) declining general service customer use ($5.6 million); and 3) changes in the Company's cost of capital ($20.9 million). These three items comprise 62 percent of the total revenue deficiency in the present rate application. I discuss these three items in more detail later in my testimony.

Q. 13 What are some of the changes in expenses that have contributed to the Company's revenue deficiency?

A. 13 Some of the changes in expense contributing to the Company's revenue deficiency include: 1) depreciation expense ($12.9 million); and 2) pension expense ($7.0 million); These increases are partially offset by a $5.7 million property tax expense decrease.

Q. 14 Please identify any proposed adjustments that relate to events that have occurred, or will occur, after June 30, 2010.

A. 14 There are four proposed adjustments that fall into this category: 1) the 2011 wage increase and within-grade movement; 2) post test-year new and expired software amortizations; 3) the 2011 property tax assessment ratio – all of which are sponsored by Company witness Randi L. Aldridge; and 4) adjusting the test year-end recorded deferred federal income taxes as a result of the post test year enactment of bonus depreciation for tax year 2010 qualifying capital expenditures – which are addressed later in my direct testimony.

Q. 15 Why has Southwest Gas included these four post test-year adjustments in its application?

A. 15 Consistent with Southwest Gas' prior Arizona rate cases, the Commission has allowed adjustments similar to the four proposed in this proceeding when events are known or reasonably certain to occur and are measurable prior to hearing. By including these post test-year adjustments, the test year more accurately reflects the level of expenses and costs Southwest Gas will incur when rates approved in this proceeding go into effect. Furthermore, the four post test-year adjustments are easily reconcilable to test year accounts without distortion or mismatching.

The adjustments for post test-year wage increase and within grade movement, post test-year new and expiring amortizations, and post test-year property tax assessment ratio have been utilized in setting Southwest Gas' rates for at least the last three rate cases.

Q. 16 How much has the average annual residential bill for Southwest Gas' Arizona customers increased during the last 15 years?

A. 16 Exhibit No.__(RAM-1) shows that the 1996 and 2000 average annual residential bills were $361 and $380, respectively. By the 2007 rate case, the annual average bill increased to $605. Approximately 76 percent of this increase was due to the increase in gas costs. In this proceeding, if the Company's request is approved in its entirety, the average annual bill would be $576; $29 (or $2.42 per month) lower than 2007.

Q. 17 How does the proposed rate increase compare to the increase in the Consumer Price Index?

A. 17 Exhibit No. (RAM-2) shows that during the 16-year period since its 1996 rate case, which was based on a test year ending July 1995, Southwest Gas' residential margin rates have increased at an average annual rate of 2.37 percent, which is slightly less than the increase in the Consumer Price Index during this same time frame, assuming the current rate case is approved as filed. Indeed, the Company has held the residential cost per customer in line with inflation, which indicates that the Company is controlling its costs of providing service. The frequency of rate case filings, as well as the magnitude of the rate cases filed by the Company, have been greatly impacted by the continued decline in average residential use per customer.

A. Declining Average Residential Usage

Q. 18 How does declining average residential usage cause a revenue deficiency?

A. 18 At the time a rate case is filed, the Company proposes and ultimately the Commission establishes a cost of service that is deemed to be appropriate for the development of the rates that each customer class will be charged. In most instances, a fixed and variable rate is developed to recover the revenue responsibility allocated to each rate class. The portion of the designed revenue responsibility recovered through the fixed component is predicated on the number of customers requesting service. The portion of the revenue responsibility that is designed to be recovered through the variable component is predicated on volume of gas sold during the test year (or the average use per customer). Failure to sell the average use per customer will create a revenue deficiency that is not caused by an increase in the cost of service.

Q. 19 How does the Company determine the revenue deficiency component resulting from declining use per customer?

A. 19 The Company calculates this component of the deficiency by comparing the average use per customer utilized to establish its existing rates to the average use per customer experienced during the test year in the current rate case, times the authorized revenue usage rate. Only the number of customers that were included in the previous rate case is used in the calculation, thus excluding any change in customers since the last rate case.

Q. 20 Have you calculated the derivation of the residential margin authorized in the Company's last general rate case?

A. 20 Yes. Exhibit No.__(RAM-3) Sheet 1, shows the derivation of the residential margin authorized pursuant to the Company's last general rate case, which was based on annualized customers and normalized therms for the test year ending April 2007. Sheet 1, line 19 shows the 2007 rate case had 917,349 residential customers, with average use and margin per customer of 332 therms and $316.19, respectively.

Q. 21 Have you calculated margin at present rates in this rate case?

A. 21 Yes. Exhibit No.__(RAM-3) Sheet 2, shows residential margin at present rates, which is based on annualized customers and normalized therms for the test year ending June 2010. Sheet 2, line 19 shows the current rate case has 937,531 residential customers, with average use and margin per customer of 298 therms and $295.96, respectively.

Q. 22 Please compare the number of customers, therms and margin at present rates in the current rate case to levels used to develop rates in the

Company's previous rate case.

A. 22 When margin at present rates in this case is compared to the 2007 numbers, the average therms used per customer has decreased by 34 therms and the margin per customer has decreased by $20.24. Multiplying the $20.24 by the 917,349 customers from the 2007 rate case results in unrealized residential margin of approximately $18.6 million. Accordingly, if the Company did not add a single customer and did not incur additional costs above those previously authorized, the Company would still be deficient by $18.6 million. The $18.6 million represents approximately 25 percent of the Company's filed deficiency.

Q. 23 Is the margin lost due to declining average residential use per customer unique to this proceeding?

A. 23 No. The prepared direct testimony of Company witness Jamie Cattanach discusses the fact that declining residential use has occurred in every rate case since 1986. Exhibit No__(RAM-1) demonstrates the impact declining average residential use has had on the four rate cases filed since its 1996 rate case (Southwest Gas' first Arizona combined rate case). Exhibit No.__(RAM-1) Sheet 1, shows the actual normalized residential therms, fixed basic service charge and volumetric margin used to establish residential rates in the Company's four rate cases from 1996 through 2007. Sheet 1 also shows the proposed amounts in this proceeding.

The Company's 1996 rate case established rates based on average residential use of 409 therms and $257 of margin per customer. The Company's 2000 rate case established rates based on average residential use of 389 therms and $267 of margin per customer. Comparing the 1996 rate case to the 2000 rate case, the margin increased $10; however, when comparing to the margin at present rates, the increase was $18.50. The 20 therm decline from 1996 to 2000 (409 to 389) reduced the realized margin by $8.50 (20 therms X $0.4237). Approximately $8.50 or 46 percent of the $18.50 increase in the 2000 rate case was attributed to unrealized margin caused by declining average use per customer.

Following the same analysis, Sheet 1 further demonstrates that this phenomenon continued in the Company's next two rate cases and exists in the present rate case. The 2004 rate case resulted in a $48.46 increase at present rates, $18.46 or 38 percent of which can be attributed to declining average use per customer. The 2007 rate case resulted in a $26.88 increase at present rates, $7.88 or 29 percent of which can be attributed to declining average use per customer. In the present rate case, the Company is proposing an increase of $69.07 at present rates, $20.24 or 29 percent of which can be attributed to unrealized margin due to declining average use per customer.

Q. 24 Please explain Exhibit No.___(RAM-1) Sheet 2.

A. 24 Exhibit No.__(RAM-1) Sheet 2, converts the information contained on Sheet 1 into monthly amounts. The proposed average monthly residential bill, if the Company's request is accepted in its entirety, would be $48.04. During the 15-year time period shown on Exhibit No.__(RAM-1) Sheet 2, the average monthly residential bill will have increased by $17.96, or 60 percent. The gas cost portion represents 50 percent, or $9.91 of the increase. During the 15-year time period the margin portion (basic service and fixed cost collected through the commodity rate) would have increased by $9.04, or an average of $0.60 per year.

B. General Service Customers

Q. 25 What is the deficiency impact caused by the decline in the average use among general service customers?

A. 25 Exhibit No.___(RAM-4) Sheet 1, line 12 shows that in the Company's 2007 rate case, authorized margin for the Small, Medium and Large General Service rate schedules was $91,225,550, derived from 40,092 customers.

Exhibit No.___(RAM-4) sheet 2 shows that these three rate schedules in the current rate case have test year realized margin at present rates of $85,587,860; $5,637,690 less than what was previously authorized. Combined, these three rate schedules are using 17,228,603 less therms than the 2007 rate case. The $5,637,690 decrease in margin represents approximately 8 percent of the deficiency.

C. Cost of Capital

Q. 26 Does the Company's increase in its common equity ratio and its request for a higher return on common equity impact the deficiency?

A. 26 Yes. In this proceeding, the Company requests that the Commission establish rates resulting in a 7.50 percent overall rate of return on FVRB. The Company also requests that rates be established using a 52.30 percent common equity ratio (versus the 43.35 percent approved in the last rate case). In addition, the Company requests an increase in its cost of common equity capital from 10.00 percent to 11.00 percent to reflect current market conditions. The prepared direct testimony of Company witness Theodore Wood supports the requested 52.30 percent common equity ratio and the cost of debt. The prepared direct testimony of Company witness Robert Hevert supports the requested 11.0 percent cost of common equity. Mr. Hevert also supports the Company's FVROR. The combination of the above cost of capital proposals increases the Company's deficiency by approximately $20.9 million. The $20.9 million represents approximately 28 percent of the Company's filed deficiency.

IV. PIPE REPLACEMENT

Q. 27 What is Southwest Gas requesting with respect to its plan to replace?

A. 27 Southwest Gas requests specific rate treatment for pipe replacement that occurs consistent with its distribution integrity management program and its plan to replace EVPP. Company witness Jerome Schmitz sponsors testimony supporting the need for the plan to replace EVPP, and the Company's distribution integrity management program that is relied upon to identify the pipe to be replaced. I sponsor the Company's proposals concerning the specific rate treatment sought by the Company.

Q. 28 Please describe the Company's plan to replace EVPP in Arizona.

A. 28 Arizona's EVPP consists of all four pipe materials identified by Mr. Schmitz in his direct testimony – ABS, AHD, AA, and PVC. The history of Arizona EVPP replacement begins in the 1980's and early 1990's. During the 1980's, the ABS pipe originally installed by APS and acquired by Southwest Gas in 1984 required replacement. By 1990, approximately 95 percent of the ABS pipe was replaced. During the 1980's, it was also determined that the AA pipe originally installed by Tucson Gas & Electric (TG&E) and acquired by Southwest Gas required replacement. By the early 1990's, approximately 50 percent of this AA was replaced.

Q. 29 What has been the sequence of pipe replacement for the remaining EVPP in Arizona?

A. 29 Since most of the ABS pipe was replaced prior to the development of the plan to replace EVPP, the Company is left with three EVPP materials (AHD, AA and PVC). As discussed in more detail by Company witness Schmitz, the first pipe to be replaced is AHD, followed by the replacement of AA and PVC pipe based on the leak rate evaluations for those pipe types at that time. Regardless of the pipe material being replaced, approximately 5 percent of Arizona's EVPP will be replaced each year until 2026.

Q. 30 What has been the Commission's regulatory treatment of these replacement expenditures?

A. 30 With regard to the ABS and AA pipe replacement programs, the Commission found in Decision Nos. 57075 and 57745 that a cost sharing between customers and shareholders was appropriate. This cost sharing resulted in millions of dollars of replacement pipe expenditures being permanently written off on the Company's books, and never recovered from customers.

Q. 31 Please describe the Commission's regulatory treatment of replacement expenditures for the remaining pipe types.

A. 31 The AHD pipe material was the focus of Commission attention in rate proceedings occurring during the 1990's, resulting in a pre-determined percent of future AHD replacement expenditures being written-off. The AHD pipe write-off percentage was more aggressive than the percentage established for AA and ABS since those two pipe materials were installed by utilities other than Southwest Gas, while the AHD was installed by Southwest Gas.

During its 2004 Arizona rate case Southwest Gas requested that the Commission reconsider the write-off percentages established in earlier rate cases. In Decision No. 68487, the Commission agreed to modify the write-off percentage using the 40-year useful life criteria. The 40-year criteria results in a 2010 write-off of 25 percent for AHD. The write-off percent is designed to decrease by 2.5 percent per year until 2020. The 2010 write-off percent is 3.25 percent, and is designed to decrease by 1.25 percent per year until 2013.

Q. 32 Please briefly describe how much pipe has been replaced pursuant to the Company's plan to replace EVPP.

A. 32 Exhibit No.__(RAM-5) characterizes the 18.1 million feet of EVPP still in the ground in December 2006 by location (state), pipe type and the company that installed it. Approximately 54 percent of the pipe was installed in Arizona. During the 45-month period extending from January 2007 through September 2010, 16.7 percent of Arizona EVPP was replaced. Nevada's operations have replaced a nearly identical 16.6 percent, while the California operations replaced 33.3 percent, nearly twice as much on a percentage basis as Arizona and Nevada. In total, Southwest Gas has replaced approximately 19.3 percent of its EVPP after three years and nine months of a 20-year plan. After four full years under the plan, the Company should be at the 20 percent mark, or five percent per year, on average.

Q. 33 Please explain why California has replaced nearly twice as much EVPP on their system as either Arizona or Nevada.

A. 33 Southwest Gas was directed by the CPUC in D.04-03-034 to replace all California PVC pipe over a ratable period of time that will result in all of California's PVC being replaced by 2020; 6 years earlier than the anticipated expiration of the Company's 20-year plan to replace EVPP. As a result, the Company's California's operations are on a faster pace for EVPP replacement than its Nevada and Arizona operations.

Q. 34 Please explain the CPUC's regulatory treatment of the replacement expenditures.

A. 34 During the late 1990's through the early 2000's the Company determined through its Pipeline Integrity Assessment (PIA) or Distribution Pipeline Integrity (DPI) process that the PVC pipe in colder weather climates, especially the gas line services, required replacement. Company witness Schmitz describes DPI process in his prepared direct testimony. Furthermore, California rate making is based on a future test year, and the CPUC has its utilities on a rate case cycle. That cycle had the Company filing and processing a rate case during 2001/2002, with new rates being implemented in January 2003. During that rate case, the Company requested recovery of the replacement expenditures required to replace the PVC through the end of 2003, as well as annual adjustments to base rates to recover ongoing replacement expenditures planned for the following four-year period. The CPUC in D.04-03-034 found that Southwest Gas' accelerated PVC pipe replacement program was reasonable. In Section 7.3 of D.04-03-034 the CPUC stated:

> In other proceedings, we are often asked to encourage utilities to maintain, repair or replace existing plant. In the instant proceeding, it is not a matter of encouraging or directing Southwest to maintain its system or whether the aging PVC must be replaced.

The CPUC went on to state:

> In weighting [sic] the testimony and evidence presented by parties, and potential safety concerns, we conclude that an accelerated replacement program for Southwest's PVC mains and services is reasonable ... Although Southwest is under no regulatory requirement to replace its PVC pipe, it undertook a reasonable approach to potential problems and safety issues through initiating the PIA. The PIA is an example of the prudent analysis that we expect from utilities under our authority.

Finally, the CPUC stated:

> ...we expect that Southwest will proceed to replace PVC at an equal rate for the next 15 years.

Q. 35 Please comment on Southwest Gas' Northern Nevada PVC pipe experience.

A. 35 The Nevada Regulatory Operations Staff of the PUCN has encouraged Southwest Gas to replace PVC pipe, and to the extent replacement expenditures have been included in rate base, the Company has recovered the associated cost of replacement. In addition, like Northern California, all Northern Nevada PVC services were replaced during the same time frame due to the concern that extreme cold weather conditions might be having a negative impact on the PVC services. Southwest Gas' Northern Nevada service territory experiences similar extreme cold weather conditions to that of North Lake Tahoe and Big Bear, California. These weather conditions are not present in the Company's Southern Nevada and Arizona service territories.

Q. 36 Please quantify the dollar impact that cost sharing has had on the replacement of certain EVPP materials in Arizona.

A. 36 Two of the EVPP materials (AHD and AA) carry a legacy pipe write-off practice emanating from Commission decisions from nearly twenty years ago. Southwest Gas has written-off $8,176,962, or approximately 27 percent, of the $29,898,711 spent to replace AHD pipe from 2007 through June 2010. The Company has also written-off $274,000, or approximately 5.5 percent, of the $5,002,307 spent to replace AA. Since the write-off percent for AA goes to zero in 2013, and given the priority of its replacement, the directives from prior Commission decisions regarding AA will have a very small future impact on the Company.

Q. 37 What options does the Company have regarding AHD pipe replacement, and how are each of those options impacted by the AHD write-off requirements?

A. 37 Exhibit No.__(RAM-6) Sheet 1, lists the dollar write-offs that would result given four different AHD replacement time periods.

(1) The first option results in zero write-offs, provided that the Company delays replacing AHD until 2020 when the write-off percent reaches zero. This option directly conflicts with the Company's DPI process and its plan to replace EVPP.

(2) The second option is to ratably replace AHD (5 percent annually) over the 20-year period from 2007-2026. This results in a $7.7 million

write-off. Again, this option directly conflicts with the Company's DPI process and its plan to replace EVPP.

(3) The third option, similar to the Company's practices in California, is DPI based replacement through the test year ending June 2010 and then ratable replacement through 2020. This would result in all Arizona AHD pipe being replaced in the same year that California's PVC replacement program ends. This would result in a total write-off of approximately $12.6 million and is not entirely consistent with the Company's plan to replace EVPP.

(4) The fourth option reflects the replacement schedule that is currently being implemented by Southwest Gas. It relies on the DPI process as the sole criteria for replacement rather than the minimization of pipe write-offs. Unfortunately, given the Commission's current write-off requirements for AHD pipe, this option, which replaces the AHD pipe in the timeliest manner, also results in the highest write-off amount (approximately $16.0 million).

Q. 38 What is the Company's proposed resolution to the financial disincentive it faces by relying on the DPI and its plan to replace EVPP to determine the order of replacement?

A. 38 The Company is not requesting the Commission's prior decision concerning AHD write-off be changed retroactively, and understands that AHD replacement from 2007 through the end of the test year has resulted in an unavoidable $8,177,678 write-off. However, the Company does request that the Commission consider the fact that the $8,177,678 written-off at the end of the current test year is larger than the $7,709,780 that would be written-off if a 20-year ratable replacement was undertaken through the Company-wide plan to replace EVPP (or option 2 discussed above). The Company is therefore asking the Commission to reconsider the write-off requirements for AHD pipe replacement by permitting Southwest Gas to discontinue the write-offs beginning with the end of the test year in this proceeding, and finding that the $8,177,678 that has already been written-off should be permanently removed from rate base, representing a reasonable sharing of these replacement costs between shareholders and customers.

Q. 39 Please explain why this is a reasonable option for the Commission to consider.

A. 39 One of the reasons underlying the Commission' decision to write-off a portion of pipe replacement expenditures was that pipe was being replaced prematurely (in some instances very prematurely) and these replacement expenditures were placing a cost burden on customers. The Commission in Decision No. 57075, stated, ". . . the principles of fairness and equity militate [sic] against imposing upon the Central Arizona customers sole and full cost responsibility for the massive system-wide effort required to replace the defective ABS pipe before the end of its expected useful [sic] life." The Commission determined that because the pipe was being replaced well before the end of its useful life, the customers should not bear the entire cost of replacement.

Q. 40 Does the Commission's rationale from Decision No. 57075 still apply today?

A. 40 No. The pipe has continued to age in the 20 years since the Commission first considered the issue, and its removal would no longer be considered premature. Regardless of which pipe is replaced, replacement costs will be incurred consistent with the plan to replace EVPP to replace approximately 5 percent of the EVPP; it is only a matter of which pipe material is replaced first. Therefore, the emphasis is no longer centered on avoiding replacement expenditures, but prioritizing them. The current pipe write-off schedule is therefore no longer appropriate and, as discussed above, provides a disincentive for replacing pipe pursuant to the DPI process.

V. EVPP DEFERRED ACCOUNTING ORDER

Q. 41 Please explain the Company's proposal to defer the costs associated with the replacement of AHD pipe as part of its plan to replace EVPP.

A. 41 The replacement of all AHD pipe is expected to be complete by mid-year 2013. Accordingly, the Company is requesting approval of a deferred accounting order to defer depreciation expense, carrying costs, and property taxes resulting from removing the remainder of AHD pipe through mid-year 2013.

The Company's proposal is to defer the depreciation expense taken on replacement expenditures closed to plant in-service beginning July 1, 2010, and the deferred accounting order would only apply to depreciation expense not included in rates following this proceeding. With respect to carrying charges, the deferral would begin with the effective date of new rates, and only apply to replacement dollars not included in rates following this proceeding. The Company is also requesting that the property taxes associated with the replacement expenditures that are subject to the deferred accounting order also be included in the deferral. At the time of the Company's next general rate case, it will include as part of its filing a proposed amortization of these costs over a period of time the Commission deems appropriate.

Q. 42 Why does the Company believe a deferred accounting order is appropriate?

A. 42 The capital expenditures required to replace the AHD, as part of its plan to replace EVPP, are non-revenue producing. The carrying costs, depreciation and property taxes associated with these replacement costs contribute to the Company's inability to earn its Commission authorized ROR, which in turn has a negative impact on the Company's credit ratings and ultimately impacts the terms the Company is able to receive when refinancing and issuing debt.

The deferral of depreciation expense is justified for another reason. Depreciation expense is accumulated in Account 108, Accumulated Provision for Depreciation, which in turn is a permanent offset to rate base. The Company does not earn a return on amounts included in Account 108 under the presumption that the customer has provided the funds accumulated in this account. This deferred depreciation represents amounts that the customer did not provide in this rate case, or any other rate case, unless the deferral and subsequent recovery is authorized by the Commission. Therefore, without the deferral it would be unfair to use the depreciation expense accumulated in Account 108, as a rate base offset unless these amounts are ultimately recovered from the customer.

Q. 43 Has the Commission ever approved the deferral of similar EVPP replacement cost?

A. 43 Yes. In Decision No. 57075, Docket No. U-1551-89-103, the Commission concluded on page 92 item 14: "Until the allowable portion of the costs is ultimately determined by the Commission and reflected in rates, Southwest should capitalize in a deferred asset account all interest costs, taxes, and depreciation expense incurred on the Southern division pipe replacement program, with the interest costs to be accrued at the weighted average interest rate of 10.99% which is equal to the approved cost of debt for the Southern division in these proceedings."

VI. CUSTOMER OWNED YARD LINES (COYL)

Q. 44 Please describe the Company's request related to COYL.

A. 44 The Company requests that the Commission authorize the deferral of carrying costs, depreciation, property taxes and incremental expenses related to the proposed installation of Southwest Gas facilities to replace COYL. The prepared direct testimony of Company witness Schmitz supports the COYL pilot program.

Q. 45 What ratemaking treatment is Southwest Gas requesting for its proposed COYL pilot program?

A. 45 It is customary that when a Southwest Gas facility has reached the end of its useful life it is replaced and the cost of the replacement is included in rates. The difference with the replacement of COYLs is that the original cost of these facilities was borne by the customers individually and not by the general body of ratepayers. As explained in further detail in Company witness Schmitz's testimony, the Company believes that it can assist customers in managing their COYLs by initiating a pilot program to begin replacing the COYL with a Southwest Gas owned and maintained service line extension.

Q. 46 Why does the Company believe that the deferral of these costs is appropriate?

A. 46 The pilot program would not be appropriate for a post test year adjustment since it has not yet been approved by the Commission and a relatively small amount of dollars would be spent by year-end 2011. In this instance, the deferral of costs is therefore more appropriate than a post test-year adjustment.

Furthermore, the deferral of COYL program costs would remove the financial impact on the Company's income statement. Like all other pipe replacement, COYL replacement costs are non-revenue producing and absent deferral, there is nothing to offset these costs between rate cases.

Q. 47 Would it be appropriate to charge the general body of customers for these costs in future rates?

A. 47 Yes. For decades COYL customers have been paying Southwest Gas' rates, which include the cost of service extensions for all other customers; both the original cost and the cost of any subsequent replacements. Southwest Gas believes it would be equitable to allocate both the cost of the COYL replacement service and the related deferred cost amongst all customers in future rates.

VII. YUMA MANORS

Q. 48 Has the Company included in this application the cost of replacing the aging 1950's steel pipe in the Yuma Manors subdivision in Yuma Arizona?

A. 48 Yes. In Decision No. 70665, the Commission removed from rate base a portion of the cost of replacing the original steel pipe installed in the Yuma Manors subdivision in the 1950's. The Commission removed $546,224, of which $320,779 was written-off and permanently removed from rate base. The Commission stated that the Company could request that the remaining $225,445 be included in rate base in the Company's next rate case. Thus, the Company has included the remaining $225,445 in its rate base for this proceeding.

VIII. INCREMENTAL CONTRIBUTION METHOD (ICM)

Q. 49 Did the Commission direct the Company to provide an explanation, including sample ICM calculations, of how it has been implementing its Rule 6 Tariff provisions?

A. 49 Yes. The Company's Arizona Tariff Rule No. 6, Service and Main Extensions, has been addressed in one form or the other in the Company's previous three rate cases (test years 1999, 2004 and 2007). In Southwest Gas' last rate case (Decision No. 70665), the Commission directed the Company in its next rate case to provide an explanation of its Rule No. 6 policy along with sample calculations of its ICM model.

Q. 50 What is the general policy set forth in Rule No. 6, Service and Main Extensions?

A. 50 The Company's Tariff Rule No. 6, B.1. states, "General Policy – All service and main extensions are made on the basis of economic feasibility ... The economic feasibility will be calculated by the Incremental Contribution Method as described in section B.4 hereof." Section B. 4 states, "Incremental Contribution Method - Gas service and main line extensions will be made by the Utility at its own expense for the allowable investment as calculated by an Incremental Contribution Study." Section 4 Paragraph A states, " Allowable investment shall mean a determination by the Utility that revenues less the incremental cost to serve the applicant customer provides a rate of return on the Utility's investment no less than the overall rate of return authorized by the Commission in the Utility's most recent general rate case."

Q. 51 What is the goal of the Company's ICM analysis?

A. 51 The goal of the ICM is to ensure that service to new customers can be provided with incremental investment and expenses that are supported by the expected incremental margin from such new customers. The incremental cost of providing service to new customers should not place a burden on existing customers, or the shareholders, who provided the capital to serve these customers.

Q. 52 Please explain the key aspects of the ICM model.

A. 52 Exhibit No.__(RAM-7) consists of 23 sheets comprising the ICM model output. Sheets 1 through 3 provide the guidelines and key aspects of the workings of the model. Sheet 4 is the cost input sheet and the single family home (SFH) and multi-family home (MFH) residential customer appliance input sheet. Sheets 5 and 6 are the commercial customer gas appliance and equipment input sheets. Sheet 7 provides for the input of the customer build out. Sheet 8 is the investment cost summary output sheet, while Sheets 9 through 12 are the detail cost output sheets by year. Sheet 13 shows the yearly results of operations for the project for the first six years. Sheet 14 shows the residential margin calculation at full build out, while Sheet 15 shows the commercial customer calculation by year of build out. Sheet 16 is a key input sheet that is only updated after receiving a Commission-authorized rate order.

Q. 53 Do any of the inputs get changed?

A. 53 Yes. Inputs that may change after receiving a new rate order include the components of the cost of capital, state and federal income tax rates, property tax rates, book depreciation rates and the uncollectible rates that are embedded in the new tariff rates authorized by the Commission. Sheet 17 of Exhibit No.__(RAM-7) shows the authorized commodity rate for residential single and multi-family residential and small, medium and large general service customers. Also shown is the standard service stub and extension footage per customer and cost per foot. This information is shown for Southwest Gas' nine Arizona districts. Redacted on this sheet is the therm use for the heating, water heating, cooking, clothes drying and gas logs that are used to determine the new margin for each project. The Company considers this information to be proprietary, commercially sensitive, and confidential. Sheets 18 through 20 contain the ICM glossary of terms and Sheets 21 through 23 contain the release notes documenting changes to the ICM during approximately the last four years.

Q. 54 How often are the residential customer appliance end-use studies reviewed and updated?

A. 54 The residential end-use appliance studies are updated annually.

Q. 55 Has there been a significant change in Southwest Gas' residential customer growth in Arizona since its last rate case?

A. 55 Yes. During the 12-year period 1996 through 2007 in Arizona, the Company set an average of approximately 3,000 new meters per month. During the three years preceding the Company's last rate case (2004-2007) it set nearly 4,000 meters per month. From January 2008 through June 2010 the Company averaged less than 1,100 new meter sets per month and since January 2009, there have been only 2 months where the Company set more than 1,000 meters. Customer growth has declined by nearly 75 percent over the last two and a half years and has declined even further over the last 20 months.

Q. 56 Will the Company provide to the Staff, RUCO and other interested parties examples of ICM analysis of actual projects?

A. 56 Yes. The Company will provide examples of actual projects to Staff, RUCO, and other interested parties once the appropriate confidentiality agreements are executed.

IX. RATE BASE

Q. 57 What is the fair value and original cost rate base that Southwest Gas requests in its rate application?

A. 57 Southwest Gas proposes and supports a FVRB of $1,456,517,467. The FVRB was determined by giving equal weight (50/50) to the original cost rate base of $1,073,700,633 and the reconstruction cost new rate base of $1,839,334,300. Schedule B-1 is a high-level summary of the various components that comprise rate base. Rate base is presented on this schedule at original cost, reconstruction cost new, and at fair value. All measurements were performed at, or for, the thirteen months ended June 30, 2010. Details of the various rate base components can be found in Schedules B-2 through B-6.

Q. 58 Is the Company proposing any adjustments to the recorded rate base amounts at June 2010?

A. 58 Yes. Adjustment No. 17, Completed Construction Not Classified (CCNC), adds to rate base the recorded amounts as of June 2010 of non-revenue producing CCNC that resides in construction work-in-progress, along with an adjustment to System Allocable Miscellaneous Intangible Plant (to synchronize the plant with the adjustment to System Allocable amortization expense in Adjustment No. 13). This consists of two components: a direct Arizona component of $2,806,169 and a System Allocable component (after 4-Factor) of $3,284,398. Company witness Randi L. Aldridge discusses Adjustment Nos. 13 and 17 in her prepared direct testimony.

Q. 59 Please describe and explain Southwest Gas' Schedules B-3 and B-4.

A. 59 Schedule B-3 is a summary of the reconstruction cost new study. The schedule contains both the direct and system allocable plant assigned to Arizona. The reconstruction cost new data is utilized to develop the FVRB. The detail supporting Schedule B-3 is contained in Schedule B-4 which contains the Handy-Whitman indices that were used to trend original cost plant to obtain the reconstruction cost new data, and the reconstruction cost new data by vintage year, by FERC account.

Q. 60 Please describe and explain the other rate base items contained in Southwest Gas' Schedule B-5 and B-6 that do not use the end of test year balance.

A. 60 Schedules B-5 and B-6 contain four items that employ the 13-month average balance method for inclusion in rate base: 1) materials and supplies; 2) prepayments; 3) customer advances for construction; and 4) customer deposits. The use of the 13-month average balance as the method of calculation has been used and accepted by this Commission in many past rate cases.

Q. 61 Please describe and explain the items contained in Schedule B-5 and B-6 that do not employ the 13-month average balance method.

A. 61 The cash working capital allowance and the accumulated balance of deferred income taxes do not use the 13-month average balance method of calculation.

The cash working capital allowance is determined through a comprehensive lead-lag study. In performing the lead-lag study, Southwest Gas examined every non-gas invoice over $10,000 processed during the test year. The Company also examined every gas invoice processed during the test year regardless of the expense level. As a result, approximately 80 percent of total adjusted operating expenses were reviewed to determine the net lag attributable to operating expenses.

The June 2010 balance of accumulated deferred income taxes, adjusted for the post test-year enactment of bonus tax depreciation, for year 2010 capital expenditures is in rate base. The Commission has accepted the end of test year balance, rather than the 13-month average balance, in many past rate cases.

Q. 62 Does this conclude your prepared direct testimony?

A. 62 Yes.

SUMMARY OF QUALIFICATIONS
ROBERT A. MASHAS

I graduated from Wilkes College in Wilkes-Barre, Pennsylvania with a Bachelor of Science degree in Management, with an Economics concentration. I received a Master of Business Administration degree from Shippensburg State College in Shippensburg, Pennsylvania. I am a member of the American Institute of Certified Public Accountants.

Prior to joining Southwest in 1984, I held a positions as a staff accountant (one year) with Marriott Corporation, auditor (five years) with the Federal Energy Regulatory Commission (FERC) Office of Chief Accountant, and as a senior auditor (one year) Public Service Commission of Nevada (PSCN) now known as the Public Utilities Commission of Nevada (PUCN). My responsibilities at the FERC included conducting audits of natural gas transmission, electric and oil pipeline companies for compliance with the Uniform System of Accounts, rate orders and decisions of the FERC. My responsibilities at the PSCN included the examination of the books and records of gas, electric, and water utilities, as well as testifying as an expert witness.

I joined the Rate Department of Southwest, in 1984, as a cost analysis. In 1985, I was promoted to Manager/Revenue Requirements. In 1992, I was promoted to Director, Revenue Requirements and Resource Planning, and in 1998, with the regulatory requirements for resource planning reduced, my focus was primarily revenue requirements. During my more than twenty years overseeing the Revenue Requirements Department, I have either directly or indirectly prepared and participated, as an expert witness, in every Southwest Gas and Paiute Pipeline general rate case since 1986. I have also represented the Company in numerous dockets that addressed accounting and regulatory issues.

Exhibit No.___ (RAM-1)
SHEET 2 OF 2

SOUTHWEST GAS CORPORATION
ARIZONA
RESIDENTIAL GAS SERVICE RATE- SCHEDULE CG-5 MONTHLY BILL COMPARISON
DOCKET NUMBERS 96-596, 00-309, 04-0876, 07-0504, 10-11XX
NOMINAL DOLLARS

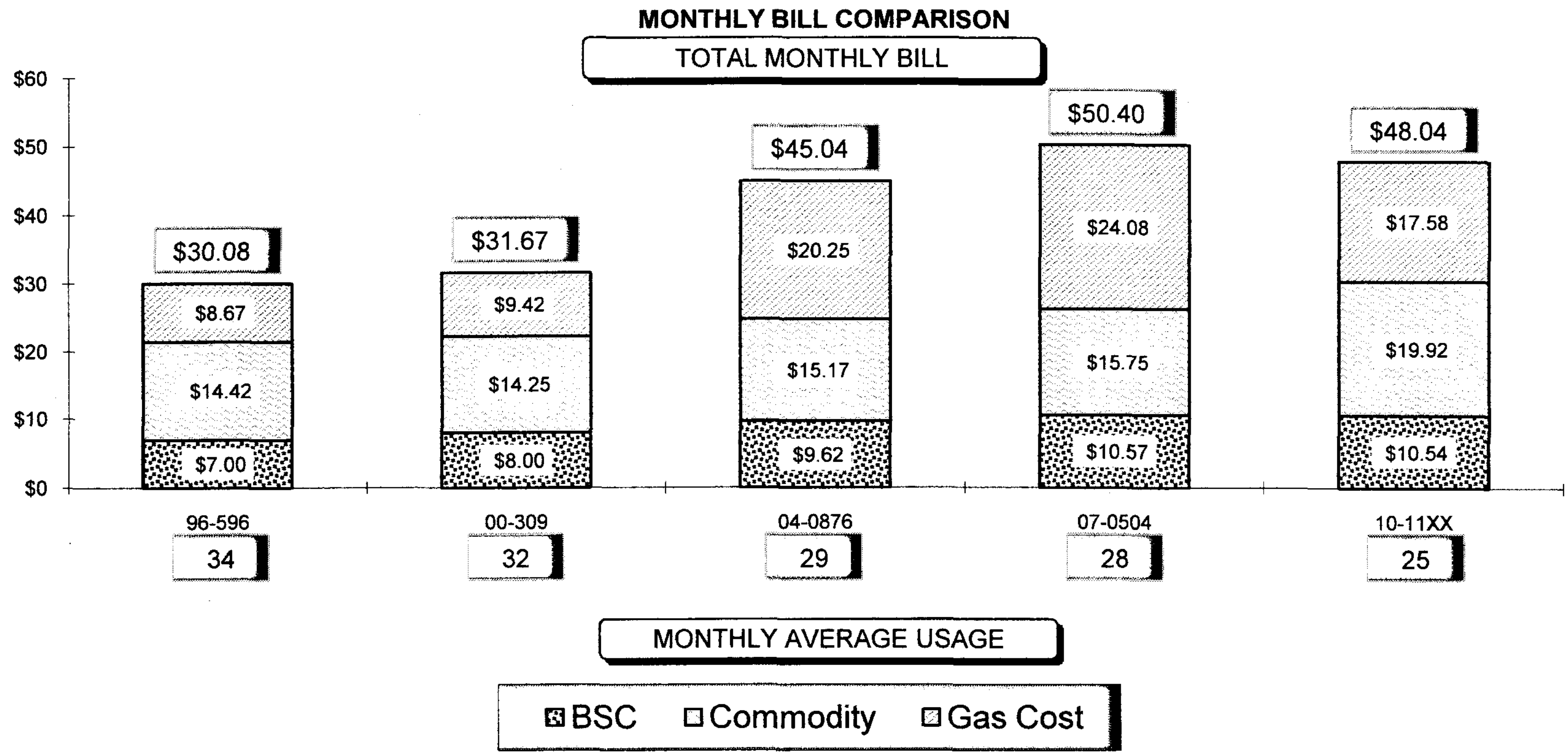
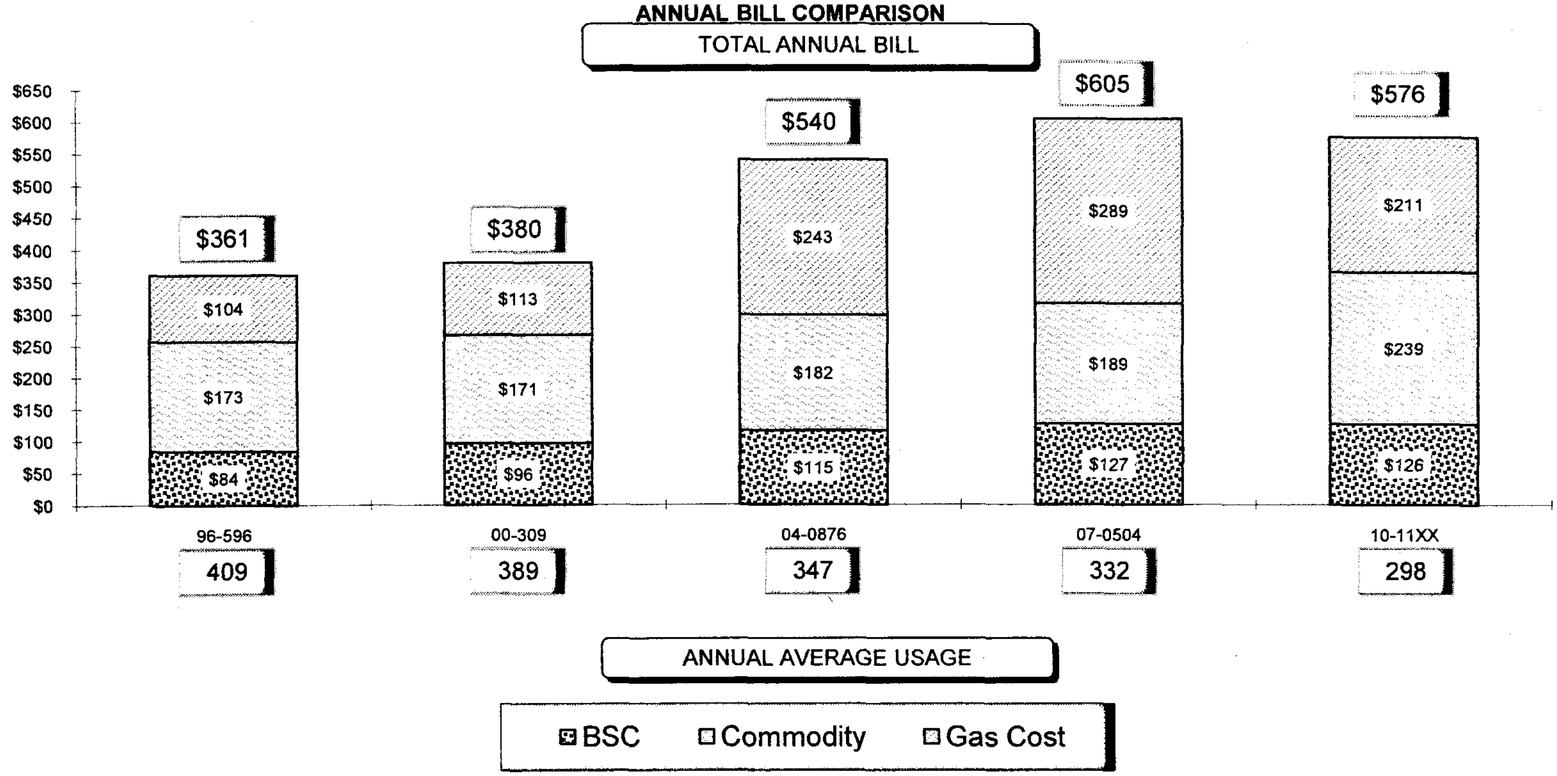


Exhibit No.___ (RAM-1)
SHEET 1 OF 2

SOUTHWEST GAS CORPORATION
ARIZONA
RESIDENTIAL GAS SERVICE RATE- SCHEDULE CG-5 ANNUAL BILL COMPARISON
DOCKET NUMBERS 96-596, 00-309, 04-0876, 07-0504, 10-11XX
NOMINAL DOLLARS

	Effective	Tariff Rate			Annual	Margin				
Docket No. U-1551-	Date	Volumetric	Gas Cost	Total	Avg Usage	Volumetric	BSC	Total	Gas Cost	Total
96-596	9/1/97	$ 0.42370	$ 0.25489	$ 0.67859	409	$ 173	$ 84	$ 257	$ 104	$ 361
00-309	4/1/01	0.43960	0.28930	0.72890	389	171	96	267	113	380
04-0876	3/1/06	0.52579	0.69994	1.22573	347	182	115	297	243	540
07-0504	12/1/08	0.56975	0.87029	1.44004	332	189	127	316	289	605
10-11XX	XX/X/XX	0.80173	0.70873	1.51046	298	239	126	365	211	576

ANNUAL BILL COMPARISON



SOUTHWEST GAS CORPORATION
ARIZONA
AVERAGE ANNUAL RESIDENTIAL MARGIN PER CUSTOMER
RATE CASES APPROVED FOR YEARS 1996 THROUGH 2008 AND REQUESTED 2010
COMPARISON OF THE AVERAGE ANNUAL RATE OF INCREASE TO THE CONSUMER PRICE INDEX

					Required Margin Increase at 2.37 Percent Annually				
Year	Docket Number G-1551A	Test Year End	Effective Date	Effective Year	Begin	Average Percent Growth	End	Average Increase Annual	Average Increase Monthly
1995							$ 257		
1996					$ 257	1.0237	263	$ 6.08	$ 0.51
1997	96-596	Jul-95	Sep-97	$ 257	263	1.0237	269	6.23	0.52
1998					269	1.0237	276	6.37	0.53
1999					276	1.0237	282	6.52	0.54
2000					282	1.0237	289	6.68	0.56
2001	00-0309	Dec-99	Nov-01	274	289	1.0237	296	6.84	0.57
2002					296	1.0237	303	7.00	0.58
2003					303	1.0237	310	7.16	0.60
2004					310	1.0237	317	7.33	0.61
2005					317	1.0237	325	7.51	0.63
2006	04-0876	Aug-04	Mar-06	297	325	1.0237	332	7.68	0.64
2007					332	1.0237	340	7.87	0.66
2008	07-0504	Apr-07	Dec-08	316	340	1.0237	348	8.05	0.67
2009					348	1.0237	357	8.24	0.69
2010					357	1.0237	365	8.44	0.70
2011	10-11XX	Jun-10		365	365	1.0237	374	8.64	0.72

Total Dollar Increase over 16 Years	$ 108
Total 15-Year (Jan 1996 - Jan 2011) Percent Increase	42.0%
Average Annual	2.37%
CPI at Dec 1995	153.5
CPI at June 2010	218.0
Change over 14.5 years	64.5
Total 14.5-Year (Jan 1996 - Jun 2010) Increase	42.00%
Average Annual Inflation Rate	2.45%

Exhibit No.___ (RAM-3)
SHEET 1 OF 2

SOUTHWEST GAS CORPORATION
ARIZONA
AUTHORIZED 2007 RATE CASE
TEST YEAR ENDED APRIL 2007

Line No.	Description	Rate Sch.	Bills	Therms	Rate	BSC	Commodity	Total	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	
1	SFH Res.	G-5	10,298,030		$ 10.70	$ 110,188,921	$	$ 110,188,921	1
2				289,056,115	$ 0.57070		164,964,325	164,964,325	2
3	Total		858,169	337		$ 110,188,921	$ 164,964,325	$ 275,153,246	3
4	MFH-Family Res.	G-6	370,562		$ 9.70	$ 3,594,451	$	$ 3,594,451	4
5				6,508,059	$ 0.55343		3,601,755	3,601,755	5
6	Total		30,880	211		$ 3,594,451	$ 3,601,755	$ 7,196,206	6
7	SFH-Low Income Res.	G-10	310,906		$ 7.50	$ 2,331,795	$	$ 2,331,795	7
8				8,658,972	$ 0.55343		4,792,135	4,792,135	8
9	Total		25,909	334		$ 2,331,795	$ 4,792,135	$ 7,123,930	9
10	MFH-Low Income Res.	G-11	27,388		$ 7.50	$ 205,410	$	$ 205,410	10
11				552,643	$ 0.55343		305,849	305,849	11
12	Total		2,282	242		$ 205,410	$ 305,849	$ 511,259	12
13	Special Res.	G-15	1,296		$ 10.70	$ 13,867	$	$ 13,867	13
14				141,520	$ 0.44048		62,337	62,337	14
15	Total		108	1,310		$ 13,867	$ 62,337	$ 76,204	15
16	Fixed					$ 116,334,445	$ 0	$ 116,334,445	16
17	Variable					0	173,726,401	173,726,401	17
18	Total Residential		11,008,182	304,917,309		$ 116,334,445	$ 173,726,401	$ 290,060,846	18
19	Average Customers, Therms & Margin		917,349	332				$ 316.19	19

SOUTHWEST GAS CORPORATION
ARIZONA
AUTHORIZED 2007 TO PRESENT RATES JUNE 2010
TEST YEAR ENDED JUNE 2010
LOST MARGIN DUE TO DECLINING AVERAGE USE

Line No.	Description (a)	Rate Sch. (b)	Bills (c)	Therms (d)	Rate (e)	Margin BSC (f)	Commodity (g)	2010 Total (h)	2007 Total (i)	2010 vs 2007 (j)	Line No.
1	SFH Res.	G-5	10,418,131		$ 10.70	$ 111,474,002	$	$ 111,474,002	$ 110,188,921	$ 1,285,081	1
2				261,822,441	$ 0.57070		149,422,067	149,422,067	164,964,325	(15,542,258)	2
3	Total		868,178	302		$ 111,474,002	$ 149,422,067	$ 260,896,069	$ 275,153,246	$ (14,257,177)	3
4	MFH-Family Res.	G-6	378,334		$ 9.70	$ 3,669,840	$	$ 3,669,840	$ 3,594,451	$ 75,388	4
5				5,862,713	$ 0.55343		3,244,601	3,244,601	3,601,755	(357,154)	5
6	Total		31,528	186		$ 3,669,840	$ 3,244,601	$ 6,914,441	$ 7,196,206	$ (281,765)	6
7	SFH-Low Income Res.	G-10	415,096		$ 7.50	$ 3,113,220	$	$ 3,113,220	$ 2,331,795	$ 781,425	7
8				10,495,198	$ 0.55343		5,808,357	5,808,357	4,792,135	1,016,223	8
9	Total		34,591	303		$ 3,113,220	$ 5,808,357	$ 8,921,577	$ 7,123,930	$ 1,797,648	9
10	MFH-Low Income Res.	G-11	37,729		$ 7.50	$ 282,968	$	$ 282,968	$ 205,410	$ 77,558	10
11				710,445	$ 0.55343		393,182	393,182	305,849	87,332	11
12	Total		3,144	226		$ 282,968	$ 393,182	$ 676,149	$ 511,259	$ 164,890	12
13	Special Res.	G-15	1,080		$ 10.70	$ 11,556	$	$ 11,556	$ 13,867	$ (2,311)	13
14				89,219	$ 0.52978		47,266	47,266	62,337	(15,071)	14
15	Total		90	991		$ 11,556	$ 47,266	$ 58,822	$ 76,204	$ (17,382)	15
16	Fixed					$ 118,551,585	$ 0	$ 118,551,585	$ 116,334,445	$ 2,217,140	16
17	Variable					0	158,915,473	158,915,473	173,726,401	(14,810,928)	17
18	Total Residential		11,250,370	278,980,016		$ 118,551,585	$ 158,915,473	$ 277,467,058	$ 290,060,846	$ (12,593,787)	18
19	Average Customers, Therms & Margin		937,531	297.57				295.96	$ 316.19		19
20	Lost Margin Prior Rate Case Customers		917,349						$ (20.24)	$ (18,566,852)	20

SOUTHWEST GAS CORPORATION
ARIZONA
AUTHORIZED 2007 TO PRESENT RATES JUNE 2010
TEST YEAR ENDED APRIL 2007

Line No.	Description (a)	Rate Sch. (b)	Bills (c)	Therms (d)	Rate (e)	BSC (f)	Commod. (g)	Total (h)	Line No.
1	General Service-Small	G-25(S)	201,805		$ 27.50	$ 5,549,638	$	$ 5,549,638	1
2				5,020,754	$ 0.57059		2,864,792	2,864,792	2
3	Total		16,817	299		$ 5,549,638	$ 2,864,792	$ 8,414,430	3
4	General Service-Medium	G-25(M)	193,790		$ 43.50	$ 8,429,865	$	$ 8,429,865	4
5				45,530,269	$ 0.37996		17,299,681	17,299,681	5
6	Total		16,149	2,819		$ 8,429,865	$ 17,299,681	$ 25,729,546	6
7	General Service-Large	G-25(L)	85,510		$ 160.00	$ 13,681,600	$	$ 13,681,600	7
8				149,222,854	$ 0.29084		43,399,975	43,399,975	8
9	Total		7,126	20,941		$ 13,681,600	$ 43,399,975	$ 57,081,575	9
10	Fixed					$ 27,661,103	$ 0	$ 27,661,103	10
11	Variable					0	63,564,448	63,564,448	11
12	Total General Service		40,092	199,773,877		$ 27,661,103	$ 63,564,448	$ 91,225,550	12

SOUTHWEST GAS CORPORATION
ARIZONA
AUTHORIZED 2007 TO PRESENT RATES JUNE 2010
TEST YEAR ENDED JUNE 2010
LOST MARGIN DUE TO DECLINING NUMBER OF CUSTOMERS AND AVERAGE USE

Line No.	Description	Rate Sch.	Bills	Therms	Rate	BSC	Commodity	2010 Total	2007 Total	2010 vs 2007	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
1	General Service-Small	G-25(S)	205,593		$ 27.50	$ 5,653,808	$	$ 5,653,808	5,549,638	$ 104,170	1
2				3,952,061	$ 0.57059		2,255,006	2,255,006	2,864,792	(609,786)	2
3	Total		17,133	231		$ 5,653,808	$ 2,255,006	$ 7,908,814	8,414,430	$ (505,616)	3
4	General Service-Medium	G-25(M)	181,390		$ 43.50	$ 7,890,465	$	$ 7,890,465	8,429,865	$ (539,400)	4
5				38,658,561	$ 0.37996		14,688,707	14,688,707	17,299,681	(2,610,974)	5
6	Total		15,116	2,557		$ 7,890,465	$ 14,688,707	$ 22,579,172	25,729,546	$ (3,150,374)	6
7	General Service-Large	G-25(L)	90,008		$ 160.00	$ 14,401,280	$	$ 14,401,280	13,681,600	$ 719,680	7
8				139,934,652	$ 0.29084		40,698,594	40,698,594	43,399,975	(2,701,381)	8
9	Total		7,501	18,656		$ 14,401,280	$ 40,698,594	$ 55,099,874	57,081,575	$ (1,981,701)	9
10	Fixed					$ 27,945,553	$ 0	$ 27,945,553	$ 27,661,103	$ 284,450	10
11	Variable					0	57,642,308	57,642,308	63,564,448	(5,922,140)	11
12	Total General Service		39,749	182,545,274		$ 27,945,553	$ 57,642,308	$ 85,587,860	$ 91,225,550	$ (5,637,690)	12

SOUTHWEST GAS CORPORATION
EARLY GENERATION PLASTIC PIPE
FOOTAGE INSTALLED AS OF DECEMBER 2006
REPLACEMENT FROM 2007 THROUGH SEPTEMBER 2010
SUMMARY BY STATE

Description	Installed By	Percent Within State	Footage Dec-06	Footage Replaced 2007	2008	2009	YTD Sept 2010	45-Mth Total	Percent of 2006
California									
Aldyl A	CPN	15%	418,828	0	2,758	24,951	24,535	52,244	12.5%
ABS	N/A	0%	0	0	0	0	0	0	0.0%
Aldyl HD	SWG	2%	43,867	40,851	3,016	0	0	43,867	100.0%
PVC	SWG	84%	2,407,218	300,846	212,555	217,108	128,309	858,818	35.7%
Total California		100%	2,869,913	341,697	218,329	242,059	152,844	954,929	33.3%
Nevada									
Aldyl A	CPN	19%	1,004,792	4,921	9,368	25,577	18,310	58,176	5.8%
ABS	N/A	0%	0	0	0	0	0	0	0.0%
Aldyl HD	SWG	1%	53,842	0	537	1,793	0	2,330	4.3%
PVC	SWG	80%	4,303,867	92,737	321,988	293,603	119,739	828,067	19.2%
Total Nevada		100%	5,362,501	97,658	331,893	320,973	138,049	888,573	16.6%
Arizona									
Aldyl A	SWG	0%	11,973	0	11	0	138	149	1.2%
Aldyl A	TG&E	31%	3,080,999	48,320	52,293	88,316	74,684	263,613	8.6%
Aldyl A	BMG	1%	57,507	236	0	26,434	16,645	43,315	75.3%
ABS	TG&E	0%	46,495	4,699	7,205	9,452	3,845	25,201	54.2%
ABS	APS	1%	117,279	1,710	68,646	16,178	29,948	116,482	99.3%
Aldyl HD	SWG	16%	1,624,825	129,374	27,047	208,814	406,776	772,011	47.5%
PVC	SWG	18%	1,765,854	52,618	45,771	26,851	60,008	185,248	10.5%
PVC	TG&E	1%	147,621	335	234	267	19,279	20,115	13.6%
PVC	APS	30%	3,005,711	17,569	32,558	128,572	39,086	217,785	7.2%
Total Arizona		100%	9,858,264	254,861	233,765	504,884	650,409	1,643,919	16.7%
Total Southwest Gas			18,090,678	694,216	783,987	1,067,916	941,302	3,487,421	19.3%
Percent of 2006 Inventory				3.8%	4.3%	5.9%	5.2%		

APS	Arizona Public Service
BMG	Black Mountain Gas
CPN	CP National
TG&E	Tucson Gas & Electric DBA TEP
SWG	Southwest Gas

SOUTHWEST GAS CORPORATION
ARIZONA
AHD REPLACEMENT OPTIONS

Line No.	Description	Begin	End	Write-Off Jun-10	Write-Off Post-June 10	Write-Off Total	Line No.
	(a)	(a)	(a)	(a)	(a)	(a)	
1	Eliminate Write-Off	2020	2026	$ 0	$ 0	$ 0	1
2	Ratable 20-Yr	2007	2026	3,473,637	4,236,143	7,709,780	2
3	Remaining 10.5-Yr	2007	2020	8,177,678	4,400,990	12,578,668	3
4	Remaining 3.0 Yr	2007	2013	8,177,678	7,849,600	16,027,278	4

Exhibit No.___ (RAM-6)
SHEET 2 OF 5

SOUTHWQEST GAS CORPORATION
ARIZONA
ALDYL HD REPLACEMENT PIPE CAPITAL EXPENDITURES
FOR THE PERIOD JULY 2010 THROUGH DECEMBER 2013

Line No.	Month	Year	Mains Feet	Mains Cost Per Foot	Mains Capital Cost	Mains Write-Off Percent	Mains Write-Off Dollars	Services Feet	Services Cost Per Foot	Services Capital Cost	Services Write-Off Percent	Services Write-Off Dollars	Total Mains & Services Dollars	Total Mains & Services Write-Off	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	
1	July	2010	15,332	47.01	$ 720,749	25.00%	$ 180,187	8,800	32.93	$ 289,784	25.00%	$ 72,446	$ 1,010,533	$ 252,633	1
2	August		15,332	47.01	720,749	25.00%	180,187	8,800	32.93	289,784	25.00%	72,446	1,010,533	252,633	2
3	September		15,332	47.01	720,749	25.00%	180,187	8,800	32.93	289,784	25.00%	72,446	1,010,533	252,633	3
4	October		15,332	47.01	720,749	25.00%	180,187	8,800	32.93	289,784	25.00%	72,446	1,010,533	252,633	4
5	November		15,332	47.01	720,749	25.00%	180,187	8,800	32.93	289,784	25.00%	72,446	1,010,533	252,633	5
6	December		15,332	47.01	720,749	25.00%	180,187	8,800	32.93	289,784	25.00%	72,446	1,010,533	252,633	6
7	Total		91,991		$ 4,324,497		$ 1,081,124	52,800		$ 1,738,704		$ 434,676	$ 6,063,201	$ 1,515,800	7
8	January	2011	14,080	$ 47.01	$ 661,901	22.50%	$ 148,928	8,800	$ 32.93	$ 289,784	22.50%	$ 65,201	$ 951,685	$ 214,129	8
9	February	2011	14,080	47.01	661,901	22.50%	148,928	8,800	32.93	289,784	22.50%	65,201	951,685	214,129	9
10	March	2011	14,080	47.01	661,901	22.50%	148,928	8,800	32.93	289,784	22.50%	65,201	951,685	214,129	10
11	April	2011	14,080	47.01	661,901	22.50%	148,928	8,800	32.93	289,784	22.50%	65,201	951,685	214,129	11
12	May	2011	14,080	47.01	661,901	22.50%	148,928	8,800	32.93	289,784	22.50%	65,201	951,685	214,129	12
13	June	2011	14,080	47.01	661,901	22.50%	148,928	8,800	32.93	289,784	22.50%	65,201	951,685	214,129	13
14	July	2011	14,080	47.01	661,901	22.50%	148,928	8,800	32.93	289,784	22.50%	65,201	951,685	214,129	14
15	August	2011	14,080	47.01	661,901	22.50%	148,928	8,800	32.93	289,784	22.50%	65,201	951,685	214,129	15
16	September	2011	14,080	47.01	661,901	22.50%	148,928	8,800	32.93	289,784	22.50%	65,201	951,685	214,129	16
17	October	2011	14,080	47.01	661,901	22.50%	148,928	8,800	32.93	289,784	22.50%	65,201	951,685	214,129	17
18	November	2011	14,080	47.01	661,901	22.50%	148,928	8,800	32.93	289,784	22.50%	65,201	951,685	214,129	18
19	December	2011	14,080	47.01	661,901	22.50%	148,928	8,800	32.93	289,784	22.50%	65,201	951,685	214,129	19
20	Total		168,960		$ 7,942,810		$ 1,787,132	105,600		$ 3,477,408		$ 782,417	$ 11,420,218	$ 2,569,549	20
21	January	2012	18,040	$ 47.01	$ 848,060	20.00%	$ 169,612	10,120	$ 32.93	$ 333,252	20.00%	$ 66,650	$ 1,181,312	$ 236,262	21
22	February	2012	18,040	47.01	848,060	20.00%	169,612	10,120	32.93	333,252	20.00%	66,650	1,181,312	236,262	22
23	March	2012	18,040	47.01	848,060	20.00%	169,612	10,120	32.93	333,252	20.00%	66,650	1,181,312	236,262	23
24	April	2012	18,040	47.01	848,060	20.00%	169,612	10,120	32.93	333,252	20.00%	66,650	1,181,312	236,262	24
25	May	2012	18,040	47.01	848,060	20.00%	169,612	10,120	32.93	333,252	20.00%	66,650	1,181,312	236,262	25
26	June	2012	18,040	47.01	848,060	20.00%	169,612	10,120	32.93	333,252	20.00%	66,650	1,181,312	236,262	26
27	July	2012	18,040	47.01	848,060	20.00%	169,612	10,120	32.93	333,252	20.00%	66,650	1,181,312	236,262	27
28	August	2012	18,040	47.01	848,060	20.00%	169,612	10,120	32.93	333,252	20.00%	66,650	1,181,312	236,262	28
29	September	2012	18,040	47.01	848,060	20.00%	169,612	10,120	32.93	333,252	20.00%	66,650	1,181,312	236,262	29
30	October	2012	18,040	47.01	848,060	20.00%	169,612	10,120	32.93	333,252	20.00%	66,650	1,181,312	236,262	30
31	November	2012	18,040	47.01	848,060	20.00%	169,612	10,120	32.93	333,252	20.00%	66,650	1,181,312	236,262	31
32	December	2012	18,040	47.01	848,060	20.00%	169,612	10,120	32.93	333,252	20.00%	66,650	1,181,312	236,262	32
33	Total		216,480		$ 10,176,725		$ 2,035,345	121,440		$ 3,999,019		$ 799,804	$ 14,175,744	$ 2,835,149	33
34	January	2013	15,415	$ 47.01	$ 724,643	17.50%	$ 126,813	4,865	$ 32.93	$ 160,215	17.50%	$ 28,038	$ 884,859	$ 154,850	34
35	February	2013	15,415	47.01	724,643	17.50%	126,813	4,865	32.93	160,215	17.50%	28,038	884,859	154,850	35
36	March	2013	15,415	47.01	724,643	17.50%	126,813	4,865	32.93	160,215	17.50%	28,038	884,859	154,850	36
37	April	2013	15,415	47.01	724,643	17.50%	126,813	4,865	32.93	160,215	17.50%	28,038	884,859	154,850	37
38	May	2013	15,415	47.01	724,643	17.50%	126,813	4,865	32.93	160,215	17.50%	28,038	884,859	154,850	38
39	June	2013	15,415	47.01	724,643	17.50%	126,813	4,865	32.93	160,215	17.50%	28,038	884,859	154,850	39
40	July	2013		47.01	0	17.50%	0		32.93	0	17.50%	0	0	0	40
41	August	2013		47.01	0	17.50%	0		32.93	0	17.50%	0	0	0	41
42	September	2013		47.01	0	17.50%	0		32.93	0	17.50%	0	0	0	42
43	October	2013		47.01	0	17.50%	0		32.93	0	17.50%	0	0	0	43
44	November	2013		47.01	0	17.50%	0		32.93	0	17.50%	0	0	0	44
45	December	2013		47.01	0	17.50%	0		32.93	0	17.50%	0	0	0	45
46	Total		92,488		$ 4,347,861		$ 760,876	29,192		$ 961,293		$ 168,226	$ 5,309,153	$ 929,102	46
47	Total Remaining		569,919		$ 26,791,892		$ 5,664,477	309,032		$ 10,176,424		$ 2,185,123	$ 36,968,316	$ 7,849,600	47

SOUTHWEST GAS CORPORATION
ARIZONA
DISALLOWED DOLLARS - REMAINING REPLACEMENT THROUGH JUNE 2013

Description	Year	Mains	Services	Total	Percent Disallowed	Disallowed
	2007	$ 298,767	$ 1,377,037	$ 1,675,804	32.50%	$ 544,636
	2008	4,135,001	1,078,582	5,213,583	30.00%	1,564,075
	2009	5,375,979	4,246,442	9,622,421	27.50%	2,646,166
January to June	2010	10,444,643	3,246,563	13,691,206	25.00%	3,422,801
July to December	2010	4,324,497	1,738,704	6,063,201	25.00%	1,515,800
	2011	7,942,810	3,477,408	11,420,218	22.50%	2,569,549
	2012	10,176,725	3,999,019	14,175,744	20.00%	2,835,149
	2013	4,347,861	961,293	5,309,153	17.50%	929,102
	2014			0	15.00%	0
	2015			0	12.50%	0
	2016			0	10.00%	0
	2017			0	7.50%	0
	2018			0	5.00%	0
	2019			0	2.50%	0
	2020			0	0.00%	0
	2021			0	0.00%	0
	2022			0	0.00%	0
	2023			0	0.00%	0
	2024			0	0.00%	0
	2025			0	0.00%	0
	2026			0	0.00%	0
Total		$ 47,046,283	$ 20,125,047	$ 67,171,330	23.86%	$ 16,027,278
Actual Write-Off through June 2010						$ 8,177,678
Remaining Write-Off						$ **7,849,600**

SOUTHWEST GAS CORPORATION
ARIZONA
DISALLOWED DOLLARS - REMAINING REPLACEMENT THROUGH DECEMBER 2020

Description	Year	Mains	Services	Total	Percent Disallowed	Disallowed
	2007	$ 298,767	$ 1,377,037	$ 1,675,804	32.50%	$ 544,636
	2008	4,135,001	1,078,582	5,213,583	30.00%	1,564,075
	2009	5,375,979	4,246,442	9,622,421	27.50%	2,646,166
January to June	2010	10,444,643	3,246,563	13,691,206	25.00%	3,422,801
July to December	2010	1,275,804	484,592	1,760,396	25.00%	440,099
	2011	2,551,609	969,183	3,520,792	22.50%	792,178
	2012	2,551,609	969,183	3,520,792	20.00%	704,158
	2013	2,551,609	969,183	3,520,792	17.50%	616,139
	2014	2,551,609	969,183	3,520,792	15.00%	528,119
	2015	2,551,609	969,183	3,520,792	12.50%	440,099
	2016	2,551,609	969,183	3,520,792	10.00%	352,079
	2017	2,551,609	969,183	3,520,792	7.50%	264,059
	2018	2,551,609	969,183	3,520,792	5.00%	176,040
	2019	2,551,609	969,183	3,520,792	2.50%	88,020
	2020	2,551,609	969,183	3,520,792	0.00%	0
	2021			0	0.00%	0
	2022			0	0.00%	0
	2023			0	0.00%	0
	2024			0	0.00%	0
	2025			0	0.00%	0
	2026			0	0.00%	0
Total		$ 47,046,283	$ 20,125,047	$ 67,171,330	18.73%	$ 12,578,668
Actual Write-Off through June 2010						$ 8,177,678
Remaining Write-Off						$ **4,400,990**

SOUTHWEST GAS CORPORATION
ARIZONA
DISALLOWED DOLLARS GIVEN A 20-YEAR RATABLE REPLACEMENT

Description	Year	Mains	Services	Total	Percent Disallowed	Disallowed
	2007	$ 2,382,685	$ 1,006,229	$ 3,388,914	32.50%	$ 1,101,397
	2008	2,382,685	1,006,229	3,388,914	30.00%	1,016,674
	2009	2,382,685	1,006,229	3,388,914	27.50%	931,951
	2010	2,382,685	1,006,229	3,388,914	25.00%	847,229
	2011	2,382,685	1,006,229	3,388,914	22.50%	762,506
	2012	2,382,685	1,006,229	3,388,914	20.00%	677,783
	2013	2,382,685	1,006,229	3,388,914	17.50%	593,060
	2014	2,382,685	1,006,229	3,388,914	15.00%	508,337
	2015	2,382,685	1,006,229	3,388,914	12.50%	423,614
	2016	2,382,685	1,006,229	3,388,914	10.00%	338,891
	2017	2,382,685	1,006,229	3,388,914	7.50%	254,169
	2018	2,382,685	1,006,229	3,388,914	5.00%	169,446
	2019	2,382,685	1,006,229	3,388,914	2.50%	84,723
	2020	2,382,685	1,006,229	3,388,914	0.00%	0
	2021	2,382,685	1,006,229	3,388,914	0.00%	0
	2022	2,382,685	1,006,229	3,388,914	0.00%	0
	2023	2,382,685	1,006,229	3,388,914	0.00%	0
	2024	2,382,685	1,006,229	3,388,914	0.00%	0
	2025	2,382,685	1,006,229	3,388,914	0.00%	0
	2026	2,382,685	1,006,229	3,388,914	0.00%	0
Total		$ 47,653,708	$ 20,124,577	$ 67,778,285	11.38%	$ 7,709,780
Actual Write-Off through June 2010						$ 8,177,678
Actual greater Than Ratable Over 20-Yrs.						$ **(467,898)**

SOUTHWEST GAS CORPORATION
ARIZONA
INCREMENTAL CONTRIBUTION METHOD (ICM) MODEL
GUIDELINES

Last Update: 07/09/2010

Model Owner	**The Model Owner is the Corporate Development Department. All questions or issues with the model should be directed to Corporate Development.**
Goal	**The goal of the ICM is to ensure that service to new customers can be provided with incremental investment and expenses that are supported by the expected incremental margin from the new customers. The incremental cost of providing service to new customers should not place a burden on existing customers or the shareholders who provide the capital to serve these new customers.**
ICM	**The ICM is a cost of service model that simulates the rate case process. The model calculates incremental margin (standard appliance use applied to Arizona Corporation Commission (ACC) authorized rates) investment (direct per Work Requests (WR's) and standard based on historical averages), operation and maintenance (O & M) (historical statewide averages), depreciation (ACC authorized rates), property tax (ACC rates embedded in current rates), interest expense (ACC authorized cost of debt and preferred) and common equity and income taxes on common equity (ACC authorized amounts). Refer to Standard Practice (SP) 920.0 for procedures regarding use and updates to the model.**
Target	**On December 19, 2008 the ACC authorized Southwest to place rates into effect that were based on the premise that the Company would earn an overall rate of return of 8.86 percent, and a return on shareholder capital of 10.00 percent. The ICM results should at least equal, if not exceed, the ACC authorized level (8.86%).**
Results 3 Yr.	**Both the 3-Yr. Aver. and Year Four results must at least equal the authorized level. Main extension (MEC) Advances and Contributions In Aid of Construction (CIAC) will use the 3-Year Average results for calculation and refunds. All first year capital cost will be advanced to the Company. A CIAC will be required for projects that fail to achieve Year 4 Target Results.**
Results 5 Yr.	**5-Year average results can be used for long term projects for information purposes. 5-Year Average and Year Six results must at least equal the authorized levels. Senior management approval must be obtained for use as a project justification.**
Adv.-100%	**Is the sum of all first year capital expenditures except service extensions and meters. MEC's will be reviewed annually for adjustment of advance.**

SOUTHWEST GAS CORPORATION
ARIZONA
INCREMENTAL CONTRIBUTION METHOD (ICM) MODEL
GUIDELINES

Last Update: 07/09/2010

Margin	The Company's Tariff provides that the builder, or customer, must provide the number of homes and types of gas appliances that will be included in each home. Appliance inputs should only include gas appliances, including dryer stub, that will be provided as standard equipment *at no extra cost to the purchaser of the home.* Appliances and or stubs for equipment that *will only be provided for a charge to the ultimate purchaser of the* home will not be included in the margin calculation. The one exception is a gas fireplace and or log. Additional use is provided for homes that provide gas drying as standard without a 220 volt receptacle unless one is requested by the ultimate (first) purchaser of the home.
Appliances	Space Heat - One, two or three furnaces - Use is district specific Water heat - One or two furnace homes - Use is district specific Cooking - Standard Arizona expected value Cooking/Oven - Combination cooktop and gas oven and or broiler (Inventory both Ck & Ov) *Drying W 220 - Standard Arizona expected value* Drying WO 220 - Standard Arizona expected value Log - Standard Arizona expected value BBQ, Pool, Spa - No use for these or other ancillary gas appliances
Commercial	Appliance use is business specific and is the responsibility of Commercial-Customer Service Planning (CSP) for its accuracy. Should be based on experience of similar customers in similar lines of business. Choice of the appropriate rate schedule is Commercial-CSP responsibility. Demand charge calculation is Commercial-CSP or Key Accounts Management (KAM) responsibility.
Buildout	Critical to the workings of the model. All Blanket Identification (BI) numbers below must have a buildout percent of 100%. Except service extension and meters. General rule BI No's 9603 (4",6" & Steel), 9606, 9607, 9612 and 9635 have a first year buildout of 100%. BI 9603 (2") mains and 9608 Service-Stub have the same buildout percent. BI 9608 Service-Extension and meters have the same buildout percent. CSP-Residential, CSP-Commercial. or KAM is responsible for the accuracy of the customer buildout percent.

SOUTHWEST GAS CORPORATION
ARIZONA
INCREMENTAL CONTRIBUTION METHOD (ICM) MODEL
GUIDELINES

Last Update: 07/09/2010

Investment	BI 9603	Mains	WR specific. Estimates should include 4"PE ,6" PE and 2" PE. If applicable the cost of steel pipe should also be included.
	BI 9606	Mains	District specific standard amounts by on historical results.
	BI 9607	Reg. Sta.	WR specific.
	BI 9608	Serv.-Stub	District specific standard amounts based on historical results.
		Serv. Ext.	District specific standard amounts based on historical results.
	BI 9610	Meters	Based on size of meter. Statewide average cost with ERTS. WR specific for large industrial meters and regulation equipment.
	BI 9612	Ind. Reg.	WR specific.
	BI 9635	HP Main	WR specific. Used only in remote large project analysis.
CIAC	Can be input manually or solved by using Excel "Goal Seek". Instructions are contained in the cost input sheet. Must solve for the authorized level result using one of the following Cost Input sheet cells: I-32, I-33, L-29, N-29.		
Expense	Statewide average based on Twelve Months Ended (TME) December 2008. Includes Blue Stake, Meter Reading, Appl. Services, CAP-Billing, uncollectible & liability insurance. Excludes customer installation and return check-collection expense and fees (revenue authorized to recover such expense).		
Other Exp	Builder incentives and/or KAM - CSP incentives. The authorized level of results, based on the 3-Year Average, obtained both before and after incentive.		

Arizona Incremental Contribution Model Cost Inputs

#N/A

0

WR No. 0

CSS No. 0

	Std.	
Work Order Description		
District Number		
Work Order/Request No.		
CSS No.		
Feet - Steel		
Feet - 6" and or 8" PE		
Feet 4" Main		
Feet 2" Main		
Main $ - Lrg. Diam. Pipe If Known or Est. Per WMIS		
Main $ 2" Pipe If Known or Estimated		
Main $ **Total** If Separate Amts. Above Known Then $0		
Feet - Pressure Reinforce. (Optional) - Bl. No. 9606		
$ - Pressure Reinforce. (Std.) - Bl. No. 9606	#N/A	#N/A
Feet High-Pressure (HP-Main) Distribution Main		
HP-Main $ - Bl. No. 9635		
Std Serv. Stub Ft. Per Cust. or Actual If Greater	#N/A	
Std. Serv. Ext. Ft. Per Cust. or Actual If Greater	#N/A	
Std. Serv. Stub $ Per Ft Per Cust. or Actual If Greater	#N/A	
Std. Serv. Ext. $ Per Ft Per Cust. or Actual If Greater	#N/A	
Comm./KAM Service Feet		
Comm./KAM Service Cost		
Reg. Sta. $ Per WMIS Estimate - Bl. No. 9607		
Industrial Reg. Sta. $ BI-9612 Est. Per WMIS or KAM		
No. of Meters-250-With ERTS	$184	
No. of Meters-425-With ERTS	$268	
No. of Meters-630-With ERTS	$697	
No. of Meters Commercial/KAM - See Gen Serv. Sales Input		-
Meters-Comm./KAM-Actual Per WMIS Cost Est.-Avg Per Meter		$ -
Other Expense		
Residential Customers		**No. of Appl.**
SFH BSC		
MFH BSC		
Space Heating - SFH - One Heating System		
Space Heating - SFH - Two Heating Systems		
Space Heating - SFH - Three Heating Systems		
SFH Water Heat- One Heating System		
SFH Water Heat - Two/Three Heating Systems		
SFH Cook Top Without Gas Oven and/or Broiler		
SFH Range w/ Gas Cook top & Oven and/or Broiler		
SFH Dryer - Stub & 220 Electric Plug - Customer Option		
SFH Dryer Stub - No 220 Electric Plug - Gas Dryer Only		
SFH Gas Log		
Space Heating - MFH Multi-Family Home		
MFH Water Heat- One Heating System		
MFH Cook Top Without Gas Oven and/or Broiler		
MFH Range w/ Gas Cook top & Oven and/or Broiler		
MFH Dryer - Stub & 220 Electric Plug - Customer Option		
MFH Dryer Stub - No 220 Electric Plug - Gas Dryer Only		
MFH Gas Log		

	Est. Cost	Advance	CIAC
Large Diameter Mains	0	0	
2" Inch Mains	0	0	
Main $ **Total** If Separate Amts. Unkown	0		
Pressure Reinforcement	#N/A		
High Pressure Dist Pipe	0		
Service Stubs	0	0	
Services Extensions	0		
Comm./KAM Service Cost	0		
Regulator Stations	0		
Industrial Regulating Stations	0		
Meters	0	0	
Total	#N/A	0	0
100% of Eligible Project Est. Cost		#N/A	
Percent of 100% of Advance			-

	Customer Advance Year End Balance (-)					Avg. Adv.
Gross Adv.	$0	$0	$0	$0	$0	
Adv.LessTax	$0	$0	$0	$0	$0	Yrs. Of Adv.
% Yr. End						0
Results	Year1	Year 2	Year 3	Year 4	Year 5	Year 6
ROR on RB	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
ROE (Eq.)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

	ROR	ROE
3-Yr Aver.	#N/A	#N/A
5-Yr. Aver.	#N/A	#N/A

Source
CSP/Builder
WMS
CIAC-Option

CIAC Option

1. Click on either cell L-29, N-29, I-32, I-33
2. Click "Data" tab, then "What-If Analysis" icon, then "Goal Seek"
3. Put cursor in "To value" box, enter 8.86%
4. Put cursor in "By changing cell" box, click on one cell from N10 to N18 except N16
5. Click "OK"

Investment Per Customer Before CIAC	#N/A
Investment Per Customer After CIAC	#N/A

Customer Statistics

	Resid.	Gen Service	Total
Total Customer Adds	0	0	0
Annual Therms After Buildout	#N/A	0	#N/A
Annual Margin After Buildout	#N/A	0	#N/A
Avg. Margin Per Cust.	0	0	
Avg. Use Per Cust.	0	0	

Please notice: The Service Stub Feet per Customer is smaller than the standard.
Please notice: The Service Extension Feet per Customer is smaller than the standard.
Please notice: The Service Stub $ per Ft per Customer is smaller than the standard.
Please notice: The Service Extension $ per Ft per Customer is smaller than the standard.

Arizona Incremental Contribution Model General Gas Service Sales Input

#N/A

0

WR No. 0
CSS No. 0

Customer Class	Annual Requirements	Gas Appliance/Equipment	Avg Therms per Appl/Equip per Year	No. of Appliance/ Equip	Total Therms
General Service G-25 (**Small** Customers) - Per CSP	<= 600 Therms				-
					-
					-
					-
					-
					-
					-
					-
					-
					-
Total Therms per Year for this Customer Class		-	*Total Therms per Year per Small Customer*		-

Small Customer Additions by Year

One	Two	Three	Four	Five	Six	Total
						0

Customer Class	Annual Requirements	Gas Appliance/Equipment	Avg Therms per Appl/Equip per Year	No. of Appliance/ Equip	Total Therms
General Service G-25 (**Medium** Customers) - Per CSP	> 600 Therms and <= 7200 Therms				-
					-
					-
					-
					-
					-
					-
					-
					-
					-
Total Therms per Year for this Customer Class		-	*Total Therms per Year per Medium Customer*		-

Medium Customer Additions by Year

One	Two	Three	Four	Five	Six	Total
						0

Arizona Incremental Contribution Model General Gas Service Sales Input

#N/A

0

WR No. 0

CSS No. 0

Customer Class	Annual - Requirements	Gas Appliance/Equipment	Avg Therms per Appl/Equip per Year	No. of Appliance/Equip	Total Therms
General Service G-25 (**Large** Customers) - Per CSP or KAM	> 7200 Therms and <=180,000 Therms				-
					-
					-
					-
					-
					-
					-
					-
					-
					-
Total Therms per Year for this Customer Class		-	*Total Therms per Year per Large Customer*		-

Large Customer Additions by Year

One	Two	Three	Four	Five	Six	Total
						0

Customer Class	Annual Requirements	Gas Appliance/Equipment	Avg Therms per Year per Appliance	No. of Appliance/Equip	Total Therms
Transportation-Eligible General Service (**KAM** Customers)	> 180,000 Therms				-
					-
					-
					-
					-
					-
					-
					-
					-
					-
Total Therms per Year for this Customer Class		-	*Total Therms per Year per KAM Customer*		-

Annual Basic Service Charge per Customer	
Annual Demand Charge (KAM Calculated)	
Commodity Rate per Therm	

KAM Customer Additions by Year

One	Two	Three	Four	Five	Six	Total
						0

SOUTHWEST GAS CORPORATION

#N/A

0

WR No. 0

CSS No. 0

SALES INPUT

	One	Two	Three	Four	Five	Six	
Other Expense Buildout-Total Must = 100%	100%						100%

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
	Project Build-Out As a Percent to Total						
Large Diameter PE & Steel (% by year)	100%						100%
Interior Main (% by year)	100%						100%
Main $ **Total** If Separate Amts. Above Unknown Then $0	100%						100%
Main CIAC (% by Year)	100%						100%
Pressure Reinforcement Main	100%						100%
High Pressure Distribution Main	100%						100%
Service Stub (% by year)	100%						100%
Service Extension (% by year)	100%						100%
Service Comm./KAM	100%						100%
Service CIAC (% by Year)	100%						100%
Regulator Stations (% by year)	100%						100%
Regulator Stations CIAC (% by year)	100%						100%
Industrial Regulator Stations (% by Year)	100%						100%
Industrial Regulator Stations CIAC (% by Year)	100%						100%
Meter Set' (% by year)-Non-A/C	100%						100%

#N/A

SOUTHWEST GAS CORPORATION

#N/A

0

WR No. 0

CSS No. 0

Description	Standard Length	Standard Cost / Ft.	Per Cust / Customers	Footage	Dollars	Cost Per Foot	Cost Per Customer	Feet Per Customer
Main								
Steel Main - Lrg Diameter Steel				0	$			#DIV/0!
6" Main - Large Diameter PE				0				#DIV/0!
4" Main - Large Diameter PE				0				#DIV/0!
Large Diameter Main				0	0			
2" Main - Interior				0	0			#DIV/0!
Total Main Before CIAC			0	0	$ 0	$ #DIV/0!	$ #DIV/0!	#DIV/0!
CIAC-Main					0			
Main After CIAC					$ 0	$ 0.00		
Main-Pressure Reinforcement				0	$ #N/A	$ 0.00		
Less: CIAC					0			
Net Pressure Reinforcement					$ #N/A	$ 0.00		
Main-High Pressure Distribution				0	$ 0	$ 0.00		
Less: CIAC					0			
Net High Pressure Distribution					$ 0	$ 0.00		
Service								
1" or 1/2" Service-Stub	0	0.00	0	0	$ 0	$ 0.00	$ 0	0
1/2" Service Extension	0	0.00	0	0	0	0.00	0	0
Comm./KAM			0	0	0	0.00	0	0
Total Service			0	0	$ 0	$ 0.00	$ #DIV/0!	#DIV/0!
Less CIAC					0			
Net Service After CIAC					$ 0	$ 0.00	$ #DIV/0!	
Regulator Station Eq.					$ 0			
Less CIAC					0			
Net Regulating Stations					0			
Industrial Regulating Stations					$ 0			
Less CIAC					0			
Net Industrial Regulating Stations					0			
Meters-Installed								
Meters-250-With ERTS		$184	0		$ 0		$ 0	
Meters-425-With ERTS		$268	0		0		0	
Meters-630-With ERTS		$697	0		0		0	
Meters-Comm./KAM		$0	0		0		0	
Total Meters			0		$ 0		$ 0	
					#N/A			
Total CIAC					0			
Total After CIAC					#N/A			

Capital By Year		Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Large Diameter PE & Steel	$	0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Interior Main		0	0	0	0	0	0	0
Total Main if Separate Not Known		0	0	0	0	0	0	0
CIAC Main		0	0	0	0	0	0	0
Pressure Reinforcement Main		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
High Pressure Distribution Main		0	0	0	0	0	0	0
Service Stub		0	0	0	0	0	0	0
Service Extension		0	0	0	0	0	0	0
Service Comm./KAM		0	0	0	0	0	0	0
CIAC Service		0	0	0	0	0	0	0
Regulator Stations		0	0	0	0	0	0	0
Regulator Stations - CIAC		0	0	0	0	0	0	0
Industrial Reg. Stations		0	0	0	0	0	0	0
Industrial Reg. Stations - CIAC		0	0	0	0	0	0	0
Meter Set		0	0	0	0	0	0	0
	$	#N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A

Total Project Cost $ #N/A

SOUTHWEST GAS CORPORATION

0

0

Description	Total Project	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Capital Expenditures							
Approach Main	0	0	0	0	0	0	0
Interior Main	0	0	0	0	0	0	0
Total Main if Separate Not Known	0	0	0	0	0	0	0
Main CIAC	0	0	0	0	0	0	0
Pressure Reinforcement Main	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
High Pressure Distribution Main	0	0	0	0	0	0	0
Service Stub	0	0	0	0	0	0	0
Service Extension	0	0	0	0	0	0	0
Service Comm./KAM	0	0	0	0	0	0	0
Service CIAC	0	0	0	0	0	0	0
Regulator Station Eq.	0	0	0	0	0	0	0
Regulator Station Eq. CIAC	0	0	0	0	0	0	0
Industrial Regulating Sta.	0	0	0	0	0	0	0
Industrial Regulating Sta. CIAC	0	0	0	0	0	0	0
Meter Set Assembly - Standard	0	0	0	0	0	0	0
Total Capital Expenditures	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Completion Percentage							
Approach Main		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Interior Main		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Main if Separate Not Known		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Main CIAC %		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Pressure Reinforcement Main		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
High Pressure Distribution Main		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Service Stub		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Service Extension		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Service Comm./KAM		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Service CIAC		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Regulator Station Eq.		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Regulator Station Eq. CIAC		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Industrial Regulating Sta.		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Industrial Regulating Sta. CIAC		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Meter Set Assembly - Standard		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Capital Expenditures							

SOUTHWEST GAS CORPORATION

0

0

Description	Total Project	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Gross Plant							
Approach Main		0	0	0	0	0	0
Interior Main		0	0	0	0	0	0
Total Main if Separate Not Known		0	0	0	0	0	0
Main CIAC		0	0	0	0	0	0
Pressure Reinforcement Main		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
High Pressure Distribution Main		0	0	0	0	0	0
Service Stub		0	0	0	0	0	0
Service Extension		0	0	0	0	0	0
Service Comm./KAM		0	0	0	0	0	0
Service CIAC		0	0	0	0	0	0
Regulator Station Eq.		0	0	0	0	0	0
Regulator Station Eq. CIAC		0	0	0	0	0	0
Industrial Regulating Sta.		0	0	0	0	0	0
Industrial Regulating Sta. CIAC		0	0	0	0	0	0
Meter Set Assembly - Standard		0	0	0	0	0	0
Total Gross Plant		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Accumulated Depreciation							
Approach Main		0	0	0	0	0	0
Interior Main		0	0	0	0	0	0
Total Main if Separate Not Known		0	0	0	0	0	0
Main CIAC		0	0	0	0	0	0
Pressure Reinforcement Main		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
High Pressure Distribution Main		0	0	0	0	0	0
Service Stub		0	0	0	0	0	0
Service Extension		0	0	0	0	0	0
Service Comm./KAM		0	0	0	0	0	0
Service CIAC		0	0	0	0	0	0
Regulator Station Eq.		0	0	0	0	0	0
Regulator Station Eq. CIAC		0	0	0	0	0	0
Industrial Regulating Sta.		0	0	0	0	0	0
Industrial Regulating Sta. CIAC		0	0	0	0	0	0
Meter Set Assembly - Standard		0	0	0	0	0	0
Total Accumulated Depreciation		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Net Plant							

SOUTHWEST GAS CORPORATION

0

0

Description	Total Project	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Approach Main		0	0	0	0	0	0
Interior Main		0	0	0	0	0	0
Total Main if Separate Not Known		0	0	0	0	0	0
Main CIAC		0	0	0	0	0	0
Pressure Reinforcement Main		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
High Pressure Distribution Main		0	0	0	0	0	0
Service Stub		0	0	0	0	0	0
Service Extension		0	0	0	0	0	0
Service Comm./KAM		0	0	0	0	0	0
Service CIAC		0	0	0	0	0	0
Regulator Station Eq.		0	0	0	0	0	0
Regulator Station Eq. CIAC		0	0	0	0	0	0
Industrial Regulating Sta.		0	0	0	0	0	0
Industrial Regulating Sta. CIAC		0	0	0	0	0	0
Meter Set Assembly - Standard		0	0	0	0	0	0
Total Net Plant		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

SOUTHWEST GAS CORPORATION

0

0

Description	Total Project Bk Depr. Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Annual Book Depreciation							
Approach Main	3.82%	0	0	0	0	0	0
Interior Main	3.82%	0	0	0	0	0	0
Total Main if Separate Not Known	3.82%	0	0	0	0	0	0
Main CIAC	3.82%	0	0	0	0	0	0
Pressure Reinforcement Main	3.82%	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
High Pressure Distribution Main	3.82%	0	0	0	0	0	0
Service Stub	5.30%	0	0	0	0	0	0
Service Extension	5.30%	0	0	0	0	0	0
Service Comm./KAM	5.30%	0	0	0	0	0	0
Service CIAC	5.30%	0	0	0	0	0	0
Regulator Station Eq.	4.12%	0	0	0	0	0	0
Regulator Station Eq. CIAC	4.12%	0	0	0	0	0	0
Industrial Regulating Sta.	4.31%	0	0	0	0	0	0
Industrial Regulating Sta. CIAC	4.31%	0	0	0	0	0	0
Meter Set Assembly - Standard	1.98%	0	0	0	0	0	0
Total Book Depreciation		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Rate Base							
Beginning Balance							
Gross Plant		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Net Plant		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Less Advances Net of Tax		0	0	0	0	0	0
Rate Base		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Ending Balance							
Net Plant		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Less Advances Net of Tax		0	0	0	0	0	0
Rate Base		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Average Rate Base		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

SOUTHWEST GAS CORPORATION
#N/A
0
WR No. 0
CSS No. 0
INCREMENTAL RESULTS OF OPERATIONS

Description	Year of Full Service: One	Two	Three	Four	Five	Six	Three Yr. Average	Five Yr Average
Single Family-Multi-Family	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	0
Margin-General Service	0	0	0	0	0	0	0	0
Margin	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	0
Less: Expenses								
Incremental Oper. & Maint.	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Other Expense	0	0	0	0	0	0	0	0
Depreciation	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Property Taxes		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Interest	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Total Incremental Expense	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A
Taxable Income	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Income Tax	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Income Avail. For Common	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A
Utility Inc. (Int. + Inc Avail. Com)	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A
Return on Rate Base	**#N/A**	**#N/A**	**#N/A**	**#N/A**	**#N/A**	**#N/A**	**#N/A**	**#N/A**
Return on Common Equity	**#N/A**	**#N/A**	**#N/A**	**#N/A**	**#N/A**	**#N/A**	**#N/A**	**#N/A**
Gross Plant - Beginning Balance	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A
Current Years Additions	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
End of Year Balance	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A
Beginning Advance	0	0	0	0	0	0	0	0
Net Cap Ex	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A
Less Accumulated Depreciation	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Net Plant In Service	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A
Customer Advance-Received (-)	0	0	0	0	0		0	0
Rate Base	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A
Average Rate Base	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A
Percent Customer Adds-	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Residential Customer Adds	0	0	0	0	0	0		
Cumulative Residential Adds	0	0	0	0	0	0		
General Service Customer Adds	0	0	0	0	0	0		
Cumulative General Service Adds	0	0	0	0	0	0		
Margin Per Customer	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0		
Residential O & M Per Customer	$ 29	$ 29	$ 29	$ 29	$ 29	$ 29		
General Service Customer O & M	$ 61	$ 61	$ 61	$ 61	$ 61	$ 61		
Service Extension Per Cust.	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0		
Meter Set Per Customer	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0		
Project Property Tax Rate	2.65%	2.65%	2.65%	2.65%	2.65%	2.65%		
Property Tax Plant	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A	$ #N/A		
Auth. Weighted Cost of Debt	4.51%	4.51%	4.51%	4.51%	4.51%	4.51%		

#REF!
#REF!

SOUTHWEST GAS CORPORATION
#N/A
0
WR No. 0
CSS No. 0
RESIDENTIAL MARGIN

Gas Applications (a)	No. Of Homes-Appl. (b)	Per Appl. Usage (c)	Total Therms (d) (b) x (c)	Rates (e)	Margin (f) (d) x (e)
Fixed Component-Homes					
BSC - Single Family Homes	0			$ #N/A	$ #N/A
BSC-Multi-Family	0			#N/A	#N/A
Total Basic Service Margin	0				$ #N/A
Variable Component-Appliances					
Space Heating - SFH - One Heating System	0	#N/A	#N/A	$ #N/A	$ #N/A
Space Heating - SFH - Two Heating Systems	0	#N/A	#N/A	#N/A	#N/A
Space Heating - SFH - Three Heating Systems	0	#N/A	#N/A	#N/A	#N/A
SFH Water Heat- One Heating System	0	#N/A	#N/A	#N/A	#N/A
SFH Water Heat - Two/Three Heating Systems	0	#N/A	#N/A	#N/A	#N/A
SFH Cook Top Without Gas Oven and/or Broiler	0	#N/A	#N/A	#N/A	#N/A
SFH Range w/ Gas Cook top & Oven and/or Broiler	0	#N/A	#N/A	#N/A	#N/A
SFH Dryer - Stub & 220 Electric Plug - Customer Option	0	#N/A	#N/A	#N/A	#N/A
SFH Dryer Stub - No 220 Electric Plug - Gas Dryer Only	0	#N/A	#N/A	#N/A	#N/A
SFH Gas Log	0	#N/A	#N/A	#N/A	#N/A
Space Heating - MFH Multi-Family Home	0	#N/A	#N/A	#N/A	#N/A
MFH Water Heat- One Heating System	0	#N/A	#N/A	#N/A	#N/A
MFH Cook Top Without Gas Oven and/or Broiler	0	#N/A	#N/A	#N/A	#N/A
MFH Range w/ Gas Cook top & Oven and/or Broiler	0	#N/A	#N/A	#N/A	#N/A
MFH Dryer - Stub & 220 Electric Plug - Customer Option	0	#N/A	#N/A	#N/A	#N/A
MFH Dryer Stub - No 220 Electric Plug - Gas Dryer Only	0	#N/A	#N/A	#N/A	#N/A
MFH Gas Log	0	#N/A	#N/A	#N/A	#N/A
Total Commodity Margin			**#N/A**		$ #N/A
Total Residential Margin					$ **#N/A**
Average Margin Per Customer					**$ -**

SOUTHWEST GAS CORPORATION
#N/A
0
WR No. 0
CSS No. 0
GENERAL SERVICE MARGIN

		Average Per Cust		Customer Adds Year 1 through 6						Margin By Year					
	Rates	Use	Margin	1	2	3	4	5	6	1	2	3	4	5	6
General Service G-25(S)															
Basic Service Charge	$ 330		$ 330							$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Commodity Rate	0.57059	0	0							0	0	0	0	0	0
Total Therms / Margin		0	$ 330	0	0	0	0	0	0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Cumulative				0	0	0	0	0	0						
General Service G-25(M)															
Basic Service Charge	$ 522		$ 522							$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Commodity Rate	0.37996	0	0							0	0	0	0	0	0
Total Therms / Margin		0	$ 522	0	0	0	0	0	0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Cumulative				0	0	0	0	0	0						
General Service G-25(L)															
Basic Service Charge	$ 1,920		$ 1,920							$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Commodity Rate	0.29084	0	0							0	0	0	0	0	0
Total Therms / Margin		0	$ 1,920	0	0	0	0	0	0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Cumulative				0	0	0	0	0	0						
Other Rate Schedule															
Basic Service Charge	$ 0		$ 0							$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Demand Charge	0		0							0	0	0	0	0	0
Commodity Rate	0.00000	0	0							0	0	0	0	0	0
Total Therms / Margin		0	$ 0	0	0	0	0	0	0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Cumulative				0	0	0	0	0	0						
Total General Service Cust.				0	0	0	0	0	0						
Cumulative Customers				0	0	0	0	0	0						
Total Therms		0													
Cumulative Margin										0	0	0	0	0	0

ICM MODEL
KEY PARAMETERS
ACC AUTHORIZED

Allowed Rate of Return	Input
Percent Long-Term Debt =	52.08%
Percent Preferred Equity =	4.48%
Percent Common Equity =	43.44%
Total =	100.00%
Cost of Long-Term Debt =	7.96%
Cost of Preferred Equity =	8.20%
Return on Common Equity =	10.00%
Tax Rates	
Federal Income Tax Rate =	35.00%
Arizona Income Tax Rate =	6.97%
Property Tax Rate =	2.65%
Book Depreciation Rates	
Approach Main =	3.82%
Interior Main =	3.82%
Regulator Station Eq. =	4.12%
Service Stub =	5.30%
Service Extension =	5.30%
Meter Set Assembly - Standard =	1.98%
Other	
Uncollectibles =	0.2989%

ALLOWED RATE OF RETURN

	Weight	Regulatory Rate	Weighted Regulatory Rate	Pretax Rate	Weighted Pretax Rate	After-Tax Rate	Weighted After-Tax Rate
Long-Term Debt	52.08%	7.96%	4.15%	7.96%	4.15%	4.81%	2.51%
Preferred Equity	4.48%	8.20%	0.37%	8.20%	0.37%	4.96%	0.22%
Common Equity	43.44%	10.00%	4.34%	16.59%	7.21%	10.00%	4.34%
	100.00%		8.86%		11.72%		7.07%

Effective Tax Rate

State Tax Rate	6.97%	Weighted Long-Term Debt & Preferred =	4.51%
Federal Tax Rate	35.00%		
Effective Tax Rate[1]	39.53%		

Gross Revenue Conversion Factor

$1 Revenue	1.0000000	
Less Uncollectibes	0.0029890	
Subtotal	0.9970110	
Less State Income Tax	0.0694717	
Subtotal	0.9275393	
Less Federal Income Tax	0.3246387	
Total	0.6029005	
Gross Revenue Conversion Factor	1.6586484	= $1 / Total
Rounded	1.6586500	

[1] Effective Tax Rate = (1-State Tax Rate) X Federal Tax Rate + State Tax Rate

ACC Authorized Rates

SOUTHWEST GAS CORPORATION
ARIZONA
RESIDENTIAL APPLIANCE USAGE AND RATES, SERVICE FOOTAGE AND COST PER FOOT

Description	Valley 32	Bullhead City 34	Tucson 36	Phoenix 42	Ajo 44	Mtn 46	Southeast 47	Yuma 48	Parker Wickenb 49
Space Heating - SFH - One Heating System	[redacted]								
Space Heating - SFH - Two Heating Systems									
Space Heating - SFH - Three Heating Systems									
Space Heating - MFH Multi-Family Home									
SFH/MFH Water Heat- One Heating System									
SFH Water Heat - Two/Three Heating Systems									
SFH/MFH Cook Top Without Gas Oven and/or Broiler									
SFH/MFH Range w/ Gas Cook top & Oven and/or Broiler									
SFH/MFH Dryer - Stub & 220 Electric Plug - Customer Option									
SFH/MFH Dryer Stub - No 220 Electric Plug - Gas Dryer Only									
SFH/MFH Gas Log									
Sch. G-5 Single-Family Residential									
Basic Service Charge-Monthly	$ 10.70	$ 10.70	$ 10.70	$ 10.70	$ 10.70	$ 10.70	$ 10.70	$ 10.70	$ 10.70
Basic Service Charge Annual	$ 128.40	$ 128.40	$ 128.40	$ 128.40	$ 128.40	$ 128.40	$ 128.40	$ 128.40	$ 128.40
Space Heating - SFH - One Heating System	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070
Space Heating - SFH - Two Heating Systems	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070
Space Heating - SFH - Three Heating Systems	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070
SFH Water Heat- One Heating System	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070
SFH Water Heat - Two/Three Heating Systems	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070
SFH Cook Top Without Gas Oven and/or Broiler	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070
SFH Range w/ Gas Cook top & Oven and/or Broiler	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070
SFH Dryer - Stub & 220 Electric Plug - Customer Option	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070
SFH Dryer Stub - No 220 Electric Plug - Gas Dryer Only	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070
SFH Gas Log	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070	0.57070
Sch. G-6 Multi-Family Residential									
Basic Service Charge-Monthly	$ 9.70	$ 9.70	$ 9.70	$ 9.70	$ 9.70	$ 9.70	$ 9.70	$ 9.70	$ 9.70
Basic Service Charge Annual	$ 116.40	$ 116.40	$ 116.40	$ 116.40	$ 116.40	$ 116.40	$ 116.40	$ 116.40	$ 116.40
Space Heating - MFH Multi-Family Home	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343
MFH Water Heat- One Heating System	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343
MFH Cook Top Without Gas Oven and/or Broiler	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343
MFH Range w/ Gas Cook top & Oven and/or Broiler	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343
MFH Dryer - Stub & 220 Electric Plug - Customer Option	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343
MFH Dryer Stub - No 220 Electric Plug - Gas Dryer Only	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343
MFH Gas Log	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343	0.55343
Service Stub - Ft. - Per Cust. Standard @ Ft., Other Needs Justification	20	20	20	15	20	25	20	20	25
Service Stub-Cost/Ft (Co. Incurred + Pipeline Install. Standard) @	$ 8.62	$ 14.10	$ 8.55	$ 14.18	$ 10.00	$ 12.00	$ 9.38	$ 10.15	$ 10.00
Service Extension - Ft. - Per Cust. @ Ft, < Needs Justification	30	31	40	22	40	70	44	33	45
Service Ext. -Cost/Ft (Co. Incurred + Pipeline Install. Standard) @	$ 8.62	$ 14.10	$ 8.55	$ 14.18	$ 10.00	$ 12.00	$ 9.38	$ 10.15	$ 10.00
District Label	DISTRICT 32 VALLEY, ARIZONA	DISTRICT 34 BULLHEAD, ARIZONA	DISTRICT 36 TUCSON, ARIZONA	DISTRICT 42 PHOENIX, ARIZONA	DISTRICT 44 AJO, ARIZONA	DISTRICT 46 MOUNTAIN, ARIZONA	DISTRICT 47 SOUTHEAST, ARIZONA	DISTRICT 48 YUMA, ARIZONA	DISTRICT 49 PARKER/WICKENBURG, ARIZONA
Pressure Reinforcement - 3-Year Capital Plan 2006-2008	58	0	61	174	0	0	24	176	0

Parameters for General Service and Residential Margin Calculation	General Service G-25 Small	Medium	Large
Basic Service Charge	27.5	43.5	160
Commodity Rate	0.57059	0.37996	0.29084

SF Residential G-5		MF Residential G-6	
BSC-Monthly	$ 10.70	BSC-Monthly	$ 9.70
BSC-Annual	$ 128.40	BSC-Annual	$ 116.40
Comm Rate	0.57070	Comm Rate	0.55343

O & M Per New Residential Customer Addition [redacted]
O & M Per New Commercial Customer Addition

Standard Amounts

Last Updated: 1/16/2008	ICM Model Glossary of Terms
Term	**Description**
A	
ACC	Arizona Corporation Commission - The regulatory agency responsible for utilities in Arizona
ACC Authorized Rates	The ACC rates that were approved and authorized for the current ICM Model.
ACC Authorized Level	Currently 8.40% which is the weighted Average Cost of Capital. See below
ADV. -100%	*Customer refundable advance required.*
Appliances	Any natural gas appliance used in the Model
Approach Main	The amount of main distribution pipe before entering a subdivision or project. Usually a large diameter pipe.
B	
Basic Service Charge	Basic Service Charge which is a monthly service charge regardless of the level of therms used.
BI	Budget Identification No. Subclassification of CapEx beyond the FERC Account
Blue Stake	The company contracted for line location services in Arizona. Used by all utilities.
Book Depreciation Rates	Authorized by the ACC to accomplish depreciation definition (See Depreciation)
Buildout	A term used to describe the rate of connections (buildout) on an annual basis for each project.
C	
Capital Expenditures-CapEx	Cost incurred to install pipe or other facilities and equipment. Have a useful life > 1 Yr.
CIAC	*Contribution In Aid of Construction* - A non-refundable amount collected by Southwest Gas Corporation for projects
Commerical-CSP	Indicates that a line item for commercial projects entered in the Model by Customer Service Planning.
Comm./KAM Service Cost	Indicates that a line item for commercial projects entered in the Model by Key Accounts Management.
Commodity Margin	Recovery of costs by applying a rate times the number of terms used.
Commodity Rate	Rate authorized by the ACC to apply to the customer's therm usage.
Cost and Residential Sales Input	A Tab (worksheet) in the Model for entering project costs and residential usage and buildout information.
CSP	Customer Service Planning
Customer Advance	An amount of refundable payment required by the Developer or Customer to proceed with a project.
D	
Demand Charge	Applies only to Customers using G-25TE Rate Schedule Used to recover fixed cost based on the customers peak usage.
Depreciation	Expensing a long term asset over the expected useful life
E-F	
ERTS	Encoder/Receiver/Transmitters. Electronic devices used on natural gas meters to provide *meter reads for billing purposes.*
G	
Gas Logs	Ceramic or other artificial logs used in gas fireplaces.
GRC	General Rate Case- Application to change rates subject to the ACC approval.
General Service Margin	The non-gas cost related funds received from service to non-Residential customers.
General Service Sales Input	The area(s) within the Model used to input non-residential information.
Goal Seek	A function of Excel used in the Model to calculate CIAC.
Gross Plant	Gross CapEx used to provide natural gas service to the Company's customers.
Gross Revenue Conversion Factor	The additional revenue required to provide recovery of $1 of a cost that is not deductible on *either a state or federal tax return.*

Last Updated: 1/16/2008	ICM Model Glossary of Terms
Term	**Description**
H	
High Pressure Dist Pipe	6 inche or greater diameter steel pipe that can be operated at high pressure.
I-J	
Incremental Cost	Capex and O&M that are the direct result of the addition of a new customer.
Incremental Investment	CapEx incurred as a direct result of adding a new customer. .
Incremental Margin	Margin that results from the addition of a new customer.
Incremental Operat. & Maint.	Annual expenses that are the direct result of adding a new customer.
Income Avail. For Common	The amount that is left over after all expenses are paid . These funds are available to shareholder to be paid in either dividends or left invested in the company.
Income Tax	Federal and state tax based on the net income
Industrial Regulator Stations	Above ground facilities used to control the flow of gas from large diameter pipe to smaller diameter pipe.
Interest Expense	Funds required to compensate investors who provided money to the company to finance rate base.
Investment	Synominous with rate base.
K	
KAM	Key Accounts Management is a group of Service Planners who address the needs of large customers
KAM Customers	Those Southwest Gas customers represented and handled by Key Accounts Management.
L	
Large Diameter Mains	Pipe whose inside with is 4 inches or greater.
M	
Main	Gas pipe facities usually under a street or right of way that is used to carry gas to more than one customer.
Main CIAC	The amount of Contribution In Aid of Construction (Non-refundable amount) applied against Mains.
Margin	See Residential and General Service Margin
MEC Advances	Main Extension Contract Advances (Refundable)
Meter Set Assembly	Refers to the complete meter set assembly, including regulators and above ground pipe in front of the customers gas pipe. Used to measure the flow of gas to a home or business.
MFH	Multi-Family Home- Customers served subject to rate schedules G-6 Multi-Family Residential and G-1 Multi-family Low Income
N	
Net Cap Ex	Gross CapEx less Accumulated Depreciation. Represent the Company's net investment in gas facilites which are financed using debt, preferred securities and shareholder equity.
Net Income	Revenues less deductible expense the balance of which is subject to tax.
O	
O & M	Operations & Maintenance Exp.- Cost incurred that have benefit only in the current year
P-Q	
Pressure Reinforcement	Mains CapEx required to maintain pressure in the gas distribution System. Is required due to growth over a period of time.
Property Tax	State tax based on net investment in facilites.
R	
Rate Base	Gross CapEx to provide service less funds received from customers and other sources
Rate Base in Service	See above
Regulatory Return	Includes funds available to pay interes, preferred dividends and shareholders.
Regulator Stations	A regulation system built and utilized for reducing high pressure or stepping down pressure to normal high pressure in mains and services.
Residential Margin	Non-gas revenue from customers included in rate schedule g-5,G-6,G-10,G-11.
Return on Rate Base	After tax Net Income available to pay interest exp. and shareholders devided by rate base.

Last Updated: 1/16/2008	ICM Model Glossary of Terms
Term	**Description**
S	
Service CIAC	The amount of Contribution In Aid of Construction (Non-refundable amount) applied against service lines (on property service).
Service Comm./KAM	Commercial service line required for a project and coordinated by Key Accounts Management.
Service Extension	The amount of gas pipeline extended on property up to the gas meter.
Service Footage	The amount of service line footage required to serve a gas meter or meters on property.
Service Stub	A service line that connects to a main gas line (usually in a street or right of way) and extends to a property line in anticipation of a service line extension.
SFH	Single Family Home- Customers served subject to Rate Schedule G-5, Single Family Residential, G-10 Single Family Low Income Residential
Space Heating	A gas appliance used for heating a residence or non-residential unit.
Standard Amounts	Cost per foot, feet per customer and usage per appliance average experienced or calculated rather than a specific unique amount.
T	
Taxable Income	Revenues less deductible expense the balance of which is subject to tax.
Tax Rates	The rate of a tax levy by a Federal, State or municipality (Income tax or property tax)
TME	Twelve Months Ending (Period of time measured using 12 months of activity)
U-V	
Ultimate Purchaser	The first person that purchase the home for either rent or live.
Utility Inc.	
220 Volt Receptical (W 220)	Electrical receptical (plug) required to provide serve to an electric clothes dryer
W-Z	
Weighted Average Cost of Capital	The cost of funds needed to finance rate base. It is the ratio of the sources (debt, preferred and common equity) and their respective costs
WMIS	Work Management Information System. Used to provide cost information, appliance information and usage information for the ICM Model. Also houses the current ICM Model as an attachment and saved with each Work Order.
Work Order Description	A brief description in the Model for the project under consideration.
Work Order/Request No.	A number created by WMS or Plant Accounting for tracking a project.

	Release Notes For ICM Model Version: Production ICM Model 2/10/09
Note 1:	This current Model has undergone a number of cosmetic changes, primarily to the Model documentation. Comments have been added to individual cells where appropriate too describe the purpose of the specific cell. In addition, Notes have been added for ranges of cells to explain and describe the purpose of the a specific section and area of each worksheet. The overall purpose of the comments, notes and descriptions are to include documentation within the Model.
Note 2 :	The "Guidelines" tab has been enhanced to show the ICM Model Owner and the creation of Standard Practice 920.0 - Incremental Contribution Method (ICM) Model (Arizona).
Note 3:	The "Project Summary" and "3-Year Results" worksheets were eliminated from the Model and combined with other existing worksheets to streamline the Model. The "Project - Dep. & Rate Base" page now links to only one page, the "Project Cost Calculation" worksheet.
Note 4:	Calculations on worksheets have been reviewed and where appropriate, modified for accuracy purposes.
Note 5:	A new section has been added to the "Standard Amounts" worksheet below the Service Line average lengths and costs section.
Note 6:	Analyses were conducted for average consumptions resulting in changes to the "Standard Amounts" worksheet consumption section. Average Service Line estimates were also changed to reflect new averages.
Note 7:	A "Glossary of Terms" worksheet has been added towards the end of the Model to assist with defining terminology and descriptions.
Note 8:	A "Current Release Notes" worksheet has been added to document what changes have been made from the previous version to the current version of the Model.
Note 9:	Model Modification February 21, 2008
Note 10:	Revenue Requirements modified the model in order to move the input location for O&M per residential customer addition from Tab "6-Year Results" cell C-48 to Tab "Standard Amounts" cell B-50. The "text box" was change to note that C-48 was now a look-up cell to cell B-50. A new Text box was created for Tab Standard Amounts line 50.

	Release Notes For ICM Model
	Version: Production ICM Model 2/10/09
Note 11:	Revenue Requirements modified the model in order to move the input location for O&M per commercial customer addition from Tab "6-Year Results" cell C-49 to Tab "Standard Amounts" cell B-50. The "text box" was change to note that C-48 was now a look-up cell to cell B-51. A new Text box was created for Tab Standard Amounts line 51.
Note 12	Demand Planning updated appliance end-use estimates to reflect current usage patterns based on normalized use during the twelve months ended August 2007
Note 13	Revenue Requirements updated the average feet per service extension and the average cost per foot of service stub and extension based on the actual results for the three years ending 2007.
Note 14	Revenue Requirements updated the system reinforcement cost per customer by district based on actual results for years 2002 - 2007 adjusted for unusual activity.
Note 15	Revenue Requirements updated O&M per customer based on actual results for the 2007.
Note 16	Central Arizona Division pointed out that residual inputs were left in the previous version. Inputs such as customers, appliances and cost estimates were left in. This version has therms zeroed out.
Note 17	One physical change was made. The input cell for the project name was moved from the build out page to the Cost and Resi Sales Input page Cell A-3.
Note 18	Revenue Requirements made a mechanical change to Tab "Gen Serv Margin Summary" Line 32 Columns I through S to add line 14-19-24-30 instead of lines 15-20-25-31. This change was necessary to eliminate the double counting of commercial customers in the Tab "6-Years Results" O& M line 16.
Note 19	In accordance with Decision No. 70665, Revenue Requirements eliminated the tier structure for schedules
	(all usage is now billed at the same rate) G-5 and G-6 on the Standard Amounts page to allow for different
	rates for each of these schedules. Commodity rates and Basic Service charges were updated for
	Residential Schedules G-5 & G-6 as well as General Service schedule G-25.
Note 20	In accordance with Decision No. 70665, the appropriate rates were updated on the "ACC Authorized
	Rates" worksheet.
Note 21	The Cost and Resi Sales Input and Resid. Margin Summary worksheets were revised to accommodate
	the different rates for schedules G-5 and G-6. The SFH and MFH appliances are now represented
	individually to allow for calculations using different Commodity rates.
Note 22	A mechanical change was made to the property tax calculation on the "6-Year Results" worksheet (Ln 53,
	Columns E, G, I, K, M) calculation now uses the "End of Year Bal" (Ln 32) rather than the "Net Cap Ex"

	Release Notes For ICM Model Version: Production ICM Model 2/10/09
	balance (plant balance including customer advance) to calculate the property taxes.
Note 23	Analyses were conducted for average consumptions resulting in changes to the "Standard Amounts" worksheet consumption section; formulas were updated in cells B9:J10.
Note 24	Revenue Requirements updated O&M per customer based on actual results for the 2008.
Note 25	Analyses were conducted for meter equipment and installation costs resulting in changes to the "Cost and Resi Sales Input" worksheet.
Note 26	The "Target" was updated on the "Guidelines" worksheet to include the new rates reflected on the "ACC Authorized Rates" page.

TAB 7

IN THE MATTER OF
SOUTHWEST GAS CORPORATION
Docket No. G-01551A-10___

PREPARED DIRECT TESTIMONY
OF
THEODORE K. WOOD

ON BEHALF OF
SOUTHWEST GAS CORPORATION

NOVEMBER 12, 2010

Table of Contents
of
Prepared Direct Testimony
of
THEODORE K. WOOD

BEFORE THE ARIZONA CORPORATION COMMISSION

Prepared Direct Testimony
of
THEODORE K. WOOD

I. INTRODUCTION

Q. 1 Please state your name and business address.

A. 1 My name is Theodore K. Wood, and my business address is 5241 Spring Mountain Road, Las Vegas, Nevada 89150.

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

A. 2 I am employed by Southwest Gas Corporation (Southwest Gas or the Company). My title is Assistant Treasurer/Director of Financial Services.

Q. 3 Please summarize your educational background and relevant business experience.

A. 3 My educational background and relevant business experience are summarized in Appendix A to this testimony.

Q. 4 Have you previously testified before any regulatory commission?

A. 4 Yes. I previously testified before the Arizona Corporation Commission (Commission), the California Public Utilities Commission (CPUC) and the Public Utilities Commission of Nevada (PUCN). I have also provided written testimony to the Federal Energy Regulatory Commission (FERC).

Q. 5 What is the purpose of your prepared direct testimony in this proceeding?

A. 5 I sponsor the Company's overall requested rate of return. Specifically, my direct testimony details the requested capital structure and the embedded cost of long-term debt used for determining the appropriate cost of capital for the Company's Arizona rate jurisdiction. In addition, I discuss the importance of the Company's overall rate of return on the Company's bond ratings and financial profile.

Q. 6 Please summarize your prepared direct testimony.

A. 6 My prepared direct testimony addresses the following key issues:

- The development of a fair value rate of return (FVROR) necessary for the Company to earn a fair return on its Arizona properties;
- A review of the Company's financial profile, including the Company's request for revenue decoupling and its requested FVROR and how these proposals are necessary to support and improve its financial profile and credit ratings. Ultimately, an improved financial profile and higher credit ratings will benefit both customers and investors.
- The Company's requested capital structure for ratemaking: The Company is requesting a capital structure composed of 52.3 percent common equity and 47.7 percent long-term debt. The requested capital structure is the Company's actual capital structure for the test period ended June 30, 2010.
- The development of the Company's embedded cost of long-term debt: For the test period ended June 30, 2010, the embedded cost of debt for the Company's Arizona jurisdiction is 8.34 percent.

II. SOUTHWEST GAS' FAIR VALUE RATE OF RETURN

Q. 7 Have you determined a reasonable rate of return necessary for Southwest Gas to earn a fair return on its Arizona distribution properties?

A. 7 Yes. An overall FVROR of 7.50 percent for the Arizona jurisdiction is reasonable in this proceeding and properly reflects the Company's level of business, financial, and regulatory risks. The FVROR was developed from the estimated weighted average cost of capital (WACC) for the original cost rate base (OCRB), summarized as follows:

Southwest Gas Corporation
Arizona Rate Jurisdiction

Component	Ratio	Cost	Weighted Cost
Long-Term Debt	47.70%	8.34%	3.98%
Common Equity	52.30%	11.00%	5.75%
Total	100.00%		9.73%

The resulting FVROR to be applied to the fair value rate base is 7.50 percent (the testimony of Company witness Robert Hevert details the methodology used to derive the FVROR).

Q. 8 Why is the proposed rate of return appropriate and necessary for Southwest Gas?

A. 8 This rate of return is necessary to maintain the Company's financial integrity, to allow the Company to attract new capital and to permit the Company's equity holders the opportunity to earn a fair and reasonable rate of return.

Moreover, this rate of return meets the standard of reasonableness established by the United States Supreme Court in Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia, 262 U.S. 679 (1923)(Bluefield):

> The return should be reasonably sufficient to assure confidence in the financial soundness of the utility, and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties.

This rate of return also satisfies the comparability standard set by the Court in Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591 (1944)(Hope):

> . . . the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks.

An explanation regarding the practical application of these two court rulings to a diversified utility such as Southwest Gas is appropriate.

The Company has, since the late 1950s, filed rate cases as a "diversified" utility. The multi-jurisdictional rate case filings are based on the fact that Southwest Gas, as a natural gas utility, serves three states with several different ratemaking jurisdictions. The Company requests only gas distribution utility required rates of return in all filings within each jurisdiction. The capital costs requested in this filing are utility-only costs. Southwest Gas' practices assure that the costs of utility operations attributable to each of its jurisdictions are properly insulated from the impact of any non-utility activities.

In summary, Southwest Gas' requested rate of return in this proceeding is fair to both customers and shareholders and properly reflects the risks and returns appropriate for its gas distribution properties.

<u>III. SOUTHWEST GAS' FINANCIAL PROFILE</u>

A. Credit Ratings

Q. 9 What is a credit rating?

A. 9 A credit rating reflects a rating agency's opinion of the creditworthiness of a particular company, security, or obligation. Credit ratings play an important role in capital markets by providing an effective and objective tool for market participants to evaluate and assess credit risk. As such, the Company's credit ratings are a key factor in determining the required yield on the Company's securities and bank facilities, and the amount and terms of available unsecured trade credit. Credit rating agencies use both quantitative and qualitative information in the process of developing a credit rating.

Q. 10 How important is the regulatory environment in the determination of a credit rating for a public utility?

A. 10 For a public utility, credit rating agencies regard regulation as a significant factor in determining a utility's financial performance, as regulation defines the environment in which the utility operates. The importance of regulation on the credit rating for a utility is reflected in the following statement from Standard & Poor's (S&P):

> Based on Standard & Poor's Ratings Services' experience in rating U.S. investor-owned utilities, we believe that the fundamental regulatory environment can be one of the most important factors we analyze when assigning utility credit ratings.[1]

Similarly, Moody's Investor Services (Moody's) states:

> For a regulated utility, the predictability and supportiveness of the regulatory framework in which it operates is a key credit consideration and the one that differentiates the industry from most other corporate sectors.[2]

Q. 11 What are the Company's current long-term unsecured credit ratings?

A. 11 Currently, Southwest Gas' long-term unsecured credit ratings are "BBB" from Fitch, Inc. (Fitch), "Baa2" from Moody's, and "BBB" from S&P. The ratings are two levels above the threshold for an investment grade rating.

In addition, credit rating agencies provide a ratings outlook, which is an assessment of the direction of the credit rating over the intermediate to longer term. The current rating outlook for Southwest Gas provided by both Fitch and S&P is "positive," while Moody's is "stable." The latest available credit agency reports are included in Exhibit No.__(TKW-1).

Q. 12 Have there been any changes in the credit ratings since the decision in the Company's last Arizona general rate case, Docket No. G-01551A-07-0504?

A. 12 Yes. On April 22, 2009, S&P upgraded the Company's unsecured bond rating

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1 Standard & Poor's Direct, *Credit FAQ: Standard & Poor's Assessments Of Regulatory Climates For U.S Investor-Owned Utilities,* November 25, 2008, p. 2.

2 Moody's Investor Services, Moody's Rating Methodology, *Regulated Electric and Gas Utilities,* August 2009, p. 6.

to "BBB" from "BBB-" and on May 27, 2010, Moody's upgraded the Company's unsecured bond rating to "Baa2" from "Baa3."

Q. 13 Please discuss the rationale for the more recent bond rating upgrade from Moody's.

A. 13 Moody's rationale for the upgrade was stated as follows:

> 'The upgrade follows improvements in Southwest's cash flow credit metrics which we believe will be sustained for the foreseeable future,' said Kevin Rose, Vice President & Senior Analyst. 'Even in the face of an economic downturn in Southwest's primary service territories, financial results for 2009 were generally robust,' Rose added. The improvement comes primarily as a result of recent rate relief in all of Southwest's regulatory jurisdictions, and the company's continued effort to minimize costs.[3]

In addition, Moody's discussed the importance of the recent improvement in regulatory support the Company has received:

> ...we recognize some signs of improvement in Southwest's regulatory environment. In Nevada, the PUCN approved the company's request for the implementation of a decoupling mechanism in its April 2009 general rate case, pursuant to the decoupling legislation approved in 2008. Furthermore, the ACC has conducted a series of workshops in 2009 and 2010 to evaluate the possibility of implementing decoupling mechanism in Arizona, and is currently reviewing related proposals submitted by utilities in its jurisdiction, including Southwest.[4]

The key point in Moody's rationale is the improvement in the Company's regulatory environment due to authorized decoupling in Nevada and the prospect for approval of a decoupling mechanism in Arizona.

Q. 14 Did S&P also change its rating outlook for Southwest Gas from "stable" to "positive"?

A. 14 Yes. With respect to the change in rating outlook, S&P stated the following:

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3 Moody's Investor Services, *Rating Action: Moody's upgrades Southwest Gas Corp. – Sr. Unsecured to Baa2*, May 27, 2010, p. 1.

4 Moody's Investor Services, *Credit Opinion: Southwest Gas Corporation*, May 27, 2010, p. 2.

> The positive outlook reflects our expectation that the company will maintain its current financial performance, supported by stable cash flows from its utility operations. We expect FFO to debt of 20% to 25% and debt to capital of about 55%. The outlook assumes adequate rate relief and expectations for continued, gradual reductions in regulatory risks associated with the company's Arizona service territory.
>
> We could raise the rating if credit metrics remain stable and the company's management of its regulatory risk continues to result in a gradually improving rate environment. Conversely, an outlook revision to stable could result if regulatory risks increase in Arizona, the company displays an increased reliance on debt to finance capital spending, or the company experiences significant reductions in customer usage without adequate regulatory protections.[5]

The positive outlook expects the Company's financial condition to be maintained, based on the assumption of adequate rate relief and improved regulatory support.

Q. 15 How does the lack of revenue decoupling affect the Company's financial profile?

A. 15 Because a large portion of the Company's distribution costs are fixed, and cost recovery is based on rates using volumetric charges, weather and declining consumption per customer introduce additional risk to returns and cash flows. Such risk is of particular concern because, unlike other risk factors, it is beyond management's control. The variability due to weather creates symmetric risk, while declining consumption per customer creates asymmetric risk. Asymmetric risk caused by declining consumption per customer and utilization of a volumetric rate design has been recognized by the rating agencies. For instance, Moody's stated the following:

> In attempting to grapple with the conservation issue, LDCs are in fact having to dispel the notion that their fixed charges should be recovered from volumetric sales of gas.

5 Standard & Poor's, *Southwest Gas Corp.*, April 22, 2010, p. 4.

> As the fixed charges appear year in and year out regardless of gas usage, the volumetric approach to cost recovery for operating a gas distribution system is a faulty equation which needs to be rectified in ratemaking. It would appear, therefore, that unless and until this anomaly is corrected, the LDC would lack the necessary tools with which to earn its allowed rate of return.[6]

Q. 16 How will the decoupling provision proposed by the Company in this proceeding help improve the Company's financial profile?

A. 16 In August 2010, the Commission issued a Notice of Proposed Rulemaking on Gas Energy Efficiency, which contained an energy efficiency requirement for Southwest Gas to achieve a cumulative energy savings of six percent by December 2020. Given the adoption of policies to promote energy efficiency, the Company's proposed decoupling provision will mitigate that additional risk, along with its existing exposure to volumetric risk, and provide an improved opportunity to recover Commission authorized fixed costs and achieve its authorized rate of return (ROR). Over time, this will help to strengthen the Company's financial metrics and improve its credit ratings. Improved credit ratings will in turn likely lead to an improvement in the Company's debt costs, which will benefit customers in the long term as these improved terms are reflected in rates.

Q. 17 Would the Commission's approval of the proposed decoupling provision be recognized as a positive factor for the Company's credit rating?

A. 17 Yes. Rating agencies would view Commission approval of a decoupling provision as a positive factor. Nevertheless, it is important to point out that decoupling through a balancing account, which is part of the decoupling provision, does not eliminate cash flow risk associated with variations in sales volumes. One of the most critical elements of the rating agencies' analysis is

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6 Moody's Investor Services, Moody's Special Comment, *Local Gas Distribution Companies: Update on Revenue Decoupling And Implications for Credit Ratings*, June 2006, p. 4.

based on analyzing cash flows. As a result, ratings agencies will evaluate the decoupling provision based on its impacts on cash flows.

Q. 18 What is the Company's target credit rating?

A. 18 Management's long-run goal is to achieve an "A" credit rating. The short-run goal, at a minimum, is to maintain an investment grade credit rating.

The Company believes that obtaining an "A" bond rating would provide the Company with a greater amount of financial flexibility. The Company would be able to attract capital at reasonable prices during both normal and turbulent market conditions, which have been recently experienced. In addition, an "A" bond rating would be in a range that has been generally found to minimize the long-run average pre-tax cost of capital paid by customers.[7]

Q. 19 Please explain how moving from a BBB/Baa2 to an "A" bond rating would reduce the long-run average pre-tax cost of capital being paid by customers.

A. 19 It is important to point out that any reduction obtained is on a relative basis, as the absolute cost of capital is a function of capital market conditions at a particular moment in time. An upgrade in the bond rating from a BBB/Baa2 to an "A" would be reflected in lower long-run average capital costs such as: (1) lower cost rates for existing debt; (2) lower cost rates for refinancing maturing debt and issuing new debt; and (3) a lower required return on common equity, all else equal, due to a lower level of investment risk.

The reduction in the long-run average cost of capital for each of these capital components is briefly discussed as follows.

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7 Roger A. Morin, *New Regulatory Finance*, (Arlington, Virginia: Public Utilities Reports, Inc., 2006), pp. 505-15, demonstrates using simulation analysis and under a wide range of cost of common equity models that an "A" bond rating generally results in the lowest pre-tax cost of capital for electric utilities. In a study conducted by the National Economic Research Associates, "Capital Structure, Interest Coverage, & Optimal Credit Ratings," 1999, for UK water utilities also finds that an "A" bond rating is optimal.

(1) Existing Debt - If the Company's bond ratings were upgraded to an "A" bond rating, approximately $382 million of its existing long-term debt would be re-priced, resulting in an annual decrease in interest expense of approximately $800,000.

(2) Refinancing and New Debt – The 10-year historical average spread between a "BBB" and an "A" utility bond is approximately 42 basis points.[8] The embedded cost of debt would be reduced, on a relative basis, over time as maturing debt is refinanced and incremental new debt is issued. The actual cost reduction achieved will depend on capital market conditions at the time of issuance and the benefits of the lower costs would be reflected in future general rate case proceedings.

(3) Required Return on Common Equity – As discussed infra and as also discussed by Company witness Robert Hevert, Southwest Gas currently has a higher level of investment risk relative to the proxy group companies used to estimate the cost of common equity. This higher relative investment risk requires a higher required rate of return on common equity. Achieving an "A" bond rating would indicate a lower level of relative investment risk, and would be reflected in a lower required return on common equity relative to the proxy group (all else equal) in future general rate case proceedings.

B. Relative Investment Risk

Q. 20 How does Southwest Gas' credit ratings and credit metrics compare to the

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8 This is the average spread between the Moody's A Utility Bond Index and the Moody's Baa Utility Bond Index for the time period June 30, 2000 to June 30, 2010.

proxy group of natural gas distribution companies?

A. 20 The comparative average bond ratings and credit metrics are shown below:

Description	SWG Actual	Proxy Group of Eight LDCs
Bond Ratings[1]:		
S&P	BBB	A
Moody's	Baa2	A3
Credit Metrics[2]:		
Return on capital	7.6%	9.6%
EBIT Interest Coverage	2.4	3.9
EBITDA Interest Coverage	4.6	5.2
Debt/Debt plus equity	57.4%	54.1%

[1] Exhibit No.__(TKW-2).
[2] Three-year (2007-2009) median ratios as reported by S&P.

While Southwest Gas has improved its bond ratings, the ratings are approximately two (Moody's) to three (S&P) notches below the average rating of the proxy group. The Company's three-year average return on capital and interest coverage ratios are all lower than the proxy group measures, indicating higher financial risk.

Q. 21 In terms of relative investment risk, what is Southwest Gas' risk position in comparison to the proxy group of natural gas distribution companies?

A. 21 The *Value Line Investment Survey* (Value Line) Safety rank can be used as relative measure of investment risk. Value Line ranks stocks for Safety by analyzing the total risk of a stock compared to the approximately 1,700 stocks in the Value Line universe. Value Line ranks each stock from 1 (highest) to 5 (lowest). Each of the stocks tracked in Value Line is ranked in relationship to each other, from 1 (highest) to 5 (lowest). Value Line defines Safety as a quality rank, not a performance rank, and stocks ranked 1 and 2 are most suitable for conservative investors, while those ranked 4 and 5 will be more volatile. The major influences on a stock's Safety rank are the company's financial strength, as measured by balance sheet and financial ratios, and the stability of its price over the past five years. Southwest Gas' Value Line Safety rank is 3, while the average for the proxy group is 1.88 (see Exhibit No.__(TKW-3)). This measure indicates higher relative investment risk for Southwest Gas.

C. Capital Attraction

Q. 22 Given the Company's operating environment, what are the key factors that will enable the Company to continue to attract the capital necessary to meet its ongoing capital requirements?

A. 22 Generally, investors will choose between alternative investments based on the risk and reward characteristics of the available investment opportunities. Consequently, the Company must compete with other utilities and alternative investment opportunities in fully competitive capital markets to attract equity capital.

For Southwest Gas to successfully attract equity capital, it must demonstrate an ability to achieve a competitive return on that equity capital. As a regulated natural gas utility, the Company's overall authorized net income available for its shareholders is ultimately determined by the authorized rate base in each jurisdiction multiplied by the applicable authorized equity ratio in the capital structure and the applicable authorized cost of equity.

Company witness Robert Hevert has provided testimony in this proceeding regarding a fair and reasonable cost of common equity, considering the Company's specific risk factors and costs of common equity for proxy groups of "similar" natural gas utilities.

Q. 23 How does the overall rate of return balance the interests of both customers and investors of the Company?

A. 23 The Company's financial health is, over time, important in determining the rates it must charge its customers. The Company's credit ratings are significantly influenced by the financial strength of the Company. The Company's cost of debt is, in large part, determined by the Company's credit ratings. All other things being equal, with higher credit ratings, the Company's cost of capital and the rates it charges its customers would be lower.

It is also important that investors be given the opportunity to earn a rate of return commensurate with the level of risk associated with their investment. Investor confidence in Southwest Gas is important for both its existing shareholders and for the Company's future ability to issue additional common equity. If the overall allowed rate of return is set below the Company's actual cost of capital, the Company may be unable to attract sufficient financing at reasonable rates to continue to fund the required capital expenditures and maintain its quality of customer service. The Company's requested overall rate of return will help sustain the Company's improved financial condition and support continued improvement. In the long-run, this will benefit both the Company's customers and investors.

With the regulatory support of the Commission in approving the Company's proposed overall FVROR of 7.50 percent, based on an 11.00 percent return on common equity, Southwest Gas can continue to build on the substantial progress it has made in improving its financial profile and bond ratings. Such improvement benefits Southwest Gas' customers by reducing the long-run average capital costs embedded in customer rates.

IV. RECOMMENDED CAPITAL STRUCTURE

Q. 24 What is Southwest Gas' current Commission-authorized ratemaking capital structure and overall rate of return?

A. 24 In the Company's last general rate case (Decision No. 70665 in Docket No. G-01551A-07-0504, dated December 24, 2008), the Commission adopted the following capital structure, capital costs and overall rate of return:

Southwest Gas Corporation
ACC Authorized Rate of Return
Decision No. 70665

Component	Ratio	Cost	Weighted Cost
Long-Term Debt	52.08%	7.96%	4.15%
Preferred Equity	4.48%	8.20%	0.37%
Common Equity	43.44%	10.00%	4.34%
Total	100.00%		8.86%

The authorized rate of return on fair value rate base was 7.02 percent.

Q. 25 What is the Company's recommended capital structure in this proceeding for ratemaking purposes?

A. 25 The Company is requesting its actual capital structure at the end of test period, June 30, 2010, composed of 52.3 percent common equity and 47.7 percent long-term debt.

Q. 26 Please compare the Company's requested capital structure to its capital structure at the end of the previous test period, April 30, 2007.

A. 26 The Company's actual capital structure at April 30, 2007 and June 30, 2010[9] are as follows:

9 The ratemaking capital structure is the Company's gas segment permanent capital structure, which includes common equity, preferred securities and long-term debt. Short-term debt is excluded as short-term debt is used primarily to finance working capital and PGA receivable balances, and not long-term rate base assets.

SOUTHWEST GAS' ACTUAL RATEMAKING CAPITAL STRUCTURE
($ IN MILLIONS)

Capital	Percent of Capital 4/30/2007	Percent of Capital 6/30/2010	Change
Long-Term Debt	52.7%	47.7%	-5.0%
Preferred Equity	4.4%	0.0%	-4.4%
Common Equity	42.9%	52.3%	9.4%
Total	100.0%	100.0%	

During this 38-month period, the Company increased its common equity by approximately $205 million and reduced outstanding long-term debt and preferred securities by $219 million. As a result, the common equity ratio improved by 9.4 percentage points.

Q. 27 How does Southwest Gas' book value capital structure compare to a representative group of Southwest Gas' peers?

A. 27 The Southwest Gas actual and the average permanent capital structures of the proxy group of eight LDCs used by Mr. Hevert in his testimony to estimate the cost of common equity are as follows:

Permanent Capital Structure Ratios

Type of Capital	SWG Actual	Proxy Group of Eight LDCs[1] June 30, 2010	Proxy Group of Eight LDCs[1] 5-Year Avg.
Long-Term Debt	47.7%	40.4%	43.5%
Common Equity	52.3%	59.6%	56.5%
Total	100.0%	100.0%	100.0%

[1] Five-year (2005–2009) average permanent capital structure of a proxy group of eight local gas distribution companies included in R. Hevert's testimony. See Exhibit No.___(TKW-4), Sheet 1 of 9.

Southwest Gas' actual capital structure contains more leverage when compared to the average capital structure of the proxy group of local gas distribution companies included in this table.

V. EMBEDDED COST OF LONG-TERM DEBT

Q. 28 Have you determined the test period embedded cost rate for long-term debt capital?

A. 28 Yes. Southwest Gas' cost rate for long-term debt is 8.34 percent. This rate is summarized on line 1, column (c), of Schedule D-1, Sheet 1 of 2. Schedule D-2, Sheets 1 through 4, contains the development of the long-term debt cost rate. The cost of long-term debt is comprised of the cost of fixed-rate debentures and fixed-rate medium-term notes. At the end of the current test period, June 30, 2010, the Company had no debt outstanding under the variable-rate term facility.

Q. 29 Does the Company anticipate changes in the cost of long-term debt during the twelve-month period following the current test period?

A. 29 Yes. In February 2011, the Company has $200 million of maturing long-term debt, which will be refinanced. By February 2011, the Company intends to issue $250 million of new debentures (including at least $125 million in December 2010) to provide funding for the maturing obligation and a portion of the redeemed Preferred Securities. In March 2010, the Company redeemed the $100 million 7.70% Preferred Securities at par. The Company has a refinancing plan, but specific aspects remain uncertain, making it difficult at the time of preparing this testimony to project the impact to the cost of long-term debt. The Company anticipates the refinancing will reduce the cost of long-term debt and can provide an update of the cost of long-term debt during the course of the proceeding – which will likely result in a lower long-term cost of debt than what was included in Southwest Gas' last rate case application.

Q. 30 Please describe the development of the cost rates of the debentures and notes.

A. 30 The Company had three outstanding debenture and note issues, totaling $475 million of gross principal, at the end of the test year (June 30, 2010). The debentures and notes had a weighted average cost of 8.30 percent, as shown on line 4, column (e), of Schedule D-2, Sheet 2 of 4.

Q. 31 Please describe the cost rate of the medium-term notes.

A. 31 The Company established a $150 million medium-term note program in November 1997. The name is somewhat of a misnomer as medium-term notes can be issued with maturities ranging from nine months to 30 years. The Company issued its entire medium-term note program and had six outstanding medium-term note issues totaling $82.5 million of gross principal at June 30, 2010. The medium-term notes had a weighted average cost of 7.75 percent, as shown on line 11, column (e), of Schedule D-2, Sheet 2 of 4.

Q. 32 How are the effective cost rates of debentures, notes, and medium-term notes calculated?

A. 32 The effective cost rates of debentures, notes, and medium-term notes are calculated through the use of the yield-to-maturity (YTM) or effective interest rate method.

Q. 33 Please describe the YTM method.

A. 33 The YTM method is based on an internal rate of return calculation, which takes into account the actual cash flows of each debt security. Specifically, the Company receives a cash inflow at the debt's issuance, consisting of the face value less any associated issuance expenses and debt discount. The Company's cash outflows consist of interest payments and principal repayments. The effective rate is the percentage rate that discounts those cash outflows to the net cash inflow the Company receives at issuance. Once the effective rate is calculated, it is then multiplied by the net proceeds (i.e., the principal amount outstanding less any unamortized discounts) to determine the total expense per payment period for each issue. The weighted average cost is then determined by weighting the effective cost of each issue by the current net proceeds amount. When used for ratemaking, the YTM method results in an effective cost that remains constant over the life of the debt security. The calculations for the effective cost of debentures, notes, and medium-term notes are shown in Exhibit No.__(TKW-5).

Q. 34 Please describe and discuss the development of the cost rate for the variable-rate term facility debt.

A. 34 The Company has a five-year (May 2007 – May 2012) $300 million revolving credit facility. In addition, the Company has a $50 million uncommitted F-2 commercial paper program, supported by the revolving credit facility. The Company continues to view $150 million of the facility as a permanent intermediate-term component of its debt portfolio. Accordingly, the Company has classified it as long-term debt. Southwest Gas continues to use the remaining $150 million of the facility to fund recurring, seasonal working capital needs.

At the end of the test period, the Company had no outstanding term facility balance. The amount reported in Schedule D-2 of approximately negative $238,000 represents the unamortized debt expenses incurred to establish the facility. The annual amortization expense includes an annual fee and amortization of debt expenses incurred to establish the facility. Given there was no outstanding principal at the end of the test period, the variable rate debt was reflected as zero on Schedule D-1.

Q. 35 Why are the Clark County and Big Bear Industrial Development Revenue Bonds (IDRBs) excluded in calculating the cost of long-term debt?

A. 35 Southwest Gas issued IDRBs in two of its rate jurisdictions. The IDRB issues and applicable rate jurisdictions are as follows: (1) the Clark County, Nevada

IDRBs (1993 Series A, 1999 Series A, C & D, 2003 Series A, C, D & E, 2004 Series A & B, 2005 Series A, 2006 Series A, 2008 Series A and 2009 Series A) for its Southern Nevada rate jurisdiction; and (2) the City of Big Bear, *California* IDRBs (1993 Series A) for its Southern California rate jurisdiction. As reflected in the IDRB indentures and financing agreements, the proceeds from the issuance of this type of debt are restricted to funding qualified construction expenditures for additions and improvements in the specific distribution systems to which the IDRBs relate. In addition, there are strict Internal Revenue Service (IRS) rules which mandate that the benefits of the tax-exempt, lower cost IDRBs must accrue to customers in the specific jurisdiction to which the IDRBs apply. Deviation from the requirements of this IRS ruling could result in the loss of the IDRB tax-exempt status, which would, in turn, cause the Company to refinance its debt at a much higher cost.

Q. 36 How have this and other regulatory Commissions treated the cost of Southwest Gas' IDRBs in past regulatory proceedings?

A. 36 Southwest Gas has historically excluded the IDRBs from the cost of debt calculation in all regulatory jurisdictions, except for the specific jurisdictions (Southern Nevada for Clark County IDRBs and Southern California for City of Big Bear IDRBs), to which the relevant IDRBs apply. This Commission, the PUCN, the CPUC, and the FERC have accepted this treatment for IDRBs in past regulatory proceedings.

Q. 37 Does this conclude your prepared direct testimony?

A. 37 Yes.

SUMMARY OF QUALIFICATIONS
THEODORE K. WOOD

I graduated from the University of Nevada, Reno (UNR) in 1985 with a Bachelor of Science degree with a major in agricultural economics. In 1989, I earned a Master of Science degree from UNR in agricultural economics with a minor in finance. I have attained the professional designations of Chartered Financial Analyst (CFA), Certified Rate of Return Analyst (CRRA), Certified Management Accountant (CMA), Certified in Financial Management (CFM), and Certified Treasury Professional (CTP). I am a member of the Institute of Management Accountants, the CFA Institute, Association for Financial Professionals, Financial Management Association, and the Society of Regulatory and Utility Financial Analysts.

From 1985 to 1988, I was employed as a research associate in the Department of Agricultural Economics at UNR in Reno, Nevada. My primary role was to assist with ongoing research projects in the Department including secondary data collection, statistical analysis, FORTRAN programming, and the development of microcomputer spreadsheets for farm management decision analysis.

In 1989, I was employed by First Interstate Bank of Nevada in Reno, Nevada, as a financial analyst in the Finance Department. My duties entailed maintenance of the general ledger system, creation of monthly management and financial reports, and special projects.

From 1990 to 1992, I was employed as a planning analyst with Valley Bank of Nevada, in Las Vegas, Nevada, in the Planning Department. My primary responsibilities included preparation of the annual budget, quarterly budget variance analysis, supporting the Asset/Liability Committee of the bank, and other financial analyses.

From 1992 to 1994, I was employed by PriMerit Bank, FSB, then a wholly-owned subsidiary of Southwest, as a Senior Financial Analyst in the Budget and Forecasting

Department. My primary responsibilities included creation and maintenance of a microcomputer-based budgeting system, preparation of the annual budget, monthly budget variance analysis, product profitability analysis, and other special projects.

In 1994, I accepted a Senior Financial Analyst position in the Treasury Services Department of Southwest. I was promoted to Supervisor of the Treasury Services Department in May 1997, Manager in June 2000, Senior Manager in May 2005, and Assistant Treasurer/ Director of Financial Services in December 2009. My responsibilities include directing the Company's treasury and corporate planning functions, as well as the representing the Company in various regulatory proceedings in its ratemaking jurisdictions concerning regulatory finance issues.

BEFORE THE ARIZONA CORPORATION COMMISSION
Docket No. G-01551A-10___

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to the Financial Supporting Exhibits
of
THEODORE K. WOOD

STANDARD &POOR'S

Global Credit Portal
RatingsDirect®

October 18, 2010

Summary:
Southwest Gas Corp.

Primary Credit Analyst:
Kenneth L Farer, New York (1) 212-438-1679; kenneth_farer@standardandpoors.com

Secondary Contact:
William Ferara, New York (1) 212-438-1776; bill_ferara@standardandpoors.com

Table Of Contents

Summary:

Southwest Gas Corp.

Credit Rating: BBB/Positive/--

Rationale

The ratings on Las Vegas-based natural gas local distributor Southwest Gas Corp. reflect an excellent business risk profile and a significant financial risk profile. Standard & Poor's Ratings Services bases the ratings on the consolidated credit profiles of its natural gas operations segment (about 90% of operating income) and its construction services business, Northern Pipeline Construction Co. (NPL; 10%).

Southwest Gas's excellent business risk profile reflects:

- A low-risk monopoly gas distribution business.
- A supportive regulatory environment in California and Nevada.
- A large, stable residential and commercial customer base.
- Healthy, but somewhat muted, customer growth prospects in Arizona (about 55% of customers and operating margin), Nevada (about 35%), and California (about 10%).
- Strong internal cash generation and substantial liquidity position, and ready access to the capital markets.

In our view, the following factors temper the company's business profile:

- Improved, but still challenging, regulatory environment in Arizona.
- Absence of natural gas storage facilities in Arizona and southern Nevada.
- Limited geographic service territory.
- Ownership of a small, unregulated construction and maintenance business.

The Arizona Corporation Commission (ACC), the Public Utilities Commission of Nevada (PUCN), and the California Public Utilities Commission each regulate Southwest Gas. Each regulatory commission provides the company with various cost-recovery mechanisms, including purchase gas adjustment mechanisms, a margin tracker balancing account in California, which mitigates margin volatility due to weather and other usage variations. In Nevada, Southwest Gas can use declining block rates to mitigate the affect of weather variation. However, we view regulatory oversight in Arizona as less supportive of credit than other jurisdictions due to the absence of mechanisms which mitigate the effect of weather and rate design that relates solely to gas throughput. This type of rate design exposes the company to reduced cash flows as volumes decline related to conservation. The approval of decoupling mechanism, which the company requested in its rate filing, is critical to the improvement in Arizona's overall regulatory environment, and to protect the company from underrecoveries during warmer weather.

Slowing customer growth, reduced throughput per customer, and rate design improvements were the primary reasons for the company's recent rate filings. While Southwest Gas's annual customer growth was about 5% per year from 2002 through 2006, growth since 2007 has averaged less than 1% per year and the company projects net growth will remain sluggish (1% or less) for 2010 as high foreclosure rates and recessionary conditions persist throughout its service territories. Despite strong historical customer growth statistics, annual total residential and light commercial consumption has nevertheless dropped by more than 1% per year since 2000 largely due to conservation efforts, making rate design a key credit driver for the company.

Effective November 2009, the PUCN granted a revenue increase of $17.6 million and an allowed return on equity (ROE) of 10.15% for the southern Nevada territory and a revenue decrease of $500,000 and an allowed ROE of 10.15% for northern Nevada. The company had requested a total increase of $27.8 million in Nevada. In addition to supporting customer conservation efforts, the decision also authorized the company to implement decoupling in line with PUCN's recently established rules.

Effective Dec. 1, 2008, the ACC granted a revenue increase of $33.5 million and an allowed ROE of 10%, compared with the company's request for an increase of $50.2 million and an allowed ROE of 11.25%. Regulators did not approve requests for a decoupling mechanism, which separates the utility's margins and cash flow from commodity sales and encourages conservation, or a weather normalization clause, which allows the company to adjust customers' bills during the winter heating season to reduce variations in margin recovery due to fluctuations from average temperatures. However, we expect Southwest Gas to request similar enhanced recovery mechanisms in future rate cases.

Southwest Gas's nonregulated maintenance and construction subsidiary, NPL, is not currently a significant rating factor. Our view is supported by the majority of the costs related to NPL's contracts are supplied by its customers and about 20% of NPL's revenues come from Southwest Gas's regulated gas operations. Nevertheless, NPL has reported reduced revenues and earnings related to general economic conditions and the slowdown in residential housing.

Southwest Gas has an aggressive financial risk profile, with bondholder protection measures that are relatively strong for the rating. As of June 30, 2010, total debt, including operating leases and tax-affected pensions and post-retirement obligations, was about $1.25 billion, with debt to capital of 51%, an improvement from the 58% reported at year-end 2008 and almost 60% at year-end 2007. For the 12 months ended June 30, 2010, the company reported funds from operations (FFO) to total debt of 26% and FFO interest coverage of almost 5x. We expect the company to generate FFO to total debt in the low 20% area and debt to capital of about 55%.

Liquidity

Under Standard & Poor's corporate liquidity methodology, we consider Southwest Gas's consolidated liquidity to be 'adequate'. (See "Standard & Poor's Standardizes Liquidity Descriptors For Global Corporate Issuers," published July 2, 2010 on RatingsDirect).

The company's projected sources of liquidity consist of modest cash balances, operating cash flow, and available bank lines. Projected uses of cash include maintenance and significant discretionary capital expenditures, the purchase of natural gas, manageable debt maturities, and dividends. Including peak borrowings for the purchase of natural gas inventories, which peak in the winter months, we forecast cash sources to exceed uses by about 1.2x over the next year. The company has announced plans to issue $250 million of new debt by February 2011, including at least $125 million in December 2010. Financing plans also include the issuance of $200 million of debt in March 2012 to refinance a maturity of $200 million due at that time. For the 12 months ended June 30, 2010, Southwest Gas reported cash from operations of $415 million with capital expenditures of $195 million. Capital expenditures for 2010 are forecast to be $200 million with an additional $370 million planned for 2011-2012.

In our view, Southwest Gas's liquidity position also benefits from its ability to absorb high-impact, low-probability events with limited need for refinancing; its flexibility to lower capital spending or sell assets; its sound bank relationships; and its generally prudent risk management. Companies in the utility sector have a proven track record of successfully accessing the capital markets, even during very challenging market conditions such as those most recently witnessed in late 2008 and early 2009.

Southwest Gas is comfortably in compliance with its requirements for debt to capital to be below 70%. At June 30, 2010, reported debt to capital was 49%.

Outlook

The positive outlook reflects our expectation that the company will maintain its current financial performance, supported by stable cash flows from its utility operations. We expect FFO to debt of 20% to 25% and debt to capital of about 55%. The outlook assumes adequate rate relief and expectations for continued, gradual reductions in regulatory risks associated with the company's Arizona service territory.

We could raise the rating if credit metrics remain stable and the company's management of its regulatory risk continues to result in a gradually improving rate environment. Conversely, an outlook revision to stable could result if regulatory risks increase in Arizona, the company displays an increased reliance on debt to finance capital spending, or the company experiences significant reductions in customer usage without adequate regulatory protections. These factors deteriorate financial performance such that the company sustains FFO to debt below 20% or debt to capital begins to approach 60%, which would not be consistent with a higher rating.

Related Criteria And Research

Criteria: Key Credit Factors: Business And Financial Risks In the Investor-Owned Utilities Industry, published Nov. 26, 2008.

MOODY'S
INVESTORS SERVICE

Credit Opinion: Southwest Gas Corporation

Global Credit Research - 27 May 2010

Las Vegas, Nevada, United States

Ratings

Category	Moody's Rating
Outlook	Stable
Senior Unsecured	Baa2
Preferred Shelf	(P)Ba1

Contacts

Analyst	Phone
Kevin G. Rose/New York	212.553.0389
William L. Hess/New York	212.553.3837

Key Indicators

[1]Southwest Gas Corporation

	1Q10 LTM	2009	2008	2007
(CFO Pre-W/C + Interest) / Interest Expense	4.2x	4.2x	3.8x	3.7x
(CFO Pre-W/C) / Debt	22.0%	20.5%	18.8%	17.7%
(CFO Pre-W/C - Dividends) / Debt	19.1%	18.0%	16.6%	15.6%
Debt / Book Capitalization	48.2%	51.6%	55.3%	56.5%

[1] All ratios calculated in accordance with the Regulated Electric and Gas Utilities Rating Methodology using Moody's standard adjustments

Note: For definitions of Moody's most common ratio terms please see the accompanying User's Guide.

Opinion

Rating Drivers

Generally low business risk given dominance of regulated gas distribution operations

Cautiously optimistic about signs of improvements in historically challenging regulatory environment

Timely recovery of costs via PGA mechanisms

Market diversity and high reliance on residential and commercial customers stabilize cash flows

Moderate capital expenditure plan eases future financing needs

Credit metrics appropriate for the rating

Corporate Profile

Southwest Gas Corporation (Southwest: Baa2 senior unsecured, stable) is primarily a local natural gas distribution company (LDC), which purchases, transports and distributes natural gas to about 1.8 million customers. Major parts of the company's service territory include Phoenix and Tucson, Arizona; Las Vegas, Nevada; and the Lake Tahoe and San Bernardino County areas in California. The LDC operation represents approximately 90% of the company's consolidated business, with the balance derived from Northern Pipeline Construction Company (NPL), a significant but relatively small wholly owned unregulated subsidiary that operates as a full-service underground piping contractor. NPL typically provides utility companies with trenching and installation, replacement and maintenance services for energy distribution systems and conducts operations in about 17 major markets nationwide. The LDC operations are regulated by the Arizona Corporation Commission (ACC), the Public Utilities Commission of Nevada (PUCN), and the California Public Utilities Commission (CPUC).

Recent Developments

On May 27, 2010, Moody's upgraded the senior unsecured rating of Southwest to Baa2 from Baa3, with a stable rating outlook.

SUMMARY RATING RATIONALE

Southwest's Baa2 senior unsecured rating is primarily driven by the generally low business risk associated with LDC utility operations, which are complemented by modest-sized energy related unregulated activities. The rating also takes into account the historically challenging regulatory environment that has shown signs of improvement, primarily in addressing more timely recovery of variable costs of service and compensating for uncontrollable effects of weather and customer conservation. The rating also reflects Southwest's diverse jurisdiction mix and its strong market position in those states. Furthermore, the rating considers Southwest's credit metrics that are appropriate for the rating, and recognizes that the company's need for external financing is expected to remain moderate, with modestly lower capital expenditures planned in near to medium term

DETAILED RATING CONSIDERATIONS

Generally low business risk given dominance of regulated gas distribution operations

Southwest's rating reflects its generally low business risk profile, given that the majority of its operations are in regulated gas distribution. In 2009, the LDC operation generated approximately 91% of the company's consolidated net income, and approximately 85% of the consolidated revenues. Due to the regulated nature of the business, its cash flow tends to be relatively more stable and predictable than that of unregulated companies, a positive from a credit perspective.

Cautiously optimistic about signs of improvements in historically challenging regulatory environment

The below average level of regulatory supportiveness Southwest received compared to many of its peers in other U.S. jurisdictions has been a key constraint to its rating. Among reasons for the weak score on regulatory support is the significant regulatory lag the company has experienced, especially in regard to the Arizona jurisdiction, where it is not unusual for the ACC to take a year or longer to decide a rate case, and its requests to improve rate designs through the implementation of weather normalization and decoupling mechanisms in Arizona have not been approved to date.

Nevertheless, we recognize some signs of improvement in Southwest's regulatory environment. In Nevada, the PUCN approved the company's request for the implementation of a decoupling mechanism in its April 2009 general rate case, pursuant to the decoupling legislation approved in 2008. Furthermore, the ACC has conducted a series of workshops in 2009 and 2010 to evaluate the possibility of implementing decoupling mechanism in Arizona, and is currently reviewing related proposals submitted by utilities in its jurisdiction, including Southwest. The final ACC decision is expected sometime later this year.

Within the framework of Moody's August 2009 Rating Methodology for Regulated Electric and Gas Utilities (the Methodology), Southwest maps to a rating factor in the Baa range for Factor 1: Regulatory Framework. This mapping incorporates our views of the generally supportive frameworks in the Nevada and California jurisdictions, tempered by our view of the less supportive Arizona jurisdiction, despite near term prospects for decoupling in that state.

Timely recovery of costs via purchased gas adjustment (PGA) mechanisms

Despite Southwest's current lack of decoupling and weather normalization mechanisms in Arizona, its largest jurisdiction, Southwest benefits from PGA mechanisms in all of its jurisdictions, through which the company can change rates up or down as the cost of purchased gas changes. Moody's generally views these mechanisms as credit positive, as they ensure timely recovery of gas costs. The rates are adjusted on monthly basis for the changes in purchased gas costs in Arizona and California, while Nevada employs quarterly adjustments. At March 31, 2010, the company had an over-collection position of approximately $93 million.

In order to help minimize variable cost exposure for natural gas supplies, Southwest generally locks in about half of its annual supply needs through fixed-priced or fixed-for-floating swap contracts. For the 2009/2010 heating season, contracts contained in the fixed-price portion ranged in price from about $4 to $10 per dekatherm.

Within the framework of the Methodology, Southwest maps to a rating factor in the Baa range for Factor 2: Ability to Recover Costs and Earn Returns. This mapping incorporates our favorable view of regulatory mechanisms in California and more recently in Nevada, along with cautious optimism that the ACC will ultimately support some form of decoupling and/or weather normalization.

Market diversity and high reliance on residential and commercial customers stabilize cash flows

Southwest benefits from its multi-jurisdictional utility operations and the relatively solid competitive position it maintains in each of its three markets. In 2009, 55% of operating margins were earned in Arizona, 34% in Nevada, and 11% in California. Moreover, Southwest is the largest natural gas provider in Arizona and Nevada, its two largest jurisdictions. Such diversification and market competitiveness are credit-positive, as they can diminish concentration risk and ensure that any adverse development specific to one part of its operations does not create a rapid deterioration in the company's overall credit profile.

In addition, Southwest's high reliance on residential and commercial customers further improves its overall credit profile. At December 31, 2009, over 99% of Southwest's customers were in the residential and small commercial classes, and in 2009, these customer groups contributed approximately 86% of the company's operating margins. Due to its small exposure to large industrial customers, Southwest can effectively mitigate any material risks in dealing with those customers' business downturns in this challenging economic environment.

Given its relatively diverse markets and competitive position within them, within the framework of the Methodology, Southwest maps to a rating factor in the A range for Factor 3: Diversification.

Moderate capital expenditure plan eases future financing needs

For the next three years from 2010 to 2012, Southwest plans to spend approximately $570 million in its planned capital expenditure program, approximately $200 million of which is expected to be incurred in 2010. This moderate plan, compared to the expenditures incurred in last three years ending 2009 (approximately $860 million), will most likely enable Southwest to cover the majority of the planned expenditures with internally generated cash flows, easing the company's future needs to periodically issue debt and common equity to fund its capital projects.

Credit Metrics appropriate for the rating

Southwest's key credit metrics have improved over the last couple of years, as various rate relief mechanisms from regulatory filings have resulted in higher cash flows, and allowed the company to reduce its overall level of debt. Specifically, the ratio of cash flows from operation before changes in working capital (CFO Pre-WC) to debt, as calculated in accordance with Moody's standard analytical adjustments, improved to over 20% in 2009 from around 16% in 2006, while the CFO Pre-WC to interest metric improved to above 4x in 2009 from 3.5x in 2006. On a prospective basis, we expect Southwest to maintain its metrics comparable to these levels, albeit slightly lower, primarily due to the effects that the economic downturn and unseasonable weather are having on demand. Our expectations are premised on supportive regulatory treatment in future proceedings (especially in Arizona and Nevada), continued cost management, and the prudent execution of capital projects and associated financing.

Liquidity

Southwest maintains a sufficient liquidity profile with external liquidity sources supplementing its operating cash flows to help meet short-term working capital needs. During the 12 months ended March 31, 2010, Southwest's cash flow from operations of approximately $420 million was *more than sufficient* to cover its capital expenditures of around $200 million, $100 million of trust preferred security redemption, and $43 million of common dividends. Going forward, we anticipate that cash flow from operations should cover the majority of capital expenditures and dividends, with any shortfalls to be covered by a moderate level of debt and equity mix consistent with keeping the balance sheet ratios close to current levels. We further recognize that Southwest intends to pre-fund for its next debt maturity obligation, a $200 million 8.375% series of note due February 2011, by issuing new debentures in December 2010.

As of March 31, 2010, the company's liquidity included unrestricted cash and equivalents of $39 million and $255 million of unused capacity under its $300 million committed senior unsecured bank revolver that expires in May 2012. The company has consistently designated $150 million of the facility as part of its sources of long-term debt financing. As of March 31, 2010, $45 million was drawn under the long-term portion of the revolver while no borrowings were outstanding under the portion of the facility used for short-term working capital needs. The revolver does not contain an ongoing material adverse change clause for each borrowing, but it does contain two financial covenants; a maximum allowed debt to capital of 70% and a minimum required net worth of $475 million plus 25% of the net proceeds from any equity issuance from and after December 31, 2003. Southwest had ample headroom under both covenants as of March 31, 2010.

Given its adequate liquidity position, within the framework of the Methodology, Southwest maps to a rating factor in the Baa range for Factor 4: Liquidity.

Rating Outlook

The stable outlook for Southwest reflects our expectations that it can maintain credit metrics comparable to the current level, while continuing to pursue changes to improve rate design in Arizona, and conservatively fund capital expenditures in a manner that is consistent with the rating. Nevertheless, the lingering effects from the economic downturn and unseasonable weather on demand and overall financial results in the absence of decoupling mechanism in Arizona remain a modest credit concern.

What Could Change the Rating - Up

The rating or outlook could improve if Southwest's regulatory environment improves significantly (for example, the approval by Arizona to implement weather normalization and revenue decoupling mechanisms). The rating could also be revised upward if the company can achieve CFO Pre-WC coverage of interest and debt at or above 4x and 22%, respectively, for a sustained period.

What Could Change the Rating - Down

A downgrade is unlikely in the near to medium term. The rating could move downward, however, if the company moves toward higher leverage; or if it experiences significant earnings and cash flow volatility due to weather variation or consumer conservation efforts in the absence of weather normalization and/or decoupling mechanisms in Arizona; such that there is a sustained deterioration of financial metrics, for example, demonstrated by the CFO Pre-WC to interest and debt to falling to below 3.3x and 16%, respectively.

Rating Factors

Southwest Gas Corporation

Regulated Electric and Gas Utilities	Aaa	Aa	A	Baa	Ba	B
Factor 1: Regulatory Framework (25%)				X		
Factor 2: Ability to Recover Costs and Earn Returns (25%)				X		
Factor 3: Diversification (10%)						
a) Market Position (5%)			X			
b) Generation and Fuel Diversity (5%)				NA		
Factor 4: Financial Strength, Liquidity & Financial Metrics (40%)						
a) Liquidity (10%)				X		
b) CFO pre-WC + Interest / Ineterest (7.5%) (3yr Avg)				X		
c) CFO pre-WC / Debt (7.5%) (3yr Avg)				X		
d) CFO pre-WC - Dividends / Debt (7.5%) (3yr Avg)				X		
e) Debt / Capitalization or Debt / RAV (7.5%) (3yr Avg)				X		
Rating:						
a) Methodology Implied Senior Unsecured Rating				**Baa2**		

b) Actual Senior Unsecured Rating				Baa2		

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FITCH AFFIRMS SOUTHWEST GAS CORP.; OUTLOOK TO POSITIVE

Fitch Ratings-New York-01 June 2010: Fitch Ratings has affirmed Southwest Gas Corp.'s (SWX) ratings as follows:

--Long-term Issuer Default Rating (IDR) at 'BBB';
--Senior Unsecured Rating at 'BBB';
--Short Term IDR at 'F2';
--Commercial Paper at 'F2'.

The Rating Outlook for the above securities has been revised to Positive from Stable.

SWX's ratings reflect the operating, regulatory, and financial characteristics associated with SWX's dynamic service territory. In recent years the company has made timely general rate case filings in all three geographic operating jurisdictions. Growth in SWX's service territories has slowed significantly as a result of the recessionary economy. Economic conditions have had a dampening effect on SWX's pipeline construction subsidiary, Northern Pipeline Construction Co., which provides roughly 10% of net income. However, marginal utility customer growth coupled with recent rate increases, as a result of SWX's rate cases in Arizona, Nevada, California and with FERC, should allow SWX's credit measures to remain stable over the next three years. During this time, Fitch expects EBITDA/Interest coverage and Debt to EBITDA to average approximately 5.0 times (x) and 3.0x, respectively. Fitch expects SWX customer growth to remain flat to slightly positive over the next several years as the economy slowly recovers.

A push toward more progressive rate structures within SWX's operating jurisdictions has helped to lower some of the revenue volatility associated with the effects of weather and conservation. With decoupling mechanisms in place in Nevada and California a significant portion of SWX's operating margin and cash flow should experience more stability. Fitch generally views the implementation of rate mechanisms that reduce cash flow volatility favorably; more predictable cash flow will translate to lower business risk for SWX.

The Positive Outlook is reflective of improvements in SWX's credit metrics relative to Fitch's prior forecasts and past performance and the expectation that these improvements will continue. The majority of SWX's cash flow and operating income is being generated by SWX's gas distribution operations, which should provide for continued earnings and cash flow stability. With purchased gas adjustment mechanisms in place SWX's local gas distribution company operations have generated sustainable cash flow during times of natural gas price volatility. While SWX's credit measures can be affected, at least in the short term, by regulatory lag associated with gas supply acquisitions, SWX has become more adept at timely management of its purchased gas adjustments (PGA) balances. SWX is allowed monthly PGA adjustments in California and Arizona. In Nevada, SWX moved to a quarterly PGA from an annual filing at the start of 2006, which has contributed to more timely recovery. The recent approval of a more progressive decoupled rate structure in NV, in addition to the decoupled rate structure already in place in CA, should help provide additional cash flow and earnings stability. Fitch believes that the approval of a decoupling rate mechanism in AZ would further lower business risk and help stabilize revenue and cash flow from the effects of weather and conservation. However, Fitch notes that any positive or negative rating action on SWX is not contingent on the implementation of decoupled rates in AZ.

SWX's credit measures could be affected over the short term due to the recovery lag associated with gas supply acquisitions. Gas costs that are incurred in excess of amounts embedded in customer rates are generally deferred and recovered under its PGAs. The company uses its bank lines for borrowings to fund gas purchases. In periods of under-recovery, there may be some near-term negative effect on coverage ratios and capital structure.

Applicable criteria available on Fitch's web site at 'www.fitchratings.com' include:

--'Corporate Rating Methodology' Nov. 24, 2009;
--'Credit Rating Guidelines for Regulated Utility Companies' July 31, 2007;
--'U.S. Power and Gas Comparative Operating Risk (COR) Evaluation and Financial Guidelines' Aug. 22, 2007;
--'Utilities Sector Notching and Recovery Ratings', March 16, 2010.

Contact: Peter Molica +1-212-908-0288 or Ralph Pellecchia +1-212-908-0586, New York.

Media Relations: Cindy Stoller, New York, Tel: +1 212 908 0526, Email: cindy.stoller@fitchratings.com.

Additional information is available at 'www.fitchratings.com'.

SOUTHWEST GAS CORPORATION
PROXY GROUP OF VALUE LINE GAS DISTRIBUTION COMPANIES
BOND RATINGS

Line No.	Symbol (a)	Company (b)	Moody's[1] (c)	Numerical Weight (d)	S&P[1] (e)	Numerical Weight (f)	Line No.
1	AGL	AGL Resources Inc.	A3	7	A-	7	1
2	ATO	Atmos Energy Corp.	Baa2	9	BBB+	8	2
3	LG	Laclede Gas Co.	Baa1	8	A	6	3
4	NJR	New Jersey Natural Gas Co.	Aa3	4	A	6	4
5	GAS	Nicor Gas Co.	A2	6	AA	3	5
6	NWN	Northwest Natural Gas Co.	A3	7	A+	5	6
7	PNY	Piedmont Natural Gas Co. Inc.	A3	7	A	6	7
8	SJI	South Jersey Gas Co.	Baa1	8	BBB+	8	8
10		Proxy Group Average	A3	7	A	6	10
11	SWX	Southwest Gas Corporation	Baa2	9	BBB	9	11

[1] Source: Bloomberg

SOUTHWEST GAS CORPORATION
NUMERICAL WEIGHT FOR BOND RATINGS

Moody's Bond Rating	S&P Bond Rating	Numerical Weight
Aaa	AAA	1
Aa1	AA+	2
Aa2	AA	3
Aa3	AA-	4
A1	A+	5
A2	A	6
A3	A-	7
Baa1	BBB+	8
Baa2	BBB	9
Baa3	BBB-	10
Ba1	BB+	11
Ba2	BB	12
Ba3	BB-	13

SOUTHWEST GAS CORPORATION
PROXY GROUP OF VALUE LINE GAS DISTRIBUTION COMPANIES
CREDIT RATIOS[1]

Line No.	Company	Return on capital (%)	EBIT interest coverage (x)	EBITDA interest coverage (x)	FFO/debt (%)	Free oper. cash flow/debt (%)	Debt/EBITDA (x)	Debt/ Total Capital (%)	Line No.
		--Average of past three fiscal years (2007-2009)--							
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	
1	AGL Resources Inc.	10.7	3.8	5.0	19.8	2.1	3.7	57.7	1
2	Atmos Energy Corp.	9.5	2.7	4.0	21.1	5.5	3.7	54.5	2
3	Laclede Gas Co.	7.2	2.3	3.3	14.1	4.7	4.9	60.0	3
4	New Jersey Natural Gas Co.	9.6	4.6	6.0	25.7	10.1	3.1	45.4	4
5	Nicor Gas Co.	6.8	3.1	6.6	22.5	1.0	3.4	55.7	5
6	Northwest Natural Gas Co.	10.5	3.9	5.5	19.7	5.0	3.2	53.7	6
7	Piedmont Natural Gas Co. Inc.	10.9	4.0	5.0	22.7	7.2	3.5	53.7	7
8	South Jersey Gas Co.	8.8	4.2	5.4	20.0	4.4	3.6	49.8	8
9	Mean	9.3	3.6	5.1	20.7	5.0	3.6	53.8	9
10	Median	9.6	3.9	5.2	20.6	4.9	3.6	54.1	10
11	Southwest Gas Corporation	7.6	2.4	4.6	21.2	5.4	3.5	57.4	11

[1] Source: Standard & Poor's, *CreditStats: Gas Utilities--U.S.*, August 20, 2010

SOUTHWEST GAS CORPORATION
PROXY GROUP - GAS DISTRIBUTION COMPANIES
VALUE LINE INVESTMENT SURVEY SAFETY RANK

Line No.	Company	Value Line Safety[1]	Line No.
	(a)	(b)	
1	AGL Resources Inc.	2.00	1
2	Atmos Energy Corp.	2.00	2
3	Laclede Gas Co.	2.00	3
4	New Jersey Natural Gas Co.	1.00	4
5	Nicor Gas Co.	3.00	5
6	Northwest Natural Gas Co.	1.00	6
7	Piedmont Natural Gas Co. Inc.	2.00	7
8	South Jersey Gas Co.	2.00	8
10	**Proxy Group Average**	**1.88**	10
11	Southwest Gas Corporation	3.00	11

Notes:
[1] Source: Value Line Investment Survey, September 10, 2010.

Definitions:
Value Line Safety Rank - is a measure of total investment risk of a stock, with a rank of "1" being highest safety and "5" being lowest safety.

PROXY GROUP OF NATURAL GAS DISTRIBUTION COMPANIES
CAPITALIZATION STATISTICS
2005-2010

Line No.		At June 30, 2010	2009	2008	2007	2006	2005	5-Year Average[1]	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	
	Capital Structure Ratios								
	Based on Total Permanent Capital								
1	Long-Term Debt	40.45%	42.96%	42.61%	43.68%	45.83%	45.91%	43.48%	1
2	Preferred Stock	0.00%	0.00%	0.01%	0.00%	0.01%	0.02%	0.00%	2
3	Common Equity	59.55%	57.04%	57.38%	56.32%	54.15%	54.07%	56.51%	3
4	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	4
	Based on Total Capital								
5	Total Debt, Including Short Term	47.69%	48.63%	47.74%	48.91%	51.22%	49.62%	50.98%	5
6	Preferred Stock	0.00%	0.00%	0.01%	0.00%	0.01%	0.01%	0.00%	6
7	Common Equity	52.31%	51.37%	52.26%	51.09%	48.77%	50.37%	49.02%	7
8	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	8
	Capital Structure Ratios (Market Value)								
	Based on Total Permanent Capital								
9	Long-Term Debt	29.50%	32.30%	29.23%	29.70%	31.60%	30.34%	30.42%	9
10	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%	0.00%	10
11	Common Equity	70.50%	67.70%	70.77%	70.30%	68.39%	69.65%	69.57%	11
12	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	12
13	Total Debt, Including Short Term	35.77%	37.32%	33.50%	34.17%	36.34%	33.35%	36.92%	13
14	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%	0.00%	14
15	Common Equity	64.23%	62.68%	66.50%	65.83%	63.65%	66.63%	63.08%	15
16	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	16

[1] 5-year quarterly average ratio for the period ended June 30, 2010

AGL RESOURCES (AGL)
CAPITALIZATION STATISTICS
2005-2010

Line No.		At June 30, 2010	2009	2008	2007	2006	2005	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	
	Amount of Capital Employed (Book Value)			($ in millions)				
1	LT Borrowings	$ 1,553	$ 1,675	$ 1,637	$ 1,544	$ 1,632	$ 1,621	1
2	Preferred Equity	-	-	-	-	-	-	2
3	Common Equity + Minority Interest	1,827	1,759	1,720	1,712	1,607	1,489	3
4	Total Permanent Capital	3,380	3,434	3,357	3,256	3,239	3,110	4
5	Short Term Debt	694	418	513	339	455	172	5
6	Total Capital Employed	$ 4,074	$ 3,852	$ 3,870	$ 3,595	$ 3,694	$ 3,282	6
	Capital Structure Ratios (Book Value)							
	Based on Total Permanent Capital							
7	Long-Term Debt	45.95%	48.78%	48.76%	47.42%	50.39%	52.12%	7
8	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8
9	Common Equity	54.05%	51.22%	51.24%	52.58%	49.61%	47.88%	9
10	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	10
	Based on Total Capital							
11	Total Debt, Including Short Term	55.15%	54.34%	55.56%	52.38%	56.50%	54.63%	11
12	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12
13	Common Equity	44.85%	45.66%	44.44%	47.62%	43.50%	45.37%	13
14	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	14
15	Market/Book Ratio	1.54	1.42	1.57	1.88	1.89	2.05	15
	Amount of Capital Employed (Market Value)							
16	LT Borrowings	$ 1,553	$ 1,675	$ 1,637	$ 1,544	$ 1,632	$ 1,621	16
17	Preferred Equity	-	-	-	-	-	-	17
18	Common Equity + Minority Interest	2,814	2,498	2,706	3,225	3,034	3,053	18
18	Total Permanent Capital	4,367	4,173	4,343	4,769	4,666	4,674	18
20	Short Term Debt	694	418	513	339	455	172	20
21	Total Capital Employed	$ 5,061	$ 4,591	$ 4,856	$ 5,108	$ 5,121	$ 4,846	21
	Capital Structure Ratios (Market Value)							
	Based on Total Permanent Capital							
22	Long-Term Debt	35.57%	40.14%	37.69%	32.38%	34.98%	34.68%	22
23	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	23
24	Common Equity	64.43%	59.86%	62.31%	67.62%	65.02%	65.32%	24
25	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	25
	Based on Total Capital							
26	Total Debt, Including Short Term	44.40%	45.59%	44.28%	36.87%	40.76%	37.00%	26
26	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	26
28	Common Equity	55.60%	54.41%	55.72%	63.13%	59.24%	63.00%	28
29	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	29

Source: Bloomberg

ATMOS ENERGY CORP (ATO)
CAPITALIZATION STATISTICS
2005-2010

Line No.	(a)	At June 30, 2010 (b)	2009 (c)	2008 (d)	2007 (e)	2006 (f)	2005 (g)	Line No.
	Amount of Capital Employed (Book Value)			($ in millions)				
1	LT Borrowings	$ 1,810	$ 2,169	$ 2,120	$ 2,127	$ 2,181	$ 2,184	1
2	Preferred Equity	-	-	-	-	-	-	2
3	Common Equity + Minority Interest	2,314	2,192	2,105	1,988	1,665	1,616	3
4	Total Permanent Capital	4,123	4,361	4,225	4,115	3,845	3,800	4
5	Short Term Debt	360	0	114	304	300	3	5
6	Total Capital Employed	$ 4,483	$ 4,361	$ 4,339	$ 4,419	$ 4,146	$ 3,803	6
	Capital Structure Ratios (Book Value)							
	Based on Total Permanent Capital							
7	Long-Term Debt	43.89%	49.75%	50.17%	51.68%	56.71%	57.47%	7
8	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8
9	Common Equity	56.11%	50.25%	49.83%	48.32%	43.29%	42.53%	9
10	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	10
	Based on Total Capital							
11	Total Debt, Including Short Term	48.39%	49.75%	51.48%	55.01%	59.85%	57.51%	11
12	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12
13	Common Equity	51.61%	50.25%	48.52%	44.99%	40.15%	42.49%	13
14	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	14
15	Market/Book Ratio	1.09	1.05	1.19	1.35	1.37	1.43	15
	Amount of Capital Employed (Market Value)							
16	LT Borrowings	$ 1,810	$ 2,169	$ 2,120	$ 2,127	$ 2,181	$ 2,184	16
17	Preferred Equity	-	-	-	-	-	-	17
18	Common Equity + Minority Interest	2,522	2,301	2,497	2,679	2,276	2,311	18
18	Total Permanent Capital	4,332	4,470	4,617	4,805	4,456	4,495	18
20	Short Term Debt	360	0	114	304	300	3	20
21	Total Capital Employed	$ 4,692	$ 4,471	$ 4,731	$ 5,109	$ 4,757	$ 4,498	21
	Capital Structure Ratios (Market Value)							
	Based on Total Permanent Capital							
22	Long-Term Debt	41.78%	48.53%	45.91%	44.25%	48.93%	48.58%	22
23	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	23
24	Common Equity	58.22%	51.47%	54.09%	55.75%	51.07%	51.42%	24
25	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	25
	Based on Total Capital							
26	Total Debt, Including Short Term	46.25%	48.53%	47.22%	47.57%	52.16%	48.62%	26
26	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	26
28	Common Equity	53.75%	51.47%	52.78%	52.43%	47.84%	51.38%	28
29	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	29

Source: Bloomberg

LACLEDE GROUP (LG)
CAPITALIZATION STATISTICS
2005-2010

Line No.		At June 30, 2010	2009	2008	2007	2006	2005	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	
	Amount of Capital Employed (Book Value)			($ in millions)				
1	LT Borrowings	$ 364	$ 389	$ 309	$ 356	$ 395	$ 340	1
2	Preferred Equity	-	-	0	-	1	1	2
3	Common Equity + Minority Interest	547	531	483	435	407	384	3
4	Total Permanent Capital	911	920	792	791	803	726	4
5	Short Term Debt	101	133	59	142	123	88	5
6	Total Capital Employed	$ 1,012	$ 1,053	$ 851	$ 933	$ 926	$ 813	6
	Capital Structure Ratios (Book Value)							
	Based on Total Permanent Capital							
7	Long-Term Debt	39.99%	42.30%	39.01%	45.02%	49.24%	46.92%	7
8	Preferred Stock	0.00%	0.00%	0.06%	0.00%	0.10%	0.13%	8
9	Common Equity	60.01%	57.70%	60.93%	54.98%	50.66%	52.95%	9
10	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	10
	Based on Total Capital							
11	Total Debt, Including Short Term	45.99%	49.59%	43.22%	53.40%	56.00%	52.63%	11
12	Preferred Stock	0.00%	0.00%	0.05%	0.00%	0.08%	0.12%	12
13	Common Equity	54.01%	50.41%	56.72%	46.60%	43.92%	47.25%	13
14	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	14
15	Market/Book Ratio	1.35	1.38	1.84	1.58	1.80	1.75	15
	Amount of Capital Employed (Market Value)							
16	LT Borrowings	$ 364	$ 389	$ 309	$ 356	$ 395	$ 340	16
17	Preferred Equity	-	-	0	-	1	1	17
18	Common Equity + Minority Interest	738	733	887	689	733	671	18
18	Total Permanent Capital	1,102	1,122	1,196	1,045	1,129	1,012	18
20	Short Term Debt	101	133	59	142	123	88	20
21	Total Capital Employed	$ 1,203	$ 1,255	$ 1,255	$ 1,187	$ 1,253	$ 1,100	21
	Capital Structure Ratios (Market Value)							
	Based on Total Permanent Capital							
22	Long-Term Debt	33.05%	34.69%	25.85%	34.08%	35.02%	33.64%	22
23	Preferred Stock	0.00%	0.00%	0.04%	0.00%	0.07%	0.09%	23
24	Common Equity	66.95%	65.31%	74.12%	65.92%	64.91%	66.27%	24
25	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	25
	Based on Total Capital							
26	Total Debt, Including Short Term	38.68%	41.62%	29.32%	41.98%	41.42%	38.92%	26
26	Preferred Stock	0.00%	0.00%	0.04%	0.00%	0.06%	0.09%	26
28	Common Equity	61.32%	58.38%	70.65%	58.02%	58.52%	60.99%	28
29	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	29

Source: Bloomberg

NEW JERSEY RESOURCES CORP (NJR)
CAPITALIZATION STATISTICS
2005-2010

Line No.		At June 30, 2010	2009	2008	2007	2006	2005	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	
	Amount of Capital Employed (Book Value)			($ in millions)				
1	LT Borrowings	$ 435	$ 458	$ 482	$ 334	$ 334	$ 318	1
2	Preferred Equity	-	-	-	-	-	-	2
3	Common Equity + Minority Interest	741	721	658	672	595	518	3
4	Total Permanent Capital	1,176	1,179	1,139	1,006	929	836	4
5	Short Term Debt	192	55	145	231	157	197	5
6	Total Capital Employed	$ 1,368	$ 1,234	$ 1,284	$ 1,237	$ 1,086	$ 1,033	6
	Capital Structure Ratios (Book Value)							
	Based on Total Permanent Capital							
7	Long-Term Debt	36.98%	38.82%	42.27%	33.25%	35.92%	38.04%	7
8	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8
9	Common Equity	63.02%	61.18%	57.73%	66.75%	64.08%	61.96%	9
10	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	10
	Based on Total Capital							
11	Total Debt, Including Short Term	45.81%	41.53%	48.79%	45.73%	45.18%	49.85%	11
12	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12
13	Common Equity	54.19%	58.47%	51.21%	54.27%	54.82%	50.15%	13
14	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	14
15	Market/Book Ratio	1.96	2.15	2.08	2.13	2.21	2.56	15
	Amount of Capital Employed (Market Value)							
16	LT Borrowings	$ 435	$ 458	$ 482	$ 334	$ 334	$ 318	16
17	Preferred Equity	-	-	-	-	-	-	17
18	Common Equity + Minority Interest	1,453	1,551	1,370	1,430	1,313	1,327	18
18	Total Permanent Capital	1,888	2,008	1,852	1,764	1,647	1,645	18
20	Short Term Debt	192	55	145	231	157	197	20
21	Total Capital Employed	$ 2,079	$ 2,063	$ 1,997	$ 1,996	$ 1,804	$ 1,842	21
	Capital Structure Ratios (Market Value)							
	Based on Total Permanent Capital							
22	Long-Term Debt	23.04%	22.79%	26.01%	18.96%	20.27%	19.34%	22
23	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	23
24	Common Equity	76.96%	77.21%	73.99%	81.04%	79.73%	80.66%	24
25	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	25
	Based on Total Capital							
26	Total Debt, Including Short Term	30.13%	24.83%	31.38%	28.35%	27.21%	27.97%	26
26	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	26
28	Common Equity	69.87%	75.17%	68.62%	71.65%	72.79%	72.03%	28
29	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	29

Source: Bloomberg

NICOR GAS (GAS)
CAPITALIZATION STATISTICS
2005-2010

Line No.		At June 30, 2010	2009	2008	2007	2006	2005	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	
	Amount of Capital Employed (Book Value)			($ in millions)				
1	LT Borrowings	$ 423	$ 499	$ 374	$ 498	$ 471	$ 497	1
2	Preferred Equity	-	-	-	-	-	-	2
3	Common Equity + Minority Interest	1,088	1,006	984	916	828	790	3
4	Total Permanent Capital	1,512	1,505	1,358	1,415	1,299	1,287	4
5	Short Term Debt	182	227	143	-	50	-	5
6	Total Capital Employed	$ 1,694	$ 1,732	$ 1,501	$ 1,415	$ 1,349	$ 1,287	6
	Capital Structure Ratios (Book Value)							
	Based on Total Permanent Capital							
7	Long-Term Debt	28.01%	33.15%	27.51%	35.22%	36.25%	38.62%	7
8	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8
9	Common Equity	71.99%	66.85%	72.49%	64.78%	63.75%	61.38%	9
10	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	10
	Based on Total Capital							
11	Total Debt, Including Short Term	35.75%	41.91%	34.41%	35.22%	38.61%	38.62%	11
12	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12
13	Common Equity	64.25%	58.09%	65.59%	64.78%	61.39%	61.38%	13
14	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	14
15	Market/Book Ratio	1.69	1.56	1.95	2.11	2.23	2.30	15
	Amount of Capital Employed (Market Value)							
16	LT Borrowings	$ 423	$ 499	$ 374	$ 498	$ 471	$ 497	16
17	Preferred Equity	-	-	-	-	-	-	17
18	Common Equity + Minority Interest	1,839	1,566	1,923	1,936	1,848	1,818	18
18	Total Permanent Capital	2,262	2,064	2,296	2,435	2,319	2,314	18
20	Short Term Debt	182	227	143	-	50	-	20
21	Total Capital Employed	$ 2,444	$ 2,291	$ 2,439	$ 2,435	$ 2,369	$ 2,314	21
	Capital Structure Ratios (Market Value)							
	Based on Total Permanent Capital							
22	Long-Term Debt	18.72%	24.16%	16.26%	20.46%	20.30%	21.47%	22
23	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	23
24	Common Equity	81.28%	75.84%	83.74%	79.54%	79.70%	78.53%	24
25	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	25
	Based on Total Capital							
26	Total Debt, Including Short Term	24.77%	31.67%	21.17%	20.46%	21.98%	21.47%	26
26	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	26
28	Common Equity	75.23%	68.33%	78.83%	79.54%	78.02%	78.53%	28
29	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	29

Source: Bloomberg

NORTHWEST NATURAL GAS (NWN)
CAPITALIZATION STATISTICS
2005-2010

Line No.		At June 30, 2010	2009	2008	2007	2006	2005	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	
	Amount of Capital Employed (Book Value)			($ in millions)				
1	LT Borrowings	$ 592	$ 587	$ 512	$ 517	$ 492	$ 522	1
2	Preferred Equity	-	-	-	-	-	-	2
3	Common Equity + Minority Interest	691	657	624	610	611	592	3
4	Total Permanent Capital	1,282	1,244	1,136	1,127	1,103	1,113	4
5	Short Term Debt	152	91	73	42	85	27	5
6	Total Capital Employed	$ 1,434	$ 1,335	$ 1,209	$ 1,169	$ 1,188	$ 1,141	6
	Capital Structure Ratios (Book Value)							
	Based on Total Permanent Capital							
7	Long-Term Debt	46.14%	47.18%	45.05%	45.86%	44.61%	46.84%	7
8	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8
9	Common Equity	53.86%	52.82%	54.95%	54.14%	55.39%	53.16%	9
10	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	10
	Based on Total Capital							
11	Total Debt, Including Short Term	51.84%	50.76%	48.36%	47.81%	48.59%	48.11%	11
12	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12
13	Common Equity	48.16%	49.24%	51.64%	52.19%	51.41%	51.89%	13
14	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	14
15	Market/Book Ratio	1.68	1.79	1.96	2.03	1.67	1.78	15
	Amount of Capital Employed (Market Value)							
16	LT Borrowings	$ 592	$ 587	$ 512	$ 517	$ 492	$ 522	16
17	Preferred Equity	-	-	-	-	-	-	17
18	Common Equity + Minority Interest	1,161	1,176	1,223	1,239	1,020	1,054	18
18	Total Permanent Capital	1,752	1,763	1,735	1,756	1,512	1,576	18
20	Short Term Debt	152	91	73	42	85	27	20
21	Total Capital Employed	$ 1,904	$ 1,854	$ 1,808	$ 1,798	$ 1,597	$ 1,603	21
	Capital Structure Ratios (Market Value)							
	Based on Total Permanent Capital							
22	Long-Term Debt	33.77%	33.29%	29.51%	29.45%	32.54%	33.09%	22
23	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	23
24	Common Equity	66.23%	66.71%	70.49%	70.55%	67.46%	66.91%	24
25	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	25
	Based on Total Capital							
26	Total Debt, Including Short Term	39.05%	36.55%	32.35%	31.10%	36.14%	34.23%	26
26	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	26
28	Common Equity	60.95%	63.45%	67.65%	68.90%	63.86%	65.77%	28
29	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	29

Source: Bloomberg

PIEDMONT NATURAL GAS (PNY)
CAPITALIZATION STATISTICS
2005-2010

Line No.		At June 30, 2010	2009	2008	2007	2006	2005	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	
	Amount of Capital Employed (Book Value)			($ in millions)				
1	LT Borrowings	$ 732	$ 793	$ 825	$ 825	$ 825	$ 625	1
2	Preferred Equity	-	-	-	-	-	-	2
3	Common Equity + Minority Interest	989	948	922	900	902	905	3
4	Total Permanent Capital	1,721	1,741	1,746	1,725	1,727	1,530	4
5	Short Term Debt	182	288	170	148	103	119	5
6	*Total Capital Employed*	$ 1,903	$ 2,028	$ 1,916	$ 1,873	$ 1,830	$ 1,649	6
	Capital Structure Ratios (Book Value)							
	Based on Total Permanent Capital							
7	Long-Term Debt	42.54%	45.55%	47.21%	47.81%	47.77%	40.84%	7
8	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8
9	Common Equity	57.46%	54.45%	52.79%	52.19%	52.23%	59.16%	9
10	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	10
	Based on Total Capital							
11	Total Debt, Including Short Term	48.03%	53.26%	51.88%	51.92%	50.70%	45.11%	11
12	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12
13	Common Equity	51.97%	46.74%	48.12%	48.08%	49.30%	54.89%	13
14	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	14
15	Market/Book Ratio	1.94	1.90	2.13	1.91	2.15	2.09	15
	Amount of Capital Employed (Market Value)							
16	LT Borrowings	$ 732	$ 793	$ 825	$ 825	$ 825	$ 625	16
17	Preferred Equity	-	-	-	-	-	-	17
18	Common Equity + Minority Interest	1,918	1,801	1,964	1,717	1,939	1,895	18
18	Total Permanent Capital	2,650	2,594	2,788	2,542	2,764	2,520	18
20	Short Term Debt	182	288	170	148	103	119	20
21	Total Capital Employed	$ 2,832	$ 2,881	$ 2,958	$ 2,690	$ 2,867	$ 2,639	21
	Capital Structure Ratios (Market Value)							
	Based on Total Permanent Capital							
22	Long-Term Debt	27.62%	30.57%	29.57%	32.45%	29.84%	24.80%	22
23	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	23
24	Common Equity	72.38%	69.43%	70.43%	67.55%	70.16%	75.20%	24
25	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	25
	Based on Total Capital							
26	Total Debt, Including Short Term	32.27%	37.49%	33.61%	36.16%	32.35%	28.19%	26
26	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	26
28	Common Equity	67.73%	62.51%	66.39%	63.84%	67.65%	71.81%	28
29	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	29

Source: Bloomberg

SOUTH JERSEY INDUSTRIES (SJI)
CAPITALIZATION STATISTICS
2005-2010

Line No.		At June 30, 2010	2009	2008	2007	2006	2005	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	
	Amount of Capital Employed (Book Value)			($ in millions)				
1	LT Borrowings	$ 371	$ 333	$ 333	$ 358	$ 358	$ 319	1
2	Preferred Equity	-	-	-	-	-	-	2
3	Common Equity + Minority Interest	555	540	481	471	424	368	3
4	Total Permanent Capital	926	872	814	829	782	687	4
5	Short Term Debt	195	164	114	109	147	56	5
6	Total Capital Employed	$ 1,121	$ 1,036	$ 928	$ 938	$ 929	$ 743	6
	Capital Structure Ratios (Book Value)							
	Based on Total Permanent Capital							
7	Long-Term Debt	40.11%	38.14%	40.90%	43.17%	45.78%	46.45%	7
8	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8
9	Common Equity	59.89%	61.86%	59.10%	56.83%	54.22%	53.55%	9
10	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	10
	Based on Total Capital							
11	Total Debt, Including Short Term	50.51%	47.92%	48.18%	49.78%	54.35%	50.48%	11
12	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12
13	Common Equity	49.49%	52.08%	51.82%	50.22%	45.65%	49.52%	13
14	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	14
15	Market/Book Ratio	2.31	1.93	2.32	2.22	1.89	2.33	15
	Amount of Capital Employed (Market Value)							
16	LT Borrowings	$ 371	$ 333	$ 333	$ 358	$ 358	$ 319	16
17	Preferred Equity	-	-	-	-	-	-	17
18	Common Equity + Minority Interest	1,281	1,041	1,114	1,044	800	857	18
18	Total Permanent Capital	1,652	1,374	1,447	1,402	1,158	1,176	18
20	Short Term Debt	195	164	114	109	147	56	20
21	Total Capital Employed	$ 1,847	$ 1,538	$ 1,561	$ 1,511	$ 1,305	$ 1,232	21
	Capital Structure Ratios (Market Value)							
	Based on Total Permanent Capital							
22	Long-Term Debt	22.48%	24.21%	23.01%	25.53%	30.92%	27.14%	22
23	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	23
24	Common Equity	77.52%	75.79%	76.99%	74.47%	69.08%	72.86%	24
25	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	25
	Based on Total Capital							
26	Total Debt, Including Short Term	30.65%	32.28%	28.65%	30.91%	38.70%	30.45%	26
26	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	26
28	Common Equity	69.35%	67.72%	71.35%	69.09%	61.30%	69.55%	28
29	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	29

Source: Bloomberg

SOUTHWEST GAS CORPORATION
Effective Cost Calculation of
8.0% Debenture, Due 8/1/2026

Internal Rate of Return = Effective Rate 8.89%

Semi-Annual Payment	Outstanding Principal	Unamortized Balance: Reacquired Debt Expense	Unamortized Balance: Discount	Unamortized Balance: Debt Expense	Net Proceeds	Redemption	Interest Expense	Amortization of: Reacquired Debt Expense	Amortization of: Discount	Amortization of: Debt Expense	Total Expense	Annual Cost	Cash Flows
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
8/1/1996	$ 75,000,000	$ 5,898,405	$ 894,750	$ 150,000	$ 68,056,845	$ -	$ -	$ -	$ -	$ -	$ -		$ 68,056,845
2/1/1997	75,000,000	5,877,575	891,590	149,470	68,081,364	-	3,000,000	20,830	3,160	530	3,024,520	8.89%	(3,000,000)
8/1/1997	75,000,000	5,855,819	888,290	148,917	68,106,974	-	3,000,000	21,756	3,300	553	3,025,609	8.89%	(3,000,000)
2/1/1998	75,000,000	5,833,097	884,843	148,339	68,133,721	-	3,000,000	22,723	3,447	578	3,026,747	8.89%	(3,000,000)
8/1/1998	75,000,000	5,809,364	881,243	147,736	68,161,657	-	3,000,000	23,732	3,600	604	3,027,936	8.89%	(3,000,000)
2/1/1999	75,000,000	5,784,577	877,483	147,105	68,190,835	-	3,000,000	24,787	3,760	630	3,029,178	8.89%	(3,000,000)
8/1/1999	75,000,000	5,758,688	873,556	146,447	68,221,309	-	3,000,000	25,889	3,927	658	3,030,474	8.89%	(3,000,000)
2/1/2000	75,000,000	5,731,649	869,454	145,759	68,253,137	-	3,000,000	27,039	4,102	688	3,031,829	8.89%	(3,000,000)
8/1/2000	75,000,000	5,703,408	865,170	145,041	68,286,380	-	3,000,000	28,241	4,284	718	3,033,243	8.89%	(3,000,000)
2/1/2001	75,000,000	5,673,912	860,696	144,291	68,321,101	-	3,000,000	29,496	4,474	750	3,034,720	8.89%	(3,000,000)
8/1/2001	75,000,000	5,643,106	856,023	143,508	68,357,364	-	3,000,000	30,807	4,673	783	3,036,263	8.89%	(3,000,000)
2/1/2002	75,000,000	5,610,930	851,142	142,689	68,395,239	-	3,000,000	32,176	4,881	818	3,037,875	8.89%	(3,000,000)
8/1/2002	75,000,000	5,577,324	846,044	141,835	68,434,797	-	3,000,000	33,606	5,098	855	3,039,558	8.89%	(3,000,000)
2/1/2003	75,000,000	5,542,225	840,720	140,942	68,476,114	-	3,000,000	35,099	5,324	893	3,041,316	8.89%	(3,000,000)
8/1/2003	75,000,000	5,505,566	835,159	140,010	68,519,266	-	3,000,000	36,659	5,561	932	3,043,152	8.89%	(3,000,000)
2/1/2004	75,000,000	5,467,277	829,351	139,036	68,564,336	-	3,000,000	38,288	5,808	974	3,045,070	8.89%	(3,000,000)
8/1/2004	75,000,000	5,427,287	823,284	138,019	68,611,409	-	3,000,000	39,990	6,066	1,017	3,047,073	8.89%	(3,000,000)
2/1/2005	75,000,000	5,385,520	816,949	136,957	68,660,574	-	3,000,000	41,767	6,336	1,062	3,049,165	8.89%	(3,000,000)
8/1/2005	75,000,000	5,341,897	810,331	135,848	68,711,924	-	3,000,000	43,623	6,617	1,109	3,051,350	8.89%	(3,000,000)
2/1/2006	75,000,000	5,296,335	803,420	134,689	68,765,556	-	3,000,000	45,562	6,911	1,159	3,053,632	8.89%	(3,000,000)
8/1/2006	75,000,000	5,248,748	796,201	133,479	68,821,571	-	3,000,000	47,587	7,219	1,210	3,056,015	8.89%	(3,000,000)
2/1/2007	75,000,000	5,199,047	788,662	132,215	68,880,076	-	3,000,000	49,702	7,539	1,264	3,058,505	8.89%	(3,000,000)
8/1/2007	75,000,000	5,147,137	780,787	130,895	68,941,181	-	3,000,000	51,910	7,874	1,320	3,061,105	8.89%	(3,000,000)
2/1/2008	75,000,000	5,092,919	772,563	129,516	69,005,002	-	3,000,000	54,217	8,224	1,379	3,063,820	8.89%	(3,000,000)
8/1/2008	75,000,000	5,036,293	763,973	128,076	69,071,658	-	3,000,000	56,627	8,590	1,440	3,066,657	8.89%	(3,000,000)
2/1/2009	75,000,000	4,977,149	755,001	126,572	69,141,277	-	3,000,000	59,143	8,972	1,504	3,069,619	8.89%	(3,000,000)
8/1/2009	75,000,000	4,915,378	745,631	125,001	69,213,990	-	3,000,000	61,772	9,370	1,571	3,072,713	8.89%	(3,000,000)
2/1/2010	75,000,000	4,850,861	735,844	123,360	69,289,935	-	3,000,000	64,517	9,787	1,641	3,075,944	8.89%	(3,000,000)
8/1/2010	75,000,000	4,783,477	725,623	121,647	69,369,254	-	3,000,000	67,384	10,222	1,714	3,079,319	8.89%	(3,000,000)
2/1/2011	75,000,000	4,713,098	714,947	119,857	69,452,098	-	3,000,000	70,379	10,676	1,790	3,082,844	8.89%	(3,000,000)
8/1/2011	75,000,000	4,639,592	703,796	117,988	69,538,625	-	3,000,000	73,506	11,150	1,869	3,086,526	8.89%	(3,000,000)
2/1/2012	75,000,000	4,562,819	692,150	116,035	69,628,996	-	3,000,000	76,773	11,646	1,952	3,090,371	8.89%	(3,000,000)
8/1/2012	75,000,000	4,482,634	679,987	113,996	69,723,384	-	3,000,000	80,185	12,164	2,039	3,094,388	8.89%	(3,000,000)
2/1/2013	75,000,000	4,398,885	667,282	111,866	69,821,966	-	3,000,000	83,748	12,704	2,130	3,098,582	8.89%	(3,000,000)
8/1/2013	75,000,000	4,311,415	654,014	109,642	69,924,930	-	3,000,000	87,470	13,269	2,224	3,102,963	8.89%	(3,000,000)
2/1/2014	75,000,000	4,220,057	640,155	107,319	70,032,469	-	3,000,000	91,358	13,858	2,323	3,107,539	8.89%	(3,000,000)
8/1/2014	75,000,000	4,124,639	625,681	104,892	70,144,787	-	3,000,000	95,418	14,474	2,427	3,112,318	8.89%	(3,000,000)
2/1/2015	75,000,000	4,024,981	610,564	102,358	70,262,097	-	3,000,000	99,658	15,118	2,534	3,117,310	8.89%	(3,000,000)
8/1/2015	75,000,000	3,920,894	594,774	99,711	70,384,621	-	3,000,000	104,087	15,789	2,647	3,122,523	8.89%	(3,000,000)
2/1/2016	75,000,000	3,812,181	578,283	96,946	70,512,589	-	3,000,000	108,713	16,491	2,765	3,127,968	8.89%	(3,000,000)
8/1/2016	75,000,000	3,698,637	561,059	94,059	70,646,245	-	3,000,000	113,544	17,224	2,888	3,133,656	8.89%	(3,000,000)
2/1/2017	75,000,000	3,580,047	543,070	91,043	70,785,840	-	3,000,000	118,590	17,989	3,016	3,139,595	8.89%	(3,000,000)
8/1/2017	75,000,000	3,456,187	524,281	87,893	70,931,639	-	3,000,000	123,860	18,789	3,150	3,145,799	8.89%	(3,000,000)
2/1/2018	75,000,000	3,326,822	504,657	84,603	71,083,918	-	3,000,000	129,365	19,624	3,290	3,152,279	8.89%	(3,000,000)

SOUTHWEST GAS CORPORATION
Effective Cost Calculation of
8.0% Debenture, Due 8/1/2026

Internal Rate of Return = Effective Rate 8.89%

Semi-Annual Payment	Outstanding Principal	Unamortized Balance: Reacquired Debt Expense	Unamortized Balance: Discount	Unamortized Balance: Debt Expense	Net Proceeds	Redemption	Interest Expense	Amortization of: Reacquired Debt Expense	Amortization of: Discount	Amortization of: Debt Expense	Total Expense	Annual Cost	Cash Flows
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
8/1/2018	75,000,000	3,191,708	484,162	81,167	71,242,964	-	3,000,000	135,114	20,496	3,436	3,159,046	8.89%	(3,000,000)
2/1/2019	75,000,000	3,050,589	462,755	77,578	71,409,078	-	3,000,000	141,119	21,407	3,589	3,166,114	8.89%	(3,000,000)
8/1/2019	75,000,000	2,903,199	440,397	73,830	71,582,574	-	3,000,000	147,390	22,358	3,748	3,173,496	8.89%	(3,000,000)
2/1/2020	75,000,000	2,749,259	417,045	69,915	71,763,781	-	3,000,000	153,940	23,352	3,915	3,181,207	8.89%	(3,000,000)
8/1/2020	75,000,000	2,588,477	392,655	65,827	71,953,041	-	3,000,000	160,782	24,390	4,089	3,189,260	8.89%	(3,000,000)
2/1/2021	75,000,000	2,420,551	367,182	61,556	72,150,712	-	3,000,000	167,927	25,473	4,270	3,197,671	8.89%	(3,000,000)
8/1/2021	75,000,000	2,245,161	340,576	57,096	72,357,167	-	3,000,000	175,390	26,605	4,460	3,206,455	8.89%	(3,000,000)
2/1/2022	75,000,000	2,061,977	312,789	52,437	72,572,797	-	3,000,000	183,184	27,788	4,658	3,215,631	8.89%	(3,000,000)
8/1/2022	75,000,000	1,870,652	283,766	47,572	72,798,011	-	3,000,000	191,325	29,023	4,866	3,225,213	8.89%	(3,000,000)
2/1/2023	75,000,000	1,670,824	253,453	42,490	73,033,233	-	3,000,000	199,828	30,313	5,082	3,235,222	8.89%	(3,000,000)
8/1/2023	75,000,000	1,462,115	221,794	37,182	73,278,909	-	3,000,000	208,708	31,660	5,308	3,245,676	8.89%	(3,000,000)
2/1/2024	75,000,000	1,244,132	188,727	31,639	73,535,502	-	3,000,000	217,984	33,067	5,543	3,256,594	8.89%	(3,000,000)
8/1/2024	75,000,000	1,016,461	154,191	25,849	73,803,499	-	3,000,000	227,671	34,536	5,790	3,267,997	8.89%	(3,000,000)
2/1/2025	75,000,000	778,672	118,120	19,802	74,083,407	-	3,000,000	237,789	36,071	6,047	3,279,907	8.89%	(3,000,000)
8/1/2025	75,000,000	530,315	80,445	13,486	74,375,753	-	3,000,000	248,357	37,674	6,316	3,292,346	8.89%	(3,000,000)
2/1/2026	75,000,000	270,922	41,097	6,890	74,681,092	-	3,000,000	259,394	39,348	6,597	3,305,339	8.89%	(3,000,000)
8/1/2026	75,000,000	-	-	-	75,000,000	75,000,000	3,000,000	270,922	41,097	6,890	3,318,908	8.89%	(78,000,000)
						$ 75,000,000	$ 180,000,000	$ 5,898,405	$ 894,750	$ 150,000	$ 186,943,155		

SOUTHWEST GAS CORPORATION
Effective Cost Calculation of
8.375 % Notes Due 2011

Internal Rate of Return = Effective Rate 8.61%

		Unamortized Balance						Amortization of					
Semi-Annual Payment	Outstanding Principal	Reacquired Debt Expense	Discount	Debt Expense	Net Proceeds	Redemption	Interest Expense	Reacquired Debt Expense	Discount	Debt Expense	Total Expense	Annual Cost	Cash Flows
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
2/13/2001	$ 200,000,000	$ 0	$ 2,818,000	$ 288,784	$ 196,893,216	$ 0	$ 0		$ 0	$ 0	$ 0		$ 196,893,216
8/15/2001	200,000,000	0	2,726,322	279,389	196,994,289	0	8,375,000	0	91,678	9,395	8,476,073	8.61%	(8,375,000)
2/15/2002	200,000,000	0	2,630,697	269,589	197,099,713	0	8,375,000	0	95,625	9,799	8,480,424	8.61%	(8,375,000)
8/15/2002	200,000,000	0	2,530,956	259,368	197,209,676	0	8,375,000	0	99,741	10,221	8,484,962	8.61%	(8,375,000)
2/15/2003	200,000,000	0	2,426,921	248,707	197,324,372	0	8,375,000	0	104,035	10,661	8,489,696	8.61%	(8,375,000)
8/15/2003	200,000,000	0	2,318,408	237,586	197,444,006	0	8,375,000	0	108,514	11,120	8,494,634	8.61%	(8,375,000)
2/15/2004	200,000,000	0	2,205,223	225,987	197,568,790	0	8,375,000	0	113,185	11,599	8,499,784	8.61%	(8,375,000)
8/15/2004	200,000,000	0	2,087,166	213,889	197,698,945	0	8,375,000	0	118,057	12,098	8,505,156	8.61%	(8,375,000)
2/15/2005	200,000,000	0	1,964,026	201,270	197,834,704	0	8,375,000	0	123,140	12,619	8,510,759	8.61%	(8,375,000)
8/15/2005	200,000,000	0	1,835,585	188,108	197,976,307	0	8,375,000	0	128,441	13,162	8,516,603	8.61%	(8,375,000)
2/15/2006	200,000,000	0	1,701,615	174,379	198,124,006	0	8,375,000	0	133,970	13,729	8,522,699	8.61%	(8,375,000)
8/15/2006	200,000,000	0	1,561,878	160,058	198,278,064	0	8,375,000	0	139,737	14,320	8,529,057	8.61%	(8,375,000)
2/15/2007	200,000,000	0	1,416,125	145,122	198,438,753	0	8,375,000	0	145,753	14,936	8,535,689	8.61%	(8,375,000)
8/15/2007	200,000,000	0	1,264,098	129,543	198,606,360	0	8,375,000	0	152,027	15,579	8,542,607	8.61%	(8,375,000)
2/15/2008	200,000,000	0	1,105,526	113,292	198,781,182	0	8,375,000	0	158,572	16,250	8,549,822	8.61%	(8,375,000)
8/15/2008	200,000,000	0	940,127	96,343	198,963,530	0	8,375,000	0	165,398	16,950	8,557,348	8.61%	(8,375,000)
2/15/2009	200,000,000	0	767,609	78,663	199,153,728	0	8,375,000	0	172,519	17,679	8,565,198	8.61%	(8,375,000)
8/15/2009	200,000,000	0	587,663	60,223	199,352,114	0	8,375,000	0	179,945	18,440	8,573,386	8.61%	(8,375,000)
2/15/2010	200,000,000	0	399,971	40,988	199,559,040	0	8,375,000	0	187,692	19,234	8,581,926	8.61%	(8,375,000)
8/15/2010	200,000,000	0	204,200	20,926	199,774,874	0	8,375,000	0	195,772	20,062	8,590,834	8.61%	(8,375,000)
2/15/2011	200,000,000	0	0	0	200,000,000	200,000,000	8,375,000	0	204,200	20,926	8,600,126	8.61%	(208,375,000)
						$ 200,000,000	$ 167,500,000	$ 0	$ 2,818,000	$ 288,784	$ 170,606,784		

SOUTHWEST GAS CORPORATION
Effective Cost Calculation of
7.625% New Debenture, Due May 15, 2012

Internal Rate of Return = Effective Rate 7.79%

		Unamortized Balance						Amortization of					
Semi-Annual Payment	Outstanding Principal	Reacquired Debt Expense	Discount	Debt Expense	Net Proceeds	Redemption	Interest Expense	Reacquired Debt Expense	Discount	Debt Expense	Total Expense	Annual Cost	Cash Flows
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
5/15/2002	$ 200,000,000	$ 0	$ 2,052,000	$ 270,042	$ 197,677,958	$ 0	$ 0		$ 0	$ 0	$ 0		$ 197,677,958
11/15/2002	200,000,000	0	1,982,352	260,876	197,756,772	0	7,625,000	0	69,648	9,166	7,703,814	7.79%	(7,625,000)
6/15/2003	200,000,000	0	1,909,989	251,354	197,838,657	0	7,625,000	0	72,363	9,523	7,706,885	7.79%	(7,625,000)
11/15/2003	200,000,000	0	1,834,806	241,460	197,923,734	0	7,625,000	0	75,183	9,894	7,710,077	7.79%	(7,625,000)
5/15/2004	200,000,000	0	1,756,694	231,180	198,012,126	0	7,625,000	0	78,113	10,280	7,713,392	7.79%	(7,625,000)
11/15/2004	200,000,000	0	1,675,537	220,500	198,103,963	0	7,625,000	0	81,157	10,680	7,716,837	7.79%	(7,625,000)
5/15/2005	200,000,000	0	1,591,217	209,403	198,199,379	0	7,625,000	0	84,320	11,096	7,720,416	7.79%	(7,625,000)
11/15/2005	200,000,000	0	1,503,612	197,874	198,298,514	0	7,625,000	0	87,606	11,529	7,724,135	7.79%	(7,625,000)
5/15/2006	200,000,000	0	1,412,592	185,896	198,401,512	0	7,625,000	0	91,020	11,978	7,727,998	7.79%	(7,625,000)
11/15/2006	200,000,000	0	1,318,025	173,451	198,508,524	0	7,625,000	0	94,567	12,445	7,732,012	7.79%	(7,625,000)
5/15/2007	200,000,000	0	1,219,772	160,521	198,619,706	0	7,625,000	0	98,252	12,930	7,736,182	7.79%	(7,625,000)
11/15/2007	200,000,000	0	1,117,691	147,087	198,735,222	0	7,625,000	0	102,082	13,434	7,740,515	7.79%	(7,625,000)
5/15/2008	200,000,000	0	1,011,631	133,130	198,855,239	0	7,625,000	0	106,060	13,957	7,745,017	7.79%	(7,625,000)
11/15/2008	200,000,000	0	901,438	118,629	198,979,933	0	7,625,000	0	110,193	14,501	7,749,694	7.79%	(7,625,000)
5/15/2009	200,000,000	0	786,950	103,562	199,109,487	0	7,625,000	0	114,487	15,066	7,754,554	7.79%	(7,625,000)
11/15/2009	200,000,000	0	668,001	87,909	199,244,090	0	7,625,000	0	118,949	15,654	7,759,603	7.79%	(7,625,000)
5/15/2010	200,000,000	0	544,416	71,645	199,383,939	0	7,625,000	0	123,585	16,264	7,764,849	7.79%	(7,625,000)
11/15/2010	200,000,000	0	416,015	54,747	199,529,238	0	7,625,000	0	128,401	16,898	7,770,299	7.79%	(7,625,000)
5/15/2011	200,000,000	0	282,610	37,191	199,680,199	0	7,625,000	0	133,405	17,556	7,775,961	7.79%	(7,625,000)
11/15/2011	200,000,000	0	144,006	18,951	199,837,043	0	7,625,000	0	138,604	18,240	7,781,844	7.79%	(7,625,000)
5/15/2012	200,000,000	0	0	(0)	200,000,000	200,000,000	7,625,000	0	144,006	18,951	7,787,957	7.79%	(207,625,000)
						$ 200,000,000	$ 152,500,000	$ 0	$ 2,052,000	$ 270,042	$ 154,822,042		

SOUTHWEST GAS CORPORATION
Effective Cost Calculation of
7.59% Medium Term Note Series A, Due 1/17/2017

Internal Rate of Return = 7.68% (Effective Rate)

Semi-Annual Payment	Outstanding Principal	Unamortized Balance: Reacquired Debt Expense	Unamortized Balance: Discount	Unamortized Balance: Debt Expense	Net Proceeds	Redemption	Interest Expense	Amortization of: Reacquired Debt Expense	Amortization of: Discount	Amortization of: Debt Expense	Total Expense	Annual Cost	Cash Flows
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
1/17/1997	$ 25,000,000	$ -	$ 187,500	$ 33,400	$ 24,779,100	$ -	$ -	$ -	$ -	$ -	$ 0		$ 24,779,100
4/1/1997	25,000,000	-	186,657	33,250	24,780,093	-	390,042	-	843	150.09	391,034	7.68%	(390,042)
10/1/1997	25,000,000	-	184,576	32,879	24,782,545	-	948,750	-	2,082	371	951,203	7.68%	(948,750)
4/1/1998	25,000,000	-	182,414	32,494	24,785,092	-	948,750	-	2,162	385	951,297	7.68%	(948,750)
10/1/1998	25,000,000	-	180,169	32,094	24,787,737	-	948,750	-	2,245	400	951,395	7.68%	(948,750)
4/1/1999	25,000,000	-	177,838	31,679	24,790,483	-	948,750	-	2,331	415	951,496	7.68%	(948,750)
10/1/1999	25,000,000	-	175,418	31,248	24,793,334	-	948,750	-	2,420	431	951,601	7.68%	(948,750)
4/1/2000	25,000,000	-	172,905	30,800	24,796,295	-	948,750	-	2,513	448	951,711	7.68%	(948,750)
10/1/2000	25,000,000	-	170,295	30,335	24,799,370	-	948,750	-	2,610	465	951,825	7.68%	(948,750)
4/1/2001	25,000,000	-	167,585	29,852	24,802,562	-	948,750	-	2,710	483	951,943	7.68%	(948,750)
10/1/2001	25,000,000	-	164,771	29,351	24,805,878	-	948,750	-	2,814	501	952,065	7.68%	(948,750)
4/1/2002	25,000,000	-	161,849	28,831	24,809,320	-	948,750	-	2,922	521	952,192	7.68%	(948,750)
10/1/2002	25,000,000	-	158,815	28,290	24,812,895	-	948,750	-	3,034	540	952,325	7.68%	(948,750)
4/1/2003	25,000,000	-	155,665	27,729	24,816,606	-	948,750	-	3,151	561	952,462	7.68%	(948,750)
10/1/2003	25,000,000	-	152,393	27,146	24,820,461	-	948,750	-	3,272	583	952,604	7.68%	(948,750)
4/1/2004	25,000,000	-	148,996	26,541	24,824,463	-	948,750	-	3,397	605	952,752	7.68%	(948,750)
10/1/2004	25,000,000	-	145,468	25,913	24,828,619	-	948,750	-	3,527	628	952,906	7.68%	(948,750)
4/1/2005	25,000,000	-	141,806	25,260	24,832,934	-	948,750	-	3,663	652	953,065	7.68%	(948,750)
10/1/2005	25,000,000	-	138,002	24,583	24,837,415	-	948,750	-	3,803	678	953,231	7.68%	(948,750)
4/1/2006	25,000,000	-	134,053	23,879	24,842,068	-	948,750	-	3,949	704	953,403	7.68%	(948,750)
10/1/2006	25,000,000	-	129,951	23,149	24,846,900	-	948,750	-	4,101	731	953,582	7.68%	(948,750)
4/1/2007	25,000,000	-	125,693	22,390	24,851,917	-	948,750	-	4,259	759	953,767	7.68%	(948,750)
10/1/2007	25,000,000	-	121,271	21,602	24,857,127	-	948,750	-	4,422	788	953,960	7.68%	(948,750)
4/1/2008	25,000,000	-	116,679	20,784	24,862,536	-	948,750	-	4,592	818	954,160	7.68%	(948,750)
10/1/2008	25,000,000	-	111,911	19,935	24,868,154	-	948,750	-	4,768	849	954,367	7.68%	(948,750)
4/1/2009	25,000,000	-	106,960	19,053	24,873,987	-	948,750	-	4,951	882	954,583	7.68%	(948,750)
10/1/2009	25,000,000	-	101,819	18,137	24,880,043	-	948,750	-	5,141	916	954,807	7.68%	(948,750)
4/1/2010	25,000,000	-	96,481	17,186	24,886,333	-	948,750	-	5,338	951	955,039	7.68%	(948,750)
10/1/2010	25,000,000	-	90,937	16,199	24,892,864	-	948,750	-	5,543	987	955,281	7.68%	(948,750)
4/1/2011	25,000,000	-	85,181	15,174	24,899,645	-	948,750	-	5,756	1,025	955,531	7.68%	(948,750)
10/1/2011	25,000,000	-	79,204	14,109	24,906,687	-	948,750	-	5,977	1,065	955,792	7.68%	(948,750)
4/1/2012	25,000,000	-	72,998	13,003	24,913,999	-	948,750	-	6,206	1,106	956,062	7.68%	(948,750)
10/1/2012	25,000,000	-	66,553	11,855	24,921,592	-	948,750	-	6,445	1,148	956,343	7.68%	(948,750)
4/1/2013	25,000,000	-	59,861	10,663	24,929,476	-	948,750	-	6,692	1,192	956,634	7.68%	(948,750)
10/1/2013	25,000,000	-	52,912	9,425	24,937,663	-	948,750	-	6,949	1,238	956,937	7.68%	(948,750)
4/1/2014	25,000,000	-	45,696	8,140	24,946,164	-	948,750	-	7,216	1,285	957,251	7.68%	(948,750)
10/1/2014	25,000,000	-	38,204	6,805	24,954,991	-	948,750	-	7,493	1,335	957,577	7.68%	(948,750)
4/1/2015	25,000,000	-	30,423	5,419	24,964,157	-	948,750	-	7,780	1,386	957,916	7.68%	(948,750)
10/1/2015	25,000,000	-	22,344	3,980	24,973,676	-	948,750	-	8,079	1,439	958,268	7.68%	(948,750)
4/1/2016	25,000,000	-	13,955	2,486	24,983,559	-	948,750	-	8,389	1,494	958,633	7.68%	(948,750)
10/1/2016	25,000,000	-	5,244	934	24,993,822	-	948,750	-	8,711	1,552	959,013	7.68%	(948,750)
1/17/2017	25,000,000	-	-	-	25,000,000	25,000,000	558,708	-	5,244	934	564,886	7.68%	(25,558,708)
						$ 25,000,000	$ 37,950,000	$ -	$ 187,500	$ 33,400	$ 38,170,900		

SOUTHWEST GAS CORPORATION
Effective Cost Calculation of
7.78% Medium Term Note Series A, Due 2/3/2022

Internal Rate of Return = Effective Rate 7.86%

Semi-Annual Payment (a)	Outstanding Principal (b)	Unamortized Balance: Reacquired Debt Expense (c)	Unamortized Balance: Discount (d)	Unamortized Balance: Debt Expense (e)	Net Proceeds (f)	Redemption (g)	Interest Expense (h)	Amortization of: Reacquired Debt Expense (i)	Amortization of: Discount (j)	Amortization of: Debt Expense (k)	Total Expense (l)	Annual Cost (m)	Cash Flows (n)
2/3/1997	$ 25,000,000	$ -	$ 187,500	$ 33,400	$ 24,779,100	$ -	$ -	$ -	$ -	$ -	$ -		$ 24,779,100
4/1/1997	25,000,000	-	187,096	33,328	24,779,576	-	313,361	-	404	72	313,837	7.86%	(313,361)
10/1/1997	25,000,000	-	185,825	33,102	24,781,073	-	972,500	-	1,271	226	973,997	7.86%	(972,500)
4/1/1998	25,000,000	-	184,504	32,866	24,782,629	-	972,500	-	1,321	235	974,056	7.86%	(972,500)
10/1/1998	25,000,000	-	183,132	32,622	24,784,246	-	972,500	-	1,373	244	974,117	7.86%	(972,500)
4/1/1999	25,000,000	-	181,705	32,368	24,785,927	-	972,500	-	1,426	254	974,181	7.86%	(972,500)
10/1/1999	25,000,000	-	180,223	32,104	24,787,673	-	972,500	-	1,483	264	974,247	7.86%	(972,500)
4/1/2000	25,000,000	-	178,682	31,829	24,789,489	-	972,500	-	1,541	274	974,315	7.86%	(972,500)
10/1/2000	25,000,000	-	177,081	31,544	24,791,375	-	972,500	-	1,601	285	974,387	7.86%	(972,500)
4/1/2001	25,000,000	-	175,416	31,248	24,793,336	-	972,500	-	1,664	296	974,461	7.86%	(972,500)
10/1/2001	25,000,000	-	173,687	30,939	24,795,374	-	972,500	-	1,730	308	974,538	7.86%	(972,500)
4/1/2002	25,000,000	-	171,889	30,619	24,797,492	-	972,500	-	1,798	320	974,618	7.86%	(972,500)
10/1/2002	25,000,000	-	170,021	30,286	24,799,693	-	972,500	-	1,868	333	974,701	7.86%	(972,500)
4/1/2003	25,000,000	-	168,079	29,940	24,801,981	-	972,500	-	1,942	346	974,788	7.86%	(972,500)
10/1/2003	25,000,000	-	166,061	29,581	24,804,359	-	972,500	-	2,018	360	974,878	7.86%	(972,500)
4/1/2004	25,000,000	-	163,963	29,207	24,806,830	-	972,500	-	2,097	374	974,971	7.86%	(972,500)
10/1/2004	25,000,000	-	161,783	28,819	24,809,398	-	972,500	-	2,180	388	975,068	7.86%	(972,500)
4/1/2005	25,000,000	-	159,518	28,415	24,812,067	-	972,500	-	2,266	404	975,169	7.86%	(972,500)
10/1/2005	25,000,000	-	157,163	27,996	24,814,841	-	972,500	-	2,355	419	975,274	7.86%	(972,500)
4/1/2006	25,000,000	-	154,716	27,560	24,817,724	-	972,500	-	2,447	436	975,383	7.86%	(972,500)
10/1/2006	25,000,000	-	152,172	27,107	24,820,721	-	972,500	-	2,543	453	975,496	7.86%	(972,500)
4/1/2007	25,000,000	-	149,529	26,636	24,823,835	-	972,500	-	2,643	471	975,614	7.86%	(972,500)
10/1/2007	25,000,000	-	146,782	26,147	24,827,072	-	972,500	-	2,747	489	975,737	7.86%	(972,500)
4/1/2008	25,000,000	-	143,926	25,638	24,830,436	-	972,500	-	2,855	509	975,864	7.86%	(972,500)
10/1/2008	25,000,000	-	140,959	25,109	24,833,932	-	972,500	-	2,968	529	975,996	7.86%	(972,500)
4/1/2009	25,000,000	-	137,875	24,560	24,837,565	-	972,500	-	3,084	549	976,134	7.86%	(972,500)
10/1/2009	25,000,000	-	134,669	23,989	24,841,342	-	972,500	-	3,205	571	976,276	7.86%	(972,500)
4/1/2010	25,000,000	-	131,338	23,396	24,845,266	-	972,500	-	3,331	593	976,425	7.86%	(972,500)
10/1/2010	25,000,000	-	127,876	22,779	24,849,345	-	972,500	-	3,462	617	976,579	7.86%	(972,500)
4/1/2011	25,000,000	-	124,277	22,138	24,853,585	-	972,500	-	3,598	641	976,739	7.86%	(972,500)
10/1/2011	25,000,000	-	120,537	21,472	24,857,991	-	972,500	-	3,740	666	976,906	7.86%	(972,500)
4/1/2012	25,000,000	-	116,651	20,779	24,862,570	-	972,500	-	3,887	692	977,079	7.86%	(972,500)
10/1/2012	25,000,000	-	112,611	20,060	24,867,329	-	972,500	-	4,040	720	977,259	7.86%	(972,500)
4/1/2013	25,000,000	-	108,413	19,312	24,872,275	-	972,500	-	4,198	748	977,446	7.86%	(972,500)
10/1/2013	25,000,000	-	104,049	18,535	24,877,416	-	972,500	-	4,363	777	977,641	7.86%	(972,500)
4/1/2014	25,000,000	-	99,514	17,727	24,882,759	-	972,500	-	4,535	808	977,843	7.86%	(972,500)
10/1/2014	25,000,000	-	94,801	16,887	24,888,312	-	972,500	-	4,713	840	978,053	7.86%	(972,500)
4/1/2015	25,000,000	-	89,903	16,015	24,894,083	-	972,500	-	4,898	873	978,271	7.86%	(972,500)
10/1/2015	25,000,000	-	84,812	15,108	24,900,080	-	972,500	-	5,091	907	978,498	7.86%	(972,500)
4/1/2016	25,000,000	-	79,521	14,165	24,906,314	-	972,500	-	5,291	943	978,734	7.86%	(972,500)
10/1/2016	25,000,000	-	74,022	13,186	24,912,793	-	972,500	-	5,499	980	978,979	7.86%	(972,500)
4/1/2017	25,000,000	-	68,306	12,168	24,919,526	-	972,500	-	5,715	1,018	979,233	7.86%	(972,500)
10/1/2017	25,000,000	-	62,367	11,110	24,926,524	-	972,500	-	5,940	1,058	979,498	7.86%	(972,500)
4/1/2018	25,000,000	-	56,193	10,010	24,933,797	-	972,500	-	6,173	1,100	979,773	7.86%	(972,500)

SOUTHWEST GAS CORPORATION
Effective Cost Calculation of
7.78% Medium Term Note Series A, Due 2/3/2022

Internal Rate of Return = Effective Rate 7.86%

		Unamortized Balance						Amortization of					
Semi-Annual Payment	Outstanding Principal	Reacquired Debt Expense	Discount	Debt Expense	Net Proceeds	Redemption	Interest Expense	Reacquired Debt Expense	Discount	Debt Expense	Total Expense	Annual Cost	Cash Flows
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
10/1/2018	25,000,000	-	49,777	8,867	24,941,356	-	972,500	-	6,416	1,143	980,059	7.86%	(972,500)
4/1/2019	25,000,000	-	43,109	7,679	24,949,212	-	972,500	-	6,668	1,188	980,356	7.86%	(972,500)
10/1/2019	25,000,000	-	36,179	6,445	24,957,377	-	972,500	-	6,930	1,235	980,665	7.86%	(972,500)
4/1/2020	25,000,000	-	28,976	5,162	24,965,862	-	972,500	-	7,203	1,283	980,986	7.86%	(972,500)
10/1/2020	25,000,000	-	21,490	3,828	24,974,681	-	972,500	-	7,486	1,333	981,319	7.86%	(972,500)
4/1/2021	25,000,000	-	13,710	2,442	24,983,847	-	972,500	-	7,780	1,386	981,666	7.86%	(972,500)
10/1/2021	25,000,000	-	5,624	1,002	24,993,374	-	972,500	-	8,086	1,440	982,026	7.86%	(972,500)
2/3/2022	25,000,000	-	-	-	25,000,000	25,000,000	659,139	-	5,624	1,002	665,765	7.86%	(25,659,139)
						$ 25,000,000	$ 48,625,000	$ -	$ 187,500	$ 33,400	$ 48,845,900		

SOUTHWEST GAS CORPORATION
Effective Cost Calculation of
7.92% Medium Term Note, Due June 4, 2027

Internal Rate of Return = Effective Rate 8.00%

Semi-Annual Payment (a)	Outstanding Principal (b)	Unamortized Balance: Reacquired Debt Expense (c)	Unamortized Balance: Discount (d)	Unamortized Balance: Debt Expense (e)	Net Proceeds (f)	Redemption (g)	Interest Expense (h)	Amortization of: Reacquired Debt Expense (i)	Amortization of: Discount (j)	Amortization of: Debt Expense (k)	Total Expense (l)	Annual Cost (m)	Cash Flows (n)
6/4/1997	$ 25,000,000	$ -	$ 187,500	$ 45,761	$ 24,766,739	$ -	$ -	$ -	$ -	$ -	$ -		$ 24,766,739
10/1/1997	25,000,000	-	186,988	45,636	24,767,375	-	643,500	-	512	125	644,137	8.00%	(643,500)
4/1/1998	25,000,000	-	186,180	45,439	24,768,381	-	990,000	-	808	197	991,005	8.00%	(990,000)
10/1/1998	25,000,000	-	185,340	45,234	24,769,426	-	990,000	-	840	205	991,045	8.00%	(990,000)
4/1/1999	25,000,000	-	184,466	45,021	24,770,513	-	990,000	-	874	213	991,087	8.00%	(990,000)
10/1/1999	25,000,000	-	183,557	44,799	24,771,644	-	990,000	-	909	222	991,131	8.00%	(990,000)
4/1/2000	25,000,000	-	182,612	44,568	24,772,820	-	990,000	-	945	231	991,176	8.00%	(990,000)
10/1/2000	25,000,000	-	181,629	44,329	24,774,043	-	990,000	-	983	240	991,223	8.00%	(990,000)
4/1/2001	25,000,000	-	180,607	44,079	24,775,315	-	990,000	-	1,022	250	991,272	8.00%	(990,000)
10/1/2001	25,000,000	-	179,543	43,819	24,776,637	-	990,000	-	1,063	260	991,323	8.00%	(990,000)
4/1/2002	25,000,000	-	178,437	43,550	24,778,013	-	990,000	-	1,106	270	991,376	8.00%	(990,000)
10/1/2002	25,000,000	-	177,287	43,269	24,779,444	-	990,000	-	1,150	281	991,431	8.00%	(990,000)
4/1/2003	25,000,000	-	176,091	42,977	24,780,932	-	990,000	-	1,196	292	991,488	8.00%	(990,000)
10/1/2003	25,000,000	-	174,847	42,673	24,782,479	-	990,000	-	1,244	304	991,548	8.00%	(990,000)
4/1/2004	25,000,000	-	173,554	42,358	24,784,089	-	990,000	-	1,294	316	991,609	8.00%	(990,000)
10/1/2004	25,000,000	-	172,208	42,029	24,785,763	-	990,000	-	1,346	328	991,674	8.00%	(990,000)
4/1/2005	25,000,000	-	170,809	41,688	24,787,504	-	990,000	-	1,399	342	991,741	8.00%	(990,000)
10/1/2005	25,000,000	-	169,353	41,333	24,789,314	-	990,000	-	1,455	355	991,811	8.00%	(990,000)
4/1/2006	25,000,000	-	167,840	40,963	24,791,197	-	990,000	-	1,514	369	991,883	8.00%	(990,000)
10/1/2006	25,000,000	-	166,266	40,579	24,793,155	-	990,000	-	1,574	384	991,958	8.00%	(990,000)
4/1/2007	25,000,000	-	164,629	40,179	24,795,192	-	990,000	-	1,637	400	992,037	8.00%	(990,000)
10/1/2007	25,000,000	-	162,926	39,764	24,797,310	-	990,000	-	1,703	416	992,118	8.00%	(990,000)
4/1/2008	25,000,000	-	161,155	39,332	24,799,513	-	990,000	-	1,771	432	992,203	8.00%	(990,000)
10/1/2008	25,000,000	-	159,314	38,882	24,801,804	-	990,000	-	1,842	449	992,291	8.00%	(990,000)
4/1/2009	25,000,000	-	157,398	38,415	24,804,187	-	990,000	-	1,915	467	992,383	8.00%	(990,000)
10/1/2009	25,000,000	-	155,407	37,929	24,806,665	-	990,000	-	1,992	486	992,478	8.00%	(990,000)
4/1/2010	25,000,000	-	153,335	37,423	24,809,242	-	990,000	-	2,072	506	992,577	8.00%	(990,000)
10/1/2010	25,000,000	-	151,180	36,897	24,811,922	-	990,000	-	2,154	526	992,680	8.00%	(990,000)
4/1/2011	25,000,000	-	148,940	36,350	24,814,710	-	990,000	-	2,241	547	992,788	8.00%	(990,000)
10/1/2011	25,000,000	-	146,609	35,782	24,817,609	-	990,000	-	2,330	569	992,899	8.00%	(990,000)
4/1/2012	25,000,000	-	144,186	35,190	24,820,624	-	990,000	-	2,424	592	993,015	8.00%	(990,000)
10/1/2012	25,000,000	-	141,665	34,575	24,823,760	-	990,000	-	2,521	615	993,136	8.00%	(990,000)
4/1/2013	25,000,000	-	139,044	33,935	24,827,021	-	990,000	-	2,621	640	993,261	8.00%	(990,000)
10/1/2013	25,000,000	-	136,317	33,270	24,830,413	-	990,000	-	2,726	665	993,392	8.00%	(990,000)
4/1/2014	25,000,000	-	133,482	32,578	24,833,940	-	990,000	-	2,835	692	993,527	8.00%	(990,000)
10/1/2014	25,000,000	-	130,533	31,858	24,837,609	-	990,000	-	2,949	720	993,669	8.00%	(990,000)
4/1/2015	25,000,000	-	127,466	31,110	24,841,424	-	990,000	-	3,067	748	993,815	8.00%	(990,000)
10/1/2015	25,000,000	-	124,277	30,331	24,845,392	-	990,000	-	3,190	778	993,968	8.00%	(990,000)
4/1/2016	25,000,000	-	120,960	29,521	24,849,519	-	990,000	-	3,317	810	994,127	8.00%	(990,000)
10/1/2016	25,000,000	-	117,510	28,679	24,853,811	-	990,000	-	3,450	842	994,292	8.00%	(990,000)
4/1/2017	25,000,000	-	113,922	27,804	24,858,275	-	990,000	-	3,588	876	994,464	8.00%	(990,000)
10/1/2017	25,000,000	-	110,190	26,893	24,862,917	-	990,000	-	3,732	911	994,642	8.00%	(990,000)
4/1/2018	25,000,000	-	106,309	25,946	24,867,745	-	990,000	-	3,881	947	994,828	8.00%	(990,000)
10/1/2018	25,000,000	-	102,273	24,961	24,872,766	-	990,000	-	4,036	985	995,021	8.00%	(990,000)

SOUTHWEST GAS CORPORATION
Effective Cost Calculation of
7.92% Medium Term Note, Due June 4, 2027

Internal Rate of Return = Effective Rate 8.00%

Semi-Annual Payment	Outstanding Principal	Unamortized Balance: Reacquired Debt Expense	Unamortized Balance: Discount	Unamortized Balance: Debt Expense	Net Proceeds	Redemption	Interest Expense	Amortization of: Reacquired Debt Expense	Amortization of: Discount	Amortization of: Debt Expense	Total Expense	Annual Cost	Cash Flows
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
4/1/2019	25,000,000	-	98,076	23,936	24,877,988	-	990,000	-	4,198	1,024	995,222	8.00%	(990,000)
10/1/2019	25,000,000	-	93,710	22,871	24,883,419	-	990,000	-	4,366	1,065	995,431	8.00%	(990,000)
4/1/2020	25,000,000	-	89,170	21,763	24,889,067	-	990,000	-	4,540	1,108	995,648	8.00%	(990,000)
10/1/2020	25,000,000	-	84,448	20,610	24,894,942	-	990,000	-	4,722	1,152	995,874	8.00%	(990,000)
4/1/2021	25,000,000	-	79,537	19,412	24,901,051	-	990,000	-	4,911	1,199	996,109	8.00%	(990,000)
10/1/2021	25,000,000	-	74,430	18,165	24,907,405	-	990,000	-	5,107	1,246	996,354	8.00%	(990,000)
4/1/2022	25,000,000	-	69,118	16,869	24,914,013	-	990,000	-	5,312	1,296	996,608	8.00%	(990,000)
10/1/2022	25,000,000	-	63,594	15,521	24,920,885	-	990,000	-	5,524	1,348	996,872	8.00%	(990,000)
4/1/2023	25,000,000	-	57,849	14,119	24,928,033	-	990,000	-	5,745	1,402	997,147	8.00%	(990,000)
10/1/2023	25,000,000	-	51,873	12,660	24,935,466	-	990,000	-	5,975	1,458	997,433	8.00%	(990,000)
4/1/2024	25,000,000	-	45,659	11,144	24,943,197	-	990,000	-	6,214	1,517	997,731	8.00%	(990,000)
10/1/2024	25,000,000	-	39,196	9,566	24,951,237	-	990,000	-	6,463	1,577	998,040	8.00%	(990,000)
4/1/2025	25,000,000	-	32,475	7,926	24,959,599	-	990,000	-	6,721	1,640	998,362	8.00%	(990,000)
10/1/2025	25,000,000	-	25,485	6,220	24,968,296	-	990,000	-	6,990	1,706	998,696	8.00%	(990,000)
4/1/2026	25,000,000	-	18,214	4,445	24,977,340	-	990,000	-	7,270	1,774	999,044	8.00%	(990,000)
10/1/2026	25,000,000	-	10,653	2,600	24,986,747	-	990,000	-	7,561	1,845	999,406	8.00%	(990,000)
4/1/2027	25,000,000	-	2,790	681	24,996,529	-	990,000	-	7,864	1,919	999,783	8.00%	(990,000)
6/4/2027	25,000,000	-	-	-	25,000,000	25,000,000	346,500	-	2,790	681	349,971	8.00%	(25,346,500)
						$ 25,000,000	$ 59,400,000	$ -	$ 187,500	$ 45,761	$ 59,633,261		

SOUTHWEST GAS CORPORATION
Effective Cost Calculation of
6.76% Medium Term Note Series A, Due 9/24/27
Put Date September 24, 2007

		Unamortized Balance						Amortization of					
Semi-Annual Payment	Outstanding Principal	Reacquired Debt Expense	Discount	Debt Expense	Net Proceeds	Redemption	Interest Expense	Reacquired Debt Expense	Discount	Debt Expense	Total Expense	Annual Cost	Cash Flows
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
9/23/1997	$ 7,500,000	$ -	$ 46,875	$ 17,228	$ 7,435,897	$ -	$ -	$ -	$ -	$ -	$ -		$ 7,435,897
4/1/1998	7,500,000	-	45,133	16,588	7,438,279	-	264,767	-	1,742	640	267,149	6.88%	(264,767)
10/1/1998	7,500,000	-	43,405	15,953	7,440,642	-	253,500	-	1,728	635	255,863	6.88%	(253,500)
4/1/1999	7,500,000	-	41,618	15,296	7,443,086	-	253,500	-	1,787	657	255,944	6.88%	(253,500)
10/1/1999	7,500,000	-	39,769	14,617	7,445,614	-	253,500	-	1,849	679	256,028	6.88%	(253,500)
4/1/2000	7,500,000	-	37,857	13,914	7,448,229	-	253,500	-	1,912	703	256,115	6.88%	(253,500)
10/1/2000	7,500,000	-	35,879	13,187	7,450,934	-	253,500	-	1,978	727	256,205	6.88%	(253,500)
4/1/2001	7,500,000	-	33,833	12,435	7,453,732	-	253,500	-	2,046	752	256,298	6.88%	(253,500)
10/1/2001	7,500,000	-	31,717	11,657	7,456,626	-	253,500	-	2,116	778	256,394	6.88%	(253,500)
4/1/2002	7,500,000	-	29,527	10,853	7,459,620	-	253,500	-	2,189	805	256,494	6.88%	(253,500)
10/1/2002	7,500,000	-	27,263	10,020	7,462,717	-	253,500	-	2,265	832	256,597	6.88%	(253,500)
4/1/2003	7,500,000	-	24,920	9,159	7,465,920	-	253,500	-	2,342	861	256,703	6.88%	(253,500)
10/1/2003	7,500,000	-	22,497	8,269	7,469,234	-	253,500	-	2,423	891	256,814	6.88%	(253,500)
4/1/2004	7,500,000	-	19,991	7,348	7,472,661	-	253,500	-	2,506	921	256,928	6.88%	(253,500)
10/1/2004	7,500,000	-	17,398	6,395	7,476,207	-	253,500	-	2,593	953	257,045	6.88%	(253,500)
4/1/2005	7,500,000	-	14,717	5,409	7,479,874	-	253,500	-	2,682	986	257,167	6.88%	(253,500)
10/1/2005	7,500,000	-	11,943	4,389	7,483,668	-	253,500	-	2,774	1,020	257,294	6.88%	(253,500)
4/1/2006	7,500,000	-	9,073	3,335	7,487,592	-	253,500	-	2,869	1,055	257,424	6.88%	(253,500)
10/1/2006	7,500,000	-	6,105	2,244	7,491,651	-	253,500	-	2,968	1,091	257,559	6.88%	(253,500)
4/1/2007	7,500,000	-	3,035	1,115	7,495,850	-	253,500	-	3,070	1,128	257,699	6.88%	(253,500)
10/1/2007	7,500,000	-	0.00	0.00	7,500,000	-	253,500	-	3,035	1,115	257,650	6.87%	(253,500)
4/1/2008	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
10/1/2008	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
4/1/2009	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
10/1/2009	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
4/1/2010	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
10/1/2010	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
4/1/2011	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
10/1/2011	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
4/1/2012	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
10/1/2012	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
4/1/2013	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
10/1/2013	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
4/1/2014	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
10/1/2014	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
4/1/2015	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
10/1/2015	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
4/1/2016	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
10/1/2016	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
4/1/2017	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
10/1/2017	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
4/1/2018	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
10/1/2018	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)

SOUTHWEST GAS CORPORATION
Effective Cost Calculation of
6.76% Medium Term Note Series A, Due 9/24/27
Put Date September 24, 2007

		Unamortized Balance						Amortization of					
Semi-Annual Payment	Outstanding Principal	Reacquired Debt Expense	Discount	Debt Expense	Net Proceeds	Redemption	Interest Expense	Reacquired Debt Expense	Discount	Debt Expense	Total Expense	Annual Cost	Cash Flows
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
4/1/2019	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
10/1/2019	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
4/1/2020	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
10/1/2020	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
4/1/2021	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
10/1/2021	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
4/1/2022	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
10/1/2022	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
4/1/2023	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
10/1/2023	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
4/1/2024	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
10/1/2024	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
4/1/2025	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
10/1/2025	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
4/1/2026	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
10/1/2026	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
4/1/2027	7,500,000	-	-	-	7,500,000	-	253,500	-	-	-	253,500	6.76%	(253,500)
9/24/2027	7,500,000	-	-	-	7,500,000	7,500,000	243,642	-	-	-	243,642	6.76%	(7,743,642)
						$ 7,500,000	$ 15,211,408	$ -	$ 46,875	$ 17,228	$ 5,145,370		

Debt expense and discount were completely amortized over the 10-year period prior to the put date of 9/24/2027

TAB 8

IN THE MATTER OF

SOUTHWEST GAS CORPORATION

Docket No. G-01551A-10-___

PREPARED DIRECT TESTIMONY

OF

ROBERT B. HEVERT

ON BEHALF OF

SOUTHWEST GAS CORPORATION

November 12, 2010

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BEFORE THE ARIZONA CORPORATION COMMISSION

Prepared Direct Testimony
Of
Robert B. Hevert

I. INTRODUCTION

Q. 1 Please state your name, affiliation, and business address.

A. 1 My name is Robert B. Hevert. I am President of Concentric Energy Advisors, Inc. ("Concentric"), located at 293 Boston Post Road West, Suite 500, Marlborough, Massachusetts 01752.

Q. 2 On whose behalf are you submitting this testimony?

A. 2 I am submitting this testimony on behalf of Southwest Gas Corporation ("Southwest Gas" or the "Company").

Q. 3 Please describe your educational background and professional experience in the energy and utility industries.

A. 3 I received my Bachelors of Science degree in Finance from the University of Delaware, and my Master's degree in Business Administration from the University of Massachusetts. I also hold the Chartered Financial Analyst designation. I have served as a financial officer of Bay State Gas Company, as well as an executive and manager with other consulting firms (REED Consulting Group and Navigant Consulting, Inc.). I have provided testimony regarding strategic and financial matters, including the cost of capital, before several state utility regulatory agencies as well as the Federal Energy Regulatory Commission on approximately 70 occasions, and have advised numerous energy and utility clients on a wide range of financial and economic issues including both asset and corporate-based transactions. Many of those assignments have included the determination of the cost of capital for valuation purposes. I have provided a summary of my professional and educational background, including a listing of my testimony in prior proceedings in Attachment A to my Direct Testimony.

Q. 4 Please describe Concentric's activities in energy and utility engagements.

A. 4 Concentric provides financial and economic advisory services to many and various energy and utility clients across North America. Our regulatory economic and market analysis services include utility ratemaking and regulatory advisory services; energy market assessments; market entry and exit analysis; corporate and business unit strategy development; demand forecasting, resource planning, and energy contract negotiations. Our financial advisory activities include both buy and sell side merger, acquisition and divestiture assignments, due diligence and valuation assignments, project and corporate finance services, and transaction support services. In addition, we provide litigation support services on a wide range of financial and economic issues on behalf of clients throughout North America.

II. PURPOSE AND OVERVIEW OF TESTIMONY

Q. 5 What is the purpose of your testimony?

A. 5 The purpose of my Direct Testimony is to present evidence and provide a recommendation regarding the Company's return on equity ("ROE").[1] My analyses and recommendations are supported by the data presented in Exhibit No. ___(RBH-1) through Exhibit No. ___(RBH-10), which I or others under my supervision have prepared.

Q. 6 What are your conclusions regarding the appropriate cost of equity for the Company?

A. 6 My analyses indicate that the Company's cost of equity is currently within the range of 10.50 percent to 11.25 percent. I agree with the Commission's position as noted in its recent decision in an Arizona Public Service Company case; that the DCF results alone would not result in an appropriate cost of equity[2]. Therefore, I base my recommendation on the results of several quantitative methodologies and qualitative analyses discussed throughout my Direct Testimony. Considering the results of these analyses, I recommend that the Commission authorize Southwest Gas the opportunity to earn an ROE of 11.00 percent.

Q. 7 Please provide a brief overview of the analysis that led to your ROE recommendation.

A. 7 As discussed in more detail in Section VI, in light of recent and expected capital market conditions, and given the fact that equity analysts and investors tend to use multiple methodologies in developing their return requirements, it is extremely

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1 Throughout my testimony, I interchangeably use the terms "ROE" and "cost of equity."

2 Arizona Corporation Commission Decision No. 69663, Docket No. E-01345A-05-0816, June 28 2007, at 49.

important to consider the results of several analytical approaches in determining the Company's ROE. Therefore, in developing my ROE recommendation, I applied the Constant Growth and Multi-Stage forms of the Discounted Cash Flow ("DCF") model, the Capital Asset Pricing Model ("CAPM"), and the Risk Premium approach.

In addition to the analyses discussed above, my recommendation also takes into consideration: (1) the regulatory and capital environments in which the Company operates; and (2) the Company's credit rating relative to a group of comparison or "proxy" companies. I also considered the flotation costs associated with equity issuances. While I did not make any explicit adjustments to my ROE estimates for those factors, I did take them into consideration when determining where the Company's ROE falls within the range of analytical results.

Q. 8 How is the remainder of your Direct Testimony organized?

A. 8 The remainder of my Direct Testimony is organized in nine sections. Section III reviews the regulatory guidelines and financial considerations pertinent to the development of the cost of capital. Section IV discusses the current capital market conditions and the effect of those conditions on the Company's cost of equity. Section V explains my selection of a proxy group of gas distribution utilities. Section VI describes my analyses and the analytical basis for the recommendation of the appropriate ROE for Southwest Gas. Section VII provides a discussion of specific regulatory and business risks that have a direct bearing on the ROE to be authorized for the Company in this case. Section VIII discusses the effect of the Company's proposed decoupling mechanism on the ROE. Section IX discusses my analyses and the analytical basis for the recommendation regarding the market return on equity Section X discusses my analysis of the Company's proposed fair value rate base and Section XI discusses the calculation of the fair value rate of return.

III. <u>REGULATORY GUIDELINES AND FINANCIAL CONSIDERATIONS</u>

Q. 9 Please describe the guiding principles to be considered in establishing the cost of capital for a regulated utility.

A. 9 The United States Supreme Court's precedent-setting *Hope* and *Bluefield* cases established the standards for determining the fairness or reasonableness of a utility's allowed ROE. Among the standards established by the Court in those cases are: (1) consistency with other businesses having similar or comparable risks; (2) adequacy of the return to support credit quality and access to capital; and (3) the principle that the specific means of arriving at a fair return are not important, only that the end result leads to just and reasonable rates.[3]

Q. 10 Has the Commission provided similar guidance in establishing the appropriate return on common equity?

A. 10 Yes. The Commission has noted that under the Arizona Constitution, a public utility is entitled to a fair return on the fair value of its property devoted to public uses. The Commission is required to find the fair value of the utility's property and to use that value to establish just and reasonable rates.[4]

Q. 11 Why is it important for a utility to be allowed the opportunity to earn a return that is adequate to attract equity capital at reasonable terms?

A. 11 There is a long history of precedent regarding the allowed return on equity, the role of capital structure, and the resulting cost of capital in establishing just and reasonable rates for utility services. Among the themes common to many such decisions is the principle that a utility's cost of capital (including its capital structure and allowed return on common equity) must reflect of other enterprises having comparable risks, and acting independently in the financial markets. As noted elsewhere in my Direct Testimony, a return that is adequate to attract capital at reasonable terms enables the Company to provide safe, reliable natural gas service while maintaining its financial integrity. That return should be commensurate with the returns expected elsewhere in the market for investments of equivalent risk. If it is not, debt and equity investors will seek alternative investment opportunities for which the expected return reflects the perceived risks, thereby impairing the Company's ability to attract capital at reasonable cost rates.

The consequence of the Commission's order in this case, therefore, should be rates that provide the Company with the opportunity to earn a return on equity that is:

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[3] *Bluefield Waterworks & Improvement Co., v. Public Service Commission of West Virginia,* 262 U.S. 679 (1923); *Federal Power Commission v. Hope Natural Gas Co.,* 320 U.S. 591 (1944).

[4] Arizona Corporation Commission Order No. W-02113A-04-0616, *Chaparral City Water Company,* February 13, 2007, at 11. References Ariz. Water co., 85 Ariz. at 203, 335, P.2d at 415.

(1) adequate to attract capital at reasonable terms, thereby enabling it to continue to provide safe and reliable natural gas service; (2) sufficient to ensure its financial integrity; and (3) commensurate with returns on investments in enterprises having corresponding risks. To the extent Southwest Gas is provided the opportunity to earn its market-based cost of capital, neither customers nor shareholders are disadvantaged.

IV. CAPITAL MARKET ENVIRONMENT

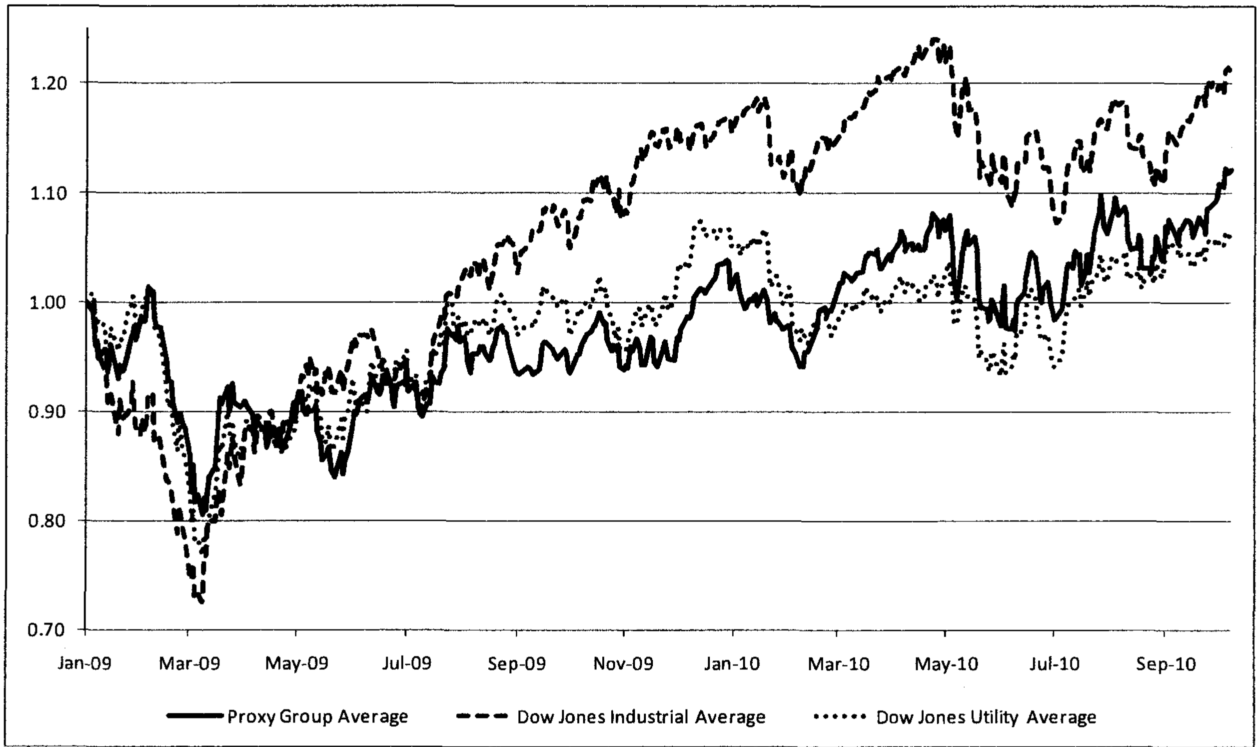
Q. 12 How do economic conditions influence the required cost of capital and required return on common equity?

A. 12 The required cost of capital, including the ROE, is a function of prevailing and expected financial market conditions. Consistent with the *Hope* and *Bluefield* decisions, the authorized ROE for a public utility should allow the company to attract investor capital at reasonable cost under a variety of economic and financial market conditions. The ability to attract capital on reasonable terms is especially important for capital-intensive businesses such as utilities. As such, the Commission's order regarding both the return on equity and the capital structure will have a direct bearing on the Company's financial profile and, therefore, its ability to attract capital at reasonable terms.

Q. 13 How have the recent capital market conditions affected the availability and cost of equity capital?

A. 13 The widely discussed financial market crisis and the following recession led to a general decrease in the availability of, and an increase in, the cost of equity capital for all market sectors, including utilities. From the perspective of equity investors, both the Dow Jones Utility Average and the proxy group used in my analyses have considerably under-performed the general market since the beginning of 2009 (*see* Chart 1, below).

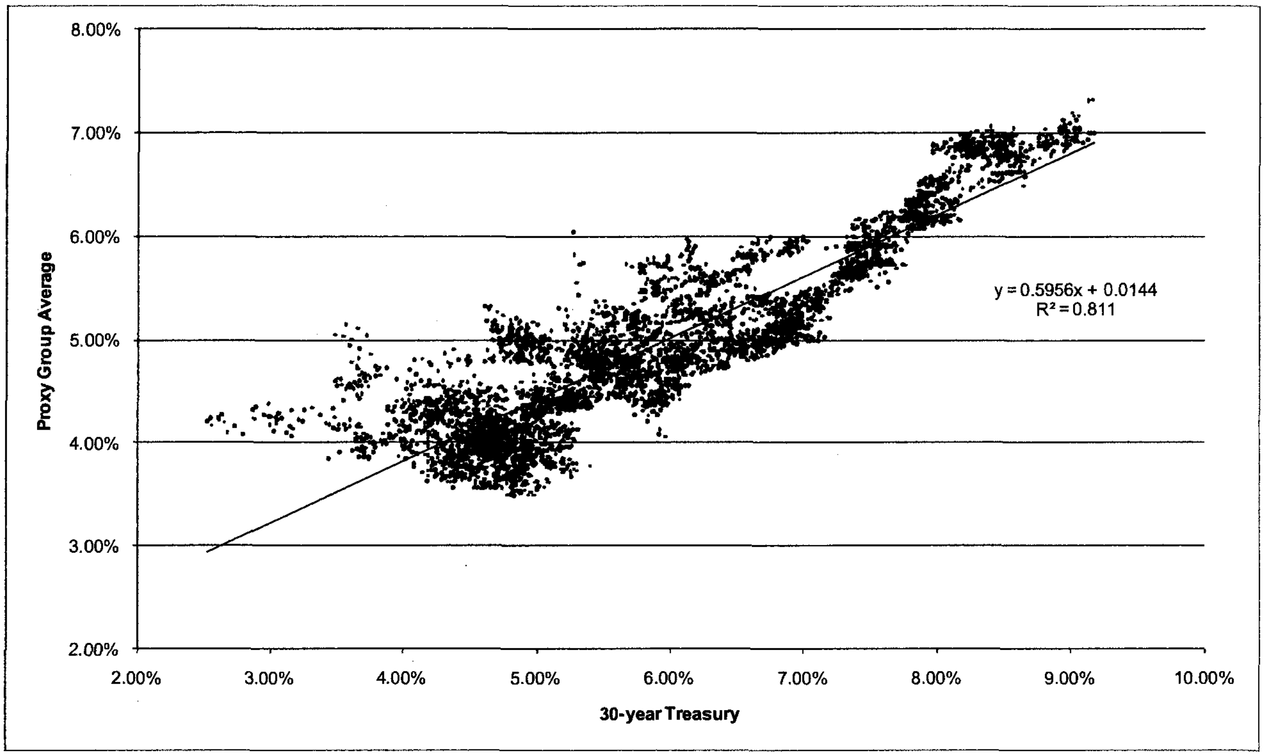
Chart 1: Relative Price Performance 1/1/2009 – 10/8/2010



Q. 14 Does the potential for increasing interest rates represent a source of risk to utilities?

A. 14 Yes, the potential for rising interest rates represents a significant source of risk for utilities. Equity analysts such as Barclays have pointed out the potentially dilutive effects of accessing the capital markets during periods of rising construction costs and increased interest rates. The fact that capital-intensive companies trade inversely to interest rates has long been recognized by the financial community. Value Line, for example, establishes "price targets" based on the ratio of dividends to interest rates; as interest rates increase, the price target declines, resulting in an increased dividend yield. Consistent with Value Line's methodology, as shown in Chart 2 (below), there is a strong statistical relationship between the proxy group companies' average dividend yield and the 30-year Treasury yield.

Chart 2: Proxy Group Average Dividend Yield vs. 30-Year Treasury Yield



Given the historically low level of long-term Treasury rates, it is reasonable to assume that on balance, long-term rates are more likely to increase than decrease in the intermediate to long term. In fact, the Blue Chip Financial Forecast consensus projected 30-year Treasury yield for the years 2013 and 2014 are 5.70 percent and 5.90 percent,[5] respectively, while the 30-day average long-term Treasury yield (*i.e.*, the yield on 30-year Treasury securities) was approximately 3.75 percent as of October 8, 2010. The projected increase of approximately 195 to 215 basis points represents a significant element of market risk for equity valuations of utility companies.

Q. 15 What are the implications of current market conditions on the company's cost of equity?

A. 15 In general, while capital market conditions have moderated since the height of the financial crisis, there remain elevated levels of uncertainty and risk aversion on the part of equity investors. As a consequence, the cost of capital remains high relative to the levels observed before the third quarter of 2008.

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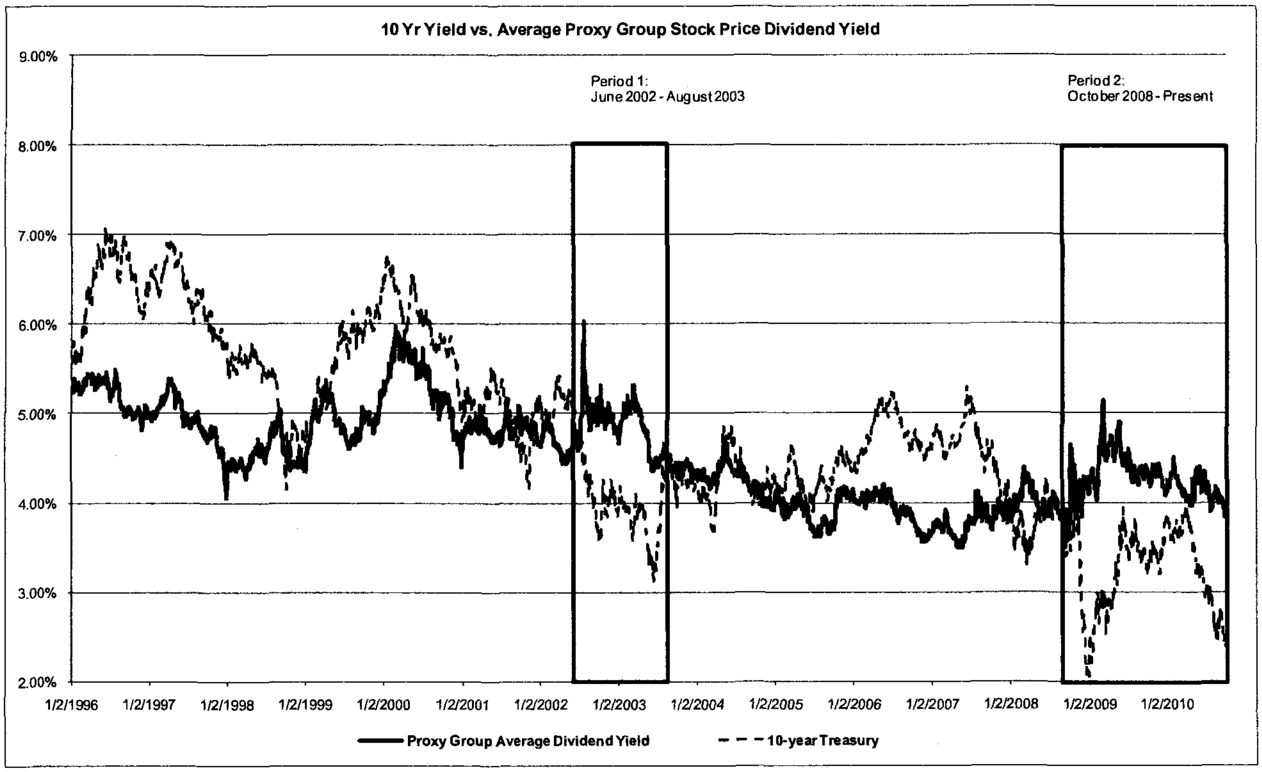
[5] Blue Chip Financial Forecast, Vol. 29, No. 6, June 1, 2010, at 14.

Q. 16 What analysis have you conducted to assess current capital market conditions?

A. 16 Because Treasury security interest rates remain at historically low levels, I examined the relationship between the interest rate on ten-year Treasury notes and the dividend yield of my proxy group over time.

Chart 3: Treasury Yield/Dividend Yield Inversion



As shown in Chart 3, the 2008 – 2009 financial dislocation created the inversion (wherein, as opposed to its typical relationship, the dividend yield exceeded the Treasury yield) of the ten year Treasury yield relative to the proxy group average dividend yield in five years. The most recent period during which these yields were significantly inverted was the period from mid-2002 through mid-2003, which likewise was a period of credit and equity valuation contraction.

A 2009 article in The Wall Street Journal described this same inverted relationship between utility dividend yields and the ten-year Treasury yield, noting that:

> ...dividend yields have tended to track the yield on 10-year Treasurys closely. Since 1970, the spread of regulated utilities' dividend yields over Treasury yields has averaged 0.24

> percentage point. Today, with utilities yielding about 5.65%, the spread is 10 times that, having peaked in March at 3.75 percentage points. You have to go all the way back to the early 1980s for the last time it reached such heights.
>
> ***
>
> Regulated utilities' dividend yields decoupled from Treasury yields in December 2007, as the U.S. recession began. After the initial flight to quality cut yields on Treasurys, particularly after Lehman Brothers collapsed in September 2008, the Federal Reserve's policy of buying up government debt has helped keep them low.[6]

Significantly, that inversion of dividend yield relative to the ten-year Treasury has continued unabated since that article was published, demonstrating the extraordinarily low level of Treasury yields discussed previously and the continuing high level of capital market uncertainty.

Q. 17 What conclusions do you draw from these analyses?

A. 17 These analyses demonstrate that the current capital market continues to experience high levels of risk aversion, and dislocation. The result, of course, is an increased, not a decreased cost of equity. As noted in the June 2010 Federal Reserve Open Market Committee ("FOMC") Minutes, during the period from April to June 2010, "[t]he spread between the staff's estimate of the expected real return on equities over the next 10 years and an estimate of the expected real return on a 10-year Treasury note—a measure of the equity risk premium—increased from its already elevated level."[7]

Finally, while certain capital market indices have moderated since the height of the financial crisis, both debt and equity investors are concerned with the potential that rising interest rates could result in a diminished financial profile for utility companies. This concern is particularly relevant because interest rates are projected to increase, thereby placing additional pressure on cash flow metrics and credit quality for utility companies such as Southwest Gas. Under such conditions, regulatory policies that are perceived as unsupportive of credit quality may well add to investors' views of relative risk. To the extent that is the case, the Commission's

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6 *A Short Circuit in the Stock Market*, The Wall Street Journal, Liam Denning, October 23, 2009, at C10.

7 Federal Open Market Committee, Minutes of the Meeting of June 22-23, 2010, at 6.

decision in this proceeding would have a direct bearing on the Company's overall cost of capital.

Q. 18 How should current economic conditions and capital spending plans be taken into consideration in determining the appropriate ROE for the Company?

A. 18 In my view, the authorized rate of return in this proceeding will provide a signal to the financial community concerning the ability of the Company to meet its capital needs during a period in which its capital investments are increasing, and both debt and equity investors are requiring higher rates of return. If investors perceive a supportive regulatory environment, as evidenced by an allowed rate of return that compensates the Company at a level commensurate with its risk, the Company should be able to attract equity capital at a reasonable cost.

V. PROXY GROUP SELECTION

Q. 19 Please explain why you have used a group of proxy companies to determine the cost of equity for Southwest Gas.

A. 19 First, it is important to bear in mind that the cost of equity for a given enterprise depends on the risks attendant to the business in which the company is engaged. According to financial theory, the aggregate value of a given company is equal to the market value weighted average of the constituent business units. The value of the individual business units reflects the risks and opportunities inherent in the business sectors in which those units operate. In this proceeding, I am estimating the cost of equity for the Arizona jurisdictional gas distribution operations of Southwest Gas, a rate-regulated, public service corporation. Since the ROE is a market-based concept, and given the fact that Southwest Gas's Arizona jurisdictional operations do not make up the entirety of the publicly traded entity, it is necessary to establish a group of companies that are both publicly traded and comparable to Southwest Gas in certain fundamental business and financial respects to serve as its "proxy" for purposes of the ROE estimation process.

Even if Southwest Gas's Arizona jurisdictional operations made up the entirety of the publicly traded entity, it is possible that transitory events could bias its market value in one way or another over a given period of time. A significant benefit of using a proxy group, therefore, is its ability to mitigate the effects of anomalous events that may be associated with any one company. As discussed later in my Direct Testimony, the proxy companies used in my analyses all possess a set of operating and risk characteristics that are substantially comparable to Southwest Gas's gas distribution operations, and thus provide a reasonable basis for the derivation and assessment of ROE estimates.

The importance of selecting a proxy group that is similar in overall financial and business risk to the subject company was endorsed by the United States Court of Appeals for the District of Columbia (the "Court of Appeals") in the *Petal Gas Storage* decision. The Court of Appeals acknowledged that the goal of a proxy group is to rely on companies that possess similar risk to the subject company for the determination of the cost of equity:

> That proxy group arrangements must be risk-appropriate is the common theme in each argument. The principle is well-established. *See Hope Natural Gas Co.*, 320 U.S. at 603 ("[T]he return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks."); *CAPP I*, 254 F.3d at 293 ("[A] utility must offer a risk-adjusted expected rate of return sufficient to attract investors."). The principle captures what proxy groups do, namely, provide market-determined stock and dividend figures from public companies comparable to a target company for which those figures are unavailable. *CAPP I*, 254 F.3d at 293–94. Market determined stock figures reflect a company's risk level and, when combined with dividend values, permit calculation of the "risk-adjusted expected rate of return sufficient to attract investors."[8]
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> ***
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> What matters is that the overall proxy group arrangement makes sense in terms of relative risk and, even more importantly, in terms of the statutory command to set "just and reasonable" rates, 15 U.S.C. § 717c, that are "commensurate with returns on investments in other enterprises having corresponding risks" and "sufficient to assure confidence in the financial integrity of the enterprise . . . [and] maintain its credit and . . . attract capital," *Hope Natural Gas Co.*, 320 U.S. at 603.[9]

[8] *Petal Gas Storage v. FERC*, 496 F.3d 695, 699 (D.C. Cir. 2007).
[9] *Ibid.*, at 7.

Thus, regulatory commissions and analysts alike recognize the importance of developing a proxy group that adequately represents the ongoing risks and prospects of the subject company.

Q. 20 Does the rigorous selection of a proxy group suggest that analytical results will be tightly clustered around average (*i.e.*, mean) results?

A. 20 Not necessarily. As discussed in greater detail in Section VI, the DCF approach is based on the theory that a stock's current price represents the present value of its expected future cash flows. For example, the Constant Growth form of the DCF model is defined as the sum of the expected dividend yield and projected long-term growth. Notwithstanding the care taken to ensure risk comparability, market expectations with respect to future risks and growth opportunities will vary from company to company. Therefore, even within a group of similarly situated companies, it is common for analytical results to reflect a seemingly wide range. At issue, then, is how to select an ROE estimate in the context of that range. As discussed throughout my Direct Testimony, that determination must necessarily be based on an assessment of the company-specific risks relative to the proxy group, as well as the informed judgment and experience of the analyst.

Q. 21 Please provide a brief profile of Southwest Gas.

A. 21 Southwest Gas provides natural gas distribution service to approximately 976,000 customers in Arizona.[10] The Company also has operations in Nevada and California serving a total of approximately 1,824,000 customers. Operating income from gas distribution operations accounted for 93.62 percent of Southwest Gas's total operating income in 2009.[11] Southwest Gas Corporation currently has Long Term Issuer credit ratings from S&P of BBB (Outlook: Positive), from Moody's of Baa2 (Outlook: Stable) and from Fitch Ratings of BBB (Outlook: Positive).

Q. 22 How did you select the companies included in your proxy group?

A. 22 The proxy group was selected based on the following criteria:

- I began with the group of 12 companies that currently are classified as Natural Gas Utilities by Value Line. Those companies include: AGL Resources Inc.,

[10] Direct Testimony of Randi L. Aldridge.

[11] Southwest Gas 2009 SEC Form 10-K, at 66.

Atmos Energy Corp., Laclede Group, Inc., New Jersey Resources Corp., Nicor, Inc., NiSource Inc., Northwest Natural Gas Co., Piedmont Natural Gas Co., South Jersey Industries, Inc., Southwest Gas Corp., UGI Corp., and WGL Holdings, Inc.;

- I eliminated companies that did not have long-term growth forecasts from at least two utility industry equity analysts; and
- To incorporate companies that are primarily regulated gas distribution utilities, I have only included companies with at least 60.00 percent of net operating income from regulated natural gas utility operations.

While I did not include specific criteria regarding credit rating and merger activities, I note that all of the companies included in the Value Line segment have investment grade credit ratings, and none are currently involved in a transformational merger or transaction. Consequently, none of the potential proxy companies would have been eliminated on those bases.

Q. 23 Did you include Southwest Gas Corporation in your analysis?

A. 23 No. In order to avoid the circular logic that otherwise would occur, it is my practice to exclude the subject company, or its parent holding company, from the proxy group.

Q. 24 Based on those criteria, what was the composition of your final proxy group?

A. 24 The criteria discussed above resulted in a proxy group consisting of the nine companies provided in Table 1 (below).

Table 1: Proxy Group

Company	**Ticker**
AGL Resources Inc.	AGL
Atmos Energy Corp.	ATO
Laclede Group, Inc.	LG
Nicor, Inc.	GAS
New Jersey Resources Corp.	NJR
Northwest Natural Gas Co.	NWN
Piedmont Natural Gas Co. Inc.	PNY
South Jersey Industries, Inc.	SJI
WGL Holdings, Inc.	WGL

Q. 25 Do you believe that a total of nine companies constitutes a sufficiently large proxy group?

A. 25 Yes, I do. The analyses performed in estimating the ROE are more likely to be representative of the subject utility's cost of equity to the extent that the chosen proxy companies are fundamentally comparable to the subject utility. Because all analysts use some form of screening process to arrive at a proxy group, the group, by definition, is not randomly drawn from a larger population. Consequently, there is no reason to place more reliance on the quantitative results of a larger proxy group simply by virtue of the resulting larger number of observations.

Moreover, because I am using market-based data, my analytical results will not necessarily be tightly clustered around a central point. Results that may be somewhat dispersed, however, do not suggest that the screening approach is inappropriate or the results less meaningful. In my view, including companies whose fundamental comparability is tenuous at best simply for the purpose of expanding the number of observations does not add relevant information to the analysis.

VI. <u>COST OF EQUITY ESTIMATION</u>

Q. 26 Please briefly discuss the ROE in the context of the regulated rate of return.

A. 26 Regulated utilities primarily use common stock and long-term debt to finance their permanent property, plant, and equipment. The overall rate of return ("ROR") for a regulated utility is based on its weighted average cost of capital, in which the cost rates of the individual sources of capital are weighted by their respective book values. While the costs of debt and preferred stock can be directly observed, the cost of equity is market-based and, therefore, must be estimated based on observable market information.

Q. 27 How is the required ROE determined?

A. 27 The required ROE is estimated by using one or more analytical techniques that rely on market-based data to quantify investor expectations regarding required equity returns, adjusted for certain incremental costs and risks. By their very nature, quantitative models produce a range of reasonable results from which the market required ROE is selected. As discussed throughout my Direct Testimony, that selection must be based on a comprehensive review of relevant data and information, and does not necessarily lend itself to a strict mathematical solution. As a general proposition, the key consideration in determining the cost of equity is to ensure that the methodologies employed reasonably reflect investors' view of the financial markets in general, and the subject company (in the context of the proxy group) in particular.

Q. 28 Why do you believe it is important to use more than one analytical approach?

A. 28 When faced with the task of estimating the cost of equity, analysts are inclined to gather and evaluate as much relevant data (both quantitative and qualitative) as can be reasonably analyzed. For that reason, Concentric employs multiple approaches to estimate the cost of equity used in performing valuation analyses in the context of our financial advisory and transaction practices. In addition, as a practical matter all of the models available to estimate the cost of equity are subject to limiting assumptions or other methodological constraints, many of which are inconsistent with the actual conditions prevailing in the marketplace. Consequently, many finance texts recommend using multiple approaches when estimating the cost of equity. Copeland, Koller and Murrin,[12] for example, suggest using the CAPM and Arbitrage Pricing Theory model, while Brigham and Gapenski[13] recommend the CAPM, DCF and "Bond Yield plus Risk Premium" approaches.

Although we cannot directly observe the cost of equity, we can observe the methods frequently used by analysts to arrive at their return requirements and expectations. While investors and analysts tend to use multiple approaches in developing their estimate of return requirements, each methodology requires certain judgment with respect to the reasonableness of assumptions and the validity of proxies in its application. In essence, analysts and academics understand that ROE models are tools to be used in the ROE estimation process and that strict adherence to any single approach, or the specific results of any single approach, can lead to flawed and irrelevant conclusions. That position is consistent with the *Hope* and *Bluefield*

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12 Tom Copeland, Tim Koller and Jack Murrin, Valuation: Measuring and Managing the Value of Companies, 3rd ed. (New York: McKinsey & Company, Inc., 2000), at 214.

13 Eugene Brigham, Louis Gapenski, Financial Management: Theory and Practice, 7th Ed. (Orlando: Dryden Press, 1994), at 341.

finding that it is the analytical result, as opposed to the methodology, that is controlling in arriving at ROE determinations. A reasonable ROE estimate therefore considers alternative methodologies, observable market data, and the reasonableness of their individual and collective results.

In my view, therefore, it is both prudent and appropriate to use multiple methodologies in order to mitigate the effects of assumptions and inputs associated with relying exclusively on any single approach. Such use, however, must be tempered with due caution as to the results generated by each individual approach. Therefore, in light of the capital market practices discussed above, I have considered the results of the Constant Growth and Multi-Stage form of the DCF model, the Capital Asset Pricing Model, and the Risk Premium approach.

A. Constant Growth DCF Model

Q. 29 Are DCF models widely used to determine the ROE for regulated utilities?

A. 29 Yes. DCF models are widely used in regulatory proceedings and have sound theoretical bases, although neither the DCF model nor any other model can be applied without considerable judgment in the selection of data and the interpretation of results. In a previous Southwest Gas rate order, the Commission stated that the:

> [u]se of the DCF as the primary basis for determining the Company's reasonable estimated cost of equity capital is a methodology that has been used for many years by this Commission, as well as other regulatory commissions across the country.[14]

In its simplest form, the DCF model expresses the cost of equity as the sum of the expected dividend yield and long-term growth rate.

Q. 30 Please describe the DCF approach.

A. 30 The DCF approach is based on the theory that a stock's current price represents the present value of all expected future cash flows. In its most general form, the DCF model is expressed as follows:

[14] *In the Matter of the Application of Southwest Gas Corporation for the Establishment of Just and Reasonable Rates and Charges Designed to Realize a Reasonable Rate of Return of the Fair Value of its Properties of Southwest Gas Corporation Devoted to its Operations throughout Arizona,* Opinion and Order, Arizona Corporation Commission, Docket No. G-01551A-04-0876. February 23, 2006 at 29.

$$P_0 = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + ... + \frac{D_\infty}{(1+k)^\infty} \quad [1]$$

where:

P_0 = the current stock price;

$D_1 \ldots D_\infty$ = all expected future dividends; and

k = the discount rate or required ROE.

Equation [1] is a standard present value calculation that can be simplified and rearranged into the familiar form:

$$k = \frac{D(1+g)}{P_0} + g \quad [2]$$

Equation [2] is often referred to as the "Constant Growth DCF" model in which the first term is the expected dividend yield and the second term is the expected long-term growth rate.

Q. 31 What assumptions are required for the Constant Growth DCF model?

A. 31 The Constant Growth DCF model is predicated on the following assumptions: (1) a constant growth rate for earnings and dividends; (2) a stable dividend payout ratio; (3) a constant price-to-earnings multiple; and (4) a discount rate greater than the expected growth rate. To the extent that any of these assumptions is violated, the need to apply considered judgment and/or specific adjustments to the model's results is increased.

B. Dividend Yield for the Constant Growth DCF Model

Q. 32 What market data did you use to calculate the dividend yield in your Constant Growth DCF model?

A. 32 The dividend yield in my Constant Growth DCF model is based on the proxy companies' current annual dividend and average closing stock prices over the 30-, 90- and 180-trading days ended October 8, 2010.

Q. 33 Why did you use three averaging periods?

A. 33 I believe it is important to use an average of trading days to calculate the term P_0 in the DCF model to ensure that the calculated ROE is not skewed by anomalous events that may affect stock prices on any given trading day. In that regard, the averaging period should be reasonably representative of expected capital market conditions over the long term. At the same time, it is important to reflect the volatile conditions definitive of the financial markets over the recent past. In my view, the use of the 30, 90, and 180- day averaging periods reasonably balances those concerns.

Q. 34 Putting aside the issue of the averaging period, did you make any adjustments to the dividend yield to account for periodic growth in dividends?

A. 34 Yes. Since utility companies tend to increase their quarterly dividends at different times throughout the year, it is reasonable to assume that dividend increases will be evenly distributed over calendar quarters. Given that assumption, it is reasonable to apply one-half of the expected annual dividend growth for purposes of calculating the expected dividend yield component of the DCF model. This adjustment ensures that the expected dividend yield is, on average, representative of the coming twelve-month period, and does not overstate the aggregated dividends to be paid during that time. Accordingly, the DCF estimates provided in Exhibit No. ___(RBH-1) reflect one-half of the expected growth in the dividend yield component of the model.

C. Growth Rates for the DCF Model

Q. 35 Why is it important to select appropriate measures of long-term growth in applying the Constant Growth DCF model?

A. 35 In its Constant Growth form, the DCF model (*i.e.*, Equation [2]) assumes a single growth estimate in perpetuity. In order to reduce the long-term growth rate to a single measure, one must assume a constant payout ratio, and that earnings per share, dividends per share and book value per share all grow at the same constant rate. This can be accomplished by averaging those measures of long-term growth that tend to be least influenced by capital allocation decisions that companies may make in response to near-term changes in the business environment. Since such decisions may directly affect near-term dividend payout ratios, estimates of earnings growth are more indicative of long-term investor expectations than are dividend or book value growth estimates. Over the long term dividend growth can only be sustained by earnings growth, and as such, it is important to incorporate a variety of measures of long-term earnings growth into the Constant Growth DCF model. Therefore, for the purposes of the Constant Growth form of the DCF model, growth in earnings per share represents the appropriate measure of long-term growth.

Q. 36 Please describe the retention growth estimate as applied in your Constant Growth DCF.

A. 36 The Retention Growth model, which is a generally recognized and widely taught method of estimating long-term growth, is an alternative approach to the use of analysts' earnings growth estimates. In essence, the model is premised on the proposition that a firm's growth is a function of its expected earnings, and the extent to which it retains earnings to invest in the enterprise. In its simplest form, the model represents long-term growth as the product of the retention ratio (*i.e.*, the percentage of earnings not paid out as dividends, referred to below as ("b") and the expected return on book equity (referred to below as ("r")). Thus, the simple "b x r" form of the model projects growth as a function of internally generated funds. That form of the model is limiting, however, in that it does not provide for growth funded from external equity.

The "br + sv" form of the Retention Growth estimate used in my DCF analysis is meant to reflect growth from both internally generated funds (*i.e.*, the "br" term) and from issuances of equity (*i.e.*, the "sv" term). The first term, which is the product of the retention ratio (*i.e.*, "b", or the portion of net income not paid in dividends) and the expected return on equity (*i.e.*, "r") represents the portion of net income that is "plowed back" into the Company as a means of funding growth. The "sv" term can be represented as:

$(\frac{m}{b} - 1)$ x Common Shares growth rate [3]

where:

$\frac{m}{b}$ = the Market to Book ratio.

In this form, the "sv" term reflects an element of growth as the product of (a) the growth in shares outstanding, and (b) that portion of the market-to-book ratio that exceeds unity. As shown in Exhibit No. ___(RBH-2), all of the components of the Retention Growth Model can be derived from data provided by Value Line.

Q. 37 Please summarize your inputs to the Constant Growth DCF model.

A. 37 I applied the Constant Growth DCF model to the proxy group of nine gas distribution companies using the following inputs for the price and dividend terms:

1. The average daily closing prices for the 30-, 90-, and 180-trading days ended October 8, 2010 for the term P_0; and
2. The annualized dividend per share as of October 8, 2010 for the term D_0.

I then calculated the DCF results using each of the following growth terms:

1. The Zacks consensus long-term earnings growth estimates;
2. The First Call consensus long-term earnings growth estimates;
3. The Value Line long-term earnings growth estimates; and
4. The projected Retention Growth rates.

D. Multi-Stage DCF Model

Q. 38 What other forms of the DCF model have you considered?

A. 38 In order to address some of the limiting assumptions underlying the Constant Growth form of the DCF model, I also considered the results of a multi-period (three-stage) Discounted Cash Flow Model. The multi-stage model, which is an extension of the Constant Growth form, enables the analyst to specify growth rates over three distinct stages. As with the Constant Growth form of the DCF model, the multi-period form defines the cost of equity as the discount rate that sets the current price equal to the discounted value of future cash flows. Unlike the Constant Growth form, however, the multi-period model must be solved in an iterative fashion.

Q. 39 Please generally describe the structure of your multi-stage model.

A. 39 As noted above, the model sets the subject company's stock price equal to the present value of future cash flows received over three "stages." In the first two stages, cash flows are defined as projected dividends. In the third stage, cash flows equal both dividends and the expected price at which the stock will be sold at the end of the period. I employed two different methods to estimate the expected terminal stock price. The first approach is based on the Gordon model, which defines the price as the expected dividend divided by the difference between the cost of equity (*i.e.*, the discount rate) and the long-term expected growth rate. The second approach estimates the terminal stock price based on the projected average annual price-to-earnings ("P/E") ratio provided by Value Line. The expected price is the product of the earnings per share estimate for the final year and the projected P/E ratio. In each of the three stages, the dividend is the product of the projected earnings per share and the expected dividend payout ratio. A summary description of the model is provided in Table 2 (below).

Table 2: Multi-Stage DCF Structure

Stage	0	1	2	3
Cash Flow Component	Initial Stock Price	Expected Dividend	Expected Dividend	Expected Dividend + Terminal Value
Inputs	Stock Price Earnings Per Share ("EPS") Dividends Per Share ("DPS")	Expected EPS Expected DPS	Expected EPS Expected DPS	Expected EPS Expected DPS Terminal Value
Assumptions	30, 90, and 180-day average stock price	EPS growth rate Payout ratio		Long-term growth rate

Q. 40 What are the specific benefits of a three-stage model?

A. 40 Because the second stage allows for a transition from the first stage growth rate to the long-term growth rate, the three-stage model avoids the often unrealistic assumption that growth will change immediately between the first and final stages. Additionally, because the model projects dividends as the product of earnings per share and the payout ratio, it provides the important ability to recognize that payout ratios may change over time.

It also is very important to note that while the model calculates the cost of equity based on expected dividends, it does not rely solely on Value Line for dividend growth rate projections. A common and legitimate criticism of DCF models that rely on projected dividend growth rates (especially in the Constant Growth form of the model) is that Value Line is the sole source of such projections.[15] While the form of the three-stage model I have used relies on Value Line for projected payout and P/E ratios, the potential bias resulting from reliance on a single analyst is mitigated by the use of consensus earnings forecasts. The model also enables the analyst to assess the reasonableness of the inputs and results by reference to certain market-based metrics. For example, when using the Gordon model approach to estimate the terminal price, the stock price estimate can be divided by the expected earnings per share in the final year to calculate an average P/E ratio. To the extent that the projected P/E ratio is inconsistent with either historical or expected levels, it may indicate incorrect or inconsistent assumptions within the balance of the model.

Q. 41 Please summarize your inputs to the Multi-Period DCF model.

A. 41 I applied the multi-period model to the proxy group described earlier in my Direct Testimony. My assumptions with respect to the various model inputs are described in Table 3 (below).

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15 *Ibid. See,* for example, Harris and Marston, *Estimating Shareholder Risk Premia Using Analysts' Growth Forecasts*, Financial Management, 21 (Summer 1992).

Table 3: Multi-Stage DCF Model Assumptions

Stage	0	1	2	3
Stock Price	30, 90, and 180-day average stock price as of October 8, 2010			
Earnings Growth	EPS as reported by Value Line	EPS growth as average of (1) Value Line, (2) Zacks, and (3) First Call projected growth rates	Transition to Long-term GDP growth on geometric average basis	Long-term GDP growth
Payout Ratio		Value Line company-specific	Transition to industry average payout ratio (Value Line) on a geometric average basis	Industry average (Value Line)
Terminal Value				Expected dividend in final year divided by solved cost of equity less long-term growth rate or expected EPS in final year multiplied by Value Line projected P/E ratio

Q. 42 How did you calculate the long-term GDP growth rate?

A. 42 The long-term growth rate of 5.83 percent is based on the real GDP growth rate of 3.28 percent from 1929 through 2009,[16] and an inflation rate of 2.47 percent. The GDP growth rate is calculated as the compound growth rate in the chain-weighted GDP for the period from 1929 through 2009.[17] The rate of inflation of 2.47 percent is based on the average of the long-term projected growth rate in the Consumer Price Index ("CPI") for all urban consumers, as reported by Blue Chip Economic Indicators

[16] Source: Bureau of Economic Analysis

[17] The growth rate in CPI as reported by the Energy Information Administration in the 2010 Annual Energy Outlook, Table A20.

of 2.50 percent[18] and the compound annual CPI growth rate of 2.45 percent projected by the Energy Information Administration ("EIA") in the 2010 Annual Energy Outlook.[19]

Q. 43 What were your specific assumptions with respect to the payout ratio?

A. 43 As noted in Table 3, for the first two periods I relied on the first year and long-term projected payout ratios reported by Value Line[20] for each of the proxy group companies. I then assumed that the long-term payout ratios for the proxy group will converge to the long-term average payout ratio of the natural gas distribution companies as reported by Value Line. The long-term average payout ratio for this industry segment is 71.18 percent.

Q. 44 Did you also consider the alternative analysis in which the terminal value was calculated based on the expected price/earnings ratio?

A. 44 Yes, I also considered the results of estimating the terminal stock price based on the expected earnings per share in the final year and the projected P/E ratio as provided by Value Line. The summary of the Multi-Stage model's results that appear in Table 4 (below) presents the ROE estimates using both terminal stock price estimation techniques.

E. Discounted Cash Flow Model Results

Q. 45 Please summarize the results of your DCF analyses.

A. 45 Table 4 (below), (*see* also Exhibit No. ___(RBH-1) and Exhibit No. ___(RBH-3)), presents the results of the Constant Growth and Multi-Stage DCF analyses. Setting aside the low results, the Constant Growth DCF model produces a range of results from 8.39 percent to 9.71 percent. Using the Gordon model to calculate the terminal stock price, the Multi-Stage DCF analysis produces a range of results from 10.48 percent to 10.66 percent, while using the long-term P/E model to calculate the

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18 Blue Chip Financial Forecasts, Vol. 29, No. 6, June 1, 2010, at 14. The long-term average growth rate in CPI is for the period from 2017 through 2021.

19 EIA 2010 Annual Energy Outlook, Table A20. Macroeconomic Indicators. Please note that 5.83% = [(1+3.28%) x (1+2.47%)]-1.

20 As reported in the December 11, 2009 Value Line Investment Survey for Gas Distribution Utilities as "All Div'ds to Net Prof."

terminal stock price, the Multi-Stage analysis produces a range of results from 10.08 percent to 10.49 percent.

Table 4: Discounted Cash Flow Analyses Results

	Mean Low	Mean	Mean High
Constant Growth DCF			
30-Day Average	7.43%	8.39%	9.55%
90-Day Average	7.54%	8.50%	9.65%
180-Day Average	7.59%	8.55%	9.71%
Multi-Stage DCF	**Long-Term P/E Model**	**Mean**	**Gordon Model**
30-Day Average	10.08%	10.28%	10.48%
90-Day Average	10.36%	10.48%	10.60%
180-Day Average	10.49%	10.58%	10.66%

Q. 46 Referring to your Constant Growth DCF model, how did you calculate the mean high and mean low results?

A. 46 I calculated the mean high result for my Constant Growth DCF model using the maximum growth rate (*i.e.*, the maximum of the Zacks, First Call, and Value Line EPS growth rates together with the Retention Growth rate) in combination with the dividend yield for each of the proxy group companies. Thus, the mean high result reflects the maximum DCF result for the proxy group. I used a similar approach to calculate the mean low results, using the minimum growth rate for each proxy group company.

Q. 47 Did you give the Constant Growth DCF results specific weight in arriving at your ROE recommendation?

A. 47 No, I did not. As a practical matter, there is no reasonable benchmark that could rationalize a mean result as low as 8.55 percent. That is especially true given the continuing level of volatility and uncertainty that persist in the equity markets. Those findings lead me to believe that the models underlying assumptions have so deviated from market reality that its results cannot be considered a reasonable and reliable estimate of the Company's cost of equity. Furthermore, I note that my conclusion in this regard is consistent with the Commission's position in the recent Arizona Public

Service case; that the DCF results (based on the Constant Growth version of the DCF model) would not result in an appropriate cost of equity.[21]

Q. 48 Referring now to your Multi-Stage DCF model, are those results consistent with other market indices?

A. 48 Yes, they are. Based on the assumptions described earlier, when using the Gordon model method to estimate the terminal price, the Multi-Stage model produces average P/E multiples of 15.77 to 16.45 (depending upon the stock price averaging period). This range is consistent with the projected proxy group average P/E ratio of 13.00 to 18.00 for 2013 through 2015.[22]

Q. 49 Did you undertake any additional analyses to support your DCF model results?

A. 49 Yes. As noted earlier, I also used the CAPM and the Risk Premium approach as a means of assessing the reasonableness of my DCF results.

F. CAPM Analysis

Q. 50 Please briefly describe the general form of the Capital Asset Pricing Model.

A. 50 The CAPM is a risk premium approach that estimates the cost of equity for a given security as a function of a risk-free return plus a risk premium (to compensate investors for the non-diversifiable or "systematic" risk of that security). As shown in Equation [4], the CAPM is defined by four components, each of which must theoretically be a forward-looking estimate:

$$K_e = r_f + \beta(r_m - r_f) \quad [4]$$

where:

K_e = the required market ROE;

β = Beta of an individual security;

r_f = the risk-free rate of return; and

r_m = the required return on the market as a whole.

In this specification, the term $(r_m - r_f)$ represents the market risk premium. According to the theory underlying the CAPM, since unsystematic risk can be

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21 Arizona Corporation Commission, Docket No. E-01345A-05-08816, Decision No. 69663, June 28, 2007, at 49.

22 Projected P/E ratios provided by Value Line.

diversified away, investors should be concerned only with systematic or non-diversifiable risk. Non-diversifiable risk is measured by Beta, which is defined as:

$$\beta = \frac{Covariance(r_e, r_m)}{Variance(r_m)} \quad [5]$$

The variance of the market return, noted in Equation [5], is a measure of the uncertainty of the general market, and the covariance between the return on a specific security and the market reflects the extent to which the return on that security will respond to a given change in the market return. Thus, Beta represents the risk of the security relative to the market.

Q. 51 What risk-free rate did you use in your CAPM model?

A. 51 Since both the DCF and CAPM models assume long-term investment horizons, I used the current 30-day average yield on 30-year Treasury bonds (*i.e.*, 3.75 percent) and the near-term projected 30-year Treasury yield (*i.e.*, 4.22 percent) as my estimate of the risk-free rate.

Q. 52 What market risk premium did you use in your CAPM model?

A. 52 I used two expected (*ex-ante*) measures of the Market Risk Premium. My first *ex-ante* estimate is based on the expected return on the S&P 500 Index, less the current 30-year Treasury bond yield. The expected return on the S&P 500 is calculated using the Constant Growth DCF model discussed earlier in my testimony for the companies in the S&P 500 index for which long-term earnings projections are available (the companies with such projections represent 97.22 percent of the index market capitalization). Based on an estimated weighted-index dividend yield of 1.88 percent and a weighted-index long-term growth rate of 11.17 percent, the estimated required market return for the S&P 500 index is approximately13.16 percent. The implied Market Risk Premium over the current 30-day average of the 30-year Treasury yield of 3.75 percent is approximately 9.42 percent.

The second *ex-ante* approach assumes a constant Sharpe Ratio, which is the ratio of the Risk Premium relative to the risk, or standard deviation of a given security or index of securities. As shown in Exhibit No. ___(RBH-4), the constant Sharpe Ratio is the ratio of the historical risk premium of 6.70 percent and the historical market volatility of 20.40 percent (0.067/0.2040 = 0.3285 or 32.85 percent).[23] The expected Risk Premium is then calculated as the product of the Sharpe Ratio and the expected market volatility. For the purpose of that calculation, I relied on the average of the settlement price of futures on the Chicago Board Options Exchange Volatility Index (the "VIX"), which is a widely recognized measure of market volatility, for February through April 2011 and the thirty day average of the three-month volatility index (*i.e.*, the "VXV"), which resulted in expected market volatility of 30.26 percent. The expected Risk Premium using this approach is 9.94 percent (0.3026 x 0.3285= 0.994).

Q. 53 What Beta did you use in your CAPM model?

A. 53 With respect to Beta, I considered two methods of calculation. My first approach simply employs the average reported Beta from Bloomberg and Value Line for the proxy group companies. While both of those services adjust their calculated (or "raw") Betas to reflect the tendency of Beta to regress to the market mean of 1.00, Value Line calculates Beta over a five year period, while Bloomberg's calculation is based on two years of data. As discussed below, however, current market conditions are such that the volatility of the proxy group stock prices has been increasing relative to the broad market. Consequently, Betas calculated over a more recent time period provide a more current view as to investors' perspectives with respect to "systematic" risk.

Q. 54 Please describe how you calculated the mean adjusted beta for your proxy group.

A. 54 As noted in Equation 5, Beta is calculated as the ratio of the covariance between the individual security returns and the market returns, to the variance of the market returns. To arrive at a single estimate of Beta for the proxy group, I first calculated the covariance between the weekly returns for each of the nine companies in the proxy group and the weekly returns for the S&P 500 for the most recent twelve-month period. The average of those nine covariances for a given date produces the numerator of the Beta calculation for the proxy group. As noted above, the

[23] The standard deviation is easily calculated from the Morningstar data. *See* also Morningstar Inc., 2010 Ibbotson Stocks, Bonds, Bills and Inflation, Valuation Yearbook, Large Company Stocks: Total Returns Table B-1, at 166-167.

denominator in the calculation is the variance of weekly returns for the S&P 500.[24] As shown in Exhibit No. ___(RBH-5), this methodology results in a proxy group mean raw Beta of 0.814. Adjusting the raw Beta for the tendency to regress toward the market Beta of 1.0 results in an adjusted Beta of 0.876.

Q. 55 How and why did you adjust the raw Beta?

A. 55 I adjusted my raw Beta consistent with the methodology used by Bloomberg. This approach multiplies the raw Beta by 0.67, and adds 0.33 to that product. The purpose of such adjustments is to reflect the results of substantial academic research indicating that over time raw Betas tend to regress to the market mean of 1.00.[25]

Q. 56 Please explain why you relied on a twelve-month estimate of the proxy group mean adjusted Beta.

A. 56 As noted earlier, Beta estimates reported by Value Line and Bloomberg calculate the Beta for each company over historical periods of 60 and 24 months, respectively. During the recent financial market dislocation, the relationship between the returns of the proxy group companies and the S&P 500 was considerably different than has been experienced in the current market environment. In order to develop a cost of equity estimate that does not reflect an anomalous historical period, it is reasonable to rely on a near-term calculation of Beta to reflect the current relationship between the proxy group companies and the S&P 500. Given that Bloomberg uses a two-year calculation period, I based my analysis on a twelve-month calculation period.

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24 It is worthwhile noting that averaging nine individual Betas for each of the proxy group companies would produce the same result as first averaging the nine covariances and then dividing by the variance of the S&P 500's weekly returns.

22 The regression tendency of betas to converge to 1.0 over time is well known and widely discussed in financial literature. *See* Blume, Marshall E., *On the Assessment of Risk*, The Journal of Finance, Vol. 26, No. 1, March 1971, at 1-10.

Chart 4: Hevert Proxy Group Rolling Twelve-Month Beta Coefficient Components

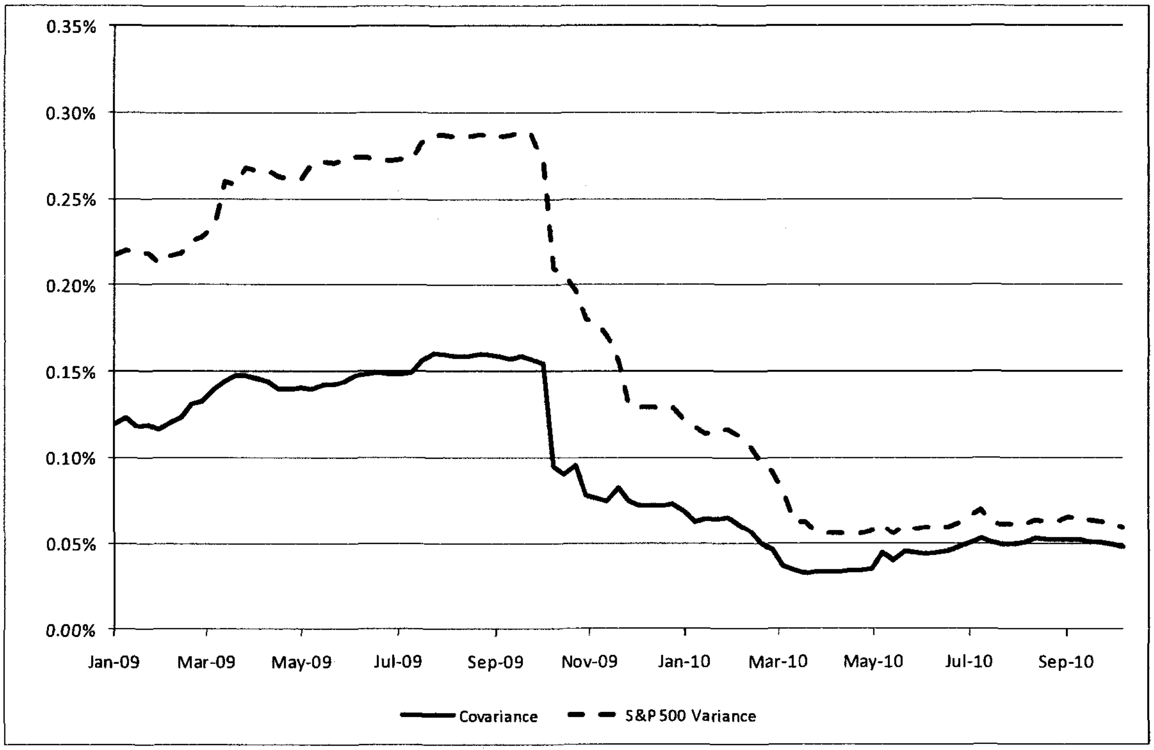


Chart 4 demonstrates that since January 2009, the difference between the average covariance for the proxy group weekly returns and the variance in the S&P 500 weekly returns, calculated on a rolling twelve-month basis, has narrowed significantly. Since Beta is the ratio of the covariance to the variance, that increasingly small difference indicates that the proxy company stock prices have become increasingly volatile relative to the broad market. Consequently, over the past several months, the proxy group average Beta has been steadily increasing. That finding is consistent with the increased level of return correlation discussed earlier in my testimony.

Q. 57 Is your calculated Beta of 0.876 consistent with levels that were observed prior to the financial market crisis?

A. 57 Yes. In September 2007, one year prior to the Lehman Brothers bankruptcy filing, the average Beta for my proxy group companies, as reported by Value Line, was 0.839. In March 2008, the Beta for this same group was 0.883. Based on those historical measures, it is my view that the twelve-month average calculated Beta of 0.876 is reasonable when compared to levels before the financial market crisis.

Q. 58 How did you apply your modified CAPM?

A. 58 I relied on the *ex-ante* risk premium and near-term Beta to calculate the CAPM model using both the current 30-day average yield on the 30-year Treasury bond and near-term projections of the 30-year Treasury bond yield as the risk-free rate. As noted in Exhibit No. ___(RBH-4), the use of a projected market risk premium and risk-free rates produces a range of results that is generally consistent with the range of results produced by the other calculation methodologies.

Q. 59 What are the results of your CAPM analyses?

A. 59 As shown in Table 5 (below), (*see* also Exhibit No. ___(RBH-4)), the results of my modified CAPM analysis, using the current Beta estimate suggest a mean ROE of 12.46 percent based on a range of returns from 11.99 percent to 12.93 percent. My CAPM analysis using the average historical Beta produces a range of returns from 10.06 percent to 10.88 percent.

Table 5: Forward-Looking CAPM Results

	Current 30-Year Treasury (3.75%)	**Near Term Projected 30-Year Treasury (4.22%)**
Current Calculated Beta		
Sharpe Ratio Derived Market Risk Premium	12.45%	12.93%
Ex-Ante Approach Derived Market Risk Premium	11.99%	12.47%
Average Historical Beta		
Sharpe Ratio Derived Market Risk Premium	10.41%	10.88%
Ex-Ante Approach Derived Market Risk Premium	10.06%	10.53%

Q. 60 How did you incorporate these CAPM estimates in your ROE recommendation?

A. 60 As noted earlier in my testimony, the equity markets continue to experience elevated levels of expected volatility and instability. Those conditions, which are directly reflected in the Beta Risk Premium and Risk Free rate terms of the model indicate that the cost of equity is considerably higher than the levels suggested by other approaches, in particular, the Constant Growth DCF model. While I realize that some of the market conditions that influence the CAPM results, such as the elevated degree of return correlations, are symptomatic of the currently unsettled market conditions and as such, they may revert to more "normal" levels over the long term. Nonetheless, it would be inappropriate not to recognize the effect of those conditions on the Company's cost of equity. Consequently, I have considered several of the CAPM results in arriving at my ROE recommendation.

G. Bond Yield Plus Risk Premium Analysis

Q. 61 Please describe the bond yield plus risk premium approach you employed.

A. 61 In general terms, this approach is based on the fundamental principle that equity investors bear the residual risk associated with ownership and therefore require a premium over the return they would have earned as a bondholder. That is, since returns to equity holders are more risky than returns to bondholders, equity investors must be compensated for bearing that risk. Risk premium approaches, therefore, estimate the cost of equity as the sum of the equity risk premium and the yield on a particular class of bonds. As noted in my discussion of the CAPM, since the equity risk premium is not directly observable, it typically is estimated using a variety of approaches, some of which incorporate *ex-ante*, or forward-looking estimates of the cost of equity, and others that consider historical, or *ex-post,* estimates. In the case of the CAPM, those estimates are with respect to the return on the broad market. An alternative approach is to use actual authorized returns for natural gas utilities as the measure of the cost of equity to determine the Equity Risk Premium.

Q. 62 What did your bond yield plus risk premium analysis reveal?

A. 62 As shown on Exhibit No. ___(RBH-6), from 1992 through October 8, 2010, there was, in fact, a significant statistical relationship between risk premia and interest rates. To estimate that relationship, I examined the relationship between risk premia and interest rates using the following equation:

$$RP = a + b\,(T) \quad [6]$$

where:

RP = Risk Premium (difference between allowed ROEs and the 30-Year Treasury Yield);

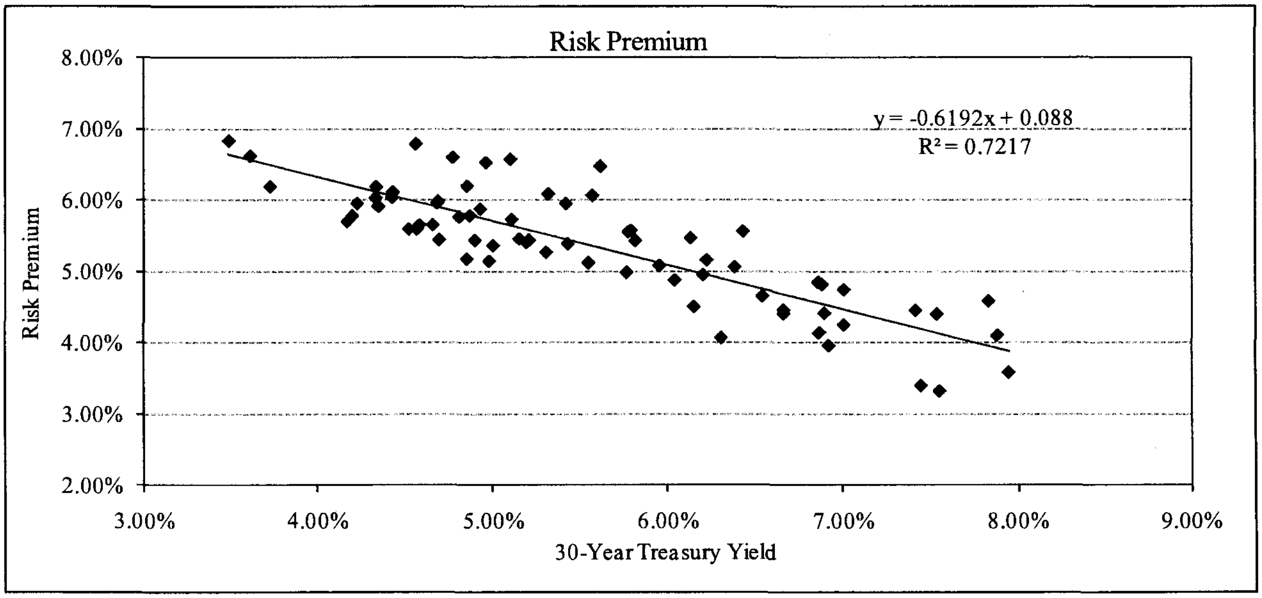
a = Intercept term;

b = Slope term; and

T = 30-Year Treasury Yield.

Data regarding allowed ROEs was derived from 394 natural gas distribution rate cases from 1992 through October 8, 2010 as reported by Regulatory Research Associates. As shown in Chart 5 (below), the R-squared of the equation assuming a linear relationship is approximately 0.72. This value means that the equation explains approximately 72.00 percent of the deviation from the regression line. Based upon the equation shown in Chart 5 (below), and current and near-term projected yields on 30-year U.S. Treasury bonds, the ROE ranges between 10.23 percent and 11.01 percent.[26]

Chart 5: Risk Premium Results



[26] In order to ensure that the regression coefficients were not biased as a result of serially correlated error terms, the equation presented in Exhibit No. ___(RBH-6) was estimated using the Prais-Winsten corrective routine. That equation continues to produce a negative slope coefficient and an average ROE estimate of approximately 10.61 percent.

VII. REGULATORY AND FINANCIAL RISKS

Q. 63 Do the mean DCF, CAPM, and Risk Premium results for the proxy group provide an appropriate estimate of the cost of equity for Southwest Gas?

A. 63 No, the mean results do not necessarily provide an appropriate estimate of the Company's cost of equity. In my view, there are several additional factors that must be taken into consideration when determining where the Company's cost of equity falls within the range of results. Regulatory risks include regulatory lag; and rate design. Financial risks include the Company's credit rating relative to the proxy group; and flotation costs. These risk factors, which are discussed below, should be considered with respect to their overall effect on the Company's risk profile.

A. Regulatory Risks

Q. 64 Is there any precedent that identifies the regulatory risks faced by utilities?

A. 64 Yes. In *Hope*, the Supreme Court noted that it is not the theory, but the impact of the rate order which counts.[27] In *Duquesne,* the Supreme Court noted the risks to utilities of ratemaking treatment and the importance of establishing ratemaking treatment that does not continuously favor customers to the continuous detriment of investors:

> [t]he risks a utility faces are in large part defined by the rate methodology because utilities are virtually always public monopolies dealing in essential service, and so relatively immune to the usual market risks. Consequently, a State's decision to arbitrarily switch back and forth between methodologies in a way which required investors to bear the risk of bad investments at some times while denying them the benefit of good investments at others would raise serious constitutional questions. [28]

Q. 65 How does the regulatory environment in which a utility operates affect its access to and cost of capital?

A. 65 The regulatory environment can significantly affect both the access to, and cost of capital in several ways. First, the proportion and cost of debt capital available to utility companies are influenced by the rating agencies' assessment of the regulatory

[27] *Hope*, 320 U.S., at 602, 64 S.Ct., at 288.

[28] *Duquesne*, 109 S.Ct. 609 (1989) at 9.

environment. As noted by Moody's, "the predictability and supportiveness of the regulatory framework in which a regulated utility operates is a key credit consideration and the one that differentiates the industry from most other corporate sectors."[29] Moody's further noted that:

> For a regulated utility company, we consider the characteristics of the regulatory environment in which it operates. These include how developed the regulatory framework is; its track record for predictability and stability in terms of decision making; and the strength of the regulator's authority over utility regulatory issues. A utility operating in a stable, reliable, and highly predictable regulatory environment will be scored higher on this factor than a utility operating in a regulatory environment that exhibits a high degree of uncertainty or unpredictability. Those utilities operating in a less developed regulatory framework or one that is characterized by a high degree of political intervention in the regulatory process will receive the lowest scores on this factor.[30]

S&P notes that regulatory commissions should eliminate, or at least greatly reduce, the issue of rate-case lag.[31] Moody's agrees that timely cost recovery is an important determinant of credit quality, stating that "[t]he ability to recover prudently incurred costs in a timely manner is perhaps the single most important credit consideration for regulated utilities, as the lack of timely recovery of such costs has caused financial stress for utilities on several occasions"[32] Similarly, FitchRatings ("Fitch") notes that in the current environment of rising costs, utilities will require more frequent rate increases to maintain financial results, resulting in further exposure to regulatory risks.[33]

Q. 66 Have you compared the risk of regulatory lag in Arizona to the regulatory lag for the proxy group companies?

A. 66 Yes. I reviewed the regulatory lag for Southwest Gas in Arizona in the Company's last three cases[34] and compared that lag with the regulatory lag experienced by the operating companies of my proxy group companies over the same period. In this

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29 Moody's Global Infrastructure Finance, *Regulated Electric and Gas Utilities*, August 2009, at 6.

30 *Ibid.*

31 Standard and Poor's, *Assessing Vertically Integrated Utilities' Business Risk Drivers*, U.S. Utilities and Power Commentary, November 2006, at 10.

32 Moody's, Global Infrastructure Finance, *Regulated Electric and Gas Utilities*, August 2009, at 7.

33 FitchRatings, *U.S. Utilities, Power, and Gas 2010 Outlook*, December 4, 2009, at 1.

34 This analysis was conducted based on data compiled by Regulatory Research Associates ("RRA").

analysis, I analyzed the duration of 50 rate proceedings filed by the operating companies of my proxy group companies across 15 regulatory jurisdictions. As shown in Exhibit No. ___(RBH-7), in Arizona, the average number of months between the date of filing and the date of the Commission's order in the Company's last three rate cases was 16 months. The average duration of the regulatory processes for the operating companies of the proxy group companies was half that time, or approximately 8 months. Therefore, in Arizona, Southwest Gas faces substantially greater risk related to regulatory lag than the proxy group companies.

Q. 67 Are there other regulatory risks that should be considered?

A. 67 Yes. It also is important to recognize that regulatory decisions regarding the authorized ROE and capital structure have direct consequences for the subject utility's internal cash flow generation (sometimes referred to as "Funds Flow from Operations", or "FFO"). Since credit ratings are intended to reflect a company's ability to fund financial obligations, the ability to internally generate the cash flows required to meet those obligations (and to provide an additional amount for unexpected events) is of critical importance to debt investors. Two of the most important metrics used to assess that ability are the ratios of FFO to debt, and FFO to interest expense, both of which are directly affected by regulatory decisions regarding the appropriate rate of return and capital structure.

Q. 68 Please explain how credit rating agencies consider regulatory risk in establishing a company's credit rating.

A. 68 While both S&P and Moody's consider regulatory risk in establishing credit ratings, Moody's has published a report quantifying the importance of this metric. Moody's establishes credit ratings based on four key factors: (1) regulatory framework; (2) the ability to recover costs and earn returns; (3) diversification; and (4) financial strength, liquidity, and key financial metrics. Of these criteria, regulatory framework and the ability to recover costs and earn returns are each given a broad rating factor of 25.00 percent. Therefore, Moody's assigns regulatory risk a 50.00 percent weighting in the overall assessment of business and financial risk for regulated utilities.[35] In fact, Moody's notes that the ability to recover prudently incurred costs in a timely manner

[35] Moody's Investors Service, *Rating Methodology: Regulated Electric and Gas Utilities*, August 2009, at 4.

is perhaps the single most important credit consideration for regulated utilities as the lack of timely recovery of such costs has caused financial stress for utilities on several occasions.[36]

Q. 69 Have credit rating agencies specifically identified the regulatory environment as a risk for Southwest Gas?

A. 69 Yes. Moody's and Standard and Poor's both emphasize their concerns regarding the regulatory environment in Arizona. In a recent report, Standard and Poor's ("S&P") considered each of the three regulatory jurisdictions in which Southwest operates. In that report, S&P noted that California and Nevada were supportive regulatory environments and Arizona, while improving, is still considered a challenging regulatory environment. S&P stated that Arizona was less supportive of credit than other jurisdictions because the Company does not have rate design mechanisms that help mitigate the affect of weather and rate design, ultimately throughput, on the Company's cash flow. S&P further noted that the approval of a decoupling mechanism is "critical to the improvement in Arizona's overall regulatory environment, and to protect the company from under recoveries during warmer weather."[37] Importantly, Standard and Poor's noted that the positive outlook could be revised to stable if regulatory risks increased in Arizona, or the company experiences significant reductions in customer usage without regulatory protections.[38]

While Moody's recently upgraded the Company's senior unsecured rating to Baa2 from Baa3, in its detailed rating considerations Moody's noted the below average level of regulatory supportiveness in Arizona. In particular, Moody's noted significant regulatory lag and the lack of rate design mechanisms to include weather normalization and decoupling as the main concerns.[39]

Q. 70 What are your conclusions regarding regulatory guidelines and capital market expectations?

A. 70 The regulatory environment is one of the most important issues considered by both debt and equity investors in assessing the risks and prospects of utility companies.

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36 *Ibid.*, at 7.

37 Standard & Poor's, *Ratings Direct on the Global Credit Portal*, April 22, 2010, at 2.

38 *Ibid.*, at 4.

39 Moody's Investor Service, *Credit Opinion: Southwest Gas Corporation*, May 27, 2010.

From the perspective of debt investors, the authorized return should enable the Company to generate the cash flow needed to meet its near-term financial obligations, make the capital investments needed to maintain and expand its system, and maintain sufficient levels of liquidity to fund unexpected events. This financial liquidity must be derived not only from internally generated funds, but also by efficient access to capital markets. Moreover, because fixed income investors have many investment alternatives, even within a given market sector, the Company's financial profile must be adequate on a relative basis to ensure its ability to attract capital under a variety of economic and financial market conditions. From the perspective of equity investors, the authorized return must be adequate to provide a risk-comparable return on the equity portion of the Company's capital investments. Because equity investors are the residual claimants on the Company's cash flows (which is to say that the equity return is subordinate to interest payments), they are particularly concerned with regulatory uncertainty and its effect on future cash flows.

As noted earlier, both Moody's and S&P have identified the regulatory environment in Arizona as a particular risk, and have noted the credit considerations attendant to that risk. In my view, therefore, the regulatory environment is a meaningful area of risk for Southwest Gas.

B. Credit Rating

Q. 71 Why are credit ratings an important indicator as to the appropriate cost of capital?

A. 71 Credit ratings represent an independent assessment of a utility company's ability to meet its financial obligations. Credit ratings also are an important determining factor in the interest rate that a utility company will pay for debt financing. Likewise, credit ratings are also considered by equity investors as they determine their required rate of return.

Q. 72 How does Southwest Gas's credit rating compare to the proxy group companies?

A. 72 As noted earlier, Southwest Gas has Long-Term Issuer credit ratings of BBB, BBB, and Baa2 from S&P, Fitch and Moody's, respectively. Seven of the nine proxy companies have an S&P rating of A- or higher, while the other two proxy companies have ratings of BBB+. On average, the proxy group has an S&P ranking of A, which is three notches higher than Southwest Gas on the S&P ranking scale.

Q. 73 Have you quantified the impact of differences in credit ratings on the interest rate paid by regulated utility companies?

A. 73 Yes. I have examined the credit spread between the average yield for the 30-year U.S. Treasury and the yield on the Moody's A-rated Utility Bond Index and the Baa-rated Utility Bond Index for the past six months. As shown in Table 6 (below), this analysis demonstrates that the average credit spread for Baa-rated utility bonds has been 58 basis points higher than the average credit spread rate for A-rated utility bonds during this period.

Table 6: Credit Spreads on A and Baa-rated Utility Bond Indices[40]

	A-rated utility bond	Baa-rated utility bond
October 2010	1.24%	1.76%
September 2010	1.23%	1.76%
August 2010	1.21%	1.75%
July 2010	1.26%	1.98%
June 2010	1.34%	2.06%
May 2010	1.22%	1.69%
Average Spread	1.25%	1.83%

Q. 74 What is your conclusion regarding the effect of Southwest Gas's credit rating on its ROE?

A. 74 Southwest Gas's credit rating is lower than the average for the proxy group companies. The Commission's order in this proceeding, therefore, could directly affect the ability of the Company to maintain [or enhance] its credit profile relative to its peers.

40 Credit spreads measured against 30-year Treasury Bond yields.

C. Flotation Costs

Q. 75 What are flotation costs?

A. 75 Flotation costs are the costs associated with the sale of new issues of common stock. These costs include out-of-pocket expenditures for the preparation, filing, underwriting, and other costs of issuance of common stock.

Q. 76 Why is it important to recognize flotation costs in the allowed return on equity?

A. 76 In order to attract and retain new investors, a regulated utility must have the opportunity to earn a return that is both competitive and compensatory. To the extent that a company is denied the opportunity to recover prudently incurred flotation costs, actual returns will fall short of expected (or required) returns, thereby diminishing its ability to attract adequate capital on reasonable terms.

Q. 77 Over what periods of time are issuance and flotation costs recognized?

A. 77 The issuance costs associated with long-term debt reflect the incurrence of issuance costs that can be assigned a definite life or period of applicability. These costs are amortized over the life of the debt issuance, either to maturity or upon retirement of the debt. Equity issuance or flotation costs, however, do not have a definite period of applicability, but rather have an infinite life.

Q. 78 Do the DCF and CAPM models already incorporate investor expectations of a return that compensates for flotation costs?

A. 78 No. All the models used to estimate the appropriate ROE assume no "friction" or transaction costs, as these costs are not reflected in the market price (in the case of the DCF model) or risk premium (in the case of the CAPM). However, "br + sv" form of the Retention Growth estimate used in my DCF analysis is meant to reflect growth from both internally generated funds (*i.e.*, the "br" term) and from issuances of equity (*i.e.*, the "sv" term). Therefore, the retention growth estimate implicitly assumes that there will be future issuances of equity, which would not be expected to be issued at a zero cost.

Q. 79 Have you made a specific adjustment to the Company's ROE to recover flotation costs?

A. 79 No. While I recognize that flotation costs are an important component of the cost of capital, it is my understanding that as a matter of policy the Commission does not consider the recovery of flotation costs.[41] Furthermore, as noted by Company witness Theodore Wood in the Company's last rate proceeding, the Company has issued a substantial amount of equity through existing equity plans (Dividend Reinvestment and Stock Purchase Plan, Employee Investment Plan, Management Incentive Plan, and Stock Incentive Plan), the Company's equity shelf program ("ESP"), and an increase in retained earnings.[42] In that case, Mr. Wood noted that shares issued through the ESP were issued at an administrative cost of just 1.00 percent.[43] Therefore I have not made a specific adjustment to the ROE to recover any costs related to equity issuances. Rather, I have considered flotation costs in determining where within the range of reasonable returns Southwest Gas's ROE should fall.

VIII. <u>DECOUPLING</u>

Q. 80 Please summarize the Company's proposed decoupling mechanism.

A. 80 As discussed in more detail in the Direct Testimony of Company witness Edward Gieseking, the Company is proposing to establish a revenue stabilizing mechanism referred to by the Company as the Energy Efficiency Enabling Provision ("EEP") that accounts for over and under-recoveries of the authorized revenue requirement, and will balance the actual recovery to the authorized revenue requirement [on a monthly basis (for weather) and on a quarterly basis (for non-weather)]. As discussed by Mr. Gieseking, this mechanism is being proposed to mitigate the additional risks associated with declining use per customer that result from the implementation of the Energy Efficiency Standards established by the Commission. Under the Energy Efficiency Standards, the Company is required, through the implementation of energy efficiency and renewable energy resource technologies, to achieve increasing annual energy savings each year beginning in 2011. While the annual energy savings in 2011 are required to be 0.50 percent, the annual savings are required to increase to at

41 Arizona Corporation Commission, Docket No. E-01345A-05-08816, Decision No. 69663, June 28, 2007, at 49.

42 Southwest Gas Corporation Docket No. G-01551A-07-0504, Prepared Direct Testimony of Theodore K. Wood, at 7.

43 Southwest Gas Corporation Docket No. G-01551A-07-0504, Prepared Direct Testimony of Theodore K. Wood, Exhibit No.___(TKW-1), at 7.

least 6.00 percent of the Company's retail gas energy sales, in therms, for the calendar year 2019, by 2020.[44]

The proposed EEP is a symmetrical mechanism, meaning that while the Company would be assured revenue to offset declines due to weather or other exogenous risks, it also provides the potential for rate reductions if actual revenues per customer exceed authorized revenues.

Q. 81 If the Commission were to adopt the Company's proposed EEP, what is the appropriate standard to consider in establishing the Company's ROE?

A. 81 Under the comparable earnings standard, the allowed ROE should represent a return commensurate with the returns on investments of similar risks. In this case, the proxy group companies would constitute the comparable earnings standard for Southwest Gas. While the Company may be less risky from a revenue stability perspective, acceptance by the Commission of the EEP would not make the Company less risky than the proxy group companies to the extent that those companies have employed some method to address revenue shortfalls. In other words, the issue is not whether the Company's revenues would be less volatile with the proposed EEP than without it; rather the relevant issue is whether the Company would be more or less risky with its EEP as compared to the proxy group. Exhibit No. ___(RBH-8) provides a summary of the methods used by the proxy group companies to address revenue stability. As shown in that exhibit, the issue of revenue stability has been addressed by each of the proxy group companies through the implementation of various revenue stabilization adjustment mechanisms and favorable rate structures.

Q. 82 How do rating agencies view the implementation of revenue stabilization mechanisms?

A. 82 Revenue stabilization mechanisms have become increasingly important rate design mechanisms and have been implemented nationwide. As such, rating agencies have come to expect some form of revenue stabilization mechanism. In fact, four years ago, in a 2006 review of the natural gas local distribution companies, Moody's noted an increased focus on the use of revenue stabilization mechanisms:

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[44] Arizona Corporation Commission Decision No. 71855, August 25, 2010, at 5-6.

> While [revenue decoupling] may have originally begun as a regional concept in certain jurisdictions, it has quickly become a nationwide phenomenon that will challenge regulators and gas utilities alike, as they seek to correct a structural imbalance in their rate design that has become increasingly difficult to ignore.[45]

In a June 2006, Special Report on Revenue Decoupling and Local Gas Distribution Companies, Moody's clearly noted the effect of decoupling mechanisms on credit rating outlooks:

> LDCs that have, or soon expect to have, RD [Revenue Decoupling] stand a better chance than others in being able to maintain their credit ratings or stabilize their credit outlook in face of adversity. This difference between those companies that have RD and those that do not will tend to be further accentuated as the credit demarcation reflected through rating actions becomes more evident.[46]

To the extent the Company will be refinancing several hundred million dollars of long-term debt over the next few years, the implementation of the EEP in this proceeding may have a material effect on the debt costs to be paid by the Company's customers incrementally for many years to come. As noted earlier, both Moody's and S&P specifically identified the lack of such a mechanism to mitigate the financial risks of declining use per customer and weather normalization as a concern for Southwest Gas' Arizona jurisdiction. In particular, both rating agencies have noted that the absence of such a mechanism could have negative implications for the Company's credit rating in the future. It is apparent, therefore, that rating agencies view revenue stabilization mechanisms as a means of maintaining the status quo in today's volatile utility environment. Therefore, the absence of some form of revenue stabilization mechanism results in an increase in the regulatory risk for Southwest Gas in its Arizona jurisdiction.

Q. 83 What do you conclude about Southwest's relative risk to the proxy group if the Company's EEP is approved?

A. 83 Implementation of the proposed EEP would not make Southwest Gas less risky than the proxy group companies, but rather would make the Company more comparable to

[45] *Local Gas Distribution Companies: Update on Revenue Decoupling and Implications for Credit Ratings*, Moody's, June 2006, at 6. [Clarification added.]

[46] *Ibid.*

the proxy group in that the proposed EEP provides for the reconciliation of actual revenue to authorized revenue, which provides similar revenue stability to the structures that have been implemented by the proxy group companies.

Q. 84 Is it your position that the implementation of the Company's proposed EEP should have no effect on the Company's ROE?

A. 84 Yes. As noted previously, the Company's proposed EEP, is designed to eliminate disincentives to achieving the Commission's Energy Efficiency Standards. As noted earlier, a comparison of the proxy group rate structures and the Company's proposed decoupling mechanism demonstrates that the proposed decoupling mechanism is similar to the mechanisms that have been implemented by proxy group companies, in that they are designed to address revenue deficiencies that result from weather normalization, declining throughput, and other throughput related risks. Moreover, there is no conclusive evidence of which I am aware indicating that companies that have implemented such structures either have lower required ROEs or have significantly different market valuations. Based on the comparability of the company's proposed decoupling mechanism to the rate structures implemented by the proxy group companies, and the market's valuation of companies with decoupling mechanisms, I conclude that approval of the Company's decoupling mechanism should have no effect on the Company's ROE.

Q. 85 What would be the effect on your recommended ROE if the Company was not proposing a decoupling mechanism?

A. 85 As a preliminary matter, it is important to recall that the estimation of the cost of equity is a comparative analysis. It also is important to keep in mind that for several years, rating agencies (Moody's in particular) have identified decoupling structures as an increasingly common ratemaking mechanism. Moreover, all of the proxy companies have implemented rate structures designed to stabilize revenues. Absent such a structure, Southwest Gas would be susceptible to incrementally greater risks than its peers. Consequently, while the Commission's acceptance of the Company's proposed decoupling structure would not result in a reduced cost of equity, the denial of such a structure would render the Company more risky, resulting in a cost of equity toward the upper end of the range. Indeed, as previously noted, approval of the proposed EEP by the Commission in this proceeding will arguably make the Company more comparable to the proxy group companies.

Q. 86 Is your recommended ROE for Southwest Gas lower than it otherwise would be absent the Company's proposal to implement a revenue decoupling mechanism?

A. 86 Yes.

IX. CONCLUSIONS AND RECOMMENDATION FOR THE ORIGINAL COST RATE BASE ROE

Q. 87 What is your conclusion regarding a fair ROE for Southwest Gas?

A. 87 Based on the various quantitative and qualitative analyses presented in my Direct Testimony, I believe that a reasonable range of results for Southwest Gas is from approximately 10.50 percent to 11.25 percent. The lower end of that range is supported by the range of the Multi-Stage DCF analyses and the upper end is supported by the CAPM analyses.

In light of the regulatory and business risks of Southwest Gas compared to the proxy group, it is my view that an ROE of 11.00 percent is reasonable, if not somewhat conservative. This 11.00 percent ROE is slightly above the mean of my range of results. In my view, that ROE should reasonably balance the interests of customers and shareholders by enabling the Company to maintain its financial integrity and therefore its ability to attract capital at reasonable rates under a variety of different economic and financial market conditions.

Table 7: Summary of Analytical Results

	Mean Low	Mean	Mean High
Constant Growth DCF			
30-Day Average	7.43%	8.39%	9.55%
90-Day Average	7.54%	8.50%	9.65%
180-Day Average	7.59%	8.55%	9.71%
	Long-term P/E Model	**Mean**	**Gordon Model**
Multi-Stage DCF			
30-Day Average	10.08%	10.28%	10.48%
90-Day Average	10.36%	10.48%	10.60%
180-Day Average	10.49%	10.58%	10.66%
Supporting Methodologies			
		Current 30-Year Treasury (3.75%)	**Near-Term Projected 30-Year Treasury (4.22%)**
CAPM- Current Calculated Beta			
Sharpe Ratio Derived Market Risk Premium		12.40%	12.87%
Market DCF Derived Market Risk Premium		11.94%	12.42%
CAPM – Average Historical Beta			
Sharpe Ratio Derived Market Risk Premium		10.41%	10.88%
Market DCF Derived Market Risk Premium		10.06%	10.53%
Treasury Yield Plus Risk Premium			
	Mean Low	**Mean**	**Mean High**
Risk Premium	10.23%	10.55%	11.01%

X. FAIR VALUE RATE BASE

Q. 88 What is the fair value standard in Arizona?

A. 88 As noted in *Chapparal*,[47] the Arizona Constitution requires the use of a fair value rate base in establishing rates. Article 15 para. 14 of the Arizona Constitution states:

> The corporation commission shall, to aid it in the proper discharge of its duties, ascertain the fair value of the property within the state of every public service corporation doing

[47] *In the Matter of the Application of Chapparal City Water Company, an Arizona Corporation, for a Determination of the Current Fair Value of its Utility Plant and Property and for Increases in its Rates and Charges for Utility Service Based Thereon,* Docket No. W-02113A-04-0616, Arizona Corporation Commission Decision No. 70441, July 28, 2008, at 20-21.

> business therein; and every public service corporation doing business within the state shall furnish to the commission all evidence in its possession, and all assistance in its power, requested by the commission in aid of the determination of the value of the property within the state of such public service corporation.

As interpreted by the Arizona Court of Appeals, this paragraph requires the Commission to find the fair value of a public service corporation's property and to use that value to set just and reasonable rates.[48]

Q. 89 How did the Company establish the fair value rate base?

A. 89 As is discussed in the testimony of Company witness Robert Mashas the Company calculated the fair value rate base ("FVRB") as the simple average of the original cost rate base ("OCRB") and the reconstruction cost new less depreciation ("RCND") of the utility system. As shown in the direct testimony of Company witness Mashas, the Company's RCND is estimated to be $1,839,334,300. The OCRB of $1,073,700,633 is based on the Company's plant accounting records, as of June 30, 2010, (*see* Exhibit No. ___(RBH-9)). The resulting FVRB is $1,456,517,467.

Q. 90 Do you agree with the Company's estimate of the FVRB?

A. 90 I believe that the Company's proposed FVRB is a reasonable, if not conservative estimate of the current market value of the Company's gas distribution system assets.

Q. 91 What is the definition of "fair value" as used in your testimony?

A. 91 Used in this context, "fair value" is the price at which a property would change hands between a willing buyer and a willing seller, when neither party is under any compulsion to enter into a transaction, and both parties have reasonable knowledge of relevant facts.[49] That definition is consistent with the Internal Revenue Code and Revenue Ruling 59-60 ("Ruling 59-60"), which notes that court decisions regarding Fair Value further assume that the buyer and seller are "able, as well as willing, to trade and to be well informed about the property and concerning the market for such property."[50]

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48 *Ibid.*

49 *See* Shannon P. Pratt, Valuing a Business, 5th Ed. McGraw Hill, 2008, at 41-42.

50 IRS Revenue Ruling 59-60, 1959-1 CB 237-IRC Sec. 2031.

Q. 92 Please provide a brief description of the analytical approaches used to determine the reasonableness of the Company's estimate of the FVRB.

A. 92 There are three main approaches to valuation typically relied upon by investors and analysts: the Income Approach; the Cost Approach; and the Comparables Approach. The Income Approach is not appropriate in circumstances such as these where the value of the assets is used to determine the income of the assets. The RCND, which is discussed in the testimony of Company witness Mashas is the Company's estimate of the current value of the assets using the Cost Approach. In order to determine the reasonableness of the Company's estimate of the FVRB, I relied on the Comparables Approach, specifically transaction comparables.

Q. 93 Please explain how you applied the Transaction Comparables Methodology to determine the reasonableness of the Company's FVRB.

A. 93 I compared the Company's FVRB estimate to the market value of comparable companies in recent arms-length transactions. In order to create a consistent basis of comparison, I normalized the transaction values based on the net plant of the acquired company. I then compared this transaction multiple to a comparable multiple for the Company; the ratio of FVRB to OCRB.

Q. 94 How did you establish the universe of transactions that were analyzed for comparability to the Southwest Gas system?

A. 94 I began by developing a database of announced and executed transactions involving the sale of predominantly natural gas distribution utility companies and assets. That data was compiled using SNL Financial's utility merger screening tool. I also reviewed publicly available information such as press releases, investor presentations, SEC filings, and regulatory commission filings. Once that preliminary list of transactions was developed, I then applied certain screening criteria to establish a final group of transactions from which I calculated the ratio of transaction value to net plant.

Q. 95 What period of time did you consider in developing your list of comparable transactions?

A. 95 I limited my analysis to transactions that were announced within the past five years (*i.e.*, from January 1, 2005 through September 30, 2010). In my view, that period is sufficiently long to avoid the bias that could result from limiting the analysis to a shorter period, yet produces a reasonably large number of observations.

Q. 96 How many transactions were included in your preliminary list of comparable transactions?

A. 96 My preliminary list included 25 transactions. I then applied the following screening criteria:

1. I eliminated transactions involving companies or assets that were not primarily natural gas distribution utilities;
2. I eliminated transactions in which the acquired enterprise had a substantial portion of its operations subject to Federal jurisdiction (*i.e.*, the Federal Energy Regulatory Commission, or "FERC"); and
3. I eliminated transactions for which the terms of the transaction were not disclosed, or were not disclosed to sufficient detail to produce a reasonable analysis of that particular transaction's valuation multiples.

Q. 97 How many transactions met your screening criteria?

A. 97 Of the 25 transactions initially reviewed, 14 transactions (*see* Table 8, below) met my screening criteria.

Table 8: Comparable Transactions

Announcement Date	Closing Date	Buyer	Acquired
Jul-08	Feb-10	Babcock & Brown	Dominion Peoples Natural Gas
Jul-08	Oct-08	MDU Resources	Intermountain Gas Company
Mar-08	Oct-08	UGI Corporation	PPL Gas Utilities Corp
Jan-08	Jan-09	Continental Energy	Public Service of New Mexico Gas Co.
Nov-07	Jul-08	SourceGas LLC	Arkansas Western Gas Company
Feb-07	Nov-07	Cap Rock Holding Corp	SEMCO Energy
Jan-07	Sep-07	Energy West, Inc	Frontier Utilities
Jul-06	Jul-07	MDU Resources	Cascade Natural Gas
Feb-06	Aug-06	National Grid Plc	New England Gas - Rhode Island Ops
Jan-06	Aug-06	UGI Corporation	PG Energy
Sep-05	Jun-06	Empire District	Aquila Missouri Operations
Sep-05	Jul-06	WPS Resources	Aquila Minnesota Natural Gas Ops
Sep-05	Apr-06	WPS Resources	Aquila Michigan Natural Gas Ops
May-10	Pending	UIL Holdings Corp.	Berkshire Gas, CT Natural Gas, Southern CT Gas

Q. 98 Please summarize the valuation multiples that resulted from the Comparables Transaction analysis.

A. 98 Table 9 (below) summarizes the transaction value to net plant multiple for each of the comparable transactions. As shown in Table 9, and in Exhibit No. ___(RBH-10), the range of multiples is from 0.1 times to 6.5 times net plant.

Table 9: Comparable Transaction Multiples

Acquired Company	Net Plant Multiple
Berkshire Gas, CT Natural Gas, Southern CT Gas	1.1
Dominion Peoples Natural Gas	1.4
Intermountain Gas Company	1.7
PPL Gas Utilities Corp	1.2
Public Service Co. of New Mexico Gas Ops.	1.4
Arkansas Western Gas Co.	1.7
SEMCO Energy	1.4
Frontier Utilities	0.1
Cascade Natural Gas	1.4
New England Gas - Rhode Island Ops	0.8
PG Energy	1.1
Aquila Missouri Operations	1.8
Aquila Minnesota Natural Gas Ops	6.5
Aquila Michigan Natural Gas Ops	1.6
High	6.5
Mean	1.7
Median	1.4
Low	0.1

Q. 99 What is the most appropriate measure of central tendency to rely on from your comparables analysis?

A. 99 Based on the range of results presented in Table 9, I believe that the most appropriate measure of central tendency is the median result. The use of the median eliminates any unusually high or low values from the estimate that would otherwise influence the final result if we were to rely on other measures of central tendency such as the mean value.

Based on the results presented in Table 9 (above), I believe that a valuation multiple of 1.4 times net plant is a reasonable measure of the fair value of the assets. Applying this multiple to the Company's OCRB results in a FVRB of approximately $1.50 billion.

Q. 100 What do you conclude from this analysis?

A. 100 Based on the results of this analysis, I conclude that the Company's estimate of the FVRB is conservative as compared with the market valuation of similar companies.

XI. FAIR VALUE RATE OF RETURN

Q. 101 Does the fair value standard also require consideration of the fair return on the fair value of the Company's assets?

A. 101 Yes. As noted above, the Arizona Constitution requires that the Commission establish just and reasonable rates using the fair value of the Company's property. In establishing the revenue requirement, the Commission would also need to establish the appropriate ROE to apply to the equity component of the FVRB.

Q. 102 Have you calculated the fair value rate of return ("FVROR") on the FVRB?

A. 102 Yes. As shown on Exhibit No. ___(RBH-9), I estimate that FVROR to be 7.50 percent.

Q. 103 Please explain how you calculated the FVROR.

A. 103 As shown in Exhibit No. ___(RBH-9), and in Table 10 (below), I calculated the difference between the OCRB and the Company's proposed FVRB. That this difference represents the appreciation in the value of the assets based on the current market value of the OCRB, and has been commonly referred to as the "fair value increment."[51] I then weighted the OCRB using the Company's proposed capital structure weighting, which includes the debt and equity component of the OCRB, and the appreciation in the value of the assets which, when added to the OCRB, results in the FVRB.

Q. 104 How did you apply the equity and debt costs to derive the FVROR?

A. 104 As shown in Table 10, I applied the Company's actual cost of debt to the debt component of the OCRB and my recommended ROE to the equity component of the

[51] Arizona Corporation Commission, Decision No. 70665, at 32.

OCRB. Consistent with Commission's decision in Decision No. 70665,[52] I applied 50.00 percent of the risk free rate of return to the market appreciation of the FVRB.

Q. 105 How did you estimate the risk free rate of return?

A. 105 As shown in Exhibit No. ___(RBH-9), my estimate of the nominal risk free rate of return is the average of the short-term projected yield on 30-year Treasury bonds of 4.22 percent and the long-term projected yield on the 30-year Treasury bonds of 5.80 percent of as reported in the Blue Chip Financial Forecast. I then adjusted the nominal risk free rate of 5.01 percent by the rate of inflation, which I estimated to be 2.47 percent. The resulting real risk free rate is then 2.47 percent.[53]

Q. 106 How did you estimate the rate of inflation?

A. 106 I calculated the rate of inflation based on the average of two measures of inflation, the Blue Chip Financial Forecast estimate of the long term change in CPI for 2017 through 2020, which is 2.50 percent and the EIA Annual Energy Outlook estimate of the change in CPI for the period from 2010 through 2035, of 2.45 percent, resulting in an inflation rate of 2.47 percent.

Q. 107 What is the resulting FVROR using this approach?

A. 107 As shown in Table 10 (below), based on the calculation discussed previously, the FVROR that would be applied to the FVRB is 7.50 percent.

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52 Arizona Corporation Commission Decision No. 70665, In the Matter of the Application of Southwest Gas Corporation for Establishment of Just and Reasonable Rates and Charges Designed to Realize a Reasonable Rate of Return on the Fair Value of the Properties of Southwest Gas Corporation Devoted to its Operations Throughout the State of Arizona, December 24, 2008 at 31. In that decision, the Commission determined that the Staff's approach of applying one-half of the risk free rate to the fair value increment was appropriate.

53 The real risk free rate = ((1+ nominal Treasury rate)/(inflation rate+1))-1.

Table 10: Calculation of the Fair Value Rate of Return[54]

Capital		Amount	Percent	Cost Rate	Weighted Cost Rate
Long-Term Debt	$	512,155,202	35.16%	8.34%	2.93%
Common Equity	$	561,545,431	38.55%	11.00%	4.24%
Capital Financing OCRB		1,073,700,633	73.72%		7.17%
Appreciation above OCRB not recognized on utility's books		382,816,834	26.28%	1.24%	0.32%
Total	$	1,456,517,467	100.00%		7.50%

Q. 108 Do you believe that the FVROR is a reasonable estimate of the Company's cost of capital?

A. 108 A FVROR of 7.50 percent is a conservative estimate of the appropriate cost of capital for Southwest Gas. As discussed above, using the 50/50 weighting of the OCRB and the RCND results in a FVRB that is below the median valuation of similar companies, based on current market data. In addition, the application of only 50.00 percent of the risk free rate to the appreciation in the value of the assets is a conservative estimate of the return that would be required from the market. The effect of these two below market estimates results in a FVROR that is somewhat conservative.

Q. 109 Does this conclude your pre-filed Direct Testimony?

A. 109 Yes.

54 Consistent with the methodology that the Arizona Corporation Commission determined was appropriate in Decision No. 70665, at 31.

Robert B. Hevert, CFA
President

Mr. Hevert is an economic and financial consultant with broad experience in the energy industry. He has an extensive background in the areas of corporate strategic planning, energy market assessment, corporate finance, mergers, and acquisitions, asset-based transactions, asset and business unit valuation, market entry strategies, strategic alliances, project development, feasibility and due diligence analyses. Mr. Hevert has significant management experience with both operating and professional services companies.

REPRESENTATIVE PROJECT EXPERIENCE

Financial and Economic Advisory Services

Retained by numerous leading energy companies and financial institutions throughout North America to provide services relating to the strategic evaluation, acquisition, sale or development of a variety of regulated and non-regulated enterprises. Specific services have included: developing strategic and financial analyses and managing multi-faceted due diligence reviews of proposed corporate M&A counter-parties; developing, screening and recommending potential M&A transactions and facilitating discussions between senior utility executives regarding transaction strategy and structure; performing valuation analyses and financial due diligence reviews of electric generation projects, retail marketing companies, and wholesale trading entities in support of significant M&A transactions.

Specific divestiture-related services have included advising both buy and sell-side clients in transactions for physical and contractual electric generation resources. Sell-side services have included: development and implementation of key aspects of asset divestiture programs such as marketing, offering memorandum development, development of transaction terms and conditions, bid process management, bid evaluation, negations, and regulatory approval process. Buy-side services have included comprehensive asset screening, selection, valuation and due diligence reviews. Both buy and sell-side services have included the use of sophisticated asset valuation techniques, and the development and delivery of fairness opinions.

Specific corporate finance experience while a Vice President with Bay State Gas included: negotiation, placement and closing of both private and public long-term debt, preferred and common equity; structured and project financing; corporate cash management; financial analysis, planning and forecasting; and various aspects of investor relations.

Representative non-confidential clients have included:

- Conectiv generation asset divestiture
- Eastern Utilities Associates (prior to acquisition by National Grid, PLC) generation asset divestiture
- Niagara Mohawk – sale of Niagara Mohawk Energy
- Potomac Electric Company generation asset divestiture

Representative confidential engagements have included:

- Buy-side valuation and assessment of merchant generation assets in Midwestern U.S.
- Buy-side due diligence and valuation of wholesale energy marketing companies in Eastern and Midwestern U.S.
- Buy-side due diligence of natural gas distribution assets in Northeastern U.S.
- Financial feasibility study of natural gas pipeline in upper Midwestern U.S.

- Financial valuation of natural gas pipeline in Southwestern U.S.

Regulatory Analysis and Ratemaking

On behalf of electric, natural gas and combination utilities throughout North America, provided services relating to energy industry restructuring including merchant function exit, residual energy supply obligations, and stranded cost assessment and recovery. Also performed rate of return and cost of service analyses for municipally owned gas and electric utilities. Specific services provided include: performing strategic review and development of merchant function exit strategies including analysis of provider of last resort obligations in both electric and gas markets; and developing value optimizing strategies for physical generation assets.

Representative engagements have included:

- Performing rate of return analyses for use in cost of service analyses on behalf of municipally owned gas and electric utilities in the Southeastern and Midwestern U.S.
- Developing merchant function exit strategies for Northeastern U.S. natural gas distribution companies
- Developing regulatory and ratemaking strategy for mergers including several Northeastern natural gas distribution companies

Litigation Support and Expert Testimony

Provided expert testimony and support of litigation in various regulatory proceedings on a variety of energy and economic issues including the proposed transfer of power purchase agreements, procurement of residual service electric supply, the legal separation of generation assets, and specific financing transactions. Services provided also included collaborating with counsel, business and technical staff to develop litigation strategies, preparing and reviewing discovery and briefing materials, preparing presentation materials and participating in technical sessions with regulators and intervenors.

Energy Market Assessment

Retained by numerous leading energy companies and financial institutions nationwide to manage or provide assessments of regional energy markets throughout the U.S. and Canada. Such assessments have included development of electric and natural gas price forecasts, analysis of generation project entry and exit scenarios, assessment of natural gas and electric transmission infrastructure, market structure and regulatory situation analysis, and assessment of competitive position. Market assessment engagements typically have been used as integral elements of business unit or asset-specific strategic plans or valuation analyses.

Representative engagements have included:

- Managing assessments of the NYPOOL, NEPOOL and PJM markets for major North American energy companies considering entering or expanding their presence in those markets
- Assessment of ECAR, MAPP, MAIN and SPP markets for a large U.S. integrated utility considering acquisition of additional electric generation assets
- Assessment of natural gas pipeline and storage capacity in the SERC and FRCC markets for a major international energy company

Resource Procurement, Contracting and Analysis

Assisted various clients in evaluating alternatives for acquiring fuel and power supplies, including the development and negotiation of energy contracts and tolling agreements. Assignments also have included developing generation resource optimization strategies. Provided advice and analyses of transition service power supply contracts in the context of both physical and contractual generation resource divestiture transactions.

Business Strategy and Operations

Retained by numerous leading North American energy companies and financial institutions nationwide to provide services relating to the development of strategic plans and planning processes for both regulated and non-regulated enterprises. Specific services provided include: developing and implementing electric generation strategies and business process redesign initiatives; developing market entry strategies for retail and wholesale businesses including assessment of asset-based marketing and trading strategies; and facilitating executive level strategic planning retreats. As Vice President, Energy Ventures, of Bay State was responsible for the company's strategic planning and business development processes, played an integral role in developing the company's non-regulated marketing affiliate, EnergyUSA, and managed the company's non-regulated investments, partnerships and strategic alliances.

Representative engagements have included:

- Developing and facilitating executive level strategic planning retreats for Northeastern natural gas distribution companies
- Developing organization and business process redesign plans for municipally owned gas/electric/water utility in the Southeastern U.S.
- Reviewing and revising corporate merchant generation business plans for Canadian and U.S. integrated utilities
- Advising client personnel in development of business unit level strategic plans for various natural gas distribution companies

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PROFESSIONAL HISTORY

Concentric Energy Advisors, Inc. (2002 – Present)
President

Navigant Consulting, Inc. (1997 – 2001)
Managing Director (2000 – 2001)
Director (1998 – 2000)
Vice President, REED Consulting Group (1997 – 1998)

REED Consulting Group (1997)
Vice President

Bay State Gas Company (1987 – 1997)
Vice President, Energy Ventures and Assistant Treasurer

Boston College (1986 – 1987)
Financial Analyst

General Telephone Company of the South (1984 – 1986)
Revenue Requirements Analyst

EDUCATION

M.B.A., University of Massachusetts at Amherst, 1984
B.S., University of Delaware, 1982

DESIGNATIONS AND PROFESSIONAL AFFILIATIONS

Chartered Financial Analyst, 1991
Association for Investment Management and Research
Boston Security Analyst Society

PUBLICATIONS/PRESENTATIONS

Has made numerous presentations throughout the United States and Canada on several topics, including:

- Generation Asset Valuation and the Use of Real Options
- Retail and Wholesale Market Entry Strategies
- The Use Strategic Alliances in Restructured Energy Markets
- Gas Supply and Pipeline Infrastructure in the Northeast Energy Markets
- Nuclear Asset Valuation and the Divestiture Process

AVAILABLE UPON REQUEST

Extensive client and project listings, and specific references.

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Arkansas Public Service Commission				
CenterPoint Energy Resources Corp. D/B/A CenterPoint Energy Arkansas Gas	01/07	CenterPoint Energy Resources Corp. D/B/A CenterPoint Energy Arkansas Gas	Docket No. 06-161-U	Return on Equity
Colorado Public Utilities Commission				
Atmos Energy Corporation	07/09	Atmos Energy Colorado-Kansas Division	Docket No. 09AL-507G	Return on Equity (gas)
Xcel Energy	12/06	Public Service Company of Colorado	Docket No. 06S-656G	Return on Equity (gas)
Xcel Energy	04/06	Public Service Company of Colorado	Docket No. 06S-234EG	Return on Equity (electric)
Xcel Energy	08/05	Public Service Company of Colorado	Docket No. 05S-369ST	Return on Equity (steam)
Xcel Energy	05/05	Public Service Company of Colorado	Docket No. 05S-264G	Return on Equity (gas)
Connecticut Department of Public Utility Control				
Southern Connecticut Gas Company	09/08	Southern Connecticut Gas Company	Docket No. 08-08-17	Return on Equity
Southern Connecticut Gas Company	12/07	Southern Connecticut Gas Company	Docket No. 05-03-17PH02	Return on Equity
Connecticut Natural Gas Corporation	12/07	Connecticut Natural Gas Corporation	Docket No. 06-03-04PH02	Return on Equity
Federal Energy Regulatory Commission				
Portland Natural Gas Transmission System	05/10	Portland Natural Gas Transmission System	Docket No. RP10-729-000	Return on Equity
Florida Gas Transmission Company, LLC	10/09	Florida Gas Transmission Company, LLC	Docket No. RP10-21-000	Return on Equity
Maritimes and Northeast Pipeline, LLC	07/09	Maritimes and Northeast Pipeline, LLC	Docket No. RP09-809-000	Return on Equity
Spectra Energy	02/08	Saltville Gas Storage	Docket No. RP08-257-000	Return on Equity
Panhandle Energy Pipelines	08/07	Panhandle Energy Pipelines	Docket No. PL07-2-000	Response to draft policy statement regarding inclusion of MLPs in proxy groups for determination of gas pipeline ROEs
Southwest Gas Storage Company	08/07	Southwest Gas Storage Company	Docket No. RP07-541-000	Return on Equity
Southwest Gas Storage Company	06/07	Southwest Gas Storage Company	Docket No. RP07-34-000	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Sea Robin Pipeline LLC	06/07	Sea Robin Pipeline LLC	Docket No. RP07-513-000	Return on Equity
Transwestern Pipeline Company	09/06	Transwestern Pipeline Company	Docket No. RP06-614-000	Return on Equity
GPU International and Aquila	11/00	GPU International	Docket No. EC01-24-000	Market Power Study
Georgia Public Service Commission				
Atlanta Gas Light Company	05/10	Atlanta Gas Light Company	Docket No. 31647-U	Return on Equity
Massachusetts Department of Public Utilities				
National Grid	08/09	Massachusetts Electric Company d/b/a National Grid	DPU 09-39	Revenue Decoupling and Return on Equity
National Grid	08/09	Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid	DPU 09-38	Return on Equity – Solar Generation
Bay State Gas Company	04/09	Bay State Gas Company	DTE 09-30	Return on Equity
NSTAR Electric	09/04	NSTAR Electric	DTE 04-85	Divestiture of Power Purchase Agreement
NSTAR Electric	08/04	NSTAR Electric	DTE 04-78	Divestiture of Power Purchase Agreement
NSTAR Electric	07/04	NSTAR Electric	DTE 04-68	Divestiture of Power Purchase Agreement
NSTAR Electric	07/04	NSTAR Electric	DTE 04-61	Divestiture of Power Purchase Agreement
NSTAR Electric	06/04	NSTAR Electric	DTE 04-60	Divestiture of Power Purchase Agreement
Unitil Corporation	01/04	Fitchburg Gas and Electric	DTE 03-52	Integrated Resource Plan; Gas Demand Forecast
Minnesota Public Utilities Commission				
Otter Tail Power Corporation	04/10	Otter Tail Power Company	Docket No. E-017/GR-10-239	Return on Equity
Minnesota Power a division of ALLETE, Inc.	11/09	Minnesota Power	Docket No. E015/GR-09-1151	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Minnesota Gas	11/08	CenterPoint Energy Minnesota Gas	Docket No. G-008/GR-08-1075	Return on Equity
Otter Tail Power Corporation	10/07	Otter Tail Power Company	Docket No. E017/GR-07-1178	Return on Equity
Xcel Energy	11/05	NSP-Minnesota	Docket No. E002/GR-05-1428	Return on Equity (electric)
Xcel Energy	09/04	NSP Minnesota	Docket No. G002/GR-04-1511	Cost of Capital (gas)
Mississippi Public Service Commission				
CenterPoint Energy Resources, Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Mississippi Gas	07/09	CenterPoint Energy Mississippi Gas	Docket No. 09-UN-334	Return on Equity
Missouri Public Service Commission				
Union Electric Company d/b/a AmerenUE	09/10	Union Electric Company d/b/a AmerenUE	Case No. ER-2011-0028	Return on Equity (electric)
Union Electric Company d/b/a AmerenUE	06/10	Union Electric Company d/b/a AmerenUE	Case No. GR-2010-0363	Return on Equity (gas)
New Hampshire Public Utilities Commission				
EnergyNorth Natural Gas d/b/a National Grid NH	02/10	EnergyNorth Natural Gas d/b/a National Grid NH	Docket No. DG 10-017	Return on Equity
Unitil Energy Systems, Inc. ("Unitil"), EnergyNorth Natural Gas, Inc. d/b/a National Grid NH, Granite State Electric Company d/b/a National Grid, and Northern Utilities, Inc. – New Hampshire Division	08/08	Unitil Energy Systems, Inc. ("Unitil"), EnergyNorth Natural Gas, Inc. d/b/a National Grid NH, Granite State Electric Company d/b/a National Grid, and Northern Utilities, Inc. – New Hampshire Division	Docket No. DG 07-072	Carrying Charge Rate on Cash Working Capital
New Jersey Board of Public Utilities				
Pepco Holdings, Inc.	09/06	Atlantic City Electric Company	Docket No. EMO6090638	Divestiture and Valuation of Electric Generating Assets
Pepco Holdings, Inc.	12/05	Atlantic City Electric Company	BPU Docket No. EM05121058	Market Value of Electric Generation Assets; Auction

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Conectiv	06/03	Atlantic City Electric Company	BPU Docket No. EO03020091	Market Value of Electric Generation Assets; Auction Process
New Mexico Public Regulation Commission				
Public Service Company of New Mexico	06/10	Public Service Company of New Mexico	Case No. 10-00086-UT	Return on Equity (electric)
Public Service Company of New Mexico	09/08	Public Service Company of New Mexico	Case No. 08-00273-UT	Return on Equity (electric)
Xcel Energy	07/07	Southwestern Public Service Company	Case No. 07-00319-UT	Return on Equity (electric)
New York State Public Service Commission				
Orange and Rockland Utilities, Inc.	07/10	Orange and Rockland Utilities, Inc.	Case No. 10-E-0362	Return on Equity (electric)
Consolidated Edison Company of New York, Inc.	11/09	Consolidated Edison Company of New York, Inc.	Case No. 09-G-0795	Return on Equity (gas)
Consolidated Edison Company of New York, Inc.	11/09	Consolidated Edison Company of New York, Inc.	Case No. 09-S-0794	Return on Equity (steam)
Niagara Mohawk Power Corporation	07/01	Niagara Mohawk Power Corporation	Case No. 01-E-1046	Power Purchase and Sale Agreement; Standard Offer Service Agreement
North Dakota Public Service Commission				
Otter Tail Power Company	11/08	Otter Tail Power Company	Docket No. 08-862	Return on Equity (electric)
Oklahoma Corporation Commission				
CenterPoint Energy Resources Corp., D/B/A CenterPoint Energy Oklahoma Gas	03/09	CenterPoint Energy Oklahoma Gas	Docket No. PUD200900055	Return on Equity
Rhode Island Public Utilities Commission				
National Grid RI – Gas	08/08	National Grid RI – Gas	Docket No. 3943	Revenue Decoupling and Return on Equity
South Carolina Public Service Commission				
South Carolina Electric & Gas	03/10	South Carolina Electric & Gas	Docket No. 2009-489-E	Return on Equity
South Dakota Public Utilities Commission				

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Otter Tail Power Company	08/10	Otter Tail Power Company	Docket No. EL10-011	Return on Equity (electric)
Northern States Power Company	06/09	South Dakota Division of Northern States Power	Docket No. EL09-009	Return on Equity (electric)
Otter Tail Power Company	10/08	Otter Tail Power Company	Docket No. EL08-030	Return on Equity (electric)
Texas Public Utility Commission				
Texas-New Mexico Power Company	08/10	Texas-New Mexico Power Company	Docket No. 38480	Return on Equity (electric)
CenterPoint Energy Houston Electric LLC	07/10	CenterPoint Energy Houston Electric LLC	Docket No. 38339	Return on Equity
Xcel Energy	05/10	Southwestern Public Service Company	Docket No. 38147	Return on Equity (electric)
Texas-New Mexico Power Company	08/08	Texas-New Mexico Power Company	Docket No. 36025	Return on Equity (electric)
Xcel Energy	05/06	Southwestern Public Service Company	SOAH Docket No. 473-06-2536 Docket No. 32766	Return on Equity (electric)
Texas Railroad Commission				
Atmos Pipeline - Texas	09/10	Atmos Pipeline - Texas	GUD 10000	Return on Equity
CenterPoint Energy Resources Corp. D/B/A CenterPoint Energy Entex and CenterPoint Energy Texas Gas	07/09	CenterPoint Energy Resources Corp. D/B/A CenterPoint Energy Entex and CenterPoint Energy Texas Gas	GUD 9902	Return on Equity
CenterPoint Energy Resources Corp. D/B/A CenterPoint Energy Texas Gas	03/08	CenterPoint Energy Resources Corp. D/B/A CenterPoint Energy Texas Gas	GUD 9791	Return on Equity
Utah Public Service Commission				
Questar Gas Company	12/07	Questar Gas Company	Docket No. 07-057-13	Return on Equity
Vermont Public Service Board				
Green Mountain Power	04/06	Green Mountain Power	Docket Nos. 7175 and 7176	Return on Equity (electric)
Vermont Gas Systems, Inc.	12/05	Vermont Gas Systems	Docket Nos. 7109 and 7160	Return on Equity (gas)
Virginia State Corporation Commission				
Columbia Gas Of Virginia, Inc.	06/06	Columbia Gas Of Virginia, Inc.	Case No. PUE-2005-00098	Merger Synergies
Dominion Resources	10/01	Virginia Electric and Power Company	Case No. PUE000584	Corporate Structure and Electric Generation Strategy

30-DAY CONSTANT GROWTH DCF

Company		[1] Annualized Dividend	[2] Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Zacks EPS Growth	[6] Value Line EPS Growth	[7] First Call	[8] BR + SV	[9] Average Growth Rate	[10] Low DCF ROE	[11] Mean DCF ROE	[12] High DCF ROE
PROXY GROUP GAS UTILITIES													
AGL Resources	AGL	$1.76	$38.04	4.63%	4.74%	4.00%	5.00%	5.77%	5.52%	5.07%	8.72%	9.82%	10.53%
Atmos Energy	ATO	$1.34	$28.90	4.64%	4.74%	5.00%	5.50%	3.43%	3.68%	4.40%	8.15%	9.14%	10.26%
Laclede Group	LG	$1.58	$34.16	4.62%	4.70%	3.00%	2.50%	3.50%	4.46%	3.36%	7.18%	8.07%	9.19%
New Jersey Resources	NJR	$1.36	$38.48	3.53%	3.62%	4.00%	5.00%	3.33%	6.42%	4.69%	6.92%	8.30%	10.07%
Nicor Inc.	GAS	$1.86	$44.98	4.14%	4.18%	3.50%	1.00%	0.73%	3.97%	2.30%	4.88%	6.48%	8.18%
Northwest Nat. Gas	NWN	$1.74	$46.98	3.70%	3.79%	4.90%	4.50%	4.13%	5.03%	4.64%	7.91%	8.43%	8.82%
Piedmont Natural Gas	PNY	$1.12	$28.37	3.95%	4.02%	4.50%	3.50%	3.93%	3.29%	3.80%	7.30%	7.83%	8.54%
South Jersey Industries	SJI	$1.32	$48.23	2.74%	2.84%	6.50%	7.00%	6.33%	9.29%	7.28%	9.15%	10.12%	12.15%
WGL Holdings Inc.	WGL	$1.51	$36.88	4.09%	4.16%	3.00%	2.50%	3.10%	4.01%	3.15%	6.65%	7.31%	8.18%
		PROXY GROUP MEAN		4.00%	4.09%	4.27%	4.06%	3.81%	5.07%	4.30%	7.43%	8.39%	9.55%

Notes
[1] Source: Bloomberg
[2] Source: Bloomberg. Based on indicated number of days historical average.
[3] Equals Col. [1]/Col. [2]
[4] Equals (Col. [1] x (1+(0.5 x Col. [9])))/Col. [2]
[5] Source: Zacks
[6] Source: Value Line
[7] Source: Yahoo! Finance
[8] Source: Value Line, See Exhibit No. ____(RBH-2)
[9] Equals average of Cols [5] through [8]
[10] Min (Cols [5],[6],[7],[8]) + ([3] x (1 + (0.5 x Min (Cols [5],[6],[7],[8])))
[11] Equals Col. [4] + Col. [9]
[12] Max (Cols [5],[6],[7],[8]) + ([3] x (1 + (0.5 x Max (Cols [5],[6],[7],[8])))

90-DAY CONSTANT GROWTH DCF

Company		[1] Annualized Dividend	[2] Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Zacks EPS Growth	[6] Value Line EPS Growth	[7] First Call	[8] BR + SV	[9] Average Growth Rate	[10] Low DCF ROE	[11] Mean DCF ROE	[12] High DCF ROE
PROXY GROUP GAS UTILITIES													
AGL Resources	AGL	$1.76	$37.64	4.68%	4.79%	4.00%	5.00%	5.77%	5.52%	5.07%	8.77%	9.87%	10.58%
Atmos Energy	ATO	$1.34	$28.55	4.69%	4.80%	5.00%	5.50%	3.43%	3.68%	4.40%	8.20%	9.20%	10.32%
Laclede Group	LG	$1.58	$33.93	4.66%	4.73%	3.00%	2.50%	3.50%	4.46%	3.36%	7.21%	8.10%	9.22%
New Jersey Resources	NJR	$1.36	$37.17	3.66%	3.74%	4.00%	5.00%	3.33%	6.42%	4.69%	7.05%	8.43%	10.19%
Nicor Inc.	GAS	$1.86	$43.30	4.30%	4.34%	3.50%	1.00%	0.73%	3.97%	2.30%	5.04%	6.64%	8.35%
Northwest Nat. Gas	NWN	$1.74	$45.92	3.79%	3.88%	4.90%	4.50%	4.13%	5.03%	4.64%	8.00%	8.52%	8.91%
Piedmont Natural Gas	PNY	$1.12	$27.06	4.14%	4.22%	4.50%	3.50%	3.93%	3.29%	3.80%	7.49%	8.02%	8.73%
South Jersey Industries	SJI	$1.32	$46.27	2.85%	2.96%	6.50%	7.00%	6.33%	9.29%	7.28%	9.27%	10.24%	12.27%
WGL Holdings Inc.	WGL	$1.51	$35.77	4.22%	4.29%	3.00%	2.50%	3.10%	4.01%	3.15%	6.77%	7.44%	8.31%
		PROXY GROUP MEAN		4.11%	4.20%	4.27%	4.06%	3.81%	5.07%	4.30%	7.54%	8.50%	9.65%

Notes
[1] Source: Bloomberg
[2] Source: Bloomberg. Based on indicated number of days historical average.
[3] Equals Col. [1]/Col. [2]
[4] Equals (Col. [1] x (1+(0.5 x Col. [9])))/Col. [2]
[5] Source: Zacks
[6] Source: Value Line
[7] Source: Yahoo! Finance
[8] Source: Value Line, See Exhibit No. ____(RBH-2)
[9] Equals average of Cols [5] through [8]
[10] Min (Cols [5],[6],[7],[8]) + ([3] x (1 + (0.5 x Min (Cols [5],[6],[7],[8])))
[11] Equals Col. [4] + Col. [9]
[12] Max (Cols [5],[6],[7],[8]) + ([3] x (1 + (0.5 x Max (Cols [5],[6],[7],[8])))

180-DAY CONSTANT GROWTH DCF

Company		[1] Annualized Dividend	[2] Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Zacks EPS Growth	[6] Value Line EPS Growth	[7] First Call	[8] BR + SV	[9] Average Growth Rate	[10] Low DCF ROE	[11] Mean DCF ROE	[12] High DCF ROE
PROXY GROUP GAS UTILITIES													
AGL Resources	AGL	$1.76	$37.49	4.69%	4.81%	4.00%	5.00%	5.77%	5.52%	5.07%	8.79%	9.89%	10.60%
Atmos Energy	ATO	$1.34	$28.43	4.71%	4.82%	5.00%	5.50%	3.43%	3.68%	4.40%	8.22%	9.22%	10.34%
Laclede Group	LG	$1.58	$33.78	4.68%	4.76%	3.00%	2.50%	3.50%	4.46%	3.36%	7.24%	8.12%	9.24%
New Jersey Resources	NJR	$1.36	$37.05	3.67%	3.76%	4.00%	5.00%	3.33%	6.42%	4.69%	7.06%	8.44%	10.21%
Nicor Inc.	GAS	$1.86	$42.57	4.37%	4.42%	3.50%	1.00%	0.73%	3.97%	2.30%	5.12%	6.72%	8.42%
Northwest Nat. Gas	NWN	$1.74	$45.77	3.80%	3.89%	4.90%	4.50%	4.13%	5.03%	4.64%	8.01%	8.53%	8.92%
Piedmont Natural Gas	PNY	$1.12	$26.83	4.17%	4.25%	4.50%	3.50%	3.93%	3.29%	3.80%	7.53%	8.06%	8.77%
South Jersey Industries	SJI	$1.32	$44.03	3.00%	3.11%	6.50%	7.00%	6.33%	9.29%	7.28%	9.42%	10.39%	12.43%
WGL Holdings Inc.	WGL	$1.51	$34.92	4.32%	4.39%	3.00%	2.50%	3.10%	4.01%	3.15%	6.88%	7.54%	8.42%
		PROXY GROUP MEAN		4.16%	4.25%	4.27%	4.06%	3.81%	5.07%	4.30%	7.59%	8.55%	9.71%

Notes
[1] Source: Bloomberg
[2] Source: Bloomberg. Based on indicated number of days historical average.
[3] Equals Col. [1]/Col. [2]
[4] Equals (Col. [1] x (1+(0.5 x Col. [9])))/Col. [2]
[5] Source: Zacks
[6] Source: Value Line
[7] Source: Yahoo! Finance
[8] Source: Value Line, See Exhibit No. ____(RBH-2)
[9] Equals average of Cols [5] through [8]
[10] Min (Cols [5],[6],[7],[8]) + ([3] x (1 + (0.5 x Min (Cols [5],[6],[7],[8])))
[11] Equals Col. [4] + Col. [9]
[12] Max (Cols [5],[6],[7],[8]) + ([3] x (1 + (0.5 x Max (Cols [5],[6],[7],[8])))

CALCULATION OF THE RETENTION GROWTH RATE

Company	Ticker	Payout Ratio 1 ("All Div'ds to Net Prof" 2010) [1]	Payout Ratio 2 ("All Div'ds to Net Prof" 2011) [2]	Payout Ratio 3 ("All Div'ds to Net Prof" 13-15) [3]	Average Retention Ratio [4]	Value Line Return on Book Value 1 ("Return on Com Eq" 2010) [5]	Value Line Return on Book Value 2 ("Return on Com Eq" 2011) [6]	Value Line Return on Book Value 3 ("Return on Com Eq" 13-15) [7]	Average Return on Book Value [8]	B*R [9]	Common Shares O/S 2011 [10]	Common Shares O/S 13-15 [11]	Common Shares Growth Rate [12]	Est. 2010 High [13]	Est. 2010 Low [14]	Est. 2010 Mid [15]	2011 Book Value per sh [16]	Market/ Book Ratio [17]	"S" [18]	"V" [19]	S x V [20]	BR + SV [21]
AGL Resources	AGL	58.00%	57.00%	55.00%	43.33%	12.50%	12.50%	12.00%	12.33%	5.34%	78.50	80.00	0.38%	40.1	34.3	37.20	25.30	1.47	0.56%	31.99%	0.18%	5.52%
Atmos Energy	ATO	63.00%	60.00%	53.00%	41.33%	8.00%	8.50%	9.50%	8.67%	3.58%	90.00	105.00	3.13%	30.2	25.9	28.05	27.20	1.03	3.23%	3.03%	0.10%	3.68%
Laclede Group	LG	70.00%	62.00%	57.00%	37.00%	9.00%	10.00%	11.00%	10.00%	3.70%	23.00	26.00	2.48%	35.9	30.8	33.35	25.55	1.31	3.24%	23.39%	0.76%	4.46%
New Jersey Resources	NJR	53.00%	52.00%	52.00%	47.67%	14.50%	15.00%	14.00%	14.50%	6.91%	41.00	40.00	-0.49%	39.0	33.5	36.25	18.10	2.00	-0.99%	50.07%	-0.49%	6.42%
Nicor Inc.	GAS	68.00%	66.00%	61.00%	35.00%	11.50%	11.50%	11.00%	11.33%	3.97%	45.50	45.50	0.00%	45.4	38.0	41.70	24.60	1.70	0.00%	41.01%	0.00%	3.97%
Northwest Nat. Gas	NWN	61.00%	61.00%	54.00%	41.33%	10.50%	10.50%	12.00%	11.00%	4.55%	26.75	27.70	0.70%	49.2	41.1	45.15	26.80	1.68	1.18%	40.64%	0.48%	5.03%
Piedmont Natural Gas	PNY	71.00%	66.00%	67.00%	31.33%	12.00%	13.00%	13.00%	12.67%	3.97%	71.50	69.00	-0.71%	28.5	23.9	26.20	13.35	1.96	-1.39%	49.05%	-0.68%	3.28%
South Jersey Industries	SJI	51.00%	49.00%	47.00%	51.00%	14.00%	15.00%	14.50%	14.50%	7.40%	31.50	34.00	1.54%	49.1	37.2	43.15	19.35	2.23	3.43%	55.16%	1.89%	9.29%
WGL Holdings Inc.	WGL	65.00%	63.00%	61.00%	37.00%	10.50%	11.00%	11.00%	10.83%	4.01%	50.00	50.00	0.00%	37.3	31.0	34.15	23.55	1.45	0.00%	31.04%	0.00%	4.01%

Notes:
[1] Source: Value Line
[2] Source: Value Line
[3] Source: Value Line
[4] Equals 1 - Mean (Cols. [1], [2] & [3])
[5] Source: Value Line
[6] Source: Value Line
[7] Source: Value Line
[8] Mean (Cols. [5], [6] & [7])
[9] Equals Col. [4] x Col. [8]
[10] Source: Value Line
[11] Source: Value Line
[12] Equals ((Col. [11] / Col. [10]) ^ 0.2) - 1
[13] Source: Value Line
[14] Source: Value Line
[15] Equals Mean (Cols. [13] & [14])
[16] Source: Value Line
[17] Equals Col. [15] / Col. [16]
[18] Equals Col. [12] x Col. [17]
[19] Equals 1 - (1 / Col. [17])
[20] Equals Col. [18] x Col. [19]
[21] Equals Col. [9] + Col. [20]

MULTI-STAGE DCF MODEL – 30-DAY AVERAGE PRICE
TERMINAL VALUE - GORDON MODEL

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
		Stock	EPS	GDP		Payout Ratio		Solver Cells			Near Term	Intermediate	Long Term
Company	Ticker	Price	Growth	Growth	2010	2014	2024	Delta	k(e)	Solution	Growth	Growth	Growth
AGL Resources	AGL	$ 38.04	4.92%	5.83%	58.00%	55.00%	71.18%	$ 0.00	11.42%	11.42%	4.92%	5.38%	5.83%
Atmos Energy	ATO	$ 28.90	4.64%	5.83%	63.00%	53.00%	71.18%	$ (0.00)	10.79%	10.79%	4.64%	5.24%	5.83%
Laclede Group	LG	$ 34.16	3.00%	5.83%	70.00%	57.00%	71.18%	$ (0.00)	11.54%	11.54%	3.00%	4.41%	5.83%
New Jersey Resources	NJR	$ 38.48	4.11%	5.83%	53.00%	52.00%	71.18%	$ (0.00)	10.16%	10.16%	4.11%	4.97%	5.83%
Nicor Inc.	GAS	$ 44.98	1.74%	5.83%	68.00%	61.00%	71.18%	$ (0.00)	9.91%	9.91%	1.74%	3.78%	5.83%
Northwest Nat. Gas	NWN	$ 46.98	4.51%	5.83%	61.00%	54.00%	71.18%	$ (0.00)	10.18%	10.18%	4.51%	5.17%	5.83%
Piedmont Natural Gas	PNY	$ 28.37	3.98%	5.83%	71.00%	67.00%	71.18%	$ 0.00	10.11%	10.11%	3.98%	4.90%	5.83%
South Jersey Industries	SJI	$ 48.23	6.61%	5.83%	51.00%	47.00%	71.18%	$ (0.00)	9.83%	9.83%	6.61%	6.22%	5.83%
WGL Holdings Inc.	WGL	$ 36.88	2.87%	5.83%	65.00%	61.00%	71.18%	$ (0.00)	10.38%	10.38%	2.87%	4.35%	5.83%
MEAN:		$ 38.34	4.04%	5.83%	62.22%	56.33%	71.18%			10.48%	4.04%	4.94%	5.83%

Projected Annual Data

Earnings per Share		[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]
Company	Ticker	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Terminal Growth
AGL Resources	AGL	$ 2.88	$ 3.02	$ 3.17	$ 3.33	$ 3.49	$ 3.66	$ 3.85	$ 4.05	$ 4.27	$ 4.50	$ 4.76	$ 5.04	$ 5.33	$ 5.64	$ 5.97	$ 6.32	5.83%
Atmos Energy	ATO	$ 1.97	$ 2.06	$ 2.16	$ 2.26	$ 2.36	$ 2.47	$ 2.59	$ 2.72	$ 2.86	$ 3.02	$ 3.19	$ 3.38	$ 3.57	$ 3.78	$ 4.00	$ 4.24	5.83%
Laclede Group	LG	$ 2.92	$ 3.01	$ 3.10	$ 3.19	$ 3.29	$ 3.39	$ 3.50	$ 3.64	$ 3.80	$ 3.99	$ 4.20	$ 4.45	$ 4.71	$ 4.98	$ 5.27	$ 5.58	5.83%
New Jersey Resources	NJR	$ 2.40	$ 2.50	$ 2.60	$ 2.71	$ 2.82	$ 2.94	$ 3.06	$ 3.21	$ 3.37	$ 3.54	$ 3.74	$ 3.96	$ 4.19	$ 4.43	$ 4.69	$ 4.97	5.83%
Nicor Inc.	GAS	$ 2.97	$ 3.02	$ 3.07	$ 3.13	$ 3.18	$ 3.24	$ 3.32	$ 3.42	$ 3.55	$ 3.71	$ 3.90	$ 4.13	$ 4.37	$ 4.62	$ 4.89	$ 5.18	5.83%
Northwest Nat. Gas	NWN	$ 2.83	$ 2.96	$ 3.09	$ 3.23	$ 3.38	$ 3.53	$ 3.70	$ 3.88	$ 4.08	$ 4.30	$ 4.54	$ 4.80	$ 5.08	$ 5.38	$ 5.70	$ 6.03	5.83%
Piedmont Natural Gas	PNY	$ 1.67	$ 1.74	$ 1.81	$ 1.88	$ 1.95	$ 2.03	$ 2.12	$ 2.21	$ 2.32	$ 2.44	$ 2.58	$ 2.73	$ 2.89	$ 3.06	$ 3.23	$ 3.42	5.83%
South Jersey Industries	SJI	$ 2.38	$ 2.54	$ 2.71	$ 2.88	$ 3.07	$ 3.28	$ 3.49	$ 3.71	$ 3.94	$ 4.18	$ 4.43	$ 4.69	$ 4.96	$ 5.25	$ 5.56	$ 5.88	5.83%
WGL Holdings Inc.	WGL	$ 2.53	$ 2.60	$ 2.68	$ 2.75	$ 2.83	$ 2.91	$ 3.01	$ 3.13	$ 3.26	$ 3.42	$ 3.60	$ 3.82	$ 4.04	$ 4.27	$ 4.52	$ 4.79	5.83%

Projected Annual Data

Dividend Payout Ratio		[30]	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]
Company	Ticker	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
AGL Resources	AGL	58.00%	57.25%	56.50%	55.75%	55.00%	58.24%	61.47%	64.71%	67.95%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Atmos Energy	ATO	63.00%	60.50%	58.00%	55.50%	53.00%	56.64%	60.27%	63.91%	67.55%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Laclede Group	LG	70.00%	66.75%	63.50%	60.25%	57.00%	59.84%	62.67%	65.51%	68.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
New Jersey Resources	NJR	53.00%	52.75%	52.50%	52.25%	52.00%	55.84%	59.67%	63.51%	67.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Nicor Inc.	GAS	68.00%	66.25%	64.50%	62.75%	61.00%	63.04%	65.07%	67.11%	69.15%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Northwest Nat. Gas	NWN	61.00%	59.25%	57.50%	55.75%	54.00%	57.44%	60.87%	64.31%	67.75%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Piedmont Natural Gas	PNY	71.00%	70.00%	69.00%	68.00%	67.00%	67.84%	68.67%	69.51%	70.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
South Jersey Industries	SJI	51.00%	50.00%	49.00%	48.00%	47.00%	51.84%	56.67%	61.51%	66.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
WGL Holdings Inc.	WGL	65.00%	64.00%	63.00%	62.00%	61.00%	63.04%	65.07%	67.11%	69.15%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%

Projected Annual Data

Dividends per Share & Terminal Market Value		[45]	[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]
Company	Ticker	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Terminal Price	Terminal P/E Ratio
AGL Resources	AGL	$ 0.44	$ 1.82	$ 1.88	$ 1.95	$ 2.01	$ 2.24	$ 2.49	$ 2.76	$ 3.06	$ 3.39	$ 3.58	$ 3.79	$ 4.02	$ 4.25	$ 4.50	$ 85.15	13.48
Atmos Energy	ATO	$ 0.32	$ 1.31	$ 1.31	$ 1.31	$ 1.31	$ 1.47	$ 1.64	$ 1.83	$ 2.04	$ 2.27	$ 2.40	$ 2.54	$ 2.69	$ 2.85	$ 3.02	$ 64.38	15.20
Laclede Group	LG	$ 0.53	$ 2.07	$ 2.03	$ 1.98	$ 1.93	$ 2.10	$ 2.28	$ 2.49	$ 2.73	$ 2.99	$ 3.16	$ 3.35	$ 3.54	$ 3.75	$ 3.97	$ 73.56	13.19
New Jersey Resources	NJR	$ 0.33	$ 1.37	$ 1.42	$ 1.47	$ 1.53	$ 1.71	$ 1.91	$ 2.14	$ 2.39	$ 2.66	$ 2.82	$ 2.98	$ 3.16	$ 3.34	$ 3.54	$ 86.36	17.39
Nicor Inc.	GAS	$ 0.51	$ 2.04	$ 2.02	$ 2.00	$ 1.98	$ 2.09	$ 2.23	$ 2.38	$ 2.56	$ 2.78	$ 2.94	$ 3.11	$ 3.29	$ 3.48	$ 3.68	$ 95.72	18.49
Northwest Nat. Gas	NWN	$ 0.45	$ 1.83	$ 1.86	$ 1.88	$ 1.91	$ 2.12	$ 2.36	$ 2.62	$ 2.91	$ 3.23	$ 3.42	$ 3.62	$ 3.83	$ 4.05	$ 4.29	$ 104.33	17.31
Piedmont Natural Gas	PNY	$ 0.31	$ 1.26	$ 1.30	$ 1.33	$ 1.36	$ 1.44	$ 1.52	$ 1.61	$ 1.72	$ 1.84	$ 1.94	$ 2.06	$ 2.18	$ 2.30	$ 2.44	$ 60.33	17.62
South Jersey Industries	SJI	$ 0.32	$ 1.35	$ 1.41	$ 1.48	$ 1.54	$ 1.81	$ 2.10	$ 2.43	$ 2.78	$ 3.15	$ 3.34	$ 3.53	$ 3.74	$ 3.96	$ 4.19	$ 110.89	18.85
WGL Holdings Inc.	WGL	$ 0.42	$ 1.71	$ 1.73	$ 1.76	$ 1.78	$ 1.90	$ 2.04	$ 2.19	$ 2.37	$ 2.57	$ 2.72	$ 2.87	$ 3.04	$ 3.22	$ 3.41	$ 79.26	16.56
																		16.45

Projected Annual Data

Investor Cash Flows		[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
Company	Ticker	Initial Outflow	10/8/10	12/31/10	7/1/11	7/1/12	7/1/13	7/1/14	7/1/15	7/1/16	7/1/17	7/1/18	7/1/19	7/1/20	7/1/21	7/1/22	7/1/23	7/1/24
AGL Resources	AGL	($38.04)	$0.00	$ 0.44	$ 1.82	$ 1.88	$ 1.95	$ 2.01	$ 2.24	$ 2.49	$ 2.76	$ 3.06	$ 3.39	$ 3.58	$ 3.79	$ 4.02	$ 4.25	$ 89.64
Atmos Energy	ATO	($28.90)	$0.00	$ 0.32	$ 1.31	$ 1.31	$ 1.31	$ 1.31	$ 1.47	$ 1.64	$ 1.83	$ 2.04	$ 2.27	$ 2.40	$ 2.54	$ 2.69	$ 2.85	$ 67.40
Laclede Group	LG	($34.16)	$0.00	$ 0.53	$ 2.07	$ 2.03	$ 1.98	$ 1.93	$ 2.10	$ 2.28	$ 2.49	$ 2.73	$ 2.99	$ 3.16	$ 3.35	$ 3.54	$ 3.75	$ 77.53
New Jersey Resources	NJR	($38.48)	$0.00	$ 0.33	$ 1.37	$ 1.42	$ 1.47	$ 1.53	$ 1.71	$ 1.91	$ 2.14	$ 2.39	$ 2.66	$ 2.82	$ 2.98	$ 3.16	$ 3.34	$ 89.90
Nicor Inc.	GAS	($44.98)	$0.00	$ 0.51	$ 2.04	$ 2.02	$ 2.00	$ 1.98	$ 2.09	$ 2.23	$ 2.38	$ 2.56	$ 2.78	$ 2.94	$ 3.11	$ 3.29	$ 3.48	$ 99.41
Northwest Nat. Gas	NWN	($46.98)	$0.00	$ 0.45	$ 1.83	$ 1.86	$ 1.88	$ 1.91	$ 2.12	$ 2.36	$ 2.62	$ 2.91	$ 3.23	$ 3.42	$ 3.62	$ 3.83	$ 4.05	$ 108.62
Piedmont Natural Gas	PNY	($28.37)	$0.00	$ 0.31	$ 1.26	$ 1.30	$ 1.33	$ 1.36	$ 1.44	$ 1.52	$ 1.61	$ 1.72	$ 1.84	$ 1.94	$ 2.06	$ 2.18	$ 2.30	$ 62.76
South Jersey Industries	SJI	($48.23)	$0.00	$ 0.32	$ 1.35	$ 1.41	$ 1.48	$ 1.54	$ 1.81	$ 2.10	$ 2.43	$ 2.78	$ 3.15	$ 3.34	$ 3.53	$ 3.74	$ 3.96	$ 115.08
WGL Holdings Inc.	WGL	($36.88)	$0.00	$ 0.42	$ 1.71	$ 1.73	$ 1.76	$ 1.78	$ 1.90	$ 2.04	$ 2.19	$ 2.37	$ 2.57	$ 2.72	$ 2.87	$ 3.04	$ 3.22	$ 82.67

MULTI-STAGE DCF MODEL - 90-DAY AVERAGE PRICE
TERMINAL VALUE - GORDON MODEL

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
		Stock	EPS	GDP		Payout Ratio		Solver Cells			Near Term	Intermediate	Long Term
Company	Ticker	Price	Growth	Growth	2010	2014	2024	Delta	k(e)	Solution	Growth	Growth	Growth
AGL Resources	AGL	$ 37.64	4.92%	5.83%	58.00%	55.00%	71.18%	$ (0.00)	11.48%	11.48%	4.92%	5.38%	5.83%
Atmos Energy	ATO	$ 28.55	4.64%	5.83%	63.00%	53.00%	71.18%	$ (0.00)	10.85%	10.85%	4.64%	5.24%	5.83%
Laclede Group	LG	$ 33.93	3.00%	5.83%	70.00%	57.00%	71.18%	$ (0.00)	11.58%	11.58%	3.00%	4.41%	5.83%
New Jersey Resources	NJR	$ 37.17	4.11%	5.83%	53.00%	52.00%	71.18%	$ (0.00)	10.31%	10.31%	4.11%	4.97%	5.83%
Nicor Inc.	GAS	$ 43.30	1.74%	5.83%	68.00%	61.00%	71.18%	$ (0.00)	10.07%	10.07%	1.74%	3.78%	5.83%
Northwest Nat. Gas	NWN	$ 45.92	4.51%	5.83%	61.00%	54.00%	71.18%	$ 0.00	10.28%	10.28%	4.51%	5.17%	5.83%
Piedmont Natural Gas	PNY	$ 27.06	3.98%	5.83%	71.00%	67.00%	71.18%	$ (0.00)	10.32%	10.32%	3.98%	4.90%	5.83%
South Jersey Industries	SJI	$ 46.27	6.61%	5.83%	51.00%	47.00%	71.18%	$ (0.00)	9.99%	9.99%	6.61%	6.22%	5.83%
WGL Holdings Inc.	WGL	$ 35.77	2.87%	5.83%	65.00%	61.00%	71.18%	$ (0.00)	10.52%	10.52%	2.87%	4.35%	5.83%
MEAN:		$ 37.29	4.04%	5.83%	62.22%	56.33%	71.18%			10.60%	4.04%	4.94%	5.83%

Projected Annual Data
Earnings per Share

Company	Ticker	[13] 2009	[14] 2010	[15] 2011	[16] 2012	[17] 2013	[18] 2014	[19] 2015	[20] 2016	[21] 2017	[22] 2018	[23] 2019	[24] 2020	[25] 2021	[26] 2022	[27] 2023	[28] 2024	[29] Terminal Growth
AGL Resources	AGL	$ 2.88	$ 3.02	$ 3.17	$ 3.33	$ 3.49	$ 3.66	$ 3.85	$ 4.05	$ 4.27	$ 4.50	$ 4.76	$ 5.04	$ 5.33	$ 5.64	$ 5.97	$ 6.32	5.83%
Atmos Energy	ATO	$ 1.97	$ 2.06	$ 2.16	$ 2.26	$ 2.36	$ 2.47	$ 2.59	$ 2.72	$ 2.86	$ 3.02	$ 3.19	$ 3.38	$ 3.57	$ 3.78	$ 4.00	$ 4.24	5.83%
Laclede Group	LG	$ 2.92	$ 3.01	$ 3.10	$ 3.19	$ 3.29	$ 3.39	$ 3.50	$ 3.64	$ 3.80	$ 3.99	$ 4.20	$ 4.45	$ 4.71	$ 4.98	$ 5.27	$ 5.58	5.83%
New Jersey Resources	NJR	$ 2.40	$ 2.50	$ 2.60	$ 2.71	$ 2.82	$ 2.94	$ 3.06	$ 3.21	$ 3.37	$ 3.54	$ 3.74	$ 3.96	$ 4.19	$ 4.43	$ 4.69	$ 4.97	5.83%
Nicor Inc.	GAS	$ 2.97	$ 3.02	$ 3.07	$ 3.13	$ 3.18	$ 3.24	$ 3.32	$ 3.42	$ 3.55	$ 3.71	$ 3.90	$ 4.13	$ 4.37	$ 4.62	$ 4.89	$ 5.18	5.83%
Northwest Nat. Gas	NWN	$ 2.83	$ 2.96	$ 3.09	$ 3.23	$ 3.38	$ 3.53	$ 3.70	$ 3.88	$ 4.08	$ 4.30	$ 4.54	$ 4.80	$ 5.08	$ 5.38	$ 5.70	$ 6.03	5.83%
Piedmont Natural Gas	PNY	$ 1.67	$ 1.74	$ 1.81	$ 1.88	$ 1.95	$ 2.03	$ 2.12	$ 2.21	$ 2.32	$ 2.44	$ 2.58	$ 2.73	$ 2.89	$ 3.06	$ 3.23	$ 3.42	5.83%
South Jersey Industries	SJI	$ 2.38	$ 2.54	$ 2.71	$ 2.88	$ 3.07	$ 3.28	$ 3.49	$ 3.71	$ 3.94	$ 4.18	$ 4.43	$ 4.69	$ 4.96	$ 5.25	$ 5.56	$ 5.88	5.83%
WGL Holdings Inc.	WGL	$ 2.53	$ 2.60	$ 2.68	$ 2.75	$ 2.83	$ 2.91	$ 3.01	$ 3.13	$ 3.26	$ 3.42	$ 3.60	$ 3.82	$ 4.04	$ 4.27	$ 4.52	$ 4.79	5.83%

Projected Annual Data
Dividend Payout Ratio

Company	Ticker	[30] 2010	[31] 2011	[32] 2012	[33] 2013	[34] 2014	[35] 2015	[36] 2016	[37] 2017	[38] 2018	[39] 2019	[40] 2020	[41] 2021	[42] 2022	[43] 2023	[44] 2024
AGL Resources	AGL	58.00%	57.25%	56.50%	55.75%	55.00%	58.24%	61.47%	64.71%	67.95%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Atmos Energy	ATO	63.00%	60.50%	58.00%	55.50%	53.00%	56.64%	60.27%	63.91%	67.55%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Laclede Group	LG	70.00%	66.75%	63.50%	60.25%	57.00%	59.84%	62.67%	65.51%	68.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
New Jersey Resources	NJR	53.00%	52.75%	52.50%	52.25%	52.00%	55.84%	59.67%	63.51%	67.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Nicor Inc.	GAS	68.00%	66.25%	64.50%	62.75%	61.00%	63.04%	65.07%	67.11%	69.15%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Northwest Nat. Gas	NWN	61.00%	59.25%	57.50%	55.75%	54.00%	57.44%	60.87%	64.31%	67.75%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Piedmont Natural Gas	PNY	71.00%	70.00%	69.00%	68.00%	67.00%	67.84%	68.67%	69.51%	70.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
South Jersey Industries	SJI	51.00%	50.00%	49.00%	48.00%	47.00%	51.84%	56.67%	61.51%	66.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
WGL Holdings Inc.	WGL	65.00%	64.00%	63.00%	62.00%	61.00%	63.04%	65.07%	67.11%	69.15%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%

Projected Annual Data
Dividends per Share & Terminal Market Value

Company	Ticker	[45] 2010	[46] 2011	[47] 2012	[48] 2013	[49] 2014	[50] 2015	[51] 2016	[52] 2017	[53] 2018	[54] 2019	[55] 2020	[56] 2021	[57] 2022	[58] 2023	[59] 2024	[60] Terminal Price	[61] Terminal P/E Ratio
AGL Resources	AGL	$ 0.44	$ 1.82	$ 1.88	$ 1.95	$ 2.01	$ 2.24	$ 2.49	$ 2.76	$ 3.06	$ 3.39	$ 3.58	$ 3.79	$ 4.02	$ 4.25	$ 4.50	$ 84.27	13.34
Atmos Energy	ATO	$ 0.32	$ 1.31	$ 1.31	$ 1.31	$ 1.31	$ 1.47	$ 1.64	$ 1.83	$ 2.04	$ 2.27	$ 2.40	$ 2.54	$ 2.69	$ 2.85	$ 3.02	$ 63.61	15.02
Laclede Group	LG	$ 0.53	$ 2.07	$ 2.03	$ 1.98	$ 1.93	$ 2.10	$ 2.28	$ 2.49	$ 2.73	$ 2.99	$ 3.16	$ 3.35	$ 3.54	$ 3.75	$ 3.97	$ 73.05	13.10
New Jersey Resources	NJR	$ 0.33	$ 1.37	$ 1.42	$ 1.47	$ 1.53	$ 1.71	$ 1.91	$ 2.14	$ 2.39	$ 2.66	$ 2.82	$ 2.98	$ 3.16	$ 3.34	$ 3.54	$ 83.48	16.81
Nicor Inc.	GAS	$ 0.51	$ 2.04	$ 2.02	$ 2.00	$ 1.98	$ 2.09	$ 2.23	$ 2.38	$ 2.56	$ 2.78	$ 2.94	$ 3.11	$ 3.29	$ 3.48	$ 3.68	$ 92.07	17.79
Northwest Nat. Gas	NWN	$ 0.45	$ 1.83	$ 1.86	$ 1.88	$ 1.91	$ 2.12	$ 2.36	$ 2.62	$ 2.91	$ 3.23	$ 3.42	$ 3.62	$ 3.83	$ 4.05	$ 4.29	$ 102.00	16.92
Piedmont Natural Gas	PNY	$ 0.31	$ 1.26	$ 1.30	$ 1.33	$ 1.36	$ 1.44	$ 1.52	$ 1.61	$ 1.72	$ 1.84	$ 1.94	$ 2.06	$ 2.18	$ 2.30	$ 2.44	$ 57.47	16.79
South Jersey Industries	SJI	$ 0.32	$ 1.35	$ 1.41	$ 1.48	$ 1.54	$ 1.81	$ 2.10	$ 2.43	$ 2.78	$ 3.15	$ 3.34	$ 3.53	$ 3.74	$ 3.96	$ 4.19	$ 106.58	18.11
WGL Holdings Inc.	WGL	$ 0.42	$ 1.71	$ 1.73	$ 1.76	$ 1.78	$ 1.90	$ 2.04	$ 2.19	$ 2.37	$ 2.57	$ 2.72	$ 2.87	$ 3.04	$ 3.22	$ 3.41	$ 76.84	16.05
																		15.99

Projected Annual Data
Investor Cash Flows

Company	Ticker	[62] Initial Outflow	[63] 10/8/10	[64] 12/31/10	[65] 7/1/11	[66] 7/1/12	[67] 7/1/13	[68] 7/1/14	[69] 7/1/15	[70] 7/1/16	[71] 7/1/17	[72] 7/1/18	[73] 7/1/19	[74] 7/1/20	[75] 7/1/21	[76] 7/1/22	[77] 7/1/23	[78] 7/1/24
AGL Resources	AGL	($37.64)	$0.00	$ 0.44	$ 1.82	$ 1.88	$ 1.95	$ 2.01	$ 2.24	$ 2.49	$ 2.76	$ 3.06	$ 3.39	$ 3.58	$ 3.79	$ 4.02	$ 4.25	$ 88.76
Atmos Energy	ATO	($28.55)	$0.00	$ 0.32	$ 1.31	$ 1.31	$ 1.31	$ 1.31	$ 1.47	$ 1.64	$ 1.83	$ 2.04	$ 2.27	$ 2.40	$ 2.54	$ 2.69	$ 2.85	$ 66.63
Laclede Group	LG	($33.93)	$0.00	$ 0.53	$ 2.07	$ 2.03	$ 1.98	$ 1.93	$ 2.10	$ 2.28	$ 2.49	$ 2.73	$ 2.99	$ 3.16	$ 3.35	$ 3.54	$ 3.75	$ 77.02
New Jersey Resources	NJR	($37.17)	$0.00	$ 0.33	$ 1.37	$ 1.42	$ 1.47	$ 1.53	$ 1.71	$ 1.91	$ 2.14	$ 2.39	$ 2.66	$ 2.82	$ 2.98	$ 3.16	$ 3.34	$ 87.02
Nicor Inc.	GAS	($43.30)	$0.00	$ 0.51	$ 2.04	$ 2.02	$ 2.00	$ 1.98	$ 2.09	$ 2.23	$ 2.38	$ 2.56	$ 2.78	$ 2.94	$ 3.11	$ 3.29	$ 3.48	$ 95.76
Northwest Nat. Gas	NWN	($45.92)	$0.00	$ 0.45	$ 1.83	$ 1.86	$ 1.88	$ 1.91	$ 2.12	$ 2.36	$ 2.62	$ 2.91	$ 3.23	$ 3.42	$ 3.62	$ 3.83	$ 4.05	$ 106.29
Piedmont Natural Gas	PNY	($27.06)	$0.00	$ 0.31	$ 1.26	$ 1.30	$ 1.33	$ 1.36	$ 1.44	$ 1.52	$ 1.61	$ 1.72	$ 1.84	$ 1.94	$ 2.06	$ 2.18	$ 2.30	$ 59.90
South Jersey Industries	SJI	($46.27)	$0.00	$ 0.32	$ 1.35	$ 1.41	$ 1.48	$ 1.54	$ 1.81	$ 2.10	$ 2.43	$ 2.78	$ 3.15	$ 3.34	$ 3.53	$ 3.74	$ 3.96	$ 110.77
WGL Holdings Inc.	WGL	($35.77)	$0.00	$ 0.42	$ 1.71	$ 1.73	$ 1.76	$ 1.78	$ 1.90	$ 2.04	$ 2.19	$ 2.37	$ 2.57	$ 2.72	$ 2.87	$ 3.04	$ 3.22	$ 80.24

MULTI-STAGE DCF MODEL – 180-DAY AVERAGE PRICE
TERMINAL VALUE - GORDON MODEL

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
		Stock	EPS	GDP		Payout Ratio		Solver Cells			Near Term	Intermediate	Long Term
Company	Ticker	Price	Growth	Growth	2010	2014	2024	Delta	k(e)	Solution	Growth	Growth	Growth
AGL Resources	AGL	$ 37.49	4.92%	5.83%	58.00%	55.00%	71.18%	$ (0.00)	11.50%	11.50%	4.92%	5.38%	5.83%
Atmos Energy	ATO	$ 28.43	4.64%	5.83%	63.00%	53.00%	71.18%	$ (0.00)	10.87%	10.87%	4.64%	5.24%	5.83%
Laclede Group	LG	$ 33.78	3.00%	5.83%	70.00%	57.00%	71.18%	$ (0.00)	11.61%	11.61%	3.00%	4.41%	5.83%
New Jersey Resources	NJR	$ 37.05	4.11%	5.83%	53.00%	52.00%	71.18%	$ (0.00)	10.33%	10.33%	4.11%	4.97%	5.83%
Nicor Inc.	GAS	$ 42.57	1.74%	5.83%	68.00%	61.00%	71.18%	$ (0.00)	10.14%	10.14%	1.74%	3.78%	5.83%
Northwest Nat. Gas	NWN	$ 45.77	4.51%	5.83%	61.00%	54.00%	71.18%	$ (0.00)	10.30%	10.30%	4.51%	5.17%	5.83%
Piedmont Natural Gas	PNY	$ 26.83	3.98%	5.83%	71.00%	67.00%	71.18%	$ (0.00)	10.36%	10.36%	3.98%	4.90%	5.83%
South Jersey Industries	SJI	$ 44.03	6.61%	5.83%	51.00%	47.00%	71.18%	$ (0.00)	10.19%	10.19%	6.61%	6.22%	5.83%
WGL Holdings Inc.	WGL	$ 34.92	2.87%	5.83%	65.00%	61.00%	71.18%	$ (0.00)	10.64%	10.64%	2.87%	4.35%	5.83%
MEAN:		$ 36.76	4.04%	5.83%	62.22%	56.33%	71.18%			10.66%	4.04%	4.94%	5.83%

Projected Annual Data
Earnings per Share

		[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]
Company	Ticker	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Terminal Growth
AGL Resources	AGL	$ 2.88	$ 3.02	$ 3.17	$ 3.33	$ 3.49	$ 3.66	$ 3.85	$ 4.05	$ 4.27	$ 4.50	$ 4.76	$ 5.04	$ 5.33	$ 5.64	$ 5.97	$ 6.32	5.83%
Atmos Energy	ATO	$ 1.97	$ 2.06	$ 2.16	$ 2.26	$ 2.36	$ 2.47	$ 2.59	$ 2.72	$ 2.86	$ 3.02	$ 3.19	$ 3.38	$ 3.57	$ 3.78	$ 4.00	$ 4.24	5.83%
Laclede Group	LG	$ 2.92	$ 3.01	$ 3.10	$ 3.19	$ 3.29	$ 3.39	$ 3.50	$ 3.64	$ 3.80	$ 3.99	$ 4.20	$ 4.45	$ 4.71	$ 4.98	$ 5.27	$ 5.58	5.83%
New Jersey Resources	NJR	$ 2.40	$ 2.50	$ 2.60	$ 2.71	$ 2.82	$ 2.94	$ 3.06	$ 3.21	$ 3.37	$ 3.54	$ 3.74	$ 3.96	$ 4.19	$ 4.43	$ 4.69	$ 4.97	5.83%
Nicor Inc.	GAS	$ 2.97	$ 3.02	$ 3.07	$ 3.13	$ 3.18	$ 3.24	$ 3.32	$ 3.42	$ 3.55	$ 3.71	$ 3.90	$ 4.13	$ 4.37	$ 4.62	$ 4.89	$ 5.18	5.83%
Northwest Nat. Gas	NWN	$ 2.83	$ 2.96	$ 3.09	$ 3.23	$ 3.38	$ 3.53	$ 3.70	$ 3.88	$ 4.08	$ 4.30	$ 4.54	$ 4.80	$ 5.08	$ 5.38	$ 5.70	$ 6.03	5.83%
Piedmont Natural Gas	PNY	$ 1.67	$ 1.74	$ 1.81	$ 1.88	$ 1.95	$ 2.03	$ 2.12	$ 2.21	$ 2.32	$ 2.44	$ 2.58	$ 2.73	$ 2.89	$ 3.06	$ 3.23	$ 3.42	5.83%
South Jersey Industries	SJI	$ 2.38	$ 2.54	$ 2.71	$ 2.88	$ 3.07	$ 3.28	$ 3.49	$ 3.71	$ 3.94	$ 4.18	$ 4.43	$ 4.69	$ 4.96	$ 5.25	$ 5.56	$ 5.88	5.83%
WGL Holdings Inc.	WGL	$ 2.53	$ 2.60	$ 2.68	$ 2.75	$ 2.83	$ 2.91	$ 3.01	$ 3.13	$ 3.26	$ 3.42	$ 3.60	$ 3.82	$ 4.04	$ 4.27	$ 4.52	$ 4.79	5.83%

Projected Annual Data
Dividend Payout Ratio

		[30]	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]
Company	Ticker	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
AGL Resources	AGL	58.00%	57.25%	56.50%	55.75%	55.00%	58.24%	61.47%	64.71%	67.95%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Atmos Energy	ATO	63.00%	60.50%	58.00%	55.50%	53.00%	56.64%	60.27%	63.91%	67.55%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Laclede Group	LG	70.00%	66.75%	63.50%	60.25%	57.00%	59.84%	62.67%	65.51%	68.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
New Jersey Resources	NJR	53.00%	52.75%	52.50%	52.25%	52.00%	55.84%	59.67%	63.51%	67.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Nicor Inc.	GAS	68.00%	66.25%	64.50%	62.75%	61.00%	63.04%	65.07%	67.11%	69.15%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Northwest Nat. Gas	NWN	61.00%	59.25%	57.50%	55.75%	54.00%	57.44%	60.87%	64.31%	67.75%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Piedmont Natural Gas	PNY	71.00%	70.00%	69.00%	68.00%	67.00%	67.84%	68.67%	69.51%	70.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
South Jersey Industries	SJI	51.00%	50.00%	49.00%	48.00%	47.00%	51.84%	56.67%	61.51%	66.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
WGL Holdings Inc.	WGL	65.00%	64.00%	63.00%	62.00%	61.00%	63.04%	65.07%	67.11%	69.15%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%

Projected Annual Data
Dividends per Share & Terminal Market Value

		[45]	[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]
Company	Ticker	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Terminal Price	Terminal P/E Ratio
AGL Resources	AGL	$ 0.44	$ 1.82	$ 1.88	$ 1.95	$ 2.01	$ 2.24	$ 2.49	$ 2.76	$ 3.06	$ 3.39	$ 3.58	$ 3.79	$ 4.02	$ 4.25	$ 4.50	$ 83.94	13.29
Atmos Energy	ATO	$ 0.32	$ 1.31	$ 1.31	$ 1.31	$ 1.31	$ 1.47	$ 1.64	$ 1.83	$ 2.04	$ 2.27	$ 2.40	$ 2.54	$ 2.69	$ 2.85	$ 3.02	$ 63.35	14.95
Laclede Group	LG	$ 0.53	$ 2.07	$ 2.03	$ 1.98	$ 1.93	$ 2.10	$ 2.28	$ 2.49	$ 2.73	$ 2.99	$ 3.16	$ 3.35	$ 3.54	$ 3.75	$ 3.97	$ 72.72	13.04
New Jersey Resources	NJR	$ 0.33	$ 1.37	$ 1.42	$ 1.47	$ 1.53	$ 1.71	$ 1.91	$ 2.14	$ 2.39	$ 2.66	$ 2.82	$ 2.98	$ 3.16	$ 3.34	$ 3.54	$ 83.22	16.76
Nicor Inc.	GAS	$ 0.51	$ 2.04	$ 2.02	$ 2.00	$ 1.98	$ 2.09	$ 2.23	$ 2.38	$ 2.56	$ 2.78	$ 2.94	$ 3.11	$ 3.29	$ 3.48	$ 3.68	$ 90.48	17.48
Northwest Nat. Gas	NWN	$ 0.45	$ 1.83	$ 1.86	$ 1.88	$ 1.91	$ 2.12	$ 2.36	$ 2.62	$ 2.91	$ 3.23	$ 3.42	$ 3.62	$ 3.83	$ 4.05	$ 4.29	$ 101.67	16.87
Piedmont Natural Gas	PNY	$ 0.31	$ 1.26	$ 1.30	$ 1.33	$ 1.36	$ 1.44	$ 1.52	$ 1.61	$ 1.72	$ 1.84	$ 1.94	$ 2.06	$ 2.18	$ 2.30	$ 2.44	$ 56.96	16.64
South Jersey Industries	SJI	$ 0.32	$ 1.35	$ 1.41	$ 1.48	$ 1.54	$ 1.81	$ 2.10	$ 2.43	$ 2.78	$ 3.15	$ 3.34	$ 3.53	$ 3.74	$ 3.96	$ 4.19	$ 101.65	17.28
WGL Holdings Inc.	WGL	$ 0.42	$ 1.71	$ 1.73	$ 1.76	$ 1.78	$ 1.90	$ 2.04	$ 2.19	$ 2.37	$ 2.57	$ 2.72	$ 2.87	$ 3.04	$ 3.22	$ 3.41	$ 74.97	15.67
																		15.77

Projected Annual Data
Investor Cash Flows

		[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
Company	Ticker	Initial Outflow	10/8/10	12/31/10	7/1/11	7/1/12	7/1/13	7/1/14	7/1/15	7/1/16	7/1/17	7/1/18	7/1/19	7/1/20	7/1/21	7/1/22	7/1/23	7/1/24
AGL Resources	AGL	($37.49)	$0.00	$ 0.44	$ 1.82	$ 1.88	$ 1.95	$ 2.01	$ 2.24	$ 2.49	$ 2.76	$ 3.06	$ 3.39	$ 3.58	$ 3.79	$ 4.02	$ 4.25	$ 88.44
Atmos Energy	ATO	($28.43)	$0.00	$ 0.32	$ 1.31	$ 1.31	$ 1.31	$ 1.31	$ 1.47	$ 1.64	$ 1.83	$ 2.04	$ 2.27	$ 2.40	$ 2.54	$ 2.69	$ 2.85	$ 66.36
Laclede Group	LG	($33.78)	$0.00	$ 0.53	$ 2.07	$ 2.03	$ 1.98	$ 1.93	$ 2.10	$ 2.28	$ 2.49	$ 2.73	$ 2.99	$ 3.16	$ 3.35	$ 3.54	$ 3.75	$ 76.69
New Jersey Resources	NJR	($37.05)	$0.00	$ 0.33	$ 1.37	$ 1.42	$ 1.47	$ 1.53	$ 1.71	$ 1.91	$ 2.14	$ 2.39	$ 2.66	$ 2.82	$ 2.98	$ 3.16	$ 3.34	$ 86.76
Nicor Inc.	GAS	($42.57)	$0.00	$ 0.51	$ 2.04	$ 2.02	$ 2.00	$ 1.98	$ 2.09	$ 2.23	$ 2.38	$ 2.56	$ 2.78	$ 2.94	$ 3.11	$ 3.29	$ 3.48	$ 94.17
Northwest Nat. Gas	NWN	($45.77)	$0.00	$ 0.45	$ 1.83	$ 1.86	$ 1.88	$ 1.91	$ 2.12	$ 2.36	$ 2.62	$ 2.91	$ 3.23	$ 3.42	$ 3.62	$ 3.83	$ 4.05	$ 105.96
Piedmont Natural Gas	PNY	($26.83)	$0.00	$ 0.31	$ 1.26	$ 1.30	$ 1.33	$ 1.36	$ 1.44	$ 1.52	$ 1.61	$ 1.72	$ 1.84	$ 1.94	$ 2.06	$ 2.18	$ 2.30	$ 59.40
South Jersey Industries	SJI	($44.03)	$0.00	$ 0.32	$ 1.35	$ 1.41	$ 1.48	$ 1.54	$ 1.81	$ 2.10	$ 2.43	$ 2.78	$ 3.15	$ 3.34	$ 3.53	$ 3.74	$ 3.96	$ 105.84
WGL Holdings Inc.	WGL	($34.92)	$0.00	$ 0.42	$ 1.71	$ 1.73	$ 1.76	$ 1.78	$ 1.90	$ 2.04	$ 2.19	$ 2.37	$ 2.57	$ 2.72	$ 2.87	$ 3.04	$ 3.22	$ 78.38

MULTI-STAGE DCF MODEL – 30-DAY AVERAGE PRICE
TERMINAL VALUE - LONG-TERM PROJECTED PRICE-TO-EARNINGS RATIO

Inputs

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
		Stock	EPS	GDP		Payout Ratio		Solver Cells			Near Term	ntermediat	Long Term
Company	Ticker	Price	Growth	Growth	2010	2014	2024	Delta	k(e)	Solution	Growth	Growth	Growth
AGL Resources	AGL	$ 38.04	4.92%	5.83%	58.00%	55.00%	71.18%	$ 0.00	12.02%	12.02%	4.92%	5.38%	5.83%
Atmos Energy	ATO	$ 28.90	4.64%	5.83%	63.00%	53.00%	71.18%	$ 0.00	9.91%	9.91%	4.64%	5.24%	5.83%
Laclede Group	LG	$ 34.16	3.00%	5.83%	70.00%	57.00%	71.18%	$ (0.00)	12.63%	12.63%	3.00%	4.41%	5.83%
New Jersey Resources	NJR	$ 38.48	4.11%	5.83%	53.00%	52.00%	71.18%	$ 0.00	8.90%	8.90%	4.11%	4.97%	5.83%
Nicor Inc.	GAS	$ 44.98	1.74%	5.83%	68.00%	61.00%	71.18%	$ 0.00	9.05%	9.05%	1.74%	3.78%	5.83%
Northwest Nat. Gas	NWN	$ 46.98	4.51%	5.83%	61.00%	54.00%	71.18%	$ 0.00	10.08%	10.08%	4.51%	5.17%	5.83%
Piedmont Natural Gas	PNY	$ 28.37	3.98%	5.83%	71.00%	67.00%	71.18%	$ 0.00	10.23%	10.23%	3.98%	4.90%	5.83%
South Jersey Industries	SJI	$ 48.23	6.61%	5.83%	51.00%	47.00%	71.18%	$ 0.00	8.07%	8.07%	6.61%	6.22%	5.83%
WGL Holdings Inc.	WGL	$ 36.88	2.87%	5.83%	65.00%	61.00%	71.18%	$ 0.00	9.81%	9.81%	2.87%	4.35%	5.83%
MEAN:		$ 38.34	4.04%	5.83%	62.22%	56.33%	71.18%			10.08%	4.04%	4.94%	5.83%

Projected Annual Data
Earnings per Share

		[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]
Company	Ticker	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Terminal Growth
AGL Resources	AGL	$ 2.88	$ 3.02	$ 3.17	$ 3.33	$ 3.49	$ 3.66	$ 3.85	$ 4.05	$ 4.27	$ 4.50	$ 4.76	$ 5.04	$ 5.33	$ 5.64	$ 5.97	$ 6.32	5.83%
Atmos Energy	ATO	$ 1.97	$ 2.06	$ 2.16	$ 2.26	$ 2.36	$ 2.47	$ 2.59	$ 2.72	$ 2.86	$ 3.02	$ 3.19	$ 3.38	$ 3.57	$ 3.78	$ 4.00	$ 4.24	5.83%
Laclede Group	LG	$ 2.92	$ 3.01	$ 3.10	$ 3.19	$ 3.29	$ 3.39	$ 3.50	$ 3.64	$ 3.80	$ 3.99	$ 4.20	$ 4.45	$ 4.71	$ 4.98	$ 5.27	$ 5.58	5.83%
New Jersey Resources	NJR	$ 2.40	$ 2.50	$ 2.60	$ 2.71	$ 2.82	$ 2.94	$ 3.06	$ 3.21	$ 3.37	$ 3.54	$ 3.74	$ 3.96	$ 4.19	$ 4.43	$ 4.69	$ 4.97	5.83%
Nicor Inc.	GAS	$ 2.97	$ 3.02	$ 3.07	$ 3.13	$ 3.18	$ 3.24	$ 3.32	$ 3.42	$ 3.55	$ 3.71	$ 3.90	$ 4.13	$ 4.37	$ 4.62	$ 4.89	$ 5.18	5.83%
Northwest Nat. Gas	NWN	$ 2.83	$ 2.96	$ 3.09	$ 3.23	$ 3.38	$ 3.53	$ 3.70	$ 3.88	$ 4.08	$ 4.30	$ 4.54	$ 4.80	$ 5.08	$ 5.38	$ 5.70	$ 6.03	5.83%
Piedmont Natural Gas	PNY	$ 1.67	$ 1.74	$ 1.81	$ 1.88	$ 1.95	$ 2.03	$ 2.12	$ 2.21	$ 2.32	$ 2.44	$ 2.58	$ 2.73	$ 2.89	$ 3.06	$ 3.23	$ 3.42	5.83%
South Jersey Industries	SJI	$ 2.38	$ 2.54	$ 2.71	$ 2.88	$ 3.07	$ 3.28	$ 3.49	$ 3.71	$ 3.94	$ 4.18	$ 4.43	$ 4.69	$ 4.96	$ 5.25	$ 5.56	$ 5.88	5.83%
WGL Holdings Inc.	WGL	$ 2.53	$ 2.60	$ 2.68	$ 2.75	$ 2.83	$ 2.91	$ 3.01	$ 3.13	$ 3.26	$ 3.42	$ 3.60	$ 3.82	$ 4.04	$ 4.27	$ 4.52	$ 4.79	5.83%

Projected Annual Data
Dividend Payout Ratio

		[30]	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]
Company	Ticker	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
AGL Resources	AGL	58.00%	57.25%	56.50%	55.75%	55.00%	58.24%	61.47%	64.71%	67.95%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Atmos Energy	ATO	63.00%	60.50%	58.00%	55.50%	53.00%	56.64%	60.27%	63.91%	67.55%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Laclede Group	LG	70.00%	66.75%	63.50%	60.25%	57.00%	59.84%	62.67%	65.51%	68.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
New Jersey Resources	NJR	53.00%	52.75%	52.50%	52.25%	52.00%	55.84%	59.67%	63.51%	67.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Nicor Inc.	GAS	68.00%	66.25%	64.50%	62.75%	61.00%	63.04%	65.07%	67.11%	69.15%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Northwest Nat. Gas	NWN	61.00%	59.25%	57.50%	55.75%	54.00%	57.44%	60.87%	64.31%	67.75%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Piedmont Natural Gas	PNY	71.00%	70.00%	69.00%	68.00%	67.00%	67.84%	68.67%	69.51%	70.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
South Jersey Industries	SJI	51.00%	50.00%	49.00%	48.00%	47.00%	51.84%	56.67%	61.51%	66.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
WGL Holdings Inc.	WGL	65.00%	64.00%	63.00%	62.00%	61.00%	63.04%	65.07%	67.11%	69.15%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%

Projected Annual Data
Dividends per Share & Terminal Market Value

		[45]	[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]
Company	Ticker	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Terminal Price	Terminal P/E Ratio
AGL Resources	AGL	$ 0.44	$ 1.82	$ 1.88	$ 1.95	$ 2.01	$ 2.24	$ 2.49	$ 2.76	$ 3.06	$ 3.39	$ 3.58	$ 3.79	$ 4.02	$ 4.25	$ 4.50	$ 94.77	15.00
Atmos Energy	ATO	$ 0.32	$ 1.31	$ 1.31	$ 1.31	$ 1.31	$ 1.47	$ 1.64	$ 1.83	$ 2.04	$ 2.27	$ 2.40	$ 2.54	$ 2.69	$ 2.85	$ 3.02	$ 55.07	13.00
Laclede Group	LG	$ 0.53	$ 2.07	$ 2.03	$ 1.98	$ 1.93	$ 2.10	$ 2.28	$ 2.49	$ 2.73	$ 2.99	$ 3.16	$ 3.35	$ 3.54	$ 3.75	$ 3.97	$ 89.24	16.00
New Jersey Resources	NJR	$ 0.33	$ 1.37	$ 1.42	$ 1.47	$ 1.53	$ 1.71	$ 1.91	$ 2.14	$ 2.39	$ 2.66	$ 2.82	$ 2.98	$ 3.16	$ 3.34	$ 3.54	$ 69.54	14.00
Nicor Inc.	GAS	$ 0.51	$ 2.04	$ 2.02	$ 2.00	$ 1.98	$ 2.09	$ 2.23	$ 2.38	$ 2.56	$ 2.78	$ 2.94	$ 3.11	$ 3.29	$ 3.48	$ 3.68	$ 82.82	16.00
Northwest Nat. Gas	NWN	$ 0.45	$ 1.83	$ 1.86	$ 1.88	$ 1.91	$ 2.12	$ 2.36	$ 2.62	$ 2.91	$ 3.23	$ 3.42	$ 3.62	$ 3.83	$ 4.05	$ 4.29	$ 102.47	17.00
Piedmont Natural Gas	PNY	$ 0.31	$ 1.26	$ 1.30	$ 1.33	$ 1.36	$ 1.44	$ 1.52	$ 1.61	$ 1.72	$ 1.84	$ 1.94	$ 2.06	$ 2.18	$ 2.30	$ 2.44	$ 61.62	18.00
South Jersey Industries	SJI	$ 0.32	$ 1.35	$ 1.41	$ 1.48	$ 1.54	$ 1.81	$ 2.10	$ 2.43	$ 2.78	$ 3.15	$ 3.34	$ 3.53	$ 3.74	$ 3.96	$ 4.19	$ 82.38	14.00
WGL Holdings Inc.	WGL	$ 0.42	$ 1.71	$ 1.73	$ 1.76	$ 1.78	$ 1.90	$ 2.04	$ 2.19	$ 2.37	$ 2.57	$ 2.72	$ 2.87	$ 3.04	$ 3.22	$ 3.41	$ 71.79	15.00
																		15.33

Projected Annual Data
Investor Cash Flows

		[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
Company	Ticker	Initial Outflow	10/8/10	12/31/10	7/1/11	7/1/12	7/1/13	7/1/14	7/1/15	7/1/16	7/1/17	7/1/18	7/1/19	7/1/20	7/1/21	7/1/22	7/1/23	7/1/24
AGL Resources	AGL	($38.04)	$0.00	$ 0.44	$ 1.82	$ 1.88	$ 1.95	$ 2.01	$ 2.24	$ 2.49	$ 2.76	$ 3.06	$ 3.39	$ 3.58	$ 3.79	$ 4.02	$ 4.25	$ 99.27
Atmos Energy	ATO	($28.90)	$0.00	$ 0.32	$ 1.31	$ 1.31	$ 1.31	$ 1.31	$ 1.47	$ 1.64	$ 1.83	$ 2.04	$ 2.27	$ 2.40	$ 2.54	$ 2.69	$ 2.85	$ 58.08
Laclede Group	LG	($34.16)	$0.00	$ 0.53	$ 2.07	$ 2.03	$ 1.98	$ 1.93	$ 2.10	$ 2.28	$ 2.49	$ 2.73	$ 2.99	$ 3.16	$ 3.35	$ 3.54	$ 3.75	$ 93.21
New Jersey Resources	NJR	($38.48)	$0.00	$ 0.33	$ 1.37	$ 1.42	$ 1.47	$ 1.53	$ 1.71	$ 1.91	$ 2.14	$ 2.39	$ 2.66	$ 2.82	$ 2.98	$ 3.16	$ 3.34	$ 73.07
Nicor Inc.	GAS	($44.98)	$0.00	$ 0.51	$ 2.04	$ 2.02	$ 2.00	$ 1.98	$ 2.09	$ 2.23	$ 2.38	$ 2.56	$ 2.78	$ 2.94	$ 3.11	$ 3.29	$ 3.48	$ 86.50
Northwest Nat. Gas	NWN	($46.98)	$0.00	$ 0.45	$ 1.83	$ 1.86	$ 1.88	$ 1.91	$ 2.12	$ 2.36	$ 2.62	$ 2.91	$ 3.23	$ 3.42	$ 3.62	$ 3.83	$ 4.05	$ 106.76
Piedmont Natural Gas	PNY	($28.37)	$0.00	$ 0.31	$ 1.26	$ 1.30	$ 1.33	$ 1.36	$ 1.44	$ 1.52	$ 1.61	$ 1.72	$ 1.84	$ 1.94	$ 2.06	$ 2.18	$ 2.30	$ 64.05
South Jersey Industries	SJI	($48.23)	$0.00	$ 0.32	$ 1.35	$ 1.41	$ 1.48	$ 1.54	$ 1.81	$ 2.10	$ 2.43	$ 2.78	$ 3.15	$ 3.34	$ 3.53	$ 3.74	$ 3.96	$ 86.57
WGL Holdings Inc.	WGL	($36.88)	$0.00	$ 0.42	$ 1.71	$ 1.73	$ 1.76	$ 1.78	$ 1.90	$ 2.04	$ 2.19	$ 2.37	$ 2.57	$ 2.72	$ 2.87	$ 3.04	$ 3.22	$ 75.20

MULTI-STAGE DCF MODEL ~ 90-DAY AVERAGE PRICE
TERMINAL VALUE - LONG-TERM PROJECTED PRICE-TO-EARNINGS RATIO

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
		Stock	EPS	GDP		Payout Ratio		Solver Cells			Near Term	Intermediate	Long Term
Company	Ticker	Price	Growth	Growth	2010	2014	2024	Delta	k(e)	Solution	Growth	Growth	Growth
AGL Resources	AGL	$ 37.64	4.92%	5.83%	58.00%	55.00%	71.18%	$ 0.00	12.14%	12.14%	4.92%	5.38%	5.83%
Atmos Energy	ATO	$ 28.55	4.64%	5.83%	63.00%	53.00%	71.18%	$ (0.00)	10.04%	10.04%	4.64%	5.24%	5.83%
Laclede Group	LG	$ 33.93	3.00%	5.83%	70.00%	57.00%	71.18%	$ 0.00	12.70%	12.70%	3.00%	4.41%	5.83%
New Jersey Resources	NJR	$ 37.17	4.11%	5.83%	53.00%	52.00%	71.18%	$ (0.00)	9.26%	9.26%	4.11%	4.97%	5.83%
Nicor Inc.	GAS	$ 43.30	1.74%	5.83%	68.00%	61.00%	71.18%	$ (0.00)	9.45%	9.45%	1.74%	3.78%	5.83%
Northwest Nat. Gas	NWN	$ 45.92	4.51%	5.83%	61.00%	54.00%	71.18%	$ (0.00)	10.31%	10.31%	4.51%	5.17%	5.83%
Piedmont Natural Gas	PNY	$ 27.06	3.98%	5.83%	71.00%	67.00%	71.18%	$ (0.00)	10.73%	10.73%	3.98%	4.90%	5.83%
South Jersey Industries	SJI	$ 46.27	6.61%	5.83%	51.00%	47.00%	71.18%	$ (0.00)	8.47%	8.47%	6.61%	6.22%	5.83%
WGL Holdings Inc.	WGL	$ 35.77	2.87%	5.83%	65.00%	61.00%	71.18%	$ (0.00)	10.14%	10.14%	2.87%	4.35%	5.83%
MEAN:		$ 37.29	4.04%	5.83%	62.22%	56.33%	71.18%			10.36%	4.04%	4.94%	5.83%

Projected Annual Data

Earnings per Share		[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]
																		Terminal
Company	Ticker	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Growth
AGL Resources	AGL	$ 2.88	$ 3.02	$ 3.17	$ 3.33	$ 3.49	$ 3.66	$ 3.85	$ 4.05	$ 4.27	$ 4.50	$ 4.76	$ 5.04	$ 5.33	$ 5.64	$ 5.97	$ 6.32	5.83%
Atmos Energy	ATO	$ 1.97	$ 2.06	$ 2.16	$ 2.26	$ 2.36	$ 2.47	$ 2.59	$ 2.72	$ 2.86	$ 3.02	$ 3.19	$ 3.38	$ 3.57	$ 3.78	$ 4.00	$ 4.24	5.83%
Laclede Group	LG	$ 2.92	$ 3.01	$ 3.10	$ 3.19	$ 3.29	$ 3.39	$ 3.50	$ 3.64	$ 3.80	$ 3.99	$ 4.20	$ 4.45	$ 4.71	$ 4.98	$ 5.27	$ 5.58	5.83%
New Jersey Resources	NJR	$ 2.40	$ 2.50	$ 2.60	$ 2.71	$ 2.82	$ 2.94	$ 3.06	$ 3.21	$ 3.37	$ 3.54	$ 3.74	$ 3.96	$ 4.19	$ 4.43	$ 4.69	$ 4.97	5.83%
Nicor Inc.	GAS	$ 2.97	$ 3.02	$ 3.07	$ 3.13	$ 3.18	$ 3.24	$ 3.32	$ 3.42	$ 3.55	$ 3.71	$ 3.90	$ 4.13	$ 4.37	$ 4.62	$ 4.89	$ 5.18	5.83%
Northwest Nat. Gas	NWN	$ 2.83	$ 2.96	$ 3.09	$ 3.23	$ 3.38	$ 3.53	$ 3.70	$ 3.88	$ 4.08	$ 4.30	$ 4.54	$ 4.80	$ 5.08	$ 5.38	$ 5.70	$ 6.03	5.83%
Piedmont Natural Gas	PNY	$ 1.67	$ 1.74	$ 1.81	$ 1.88	$ 1.95	$ 2.03	$ 2.12	$ 2.21	$ 2.32	$ 2.44	$ 2.58	$ 2.73	$ 2.89	$ 3.06	$ 3.23	$ 3.42	5.83%
South Jersey Industries	SJI	$ 2.38	$ 2.54	$ 2.71	$ 2.88	$ 3.07	$ 3.28	$ 3.49	$ 3.71	$ 3.94	$ 4.18	$ 4.43	$ 4.69	$ 4.96	$ 5.25	$ 5.56	$ 5.88	5.83%
WGL Holdings Inc.	WGL	$ 2.53	$ 2.60	$ 2.68	$ 2.75	$ 2.83	$ 2.91	$ 3.01	$ 3.13	$ 3.26	$ 3.42	$ 3.60	$ 3.82	$ 4.04	$ 4.27	$ 4.52	$ 4.79	5.83%

Projected Annual Data

Dividend Payout Ratio		[30]	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]
Company	Ticker	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
AGL Resources	AGL	58.00%	57.25%	56.50%	55.75%	55.00%	58.24%	61.47%	64.71%	67.95%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Atmos Energy	ATO	63.00%	60.50%	58.00%	55.50%	53.00%	56.64%	60.27%	63.91%	67.55%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Laclede Group	LG	70.00%	66.75%	63.50%	60.25%	57.00%	59.84%	62.67%	65.51%	68.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
New Jersey Resources	NJR	53.00%	52.75%	52.50%	52.25%	52.00%	55.84%	59.67%	63.51%	67.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Nicor Inc.	GAS	68.00%	66.25%	64.50%	62.75%	61.00%	63.04%	65.07%	67.11%	69.15%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Northwest Nat. Gas	NWN	61.00%	59.25%	57.50%	55.75%	54.00%	57.44%	60.87%	64.31%	67.75%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Piedmont Natural Gas	PNY	71.00%	70.00%	69.00%	68.00%	67.00%	67.84%	68.67%	69.51%	70.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
South Jersey Industries	SJI	51.00%	50.00%	49.00%	48.00%	47.00%	51.84%	56.67%	61.51%	66.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
WGL Holdings Inc.	WGL	65.00%	64.00%	63.00%	62.00%	61.00%	63.04%	65.07%	67.11%	69.15%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%

Projected Annual Data

Dividends per Share & Terminal Market Value		[45]	[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]
																	Terminal	Terminal
Company	Ticker	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Price	P/E Ratio
AGL Resources	AGL	$ 0.44	$ 1.82	$ 1.88	$ 1.95	$ 2.01	$ 2.24	$ 2.49	$ 2.76	$ 3.06	$ 3.39	$ 3.58	$ 3.79	$ 4.02	$ 4.25	$ 4.50	$ 94.77	15.00
Atmos Energy	ATO	$ 0.32	$ 1.31	$ 1.31	$ 1.31	$ 1.31	$ 1.47	$ 1.64	$ 1.83	$ 2.04	$ 2.27	$ 2.40	$ 2.54	$ 2.69	$ 2.85	$ 3.02	$ 55.07	13.00
Laclede Group	LG	$ 0.53	$ 2.07	$ 2.03	$ 1.98	$ 1.93	$ 2.10	$ 2.28	$ 2.49	$ 2.73	$ 2.99	$ 3.16	$ 3.35	$ 3.54	$ 3.75	$ 3.97	$ 89.24	16.00
New Jersey Resources	NJR	$ 0.33	$ 1.37	$ 1.42	$ 1.47	$ 1.53	$ 1.71	$ 1.91	$ 2.14	$ 2.39	$ 2.66	$ 2.82	$ 2.98	$ 3.16	$ 3.34	$ 3.54	$ 69.54	14.00
Nicor Inc.	GAS	$ 0.51	$ 2.04	$ 2.02	$ 2.00	$ 1.98	$ 2.09	$ 2.23	$ 2.38	$ 2.56	$ 2.78	$ 2.94	$ 3.11	$ 3.29	$ 3.48	$ 3.68	$ 82.82	16.00
Northwest Nat. Gas	NWN	$ 0.45	$ 1.83	$ 1.86	$ 1.88	$ 1.91	$ 2.12	$ 2.36	$ 2.62	$ 2.91	$ 3.23	$ 3.42	$ 3.62	$ 3.83	$ 4.05	$ 4.29	$ 102.47	17.00
Piedmont Natural Gas	PNY	$ 0.31	$ 1.26	$ 1.30	$ 1.33	$ 1.36	$ 1.44	$ 1.52	$ 1.61	$ 1.72	$ 1.84	$ 1.94	$ 2.06	$ 2.18	$ 2.30	$ 2.44	$ 61.62	18.00
South Jersey Industries	SJI	$ 0.32	$ 1.35	$ 1.41	$ 1.48	$ 1.54	$ 1.81	$ 2.10	$ 2.43	$ 2.78	$ 3.15	$ 3.34	$ 3.53	$ 3.74	$ 3.96	$ 4.19	$ 82.38	14.00
WGL Holdings Inc.	WGL	$ 0.42	$ 1.71	$ 1.73	$ 1.76	$ 1.78	$ 1.90	$ 2.04	$ 2.19	$ 2.37	$ 2.57	$ 2.72	$ 2.87	$ 3.04	$ 3.22	$ 3.41	$ 71.79	15.00
																		15.33

Projected Annual Data

Investor Cash Flows		[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
		Initial																
Company	Ticker	Outflow	10/8/10	12/31/10	7/1/11	7/1/12	7/1/13	7/1/14	7/1/15	7/1/16	7/1/17	7/1/18	7/1/19	7/1/20	7/1/21	7/1/22	7/1/23	7/1/24
AGL Resources	AGL	($37.64)	$0.00	$ 0.44	$ 1.82	$ 1.88	$ 1.95	$ 2.01	$ 2.24	$ 2.49	$ 2.76	$ 3.06	$ 3.39	$ 3.58	$ 3.79	$ 4.02	$ 4.25	$ 99.27
Atmos Energy	ATO	($28.55)	$0.00	$ 0.32	$ 1.31	$ 1.31	$ 1.31	$ 1.31	$ 1.47	$ 1.64	$ 1.83	$ 2.04	$ 2.27	$ 2.40	$ 2.54	$ 2.69	$ 2.85	$ 58.08
Laclede Group	LG	($33.93)	$0.00	$ 0.53	$ 2.07	$ 2.03	$ 1.98	$ 1.93	$ 2.10	$ 2.28	$ 2.49	$ 2.73	$ 2.99	$ 3.16	$ 3.35	$ 3.54	$ 3.75	$ 93.21
New Jersey Resources	NJR	($37.17)	$0.00	$ 0.33	$ 1.37	$ 1.42	$ 1.47	$ 1.53	$ 1.71	$ 1.91	$ 2.14	$ 2.39	$ 2.66	$ 2.82	$ 2.98	$ 3.16	$ 3.34	$ 73.07
Nicor Inc.	GAS	($43.30)	$0.00	$ 0.51	$ 2.04	$ 2.02	$ 2.00	$ 1.98	$ 2.09	$ 2.23	$ 2.38	$ 2.56	$ 2.78	$ 2.94	$ 3.11	$ 3.29	$ 3.48	$ 86.50
Northwest Nat. Gas	NWN	($45.92)	$0.00	$ 0.45	$ 1.83	$ 1.86	$ 1.88	$ 1.91	$ 2.12	$ 2.36	$ 2.62	$ 2.91	$ 3.23	$ 3.42	$ 3.62	$ 3.83	$ 4.05	$ 106.76
Piedmont Natural Gas	PNY	($27.06)	$0.00	$ 0.31	$ 1.26	$ 1.30	$ 1.33	$ 1.36	$ 1.44	$ 1.52	$ 1.61	$ 1.72	$ 1.84	$ 1.94	$ 2.06	$ 2.18	$ 2.30	$ 64.05
South Jersey Industries	SJI	($46.27)	$0.00	$ 0.32	$ 1.35	$ 1.41	$ 1.48	$ 1.54	$ 1.81	$ 2.10	$ 2.43	$ 2.78	$ 3.15	$ 3.34	$ 3.53	$ 3.74	$ 3.96	$ 86.57
WGL Holdings Inc.	WGL	($35.77)	$0.00	$ 0.42	$ 1.71	$ 1.73	$ 1.76	$ 1.78	$ 1.90	$ 2.04	$ 2.19	$ 2.37	$ 2.57	$ 2.72	$ 2.87	$ 3.04	$ 3.22	$ 75.20

MULTI-STAGE DCF MODEL – 180-DAY AVERAGE PRICE
TERMINAL VALUE - LONG-TERM PROJECTED PRICE-TO-EARNINGS RATIO

Inputs

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
		Stock	EPS	GDP		Payout Ratio		Solver Cells			Near Term	Intermediate	Long Term
Company	Ticker	Price	Growth	Growth	2010	2014	2024	Delta	k(e)	Solution	Growth	Growth	Growth
AGL Resources	AGL	$ 37.49	4.92%	5.83%	58.00%	55.00%	71.18%	$ 0.00	12.18%	12.18%	4.92%	5.38%	5.83%
Atmos Energy	ATO	$ 28.43	4.64%	5.83%	63.00%	53.00%	71.18%	$ 0.00	10.08%	10.08%	4.64%	5.24%	5.83%
Laclede Group	LG	$ 33.78	3.00%	5.83%	70.00%	57.00%	71.18%	$ 0.00	12.75%	12.75%	3.00%	4.41%	5.83%
New Jersey Resources	NJR	$ 37.05	4.11%	5.83%	53.00%	52.00%	71.18%	$ 0.00	9.29%	9.29%	4.11%	4.97%	5.83%
Nicor Inc.	GAS	$ 42.57	1.74%	5.83%	68.00%	61.00%	71.18%	$ (0.00)	9.62%	9.62%	1.74%	3.78%	5.83%
Northwest Nat. Gas	NWN	$ 45.77	4.51%	5.83%	61.00%	54.00%	71.18%	$ 0.00	10.34%	10.34%	4.51%	5.17%	5.83%
Piedmont Natural Gas	PNY	$ 26.83	3.98%	5.83%	71.00%	67.00%	71.18%	$ 0.00	10.82%	10.82%	3.98%	4.90%	5.83%
South Jersey Industries	SJI	$ 44.03	6.61%	5.83%	51.00%	47.00%	71.18%	$ (0.00)	8.96%	8.96%	6.61%	6.22%	5.83%
WGL Holdings Inc.	WGL	$ 34.92	2.87%	5.83%	65.00%	61.00%	71.18%	$ (0.00)	10.39%	10.39%	2.87%	4.35%	5.83%
MEAN:		$ 36.76	4.04%	5.83%	62.22%	56.33%	71.18%			10.49%	4.04%	4.94%	5.83%

Projected Annual Data
Earnings per Share

		[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]
Company	Ticker	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Terminal Growth
AGL Resources	AGL	$ 2.88	$ 3.02	$ 3.17	$ 3.33	$ 3.49	$ 3.66	$ 3.85	$ 4.05	$ 4.27	$ 4.50	$ 4.76	$ 5.04	$ 5.33	$ 5.64	$ 5.97	$ 6.32	5.83%
Atmos Energy	ATO	$ 1.97	$ 2.06	$ 2.16	$ 2.26	$ 2.36	$ 2.47	$ 2.59	$ 2.72	$ 2.86	$ 3.02	$ 3.19	$ 3.38	$ 3.57	$ 3.78	$ 4.00	$ 4.24	5.83%
Laclede Group	LG	$ 2.92	$ 3.01	$ 3.10	$ 3.19	$ 3.29	$ 3.39	$ 3.50	$ 3.64	$ 3.80	$ 3.99	$ 4.20	$ 4.45	$ 4.71	$ 4.98	$ 5.27	$ 5.58	5.83%
New Jersey Resources	NJR	$ 2.40	$ 2.50	$ 2.60	$ 2.71	$ 2.82	$ 2.94	$ 3.06	$ 3.21	$ 3.37	$ 3.54	$ 3.74	$ 3.96	$ 4.19	$ 4.43	$ 4.69	$ 4.97	5.83%
Nicor Inc.	GAS	$ 2.97	$ 3.02	$ 3.07	$ 3.13	$ 3.18	$ 3.24	$ 3.32	$ 3.42	$ 3.55	$ 3.71	$ 3.90	$ 4.13	$ 4.37	$ 4.62	$ 4.89	$ 5.18	5.83%
Northwest Nat. Gas	NWN	$ 2.83	$ 2.96	$ 3.09	$ 3.23	$ 3.38	$ 3.53	$ 3.70	$ 3.88	$ 4.08	$ 4.30	$ 4.54	$ 4.80	$ 5.08	$ 5.38	$ 5.70	$ 6.03	5.83%
Piedmont Natural Gas	PNY	$ 1.67	$ 1.74	$ 1.81	$ 1.88	$ 1.95	$ 2.03	$ 2.12	$ 2.21	$ 2.32	$ 2.44	$ 2.58	$ 2.73	$ 2.89	$ 3.06	$ 3.23	$ 3.42	5.83%
South Jersey Industries	SJI	$ 2.38	$ 2.54	$ 2.71	$ 2.88	$ 3.07	$ 3.28	$ 3.49	$ 3.71	$ 3.94	$ 4.18	$ 4.43	$ 4.69	$ 4.96	$ 5.25	$ 5.56	$ 5.88	5.83%
WGL Holdings Inc.	WGL	$ 2.53	$ 2.60	$ 2.68	$ 2.75	$ 2.83	$ 2.91	$ 3.01	$ 3.13	$ 3.26	$ 3.42	$ 3.60	$ 3.82	$ 4.04	$ 4.27	$ 4.52	$ 4.79	5.83%

Projected Annual Data
Dividend Payout Ratio

		[30]	[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]
Company	Ticker	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
AGL Resources	AGL	58.00%	57.25%	56.50%	55.75%	55.00%	58.24%	61.47%	64.71%	67.95%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Atmos Energy	ATO	63.00%	60.50%	58.00%	55.50%	53.00%	56.64%	60.27%	63.91%	67.55%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Laclede Group	LG	70.00%	66.75%	63.50%	60.25%	57.00%	59.84%	62.67%	65.51%	68.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
New Jersey Resources	NJR	53.00%	52.75%	52.50%	52.25%	52.00%	55.84%	59.67%	63.51%	67.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Nicor Inc.	GAS	68.00%	66.25%	64.50%	62.75%	61.00%	63.04%	65.07%	67.11%	69.15%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Northwest Nat. Gas	NWN	61.00%	59.25%	57.50%	55.75%	54.00%	57.44%	60.87%	64.31%	67.75%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
Piedmont Natural Gas	PNY	71.00%	70.00%	69.00%	68.00%	67.00%	67.84%	68.67%	69.51%	70.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
South Jersey Industries	SJI	51.00%	50.00%	49.00%	48.00%	47.00%	51.84%	56.67%	61.51%	66.35%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%
WGL Holdings Inc.	WGL	65.00%	64.00%	63.00%	62.00%	61.00%	63.04%	65.07%	67.11%	69.15%	71.18%	71.18%	71.18%	71.18%	71.18%	71.18%

Projected Annual Data
Dividends per Share & Terminal Market Value

		[45]	[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]
Company	Ticker	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Terminal Price	Terminal P/E Ratio
AGL Resources	AGL	$ 0.44	$ 1.82	$ 1.88	$ 1.95	$ 2.01	$ 2.24	$ 2.49	$ 2.76	$ 3.06	$ 3.39	$ 3.58	$ 3.79	$ 4.02	$ 4.25	$ 4.50	$ 94.77	15.00
Atmos Energy	ATO	$ 0.32	$ 1.31	$ 1.31	$ 1.31	$ 1.31	$ 1.47	$ 1.64	$ 1.83	$ 2.04	$ 2.27	$ 2.40	$ 2.54	$ 2.69	$ 2.85	$ 3.02	$ 55.07	13.00
Laclede Group	LG	$ 0.53	$ 2.07	$ 2.03	$ 1.98	$ 1.93	$ 2.10	$ 2.28	$ 2.49	$ 2.73	$ 2.99	$ 3.16	$ 3.35	$ 3.54	$ 3.75	$ 3.97	$ 89.24	16.00
New Jersey Resources	NJR	$ 0.33	$ 1.37	$ 1.42	$ 1.47	$ 1.53	$ 1.71	$ 1.91	$ 2.14	$ 2.39	$ 2.66	$ 2.82	$ 2.98	$ 3.16	$ 3.34	$ 3.54	$ 69.54	14.00
Nicor Inc.	GAS	$ 0.51	$ 2.04	$ 2.02	$ 2.00	$ 1.98	$ 2.09	$ 2.23	$ 2.38	$ 2.56	$ 2.78	$ 2.94	$ 3.11	$ 3.29	$ 3.48	$ 3.68	$ 82.82	16.00
Northwest Nat. Gas	NWN	$ 0.45	$ 1.83	$ 1.86	$ 1.88	$ 1.91	$ 2.12	$ 2.36	$ 2.62	$ 2.91	$ 3.23	$ 3.42	$ 3.62	$ 3.83	$ 4.05	$ 4.29	$ 102.47	17.00
Piedmont Natural Gas	PNY	$ 0.31	$ 1.26	$ 1.30	$ 1.33	$ 1.36	$ 1.44	$ 1.52	$ 1.61	$ 1.72	$ 1.84	$ 1.94	$ 2.06	$ 2.18	$ 2.30	$ 2.44	$ 61.62	18.00
South Jersey Industries	SJI	$ 0.32	$ 1.35	$ 1.41	$ 1.48	$ 1.54	$ 1.81	$ 2.10	$ 2.43	$ 2.78	$ 3.15	$ 3.34	$ 3.53	$ 3.74	$ 3.96	$ 4.19	$ 82.38	14.00
WGL Holdings Inc.	WGL	$ 0.42	$ 1.71	$ 1.73	$ 1.76	$ 1.78	$ 1.90	$ 2.04	$ 2.19	$ 2.37	$ 2.57	$ 2.72	$ 2.87	$ 3.04	$ 3.22	$ 3.41	$ 71.79	15.00
																		15.33

Projected Annual Data
Investor Cash Flows

		[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
Company	Ticker	Initial Outflow	10/8/10	12/31/10	7/1/11	7/1/12	7/1/13	7/1/14	7/1/15	7/1/16	7/1/17	7/1/18	7/1/19	7/1/20	7/1/21	7/1/22	7/1/23	7/1/24
AGL Resources	AGL	($37.49)	$0.00	$ 0.44	$ 1.82	$ 1.88	$ 1.95	$ 2.01	$ 2.24	$ 2.49	$ 2.76	$ 3.06	$ 3.39	$ 3.58	$ 3.79	$ 4.02	$ 4.25	$ 99.27
Atmos Energy	ATO	($28.43)	$0.00	$ 0.32	$ 1.31	$ 1.31	$ 1.31	$ 1.31	$ 1.47	$ 1.64	$ 1.83	$ 2.04	$ 2.27	$ 2.40	$ 2.54	$ 2.69	$ 2.85	$ 58.08
Laclede Group	LG	($33.78)	$0.00	$ 0.53	$ 2.07	$ 2.03	$ 1.98	$ 1.93	$ 2.10	$ 2.28	$ 2.49	$ 2.73	$ 2.99	$ 3.16	$ 3.35	$ 3.54	$ 3.75	$ 93.21
New Jersey Resources	NJR	($37.05)	$0.00	$ 0.33	$ 1.37	$ 1.42	$ 1.47	$ 1.53	$ 1.71	$ 1.91	$ 2.14	$ 2.39	$ 2.66	$ 2.82	$ 2.98	$ 3.16	$ 3.34	$ 73.07
Nicor Inc.	GAS	($42.57)	$0.00	$ 0.51	$ 2.04	$ 2.02	$ 2.00	$ 1.98	$ 2.09	$ 2.23	$ 2.38	$ 2.56	$ 2.78	$ 2.94	$ 3.11	$ 3.29	$ 3.48	$ 86.50
Northwest Nat. Gas	NWN	($45.77)	$0.00	$ 0.45	$ 1.83	$ 1.86	$ 1.88	$ 1.91	$ 2.12	$ 2.36	$ 2.62	$ 2.91	$ 3.23	$ 3.42	$ 3.62	$ 3.83	$ 4.05	$ 106.76
Piedmont Natural Gas	PNY	($26.83)	$0.00	$ 0.31	$ 1.26	$ 1.30	$ 1.33	$ 1.36	$ 1.44	$ 1.52	$ 1.61	$ 1.72	$ 1.84	$ 1.94	$ 2.06	$ 2.18	$ 2.30	$ 64.05
South Jersey Industries	SJI	($44.03)	$0.00	$ 0.32	$ 1.35	$ 1.41	$ 1.48	$ 1.54	$ 1.81	$ 2.10	$ 2.43	$ 2.78	$ 3.15	$ 3.34	$ 3.53	$ 3.74	$ 3.96	$ 86.57
WGL Holdings Inc.	WGL	($34.92)	$0.00	$ 0.42	$ 1.71	$ 1.73	$ 1.76	$ 1.78	$ 1.90	$ 2.04	$ 2.19	$ 2.37	$ 2.57	$ 2.72	$ 2.87	$ 3.04	$ 3.22	$ 75.20

CAPM UTILIZING ALTERNATIVE MARKET RISK PREMIUM CALCULATIONS

[1] Near Term Projected 30 Year Treasury		4.22%	
Current 30 Year Treasury (30-day average)			3.75%
Sharpe Ratio Derived Market Risk Premium	9.94%	12.93%	12.45%
Ex-Ante Approach Derived Market Risk Premium	9.42%	12.47%	11.99%
Proxy Group Current Beta	0.88		

[1] Source: Aspen Publishers, Blue Chip Financial Forecasts, Vol. 29, No. 9 September 1, 2010, p. 2

MARKET RISK PREMIUM UTILIZING EXPECTED MARKET SHARPE RATIO

RP_h	Vol_h		
6.70%	20.40%		
VOL_e		Expected Market Sharpe Ratio	RP_e
30.26%		32.85%	9.94%

$$\frac{RP_h}{Vol_h} \times Vol_e = RP_e$$

RP_h = historical arithmetic average Risk Premium
Vol_h = historical market volatility
Vol_e = expected market volatility

Date	VXV	02/11 VIX Futures	03/11 VIX Futures	04/11 VIX Futures
10/8/2010	24.06	30.50	31.40	31.45
10/7/2010	24.89	30.75	31.65	31.70
10/6/2010	24.91	30.75	31.70	31.75
10/5/2010	25.08	30.70	31.65	31.80
10/4/2010	26.32	31.40	32.25	32.40
10/1/2010	25.70	31.05	32.00	32.25
9/30/2010	26.40	31.35	32.25	32.50
9/29/2010	25.91	30.95	31.75	32.05
9/28/2010	25.34	30.65	31.45	31.65
9/27/2010	25.20	30.65	31.55	31.65
9/24/2010	24.75	30.60	31.55	31.60
9/23/2010	26.16	31.15	32.10	32.10
9/22/2010	25.16	30.55	31.65	31.70
9/21/2010	24.94	30.30	31.40	31.50
9/20/2010	24.59	30.30	31.35	31.50
9/17/2010	25.12	30.70	31.55	31.65
9/16/2010	24.96	30.55	31.40	31.50
9/15/2010	24.93	30.55	31.30	31.45
9/14/2010	24.74	30.70	31.35	31.45
9/13/2010	24.75	30.85	31.45	31.45
9/10/2010	25.59	31.40	32.05	31.85
9/9/2010	26.10	31.55	32.05	31.90
9/8/2010	26.30	31.80	32.30	32.15
9/7/2010	26.77	32.20	32.55	32.25
9/3/2010	25.31	31.85	32.15	32.05
9/2/2010	26.62	32.40	32.70	32.50
9/1/2010	27.29	32.55	32.90	32.80
8/31/2010	29.04	33.20	33.45	33.30
8/30/2010	30.01	33.15	33.25	33.10
8/27/2010	28.40	32.40	32.65	32.60
Average	30.26			

ESTIMATED MARKET RISK PREMIUM DERIVED FROM

Estimated Weighted Index Dividend Yield	Weighted Index Long-Term Growth Rate	S&P 500 Estimated Required Market Return
1.88%	11.17%	13.16%

Percent of Index Capitalization Represented by Estimate:	97.22%

30 Day Average 30-Year Treasury Yield	3.75%
Implied Market Risk Premium	9.42%

Standard and Poor's 500 Index

Ticker	Name	Weight in the Index (%)	Long-Term Growth Estimate (%)	Cap-Weighted Long-Term Growth	Estimated 2009 Dividend Yield (%)	Cap-Weighted Dividend Yield
MMM UN Equity	3M CO	0.58%	12.13%	0.07%	2.37%	0.01%
ABT UN Equity	ABBOTT LABORATORIES	0.75%	10.58%	0.08%	3.29%	0.02%
ANF UN Equity	ABERCROMBIE & FITCH CO-CL A	0.04%	17.92%	0.01%	1.56%	0.00%
ACE UN Equity	ACE LTD	0.19%	11.40%	0.02%	2.13%	0.00%
ADBE UW Equity	ADOBE SYSTEMS INC	0.13%	14.42%	0.02%	0.00%	0.00%
AMD UN Equity	ADVANCED MICRO DEVICES	0.05%	13.75%	0.01%	0.00%	0.00%
AES UN Equity	AES CORP	0.09%	9.50%	0.01%	0.00%	0.00%
AET UN Equity	AETNA INC	0.12%	11.75%	0.01%	0.05%	0.00%
AFL UN Equity	AFLAC INC	0.24%	11.68%	0.03%	2.05%	0.00%
A UN Equity	AGILENT TECHNOLOGIES INC	0.11%	32.70%	0.04%	0.00%	0.00%
APD UN Equity	AIR PRODUCTS & CHEMICALS INC	0.16%	10.18%	0.02%	2.46%	0.00%
ARG UN Equity	AIRGAS INC	0.05%	13.52%	0.01%	1.30%	0.00%
AKS UN Equity	AK STEEL HOLDING CORP	0.01%	No Long-Term Growth		1.37%	0.00%
AKAM UW Equity	AKAMAI TECHNOLOGIES INC	0.08%	14.78%	0.01%	0.00%	0.00%
AA UN Equity	ALCOA INC	0.12%	3.00%	0.00%	0.90%	0.00%
AYE UN Equity	ALLEGHENY ENERGY INC	0.04%	No Long-Term Growth		2.52%	0.00%
ATI UN Equity	ALLEGHENY TECHNOLOGIES INC	0.04%	No Long-Term Growth		1.47%	0.00%
AGN UN Equity	ALLERGAN INC	0.19%	13.79%	0.03%	0.29%	0.00%
ALL UN Equity	ALLSTATE CORP	0.16%	8.20%	0.01%	2.42%	0.00%
ALTR UW Equity	ALTERA CORPORATION	0.08%	21.50%	0.02%	0.74%	0.00%
MO UN Equity	ALTRIA GROUP INC	0.47%	7.50%	0.04%	5.98%	0.03%
AMZN UW Equity	AMAZON.COM INC	0.64%	25.24%	0.16%	0.00%	0.00%
AEE UN Equity	AMEREN CORPORATION	0.06%	No Long-Term Growth		5.32%	0.00%
AEP UN Equity	AMERICAN ELECTRIC POWER	0.16%	4.00%	0.01%	4.70%	0.01%
AXP UN Equity	AMERICAN EXPRESS CO	0.43%	10.83%	0.05%	1.82%	0.01%
AIG UN Equity	AMERICAN INTERNATIONAL GROUP	0.27%	6.00%	0.02%	0.00%	0.00%
AMT UN Equity	AMERICAN TOWER CORP-CL A	0.19%	20.27%	0.04%	0.00%	0.00%
AMP UN Equity	AMERIPRISE FINANCIAL INC	0.12%	16.05%	0.02%	1.39%	0.00%
ABC UN Equity	AMERISOURCEBERGEN CORP	0.08%	12.83%	0.01%	0.94%	0.00%
AMGN UW Equity	AMGEN INC	0.49%	8.80%	0.04%	0.00%	0.00%
APH UN Equity	AMPHENOL CORP-CL A	0.08%	15.00%	0.01%	0.12%	0.00%
APC UN Equity	ANADARKO PETROLEUM CORP	0.26%	13.51%	0.04%	0.63%	0.00%
ADI UN Equity	ANALOG DEVICES INC	0.09%	11.50%	0.01%	2.65%	0.00%
AON UN Equity	AON CORP	0.11%	6.50%	0.01%	1.56%	0.00%
APA UN Equity	APACHE CORP	0.34%	9.31%	0.03%	0.59%	0.00%
AIV UN Equity	APARTMENT INVT & MGMT CO -A	0.02%	5.45%	0.00%	1.73%	0.00%
APOL UW Equity	APOLLO GROUP INC-CL A	0.07%	12.04%	0.01%	0.00%	0.00%
AAPL UW Equity	APPLE INC	2.51%	19.35%	0.49%	0.00%	0.00%
AMAT UW Equity	APPLIED MATERIALS INC	0.15%	13.33%	0.02%	2.21%	0.00%
ADM UN Equity	ARCHER-DANIELS-MIDLAND CO	0.19%	10.00%	0.02%	1.83%	0.00%
AIZ UN Equity	ASSURANT INC	0.04%	9.67%	0.00%	1.54%	0.00%
T UN Equity	AT&T INC	1.55%	6.04%	0.09%	5.88%	0.09%
ADSK UW Equity	AUTODESK INC	0.07%	14.66%	0.01%	0.00%	0.00%
ADP UW Equity	AUTOMATIC DATA PROCESSING	0.19%	9.86%	0.02%	3.32%	0.01%
AN UN Equity	AUTONATION INC	0.03%	15.82%	0.00%	0.00%	0.00%
AZO UN Equity	AUTOZONE INC	0.10%	14.01%	0.01%	0.00%	0.00%
AVB UN Equity	AVALONBAY COMMUNITIES INC	0.09%	7.20%	0.01%	3.21%	0.00%
AVY UN Equity	AVERY DENNISON CORP	0.04%	7.00%	0.00%	2.10%	0.00%
AVP UN Equity	AVON PRODUCTS INC	0.14%	11.67%	0.02%	2.52%	0.00%
BHI UN Equity	BAKER HUGHES INC	0.18%	5.23%	0.01%	1.29%	0.00%
BLL UN Equity	BALL CORP	0.05%	8.90%	0.00%	0.65%	0.00%
BK UN Equity	BANK OF NEW YORK MELLON CORP	0.30%	9.88%	0.03%	1.49%	0.00%
BAC UN Equity	BANK OF AMERICA CORP	1.23%	9.13%	0.11%	0.30%	0.00%
BAX UN Equity	BAXTER INTERNATIONAL INC	0.27%	10.50%	0.03%	2.36%	0.01%
BBT UN Equity	BB&T CORP	0.15%	7.00%	0.01%	2.56%	0.00%
BDX UN Equity	BECTON DICKINSON AND CO	0.16%	10.07%	0.02%	2.07%	0.00%
BBBY UW Equity	BED BATH & BEYOND INC	0.10%	14.66%	0.02%	0.00%	0.00%
BMS UN Equity	BEMIS COMPANY	0.03%	11.17%	0.00%	2.71%	0.00%
BRK/B UN Equity	BERKSHIRE HATHAWAY INC-CL B	0.77%	No Long-Term Growth		0.00%	0.00%
BBY UN Equity	BEST BUY CO INC	0.15%	12.29%	0.02%	1.39%	0.00%
BIG UN Equity	BIG LOTS INC	0.02%	14.00%	0.00%	0.00%	0.00%
BIIB UW Equity	BIOGEN IDEC INC	0.13%	7.96%	0.01%	0.00%	0.00%
BMC UW Equity	BMC SOFTWARE INC	0.07%	13.65%	0.01%	0.00%	0.00%
BA UN Equity	BOEING CO/THE	0.48%	16.96%	0.08%	2.40%	0.01%
BXP UN Equity	BOSTON PROPERTIES INC	0.11%	5.40%	0.01%	2.31%	0.00%
BSX UN Equity	BOSTON SCIENTIFIC CORP	0.09%	9.43%	0.01%	0.00%	0.00%
BMY UN Equity	BRISTOL-MYERS SQUIBB CO	0.43%	4.52%	0.02%	4.67%	0.02%
BRCM UW Equity	BROADCOM CORP-CL A	0.15%	18.33%	0.03%	0.85%	0.00%
BF/B UN Equity	BROWN-FORMAN CORP-CLASS B	0.05%	13.00%	0.01%	2.00%	0.00%
CA UW Equity	CA INC	0.10%	11.00%	0.01%	0.73%	0.00%
COG UN Equity	CABOT OIL & GAS CORP	0.03%	No Long-Term Growth		0.33%	0.00%
CAM UN Equity	CAMERON INTERNATIONAL CORP	0.10%	No Long-Term Growth		0.00%	0.00%

CPB UN Equity	CAMPBELL SOUP CO	0.11%	7.73%	0.01%	3.12%	0.00%
COF UN Equity	CAPITAL ONE FINANCIAL CORP	0.17%	9.92%	0.02%	0.49%	0.00%
CAH UN Equity	CARDINAL HEALTH INC	0.11%	11.11%	0.01%	2.34%	0.00%
CFN UN Equity	CAREFUSION CORP	0.05%	8.94%	0.00%	0.00%	0.00%
KMX UN Equity	CARMAX INC	0.06%	13.02%	0.01%	0.00%	0.00%
CCL UN Equity	CARNIVAL CORP	0.22%	14.75%	0.03%	0.95%	0.00%
CAT UN Equity	CATERPILLAR INC	0.46%	12.20%	0.06%	2.15%	0.01%
CBG UN Equity	CB RICHARD ELLIS GROUP INC-A	0.06%	11.00%	0.01%	0.00%	0.00%
CBS UN Equity	CBS CORP-CLASS B NON VOTING	0.10%	6.52%	0.01%	1.12%	0.00%
CELG UW Equity	CELGENE CORP	0.25%	23.61%	0.06%	0.00%	0.00%
CNP UN Equity	CENTERPOINT ENERGY INC	0.06%	6.28%	0.00%	4.89%	0.00%
CTL UN Equity	CENTURYLINK INC	0.11%	0.53%	0.00%	7.23%	0.01%
CEPH UW Equity	CEPHALON INC	0.04%	12.38%	0.01%	0.00%	0.00%
CERN UW Equity	CERNER CORP	0.07%	18.33%	0.01%	0.00%	0.00%
CF UN Equity	CF INDUSTRIES HOLDINGS INC	0.08%	5.00%	0.00%	0.34%	0.00%
CHRW UW Equity	C.H. ROBINSON WORLDWIDE INC	0.11%	16.00%	0.02%	1.42%	0.00%
CHK UN Equity	CHESAPEAKE ENERGY CORP	0.14%	8.75%	0.01%	1.32%	0.00%
CVX UN Equity	CHEVRON CORP	1.53%	18.99%	0.29%	3.42%	0.05%
CB UN Equity	CHUBB CORP	0.17%	8.33%	0.01%	2.58%	0.00%
CI UN Equity	CIGNA CORP	0.09%	10.19%	0.01%	0.07%	0.00%
CINF UW Equity	CINCINNATI FINANCIAL CORP	0.04%	No Long-Term Growth		5.31%	0.00%
CTAS UW Equity	CINTAS CORP	0.04%	10.20%	0.00%	1.81%	0.00%
CSCO UW Equity	CISCO SYSTEMS INC	1.19%	11.58%	0.14%	0.00%	0.00%
C UN Equity	CITIGROUP INC	1.13%	1.50%	0.02%	0.00%	0.00%
CTXS UW Equity	CITRIX SYSTEMS INC	0.10%	12.55%	0.01%	0.00%	0.00%
CLF UN Equity	CLIFFS NATURAL RESOURCES INC	0.09%	No Long-Term Growth		0.67%	0.00%
CLX UN Equity	CLOROX COMPANY	0.09%	9.90%	0.01%	3.20%	0.00%
CME UW Equity	CME GROUP INC	0.16%	13.67%	0.02%	1.80%	0.00%
CMS UN Equity	CMS ENERGY CORP	0.04%	7.40%	0.00%	3.63%	0.00%
COH UN Equity	COACH INC	0.12%	14.71%	0.02%	1.31%	0.00%
KO UN Equity	COCA-COLA CO/THE	1.26%	8.50%	0.11%	2.94%	0.04%
CCE UN Equity	COCA-COLA ENTERPRISES	0.07%	10.00%	0.01%	5.98%	0.00%
CTSH UW Equity	COGNIZANT TECH SOLUTIONS-A	0.18%	19.29%	0.04%	0.00%	0.00%
CL UN Equity	COLGATE-PALMOLIVE CO	0.34%	9.80%	0.03%	2.63%	0.01%
CMCSA UW Equity	COMCAST CORP-CLASS A	0.34%	16.33%	0.06%	2.02%	0.01%
CMA UN Equity	COMERICA INC	0.06%	6.07%	0.00%	0.51%	0.00%
CSC UN Equity	COMPUTER SCIENCES CORP	0.07%	9.00%	0.01%	0.55%	0.00%
CPWR UW Equity	COMPUWARE CORP	0.02%	5.00%	0.00%	0.00%	0.00%
CAG UN Equity	CONAGRA FOODS INC	0.09%	7.90%	0.01%	3.97%	0.00%
COP UN Equity	CONOCOPHILLIPS	0.81%	18.85%	0.15%	3.56%	0.03%
ED UN Equity	CONSOLIDATED EDISON INC	0.13%	4.36%	0.01%	4.91%	0.01%
CNX UN Equity	CONSOL ENERGY INC	0.08%	46.00%	0.04%	1.00%	0.00%
CEG UN Equity	CONSTELLATION ENERGY GROUP	0.06%	No Long-Term Growth		2.91%	0.00%
STZ UN Equity	CONSTELLATION BRANDS INC-A	0.03%	7.00%	0.00%	0.00%	0.00%
GLW UN Equity	CORNING INC	0.27%	11.40%	0.03%	1.08%	0.00%
COST UW Equity	COSTCO WHOLESALE CORP	0.25%	13.05%	0.03%	1.46%	0.00%
CVH UN Equity	COVENTRY HEALTH CARE INC	0.03%	9.67%	0.00%	0.00%	0.00%
BCR UN Equity	CR BARD INC	0.07%	12.00%	0.01%	0.84%	0.00%
CSX UN Equity	CSX CORP	0.21%	11.61%	0.02%	1.64%	0.00%
CMI UN Equity	CUMMINS INC	0.17%	11.50%	0.02%	0.88%	0.00%
CVS UN Equity	CVS CAREMARK CORP	0.39%	11.88%	0.05%	1.09%	0.00%
DHR UN Equity	DANAHER CORP	0.25%	14.75%	0.04%	0.18%	0.00%
DRI UN Equity	DARDEN RESTAURANTS INC	0.05%	12.50%	0.01%	3.01%	0.00%
DVA UN Equity	DAVITA INC	0.07%	12.39%	0.01%	0.00%	0.00%
DF UN Equity	DEAN FOODS CO	0.02%	8.25%	0.00%	0.00%	0.00%
DE UN Equity	DEERE & CO	0.29%	8.75%	0.03%	1.52%	0.00%
DELL UW Equity	DELL INC	0.25%	7.83%	0.02%	0.00%	0.00%
DNR UN Equity	DENBURY RESOURCES INC	0.07%	6.50%	0.00%	0.00%	0.00%
XRAY UW Equity	DENTSPLY INTERNATIONAL INC	0.04%	11.75%	0.00%	0.66%	0.00%
DVN UN Equity	DEVON ENERGY CORPORATION	0.27%	6.39%	0.02%	0.96%	0.00%
DV UN Equity	DEVRY INC	0.03%	16.60%	0.01%	0.42%	0.00%
DO UN Equity	DIAMOND OFFSHORE DRILLING	0.09%	18.00%	0.02%	6.96%	0.01%
DTV UW Equity	DIRECTV-CLASS A	0.33%	25.41%	0.09%	0.00%	0.00%
DFS UN Equity	DISCOVER FINANCIAL SERVICES	0.09%	6.00%	0.01%	0.45%	0.00%
DISCA UW Equity	DISCOVERY COMMUNICATIONS-A	0.06%	22.26%	0.01%	0.00%	0.00%
D UN Equity	DOMINION RESOURCES INC/VA	0.24%	5.00%	0.01%	4.12%	0.01%
DOV UN Equity	DOVER CORP	0.09%	12.00%	0.01%	1.95%	0.00%
DOW UN Equity	DOW CHEMICAL	0.32%	7.50%	0.02%	2.05%	0.01%
DHI UN Equity	DR HORTON INC	0.03%	7.67%	0.00%	1.39%	0.00%
DPS UN Equity	DR PEPPER SNAPPLE GROUP INC	0.08%	9.00%	0.01%	2.41%	0.00%
DTE UN Equity	DTE ENERGY COMPANY	0.07%	4.80%	0.00%	4.59%	0.00%
DD UN Equity	DU PONT (E.I.) DE NEMOURS	0.39%	13.56%	0.05%	3.51%	0.01%
DUK UN Equity	DUKE ENERGY CORP	0.21%	3.83%	0.01%	5.52%	0.01%
DNB UN Equity	DUN & BRADSTREET CORP	0.03%	10.00%	0.00%	1.86%	0.00%
ETFC UW Equity	E*TRADE FINANCIAL CORP	0.03%	90.00%	0.03%	0.00%	0.00%
EMN UN Equity	EASTMAN CHEMICAL COMPANY	0.05%	7.00%	0.00%	2.24%	0.00%
EK UN Equity	EASTMAN KODAK CO	0.01%	10.00%	0.00%	0.00%	0.00%
ETN UN Equity	EATON CORP	0.13%	10.25%	0.01%	2.57%	0.00%
EBAY UW Equity	EBAY INC	0.30%	8.77%	0.03%	0.00%	0.00%
ECL UN Equity	ECOLAB INC	0.11%	14.00%	0.02%	1.19%	0.00%
EIX UN Equity	EDISON INTERNATIONAL	0.11%	0.60%	0.00%	3.59%	0.00%
EP UN Equity	EL PASO CORP	0.09%	11.50%	0.01%	0.30%	0.00%
ERTS UW Equity	ELECTRONIC ARTS INC	0.05%	15.71%	0.01%	0.00%	0.00%
LLY UN Equity	ELI LILLY & CO	0.39%	No Long-Term Growth		5.21%	0.00%
EMC UN Equity	EMC CORP/MASS	0.38%	14.90%	0.06%	0.00%	0.00%
EMR UN Equity	EMERSON ELECTRIC CO	0.37%	11.19%	0.04%	2.71%	0.01%
ETR UN Equity	ENTERGY CORP	0.13%	2.75%	0.00%	4.19%	0.01%
EOG UN Equity	EOG RESOURCES INC	0.23%	16.00%	0.04%	0.63%	0.00%
EQT UN Equity	EQT CORP	0.05%	14.50%	0.01%	2.34%	0.00%
EFX UN Equity	EQUIFAX INC	0.04%	9.75%	0.00%	0.51%	0.00%
EQR UN Equity	EQUITY RESIDENTIAL	0.13%	6.22%	0.01%	2.71%	0.00%
EL UN Equity	ESTEE LAUDER COMPANIES-CL A	0.07%	13.77%	0.01%	0.94%	0.00%
EXC UN Equity	EXELON CORP	0.26%	No Long-Term Growth		4.90%	0.00%
EXPE UW Equity	EXPEDIA INC	0.07%	14.00%	0.01%	0.79%	0.00%
EXPD UW Equity	EXPEDITORS INTL WASH INC	0.09%	15.93%	0.01%	0.82%	0.00%
ESRX UW Equity	EXPRESS SCRIPTS INC	0.24%	18.23%	0.04%	0.00%	0.00%
XOM UN Equity	EXXON MOBIL CORP	3.02%	15.06%	0.46%	2.68%	0.08%
FDO UN Equity	FAMILY DOLLAR STORES	0.06%	13.86%	0.01%	1.44%	0.00%
FAST UW Equity	FASTENAL CO	0.07%	20.90%	0.01%	1.56%	0.00%

FII UN Equity	FEDERATED INVESTORS INC-CL B	0.02%	6.00%	0.00%	8.31%	0.00%
FDX UN Equity	FEDEX CORP	0.26%	13.93%	0.04%	0.54%	0.00%
FIS UN Equity	FIDELITY NATIONAL INFORMATIO	0.08%	13.22%	0.01%	0.72%	0.00%
FITB UW Equity	FIFTH THIRD BANCORP	0.09%	4.56%	0.00%	0.31%	0.00%
FHN UN Equity	FIRST HORIZON NATIONAL CORP	0.02%	8.00%	0.00%	0.00%	0.00%
FSLR UW Equity	FIRST SOLAR INC	0.11%	18.60%	0.02%	0.00%	0.00%
FE UN Equity	FIRSTENERGY CORP	0.11%	3.00%	0.00%	5.75%	0.01%
FISV UW Equity	FISERV INC	0.07%	12.42%	0.01%	0.00%	0.00%
FLIR UW Equity	FLIR SYSTEMS INC	0.04%	18.60%	0.01%	0.00%	0.00%
FLS UN Equity	FLOWSERVE CORP	0.06%	9.00%	0.01%	1.01%	0.00%
FLR UN Equity	FLUOR CORP	0.09%	14.33%	0.01%	0.99%	0.00%
FMC UN Equity	FMC CORP	0.05%	9.83%	0.00%	0.71%	0.00%
FTI UN Equity	FMC TECHNOLOGIES INC	0.08%	31.20%	0.02%	0.00%	0.00%
F UN Equity	FORD MOTOR CO	0.42%	10.84%	0.05%	0.00%	0.00%
FRX UN Equity	FOREST LABORATORIES INC	0.09%	No Long-Term Growth		0.00%	0.00%
FO UN Equity	FORTUNE BRANDS INC	0.08%	11.33%	0.01%	1.37%	0.00%
BEN UN Equity	FRANKLIN RESOURCES INC	0.24%	10.00%	0.02%	0.80%	0.00%
FCX UN Equity	FREEPORT-MCMORAN COPPER	0.42%	5.00%	0.02%	1.05%	0.00%
FTR UN Equity	FRONTIER COMMUNICATIONS CORP	0.08%	No Long-Term Growth		10.03%	0.00%
GME UN Equity	GAMESTOP CORP-CLASS A	0.03%	14.00%	0.00%	0.00%	0.00%
GCI UN Equity	GANNETT CO	0.03%	5.50%	0.00%	1.15%	0.00%
GPS UN Equity	GAP INC/THE	0.11%	10.46%	0.01%	2.13%	0.00%
GD UN Equity	GENERAL DYNAMICS CORP	0.22%	8.14%	0.02%	2.53%	0.01%
GE UN Equity	GENERAL ELECTRIC CO	1.69%	15.85%	0.27%	2.46%	0.04%
GIS UN Equity	GENERAL MILLS INC	0.22%	9.32%	0.02%	2.93%	0.01%
GPC UN Equity	GENUINE PARTS CO	0.07%	10.33%	0.01%	3.59%	0.00%
GNW UN Equity	GENWORTH FINANCIAL INC-CL A	0.06%	14.05%	0.01%	0.00%	0.00%
GENZ UW Equity	GENZYME CORP	0.17%	19.39%	0.03%	0.00%	0.00%
GILD UW Equity	GILEAD SCIENCES INC	0.28%	14.00%	0.04%	0.00%	0.00%
GS UN Equity	GOLDMAN SACHS GROUP INC	0.73%	7.41%	0.05%	0.91%	0.01%
GR UN Equity	GOODRICH CORP	0.09%	7.33%	0.01%	1.38%	0.00%
GT UN Equity	GOODYEAR TIRE & RUBBER CO	0.03%	21.60%	0.01%	0.00%	0.00%
GOOG UW Equity	GOOGLE INC-CL A	1.23%	17.70%	0.22%	0.00%	0.00%
HRB UN Equity	H&R BLOCK INC	0.04%	10.00%	0.00%	4.26%	0.00%
HAL UN Equity	HALLIBURTON CO	0.29%	10.10%	0.03%	1.02%	0.00%
HOG UN Equity	HARLEY-DAVIDSON INC	0.07%	9.33%	0.01%	1.24%	0.00%
HAR UN Equity	HARMAN INTERNATIONAL	0.02%	20.00%	0.00%	0.00%	0.00%
HRS UN Equity	HARRIS CORP	0.05%	5.50%	0.00%	1.32%	0.00%
HIG UN Equity	HARTFORD FINANCIAL SVCS GRP	0.10%	13.75%	0.01%	0.80%	0.00%
HAS UN Equity	HASBRO INC	0.06%	14.33%	0.01%	2.16%	0.00%
HCP UN Equity	HCP INC	0.10%	7.57%	0.01%	5.05%	0.01%
HCN UN Equity	HEALTH CARE REIT INC	0.06%	7.24%	0.00%	5.55%	0.00%
HP UN Equity	HELMERICH & PAYNE	0.04%	10.00%	0.00%	0.45%	0.00%
HSY UN Equity	HERSHEY CO/THE	0.08%	8.50%	0.01%	2.54%	0.00%
HES UN Equity	HESS CORP	0.19%	10.68%	0.02%	0.63%	0.00%
HPQ UN Equity	HEWLETT-PACKARD CO	0.87%	11.00%	0.10%	0.83%	0.01%
HNZ UN Equity	HJ HEINZ CO	0.14%	7.12%	0.01%	3.70%	0.01%
HD UN Equity	HOME DEPOT INC	0.48%	14.43%	0.07%	3.06%	0.01%
HON UN Equity	HONEYWELL INTERNATIONAL INC	0.33%	10.52%	0.03%	2.58%	0.01%
HRL UN Equity	HORMEL FOODS CORP	0.05%	11.00%	0.01%	1.88%	0.00%
HSP UN Equity	HOSPIRA INC	0.09%	12.80%	0.01%	0.00%	0.00%
HST UN Equity	HOST HOTELS & RESORTS INC	0.10%	11.60%	0.01%	0.28%	0.00%
HCBK UW Equity	HUDSON CITY BANCORP INC	0.06%	4.50%	0.00%	5.05%	0.00%
HUM UN Equity	HUMANA INC	0.08%	10.00%	0.01%	0.00%	0.00%
HBAN UW Equity	HUNTINGTON BANCSHARES INC	0.04%	4.67%	0.00%	0.67%	0.00%
IBM UN Equity	INTL BUSINESS MACHINES CORP	1.63%	10.54%	0.17%	1.65%	0.03%
ITW UN Equity	ILLINOIS TOOL WORKS	0.23%	15.06%	0.03%	2.65%	0.01%
TEG UN Equity	INTEGRYS ENERGY GROUP INC	0.04%	8.27%	0.00%	5.20%	0.00%
INTC UW Equity	INTEL CORP	1.00%	11.29%	0.11%	3.19%	0.03%
ICE UN Equity	INTERCONTINENTALEXCHANGE INC	0.08%	17.75%	0.01%	0.00%	0.00%
IPG UN Equity	INTERPUBLIC GROUP OF COS INC	0.05%	12.00%	0.01%	0.00%	0.00%
IFF UN Equity	INTL FLAVORS & FRAGRANCES	0.04%	9.00%	0.00%	2.08%	0.00%
IGT UN Equity	INTL GAME TECHNOLOGY	0.04%	13.80%	0.01%	1.62%	0.00%
IP UN Equity	INTERNATIONAL PAPER CO	0.09%	5.50%	0.01%	1.74%	0.00%
INTU UW Equity	INTUIT INC	0.14%	14.95%	0.02%	0.00%	0.00%
ISRG UW Equity	INTUITIVE SURGICAL INC	0.10%	26.40%	0.03%	0.00%	0.00%
IVZ UN Equity	INVESCO LTD	0.10%	9.65%	0.01%	1.88%	0.00%
IRM UN Equity	IRON MOUNTAIN INC	0.04%	18.00%	0.01%	1.04%	0.00%
ITT UN Equity	ITT CORP	0.08%	11.33%	0.01%	2.07%	0.00%
JCP UN Equity	J.C. PENNEY CO INC	0.07%	9.67%	0.01%	2.45%	0.00%
JBL UN Equity	JABIL CIRCUIT INC	0.03%	11.00%	0.00%	1.91%	0.00%
JEC UN Equity	JACOBS ENGINEERING GROUP INC	0.05%	11.00%	0.01%	0.00%	0.00%
JNS UN Equity	JANUS CAPITAL GROUP INC	0.02%	2.80%	0.00%	0.34%	0.00%
JDSU UW Equity	JDS UNIPHASE CORP	0.03%	12.25%	0.00%	0.00%	0.00%
SJM UN Equity	JM SMUCKER CO/THE	0.07%	7.03%	0.00%	2.57%	0.00%
JCI UN Equity	JOHNSON CONTROLS INC	0.20%	15.53%	0.03%	1.65%	0.00%
JNJ UN Equity	JOHNSON & JOHNSON	1.61%	6.63%	0.11%	3.29%	0.05%
JPM UN Equity	JPMORGAN CHASE & CO	1.45%	8.50%	0.12%	0.67%	0.01%
JNPR UN Equity	JUNIPER NETWORKS INC	0.15%	17.69%	0.03%	0.00%	0.00%
K UN Equity	KELLOGG CO	0.18%	9.17%	0.02%	3.05%	0.01%
KEY UN Equity	KEYCORP	0.07%	4.75%	0.00%	0.45%	0.00%
KMB UN Equity	KIMBERLY-CLARK CORP	0.25%	8.27%	0.02%	3.87%	0.01%
KIM UN Equity	KIMCO REALTY CORP	0.06%	9.50%	0.01%	3.76%	0.00%
KG UN Equity	KING PHARMACEUTICALS INC	0.03%	11.92%	0.00%	0.00%	0.00%
KLAC UW Equity	KLA-TENCOR CORPORATION	0.05%	10.50%	0.01%	2.88%	0.00%
KSS UN Equity	KOHLS CORP	0.15%	13.78%	0.02%	0.00%	0.00%
KFT UN Equity	KRAFT FOODS INC-CLASS A	0.50%	7.30%	0.04%	3.75%	0.02%
KR UN Equity	KROGER CO	0.13%	8.92%	0.01%	1.80%	0.00%
LLL UN Equity	L-3 COMMUNICATIONS HOLDINGS	0.07%	8.69%	0.01%	2.19%	0.00%
LH UN Equity	LABORATORY CRP OF AMER HLDGS	0.08%	12.50%	0.01%	0.00%	0.00%
LM UN Equity	LEGG MASON INC	0.04%	7.50%	0.00%	0.49%	0.00%
LEG UN Equity	LEGGETT & PLATT INC	0.03%	4.70%	0.00%	4.33%	0.00%
LEN UN Equity	LENNAR CORP-CL A	0.02%	8.00%	0.00%	1.00%	0.00%
LUK UN Equity	LEUCADIA NATIONAL CORP	0.06%	No Long-Term Growth		0.00%	0.00%
LXK UN Equity	LEXMARK INTERNATIONAL INC-A	0.03%	No Long-Term Growth		0.00%	0.00%
LIFE UW Equity	LIFE TECHNOLOGIES CORP	0.08%	10.18%	0.01%	0.00%	0.00%
LTD UN Equity	LIMITED BRANDS INC	0.09%	14.86%	0.01%	5.38%	0.00%
LNC UN Equity	LINCOLN NATIONAL CORP	0.07%	10.80%	0.01%	0.16%	0.00%
LLTC UW Equity	LINEAR TECHNOLOGY CORP	0.06%	9.67%	0.01%	3.16%	0.00%

LMT UN Equity	LOCKHEED MARTIN CORP	0.24%	8.07%	0.02%	3.67%	0.01%
L UN Equity	LOEWS CORP	0.15%	No Long-Term Growth		0.63%	0.00%
LO UN Equity	LORILLARD INC	0.11%	6.00%	0.01%	5.26%	0.01%
LOW UN Equity	LOWE'S COS INC	0.28%	14.24%	0.04%	1.76%	0.00%
LSI UN Equity	LSI CORP	0.03%	15.00%	0.00%	0.00%	0.00%
MTB UN Equity	M & T BANK CORP	0.08%	4.95%	0.00%	3.61%	0.00%
M UN Equity	MACY'S INC	0.09%	10.00%	0.01%	0.82%	0.00%
MRO UN Equity	MARATHON OIL CORP	0.23%	12.02%	0.03%	2.77%	0.01%
MAR UN Equity	MARRIOTT INTERNATIONAL-CL A	0.12%	10.53%	0.01%	0.44%	0.00%
MMC UN Equity	MARSH & MCLENNAN COS	0.12%	11.00%	0.01%	3.44%	0.00%
MI UN Equity	MARSHALL & ILSLEY CORP	0.04%	6.33%	0.00%	0.49%	0.00%
MAS UN Equity	MASCO CORP	0.04%	10.00%	0.00%	2.41%	0.00%
MEE UN Equity	MASSEY ENERGY CO	0.03%	112.00%	0.04%	0.71%	0.00%
MA UN Equity	MASTERCARD INC-CLASS A	0.24%	19.47%	0.05%	0.27%	0.00%
MAT UW Equity	MATTEL INC	0.08%	8.50%	0.01%	3.42%	0.00%
MFE UN Equity	MCAFEE INC	0.07%	13.13%	0.01%	0.00%	0.00%
MKC UN Equity	MCCORMICK & CO-NON VTG SHRS	0.05%	8.83%	0.00%	2.39%	0.00%
MCD UN Equity	MCDONALD'S CORP	0.74%	9.58%	0.07%	3.00%	0.02%
MHP UN Equity	MCGRAW-HILL COMPANIES INC	0.10%	9.00%	0.01%	2.98%	0.00%
MCK UN Equity	MCKESSON CORP	0.15%	11.00%	0.02%	0.92%	0.00%
MJN UN Equity	MEAD JOHNSON NUTRITION CO	0.11%	10.25%	0.01%	1.45%	0.00%
MWV UN Equity	MEADWESTVACO CORP	0.04%	10.00%	0.00%	3.67%	0.00%
MHS UN Equity	MEDCO HEALTH SOLUTIONS INC	0.21%	16.67%	0.03%	0.05%	0.00%
MDT UN Equity	MEDTRONIC INC	0.33%	10.04%	0.03%	2.69%	0.01%
WFR UN Equity	MEMC ELECTRONIC MATERIALS	0.03%	17.50%	0.00%	0.00%	0.00%
MRK UN Equity	MERCK & CO. INC.	1.05%	6.73%	0.07%	4.09%	0.04%
MDP UN Equity	MEREDITH CORP	0.01%	15.00%	0.00%	2.65%	0.00%
MET UN Equity	METLIFE INC	0.33%	10.58%	0.03%	1.91%	0.01%
PCS UN Equity	METROPCS COMMUNICATIONS INC	0.04%	20.82%	0.01%	0.00%	0.00%
MCHP UW Equity	MICROCHIP TECHNOLOGY INC	0.05%	15.00%	0.01%	4.43%	0.00%
MU UW Equity	MICRON TECHNOLOGY INC	0.07%	11.75%	0.01%	0.00%	0.00%
MSFT UW Equity	MICROSOFT CORP	1.98%	11.88%	0.24%	2.26%	0.04%
MOLX UW Equity	MOLEX INC	0.02%	11.67%	0.00%	2.90%	0.00%
TAP UN Equity	MOLSON COORS BREWING CO -B	0.07%	12.00%	0.01%	2.18%	0.00%
MON UN Equity	MONSANTO CO	0.27%	11.00%	0.03%	2.11%	0.01%
MWW UN Equity	MONSTER WORLDWIDE INC	0.02%	20.20%	0.00%	0.00%	0.00%
MCO UN Equity	MOODY'S CORP	0.06%	11.05%	0.01%	1.44%	0.00%
MS UN Equity	MORGAN STANLEY	0.33%	12.00%	0.04%	0.78%	0.00%
MOT UN Equity	MOTOROLA INC	0.17%	12.50%	0.02%	0.00%	0.00%
MUR UN Equity	MURPHY OIL CORP	0.11%	15.00%	0.02%	1.61%	0.00%
MYL UW Equity	MYLAN INC	0.05%	13.70%	0.01%	1.65%	0.00%
NBR UN Equity	NABORS INDUSTRIES LTD	0.05%	10.00%	0.01%	0.00%	0.00%
NDAQ UW Equity	NASDAQ OMX GROUP/THE	0.04%	12.25%	0.00%	0.00%	0.00%
NOV UN Equity	NATIONAL OILWELL VARCO INC	0.19%	No Long-Term Growth		0.81%	0.00%
NSM UN Equity	NATIONAL SEMICONDUCTOR CORP	0.03%	8.00%	0.00%	2.88%	0.00%
NTAP UW Equity	NETAPP INC	0.16%	17.50%	0.03%	0.00%	0.00%
NYT UN Equity	NEW YORK TIMES CO -CL A	0.01%	12.00%	0.00%	0.00%	0.00%
NWL UN Equity	NEWELL RUBBERMAID INC	0.05%	9.20%	0.00%	1.23%	0.00%
NEM UN Equity	NEWMONT MINING CORP	0.28%	24.43%	0.07%	0.85%	0.00%
NWSA UW Equity	NEWS CORP-CL A	0.24%	10.53%	0.02%	1.06%	0.00%
NEE UN Equity	NEXTERA ENERGY INC	0.21%	6.05%	0.01%	3.61%	0.01%
GAS UN Equity	NICOR INC	0.02%	3.13%	0.00%	3.89%	0.00%
NKE UN Equity	NIKE INC -CL B	0.29%	12.03%	0.03%	1.37%	0.00%
NI UN Equity	NISOURCE INC	0.05%	7.17%	0.00%	5.25%	0.00%
NBL UN Equity	NOBLE ENERGY INC	0.12%	7.00%	0.01%	0.94%	0.00%
JWN UN Equity	NORDSTROM INC	0.08%	12.19%	0.01%	1.88%	0.00%
NSC UN Equity	NORFOLK SOUTHERN CORP	0.21%	13.75%	0.03%	2.29%	0.00%
NU UN Equity	NORTHEAST UTILITIES	0.05%	7.17%	0.00%	3.36%	0.00%
NTRS UW Equity	NORTHERN TRUST CORP	0.11%	6.14%	0.01%	2.25%	0.00%
NOC UN Equity	NORTHROP GRUMMAN CORP	0.17%	10.89%	0.02%	2.89%	0.00%
NOVL UW Equity	NOVELL INC	0.02%	8.33%	0.00%	0.00%	0.00%
NVLS UW Equity	NOVELLUS SYSTEMS INC	0.02%	14.00%	0.00%	0.00%	0.00%
NRG UN Equity	NRG ENERGY INC	0.05%	3.50%	0.00%	0.00%	0.00%
NUE UN Equity	NUCOR CORP	0.12%	No Long-Term Growth		3.48%	0.00%
NVDA UW Equity	NVIDIA CORP	0.06%	13.00%	0.01%	0.00%	0.00%
NYX UN Equity	NYSE EURONEXT	0.07%	9.70%	0.01%	4.16%	0.00%
ORLY UW Equity	O'REILLY AUTOMOTIVE INC	0.07%	16.50%	0.01%	0.00%	0.00%
OXY UN Equity	OCCIDENTAL PETROLEUM CORP	0.63%	7.88%	0.05%	1.55%	0.01%
ODP UN Equity	OFFICE DEPOT INC	0.01%	10.67%	0.00%	0.00%	0.00%
OMC UN Equity	OMNICOM GROUP	0.11%	11.00%	0.01%	1.93%	0.00%
OKE UN Equity	ONEOK INC	0.05%	6.00%	0.00%	3.64%	0.00%
ORCL UW Equity	ORACLE CORP	1.31%	14.84%	0.19%	0.80%	0.01%
OI UN Equity	OWENS-ILLINOIS INC	0.04%	7.20%	0.00%	0.00%	0.00%
PCAR UW Equity	PACCAR INC	0.17%	11.80%	0.02%	0.72%	0.00%
PTV UN Equity	PACTIV CORPORATION	0.04%	6.55%	0.00%	0.00%	0.00%
PLL UN Equity	PALL CORP	0.05%	12.00%	0.01%	1.44%	0.00%
PH UN Equity	PARKER HANNIFIN CORP	0.11%	8.50%	0.01%	1.49%	0.00%
PDCO UW Equity	PATTERSON COS INC	0.03%	14.33%	0.00%	1.41%	0.00%
PAYX UW Equity	PAYCHEX INC	0.09%	11.00%	0.01%	4.53%	0.00%
BTU UN Equity	PEABODY ENERGY CORP	0.13%	34.00%	0.04%	0.54%	0.00%
PBCT UW Equity	PEOPLE'S UNITED FINANCIAL	0.05%	7.67%	0.00%	4.65%	0.00%
POM UN Equity	PEPCO HOLDINGS INC	0.04%	6.50%	0.00%	5.68%	0.00%
PEP UN Equity	PEPSICO INC	0.96%	10.50%	0.10%	2.86%	0.03%
PKI UN Equity	PERKINELMER INC	0.03%	13.65%	0.00%	1.19%	0.00%
PFE UN Equity	PFIZER INC	1.30%	3.10%	0.04%	4.06%	0.05%
PCG UN Equity	P G & E CORP	0.17%	7.03%	0.01%	3.86%	0.01%
PM UN Equity	PHILIP MORRIS INTERNATIONAL	0.96%	9.97%	0.10%	4.29%	0.04%
PNW UN Equity	PINNACLE WEST CAPITAL	0.04%	5.83%	0.00%	5.12%	0.00%
PXD UN Equity	PIONEER NATURAL RESOURCES CO	0.08%	10.67%	0.01%	0.19%	0.00%
PBI UN Equity	PITNEY BOWES INC	0.04%	No Long-Term Growth		6.60%	0.00%
PCL UN Equity	PLUM CREEK TIMBER CO	0.06%	3.50%	0.00%	4.51%	0.00%
PNC UN Equity	PNC FINANCIAL SERVICES GROUP	0.26%	4.88%	0.01%	0.75%	0.00%
RL UN Equity	POLO RALPH LAUREN CORP	0.06%	13.50%	0.01%	0.35%	0.00%
PPG UN Equity	PPG INDUSTRIES INC	0.11%	7.50%	0.01%	2.89%	0.00%
PPL UN Equity	PPL CORPORATION	0.12%	5.06%	0.01%	5.07%	0.01%
PX UN Equity	PRAXAIR INC	0.26%	11.00%	0.03%	1.96%	0.01%
PCP UN Equity	PRECISION CASTPARTS CORP	0.17%	9.65%	0.02%	0.10%	0.00%
PCLN UW Equity	PRICELINE.COM INC	0.15%	20.67%	0.03%	0.00%	0.00%
PFG UN Equity	PRINCIPAL FINANCIAL GROUP	0.08%	12.17%	0.01%	1.92%	0.00%

PG UN Equity	PROCTER & GAMBLE CO/THE	1.62%	9.30%	0.15%	3.13%	0.05%
PGN UN Equity	PROGRESS ENERGY INC	0.12%	3.76%	0.00%	5.62%	0.01%
PGR UN Equity	PROGRESSIVE CORP	0.13%	6.79%	0.01%	1.21%	0.00%
PLD UN Equity	PROLOGIS	0.06%	18.23%	0.01%	4.71%	0.00%
PRU UN Equity	PRUDENTIAL FINANCIAL INC	0.23%	12.18%	0.03%	1.44%	0.00%
PEG UN Equity	PUBLIC SERVICE ENTERPRISE GP	0.15%	1.25%	0.00%	4.12%	0.01%
PSA UN Equity	PUBLIC STORAGE	0.16%	3.54%	0.01%	3.02%	0.00%
PHM UN Equity	PULTE GROUP INC	0.03%	10.00%	0.00%	0.04%	0.00%
QEP UN Equity	QEP RESOURCES INC	0.05%	15.00%	0.01%	0.15%	0.00%
QLGC UW Equity	QLOGIC CORP	0.02%	11.50%	0.00%	0.00%	0.00%
QCOM UW Equity	QUALCOMM INC	0.66%	15.50%	0.10%	1.67%	0.01%
PWR UN Equity	QUANTA SERVICES INC	0.04%	13.85%	0.01%	0.00%	0.00%
DGX UN Equity	QUEST DIAGNOSTICS	0.08%	11.95%	0.01%	0.81%	0.00%
Q UN Equity	QWEST COMMUNICATIONS INTL	0.10%	5.20%	0.01%	5.00%	0.01%
RSH UN Equity	RADIOSHACK CORP	0.02%	8.80%	0.00%	1.16%	0.00%
RRC UN Equity	RANGE RESOURCES CORP	0.05%	15.75%	0.01%	0.42%	0.00%
RTN UN Equity	RAYTHEON COMPANY	0.16%	8.71%	0.01%	3.16%	0.00%
RHT UN Equity	RED HAT INC	0.07%	18.14%	0.01%	0.00%	0.00%
RF UN Equity	REGIONS FINANCIAL CORP	0.09%	7.00%	0.01%	0.53%	0.00%
RSG UN Equity	REPUBLIC SERVICES INC	0.11%	13.00%	0.01%	2.43%	0.00%
RAI UN Equity	REYNOLDS AMERICAN INC	0.16%	6.00%	0.01%	6.09%	0.01%
RHI UN Equity	ROBERT HALF INTL INC	0.04%	16.50%	0.01%	1.93%	0.00%
ROK UN Equity	ROCKWELL AUTOMATION INC	0.08%	22.28%	0.02%	2.15%	0.00%
COL UN Equity	ROCKWELL COLLINS INC.	0.09%	8.55%	0.01%	1.69%	0.00%
ROP UN Equity	ROPER INDUSTRIES INC	0.06%	13.50%	0.01%	0.56%	0.00%
ROST UW Equity	ROSS STORES INC	0.06%	14.00%	0.01%	1.18%	0.00%
RDC UN Equity	ROWAN COMPANIES INC	0.03%	13.00%	0.00%	0.00%	0.00%
RRD UW Equity	RR DONNELLEY & SONS CO	0.03%	10.00%	0.00%	5.78%	0.00%
R UN Equity	RYDER SYSTEM INC	0.02%	14.85%	0.00%	2.29%	0.00%
SWY UN Equity	SAFEWAY INC	0.07%	8.55%	0.01%	2.09%	0.00%
SAI UN Equity	SAIC INC	0.05%	10.20%	0.01%	0.00%	0.00%
CRM UN Equity	SALESFORCE.COM INC	0.13%	28.93%	0.04%	0.00%	0.00%
SNDK UW Equity	SANDISK CORP	0.09%	14.33%	0.01%	0.00%	0.00%
SLE UN Equity	SARA LEE CORP	0.09%	9.62%	0.01%	3.04%	0.00%
SCG UN Equity	SCANA CORP	0.05%	4.88%	0.00%	4.66%	0.00%
SLB UN Equity	SCHLUMBERGER LTD	0.80%	15.96%	0.13%	1.33%	0.01%
SCHW UN Equity	SCHWAB (CHARLES) CORP	0.15%	13.00%	0.02%	1.72%	0.00%
SNI UN Equity	SCRIPPS NETWORKS INTER-CL A	0.06%	14.66%	0.01%	0.64%	0.00%
SEE UN Equity	SEALED AIR CORP	0.03%	6.00%	0.00%	1.71%	0.00%
SHLD UW Equity	SEARS HOLDINGS CORP	0.08%	10.00%	0.01%	0.00%	0.00%
SRE UN Equity	SEMPRA ENERGY	0.12%	6.50%	0.01%	2.94%	0.00%
SHW UN Equity	SHERWIN-WILLIAMS CO/THE	0.07%	7.15%	0.01%	1.97%	0.00%
SIAL UW Equity	SIGMA-ALDRICH	0.07%	9.00%	0.01%	1.04%	0.00%
SPG UN Equity	SIMON PROPERTY GROUP INC	0.26%	5.19%	0.01%	2.49%	0.01%
SLM UN Equity	SLM CORP	0.05%	10.00%	0.01%	0.00%	0.00%
SNA UN Equity	SNAP-ON INC	0.03%	10.00%	0.00%	0.00%	0.00%
SO UN Equity	SOUTHERN CO	0.29%	4.86%	0.01%	4.82%	0.01%
LUV UN Equity	SOUTHWEST AIRLINES CO	0.09%	8.33%	0.01%	0.11%	0.00%
SWN UN Equity	SOUTHWESTERN ENERGY CO	0.11%	26.00%	0.03%	0.00%	0.00%
SE UN Equity	SPECTRA ENERGY CORP	0.14%	6.67%	0.01%	4.21%	0.01%
S UN Equity	SPRINT NEXTEL CORP	0.12%	4.50%	0.01%	0.00%	0.00%
STJ UN Equity	ST JUDE MEDICAL INC	0.12%	12.28%	0.01%	0.00%	0.00%
SWK UN Equity	STANLEY BLACK & DECKER INC	0.10%	14.00%	0.01%	2.09%	0.00%
SPLS UW Equity	STAPLES INC	0.14%	14.73%	0.02%	1.79%	0.00%
SBUX UW Equity	STARBUCKS CORP	0.18%	15.74%	0.03%	1.98%	0.00%
HOT UN Equity	STARWOOD HOTELS & RESORTS	0.10%	16.00%	0.02%	0.50%	0.00%
STT UN Equity	STATE STREET CORP	0.18%	7.96%	0.01%	0.21%	0.00%
SRCL UW Equity	STERICYCLE INC	0.06%	17.80%	0.01%	0.00%	0.00%
SYK UN Equity	STRYKER CORP	0.18%	12.76%	0.02%	1.18%	0.00%
SUN UN Equity	SUNOCO INC	0.04%	0.71%	0.00%	1.49%	0.00%
STI UN Equity	SUNTRUST BANKS INC	0.12%	8.00%	0.01%	0.15%	0.00%
SVU UN Equity	SUPERVALU INC	0.02%	No Long-Term Growth		3.04%	0.00%
SYMC UW Equity	SYMANTEC CORP	0.11%	9.25%	0.01%	0.00%	0.00%
SYY UN Equity	SYSCO CORP	0.15%	10.50%	0.02%	3.71%	0.01%
TROW UW Equity	T ROWE PRICE GROUP INC	0.12%	10.80%	0.01%	2.03%	0.00%
TGT UN Equity	TARGET CORP	0.36%	13.48%	0.05%	1.49%	0.01%
TE UN Equity	TECO ENERGY INC	0.03%	7.30%	0.00%	4.62%	0.00%
TLAB UW Equity	TELLABS INC	0.03%	10.33%	0.00%	1.04%	0.00%
THC UN Equity	TENET HEALTHCARE CORP	0.02%	8.25%	0.00%	0.00%	0.00%
TDC UN Equity	TERADATA CORP	0.06%	11.00%	0.01%	0.00%	0.00%
TER UN Equity	TERADYNE INC	0.02%	15.00%	0.00%	0.00%	0.00%
TSO UN Equity	TESORO CORP	0.02%	24.94%	0.00%	0.00%	0.00%
TXN UN Equity	TEXAS INSTRUMENTS INC	0.31%	10.67%	0.03%	1.71%	0.01%
TXT UN Equity	TEXTRON INC	0.05%	51.68%	0.03%	0.38%	0.00%
TMO UN Equity	THERMO FISHER SCIENTIFIC INC	0.18%	11.53%	0.02%	0.00%	0.00%
TIF UN Equity	TIFFANY & CO	0.06%	13.72%	0.01%	1.75%	0.00%
TWC UN Equity	TIME WARNER CABLE	0.18%	13.96%	0.03%	2.82%	0.01%
TWX UN Equity	TIME WARNER INC	0.32%	14.51%	0.05%	2.72%	0.01%
TIE UN Equity	TITANIUM METALS CORP	0.03%	15.00%	0.01%	0.72%	0.00%
TJX UN Equity	TJX COMPANIES INC	0.16%	14.00%	0.02%	1.30%	0.00%
TMK UN Equity	TORCHMARK CORP	0.04%	7.33%	0.00%	1.11%	0.00%
TSS UN Equity	TOTAL SYSTEM SERVICES INC	0.03%	9.67%	0.00%	1.79%	0.00%
TRV UN Equity	TRAVELERS COS INC/THE	0.23%	7.44%	0.02%	2.62%	0.01%
TYC UN Equity	TYCO INTERNATIONAL LTD	0.17%	12.28%	0.02%	2.50%	0.00%
TSN UN Equity	TYSON FOODS INC-CL A	0.04%	8.50%	0.00%	1.07%	0.00%
UNP UN Equity	UNION PACIFIC CORP	0.39%	14.87%	0.06%	1.45%	0.01%
UPS UN Equity	UNITED PARCEL SERVICE-CL B	0.45%	13.26%	0.06%	2.74%	0.01%
UTX UN Equity	UNITED TECHNOLOGIES CORP	0.63%	10.93%	0.07%	2.30%	0.01%
UNH UN Equity	UNITEDHEALTH GROUP INC	0.36%	12.25%	0.04%	0.89%	0.00%
UNM UN Equity	UNUM GROUP	0.07%	9.33%	0.01%	1.53%	0.00%
URBN UW Equity	URBAN OUTFITTERS INC	0.05%	20.27%	0.01%	0.00%	0.00%
USB UN Equity	US BANCORP	0.40%	6.67%	0.03%	0.87%	0.00%
X UN Equity	UNITED STATES STEEL CORP	0.06%	5.00%	0.00%	0.45%	0.00%
VLO UN Equity	VALERO ENERGY CORP	0.10%	23.42%	0.02%	1.07%	0.00%
VAR UN Equity	VARIAN MEDICAL SYSTEMS INC	0.07%	16.67%	0.01%	0.00%	0.00%
VTR UN Equity	VENTAS INC	0.08%	5.45%	0.00%	3.95%	0.00%
VRSN UW Equity	VERISIGN INC	0.05%	10.00%	0.01%	0.00%	0.00%
VZ UN Equity	VERIZON COMMUNICATIONS INC	0.84%	3.87%	0.03%	5.93%	0.05%
VFC UN Equity	VF CORP	0.08%	11.00%	0.01%	2.83%	0.00%

VIA/B UN Equity	VIACOM INC-CLASS B	0.19%	11.33%	0.02%	1.59%	0.00%
V UN Equity	VISA INC-CLASS A SHARES	0.34%	20.57%	0.07%	0.69%	0.00%
VNO UN Equity	VORNADO REALTY TRUST	0.15%	6.25%	0.01%	2.95%	0.00%
VMC UN Equity	VULCAN MATERIALS CO	0.04%	8.50%	0.00%	2.76%	0.00%
WMT UN Equity	WAL-MART STORES INC	1.80%	11.04%	0.20%	2.23%	0.04%
WAG UN Equity	WALGREEN CO	0.31%	14.38%	0.04%	1.94%	0.01%
DIS UN Equity	WALT DISNEY CO/THE	0.61%	10.69%	0.07%	1.09%	0.01%
WPO UN Equity	WASHINGTON POST-CLASS B	0.03%	No Long-Term Growth		0.00%	0.00%
WM UN Equity	WASTE MANAGEMENT INC	0.16%	10.50%	0.02%	3.35%	0.01%
WAT UN Equity	WATERS CORP	0.06%	12.50%	0.01%	0.00%	0.00%
WPI UN Equity	WATSON PHARMACEUTICALS INC	0.05%	9.40%	0.00%	0.00%	0.00%
WLP UN Equity	WELLPOINT INC	0.21%	11.00%	0.02%	0.00%	0.00%
WFC UN Equity	WELLS FARGO & CO	1.25%	4.08%	0.05%	0.80%	0.01%
WDC UN Equity	WESTERN DIGITAL CORP	0.06%	7.50%	0.00%	0.00%	0.00%
WU UN Equity	WESTERN UNION CO	0.11%	11.79%	0.01%	1.40%	0.00%
WY UN Equity	WEYERHAEUSER CO	0.08%	5.50%	0.00%	1.21%	0.00%
WHR UN Equity	WHIRLPOOL CORP	0.06%	15.00%	0.01%	2.00%	0.00%
WFMI UW Equity	WHOLE FOODS MARKET INC	0.06%	19.50%	0.01%	0.00%	0.00%
WMB UN Equity	WILLIAMS COS INC	0.12%	12.97%	0.01%	2.28%	0.00%
WIN UW Equity	WINDSTREAM CORP	0.05%	0.45%	0.00%	8.14%	0.00%
WEC UN Equity	WISCONSIN ENERGY CORP	0.06%	8.00%	0.00%	2.75%	0.00%
GWW UN Equity	WW GRAINGER INC	0.08%	13.62%	0.01%	1.64%	0.00%
WYN UN Equity	WYNDHAM WORLDWIDE CORP	0.05%	5.20%	0.00%	1.65%	0.00%
WYNN UW Equity	WYNN RESORTS LTD	0.11%	15.51%	0.02%	0.77%	0.00%
XEL UN Equity	XCEL ENERGY INC	0.10%	6.17%	0.01%	4.30%	0.00%
XRX UN Equity	XEROX CORP	0.14%	7.00%	0.01%	1.58%	0.00%
XLNX UW Equity	XILINX INC	0.06%	17.00%	0.01%	2.43%	0.00%
XL UN Equity	XL GROUP PLC	0.07%	No Long-Term Growth		1.64%	0.00%
YHOO UW Equity	YAHOO! INC	0.18%	10.77%	0.02%	0.00%	0.00%
YUM UN Equity	YUM! BRANDS INC	0.20%	12.38%	0.03%	1.82%	0.00%
ZMH UN Equity	ZIMMER HOLDINGS INC	0.09%	11.11%	0.01%	0.00%	0.00%
ZION UW Equity	ZIONS BANCORPORATION	0.04%	7.67%	0.00%	0.18%	0.00%

CAPM UTILIZING ALTERNATIVE MARKET RISK PREMIUM CALCULATIONS

[1] Near Term Projected 30 Year Treasury		4.22%	
Current 30 Year Treasury (30-day average)			3.75%
Sharpe Ratio Derived Market Risk Premium	9.94%	10.88%	10.41%
Ex-Ante Approach Derived Market Risk Premium	9.42%	10.53%	10.06%
Proxy Group Historical Beta	0.67		

[1] Source: Aspen Publishers, Blue Chip Financial Forecasts, Vol. 29, No. 10 October 1, 2010, p. 2

MARKET RISK PREMIUM UTILIZING EXPECTED MARKET SHARPE RATIO

RP_h	Vol_h		
6.70%	20.40%		
VOL_e		Expected Market Sharpe Ratio	RP_e
30.26%		32.85%	9.94%

$$\frac{RP_h}{Vol_h} \times Vol_e = RP_e$$

RP_h = historical arithmetic average Risk Premium
Vol_h = historical market volatility
Vol_e = expected market volatility

Date	VXV	02/11 VIX Futures	03/11 VIX Futures	04/11 VIX Futures
10/8/2010	24.06	30.50	31.40	31.45
10/7/2010	24.89	30.75	31.65	31.70
10/6/2010	24.91	30.75	31.70	31.75
10/5/2010	25.08	30.70	31.65	31.80
10/4/2010	26.32	31.40	32.25	32.40
10/1/2010	25.70	31.05	32.00	32.25
9/30/2010	26.40	31.35	32.25	32.50
9/29/2010	25.91	30.95	31.75	32.05
9/28/2010	25.34	30.65	31.45	31.65
9/27/2010	25.20	30.65	31.55	31.65
9/24/2010	24.75	30.60	31.55	31.60
9/23/2010	26.16	31.15	32.10	32.10
9/22/2010	25.16	30.55	31.65	31.70
9/21/2010	24.94	30.30	31.40	31.50
9/20/2010	24.59	30.30	31.35	31.50
9/17/2010	25.12	30.70	31.55	31.65
9/16/2010	24.96	30.55	31.40	31.50
9/15/2010	24.93	30.55	31.30	31.45
9/14/2010	24.74	30.70	31.35	31.45
9/13/2010	24.75	30.85	31.45	31.45
9/10/2010	25.59	31.40	32.05	31.85
9/9/2010	26.10	31.55	32.05	31.90
9/8/2010	26.30	31.80	32.30	32.15
9/7/2010	26.77	32.20	32.55	32.25
9/3/2010	25.31	31.85	32.15	32.05
9/2/2010	26.62	32.40	32.70	32.50
9/1/2010	27.29	32.55	32.90	32.80
8/31/2010	29.04	33.20	33.45	33.30
8/30/2010	30.01	33.15	33.25	33.10
8/27/2010	28.40	32.40	32.65	32.60
Average	30.26			

ESTIMATED MARKET RISK PREMIUM DERIVED FROM

Estimated Weighted Index Dividend Yield	Weighted Index Long-Term Growth Rate	S&P 500 Estimated Required Market Return
1.88%	11.17%	13.16%

Percent of Index Capitalization Represented by Estimate: 97.22%

30 Day Average 30-Year Treasury Yield	3.75%
Implied Market Risk Premium	9.42%

Standard and Poor's 500 Index

Ticker	Name	Weight in the Index (%)	Long-Term Growth Estimate (%)	Cap-Weighted Long-Term Growth	Estimated 2009 Dividend Yield (%)	Cap-Weighted Dividend Yield
MMM UN Equity	3M CO	0.58%	12.13%	0.07%	2.37%	0.01%
ABT UN Equity	ABBOTT LABORATORIES	0.75%	10.58%	0.08%	3.29%	0.02%
ANF UN Equity	ABERCROMBIE & FITCH CO-CL A	0.04%	17.92%	0.01%	1.56%	0.00%
ACE UN Equity	ACE LTD	0.19%	11.40%	0.02%	2.13%	0.00%
ADBE UW Equity	ADOBE SYSTEMS INC	0.13%	14.42%	0.02%	0.00%	0.00%
AMD UN Equity	ADVANCED MICRO DEVICES	0.05%	13.75%	0.01%	0.00%	0.00%
AES UN Equity	AES CORP	0.09%	9.50%	0.01%	0.00%	0.00%
AET UN Equity	AETNA INC	0.12%	11.75%	0.01%	0.05%	0.00%
AFL UN Equity	AFLAC INC	0.24%	11.68%	0.03%	2.05%	0.00%
A UN Equity	AGILENT TECHNOLOGIES INC	0.11%	32.70%	0.04%	0.00%	0.00%
APD UN Equity	AIR PRODUCTS & CHEMICALS INC	0.16%	10.18%	0.02%	2.46%	0.00%
ARG UN Equity	AIRGAS INC	0.05%	13.52%	0.01%	1.30%	0.00%
AKS UN Equity	AK STEEL HOLDING CORP	0.01%	No Long-Term Growth		1.37%	0.00%
AKAM UW Equity	AKAMAI TECHNOLOGIES INC	0.08%	14.78%	0.01%	0.00%	0.00%
AA UN Equity	ALCOA INC	0.12%	3.00%	0.00%	0.90%	0.00%
AYE UN Equity	ALLEGHENY ENERGY INC	0.04%	No Long-Term Growth		2.52%	0.00%
ATI UN Equity	ALLEGHENY TECHNOLOGIES INC	0.04%	No Long-Term Growth		1.47%	0.00%
AGN UN Equity	ALLERGAN INC	0.19%	13.79%	0.03%	0.29%	0.00%
ALL UN Equity	ALLSTATE CORP	0.16%	8.20%	0.01%	2.42%	0.00%
ALTR UW Equity	ALTERA CORPORATION	0.08%	21.50%	0.02%	0.74%	0.00%
MO UN Equity	ALTRIA GROUP INC	0.47%	7.50%	0.04%	5.98%	0.03%
AMZN UW Equity	AMAZON.COM INC	0.64%	25.24%	0.16%	0.00%	0.00%
AEE UN Equity	AMEREN CORPORATION	0.06%	No Long-Term Growth		5.32%	0.00%
AEP UN Equity	AMERICAN ELECTRIC POWER	0.16%	4.00%	0.01%	4.70%	0.01%
AXP UN Equity	AMERICAN EXPRESS CO	0.43%	10.83%	0.05%	1.82%	0.01%
AIG UN Equity	AMERICAN INTERNATIONAL GROUP	0.27%	6.00%	0.02%	0.00%	0.00%
AMT UN Equity	AMERICAN TOWER CORP-CL A	0.19%	20.27%	0.04%	0.00%	0.00%
AMP UN Equity	AMERIPRISE FINANCIAL INC	0.12%	16.05%	0.02%	1.39%	0.00%
ABC UN Equity	AMERISOURCEBERGEN CORP	0.08%	12.83%	0.01%	0.94%	0.00%
AMGN UW Equity	AMGEN INC	0.49%	8.80%	0.04%	0.00%	0.00%
APH UN Equity	AMPHENOL CORP-CL A	0.08%	15.00%	0.01%	0.12%	0.00%
APC UN Equity	ANADARKO PETROLEUM CORP	0.26%	13.51%	0.04%	0.63%	0.00%
ADI UN Equity	ANALOG DEVICES INC	0.09%	11.50%	0.01%	2.65%	0.00%
AON UN Equity	AON CORP	0.11%	6.50%	0.01%	1.56%	0.00%
APA UN Equity	APACHE CORP	0.34%	9.31%	0.03%	0.59%	0.00%
AIV UN Equity	APARTMENT INVT & MGMT CO -A	0.02%	5.45%	0.00%	1.73%	0.00%
APOL UW Equity	APOLLO GROUP INC-CL A	0.07%	12.04%	0.01%	0.00%	0.00%
AAPL UW Equity	APPLE INC	2.51%	19.35%	0.49%	0.00%	0.00%
AMAT UW Equity	APPLIED MATERIALS INC	0.15%	13.33%	0.02%	2.21%	0.00%
ADM UN Equity	ARCHER-DANIELS-MIDLAND CO	0.19%	10.00%	0.02%	1.83%	0.00%
AIZ UN Equity	ASSURANT INC	0.04%	9.67%	0.00%	1.54%	0.00%
T UN Equity	AT&T INC	1.55%	6.04%	0.09%	5.88%	0.09%
ADSK UW Equity	AUTODESK INC	0.07%	14.66%	0.01%	0.00%	0.00%
ADP UW Equity	AUTOMATIC DATA PROCESSING	0.19%	9.86%	0.02%	3.32%	0.01%
AN UN Equity	AUTONATION INC	0.03%	15.82%	0.00%	0.00%	0.00%
AZO UN Equity	AUTOZONE INC	0.10%	14.01%	0.01%	0.00%	0.00%
AVB UN Equity	AVALONBAY COMMUNITIES INC	0.09%	7.20%	0.01%	3.21%	0.00%
AVY UN Equity	AVERY DENNISON CORP	0.04%	7.00%	0.00%	2.10%	0.00%
AVP UN Equity	AVON PRODUCTS INC	0.14%	11.67%	0.02%	2.52%	0.00%
BHI UN Equity	BAKER HUGHES INC	0.18%	5.23%	0.01%	1.29%	0.00%
BLL UN Equity	BALL CORP	0.05%	8.90%	0.00%	0.65%	0.00%
BK UN Equity	BANK OF NEW YORK MELLON CORP	0.30%	9.88%	0.03%	1.49%	0.00%
BAC UN Equity	BANK OF AMERICA CORP	1.23%	9.13%	0.11%	0.30%	0.00%
BAX UN Equity	BAXTER INTERNATIONAL INC	0.27%	10.50%	0.03%	2.36%	0.01%
BBT UN Equity	BB&T CORP	0.15%	7.00%	0.01%	2.56%	0.00%
BDX UN Equity	BECTON DICKINSON AND CO	0.16%	10.07%	0.02%	2.07%	0.00%
BBBY UW Equity	BED BATH & BEYOND INC	0.10%	14.66%	0.02%	0.00%	0.00%
BMS UN Equity	BEMIS COMPANY	0.03%	11.17%	0.00%	2.71%	0.00%
BRK/B UN Equity	BERKSHIRE HATHAWAY INC-CL B	0.77%	No Long-Term Growth		0.00%	0.00%
BBY UN Equity	BEST BUY CO INC	0.15%	12.29%	0.02%	1.39%	0.00%
BIG UN Equity	BIG LOTS INC	0.02%	14.00%	0.00%	0.00%	0.00%
BIIB UW Equity	BIOGEN IDEC INC	0.13%	7.96%	0.01%	0.00%	0.00%
BMC UW Equity	BMC SOFTWARE INC	0.07%	13.65%	0.01%	0.00%	0.00%
BA UN Equity	BOEING CO/THE	0.48%	16.96%	0.08%	2.40%	0.01%
BXP UN Equity	BOSTON PROPERTIES INC	0.11%	5.40%	0.01%	2.31%	0.00%
BSX UN Equity	BOSTON SCIENTIFIC CORP	0.09%	9.43%	0.01%	0.00%	0.00%
BMY UN Equity	BRISTOL-MYERS SQUIBB CO	0.43%	4.52%	0.02%	4.67%	0.02%
BRCM UW Equity	BROADCOM CORP-CL A	0.15%	18.33%	0.03%	0.85%	0.00%
BF/B UN Equity	BROWN-FORMAN CORP-CLASS B	0.05%	13.00%	0.01%	2.00%	0.00%
CA UW Equity	CA INC	0.10%	11.00%	0.01%	0.73%	0.00%
COG UN Equity	CABOT OIL & GAS CORP	0.03%	No Long-Term Growth		0.33%	0.00%
CAM UN Equity	CAMERON INTERNATIONAL CORP	0.10%	No Long-Term Growth		0.00%	0.00%

CPB UN Equity	CAMPBELL SOUP CO	0.11%	7.73%	0.01%	3.12%	0.00%
COF UN Equity	CAPITAL ONE FINANCIAL CORP	0.17%	9.92%	0.02%	0.49%	0.00%
CAH UN Equity	CARDINAL HEALTH INC	0.11%	11.11%	0.01%	2.34%	0.00%
CFN UN Equity	CAREFUSION CORP	0.05%	8.94%	0.00%	0.00%	0.00%
KMX UN Equity	CARMAX INC	0.06%	13.02%	0.01%	0.00%	0.00%
CCL UN Equity	CARNIVAL CORP	0.22%	14.75%	0.03%	0.95%	0.00%
CAT UN Equity	CATERPILLAR INC	0.46%	12.20%	0.06%	2.15%	0.01%
CBG UN Equity	CB RICHARD ELLIS GROUP INC-A	0.06%	11.00%	0.01%	0.00%	0.00%
CBS UN Equity	CBS CORP-CLASS B NON VOTING	0.10%	6.52%	0.01%	1.12%	0.00%
CELG UW Equity	CELGENE CORP	0.25%	23.61%	0.06%	0.00%	0.00%
CNP UN Equity	CENTERPOINT ENERGY INC	0.06%	6.28%	0.00%	4.89%	0.00%
CTL UN Equity	CENTURYLINK INC	0.11%	0.53%	0.00%	7.23%	0.01%
CEPH UW Equity	CEPHALON INC	0.04%	12.38%	0.01%	0.00%	0.00%
CERN UW Equity	CERNER CORP	0.07%	18.33%	0.01%	0.00%	0.00%
CF UN Equity	CF INDUSTRIES HOLDINGS INC	0.08%	5.00%	0.00%	0.34%	0.00%
CHRW UW Equity	C.H. ROBINSON WORLDWIDE INC	0.11%	16.00%	0.02%	1.42%	0.00%
CHK UN Equity	CHESAPEAKE ENERGY CORP	0.14%	8.75%	0.01%	1.32%	0.00%
CVX UN Equity	CHEVRON CORP	1.53%	18.99%	0.29%	3.42%	0.05%
CB UN Equity	CHUBB CORP	0.17%	8.33%	0.01%	2.58%	0.00%
CI UN Equity	CIGNA CORP	0.09%	10.19%	0.01%	0.07%	0.00%
CINF UW Equity	CINCINNATI FINANCIAL CORP	0.04%	No Long-Term Growth		5.31%	0.00%
CTAS UW Equity	CINTAS CORP	0.04%	10.20%	0.00%	1.81%	0.00%
CSCO UW Equity	CISCO SYSTEMS INC	1.19%	11.58%	0.14%	0.00%	0.00%
C UN Equity	CITIGROUP INC	1.13%	1.50%	0.02%	0.00%	0.00%
CTXS UW Equity	CITRIX SYSTEMS INC	0.10%	12.55%	0.01%	0.00%	0.00%
CLF UN Equity	CLIFFS NATURAL RESOURCES INC	0.09%	No Long-Term Growth		0.67%	0.00%
CLX UN Equity	CLOROX COMPANY	0.09%	9.90%	0.01%	3.20%	0.00%
CME UW Equity	CME GROUP INC	0.16%	13.67%	0.02%	1.80%	0.00%
CMS UN Equity	CMS ENERGY CORP	0.04%	7.40%	0.00%	3.63%	0.00%
COH UN Equity	COACH INC	0.12%	14.71%	0.02%	1.31%	0.00%
KO UN Equity	COCA-COLA CO/THE	1.26%	8.50%	0.11%	2.94%	0.04%
CCE UN Equity	COCA-COLA ENTERPRISES	0.07%	10.00%	0.01%	5.98%	0.00%
CTSH UW Equity	COGNIZANT TECH SOLUTIONS-A	0.18%	19.29%	0.04%	0.00%	0.00%
CL UN Equity	COLGATE-PALMOLIVE CO	0.34%	9.80%	0.03%	2.63%	0.01%
CMCSA UW Equity	COMCAST CORP-CLASS A	0.34%	16.33%	0.06%	2.02%	0.01%
CMA UN Equity	COMERICA INC	0.06%	6.07%	0.00%	0.51%	0.00%
CSC UN Equity	COMPUTER SCIENCES CORP	0.07%	9.00%	0.01%	0.55%	0.00%
CPWR UW Equity	COMPUWARE CORP	0.02%	5.00%	0.00%	0.00%	0.00%
CAG UN Equity	CONAGRA FOODS INC	0.09%	7.90%	0.01%	3.97%	0.00%
COP UN Equity	CONOCOPHILLIPS	0.81%	18.85%	0.15%	3.56%	0.03%
ED UN Equity	CONSOLIDATED EDISON INC	0.13%	4.36%	0.01%	4.91%	0.01%
CNX UN Equity	CONSOL ENERGY INC	0.08%	46.00%	0.04%	1.00%	0.00%
CEG UN Equity	CONSTELLATION ENERGY GROUP	0.06%	No Long-Term Growth		2.91%	0.00%
STZ UN Equity	CONSTELLATION BRANDS INC-A	0.03%	7.00%	0.00%	0.00%	0.00%
GLW UN Equity	CORNING INC	0.27%	11.40%	0.03%	1.08%	0.00%
COST UW Equity	COSTCO WHOLESALE CORP	0.25%	13.05%	0.03%	1.46%	0.00%
CVH UN Equity	COVENTRY HEALTH CARE INC	0.03%	9.67%	0.00%	0.00%	0.00%
BCR UN Equity	CR BARD INC	0.07%	12.00%	0.01%	0.84%	0.00%
CSX UN Equity	CSX CORP	0.21%	11.61%	0.02%	1.64%	0.00%
CMI UN Equity	CUMMINS INC	0.17%	11.50%	0.02%	0.88%	0.00%
CVS UN Equity	CVS CAREMARK CORP	0.39%	11.88%	0.05%	1.09%	0.00%
DHR UN Equity	DANAHER CORP	0.25%	14.75%	0.04%	0.18%	0.00%
DRI UN Equity	DARDEN RESTAURANTS INC	0.05%	12.50%	0.01%	3.01%	0.00%
DVA UN Equity	DAVITA INC	0.07%	12.39%	0.01%	0.00%	0.00%
DF UN Equity	DEAN FOODS CO	0.02%	8.25%	0.00%	0.00%	0.00%
DE UN Equity	DEERE & CO	0.29%	8.75%	0.03%	1.52%	0.00%
DELL UW Equity	DELL INC	0.25%	7.83%	0.02%	0.00%	0.00%
DNR UN Equity	DENBURY RESOURCES INC	0.07%	6.50%	0.00%	0.00%	0.00%
XRAY UW Equity	DENTSPLY INTERNATIONAL INC	0.04%	11.75%	0.00%	0.66%	0.00%
DVN UN Equity	DEVON ENERGY CORPORATION	0.27%	6.39%	0.02%	0.96%	0.00%
DV UN Equity	DEVRY INC	0.03%	16.60%	0.01%	0.42%	0.00%
DO UN Equity	DIAMOND OFFSHORE DRILLING	0.09%	18.00%	0.02%	6.96%	0.01%
DTV UW Equity	DIRECTV-CLASS A	0.33%	25.41%	0.09%	0.00%	0.00%
DFS UN Equity	DISCOVER FINANCIAL SERVICES	0.09%	6.00%	0.01%	0.45%	0.00%
DISCA UW Equity	DISCOVERY COMMUNICATIONS-A	0.06%	22.26%	0.01%	0.00%	0.00%
D UN Equity	DOMINION RESOURCES INC/VA	0.24%	5.00%	0.01%	4.12%	0.01%
DOV UN Equity	DOVER CORP	0.09%	12.00%	0.01%	1.95%	0.00%
DOW UN Equity	DOW CHEMICAL	0.32%	7.50%	0.02%	2.05%	0.01%
DHI UN Equity	DR HORTON INC	0.03%	7.67%	0.00%	1.39%	0.00%
DPS UN Equity	DR PEPPER SNAPPLE GROUP INC	0.08%	9.00%	0.01%	2.41%	0.00%
DTE UN Equity	DTE ENERGY COMPANY	0.07%	4.80%	0.00%	4.59%	0.00%
DD UN Equity	DU PONT (E.I.) DE NEMOURS	0.39%	13.56%	0.05%	3.51%	0.01%
DUK UN Equity	DUKE ENERGY CORP	0.21%	3.83%	0.01%	5.52%	0.01%
DNB UN Equity	DUN & BRADSTREET CORP	0.03%	10.00%	0.00%	1.86%	0.00%
ETFC UW Equity	E*TRADE FINANCIAL CORP	0.03%	90.00%	0.03%	0.00%	0.00%
EMN UN Equity	EASTMAN CHEMICAL COMPANY	0.05%	7.00%	0.00%	2.24%	0.00%
EK UN Equity	EASTMAN KODAK CO	0.01%	10.00%	0.00%	0.00%	0.00%
ETN UN Equity	EATON CORP	0.13%	10.25%	0.01%	2.57%	0.00%
EBAY UW Equity	EBAY INC	0.30%	8.77%	0.03%	0.00%	0.00%
ECL UN Equity	ECOLAB INC	0.11%	14.00%	0.02%	1.19%	0.00%
EIX UN Equity	EDISON INTERNATIONAL	0.11%	0.60%	0.00%	3.59%	0.00%
EP UN Equity	EL PASO CORP	0.09%	11.50%	0.01%	0.30%	0.00%
ERTS UW Equity	ELECTRONIC ARTS INC	0.05%	15.71%	0.01%	0.00%	0.00%
LLY UN Equity	ELI LILLY & CO	0.39%	No Long-Term Growth		5.21%	0.00%
EMC UN Equity	EMC CORP/MASS	0.38%	14.90%	0.06%	0.00%	0.00%
EMR UN Equity	EMERSON ELECTRIC CO	0.37%	11.19%	0.04%	2.71%	0.01%
ETR UN Equity	ENTERGY CORP	0.13%	2.75%	0.00%	4.19%	0.01%
EOG UN Equity	EOG RESOURCES INC	0.23%	16.00%	0.04%	0.63%	0.00%
EQT UN Equity	EQT CORP	0.05%	14.50%	0.01%	2.34%	0.00%
EFX UN Equity	EQUIFAX INC	0.04%	9.75%	0.00%	0.51%	0.00%
EQR UN Equity	EQUITY RESIDENTIAL	0.13%	6.22%	0.01%	2.71%	0.00%
EL UN Equity	ESTEE LAUDER COMPANIES-CL A	0.07%	13.77%	0.01%	0.94%	0.00%
EXC UN Equity	EXELON CORP	0.26%	No Long-Term Growth		4.90%	0.00%
EXPE UW Equity	EXPEDIA INC	0.07%	14.00%	0.01%	0.79%	0.00%
EXPD UW Equity	EXPEDITORS INTL WASH INC	0.09%	15.93%	0.01%	0.82%	0.00%
ESRX UW Equity	EXPRESS SCRIPTS INC	0.24%	18.23%	0.04%	0.00%	0.00%
XOM UN Equity	EXXON MOBIL CORP	3.02%	15.06%	0.46%	2.68%	0.08%
FDO UN Equity	FAMILY DOLLAR STORES	0.06%	13.86%	0.01%	1.44%	0.00%
FAST UW Equity	FASTENAL CO	0.07%	20.90%	0.01%	1.56%	0.00%

FII UN Equity	FEDERATED INVESTORS INC-CL B	0.02%	6.00%	0.00%	8.31%	0.00%
FDX UN Equity	FEDEX CORP	0.26%	13.93%	0.04%	0.54%	0.00%
FIS UN Equity	FIDELITY NATIONAL INFORMATIO	0.08%	13.22%	0.01%	0.72%	0.00%
FITB UW Equity	FIFTH THIRD BANCORP	0.09%	4.56%	0.00%	0.31%	0.00%
FHN UN Equity	FIRST HORIZON NATIONAL CORP	0.02%	8.00%	0.00%	0.00%	0.00%
FSLR UW Equity	FIRST SOLAR INC	0.11%	18.60%	0.02%	0.00%	0.00%
FE UN Equity	FIRSTENERGY CORP	0.11%	3.00%	0.00%	5.75%	0.01%
FISV UW Equity	FISERV INC	0.07%	12.42%	0.01%	0.00%	0.00%
FLIR UW Equity	FLIR SYSTEMS INC	0.04%	18.60%	0.01%	0.00%	0.00%
FLS UN Equity	FLOWSERVE CORP	0.06%	9.00%	0.01%	1.01%	0.00%
FLR UN Equity	FLUOR CORP	0.09%	14.33%	0.01%	0.99%	0.00%
FMC UN Equity	FMC CORP	0.05%	9.83%	0.00%	0.71%	0.00%
FTI UN Equity	FMC TECHNOLOGIES INC	0.08%	31.20%	0.02%	0.00%	0.00%
F UN Equity	FORD MOTOR CO	0.42%	10.84%	0.05%	0.00%	0.00%
FRX UN Equity	FOREST LABORATORIES INC	0.09%	No Long-Term Growth		0.00%	0.00%
FO UN Equity	FORTUNE BRANDS INC	0.08%	11.33%	0.01%	1.37%	0.00%
BEN UN Equity	FRANKLIN RESOURCES INC	0.24%	10.00%	0.02%	0.80%	0.00%
FCX UN Equity	FREEPORT-MCMORAN COPPER	0.42%	5.00%	0.02%	1.05%	0.00%
FTR UN Equity	FRONTIER COMMUNICATIONS CORP	0.08%	No Long-Term Growth		10.03%	0.00%
GME UN Equity	GAMESTOP CORP-CLASS A	0.03%	14.00%	0.00%	0.00%	0.00%
GCI UN Equity	GANNETT CO	0.03%	5.50%	0.00%	1.15%	0.00%
GPS UN Equity	GAP INC/THE	0.11%	10.46%	0.01%	2.13%	0.00%
GD UN Equity	GENERAL DYNAMICS CORP	0.22%	8.14%	0.02%	2.53%	0.01%
GE UN Equity	GENERAL ELECTRIC CO	1.69%	15.85%	0.27%	2.46%	0.04%
GIS UN Equity	GENERAL MILLS INC	0.22%	9.32%	0.02%	2.93%	0.01%
GPC UN Equity	GENUINE PARTS CO	0.07%	10.33%	0.01%	3.59%	0.00%
GNW UN Equity	GENWORTH FINANCIAL INC-CL A	0.06%	14.05%	0.01%	0.00%	0.00%
GENZ UW Equity	GENZYME CORP	0.17%	19.39%	0.03%	0.00%	0.00%
GILD UW Equity	GILEAD SCIENCES INC	0.28%	14.00%	0.04%	0.00%	0.00%
GS UN Equity	GOLDMAN SACHS GROUP INC	0.73%	7.41%	0.05%	0.91%	0.01%
GR UN Equity	GOODRICH CORP	0.09%	7.33%	0.01%	1.38%	0.00%
GT UN Equity	GOODYEAR TIRE & RUBBER CO	0.03%	21.60%	0.01%	0.00%	0.00%
GOOG UW Equity	GOOGLE INC-CL A	1.23%	17.70%	0.22%	0.00%	0.00%
HRB UN Equity	H&R BLOCK INC	0.04%	10.00%	0.00%	4.26%	0.00%
HAL UN Equity	HALLIBURTON CO	0.29%	10.10%	0.03%	1.02%	0.00%
HOG UN Equity	HARLEY-DAVIDSON INC	0.07%	9.33%	0.01%	1.24%	0.00%
HAR UN Equity	HARMAN INTERNATIONAL	0.02%	20.00%	0.00%	0.00%	0.00%
HRS UN Equity	HARRIS CORP	0.05%	5.50%	0.00%	1.32%	0.00%
HIG UN Equity	HARTFORD FINANCIAL SVCS GRP	0.10%	13.75%	0.01%	0.80%	0.00%
HAS UN Equity	HASBRO INC	0.06%	14.33%	0.01%	2.16%	0.00%
HCP UN Equity	HCP INC	0.10%	7.57%	0.01%	5.05%	0.01%
HCN UN Equity	HEALTH CARE REIT INC	0.06%	7.24%	0.00%	5.55%	0.00%
HP UN Equity	HELMERICH & PAYNE	0.04%	10.00%	0.00%	0.45%	0.00%
HSY UN Equity	HERSHEY CO/THE	0.08%	8.50%	0.01%	2.54%	0.00%
HES UN Equity	HESS CORP	0.19%	10.68%	0.02%	0.63%	0.00%
HPQ UN Equity	HEWLETT-PACKARD CO	0.87%	11.00%	0.10%	0.83%	0.01%
HNZ UN Equity	HJ HEINZ CO	0.14%	7.12%	0.01%	3.70%	0.01%
HD UN Equity	HOME DEPOT INC	0.48%	14.43%	0.07%	3.06%	0.01%
HON UN Equity	HONEYWELL INTERNATIONAL INC	0.33%	10.52%	0.03%	2.58%	0.01%
HRL UN Equity	HORMEL FOODS CORP	0.05%	11.00%	0.01%	1.88%	0.00%
HSP UN Equity	HOSPIRA INC	0.09%	12.80%	0.01%	0.00%	0.00%
HST UN Equity	HOST HOTELS & RESORTS INC	0.10%	11.60%	0.01%	0.28%	0.00%
HCBK UW Equity	HUDSON CITY BANCORP INC	0.06%	4.50%	0.00%	5.05%	0.00%
HUM UN Equity	HUMANA INC	0.08%	10.00%	0.01%	0.00%	0.00%
HBAN UW Equity	HUNTINGTON BANCSHARES INC	0.04%	4.67%	0.00%	0.67%	0.00%
IBM UN Equity	INTL BUSINESS MACHINES CORP	1.63%	10.54%	0.17%	1.65%	0.03%
ITW UN Equity	ILLINOIS TOOL WORKS	0.23%	15.06%	0.03%	2.65%	0.01%
TEG UN Equity	INTEGRYS ENERGY GROUP INC	0.04%	8.27%	0.00%	5.20%	0.00%
INTC UW Equity	INTEL CORP	1.00%	11.29%	0.11%	3.19%	0.03%
ICE UN Equity	INTERCONTINENTALEXCHANGE INC	0.08%	17.75%	0.01%	0.00%	0.00%
IPG UN Equity	INTERPUBLIC GROUP OF COS INC	0.05%	12.00%	0.01%	0.00%	0.00%
IFF UN Equity	INTL FLAVORS & FRAGRANCES	0.04%	9.00%	0.00%	2.08%	0.00%
IGT UN Equity	INTL GAME TECHNOLOGY	0.04%	13.80%	0.01%	1.62%	0.00%
IP UN Equity	INTERNATIONAL PAPER CO	0.09%	5.50%	0.01%	1.74%	0.00%
INTU UW Equity	INTUIT INC	0.14%	14.95%	0.02%	0.00%	0.00%
ISRG UW Equity	INTUITIVE SURGICAL INC	0.10%	26.40%	0.03%	0.00%	0.00%
IVZ UN Equity	INVESCO LTD	0.10%	9.65%	0.01%	1.88%	0.00%
IRM UN Equity	IRON MOUNTAIN INC	0.04%	18.00%	0.01%	1.04%	0.00%
ITT UN Equity	ITT CORP	0.08%	11.33%	0.01%	2.07%	0.00%
JCP UN Equity	J.C. PENNEY CO INC	0.07%	9.67%	0.01%	2.45%	0.00%
JBL UN Equity	JABIL CIRCUIT INC	0.03%	11.00%	0.00%	1.91%	0.00%
JEC UN Equity	JACOBS ENGINEERING GROUP INC	0.05%	11.00%	0.01%	0.00%	0.00%
JNS UN Equity	JANUS CAPITAL GROUP INC	0.02%	2.80%	0.00%	0.34%	0.00%
JDSU UW Equity	JDS UNIPHASE CORP	0.03%	12.25%	0.00%	0.00%	0.00%
SJM UN Equity	JM SMUCKER CO/THE	0.07%	7.03%	0.00%	2.57%	0.00%
JCI UN Equity	JOHNSON CONTROLS INC	0.20%	15.53%	0.03%	1.65%	0.00%
JNJ UN Equity	JOHNSON & JOHNSON	1.61%	6.63%	0.11%	3.29%	0.05%
JPM UN Equity	JPMORGAN CHASE & CO	1.45%	8.50%	0.12%	0.67%	0.01%
JNPR UN Equity	JUNIPER NETWORKS INC	0.15%	17.69%	0.03%	0.00%	0.00%
K UN Equity	KELLOGG CO	0.18%	9.17%	0.02%	3.05%	0.01%
KEY UN Equity	KEYCORP	0.07%	4.75%	0.00%	0.45%	0.00%
KMB UN Equity	KIMBERLY-CLARK CORP	0.25%	8.27%	0.02%	3.87%	0.01%
KIM UN Equity	KIMCO REALTY CORP	0.06%	9.50%	0.01%	3.76%	0.00%
KG UN Equity	KING PHARMACEUTICALS INC	0.03%	11.92%	0.00%	0.00%	0.00%
KLAC UW Equity	KLA-TENCOR CORPORATION	0.05%	10.50%	0.01%	2.88%	0.00%
KSS UN Equity	KOHLS CORP	0.15%	13.78%	0.02%	0.00%	0.00%
KFT UN Equity	KRAFT FOODS INC-CLASS A	0.50%	7.30%	0.04%	3.75%	0.02%
KR UN Equity	KROGER CO	0.13%	8.92%	0.01%	1.80%	0.00%
LLL UN Equity	L-3 COMMUNICATIONS HOLDINGS	0.07%	8.69%	0.01%	2.19%	0.00%
LH UN Equity	LABORATORY CRP OF AMER HLDGS	0.08%	12.50%	0.01%	0.00%	0.00%
LM UN Equity	LEGG MASON INC	0.04%	7.50%	0.00%	0.49%	0.00%
LEG UN Equity	LEGGETT & PLATT INC	0.03%	4.70%	0.00%	4.33%	0.00%
LEN UN Equity	LENNAR CORP-CL A	0.02%	8.00%	0.00%	1.00%	0.00%
LUK UN Equity	LEUCADIA NATIONAL CORP	0.06%	No Long-Term Growth		0.00%	0.00%
LXK UN Equity	LEXMARK INTERNATIONAL INC-A	0.03%	No Long-Term Growth		0.00%	0.00%
LIFE UW Equity	LIFE TECHNOLOGIES CORP	0.08%	10.18%	0.01%	0.00%	0.00%
LTD UN Equity	LIMITED BRANDS INC	0.09%	14.86%	0.01%	5.38%	0.00%
LNC UN Equity	LINCOLN NATIONAL CORP	0.07%	10.80%	0.01%	0.16%	0.00%
LLTC UW Equity	LINEAR TECHNOLOGY CORP	0.06%	9.67%	0.01%	3.16%	0.00%

LMT UN Equity	LOCKHEED MARTIN CORP	0.24%	8.07%	0.02%	3.67%	0.01%
L UN Equity	LOEWS CORP	0.15%	No Long-Term Growth		0.63%	0.00%
LO UN Equity	LORILLARD INC	0.11%	6.00%	0.01%	5.26%	0.01%
LOW UN Equity	LOWE'S COS INC	0.28%	14.24%	0.04%	1.76%	0.00%
LSI UN Equity	LSI CORP	0.03%	15.00%	0.00%	0.00%	0.00%
MTB UN Equity	M & T BANK CORP	0.08%	4.95%	0.00%	3.61%	0.00%
M UN Equity	MACY'S INC	0.09%	10.00%	0.01%	0.82%	0.00%
MRO UN Equity	MARATHON OIL CORP	0.23%	12.02%	0.03%	2.77%	0.01%
MAR UN Equity	MARRIOTT INTERNATIONAL-CL A	0.12%	10.53%	0.01%	0.44%	0.00%
MMC UN Equity	MARSH & MCLENNAN COS	0.12%	11.00%	0.01%	3.44%	0.00%
MI UN Equity	MARSHALL & ILSLEY CORP	0.04%	6.33%	0.00%	0.49%	0.00%
MAS UN Equity	MASCO CORP	0.04%	10.00%	0.00%	2.41%	0.00%
MEE UN Equity	MASSEY ENERGY CO	0.03%	112.00%	0.04%	0.71%	0.00%
MA UN Equity	MASTERCARD INC-CLASS A	0.24%	19.47%	0.05%	0.27%	0.00%
MAT UW Equity	MATTEL INC	0.08%	8.50%	0.01%	3.42%	0.00%
MFE UN Equity	MCAFEE INC	0.07%	13.13%	0.01%	0.00%	0.00%
MKC UN Equity	MCCORMICK & CO-NON VTG SHRS	0.05%	8.83%	0.00%	2.39%	0.00%
MCD UN Equity	MCDONALD'S CORP	0.74%	9.58%	0.07%	3.00%	0.02%
MHP UN Equity	MCGRAW-HILL COMPANIES INC	0.10%	9.00%	0.01%	2.98%	0.00%
MCK UN Equity	MCKESSON CORP	0.15%	11.00%	0.02%	0.92%	0.00%
MJN UN Equity	MEAD JOHNSON NUTRITION CO	0.11%	10.25%	0.01%	1.45%	0.00%
MWV UN Equity	MEADWESTVACO CORP	0.04%	10.00%	0.00%	3.67%	0.00%
MHS UN Equity	MEDCO HEALTH SOLUTIONS INC	0.21%	16.67%	0.03%	0.05%	0.00%
MDT UN Equity	MEDTRONIC INC	0.33%	10.04%	0.03%	2.69%	0.01%
WFR UN Equity	MEMC ELECTRONIC MATERIALS	0.03%	17.50%	0.00%	0.00%	0.00%
MRK UN Equity	MERCK & CO. INC.	1.05%	6.73%	0.07%	4.09%	0.04%
MDP UN Equity	MEREDITH CORP	0.01%	15.00%	0.00%	2.65%	0.00%
MET UN Equity	METLIFE INC	0.33%	10.58%	0.03%	1.91%	0.01%
PCS UN Equity	METROPCS COMMUNICATIONS INC	0.04%	20.82%	0.01%	0.00%	0.00%
MCHP UW Equity	MICROCHIP TECHNOLOGY INC	0.05%	15.00%	0.01%	4.43%	0.00%
MU UW Equity	MICRON TECHNOLOGY INC	0.07%	11.75%	0.01%	0.00%	0.00%
MSFT UW Equity	MICROSOFT CORP	1.98%	11.88%	0.24%	2.26%	0.04%
MOLX UW Equity	MOLEX INC	0.02%	11.67%	0.00%	2.90%	0.00%
TAP UN Equity	MOLSON COORS BREWING CO -B	0.07%	12.00%	0.01%	2.18%	0.00%
MON UN Equity	MONSANTO CO	0.27%	11.00%	0.03%	2.11%	0.01%
MWW UN Equity	MONSTER WORLDWIDE INC	0.02%	20.20%	0.00%	0.00%	0.00%
MCO UN Equity	MOODY'S CORP	0.06%	11.05%	0.01%	1.44%	0.00%
MS UN Equity	MORGAN STANLEY	0.33%	12.00%	0.04%	0.78%	0.00%
MOT UN Equity	MOTOROLA INC	0.17%	12.50%	0.02%	0.00%	0.00%
MUR UN Equity	MURPHY OIL CORP	0.11%	15.00%	0.02%	1.61%	0.00%
MYL UW Equity	MYLAN INC	0.05%	13.70%	0.01%	1.65%	0.00%
NBR UN Equity	NABORS INDUSTRIES LTD	0.05%	10.00%	0.01%	0.00%	0.00%
NDAQ UW Equity	NASDAQ OMX GROUP/THE	0.04%	12.25%	0.00%	0.00%	0.00%
NOV UN Equity	NATIONAL OILWELL VARCO INC	0.19%	No Long-Term Growth		0.81%	0.00%
NSM UN Equity	NATIONAL SEMICONDUCTOR CORP	0.03%	8.00%	0.00%	2.88%	0.00%
NTAP UW Equity	NETAPP INC	0.16%	17.50%	0.03%	0.00%	0.00%
NYT UN Equity	NEW YORK TIMES CO -CL A	0.01%	12.00%	0.00%	0.00%	0.00%
NWL UN Equity	NEWELL RUBBERMAID INC	0.05%	9.20%	0.00%	1.23%	0.00%
NEM UN Equity	NEWMONT MINING CORP	0.28%	24.43%	0.07%	0.85%	0.00%
NWSA UW Equity	NEWS CORP-CL A	0.24%	10.53%	0.02%	1.06%	0.00%
NEE UN Equity	NEXTERA ENERGY INC	0.21%	6.05%	0.01%	3.61%	0.01%
GAS UN Equity	NICOR INC	0.02%	3.13%	0.00%	3.89%	0.00%
NKE UN Equity	NIKE INC -CL B	0.29%	12.03%	0.03%	1.37%	0.00%
NI UN Equity	NISOURCE INC	0.05%	7.17%	0.00%	5.25%	0.00%
NBL UN Equity	NOBLE ENERGY INC	0.12%	7.00%	0.01%	0.94%	0.00%
JWN UN Equity	NORDSTROM INC	0.08%	12.19%	0.01%	1.88%	0.00%
NSC UN Equity	NORFOLK SOUTHERN CORP	0.21%	13.75%	0.03%	2.29%	0.00%
NU UN Equity	NORTHEAST UTILITIES	0.05%	7.17%	0.00%	3.36%	0.00%
NTRS UW Equity	NORTHERN TRUST CORP	0.11%	6.14%	0.01%	2.25%	0.00%
NOC UN Equity	NORTHROP GRUMMAN CORP	0.17%	10.89%	0.02%	2.89%	0.00%
NOVL UW Equity	NOVELL INC	0.02%	8.33%	0.00%	0.00%	0.00%
NVLS UW Equity	NOVELLUS SYSTEMS INC	0.02%	14.00%	0.00%	0.00%	0.00%
NRG UN Equity	NRG ENERGY INC	0.05%	3.50%	0.00%	0.00%	0.00%
NUE UN Equity	NUCOR CORP	0.12%	No Long-Term Growth		3.48%	0.00%
NVDA UW Equity	NVIDIA CORP	0.06%	13.00%	0.01%	0.00%	0.00%
NYX UN Equity	NYSE EURONEXT	0.07%	9.70%	0.01%	4.16%	0.00%
ORLY UW Equity	O'REILLY AUTOMOTIVE INC	0.07%	16.50%	0.01%	0.00%	0.00%
OXY UN Equity	OCCIDENTAL PETROLEUM CORP	0.63%	7.88%	0.05%	1.55%	0.01%
ODP UN Equity	OFFICE DEPOT INC	0.01%	10.67%	0.00%	0.00%	0.00%
OMC UN Equity	OMNICOM GROUP	0.11%	11.00%	0.01%	1.93%	0.00%
OKE UN Equity	ONEOK INC	0.05%	6.00%	0.00%	3.64%	0.00%
ORCL UW Equity	ORACLE CORP	1.31%	14.84%	0.19%	0.80%	0.01%
OI UN Equity	OWENS-ILLINOIS INC	0.04%	7.20%	0.00%	0.00%	0.00%
PCAR UW Equity	PACCAR INC	0.17%	11.80%	0.02%	0.72%	0.00%
PTV UN Equity	PACTIV CORPORATION	0.04%	6.55%	0.00%	0.00%	0.00%
PLL UN Equity	PALL CORP	0.05%	12.00%	0.01%	1.44%	0.00%
PH UN Equity	PARKER HANNIFIN CORP	0.11%	8.50%	0.01%	1.49%	0.00%
PDCO UW Equity	PATTERSON COS INC	0.03%	14.33%	0.00%	1.41%	0.00%
PAYX UW Equity	PAYCHEX INC	0.09%	11.00%	0.01%	4.53%	0.00%
BTU UN Equity	PEABODY ENERGY CORP	0.13%	34.00%	0.04%	0.54%	0.00%
PBCT UW Equity	PEOPLE'S UNITED FINANCIAL	0.05%	7.67%	0.00%	4.65%	0.00%
POM UN Equity	PEPCO HOLDINGS INC	0.04%	6.50%	0.00%	5.68%	0.00%
PEP UN Equity	PEPSICO INC	0.96%	10.50%	0.10%	2.86%	0.03%
PKI UN Equity	PERKINELMER INC	0.03%	13.65%	0.00%	1.19%	0.00%
PFE UN Equity	PFIZER INC	1.30%	3.10%	0.04%	4.06%	0.05%
PCG UN Equity	P G & E CORP	0.17%	7.03%	0.01%	3.86%	0.01%
PM UN Equity	PHILIP MORRIS INTERNATIONAL	0.96%	9.97%	0.10%	4.29%	0.04%
PNW UN Equity	PINNACLE WEST CAPITAL	0.04%	5.83%	0.00%	5.12%	0.00%
PXD UN Equity	PIONEER NATURAL RESOURCES CO	0.08%	10.67%	0.01%	0.19%	0.00%
PBI UN Equity	PITNEY BOWES INC	0.04%	No Long-Term Growth		6.60%	0.00%
PCL UN Equity	PLUM CREEK TIMBER CO	0.06%	3.50%	0.00%	4.51%	0.00%
PNC UN Equity	PNC FINANCIAL SERVICES GROUP	0.26%	4.88%	0.01%	0.75%	0.00%
RL UN Equity	POLO RALPH LAUREN CORP	0.06%	13.50%	0.01%	0.35%	0.00%
PPG UN Equity	PPG INDUSTRIES INC	0.11%	7.50%	0.01%	2.89%	0.00%
PPL UN Equity	PPL CORPORATION	0.12%	5.06%	0.01%	5.07%	0.01%
PX UN Equity	PRAXAIR INC	0.26%	11.00%	0.03%	1.96%	0.01%
PCP UN Equity	PRECISION CASTPARTS CORP	0.17%	9.65%	0.02%	0.10%	0.00%
PCLN UW Equity	PRICELINE.COM INC	0.15%	20.67%	0.03%	0.00%	0.00%
PFG UN Equity	PRINCIPAL FINANCIAL GROUP	0.08%	12.17%	0.01%	1.92%	0.00%

PG UN Equity	PROCTER & GAMBLE CO/THE	1.62%	9.30%	0.15%	3.13%	0.05%
PGN UN Equity	PROGRESS ENERGY INC	0.12%	3.76%	0.00%	5.62%	0.01%
PGR UN Equity	PROGRESSIVE CORP	0.13%	6.79%	0.01%	1.21%	0.00%
PLD UN Equity	PROLOGIS	0.06%	18.23%	0.01%	4.71%	0.00%
PRU UN Equity	PRUDENTIAL FINANCIAL INC	0.23%	12.18%	0.03%	1.44%	0.00%
PEG UN Equity	PUBLIC SERVICE ENTERPRISE GP	0.15%	1.25%	0.00%	4.12%	0.01%
PSA UN Equity	PUBLIC STORAGE	0.16%	3.54%	0.01%	3.02%	0.00%
PHM UN Equity	PULTE GROUP INC	0.03%	10.00%	0.00%	0.04%	0.00%
QEP UN Equity	QEP RESOURCES INC	0.05%	15.00%	0.01%	0.15%	0.00%
QLGC UW Equity	QLOGIC CORP	0.02%	11.50%	0.00%	0.00%	0.00%
QCOM UW Equity	QUALCOMM INC	0.66%	15.50%	0.10%	1.67%	0.01%
PWR UN Equity	QUANTA SERVICES INC	0.04%	13.85%	0.01%	0.00%	0.00%
DGX UN Equity	QUEST DIAGNOSTICS	0.08%	11.95%	0.01%	0.81%	0.00%
Q UN Equity	QWEST COMMUNICATIONS INTL	0.10%	5.20%	0.01%	5.00%	0.01%
RSH UN Equity	RADIOSHACK CORP	0.02%	8.80%	0.00%	1.16%	0.00%
RRC UN Equity	RANGE RESOURCES CORP	0.05%	15.75%	0.01%	0.42%	0.00%
RTN UN Equity	RAYTHEON COMPANY	0.16%	8.71%	0.01%	3.16%	0.00%
RHT UN Equity	RED HAT INC	0.07%	18.14%	0.01%	0.00%	0.00%
RF UN Equity	REGIONS FINANCIAL CORP	0.09%	7.00%	0.01%	0.53%	0.00%
RSG UN Equity	REPUBLIC SERVICES INC	0.11%	13.00%	0.01%	2.43%	0.00%
RAI UN Equity	REYNOLDS AMERICAN INC	0.16%	6.00%	0.01%	6.09%	0.01%
RHI UN Equity	ROBERT HALF INTL INC	0.04%	16.50%	0.01%	1.93%	0.00%
ROK UN Equity	ROCKWELL AUTOMATION INC	0.08%	22.28%	0.02%	2.15%	0.00%
COL UN Equity	ROCKWELL COLLINS INC.	0.09%	8.55%	0.01%	1.69%	0.00%
ROP UN Equity	ROPER INDUSTRIES INC	0.06%	13.50%	0.01%	0.56%	0.00%
ROST UW Equity	ROSS STORES INC	0.06%	14.00%	0.01%	1.18%	0.00%
RDC UN Equity	ROWAN COMPANIES INC	0.03%	13.00%	0.00%	0.00%	0.00%
RRD UW Equity	RR DONNELLEY & SONS CO	0.03%	10.00%	0.00%	5.78%	0.00%
R UN Equity	RYDER SYSTEM INC	0.02%	14.85%	0.00%	2.29%	0.00%
SWY UN Equity	SAFEWAY INC	0.07%	8.55%	0.01%	2.09%	0.00%
SAI UN Equity	SAIC INC	0.05%	10.20%	0.01%	0.00%	0.00%
CRM UN Equity	SALESFORCE.COM INC	0.13%	28.93%	0.04%	0.00%	0.00%
SNDK UW Equity	SANDISK CORP	0.09%	14.33%	0.01%	0.00%	0.00%
SLE UN Equity	SARA LEE CORP	0.09%	9.62%	0.01%	3.04%	0.00%
SCG UN Equity	SCANA CORP	0.05%	4.88%	0.00%	4.66%	0.00%
SLB UN Equity	SCHLUMBERGER LTD	0.80%	15.96%	0.13%	1.33%	0.01%
SCHW UN Equity	SCHWAB (CHARLES) CORP	0.15%	13.00%	0.02%	1.72%	0.00%
SNI UN Equity	SCRIPPS NETWORKS INTER-CL A	0.06%	14.66%	0.01%	0.64%	0.00%
SEE UN Equity	SEALED AIR CORP	0.03%	6.00%	0.00%	1.71%	0.00%
SHLD UW Equity	SEARS HOLDINGS CORP	0.08%	10.00%	0.01%	0.00%	0.00%
SRE UN Equity	SEMPRA ENERGY	0.12%	6.50%	0.01%	2.94%	0.00%
SHW UN Equity	SHERWIN-WILLIAMS CO/THE	0.07%	7.15%	0.01%	1.97%	0.00%
SIAL UW Equity	SIGMA-ALDRICH	0.07%	9.00%	0.01%	1.04%	0.00%
SPG UN Equity	SIMON PROPERTY GROUP INC	0.26%	5.19%	0.01%	2.49%	0.01%
SLM UN Equity	SLM CORP	0.05%	10.00%	0.01%	0.00%	0.00%
SNA UN Equity	SNAP-ON INC	0.03%	10.00%	0.00%	0.00%	0.00%
SO UN Equity	SOUTHERN CO	0.29%	4.86%	0.01%	4.82%	0.01%
LUV UN Equity	SOUTHWEST AIRLINES CO	0.09%	8.33%	0.01%	0.11%	0.00%
SWN UN Equity	SOUTHWESTERN ENERGY CO	0.11%	26.00%	0.03%	0.00%	0.00%
SE UN Equity	SPECTRA ENERGY CORP	0.14%	6.67%	0.01%	4.21%	0.01%
S UN Equity	SPRINT NEXTEL CORP	0.12%	4.50%	0.01%	0.00%	0.00%
STJ UN Equity	ST JUDE MEDICAL INC	0.12%	12.28%	0.01%	0.00%	0.00%
SWK UN Equity	STANLEY BLACK & DECKER INC	0.10%	14.00%	0.01%	2.09%	0.00%
SPLS UW Equity	STAPLES INC	0.14%	14.73%	0.02%	1.79%	0.00%
SBUX UW Equity	STARBUCKS CORP	0.18%	15.74%	0.03%	1.98%	0.00%
HOT UN Equity	STARWOOD HOTELS & RESORTS	0.10%	16.00%	0.02%	0.50%	0.00%
STT UN Equity	STATE STREET CORP	0.18%	7.96%	0.01%	0.21%	0.00%
SRCL UW Equity	STERICYCLE INC	0.06%	17.80%	0.01%	0.00%	0.00%
SYK UN Equity	STRYKER CORP	0.18%	12.76%	0.02%	1.18%	0.00%
SUN UN Equity	SUNOCO INC	0.04%	0.71%	0.00%	1.49%	0.00%
STI UN Equity	SUNTRUST BANKS INC	0.12%	8.00%	0.01%	0.15%	0.00%
SVU UN Equity	SUPERVALU INC	0.02%	No Long-Term Growth		3.04%	0.00%
SYMC UW Equity	SYMANTEC CORP	0.11%	9.25%	0.01%	0.00%	0.00%
SYY UN Equity	SYSCO CORP	0.15%	10.50%	0.02%	3.71%	0.01%
TROW UW Equity	T ROWE PRICE GROUP INC	0.12%	10.80%	0.01%	2.03%	0.00%
TGT UN Equity	TARGET CORP	0.36%	13.48%	0.05%	1.49%	0.01%
TE UN Equity	TECO ENERGY INC	0.03%	7.30%	0.00%	4.62%	0.00%
TLAB UW Equity	TELLABS INC	0.03%	10.33%	0.00%	1.04%	0.00%
THC UN Equity	TENET HEALTHCARE CORP	0.02%	8.25%	0.00%	0.00%	0.00%
TDC UN Equity	TERADATA CORP	0.06%	11.00%	0.01%	0.00%	0.00%
TER UN Equity	TERADYNE INC	0.02%	15.00%	0.00%	0.00%	0.00%
TSO UN Equity	TESORO CORP	0.02%	24.94%	0.00%	0.00%	0.00%
TXN UN Equity	TEXAS INSTRUMENTS INC	0.31%	10.67%	0.03%	1.71%	0.01%
TXT UN Equity	TEXTRON INC	0.05%	51.68%	0.03%	0.38%	0.00%
TMO UN Equity	THERMO FISHER SCIENTIFIC INC	0.18%	11.53%	0.02%	0.00%	0.00%
TIF UN Equity	TIFFANY & CO	0.06%	13.72%	0.01%	1.75%	0.00%
TWC UN Equity	TIME WARNER CABLE	0.18%	13.96%	0.03%	2.82%	0.01%
TWX UN Equity	TIME WARNER INC	0.32%	14.51%	0.05%	2.72%	0.01%
TIE UN Equity	TITANIUM METALS CORP	0.03%	15.00%	0.01%	0.72%	0.00%
TJX UN Equity	TJX COMPANIES INC	0.16%	14.00%	0.02%	1.30%	0.00%
TMK UN Equity	TORCHMARK CORP	0.04%	7.33%	0.00%	1.11%	0.00%
TSS UN Equity	TOTAL SYSTEM SERVICES INC	0.03%	9.67%	0.00%	1.79%	0.00%
TRV UN Equity	TRAVELERS COS INC/THE	0.23%	7.44%	0.02%	2.62%	0.01%
TYC UN Equity	TYCO INTERNATIONAL LTD	0.17%	12.28%	0.02%	2.50%	0.00%
TSN UN Equity	TYSON FOODS INC-CL A	0.04%	8.50%	0.00%	1.07%	0.00%
UNP UN Equity	UNION PACIFIC CORP	0.39%	14.87%	0.06%	1.45%	0.01%
UPS UN Equity	UNITED PARCEL SERVICE-CL B	0.45%	13.26%	0.06%	2.74%	0.01%
UTX UN Equity	UNITED TECHNOLOGIES CORP	0.63%	10.93%	0.07%	2.30%	0.01%
UNH UN Equity	UNITEDHEALTH GROUP INC	0.36%	12.25%	0.04%	0.89%	0.00%
UNM UN Equity	UNUM GROUP	0.07%	9.33%	0.01%	1.53%	0.00%
URBN UW Equity	URBAN OUTFITTERS INC	0.05%	20.27%	0.01%	0.00%	0.00%
USB UN Equity	US BANCORP	0.40%	6.67%	0.03%	0.87%	0.00%
X UN Equity	UNITED STATES STEEL CORP	0.06%	5.00%	0.00%	0.45%	0.00%
VLO UN Equity	VALERO ENERGY CORP	0.10%	23.42%	0.02%	1.07%	0.00%
VAR UN Equity	VARIAN MEDICAL SYSTEMS INC	0.07%	16.67%	0.01%	0.00%	0.00%
VTR UN Equity	VENTAS INC	0.08%	5.45%	0.00%	3.95%	0.00%
VRSN UW Equity	VERISIGN INC	0.05%	10.00%	0.01%	0.00%	0.00%
VZ UN Equity	VERIZON COMMUNICATIONS INC	0.84%	3.87%	0.03%	5.93%	0.05%
VFC UN Equity	VF CORP	0.08%	11.00%	0.01%	2.83%	0.00%

VIA/B UN Equity	VIACOM INC-CLASS B	0.19%	11.33%	0.02%	1.59%	0.00%
V UN Equity	VISA INC-CLASS A SHARES	0.34%	20.57%	0.07%	0.69%	0.00%
VNO UN Equity	VORNADO REALTY TRUST	0.15%	6.25%	0.01%	2.95%	0.00%
VMC UN Equity	VULCAN MATERIALS CO	0.04%	8.50%	0.00%	2.76%	0.00%
WMT UN Equity	WAL-MART STORES INC	1.80%	11.04%	0.20%	2.23%	0.04%
WAG UN Equity	WALGREEN CO	0.31%	14.38%	0.04%	1.94%	0.01%
DIS UN Equity	WALT DISNEY CO/THE	0.61%	10.69%	0.07%	1.09%	0.01%
WPO UN Equity	WASHINGTON POST-CLASS B	0.03%	No Long-Term Growth		0.00%	0.00%
WM UN Equity	WASTE MANAGEMENT INC	0.16%	10.50%	0.02%	3.35%	0.01%
WAT UN Equity	WATERS CORP	0.06%	12.50%	0.01%	0.00%	0.00%
WPI UN Equity	WATSON PHARMACEUTICALS INC	0.05%	9.40%	0.00%	0.00%	0.00%
WLP UN Equity	WELLPOINT INC	0.21%	11.00%	0.02%	0.00%	0.00%
WFC UN Equity	WELLS FARGO & CO	1.25%	4.08%	0.05%	0.80%	0.01%
WDC UN Equity	WESTERN DIGITAL CORP	0.06%	7.50%	0.00%	0.00%	0.00%
WU UN Equity	WESTERN UNION CO	0.11%	11.79%	0.01%	1.40%	0.00%
WY UN Equity	WEYERHAEUSER CO	0.08%	5.50%	0.00%	1.21%	0.00%
WHR UN Equity	WHIRLPOOL CORP	0.06%	15.00%	0.01%	2.00%	0.00%
WFMI UW Equity	WHOLE FOODS MARKET INC	0.06%	19.50%	0.01%	0.00%	0.00%
WMB UN Equity	WILLIAMS COS INC	0.12%	12.97%	0.01%	2.28%	0.00%
WIN UW Equity	WINDSTREAM CORP	0.05%	0.45%	0.00%	8.14%	0.00%
WEC UN Equity	WISCONSIN ENERGY CORP	0.06%	8.00%	0.00%	2.75%	0.00%
GWW UN Equity	WW GRAINGER INC	0.08%	13.62%	0.01%	1.64%	0.00%
WYN UN Equity	WYNDHAM WORLDWIDE CORP	0.05%	5.20%	0.00%	1.65%	0.00%
WYNN UW Equity	WYNN RESORTS LTD	0.11%	15.51%	0.02%	0.77%	0.00%
XEL UN Equity	XCEL ENERGY INC	0.10%	6.17%	0.01%	4.30%	0.00%
XRX UN Equity	XEROX CORP	0.14%	7.00%	0.01%	1.58%	0.00%
XLNX UW Equity	XILINX INC	0.06%	17.00%	0.01%	2.43%	0.00%
XL UN Equity	XL GROUP PLC	0.07%	No Long-Term Growth		1.64%	0.00%
YHOO UW Equity	YAHOO! INC	0.18%	10.77%	0.02%	0.00%	0.00%
YUM UN Equity	YUM! BRANDS INC	0.20%	12.38%	0.03%	1.82%	0.00%
ZMH UN Equity	ZIMMER HOLDINGS INC	0.09%	11.11%	0.01%	0.00%	0.00%
ZION UW Equity	ZIONS BANCORPORATION	0.04%	7.67%	0.00%	0.18%	0.00%

Beta Analysis

Date	AGL Price	AGL Weekly Return	AGL Covar.	ATO Price	ATO Weekly Return	ATO Covar.	LG Price	LG Weekly Return	LG Covar.	GAS Price	GAS Weekly Return	GAS Covar.	NJR Price	NJR Weekly Return	NJR Covar.
10/8/2010	38.88	0.15%	0.0468%	29.34	-0.20%	0.0492%	35.13	0.83%	0.0420%	47.79	2.97%	0.0578%	40.03	1.29%	0.0447%
10/1/2010	38.82	1.49%	0.0496%	29.40	1.59%	0.0529%	34.84	1.84%	0.0426%	46.41	2.45%	0.0610%	39.52	1.54%	0.0456%
9/24/2010	38.25	1.46%	0.0497%	28.94	1.58%	0.0536%	34.21	2.52%	0.0433%	45.30	2.49%	0.0630%	38.92	3.24%	0.0465%
9/17/2010	37.70	-0.89%	0.0498%	28.49	-1.04%	0.0538%	33.37	-1.94%	0.0438%	44.20	-0.38%	0.0627%	37.70	-1.41%	0.0464%
9/10/2010	38.04	-0.21%	0.0510%	28.79	-1.20%	0.0550%	34.03	-1.08%	0.0455%	44.37	0.07%	0.0643%	38.24	0.08%	0.0476%
9/3/2010	38.12	2.80%	0.0521%	29.14	0.90%	0.0561%	34.40	0.73%	0.0447%	44.34	2.71%	0.0641%	38.21	0.55%	0.0473%
8/27/2010	37.08	1.59%	0.0510%	28.88	0.63%	0.0559%	34.15	3.45%	0.0446%	43.17	2.54%	0.0633%	38.00	3.43%	0.0478%
8/20/2010	36.50	-1.93%	0.0511%	28.70	0.07%	0.0560%	33.01	-2.51%	0.0449%	42.10	-1.47%	0.0635%	36.74	-3.16%	0.0483%
8/13/2010	37.22	-4.52%	0.0514%	28.68	-2.94%	0.0561%	33.86	-3.06%	0.0464%	42.73	-4.17%	0.0644%	37.94	-0.71%	0.0483%
8/6/2010	38.98	2.58%	0.0477%	29.55	1.90%	0.0538%	34.93	-0.03%	0.0434%	44.59	1.83%	0.0609%	38.21	2.36%	0.0479%
7/30/2010	38.00	-2.24%	0.0474%	29.00	0.07%	0.0540%	34.94	0.40%	0.0416%	43.79	-0.02%	0.0601%	37.33	0.40%	0.0458%
7/23/2010	38.87	3.68%	0.0470%	28.98	3.43%	0.0541%	34.80	4.16%	0.0413%	43.80	4.76%	0.0599%	37.18	4.85%	0.0455%
7/16/2010	37.49	-0.24%	0.0494%	28.02	-1.30%	0.0553%	33.41	-2.11%	0.0431%	41.81	-1.37%	0.0618%	35.46	-3.25%	0.0456%
7/9/2010	37.58	4.97%	0.0537%	28.39	5.85%	0.0604%	34.13	4.28%	0.0468%	42.39	5.76%	0.0650%	36.65	5.10%	0.0505%
7/2/2010	35.80	-1.84%	0.0504%	26.82	-3.87%	0.0557%	32.73	-2.94%	0.0442%	40.08	-4.68%	0.0608%	34.87	-1.64%	0.0458%
6/25/2010	36.47	-3.82%	0.0483%	27.90	-2.69%	0.0518%	33.72	-1.32%	0.0422%	42.05	-2.07%	0.0568%	35.45	-2.93%	0.0450%
6/18/2010	37.92	3.83%	0.0451%	28.67	2.83%	0.0496%	34.17	4.05%	0.0413%	42.94	4.94%	0.0549%	36.52	4.91%	0.0425%
6/11/2010	36.52	2.24%	0.0434%	27.88	5.21%	0.0492%	32.84	0.40%	0.0411%	40.92	3.41%	0.0541%	34.81	1.43%	0.0392%
6/4/2010	35.72	-2.14%	0.0428%	26.50	-2.29%	0.0472%	32.71	-1.15%	0.0411%	39.57	-2.08%	0.0530%	34.32	-3.19%	0.0387%
5/28/2010	36.50	2.21%	0.0435%	27.12	1.19%	0.0469%	33.09	-1.22%	0.0435%	40.41	0.35%	0.0547%	35.45	0.25%	0.0391%
5/21/2010	35.71	-6.66%	0.0443%	26.80	-4.66%	0.0470%	33.50	-5.05%	0.0459%	40.27	-6.20%	0.0555%	35.36	-6.23%	0.0408%
5/14/2010	38.26	1.95%	0.0378%	28.11	2.85%	0.0425%	35.28	6.94%	0.0411%	42.93	6.37%	0.0494%	37.71	5.45%	0.0349%
5/7/2010	37.53	-5.01%	0.0433%	27.33	-7.61%	0.0481%	32.99	-3.20%	0.0454%	40.36	-7.24%	0.0534%	35.76	-5.22%	0.0378%
4/30/2010	39.51	0.61%	0.0330%	29.58	-1.33%	0.0375%	34.08	-3.46%	0.0347%	43.51	-2.31%	0.0458%	37.73	0.13%	0.0279%
4/23/2010	39.27	2.91%	0.0342%	29.98	2.60%	0.0377%	35.30	2.47%	0.0331%	44.54	3.20%	0.0444%	37.68	0.03%	0.0285%
4/16/2010	38.16	-0.24%	0.0327%	29.22	-0.38%	0.0373%	34.45	-0.14%	0.0334%	43.16	0.70%	0.0447%	37.67	-2.13%	0.0293%
4/9/2010	38.25	-1.75%	0.0327%	29.33	1.31%	0.0374%	34.50	1.32%	0.0328%	42.86	1.28%	0.0446%	38.49	1.18%	0.0285%
4/2/2010	38.93	2.45%	0.0324%	28.95	2.26%	0.0371%	34.05	1.82%	0.0318%	42.32	-0.45%	0.0440%	38.04	1.36%	0.0281%
3/26/2010	38.00	-0.18%	0.0328%	28.31	-2.21%	0.0350%	33.44	-3.38%	0.0331%	42.51	-2.14%	0.0441%	37.53	0.78%	0.0274%
3/19/2010	38.07	1.30%	0.0312%	28.95	0.52%	0.0376%	34.61	2.67%	0.0334%	43.44	2.53%	0.0448%	37.24	0.65%	0.0247%
3/12/2010	37.58	0.89%	0.0319%	28.80	0.70%	0.0386%	33.71	0.42%	0.0338%	42.37	-1.07%	0.0464%	37.00	-2.25%	0.0259%
3/5/2010	37.25	2.53%	0.0374%	28.60	4.15%	0.0449%	33.57	2.38%	0.0320%	42.83	2.83%	0.0530%	37.85	3.93%	0.0278%
2/26/2010	36.33	-0.52%	0.0545%	27.46	-1.15%	0.0520%	32.79	-0.88%	0.0396%	41.65	2.97%	0.0686%	36.42	-0.41%	0.0422%
2/19/2010	36.52	3.46%	0.0575%	27.78	2.93%	0.0585%	33.08	5.32%	0.0456%	40.45	3.82%	0.0637%	36.57	3.57%	0.0466%
2/12/2010	35.30	0.86%	0.0703%	26.99	-0.99%	0.0685%	31.41	-0.25%	0.0517%	38.96	-0.43%	0.0821%	35.31	1.49%	0.0543%
2/5/2010	35.00	-0.82%	0.0767%	27.26	-1.30%	0.0717%	31.49	-2.39%	0.0525%	39.13	-3.43%	0.0880%	34.79	-4.66%	0.0579%
1/29/2010	35.29	-0.82%	0.0840%	27.62	-1.81%	0.0763%	32.26	0.40%	0.0537%	40.52	1.00%	0.0919%	36.49	0.14%	0.0586%
1/22/2010	35.58	-2.28%	0.0835%	28.13	-1.85%	0.0748%	32.13	-2.16%	0.0517%	40.12	-3.51%	0.0915%	36.44	-1.41%	0.0576%
1/15/2010	36.41	1.22%	0.0824%	28.66	0.70%	0.0742%	32.84	-0.51%	0.0527%	41.58	0.12%	0.0888%	36.96	0.41%	0.0562%
1/8/2010	35.97	-1.37%	0.0830%	28.46	-3.20%	0.0727%	33.01	-2.25%	0.0532%	41.53	-1.35%	0.0890%	36.81	-1.58%	0.0525%
1/1/2010	36.47	-2.69%	0.0849%	29.40	-2.10%	0.0754%	33.77	-1.57%	0.0583%	42.10	-2.30%	0.0944%	37.40	-2.40%	0.0590%
12/25/2009	37.48	2.15%	0.0917%	30.03	2.32%	0.0771%	34.31	0.76%	0.0643%	43.09	1.03%	0.0964%	38.32	3.62%	0.0656%
12/18/2009	36.69	-0.03%	0.0913%	29.35	1.24%	0.0760%	34.05	0.53%	0.0628%	42.65	0.40%	0.0977%	36.98	0.24%	0.0653%
12/11/2009	36.70	2.54%	0.0911%	28.99	2.66%	0.0760%	33.87	3.36%	0.0624%	42.48	5.10%	0.0977%	36.89	0.60%	0.0655%
12/4/2009	35.79	3.44%	0.0913%	28.24	1.40%	0.0763%	32.77	4.03%	0.0628%	40.42	3.35%	0.0982%	36.67	3.85%	0.0656%
11/27/2009	34.60	2.40%	0.0940%	27.85	-0.82%	0.0781%	31.50	0.32%	0.0644%	39.11	1.40%	0.1031%	35.31	-0.25%	0.0661%
11/20/2009	33.79	-1.77%	0.1073%	28.08	-0.60%	0.0855%	31.40	0.61%	0.0662%	38.57	-1.00%	0.1166%	35.40	1.17%	0.0733%
11/13/2009	34.40	-2.44%	0.1097%	28.25	-1.91%	0.0729%	31.21	-0.29%	0.0550%	38.96	1.62%	0.1204%	34.99	-1.69%	0.0585%
11/6/2009	35.26	0.86%	0.1131%	28.80	3.41%	0.0812%	31.30	1.92%	0.0531%	38.34	3.40%	0.1293%	35.59	1.11%	0.0600%
10/30/2009	34.96	-4.17%	0.1167%	27.85	-2.89%	0.0821%	30.71	-3.00%	0.0550%	37.08	-0.48%	0.1337%	35.20	-2.28%	0.0618%
10/23/2009	36.48	-1.03%	0.1328%	28.68	-0.76%	0.0974%	31.66	-1.83%	0.0736%	37.26	-2.79%	0.1449%	36.02	-1.13%	0.0877%
10/16/2009	36.86	2.11%	0.1324%	28.90	0.00%	0.0944%	32.25	-0.06%	0.0629%	38.33	2.71%	0.1402%	36.43	1.17%	0.0831%
10/9/2009	36.10	3.62%	0.1345%	28.90	4.41%	0.0955%	32.27	1.16%	0.0729%	37.32	5.30%	0.1477%	36.01	1.67%	0.0857%
10/2/2009	34.84	0.23%	0.1907%	27.68	-1.49%	0.1763%	31.90	-1.09%	0.1380%	35.44	-4.01%	0.2002%	35.42	-1.94%	0.1406%
9/25/2009	34.76	-1.00%	0.1968%	28.10	-1.44%	0.1750%	32.25	-2.89%	0.1358%	36.92	-0.51%	0.2066%	36.12	-1.93%	0.1464%
9/18/2009	35.11	2.39%	0.1991%	28.51	2.11%	0.1759%	33.21	2.75%	0.1347%	37.11	3.57%	0.2078%	36.83	2.08%	0.1481%
9/11/2009	34.29	2.48%	0.1982%	27.92	2.53%	0.1751%	32.32	-1.73%	0.1338%	35.83	0.00%	0.2062%	36.08	-0.63%	0.1476%
9/4/2009	33.46	-2.22%	0.1976%	27.23	-1.09%	0.1745%	32.89	-1.11%	0.1356%	35.83	-2.74%	0.2072%	36.31	-2.97%	0.1490%
8/28/2009	34.22	-2.06%	0.1991%	27.53	-1.33%	0.1765%	33.26	-4.37%	0.1375%	36.84	-2.33%	0.2073%	37.42	0.75%	0.1507%
8/21/2009	34.94	1.72%	0.1993%	27.90	0.54%	0.1765%	34.78	4.66%	0.1382%	37.72	3.20%	0.2073%	37.14	1.28%	0.1506%
8/14/2009	34.35	0.82%	0.1986%	27.75	0.14%	0.1763%	33.23	3.49%	0.1357%	36.55	0.69%	0.2056%	36.67	-1.56%	0.1501%
8/7/2009	34.07	1.34%	0.1984%	27.71	2.03%	0.1763%	32.11	-4.35%	0.1362%	36.30	-0.38%	0.2061%	37.25	-3.50%	0.1504%
7/31/2009	33.62	-1.49%	0.1971%	27.16	0.63%	0.1758%	33.57	-3.00%	0.1412%	36.44	-1.01%	0.2105%	38.60	-2.72%	0.1535%
7/24/2009	34.13	6.42%	0.1974%	26.99	4.65%	0.1759%	34.61	5.94%	0.1422%	36.81	6.57%	0.2110%	39.68	4.28%	0.1542%
7/17/2009	32.07	3.89%	0.1919%	25.79	4.62%	0.1721%	32.67	3.58%	0.1372%	34.54	3.41%	0.2053%	38.05	4.53%	0.1510%
7/10/2009	30.87	-2.34%	0.1858%	24.65	-1.40%	0.1637%	31.54	-3.10%	0.1297%	33.40	-1.97%	0.1983%	36.40	-0.76%	0.1430%
7/3/2009	31.61	0.19%	0.1843%	25.00	-0.40%	0.1638%	32.55	-2.13%	0.1280%	34.07	-1.76%	0.1988%	36.68	-1.48%	0.1416%
6/26/2009	31.55	-0.13%	0.1840%	25.10	-0.20%	0.1635%	33.26	-0.66%	0.1284%	34.68	-0.32%	0.1983%	37.23	1.47%	0.1410%
6/19/2009	31.59	0.89%	0.1854%	25.15	-0.75%	0.1642%	33.48	-2.48%	0.1282%	34.79	-1.22%	0.1984%	36.69	2.54%	0.1434%
6/12/2009	31.31	2.42%	0.1850%	25.34	2.97%	0.1625%	34.33	2.39%	0.1259%	35.22	3.41%	0.1983%	35.78	1.91%	0.1436%
6/5/2009	30.57	5.71%	0.1846%	24.61	2.54%	0.1615%	33.53	7.88%	0.1253%	34.06	8.30%	0.1977%	35.11	5.53%	0.1432%
5/29/2009	28.92	1.62%	0.1809%	24.00	0.38%	0.1606%	31.08	4.30%	0.1206%	31.45	1.78%	0.1919%	33.27	2.91%	0.1401%
5/22/2009	28.46	-1.93%	0.1802%	23.91	-0.91%	0.1603%	29.80	-5.00%	0.1165%	30.90	-3.47%	0.1919%	32.33	3.49%	0.1373%
5/15/2009	29.02	-5.23%	0.1812%	24.13	-5.93%	0.1622%	31.37	-6.13%	0.1168%	32.01	-5.27%	0.1921%	31.24	-3.94%	0.1366%
5/8/2009	30.62	-2.52%	0.1770%	25.65	0.04%	0.1585%	33.42	-6.20%	0.1122%	33.79	3.02%	0.1888%	32.52	-2.14%	0.1352%
5/1/2009	31.41	9.98%	0.1795%	25.64	10.00%	0.1585%	35.63	3.76%	0.1191%	32.80	4.46%	0.1844%	33.23	6.34%	0.1381%
4/24/2009	28.56	5.31%	0.1754%	23.31	-0.77%	0.1546%	34.34	-4.88%	0.1195%	31.40	-4.09%	0.1856%	31.25	-3.16%	0.1351%
4/17/2009	27.12	1.57%	0.1748%	23.49	1.78%	0.1552%	36.10	-3.53%	0.1194%	32.74	-0.24%	0.1857%	32.27	-2.03%	0.1354%
4/10/2009	26.70	-2.38%	0.1788%	23.08	-0.39%	0.1603%	37.42	-4.10%	0.1226%	32.82	-2.03%	0.1908%	32.94	-1.61%	0.1420%
4/3/2009	27.35	1.71%	0.1798%	23.17	-1.91%	0.1613%	39.02	2.58%	0.1240%	33.50	0.69%	0.1921%	33.48	-1.03%	0.1429%
3/27/2009	26.89	-0.85%	0.1791%	23.62	2.21%	0.1679%	38.04	0.24%	0.1229%	33.27	1.31%	0.1942%	33.83	-2.34%	0.1451%
3/20/2009	27.12	5.85%	0.1798%	23.11	7.24%	0.1650%	37.95	2.96%	0.1230%	32.84	11.47%	0.1927%	34.64	8.56%	0.1488%
3/13/2009	25.62	3.72%	0.1761%	21.55	3.96%	0.1595%	36.86	-1.07%	0.1226%	29.46	4.32%	0.1877%	31.91	1.30%	0.1446%
3/6/2009	24.70	-10.96%	0.1666%	20.73	-5.04%	0.1500%	37.26	-5.86%	0.1261%	28.24	-10.01%	0.1777%	31.50	-10.18%	0.1425%
2/27/2009	27.74	-2.60%	0.1544%	21.83	-6.35%	0.1447%	39.58	-6.39%	0.1192%	31.38	5.87%	0.1674%	35.07	-4.36%	0.1315%
2/20/2009	28.48	-9.44%	0.1532%	23.31	-7.46%	0.1409%	42.28	-6.67%	0.1146%	29.64	-13.28%	0.1723%	36.67	-6.53%	0.1289%
2/13/2009	31.45	-6.12%	0.1423%	25.19	-2.93%	0.1322%	45.30	-1.39%	0.1063%	34.18	-5.42%	0.1563%	39.23	-3.85%	0.1204%
2/6/2009	33.50	8.66%	0.1371%	25.95	5.70%	0.1292%	45.94	1.21%	0.1049%	36.14	5.64%	0.1511%	40.80	1.77%	0.1171%
1/30/2009	30.83	0.33%	0.1297%	24.55	2.63%	0.1261%	45.39	8.93%	0.1075%	34.21	2.79%	0.1491%	40.09	4.43%	0.1141%
1/23/2009	30.73	-1.88%	0.1347%	23.92	-2.09%	0.1322%	41.67	-5.17%	0.1092%	33.28	-0.95%	0.1577%	38.39	0.31%	0.1172%
1/16/2009	31.32	-0.03%	0.1344%	24.43	2.00%	0.1321%	43.94	-0.95%	0.1080%	33.60	0.24%	0.1572%	38.27	3.88%	0.1165%
1/9/2009	31.33	-0.92%	0.1363%	23.95	-0.87%	0.1366%	44.36	-5.23%	0.1124%	33.52	-4.39%	0.1629%	36.84	-6.09%	0.1251%
1/2/2009	31.62	6.79%	0.1378%	24.16	2.50%	0.1361%	46.81	4.65%	0.1082%	35.06	2.82%	0.1600%	39.23	6.14%	0.1204%
12/26/2008	29.61	0.17%	0.1285%	23.57	1.73%	0.1331%	44.73	2.12%	0.1056%	34.10	-2.99%	0.1587%	36.96	-1.81%	0.1142%
12/19/2008	29.56	-0.67%	0.1287%	23.17	-1.28%	0.1333%	43.80	-7.40%	0.1055%	35.15	0.09%	0.1580%	37.64	1.89%	0.1136%
12/12/2008	29.76	4.79%	0.1299%	23.47	-2.45%	0.1363%	47.30	-5.08%	0.1100%	35.12	-4.12%	0.1600%	36.94	-5.84%	0.1146%
12/5/2008	28.40	-5.68%	0.1301%	24.06	-3.49%	0.1370%	49.83	-5.41%	0.1126%	36.63	-10.18%	0.1622%	39.23	-2.32%	0.1176%
11/28/2008	30.11	6.32%	0.1305%	24.93	3.75%	0.1377%	52.68	-0.15%	0.1109%	40.78	6.14%	0.1622%	40.16	3.08%	0.1176%
11/21/2008	28.32	-1.15%	0.1160%	24.03	7.66%	0.1273%	52.76	5.80%	0.1123%	38.42	-2.21%	0.1477%	38.96	8.61%	0.1115%
11/14/2008	28.65	-1.48%	0.1150%	22.32	-5.38%	0.1385%	49.87	0.50%	0.1104%	39.29	-7.40%	0.1446%	35.87	-0.66%	0.1232%
11/7/2008	29.08	-4.34%	0.1134%	23.59	-2.80%	0.1333%	49.62	-5.16%	0.1196%	42.43	-8.18%	0.1373%	36.11	-3.03%	0.1226%
10/31/2008	30.40	10.79%	0.1112%	24.27	9.77%	0.1342%	52.32	9.66%	0.1156%	46.21	5.60%	0.1328%	37.24	14.48%	0.1200%
10/24/2008	27.44	0.70%	0.0866%	22.11	2.55%	0.1122%	47.71	6.88%	0.0970%	43.76	2.80%	0.1216%	32.53	3.40%	0.0893%
10/17/2008	27.25	3.73%	0.0892%	21.56	1.84%	0.1165%	44.64	12.16%	0.1079%	42.57	9.91%	0.1251%	31.46	3.83%	0.0951%
10/10/2008	26.27	-16.07%	0.0868%	21.17	-23.35%	0.1170%	39.80	-19.24%	0.0998%	38.73	-16.26%	0.1177%	30.30	-15.55%	0.0947%
10/3/2008	31.30	-3.10%	0.0349%	27.62	0.58%	0.0400%	49.28	0.49%	0.0331%	46.25	-4.62%	0.0638%	35.88	-3.55%	0.0421%
9/26/2008	32.30	-4.38%	0.0316%	27.46	-2.28%	0.0428%	49.04	-0.37%	0.0356%	48.49	-2.49%	0.0563%	37.20	-4.00%	0.0372%
9/19/2008	33.78	2.09%	0.0295%	28.10	2.37%	0.0415%	49.22	8.10%	0.0345%	49.73	3.39%	0.0547%	38.75	6.14%	0.0348%
9/12/2008	33.09	3.60%	0.0295%	27.45	3.74%	0.0427%	45.53	5.56%	0.0376%	48.10	6.20%	0.0568%	36.51	5.09%	0.0367%
9/5/2008	31.94	-3.39%	0.0300%	26.46	-3.92%	0.0421%	43.13	-4.01%	0.0365%	45.29	-1.31%	0.0556%	34.74	-3.98%	0.0354%
8/29/2008	33.06	0.73%	0.0286%	27.54	2.57%	0.0403%	44.93	-3.25%	0.0351%	45.89	2.20%	0.0551%	36.18	0.81%	0.0340%
8/22/2008	32.82	1.20%	0.0287%	26.85	0.60%	0.0406%	46.44	1.66%	0.0348%	44.90	2.02%	0.0554%	35.89	-0.36%	0.0341%
8/15/2008	32.43	-2.14%	0.0312%	26.69	-0.04%	0.0417%	45.68	3.16%	0.0342%	44.01	4.49%	0.0562%	36.02	5.20%	0.0337%
8/8/2008	33.14	-1.07%	0.0314%	26.70	0.95%	0.0418%	44.28	4.53%	0.0330%	42.12	6.90%	0.0557%	34.24	2.18%	0.0334%
8/1/2008	33.50	-0.09%	0.0324%	26.45	2.64%	0.0418%	42.36	3.42%	0.0349%	39.40	1.86%	0.0525%	33.51	0.06%	0.0348%
7/25/2008	33.53	0.57%	0.0324%	25.77	1.02%	0.0427%	40.96	7.45%	0.0346%	38.68	0.47%	0.0520%	33.49	4.53%	0.0344%
7/18/2008	33.34	-1.36%	0.0376%	25.51	-4.39%	0.0467%	38.12	-4.99%	0.0436%	38.50	-4.66%	0.0579%	32.04	-4.50%	0.0417%
7/11/2008	33.80	3.30%	0.0383%	26.68	-1.95%	0.0487%	40.12	-0.17%	0.0463%	40.38	-4.04%	0.0597%	33.55	4.75%	0.0438%
7/4/2008	32.72	-3.59%	0.0399%	27.21	1.53%	0.0487%	40.19	-1.16%	0.0469%	42.08	-0.36%	0.0583%	32.03	-0.34%	0.0454%
6/27/2008	33.94	-1.02%	0.0398%	26.80	-1.47%	0.0494%	40.66	0.25%	0.0467%	42.23	-0.49%	0.0582%	32.14	-4.80%	0.0456%
6/20/2008	34.29	0.18%	0.0398%	27.20	2.91%	0.0487%	40.56	2.50%	0.0467%	42.44	-0.84%	0.0579%	33.76	1.53%	0.0431%
6/13/2008	34.23	-4.63%	0.0403%	26.43	-2.33%	0.0512%	39.57	-1.00%	0.0495%	42.80	2.47%	0.0589%	33.25	-0.63%	0.0458%

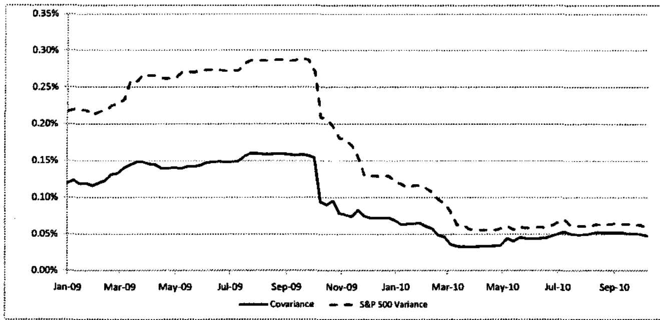
Beta Analysis

Price	NWN Weekly Return	Covar.	Price	PNY Weekly Return	Covar.	Price	SJI Weekly Return	Covar.	Price	WGL Weekly Return	Covar.	Price	SPX Weekly Return	Variance
49.61	3.51%	0.0597%	29.38	-0.03%	0.0445%	50.57	1.18%	0.0487%	38.12	0.03%	0.0393%	1165.15	1.65%	0.0590%
47.93	1.91%	0.0615%	29.39	2.80%	0.0454%	49.98	3.29%	0.0503%	38.11	1.98%	0.0402%	1146.24	-0.21%	0.0622%
47.03	1.71%	0.0627%	28.59	1.42%	0.0466%	48.39	1.96%	0.0504%	37.37	3.58%	0.0410%	1148.67	2.05%	0.0630%
46.24	0.02%	0.0630%	28.19	1.70%	0.0475%	47.46	0.34%	0.0504%	36.08	-0.66%	0.0408%	1125.59	1.45%	0.0634%
46.23	-1.03%	0.0642%	27.72	-1.28%	0.0494%	47.30	-1.36%	0.0520%	36.32	-1.12%	0.0428%	1109.55	0.46%	0.0641%
46.71	2.01%	0.0637%	28.08	0.11%	0.0478%	47.95	1.20%	0.0518%	36.73	1.97%	0.0421%	1104.51	3.75%	0.0652%
45.79	2.90%	0.0631%	28.05	5.53%	0.0489%	47.38	4.27%	0.0531%	36.02	1.72%	0.0414%	1064.59	-0.66%	0.0631%
44.50	-2.90%	0.0635%	26.58	-1.95%	0.0495%	45.44	-1.60%	0.0536%	35.41	-0.53%	0.0417%	1071.69	-0.70%	0.0630%
45.83	-3.15%	0.0636%	27.11	-2.27%	0.0511%	46.18	-2.41%	0.0536%	35.60	-2.33%	0.0421%	1079.25	-3.78%	0.0636%
47.32	-0.19%	0.0609%	27.74	4.21%	0.0490%	47.32	1.28%	0.0517%	36.45	1.03%	0.0402%	1121.64	1.82%	0.0607%
47.41	0.87%	0.0592%	26.62	0.08%	0.0471%	46.72	-0.02%	0.0501%	36.08	-0.47%	0.0402%	1101.60	-0.10%	0.0611%
47.00	6.89%	0.0591%	26.60	5.06%	0.0469%	46.73	5.84%	0.0500%	36.25	4.02%	0.0401%	1102.66	3.55%	0.0611%
43.97	-2.83%	0.0581%	25.32	-2.65%	0.0480%	44.15	-2.65%	0.0494%	34.85	-0.77%	0.0416%	1064.88	-1.21%	0.0619%
45.25	4.55%	0.0562%	26.01	3.42%	0.0506%	45.35	6.46%	0.0521%	35.12	4.34%	0.0446%	1077.96	5.42%	0.0609%
43.28	-2.13%	0.0545%	25.15	-2.48%	0.0497%	42.60	-2.70%	0.0482%	33.66	-1.43%	0.0421%	1022.58	-5.03%	0.0660%
44.22	-4.12%	0.0528%	25.79	-4.59%	0.0475%	43.78	-3.84%	0.0439%	34.15	-3.09%	0.0414%	1076.76	-3.65%	0.0619%
46.12	4.23%	0.0498%	27.03	4.85%	0.0440%	45.53	5.61%	0.0404%	35.24	4.14%	0.0387%	1117.51	2.37%	0.0589%
44.25	3.00%	0.0480%	25.78	3.08%	0.0444%	43.11	0.94%	0.0397%	33.84	2.36%	0.0376%	1091.60	2.51%	0.0599%
42.96	-2.30%	0.0476%	25.01	-1.57%	0.0436%	42.71	-2.69%	0.0395%	33.06	-2.33%	0.0368%	1064.88	-2.25%	0.0589%
43.97	0.64%	0.0491%	25.41	0.24%	0.0444%	43.89	0.00%	0.0389%	33.85	-0.50%	0.0374%	1089.41	0.16%	0.0584%
43.69	-6.57%	0.0529%	25.35	-6.28%	0.0467%	43.89	-2.36%	0.0388%	34.02	-5.60%	0.0391%	1087.69	-4.23%	0.0604%
46.76	7.49%	0.0468%	27.05	3.05%	0.0407%	44.95	7.66%	0.0362%	36.04	4.65%	0.0337%	1135.68	2.23%	0.0582%
43.50	-8.21%	0.0484%	26.25	-4.55%	0.0470%	41.75	-7.45%	0.0360%	34.44	-3.64%	0.0385%	1110.88	-6.39%	0.0612%
47.39	-3.33%	0.0402%	27.50	-3.17%	0.0380%	45.11	-0.20%	0.0251%	35.74	-0.72%	0.0305%	1186.69	-2.51%	0.0577%
49.02	3.42%	0.0383%	28.40	3.16%	0.0358%	45.20	6.73%	0.0248%	36.00	3.06%	0.0300%	1217.28	2.11%	0.0559%
47.40	1.11%	0.0381%	27.53	-0.33%	0.0358%	42.35	-1.28%	0.0234%	34.93	-0.74%	0.0298%	1192.13	-0.19%	0.0557%
46.88	-0.21%	0.0379%	27.62	0.29%	0.0355%	42.90	1.59%	0.0230%	35.19	0.95%	0.0297%	1194.37	1.38%	0.0557%
46.98	1.21%	0.0377%	27.54	1.51%	0.0353%	42.23	2.28%	0.0223%	34.86	1.04%	0.0293%	1178.10	0.99%	0.0558%
46.42	-0.79%	0.0373%	27.13	-3.18%	0.0346%	41.29	-1.83%	0.0231%	34.50	0.17%	0.0271%	1166.59	0.58%	0.0570%
46.79	0.80%	0.0366%	28.02	2.64%	0.0335%	42.06	2.86%	0.0221%	34.44	2.29%	0.0296%	1159.90	0.86%	0.0626%
46.42	-0.19%	0.0379%	27.30	2.09%	0.0358%	40.89	0.27%	0.0229%	33.67	-0.03%	0.0303%	1149.99	0.99%	0.0627%
46.51	5.73%	0.0413%	26.74	3.52%	0.0352%	40.78	2.28%	0.0215%	33.68	2.53%	0.0366%	1138.70	3.10%	0.0811%
43.99	-0.54%	0.0463%	25.83	2.09%	0.0436%	39.87	0.05%	0.0329%	32.85	-0.88%	0.0386%	1104.49	-0.42%	0.0924%
44.23	4.93%	0.0486%	25.30	2.72%	0.0469%	39.85	3.86%	0.0328%	33.14	4.38%	0.0435%	1109.17	3.13%	0.0976%
42.15	-0.19%	0.0529%	24.63	-0.24%	0.0525%	38.37	0.76%	0.0385%	31.75	0.38%	0.0482%	1075.51	0.87%	0.1073%
42.23	-2.63%	0.0560%	24.69	-3.82%	0.0569%	38.08	-0.65%	0.0393%	31.63	-0.32%	0.0527%	1066.19	-0.72%	0.1127%
43.37	-1.09%	0.0603%	25.67	-1.31%	0.0606%	38.33	0.42%	0.0411%	31.73	-1.24%	0.0609%	1073.87	-1.64%	0.1166%
43.85	-0.39%	0.0592%	26.01	-1.33%	0.0595%	38.17	-1.01%	0.0408%	32.13	-1.08%	0.0600%	1091.78	-3.90%	0.1160%
44.02	-1.70%	0.0604%	26.36	0.73%	0.0621%	38.56	1.06%	0.0405%	32.48	0.00%	0.0603%	1136.03	-0.78%	0.1135%
44.78	-0.58%	0.0558%	26.17	-2.17%	0.0636%	37.82	-0.94%	0.0420%	32.48	-3.16%	0.0556%	1144.98	2.68%	0.1182%
45.04	-1.66%	0.0609%	26.75	-1.98%	0.0754%	38.18	-1.47%	0.0465%	33.54	-1.93%	0.0624%	1115.10	-1.01%	0.1219%
45.80	2.23%	0.0600%	27.29	4.60%	0.0750%	38.75	1.87%	0.0505%	34.20	1.48%	0.0677%	1126.48	2.18%	0.1291%
44.80	-0.09%	0.0603%	26.09	3.24%	0.0725%	38.04	1.04%	0.0556%	33.70	1.29%	0.0676%	1102.47	-0.36%	0.1295%
44.84	2.49%	0.0603%	25.27	3.31%	0.0731%	37.65	1.89%	0.0560%	33.27	4.43%	0.0676%	1106.41	0.04%	0.1294%
43.75	2.24%	0.0606%	24.46	3.56%	0.0735%	36.95	3.21%	0.0502%	31.86	1.27%	0.0661%	1105.98	1.33%	0.1293%
42.79	-0.07%	0.0646%	23.62	2.65%	0.0751%	35.80	0.22%	0.0588%	31.46	0.41%	0.0715%	1091.49	0.01%	0.1306%
42.82	-0.09%	0.0658%	23.01	0.66%	0.0855%	35.72	3.03%	0.0685%	31.33	-1.76%	0.0758%	1091.38	-0.19%	0.1559%
42.86	-0.53%	0.0557%	22.86	-0.35%	0.0834%	34.67	-2.01%	0.0595%	31.89	-4.03%	0.0550%	1093.48	2.26%	0.1713%
43.09	3.06%	0.0601%	22.94	-1.46%	0.0833%	35.38	0.26%	0.0557%	33.23	0.51%	0.0544%	1069.30	3.20%	0.1791%
41.81	-2.61%	0.0613%	23.28	-1.85%	0.0851%	35.29	-1.78%	0.0554%	33.06	-3.47%	0.0569%	1036.19	-4.02%	0.1808%
43.02	-0.85%	0.0779%	23.72	-1.94%	0.1013%	35.93	-2.66%	0.0681%	34.25	1.03%	0.0760%	1079.60	-0.74%	0.1969%
43.39	2.26%	0.0701%	24.19	1.94%	0.0998%	36.91	1.91%	0.0649%	33.90	2.06%	0.0656%	1087.68	1.51%	0.2066%
42.43	3.64%	0.0699%	23.73	1.50%	0.1071%	36.22	2.75%	0.0661%	33.21	1.31%	0.0708%	1071.49	4.51%	0.2098%
40.94	-2.31%	0.1175%	23.38	-1.93%	0.1587%	35.25	0.95%	0.1168%	32.78	-1.47%	0.1551%	1025.21	-1.84%	0.2715%
41.91	-1.57%	0.1186%	23.84	-2.49%	0.1552%	34.92	-0.51%	0.1232%	33.27	-2.06%	0.1591%	1044.38	-2.24%	0.2875%
42.58	2.90%	0.1201%	24.45	5.34%	0.1558%	35.10	3.94%	0.1249%	33.97	4.23%	0.1615%	1068.30	2.45%	0.2887%
41.38	-1.10%	0.1192%	23.21	-3.37%	0.1539%	33.77	0.06%	0.1235%	32.59	-1.54%	0.1597%	1042.73	2.59%	0.2874%
41.84	-2.40%	0.1207%	24.02	-3.34%	0.1570%	33.75	-5.78%	0.1240%	33.10	-2.07%	0.1619%	1016.40	-1.22%	0.2860%
42.87	-2.06%	0.1216%	24.85	-2.93%	0.1580%	35.82	0.53%	0.1248%	33.80	-0.29%	0.1626%	1028.93	0.27%	0.2875%
43.77	1.67%	0.1216%	25.60	4.92%	0.1583%	35.63	1.22%	0.1246%	33.90	1.47%	0.1628%	1026.13	2.20%	0.2875%
43.05	0.82%	0.1208%	24.40	0.78%	0.1558%	35.20	-1.79%	0.1240%	33.41	-0.03%	0.1622%	1004.09	-0.63%	0.2862%
42.70	-4.35%	0.1214%	24.21	-1.67%	0.1562%	35.84	-2.82%	0.1240%	33.42	0.91%	0.1622%	1010.48	2.33%	0.2863%
44.64	-1.48%	0.1236%	24.62	-1.48%	0.1589%	36.88	-0.11%	0.1230%	33.12	-0.72%	0.1577%	987.48	0.84%	0.2869%
45.31	4.59%	0.1236%	24.99	5.89%	0.1594%	36.92	4.23%	0.1227%	33.36	5.50%	0.1581%	979.26	4.13%	0.2867%
43.32	0.88%	0.1198%	23.60	3.10%	0.1545%	35.42	3.45%	0.1191%	31.62	2.86%	0.1534%	940.38	6.97%	0.2828%
42.94	-1.36%	0.1164%	22.89	-4.31%	0.1473%	34.24	-3.82%	0.1124%	30.74	-3.21%	0.1478%	879.13	-1.93%	0.2730%
43.53	-0.98%	0.1154%	23.92	-0.79%	0.1452%	35.60	2.62%	0.1103%	31.76	-1.46%	0.1467%	896.42	-2.45%	0.2730%
43.96	-1.90%	0.1151%	24.11	-1.59%	0.1449%	34.69	1.26%	0.1113%	32.23	1.16%	0.1463%	918.90	-0.25%	0.2724%
44.81	-1.21%	0.1166%	24.50	-3.69%	0.1476%	34.26	-1.66%	0.1132%	31.86	-0.53%	0.1465%	921.23	-2.64%	0.2735%
45.36	0.04%	0.1149%	25.44	7.21%	0.1442%	34.84	1.37%	0.1121%	32.03	2.50%	0.1465%	946.21	0.65%	0.2739%
45.34	6.83%	0.1150%	23.73	4.72%	0.1420%	34.37	2.97%	0.1117%	31.25	5.15%	0.1459%	940.09	2.28%	0.2737%
42.44	6.37%	0.1110%	22.66	3.90%	0.1386%	33.38	0.54%	0.1100%	29.72	3.09%	0.1426%	919.14	3.62%	0.2730%
39.90	-3.39%	0.1058%	21.81	-2.37%	0.1358%	33.20	-3.63%	0.1096%	28.83	0.03%	0.1402%	887.00	0.47%	0.2706%
41.30	-3.77%	0.1055%	22.34	-6.66%	0.1364%	34.45	-1.74%	0.1109%	28.82	-5.66%	0.1403%	882.88	-4.99%	0.2718%
42.92	2.98%	0.1036%	23.94	-2.37%	0.1320%	35.06	0.00%	0.1118%	30.55	-2.46%	0.1374%	929.23	5.89%	0.2704%
41.68	2.81%	0.1006%	24.52	-0.16%	0.1350%	35.06	1.98%	0.1117%	31.32	1.66%	0.1408%	877.52	1.30%	0.2623%
40.54	-3.01%	0.1005%	24.56	-3.46%	0.1345%	34.38	-1.12%	0.1111%	30.81	-2.35%	0.1414%	866.23	-0.39%	0.2622%
41.80	-1.90%	0.0999%	25.44	-1.09%	0.1342%	34.77	-0.49%	0.1110%	31.55	0.64%	0.1411%	869.60	1.52%	0.2625%
42.61	-1.34%	0.1055%	25.72	-0.43%	0.1367%	34.94	-2.48%	0.1144%	31.35	-1.57%	0.1469%	856.56	1.67%	0.2664%
43.19	-0.32%	0.1058%	25.83	-1.26%	0.1392%	35.83	2.11%	0.1156%	31.85	-4.04%	0.1484%	842.50	3.26%	0.2661%
43.33	-0.53%	0.1079%	26.16	-0.72%	0.1429%	35.09	-0.48%	0.1175%	33.19	2.50%	0.1540%	815.94	6.17%	0.2677%
43.56	9.01%	0.1088%	26.35	16.08%	0.1442%	35.26	6.20%	0.1182%	32.38	4.72%	0.1510%	768.54	1.58%	0.2582%
39.96	2.17%	0.1057%	22.70	0.09%	0.1373%	33.20	-0.33%	0.1176%	30.92	3.62%	0.1485%	756.55	10.71%	0.2603%
39.11	-4.49%	0.1008%	22.68	-8.05%	0.1377%	33.31	-7.63%	0.1190%	29.84	-1.71%	0.1411%	683.38	-7.03%	0.2340%
40.95	-2.20%	0.0957%	24.14	-2.70%	0.1310%	36.06	0.25%	0.1117%	30.36	-4.80%	0.1395%	735.09	-4.54%	0.2278%
41.87	-4.56%	0.0951%	24.81	-4.69%	0.1292%	35.97	-4.99%	0.1122%	31.89	-4.69%	0.1367%	770.05	-6.87%	0.2254%
43.87	-3.09%	0.0894%	26.03	-4.41%	0.1235%	37.86	-0.79%	0.1061%	33.46	-4.51%	0.1311%	826.84	-4.81%	0.2188%
45.27	5.43%	0.0857%	27.23	5.09%	0.1200%	38.16	2.31%	0.1057%	35.04	9.16%	0.1276%	868.60	5.17%	0.2166%
42.94	2.34%	0.0789%	25.91	2.37%	0.1160%	37.30	2.05%	0.1046%	32.10	1.33%	0.1178%	825.88	-0.73%	0.2125%
41.96	-2.98%	0.0773%	25.31	-7.15%	0.1202%	36.55	-1.22%	0.1071%	31.68	-2.25%	0.1104%	831.95	-2.14%	0.2187%
43.25	4.34%	0.0763%	27.26	-1.41%	0.1177%	37.00	-0.94%	0.1060%	32.41	4.82%	0.1182%	850.12	-4.52%	0.2186%
41.45	-4.91%	0.0825%	27.65	-11.60%	0.1205%	37.35	-6.48%	0.1079%	30.92	-5.65%	0.1253%	890.35	-4.45%	0.2201%
43.59	-0.21%	0.0790%	31.28	-0.10%	0.1119%	39.94	7.02%	0.1031%	32.77	5.03%	0.1211%	931.80	6.76%	0.2174%
43.68	-2.28%	0.0822%	31.31	1.99%	0.1161%	37.32	0.95%	0.0942%	31.20	-0.41%	0.1162%	872.80	-1.70%	0.2091%
44.70	-0.11%	0.0819%	30.70	-0.55%	0.1160%	36.97	3.15%	0.0941%	31.33	-1.45%	0.1159%	887.88	0.93%	0.2090%
44.75	-1.97%	0.0840%	30.87	-3.47%	0.1182%	35.84	-2.37%	0.0954%	31.79	-5.33%	0.1166%	879.73	0.42%	0.2092%
45.65	-8.61%	0.0852%	31.98	-4.82%	0.1200%	36.71	-5.87%	0.0970%	33.58	-6.98%	0.1212%	876.07	-2.25%	0.2093%
49.95	0.28%	0.0833%	33.60	4.02%	0.1196%	39.00	4.33%	0.0949%	36.10	1.75%	0.1199%	896.24	12.03%	0.2101%
49.81	5.69%	0.0806%	32.30	0.78%	0.1113%	37.38	5.47%	0.0821%	35.48	11.85%	0.1157%	800.03	-8.39%	0.1805%
47.13	-3.52%	0.0887%	32.05	-0.56%	0.1117%	35.44	3.63%	0.0899%	31.72	1.76%	0.1324%	873.29	-6.20%	0.1699%
48.85	-3.99%	0.0856%	32.23	-2.10%	0.1105%	34.20	0.38%	0.0945%	31.17	-3.17%	0.1343%	930.99	-3.90%	0.1646%
50.88	9.49%	0.0816%	32.92	8.43%	0.1085%	34.07	7.61%	0.0947%	32.19	11.69%	0.1326%	968.75	10.49%	0.1644%
46.47	5.49%	0.0609%	30.36	0.43%	0.0916%	31.66	2.19%	0.0780%	28.82	8.02%	0.1072%	876.77	-6.78%	0.1397%
44.05	0.43%	0.0690%	30.23	9.33%	0.0945%	30.98	2.24%	0.0860%	26.68	7.41%	0.1182%	940.55	4.60%	0.1350%
43.86	-14.47%	0.0710%	27.65	-15.37%	0.0892%	30.30	-14.67%	0.0878%	24.84	-23.59%	0.1129%	899.22	-18.20%	0.1310%
51.28	-1.37%	0.0220%	32.67	1.24%	0.0364%	35.51	-3.37%	0.0396%	32.51	-2.37%	0.0353%	1099.23	-9.38%	0.0730%
51.99	-3.54%	0.0212%	32.27	-2.92%	0.0403%	36.75	-3.21%	0.0369%	33.30	-5.24%	0.0319%	1213.01	-3.35%	0.0592%
53.90	7.71%	0.0187%	33.24	10.25%	0.0382%	37.97	6.96%	0.0346%	35.14	3.87%	0.0289%	1255.08	0.27%	0.0575%
50.04	5.26%	0.0205%	30.15	7.68%	0.0379%	35.50	2.81%	0.0387%	33.83	6.92%	0.0305%	1251.70	0.76%	0.0593%
47.54	-2.44%	0.0198%	28.00	-2.95%	0.0346%	34.53	-3.20%	0.0392%	31.64	-1.74%	0.0301%	1242.31	-3.16%	0.0602%
48.73	1.31%	0.0192%	28.85	0.42%	0.0333%	35.67	1.16%	0.0384%	32.20	-1.50%	0.0298%	1282.83	-0.73%	0.0589%
48.10	0.54%	0.0194%	28.73	1.20%	0.0334%	35.26	1.29%	0.0385%	32.69	0.71%	0.0297%	1292.20	-0.46%	0.0588%
47.84	6.15%	0.0192%	28.39	3.80%	0.0332%	34.81	0.55%	0.0407%	32.46	0.15%	0.0297%	1298.20	0.15%	0.0600%
45.07	-0.07%	0.0188%	27.35	2.97%	0.0329%	34.62	-3.99%	0.0410%	32.41	-6.52%	0.0296%	1296.32	2.86%	0.0600%
45.10	-3.01%	0.0232%	26.56	2.00%	0.0355%	36.06	-3.17%	0.0465%	34.67	2.15%	0.0366%	1260.31	0.20%	0.0587%
46.50	5.32%	0.0231%	26.04	3.99%	0.0356%	37.24	1.17%	0.0475%	33.94	1.50%	0.0363%	1257.76	-0.23%	0.0592%
44.15	-5.22%	0.0299%	25.04	-6.39%	0.0399%	36.81	-4.07%	0.0536%	33.44	-3.58%	0.0438%	1260.68	1.71%	0.0632%
46.58	2.42%	0.0324%	26.75	3.76%	0.0429%	38.37	4.04%	0.0559%	34.68	1.05%	0.0456%	1239.49	-1.85%	0.0625%
45.48	-0.92%	0.0335%	25.78	0.04%	0.0446%	36.88	-0.30%	0.0574%	34.32	-0.81%	0.0466%	1262.90	-1.21%	0.0627%
45.90	-2.94%	0.0327%	25.77	-5.57%	0.0447%	36.99	-4.25%	0.0579%	34.60	-0.55%	0.0462%	1278.38	-3.00%	0.0634%
47.29	2.49%	0.0311%	27.29	3.96%	0.0416%	38.63	0.99%	0.0556%	34.79	-0.54%	0.0450%	1317.93	-3.10%	0.0620%
46.14	0.65%	0.0341%	26.25	-4.37%	0.0463%	38.25	0.21%	0.0569%	34.98	-0.37%	0.0473%	1360.03	-0.05%	0.0610%

Beta Analysis

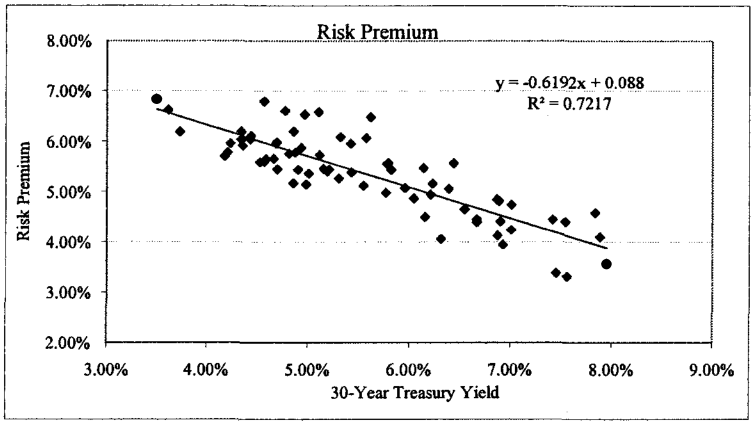
Average Proxy Group

Covariance	Raw Beta	Adj. Beta
0.0481%	0.814	0.876
0.0499%	0.802	0.868
0.0508%	0.806	0.871
0.0509%	0.803	0.869
0.0524%	0.818	0.879
0.0522%	0.800	0.867
0.0521%	0.826	0.884
0.0525%	0.833	0.889
0.0530%	0.833	0.888
0.0506%	0.833	0.889
0.0495%	0.810	0.874
0.0493%	0.807	0.871
0.0503%	0.812	0.874
0.0536%	0.767	0.844
0.0502%	0.760	0.840
0.0477%	0.771	0.847
0.0452%	0.766	0.844
0.0442%	0.738	0.825
0.0434%	0.736	0.824
0.0442%	0.756	0.837
0.0457%	0.756	0.837
0.0403%	0.718	0.812
0.0442%	0.722	0.814
0.0347%	0.602	0.735
0.0341%	0.610	0.740
0.0338%	0.607	0.738
0.0336%	0.602	0.735
0.0331%	0.593	0.729
0.0328%	0.575	0.717
0.0326%	0.521	0.680
0.0337%	0.537	0.692
0.0366%	0.452	0.634
0.0465%	0.503	0.669
0.0493%	0.505	0.670
0.0577%	0.537	0.692
0.0613%	0.544	0.696
0.0653%	0.560	0.707
0.0643%	0.554	0.703
0.0642%	0.565	0.710
0.0630%	0.533	0.689
0.0688%	0.564	0.710
0.0727%	0.563	0.709
0.0721%	0.557	0.705
0.0722%	0.558	0.705
0.0725%	0.561	0.707
0.0751%	0.575	0.716
0.0827%	0.531	0.687
0.0744%	0.435	0.623
0.0767%	0.428	0.619
0.0787%	0.435	0.623
0.0955%	0.485	0.657
0.0904%	0.437	0.625
0.0945%	0.450	0.634
0.1549%	0.571	0.714
0.1574%	0.547	0.698
0.1587%	0.550	0.700
0.1575%	0.548	0.699
0.1586%	0.554	0.703
0.1598%	0.556	0.704
0.1599%	0.556	0.704
0.1588%	0.555	0.703
0.1590%	0.555	0.704
0.1601%	0.558	0.705
0.1605%	0.560	0.707
0.1560%	0.552	0.701
0.1494%	0.547	0.698
0.1483%	0.543	0.696
0.1482%	0.544	0.696
0.1493%	0.546	0.697
0.1482%	0.541	0.694
0.1474%	0.539	0.692
0.1440%	0.528	0.685
0.1420%	0.525	0.683
0.1424%	0.524	0.683
0.1396%	0.516	0.677
0.1408%	0.537	0.691
0.1397%	0.533	0.689
0.1396%	0.532	0.688
0.1444%	0.542	0.695
0.1455%	0.547	0.698
0.1479%	0.553	0.702
0.1479%	0.573	0.715
0.1444%	0.555	0.703
0.1402%	0.599	0.733
0.1328%	0.583	0.722
0.1314%	0.583	0.722
0.1231%	0.563	0.708
0.1198%	0.553	0.702
0.1160%	0.546	0.697
0.1194%	0.546	0.697
0.1185%	0.542	0.695
0.1235%	0.561	0.707
0.1197%	0.551	0.700
0.1165%	0.557	0.705
0.1163%	0.557	0.704
0.1186%	0.567	0.711
0.1203%	0.575	0.717
0.1196%	0.569	0.713
0.1116%	0.618	0.746
0.1182%	0.695	0.797
0.1168%	0.709	0.806
0.1146%	0.697	0.798
0.0938%	0.672	0.781
0.1002%	0.742	0.828
0.0974%	0.744	0.829
0.0386%	0.528	0.685
0.0371%	0.627	0.751
0.0350%	0.609	0.739
0.0368%	0.620	0.746
0.0359%	0.596	0.731
0.0349%	0.592	0.728
0.0349%	0.594	0.729
0.0355%	0.592	0.728
0.0354%	0.590	0.726
0.0376%	0.640	0.760
0.0376%	0.636	0.758
0.0439%	0.694	0.796
0.0460%	0.735	0.824
0.0468%	0.747	0.831
0.0468%	0.738	0.825
0.0456%	0.735	0.824
0.0478%	0.784	0.856



BOND YIELD PLUS RISK PREMIUM ANALYSIS

	[1]	[2]	[3]
Quarter	Average Authorized Gas ROE	U.S. Govt. 30-year Treasury	Risk Premium
1992.1	12.42%	7.84%	4.58%
1992.2	11.98%	7.88%	4.10%
1992.3	11.87%	7.42%	4.45%
1992.4	11.94%	7.54%	4.40%
1993.1	11.75%	7.01%	4.74%
1993.2	11.71%	6.86%	4.85%
1993.3	11.39%	6.23%	5.16%
1993.4	11.16%	6.21%	4.95%
1994.1	11.12%	6.66%	4.46%
1994.2	10.84%	7.45%	3.39%
1994.3	10.87%	7.55%	3.31%
1994.4	11.53%	7.95%	3.58%
1995.2	11.00%	6.87%	4.13%
1995.3	11.07%	6.66%	4.40%
1995.4	11.61%	6.14%	5.47%
1996.1	11.45%	6.39%	5.06%
1996.2	10.88%	6.92%	3.95%
1996.3	11.25%	7.00%	4.25%
1996.4	11.19%	6.54%	4.65%
1997.1	11.31%	6.90%	4.41%
1997.2	11.70%	6.88%	4.82%
1997.3	12.00%	6.44%	5.56%
1997.4	10.92%	6.04%	4.87%
1998.2	11.37%	5.79%	5.57%
1998.3	11.41%	5.32%	6.09%
1998.4	11.69%	5.11%	6.59%
1999.1	10.82%	5.43%	5.39%
1999.2	11.25%	5.82%	5.43%
1999.4	10.38%	6.31%	4.06%
2000.1	10.66%	6.15%	4.50%
2000.2	11.03%	5.95%	5.08%
2000.3	11.33%	5.78%	5.56%
2000.4	12.10%	5.62%	6.48%
2001.1	11.38%	5.42%	5.96%
2001.2	10.75%	5.77%	4.98%
2001.4	10.65%	5.21%	5.44%
2002.1	10.67%	5.55%	5.12%
2002.2	11.64%	5.57%	6.07%
2002.3	11.50%	4.96%	6.54%
2002.4	10.81%	4.93%	5.88%
2003.1	11.38%	4.78%	6.61%
2003.2	11.36%	4.57%	6.80%
2003.3	10.61%	5.15%	5.46%
2003.4	10.84%	5.11%	5.73%
2004.1	11.06%	4.86%	6.20%
2004.2	10.57%	5.31%	5.27%
2004.3	10.37%	5.01%	5.36%
2004.4	10.66%	4.87%	5.79%
2005.1	10.65%	4.69%	5.96%
2005.2	10.54%	4.34%	6.19%
2005.3	10.47%	4.43%	6.04%
2005.4	10.32%	4.66%	5.66%
2006.1	10.68%	4.69%	5.99%
2006.2	10.60%	5.19%	5.41%
2006.3	10.34%	4.90%	5.44%
2006.4	10.14%	4.70%	5.45%
2007.1	10.57%	4.81%	5.76%
2007.2	10.13%	4.98%	5.14%
2007.3	10.03%	4.85%	5.17%
2007.4	10.12%	4.53%	5.59%
2008.1	10.38%	4.34%	6.04%
2008.2	10.17%	4.57%	5.60%
2008.3	10.55%	4.44%	6.12%
2008.4	10.34%	3.49%	6.85%
2009.1	10.24%	3.62%	6.63%
2009.2	10.19%	4.23%	5.96%
2009.3	9.88%	4.18%	5.70%
2009.4	10.27%	4.35%	5.92%
2010.1	10.24%	4.59%	5.65%
2010.2	9.99%	4.20%	5.78%
2010.3	9.93%	3.73%	6.20%
AVERAGE	10.96%	5.63%	5.33%
	10.87%	5.42%	5.44%



SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.849541739
R Square	0.721721167
Adjusted R Square	0.71768814
Standard Error	0.004345461
Observations	71

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.00337917	0.00337917	178.952743	7.65588E-21
Residual	69	0.001302929	1.8883E-05		
Total	70	0.004682099			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*ower 95.0%*	*Jpper 95.0%*
Intercept	0.088037664	0.002634062	33.42277311	2.38187E-44	0.082782853	0.093292	0.082783	0.093292
U.S. Govt. 30-year Treasury	-0.619206367	0.046287767	-13.37732197	7.65588E-21	-0.711547936	-0.52686	-0.71155	-0.52686

	[4] U.S. Govt. 30-year Treasury	[5] Risk Premium	[6] Authorized ROE
30-Day Average of 30-year Treasury	3.75%	6.48%	10.23%
Blue Chip Consensus Forecast (2010Q4 - 2012Q	4.22%	6.19%	10.41%
Blue Chip Consensus Forecast (2012 - 2021)	5.80%	5.21%	11.01%
MEAN		5.96%	10.55%

Notes

[1] Source: Regulatory Research Associates, *Rate Case Statistics*, accessed September 27, 2010.
[2] Source: Bloomberg Professional Service. Quarterly bond yields are the average of the last trading day of each month in the quarter.
[3] Equals column [1] – column [2]
[4] Source: Bloomberg Professional Service and Blue Chip Financial Forecast
[5] Dependent Variable = Risk Premium; Independent variable = U.S. Govt. 30-year Treasury
[6] Equals column [4] + column [5]

ANALYSIS OF REGULATORY LAG

State	Company	Case Identification	Increase Requested	Order Date	Lag (months)
Arizona	Southwest Gas Corp.	D-G-01551A-07-0504	8/31/2007	12/24/2008	16
Arizona	Southwest Gas Corp.	D-G-01551A-04-0876	12/9/2004	2/23/2006	14
Arizona	Southwest Gas Corp.	D-G-01551A-00-0309	5/5/2000	10/24/2001	17
Mean					16
District of Columbia	Washington Gas Light Co.	FC-1054	12/21/2006	12/28/2007	12
District of Columbia	Washington Gas Light Co.	FC-1016	2/7/2003	11/10/2003	9
District of Columbia	Washington Gas Light Co.	FC-989	6/19/2001	10/30/2002	16
Florida	Pivotal Utility Holdings Inc.	D-030569-GU	8/15/2003	2/9/2004	5
Florida	Pivotal Utility Holdings Inc.	D-000768-GU	8/25/2000	2/5/2001	5
Georgia	Atlanta Gas Light Co.	D-18638-U	5/25/2004	6/10/2005	12
Georgia	Atlanta Gas Light Co.	D-14311-U	8/24/2001	4/29/2002	8
Georgia	Atmos Energy Corp.	D-30442	10/1/2009	3/31/2010	6
Georgia	Atmos Energy Corp.	D-27163-U	3/20/2008	9/19/2008	6
Georgia	Atmos Energy Corp.	D-20298-U	5/20/2005	12/20/2005	7
Kansas	Atmos Energy Corp.	D-10-ATMG-495-RTS	1/29/2010	7/30/2010	6
Kansas	Atmos Energy Corp.	D-08-ATMG-280-RTS	9/14/2007	4/23/2008	7
Kansas	Atmos Energy Corp.	D-03-ATMG-1036-RTS	6/15/2003	1/5/2004	6
Kentucky	Atmos Energy Corp.	C-2009-00354	10/29/2009	5/28/2010	7
Kentucky	Atmos Energy Corp.	C-2006-00464	12/28/2006	7/31/2007	7
Maryland	Washington Gas Light Co.	C-9104	4/20/2007	11/15/2007	6
Maryland	Washington Gas Light Co.	C-8959	3/13/2003	10/31/2003	7
Maryland	Washington Gas Light Co.	C-8920	3/28/2002	9/27/2002	6
Missouri	Atmos Energy Corp.	C-GR-2010-0192	12/28/2009	8/18/2010	7
Missouri	Laclede Gas Co.	C-GR-2010-0171	12/4/2009	8/18/2010	8
Missouri	Laclede Gas Co.	C-GR-2007-0208	12/1/2006	7/19/2007	7
Missouri	Laclede Gas Co.	C-GR-2005-0284	2/18/2005	9/30/2005	7
Missouri	Laclede Gas Co.	C-GR-2002-356	1/25/2002	10/3/2002	8
Missouri	Laclede Gas Co.	C-GR-2001-629	5/18/2001	11/29/2001	6
North Carolina	Piedmont Natural Gas Co.	D-G-9, Sub 550	3/31/2008	10/24/2008	6
North Carolina	Piedmont Natural Gas Co.	D-G-9,SUB499	4/1/2005	11/3/2005	7
North Carolina	Piedmont Natural Gas Co.	D-G-9,SUB461	3/28/2002	10/28/2002	7
New Jersey	New Jersey Natural Gas Co.	D-GR-07110889	11/20/2007	10/3/2008	10
New Jersey	Pivotal Utility Holdings Inc.	D-GR-09030195	3/10/2009	12/17/2009	9
New Jersey	Pivotal Utility Holdings Inc.	D-GR-02040245	4/16/2002	11/20/2002	7
New Jersey	South Jersey Gas Co.	D-GR-10010035	1/15/2010	9/16/2010	8
New Jersey	South Jersey Gas Co.	D-GR-03080683	8/29/2003	7/8/2004	10
Oregon	Northwest Natural Gas Co.	D-UG-152	11/29/2002	8/22/2003	8
South Carolina	South Carolina Electric & Gas	D-2005-113-G	4/26/2005	10/31/2005	6
Tennessee	Atmos Energy Corp.	D-08-00197	10/15/2008	3/9/2009	4
Tennessee	Atmos Energy Corp.	D-07-00105	5/4/2007	10/8/2007	5
Tennessee	Chattanooga Gas Company	D-09-00183	11/16/2009	5/24/2010	6
Tennessee	Chattanooga Gas Company	D-06-00175	6/30/2006	12/5/2006	5
Tennessee	Piedmont Natural Gas Co.	D-03-00313	4/29/2003	9/22/2003	4
Texas	Atmos Energy Corp.	D-GUD 9869	4/24/2009	1/26/2010	9
Texas	Atmos Energy Corp.	D-GUD-9762	10/26/2007	6/24/2008	8
Texas	Atmos Energy Corp.	D-GUD-9670	5/31/2006	3/29/2007	10
Texas	Atmos Energy Corp.	D-GUD-9400	5/23/2003	5/25/2004	12
Virginia	Virginia Natural Gas Inc.	C-PUE-2005-00057	7/1/2005	7/24/2006	12
Virginia	Washington Gas Light Co.	C-PUE-2006-00059	9/15/2006	9/19/2007	12
Virginia	Washington Gas Light Co.	C-PUE-2003-00603	1/27/2004	9/27/2004	8
Virginia	Washington Gas Light Co.	C-PUE-2002-00364	6/14/2002	12/18/2003	18
Washington	Northwest Natural Gas Co.	D-UG-08-0546	3/28/2008	12/26/2008	9
Washington	Northwest Natural Gas Co.	D-UG-03-1885	11/19/2003	6/23/2004	7
Mean					8

Source: SNL Energy, Inc.

CURRENT AND PROPOSED ADJUSTMENT MECHANISMS
PROXY GROUP COMPANIES

	AGL	ATO	LG	NJR	GAS	NWN	PNY	SJI	WGL
Gas Supply Recovery	• PGA in all applicable jurisdictions	• Purchased Gas Adjustment in all 13 jurisdictions	• Monthly PGA • Financial Risk Management (FRM) Incentives	• Basic Gas Supply Service Rider • FRM Incentives	• Annual PGA	• Annual PGA • FRM Incentives	• PGA in all applicable jurisdictions • FRM Incentives (TN)	• Basic Gas Supply Service Clause	• PGA • FRM Incentives
General Cost Recovery Mechanisms	• Environ mental Recovery Rider (FL,GA) • Societal Benefits Charge (NJ) • Regulatory Asset recovery (NJ) • Pension& PBOP • WNA (NJ, TN, VA) • STRIDE infrastructure and pipeline replacement (GA, NJ) • Accelerated Infrastructure Replacement (NJ) • IT Margin Credit (TN)	• Weather Normalization (GA, KS, KY, LA, MS, TN, TX, VA) • Energy Efficiency & DSM Programs (CO, IA, KY, TX) • Local Taxes (CO, GA, IL, KS, TN, TX) • Pipe Replacement Surcharge (GA, KY) • Environmental Cost Recovery (TN) • Pipeline Safety Program (TX) • Transportation Gas Cost Adj. (CO) • Advanced Metering Infrastructure Surcharge (CO) • Take or Pay Adjustment (IA)	• Infrastructure System Replacement Surcharge ("ISRS") • Billing of License, Occupation, or Other Similar Charges or Taxes • Residential Tariff Seasonal Structure	• Weather Normalization Clause • New Jersey Sales and Use Tax • Transitional Energy Facilities Assessment • Energy Efficiency • Accelerated Infrastructure Program • • Societal Benefits Charge • New Jersey's Clean Energy Program • Remediation Adjustment • Universal Service Fund	• Storage Service Cost Recovery • Environmental Cost Recovery • Energy Efficiency Plan • Franchise Cost Adjustment • Governmental Agency Compensation Adjustment • Adjustments for Municipal, Local Governmental Unit and State Utility Taxes • Uncollectible Expense Adjustment	• Weather Normalization (OR) • Environmental Remediation (OR) • System Integrity Program (OR) • Industrial DSM Program Cost Recovery (OR) • Energy Conservation Programs Adjustment (WA) • Automated Meter Reading Deferral (OR) • Local Taxes (OR)	• Weather Normalization (SC,TN) • Pipeline Integrity Management Costs (NC)	• Societal Benefits Clause • USF • RAC • NJCEP • PBOP FAS 158 • Pension Accruals • Accelerated Infrastructure Program • Pipeline Integrity • Temperature Adjustment Clause • Capital Investment Recovery Tracker • Transportation Initiation Clause • SUT Clause • Energy Efficiency Tracker	• WNA (VA) • DSM (MD) • Pension and OPEB (DC)

Decoupling	• Straight Fixed Variable (GA) • Decoupling (MD, NJ) • Conservation and Ratemaking Efficiency Plan (VA)	• Margin Loss Recovery (GA, TN) • DSM Lost Sales Adjustment (KY) • Rate Stabilization Clause (LA, MS) • Rate Review Mechanism (TX)		• Conservation Incentive Program	• Straight-Fixed Variable Rate Design	• Conservation Tariff – Partial decoupling (OR)	• Margin Decoupling Mechanism(NC) • Natural gas Rate Stabilization Act (SC)	• Conservation Incentive Program	• Rev Normalization Adjustment (MD) • Conservation and Ratemaking Efficiency Plan (VA)
PBR	• PBR (TN)	• Performance Based Rate Mechanism (KY – Experimental, TN)							• PBR (VA) • Earnings sharing mechanism (DC, VA)
Proposed Mechanisms	• Decoupling to be proposed upcoming rate cases. • Proposed an Efficient Usage Adjustment Mechanism in NJ.								• RNA (DC)

AGL Resources

Florida	
Purchased Gas Adjustment	The PGA Charge is designed to recover the cost of purchased gas including the cost of storing or transporting, the cost of financial instruments employed to stabilize gas costs, other charges or credits as may result from the operation of other tariff provisions, and taxes and assessments in connection with the purchase and sale of gas. Over and under-recoveries are reconciled with interest.
Energy Conservation Cost Recovery Rider (ECCR)	The ECCR Rider is applied to the distribution charge to recover conservation related expenditures by the Company, including program costs and customer incentives. The rider is set based on the Company's estimated conservation costs (programs and customer incentives) for the next calendar year, along with a true-up for any actual conservation cost under-or over-recovery for the previous year and requires regulatory approval.
Competitive Rate Adjustment	The Competitive Rate Adjustment provides for the collection/reimbursement of shortfalls/surpluses collected through the Distribution Charge. The existence of a shortfall or surplus shall be determined by comparing Company's actual revenue with its base revenue.
Georgia	
Straight Fixed Variable Sculpting Adjustment (GA)	This mechanism is designed to help collect the difference between Dedicated Design Day Capacity charges collected and those accrued. Charges are collected based on a "sculpted" schedule designed around customer usage. Charges are recognized based on a straight-fixed variable rate design. For financial accounting purposes, the Company records into a deferred revenue account the difference between the Straight Fixed-Variable Dedicated Design Day Capacity revenues recognized and the Sculpted Dedicated Design Day Capacity collected. The company reconciles such deferred revenue account annually for the period of February 1 through January 31, and applies the appropriate positive or negative adjustment (the SFV Sculpting Adjustment) to the DDDC for a subsequent period. The Rider is only applicable to Residential Delivery Service customers.
Environmental Response Cost Recovery Rider (GA)	Environmental Response Costs including investigation, remediation, testing and litigation expenses. This cost factor is calculated annually and an adjustment rider is used to "true up" any over or under recovery. Environmental Response Costs cannot exceed 5% of jurisdictional revenues in any year.
Social Responsibility Cost Rider (GA)	The Social Responsibility Cost Rider is used to collect a portion of Low Income Senior Citizen Discounts which the Utility has distributed.
Strategic Infrastructure Development and Enhancement program (STRIDE)	STRIDE is an infrastructure development investment program whereby the Company files a ten year plan for infrastructure improvement every three years to be approved by the Commission. Cost recovery for the programs included in STRIDE are recovered through this mechanism. The Company's prior mains replacement program has been rolled into this program.
Maryland	
Purchased Gas Adjustment Clause (PGA)	Purchased Gas Adjustment is a monthly adjustment consisting of the current annualized cost of purchased gas, including transportation and storage. The Actual Cost Adjustment is calculated to determine the difference between

	PGA collected and actual cost of gas. This is calculated and applied annually, per therm, to "true up" the accounts.
Revenue Normalization Adjustment Clause (RNA)	The RNA normalizes monthly heating customer bills, based on an average monthly bill. The RNA is calculated for two rate classes, Residential and Commercial. The charge is based on the revenues derived from the Customer and Distribution charges by class as authorized in the Company's last rate case as well as actual customers billed in a month and the total actual revenue for the month. .
New Jersey	
Basic Gas Supply Service Charge (NJ)	The BGSS Charge, as defined herein, is designed to recover the cost to the Company of purchased gas including the cost of storing or transporting said gases or fuel, the cost of financial instruments employed to stabilize gas costs, other charges or credits as may result from the operation of other tariff provisions, and taxes and assessments in connection with the purchase and sale of gas. The BGSS is calculated monthly for customers in the following classes: GDS, LVD, EGF. Customers in the RDS, SGS, and GLS classes are subject to annual adjustments.
Weather Normalization Clause (NJ)	The weather normalization charge applied in each winter period is calculated based on the difference between actual and normal weather during the preceding winter period, divided by sales. WNA charges are calculated annually, following the winter months.
On-System Margin Sharing Credit (NJ)	The On-System Margin Sharing Credit. The Rider is applicable to all service classifications that pay BGSS and RDS customers that receive gas from a TPS. The OSMC shall be calculated annually by taking the current year's credits, plus the prior year's OSMC over or under recovery balance and dividing the resulting sum by the annual forecasted volumes for the service classifications set forth above. The resulting rate shall be adjusted for all applicable taxes and assessments.
Societal Benefits Charge (NJ)	The SBC is designed to recover the costs of (1) Clean Energy Programs that were approved by the Board pursuant to its Comprehensive Resource Analysis regulations prior to April 30, 1997. The Clean Energy Program includes program costs not recoverable directly from standard offer providers and costs due to decreasing margin revenue as a result of improved efficiency and DSM. (2) Manufactured Gas Plant Remediation, and (3) Consumer Education and any other new programs which the Board determines should be recovered through the Societal Benefits Charge. (4) The Universal Service Fund and Lifeline which offer programs and assistance for low income families.
Regulatory Asset Recovery Charge (NJ)	The RARC is designed to recover stranded costs, costs that the Company cannot recover as a result of restructuring by the BPU. It is applicable to all Service Classifications except those with special contracts. The RARC shall be calculated annually by taking the total stranded costs plus the prior year's RARC over or under-recovery balance plus carrying costs, using the interest rate applicable to the RAC component of the SBC, and dividing by the forecasted quantities used in

	the calculation of the Societal Benefits Charge in Rider "D". The resulting rate shall be adjusted for all applicable taxes and assessments.
Infrastructure Replacement Program	In April 2009 the BPU approved an accelerated $60 million enhanced infrastructure program that will begin in 2009 and end in 2011.
	Tennessee
Weather Normalization Adjustment (TN)	The Weather Normalization Adjustment is in effect from November through April and is based on the difference between actual and projected normal weather during the winter months using the weighted average base rate of temperature sensitive sales for each rate schedule, the heat sensitive factor, and actual and normal billing cycle heating degree days.
Purchased Gas Adjustment (TN)	This Rider is intended to apply to all Gas Costs incurred in connection with the purchase, transportation and/or storage of gas purchased for general system supply.
Performance Based Ratemaking (TN)	The Performance-Based Ratemaking Mechanism (PBRM) is designed to encourage the utility to maximize its gas purchasing activities at minimum cost consistent with efficient operations and service reliability. Each plan year will begin July 1. The PBRM establishes predefined monthly benchmark indexes to which the Company's commodity cost index is compared. Each month, the Company will compare its actual commodity cost of gas to the appropriate benchmark amount. The benchmark gas cost will be computed by multiplying the actual purchase of quantities for the month, including those quantities injected into storage, by the appropriate index. If the Company's commodity gas cost for the year does not exceed the benchmark by 1% then an audit will be waived. If the cost exceeds 2% then a report justifying or explaining the cost will be required.
Interruptible Margin Credit Rider (TN)	This Interruptible Margin Credit Rider is intended to authorize the Company to recover ninety percent (90%) of the gross profit margin losses that result from rates negotiated under the provisions of Special Service Rate Schedule SS-1 or from Customers who switch to alternate fuels where the Company is unable to meet alternate fuel competition. This Interruptible Margin Credit Rider is also intended to authorize the Company to recover not more than fifty percent (50%) of the gross profit margin that results from transactions with non-jurisdictional Customers that rely on the Company's gas supply assets (all such transactions including off-system sales) should such transactions be made by the Company. The gross profit margin loss is calculated as 90% of the difference between a Test Year Targeted Rate Margin (from most recent rate case) and the Actual Negotiated Rate Margin. Any amount of gross profit margin losses will be recovered from the firm commodity component of gas costs as determined under the Purchased Gas Adjustment Provision. Adjustments are determined annually.
	Virginia
Weather Normalization Adjustment Rider (VA)	This Rider represents a surcharge or credit to a customer's bill based on deviations in actual degree days from normal degree days. It is applicable to customers qualifying under Schedule 1 (Residential Firm Gas) or Schedule 3 (Residential Air Conditioning Firm Gas) and is calculated using the weighted average non-gas rate per Ccf, the Ccf use per customer per degree day, and the non-weather

	sensitive Ccf per customer and is in effect from November to April.
Experimental Weather Normalization Adjustment Rider for General Service Customers (VA)	This Rider represents a surcharge or credit to a customer's bill based on deviations in actual degree days from normal degree days. It is applicable to customers receiving service under Rate Schedule 2 – General Firm Gas Sales Service and Rate Schedule 4 – General Air Conditioning Firm Gas Sales Service and is calculated by multiplying the customer's Net Winter Usage by the percent deviation of actual degree days to normal degree days by the applicable Non-Gas Rate (a billing rate per Ccf equal to $0.2238). The Rider will be in effect from November through April.
Conservation and Ratemaking Efficiency Plan	As part of this plan, Virginia Natural Gas intends to invest approximately $7 million over three years in new conservation programs and to implement an accompanying decoupled rate design mechanism that will help to mitigate the impact of declining usage due to conservation and provide the utility with an opportunity to recover its fixed costs.
Proposed Mechanisms	
Rate Stabilization	AGL plans to seek rate reforms that encourage conservation and decoupling in upcoming rate cases. Elizabethtown - Filed in March 2009 for recovery of conservation programs and a proposed Efficiency Usage and Adjustment mechanism (EUA), which is a form of decoupling. In December 2009 the New Jersey BPU approved Elizabethtown's agreement, but a decision on the EUA was postponed until sometime during 2010.

Atmos Energy Corp.

Colorado	
Gas Cost Adjustment ("GCA")	The annual GCA reflects appropriate gas costs including Forecasted Gas Commodity Costs and Forecasted Upstream Service Costs incurred by the company. Includes collection of the gas cost portion of uncollectible accounts.
Transportation Gas Cost Adjustment ("TGCA")	Applicable to end users who receive service under a transportation rate schedule and who opt for AMR Electronic Metering Equipment.
Gas Demand-Side Management Cost Adjustment ("G-DSMCA")	Designed to prospectively recover prudently incurred costs of Demand-Side Management Programs.
Franchise Fee Surcharge	Percentage surcharge applied to the bill of each customer residing within a municipality that imposes a franchise fee / occupation tax upon the Company.
Advanced Metering Infrastructure Surcharge ("AMIS")	Allows for the adjustment of rates and charges to provide for the recovery of costs for the AMI Project. Costs include meter-mounted data transmitters, metering data reception/transmission equipment installed on or at a communications tower (including tower gateway base stations), regional network interfaces, software systems, capitalized employee labor and costs, and third-party contractor costs.
Georgia	
Purchased Gas Adjustment Rider	Intended to recover all of the company's Purchased Gas Costs incurred pursuant to an applicable Gas Supply Plan as well as any Gas Costs required to supply the demands of the company's customers.
Franchise Tax Recovery	Franchise fees imposed on the company will be assessed to each customer based on the customer's actual monthly bill.
Weather Normalization Adjustment Rider	Adjusts rates for the difference between Commission-authorized weather normalized revenues and actual revenues. Effective October through May.
Pipe Replacement Surcharge	Increment of $3.04 per residential customer, $9.11 per commercial customer and $75.91 per industrial customer per month will be applied to customer charges effective October 1, 2009.
Margin Loss Recovery Rider	Recovers 40% of margin loss from firm customers, 35% from interruptible customers, and the company must absorb the remaining 25%.
Illinois	
Purchased Gas Cost Adjustment	Costs recoverable through the Gas Charge include costs of natural gas, costs for storage services, transportation costs, and any other out-of-pocket direct non-commodity costs.
Adjustment for State of Illinois Gross Receipts Tax	Tax rate of 0.1% net charge is applicable to all charges, including charges for gas service; service disconnections and reconnections; line extensions, relocations, installations, and replacements; meter relocation and jobbing. Tax rate of the lesser of 2.4 cents per Ccf or 5% of gross receipts received from each customer will apply to each customer

Iowa	
Purchased Gas Adjustment	Recovers the costs to the company for purchasing gas for delivery to its customers.
Take or Pay Adjustment	Recovers or refunds any changes in the cost of take or pay charges from suppliers.
Energy Efficiency Cost Recovery	Recovers the cost of energy efficiency programs.
Kansas	
Purchased Gas Adjustment	Recovers the average cost of gas from all sources of supply. The gas cost portion of uncollectible accounts is recoverable through the Actual Cost Adjustment.
Weather Normalization Adjustment	Adjusts rates for the difference between Commission-authorized weather normalized revenues and actual revenues. Effective October through May
Ad Valorem Tax Surcharge	Recovers charges resulting from real estate and personal property taxes
Kentucky	
Gas Cost Adjustment	Recovers expected commodity costs and non-commodity costs including pipeline demand charges and gas supplier reservation charges.
Weather Normalization Adjustment	Adjusts revenues for the difference between Commission-authorized weather normalized revenues and actual revenues. Effective November through April.
Experimental Performance Based Rate Mechanism	Provides sharing of gas commodity costs, gas transportation costs, and capacity release revenues that vary from established benchmarks.
Demand Side Management	Recovers costs of DSM programs as well as annual lost sales attributable to customer conservation/efficiency created as a result of the DSM programs.
Pipe Replacement Program Rider	Recovers PRP-related revenue requirement including plant in-service not included in base gas rates less accumulated depreciation and accumulated deferred income taxes, retirement and removal of plant-related PRP construction, rate of return on net rate base, depreciation expense, reduction for savings in O&M expenses, and adjustment for ad valorem taxes.
Louisiana	
Purchased Gas Adjustment	Provides monthly adjustment for the fluctuations in cost of gas purchased by the company
Rate Stabilization Clause	Increases or decreases rates so that earned ROE equals allowed ROE.
Weather Normalization Adjustment	Adjusts rates for the difference between Commission-authorized weather normalized revenues and actual revenues. Effective December through March.

Mississippi	
Weather Normalization Adjustment Rider	Adjusts rates for the difference between Commission-authorized weather normalized revenues and actual revenues. Effective November through April.
Stable Rate Adjustment Rider	Adjusts rates for the difference between the company's expected ROE and performance-based benchmark ROE. No adjustment for difference less than or equal to 100 basis points.
Purchased Gas Adjustment Rider	Recovers commodity costs and demand charges associated with the procurement of gas.
Missouri	
Purchased Gas Adjustment	Recovers costs associated with the procurement of gas including commodity, transportation and storage costs.
Tennessee	
Purchased Gas Adjustment Rider	Recovers costs associated with the procurement of gas including commodity, transportation and storage costs. Includes collection of the gas cost portion of uncollectible accounts.
Margin Loss Recovery Rider	Recovers not more than 90% of the gross profit margin losses that results from rates negotiated under Rate Schedule 291 or from customers who transfer from Rate Schedule 240 to optional service.
Performance Based Ratemaking Mechanism Rider	Encourages the utility to maximize its gas purchasing activities at minimum costs consistent with efficient operations and service reliability, and provides for shared savings or costs between customers and shareholders.
Weather Normalization Adjustment (WNA) Rider	Adjusts revenues for the difference between Commission-authorized weather normalized revenues and actual revenues. Effective November through April.
Environmental Cost Recovery Rider (ECRR)	Recovers costs related to compliance with environmental control requirements imposed by various federal and state agencies.
Franchise Tax	Any franchise taxes imposed upon the company are collected by an addition to customers' bills.

Texas (West)	
Gas Cost Adjustment Rider	Recovers costs associated with the procurement of gas. Includes collection of the gas cost portion of uncollectible accounts.
Weather Normalization Adjustment	Adjusts revenues for the difference between Commission-authorized weather normalized revenues and actual revenues. Effective October through May.
Rider RRM Rate Review Mechanism *(select jurisdictions)*	Adjusts rates for the difference between the company's authorized ROE and actual earned ROE.
Energy Efficiency Program Rider *(select jurisdictions)*	25% of energy efficiency expenditures will be considered in determining the company's annual earnings for RRM rate adjustment purposes.
Conservation and Energy Efficiency Rider *(select jurisdictions)*	50% of energy efficiency expenditures will be considered in determining the company's annual earnings for RRM rate adjustment purposes.
Pipeline Safety Program Fees	Recovers costs associated with the pipeline safety inspection program
Mid-Texas (Central/East)	
Weather Normalization Adjustment (WNA) Rider	Adjusts revenues for the difference between Commission-authorized weather normalized revenues and actual revenues. Effective November through April
Gas Cost Recovery (GCR) Rider	Recovers gas costs and upstream transportation costs. Includes collection of the gas cost portion of uncollectible accounts.
Franchise Fee Adjustment (FF) Rider	Recovers municipal franchise fees imposed on the company by select municipalities.
Pipeline Safety Program Fees	Recovers costs associated with the pipeline safety inspection program
Conservation and Energy Efficiency (CEE) Rider	One million dollars provided by ratepayers to fund conservation and energy efficiency programs (one million dollars to be contributed by shareholders)
Rate Review Mechanism *(city groups A & B)*	Adjusts rates for the difference between the company's authorized ROE and actual earned ROE.
Tax Adjustment Rider	Recovers state gross receipts taxes imposed on the company.
Virginia	
Purchased Gas Adjustment	Recovers costs associated with the procurement of gas. Includes collection of the gas cost portion of uncollectible accounts.
Weather Normalization Adjustment	Adjusts revenues for the difference between Commission-authorized weather normalized revenues and actual revenues. Effective January through December.

Laclede Group, Inc.

Missouri	
Infrastructure System Replacement Surcharge ("ISRS")	The ISRS recovers eligible infrastructure replacements on a fixed monthly basis.
Purchased Gas Adjustment Clause ("PGAC")	The PGAC automatically recovers commodity and non-commodity costs of delivered natural gas with a monthly reconciliation of actual as compared to projected eligible gas costs. The PGAC also incorporates a Gas Supply Incentive Plan, whereby the company will share in savings obtained through hedging activities if the actual commodity cost of natural gas for a given year meets certain benchmarks. The PGAC also recovers the carrying cost of natural gas inventory. All adjustments incorporated into the PGAC are reconciled on a monthly basis by comparing the previous months' actual gas costs with the revenue collected from the PGAC. Any balances incur carrying costs at the current prime rate minus two percent.
Residential Tariff Seasonal Structure	Laclede Gas' volumetric rates differ seasonally to incorporate a substantially higher rate for given consumption volume in winter as compared to summer volumetric rates.
Billing of License, Occupation, or Other Similar Charges or Taxes	Any license, occupation, or other similar charge or tax imposed upon the company is added to the customers' bills as a separate item.

New Jersey Resources Corp.

New Jersey	
Basic Gas Supply Service (Rider "A")	Recovers the overall commodity cost of all prospective gas supplies. Includes fixed pipeline, fixed storage, and supplier demand costs.
New Jersey Sales and Use Tax (Rider "B")	Multiplies the charges that would apply before application of the SUT by the factor 1.07.
Transitional Energy Facilities Assessment (Rider "B")	Temporary surcharge resulting from the energy tax reform statute.
Remediation Adjustment (Rider "C")	Provides for recovery of actual expenditures incurred to remediate former gas manufacturing facilities.
Weather Normalization Clause (Rider "D")	Adjusts revenues for the difference between Commission-authorized weather normalized revenues and actual revenues. Effective October through May.
New Jersey's Clean Energy Program (Rider "E")	Recovers costs associated with the program designed to promote energy efficiency and renewable energy.
Energy Efficiency (Rider "F")	Recovers authorized expenditures related to the energy efficiency programs as approved in BPU Docket No. GO09010057.
Universal Service Fund (Rider "H")	Fund established by BPU to provide affordable access for electric and natural gas service to all residential customers in the state.
Conservation Incentive Program (Rider "I")	Designed to decouple the link between customer usage and the company's gross margin to allow the company to encourage its customers to conserve energy. Also serves as a tracking mechanism that allows the company to mitigate the impact of weather on its gross margin. As a result, the WNC has been suspended pending the continuation of the CIP.
Other Incentive Programs	The company is eligible to receive financial incentives for reducing BGSS costs through a series of utility gross margin-sharing programs that include off-system sales, capacity release, storage incentive and financial risk management (FRM) programs.
Economic Stimulus	Accelerated Infrastructure Program (AIP) was approved on April 16, 2009 and allows the company to expedite $70.8 million of 14 previously planned infrastructure projects. Approved as a 2-year program, the AIP will be funded through an annual adjustment to customers' base rates with the first adjustment expected in October 2010. On July 17, 2009 the BPU approved an Energy Efficiency Program and associated cost recovery mechanism. The mechanism will recover $21.1 million over a 4-year period.

Nicor, Inc.

Illinois	
Straight-Fixed Variable Rate Design	Approved in March 2009 for Nicor Gas' Residential rate class, this rate structure recovers approximately 80 percent of the company's fixed delivery service costs through the monthly customer charge, while lowering the volumetric charge.
Franchise Cost Adjustment (Rider 2)	Recovers the cost of reduced rate service or other monetary contribution provided to local governmental units under a franchise agreement or other similar agreement with the company.
Storage Service Cost Recovery (Rider 5)	Recovery of storage service costs and carrying costs of the company's additional inventory with annual true-up of per therm charge.
Gas Supply Cost (Rider 6)	Automatic gas cost recovery for cost of gas, storage services, and transportation costs, including hydrocarbons used in the manufactured gas process.
Governmental Agency Compensation Adjustment (Rider 7)	Recovers fees and additional costs the company incurs as a result of requirements that may be imposed upon the company by a local governmental unit solely from those customers taking service from the company within the boundaries of each local governmental unit imposing such costs.
Adjustments for Municipal, Local Governmental Unit and State Utility Taxes (Rider 8)	Recovers the following additional charges: municipal tax on gross receipts levied on the company, local governmental unit tax on gross receipts levied on the company, municipal or local governmental unit tax based on a charge per unit of energy, and state tax based on a percentage of gross receipts or a charge per unit of energy.
Environmental Cost Recovery (Rider 12)	Automatic recovery of forecasted environmental survey, investigation, sampling, removal, disposal storage and remediation costs with respect to legacy manufactured gas operations.
Uncollectible Expense Adjustment (Rider 26)	Recovers or refunds the amount by which the company's actual annual uncollectible expense in a calendar year exceeds or is less than the uncollectible amount included in the company's delivery service rates in effect for the reporting year.
Energy Efficiency Plan (Rider 29)	The Energy Efficiency Plan recovers the actual costs to fund energy efficiency programs. Active for a four year period, unless reauthorized, the plan recovers the budgeted amount for each Plan Year and allows for carryover of budgeted amounts into subsequent years. Reconciliation period recovers deficiencies from the previous twelve month budgetary period over an eight month period.

Northwest Natural Gas Company

Purchased Gas Adjustment	Rate changes are established each year under PGA mechanisms in both Oregon and Washington to reflect changes in the expected cost of natural gas commodity purchases, including gas storage, gas purchases hedged with financial derivatives, interstate pipeline demand charges, the application of temporary rate adjustments to amortize balances in deferred regulatory accounts, increases in bad debt expense and the removal of temporary rate adjustments effective for the previous year.
Oregon	
PGA Incentive Sharing Mechanism	Under the Oregon PGA incentive sharing mechanism, the Company can select either an 80 percent deferral or 90 percent deferral of higher or lower gas costs such that the impact on current earnings from the gas cost sharing is either 20 percent or 10 percent, respectively.
Conservation Tariff (Partial Decoupling Mechanism)	Rate mechanism designed to adjust margin for changes in consumption patterns due to residential and commercial customers' conservation efforts. The decoupling mechanism that is intended to break the link between utility earnings and the quantity of gas consumed by customers, removing any financial incentive by the utility to discourage customers' conservation efforts. The conservation tariff includes a price elasticity adjustment and a conservation adjustment. The price elasticity adjustment adjusts rates annually for increases or decreases from expected customer volumes due to annual changes in commodity costs or periodic changes in general rates. The conservation adjustment is calculated on a monthly basis to account for the difference between actual and expected customer volumes.
Weather Normalization	Approved weather normalization through October 2012. This mechanism is designed to help stabilize the collection of fixed costs by adjusting residential and commercial customer billings based on temperature variances from average weather, with rate decreases when the weather is colder than average and rate increases when the weather is warmer than average. The mechanism is applied to residential and commercial customers' bills between December 1 and May 15 of each heating season. The mechanism adjusts the margin component of customers' rates to reflect average weather, which uses the 25-year average temperature for each day of the billing period.
Regulatory and Insurance Recovery for Environmental Costs	In 2003, the OPUC approved the deferral of unreimbursed environmental costs associated with certain named sites. Beginning in 2006, the OPUC authorized the Company to accrue interest on deferred environmental cost balances, subject to an annual demonstration that the Company has maximized its insurance recovery or made substantial progress in securing insurance recovery for unrecovered environmental expenses.
System Integrity Program	In 2004, the OPUC approved specific accounting treatment and cost recovery for a transmission pipeline integrity management program. The Company records these costs as either capital expenditures or regulatory assets, accumulates the costs over a 12-month period, and recovers the revenue requirement associated with the costs, subject to audit, through rate changes effective with the annual PGA. In February 2009, the OPUC approved a stipulated agreement to create a new, consolidated system integrity program (SIP). The SIP integrates the existing transmission pipeline and proposed distribution integrity management programs. The company's SIP costs are tracked into rates annually, with rate recovery after the first $3.3 million of capital costs. An annual cap for expenditures has been set

	at $12 million, but extraordinary costs above the cap may be approved with written consent of the OPUC and other interested parties.
Industrial Demand Side Management (DSM) Program Cost Recovery	Recovers the costs of the Company's Industrial Energy Efficiency Program. Effective November 1, 2010.
Automatic Adjustment for Utility Income Tax	Recovers rate differences between the amount of income taxes paid to units of government and the amount of income taxes collected through the company's approved base rates.
AMR Deferral	In February 2010, the OPUC approved a stipulation that allows the company to defer the revenue requirement associated with the AMR project and amortize that deferral subject to an annual earnings test. The company is permitted to recover the deferral amount as long as their ROE during the earnings review period does not exceed their authorized ROE. Recovery of any deferred amounts will begin in November 2010 as part of the annual PGA rate adjustment.
Billing for City and County Exactions	Recovers business or occupation taxes, license, franchise or operating permit fees, or similar exactions imposed by any city or county.
Washington	
Energy Conservation Programs Adjustment	Recover costs associated with providing energy conservation services offered under Residential High-Efficiency Furnace Program, Residential Weatherization and Energy Conservation Services Program, and Residential Low-Income Energy Assistance Program

Piedmont Natural Gas Company, Inc.

Purchased Gas Adjustment	Gas costs in all three jurisdictions are recoverable through PGA procedures and are not affected by the WNA or the margin decoupling mechanism. The company has incentive mechanisms for gas supply management whereby it retains 25% of secondary market margins generated through off-system sales and capacity release activity in all jurisdictions, with 75% credited to customers through the incentive plans. North Carolina - Purchased gas costs include all commodity/gas charges, demand charges, peaking charges, surcharges, emergency gas purchases, over-run charges, capacity charges, take-or-pay charges, or other similar charges in connection with the purchase, storage or transportation of gas. These costs are passed through to customers in the gas cost. In North Carolina and South Carolina, gas costs related to uncollectible accounts are recovered through the PGA. Tennessee - Adjustment is intended to permit the Company to recover the total cost of gas purchased for customers including costs incurred in connection with the purchase, transportation and/or storage of gas purchased for general system supply, including, natural gas purchased from interstate pipeline transmission companies, producers, brokers, marketers, associations, intrastate pipeline transmission companies, joint ventures, providers of liquefied natural gas (LNG). The gas cost portion of net write-offs for a fiscal year that exceed the gas cost portion included in base rates is recovered through PGA procedures.
North Carolina	
Margin Decoupling Mechanism	The margin decoupling mechanism provides for the recovery of the Company's approved margin from residential and commercial customers independent of consumption patterns. The margin decoupling mechanism was experimental for a three-year period, subject to semi-annual reviews and approval for extension in a future general rate case proceeding. In October 2008, the NCUC approved a settlement including the continuation of the margin decoupling mechanism.
Pipeline Integrity Management Costs	The NCUC approved deferral treatment of pipeline integrity management costs applicable to all incremental expenditures beginning November 1, 2004. Under the settlement of the 2008 general rate proceeding, the pipeline integrity management costs incurred between July 1, 2005 and June 30, 2008 of $4.6 million are being amortized over a three-year period beginning November 1, 2008.
South Carolina	
Natural Gas Rate Stabilization Act	Natural Gas Rate Stabilization Act (RSA) of 2005 became effective in South Carolina. The law provides electing natural gas utilities, including Piedmont, with a mechanism for the regular, periodic and more frequent (annual) adjustment of rates which is intended to: (1) encourage investment by natural gas utilities, (2) enhance economic development efforts, (3) reduce the cost of rate adjustment proceedings and (4) result in smaller but more frequent rate changes for customers. If the utility elects to operate under the Act, the annual filing will provide that the utility's rate of return on equity will remain within a 50-basis point band above or below the current allowed rate of return on equity.

Weather Normalization	WNA mechanism in South Carolina and Tennessee partially offsets the impact of colder- or warmer-than-normal weather on bills rendered in November through March for residential and commercial customers. The WNA formula calculates the actual weather variance from normal, using 30 years of history.
Tennessee	
Weather Normalization	WNA mechanism in South Carolina and Tennessee partially offsets the impact of colder- or warmer-than-normal weather on bills rendered in November through March for residential and commercial customers. The WNA formula calculates the actual weather variance from normal, using 30 years of history.
Performance Incentive Plan	Replaces the annual reasonableness or prudence review of the company's gas purchasing activities overseen by the TRA. The plan incentivizes improvements in the company's gas procurement and capacity management activities. The company's commodity cost of gas is compared to a predefined benchmark index. The plan also addresses the recovery of gas supply reservation fees and the treatment of off-system sales and wholesale interstate sale for resale transactions. Net incentive benefits or costs are shared between the company's customers and the company on a 75% - customers / 25% - stockholders basis.

South Jersey Industries, Inc.

New Jersey	
Basic Gas Supply Service Clause ("BGSSC")	BGSSC is calculated and trued-up annually and is designed to recover all gas costs including commodity costs, storage costs, interstate transportation costs (including the costs and results of any supplies set by hedges), fuel and line loss costs, and non-commodity gas-related costs. Non-commodity costs include fixed pipeline costs, fixed supplier costs, fixed storage costs, pipeline refunds and similar credits. At its discretion, the company may file for two self-implementing rate increases, effective December 1st and February 1st.
Capital Investment Recovery Tracker ("CIRT")	Utilized to adjust the company's monthly revenues in cases wherein the actual recoveries experienced vary from the calculated revenue requirement. It shall be utilized to earn a return on and a return of incremental infrastructure investments, including the capitalized costs related to CIRT projects. The revenue requirement will be calculated using projected data and be subject to a true-up at the end of the year. The CIRT will be applied through a volumetric rate and will be adjusted on or about each January 1st.
Transportation Initiation Clause ("TIC")	The purpose of the TIC is to enable the Company to recover both capital expenditures and operating costs associated with Electronic Data Interchange (EDI), including consulting costs and transaction costs. The TIC filing will be based upon the costs and expenditures incurred during the previous August 1 through July 31. The TIC is collected on a per therm basis.
Societal Benefits Clause ("SBC") (Encompasses NJCEP and USF)	The purpose of SBC is to enable the Company to recover the costs of the company's Clean Energy Program, manufactured gas plant remediation, Universal Service Fund Permanent and Lifeline Credits and Tenants Assistance program, and other allowed costs. Trued-up at the end of the year.
Temperature Adjustment Clause ("TAC")	(Replaced by the CIP, but still included in the Tariff). Utilized to adjust the company's revenues for unexpected fluctuations in temperature. This rider is utilized if the number of annual degree days in a year varies from the average by more than 0.5% of the 20 year cumulative normal degree days to adjust customers' bills. The degree day adjustment is multiplied by a degree day consumption factor to derive the volumetric adjustment. Allocated to customers on a volumetric basis. Only applies to October through May.
Remediation Adjustment Clause ("RAC")	Recovers gas manufacturing facility remediation costs. This adjustment is based on 12 months of historical costs and is trued-up annually through the SBC.
New Jersey Clean Energy Program ("CLEP")	The CLEP factor is calculated annually based upon the projected CLEP costs and an amount that accounts for revenue erosion divided by the projected therm sales. Trued-up on a yearly basis. This charge is assessed through the SBC.
SUT Clause ("SUTC")	The New Jersey Sales and Use Tax ("SUT") is included in all rates by multiplying the charges that would have applied before application of the SUT by a factor of 1.07.
Conservation Incentive Program ("CIP")	Utilized to adjust the company's revenues in cases wherein actual usage per customer experienced during an annual period varies from the baseline usage per customer. This adjustment is applied through a credit or surcharge to customers' bills during the adjustment period and incorporates under recoveries or over recoveries from the previous year. Baseline use per customer is set during base rate case proceedings.
Energy Efficiency Tracker ("EET")	The company shall record a return on and a return of investments in energy efficiency programs and recover all incremental operating and maintenance

	expenses of the programs. The EET rate will be calculated annually using projected data and subject to a true-up at the end of the EET year (September 30th). The EET is applied through a volumetric rate on customers' bills.
Pension and PBOP-	The BPU authorized SJG to recover costs related to postretirement benefits under the accrual method of accounting consistent with FASB Statement No. 106. Upon the adoption of FASB Statement No. 158 in 2006, SJG's regulatory asset was increased by $37.1 million representing the recognition of underfunded positions of SJG's pension and other postretirement benefit plans.

Washington Gas Light

Purchased Gas Adjustment Charge	Automatic gas cost recovery in all jurisdictions (MD, VA, and DC). Carrying cost on storage and over or under collected gas costs in all jurisdictions. In addition, WGL has asset management incentives in place in all jurisdictions. WGL's Gas Administrative Charge (GAC) is incorporated into each of the jurisdictions' PGAs and is designed to remove the cost of uncollectible accounts expense related to gas costs from base rates and instead collects these expenses under each jurisdiction's PGA.
Maryland	
Revenue Normalization Adjustment	Compares target for recent base-rate determination of revenues against all revenues adjusted for growth. This mechanism is a monthly adjustment that is comprised of two factors; 1) a "current factor' and a 2) a "reconciliation factor". The current factor utilizes the test-year non-gas revenue and adjusts that revenue for changes in the number of customers, by rate class, as compared with test year levels using a class-specific customer growth adjustment. The reconciliation factor is also computed monthly by comparing actual collections or credits with the calculated RNA amount and any applicable reconciling amount as filed. The calculated under-or-over collection is included in the RNA factor succeeding month.
Demand Side Management Surcharge Adjustment	Recovers the cost of demand side management expenditures from the prior annual period including utility expenditures, incentive payments to customers, lost margins from program savings and expenses not elsewhere recovered in rates. DSM adjustment is trued up at the end of the year through a reconciliation factor.
Virginia	
Performance Based Rates	PBR plan includes: (i) a four-year base rate freeze (beginning October 2007); (ii) service quality measures to be determined in conjunction with the VA Staff and reported quarterly for maintaining a safe and reliable natural gas distribution system while striving to control operating costs; (iii) recovery of initial implementation costs associated with achieving Washington Gas's BPO initiatives over the four-year period of the PBR plan and (iv) an ESM that enables Washington Gas to share with shareholders and Virginia customers the earnings that exceed a target of 10.5 percent return on equity.
Weather Normalization Adjustment (WNA)	WNA charge is calculated annually and trued up at the end of each year based on the difference between their actual usage and their base usage.
Conservation and Ratemaking Efficiency Plan	The plan calls for the creation of conservation and energy efficiency programs. Along with these programs an associated cost recovery provision and a decoupling mechanism, which adjusts weather normalized non-gas distribution revenues for the impact of conservation or energy efficiency efforts, are to be implemented.
Washington D.C	
PBR- Earnings	DC settlement includes rate freeze that enables Washington Gas to retain all

Sharing Mechanism	earnings in excess of 8.12% ROR through Oct 1, 2011.
Pension and OPEB	Recovery mechanism in place to recover Pension and OPEB costs.
Proposed Mechanisms	
Revenue Normalization Adjustment	Proposed RNA in Washington DC that is currently under review.

CALCULATION OF THE FAIR VALUE RATE BASE

Rate Base Estimate	Amount	Weighting	Weighted Amount	
Original Cost Rate Base (OCRB)	$1,073,700,633	50%	$ 536,850,317	[1]
RCND Rate Base	$1,839,334,300	50%	$ 919,667,150	[2]
Fair Value Rate Base (FVRB)			1,456,517,467	[3]
Appreciation above OCRB			382,816,834	[4]
FV/OCRB Multiple	1.36			

CALCULATION OF THE FAIR VALUE RATE OF RETURN

Capital	Amount	Percent	Cost Rate		Weighted Cost Rate	
Long-Term Debt	$ 512,155,202	35.16%	8.34%	[5]	2.93%	
Common Equity	561,545,431	38.55%	11.00%	[6]	4.24%	
Capital Financing OCRB	1,073,700,633	74.02%			7.17%	
Appreciation above OCRB not recognized on utility's books	382,816,834	26.28%	1.24%		0.32%	
Total	$ 1,456,517,467	100.00%			7.50%	[7]

Notes:
[1] Direct testimony of Robert Mashas
[2] Direct testimony of Robert Mashas
[3]=[1] +[2]
[4]=[3]-OCRB
[5] Schedule D-1
[6]= Recommended ROE on OCRB
[7] FVRB Return = OCRB Return - Inflation Rate

LONG-TERM INFLATION RATE ESTIMATE

Description (a)	Value (b)
Long-Term Nomimal Treasury Rate [1]	5.01%
Real- Risk Free Rate of Return [2]	2.47%
Long-Term Expected Inflation Rate [3]	2.47%

[1] Inflation Rate = [(1+Nominal Rate)/(1+Real Rate)] - 1

Sources:
[1] Average of the near term and long term projected Nominal 30-Year Treasury rate.
Aspen Publishers Blue Chip *Financial Forecast*, Vol 6, June 1, 2010, p. 14 and Vol 10, October 1, 201
[2] Average of EIA Annual Energy Outlook Rate of Change in CPI from 2010-2035 and
Aspen Publishers Blue Chip Financial Forecast, Vol 6, June 1, 2010, p. 14.
[3] Real Risk Free Rate = ((1+Nominal Treasury Rate)/(Inflation +1)-1

SUMMARY OF COMPARABLE TRANSACTIONS

Announcement Date	Closing Date	Buyer	Acquired	States	Transaction Value ($MM)	Net Plant ($MM)	Net Plant Multiple
May-10	Pending	UIL Holdings Corp.	Berkshire Gas, CT Natural Gas, Southern CT Gas	CT, MA	$ 1,296	$ 1,213	1.1
Jul-08	Feb-10	Babcock & Brown	Dominion Peoples Natural Gas	PA	$ 780	$ 577	1.4
Jul-08	Oct-08	MDU Resources	Intermountain Gas Company	ID	$ 327	$ 190	1.7
Mar-08	Oct-08	UGI Corporation	PPL Gas Utilities Corp	PA	$ 268	$ 223	1.2
Jan-08	Jan-09	Continental Energy	Public Service of New Mexico Gas Co.	NM	$ 620	$ 447	1.4
Nov-07	Jul-08	SourceGas LLC	Arkansas Western Gas Co.	AR	$ 230	$ 133	1.7
Feb-07	Nov-07	Cap Rock Holding Corp	SEMCO Energy	MI, AK	$ 814	$ 591	1.4
Jan-07	Sep-07	Energy West, Inc	Frontier Utilities	NC	$ 5	$ 31	0.1
Jul-06	Jul-07	MDU Resources	Cascade Natural Gas	WA, OR	$ 475	$ 342	1.4
Feb-06	Aug-06	National Grid Plc	New England Gas - Rhode Island Ops	RI	$ 492	$ 581	0.8
Jan-06	Aug-06	UGI Corporation	PG Energy	PA	$ 556	$ 507	1.1
Sep-05	Jun-06	Empire District	Aquila Missouri Operations	MO	$ 85	$ 48	1.8
Sep-05	Jul-06	WPS Resources	Aquila Minnesota Natural Gas Ops	MN	$ 288	$ 44	6.5
Sep-05	Mar-06	WPS Resources	Aquila Michigan Natural Gas Ops	MI	$ 270	$ 165	1.6
			Mean				1.7
			Median				1.4

Source: SNL Financial, Company Proxy Statements, SEC Form 10-K, State LDC Filings

TAB 9

IN THE MATTER OF
SOUTHWEST GAS CORPORATION
Docket No. G-01551A-10___

PREPARED DIRECT TESTIMONY
OF
EDWARD B. GIESEKING

ON BEHALF OF
SOUTHWEST GAS CORPORATION

NOVEMBER 12, 2010

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Prepared Direct Testimony
of
EDWARD B. GIESEKING

BEFORE THE ARIZONA CORPORATION COMMISSION

Prepared Direct Testimony
of
EDWARD B. GIESEKING

I. INTRODUCTION

Q. 1 Please state your name and business address.

A. 1 My name is Edward Gieseking. My business address is 5241 Spring Mountain Road, Las Vegas, Nevada 89150-0002.

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

A. 2 I am employed by Southwest Gas Corporation (Southwest Gas or the Company). My title is Director of the Pricing and Tariffs Department.

Q. 3 Please summarize your education and relevant professional qualifications.

A. 3 My education and relevant qualifications are summarized in Appendix A to my direct testimony.

Q. 4 Have you previously testified before any regulatory commission?

A. 4 Yes. I have testified before the following regulatory entities: Arizona Corporation Commission (Commission); California Public Utilities Commission (CPUC); Federal Energy Regulatory Commission (FERC); and the Public Utilities Commission of Nevada (PUCN).

Q. 5 What is the purpose of your prepared direct testimony?

A. 5 I support the Company's proposal to implement an energy efficiency enabling provision, the Company's rate design proposals, and I sponsor the H Schedules.

Q. 6 Please provide a brief summary of your prepared direct testimony.

A. 6 My prepared direct testimony addresses the following key issues:

- The Company's proposal for an energy efficiency enabling provision (EEP).
- Rate design, including the interplay between the Company's rate design proposal, EEP and the promotion of energy efficiency.
- Minor tariff changes that correct inconsistencies and update the tariff to reflect current business practices.

II. ENERGY EFFICIENCY ENABLING PROVISION

Q. 7 What is an energy efficiency enabling provision?

A. 7 An energy efficiency enabling provision or EEP is a revenue per customer decoupling mechanism that is designed to eliminate the link between sales and revenues that currently exists with traditional rate designs, so that the existing financial disincentive associated with Southwest Gas' pursuit of cost effective energy efficiency is eliminated. The result is that the utility's financial performance is not dependent on how much gas it delivers to its customers.

Q. 8 Why is Southwest Gas proposing the EEP?

A. 8 Consistent with the draft Gas Energy Efficiency Standards, the draft ACC Policy Statement Regarding Utility Disincentives to Energy Efficiency and Decoupled Rate Structures, and the numerous workshops organized by the Commission over the past two years, the Company is proposing the EEP to better align utility and customer interests so Southwest Gas will be able to sharpen its focus on customer efficiencies and the development of strategies to achieve the gas energy efficiency standards established by the Commission. To demonstrate its commitment to the Commission's directives regarding energy efficiency, Southwest Gas is including an implementation plan consistent with the Commission's draft Gas Energy Efficiency Standards as part of its general rate case application.

Q. 9 Please briefly explain how the EEP will function.

A. 9 The EEP is designed to be a single interface with customers whereby the customers bill will adjust each month when actual weather during the billing cycle differs from the average weather used in the calculation of rates, and rates will adjust annually to true-up the difference between authorized and experienced non-gas revenues. Southwest Gas believes this strikes a good balance between providing immediate weather-related rate relief to customers following extreme weather events, and allowing for annual adjustments to moderate the changes in rates that could otherwise occur.

Q. 10 Please explain the mechanics and accounting treatment for the EEP.

A. 10 The weather-related component will be provided through an adjustment to winter bills when actual weather during the billing cycle differs from the average weather used in the calculation of rates. In the event of an extreme cold weather event, customers will receive an immediate real-time benefit as there will be a downward adjustment to their bill.

The annual true-up will reflect the difference between authorized revenue and the experienced non-gas revenues. Authorized revenue is defined as the Commission-authorized monthly revenue per customer multiplied by the total number of customers billed for service during the month. Experienced revenue is defined as the billed revenue for the month. At the end of each year, a per-therm rate adjustment will be computed by dividing the balance in the deferred account by the previous 12 months sales volume. The resulting rate will remain in effect for a 12-month period to refund or collect the deferred account balance. Using 12-months recorded use will moderate the changes in rates that could otherwise occur, but will, on an annualized basis, clear the deferred account balance. This type of decoupling is commonly referred to as revenue per customer.

Accounting records and schedules showing the rate calculations will be maintained to clearly document the monthly entries and calculations and provide an auditable record of the EEP. Southwest Gas has prepared a new Tariff Schedule, that further reflects the accounting and rate adjustment procedures associated with the EEP.

Q. 11 Does the EEP treat customers that were added after the rate case test period different from customers that were taking service during the test period?

A. 11 No. All of the customers subject to the EEP are treated the same. Equal treatment under the mechanism is appropriate for two reasons. First, "new" customers may consist of individuals who actually occupy existing dwellings and will be using the facilities that are included in the rate base used to establish rates in this proceeding. Second, "new" customers that are incremental additions after the end of the test period as the result of new construction have been added pursuant to Southwest Gas' service extension policies. Service extension policies limit the investment in new facilities up to an amount that is supported by the expected revenue from the new customer. As a result, the service extension policies place existing and new customers on equal footing with regard to the Company's cost of providing service.

Q. 12 Will the EEP result in the Company over-earning?

A. 12 No. The EEP will not, in and of itself, result in the Company over-earning. To the contrary, the EEP results in a change from a fixed rate regulatory model to a fixed revenue per customer model. Indeed, Southwest Gas customers will benefit as a result of this change because it results in a cap being created on how much revenue per customer the Company is allowed to collect in rates. The Company will not be able to collect more revenue per customer than what the Commission authorizes in this rate case proceeding. With the implementation of the EEP, the Company's actual profits remain closely tied to its management of costs, providing additional incentive to efficiently manage costs. This also benefits customers because reductions in costs are passed on to customers in subsequent rate cases.

It is important to recognize that the EEP prevents the Company from recovering more revenue per customer than what is authorized by the Commission. For example, the PUCN approved a decoupling mechanism in Nevada last year and Southwest Gas is currently preparing a filing that will return approximately $2 million to its customers.

Q. 13 Does the EEP eliminate business risk?

A. 13 No. The EEP does not eliminate business risk; it simply eliminates the financial disincentive associated with reducing sales and counterbalances the additional business risk associated with achieving the Commission's energy efficiency directives. The EEP eliminates the need for management to focus on sales and allows management to concentrate its attention on the cost of providing service. While prudent management regarding the operation of the business will have an impact on the Company's opportunity to earn its authorized rate of return, some cost are beyond the control of management.

Q. 14 Will the EEP negatively impact customers through large surcharges?

A. 14 No. As discussed at great length during the Commission's workshops, rate adjustments associated with revenue decoupling tend to be small. This fact is consistent with the findings of Pamela Lesh, in her comprehensive review of decoupling mechanisms[1], where she concludes that "decoupling adjustments tend to be small, even miniscule." Ms. Lesh further concluded in her report that a majority of the monthly adjustments from decoupling mechanisms for

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[1] *See* Pamela G. Lesh, *Rate Impacts and Key Design Elements of Gas and Electric Utility Decoupling, A Comprehensive Review* (2009).

natural gas utilities were less than 1 percent.

Although Southwest Gas does not anticipate that the annual EEP adjustment will result in a large surcharge, the Company has designed the mechanism to limit any single increase in customer rates to no more than six percent of revenues. There is no limit to any downward adjustment in rates.

Based upon the empirical data and testimony presented during the course of the Commission workshops on decoupling, the evidence supports the conclusion that the potential rate impact from revenue decoupling is minimal and is in fact significantly less than the potential $0.15 per therm variation that Southwest Gas customers could experience with a change in gas costs recovered through its existing fuel adjustment provision. In addition, it is important to not lose sight of the fact that the EEP protects customers by preventing an over-collection of revenue as compared to what the Commission authorized – even when it is colder than normal. This protection does not exist under the current Arizona regulatory structure.

Q. 15 Will the EEP discourage conservation by customers?

A. 15 No. The EEP does not establish a "fixed bill" that would make customers indifferent to the amount of gas they use. Customer bills will remain dependent on actual consumption as long as a volumetric pricing scheme is employed by the Commission. Indeed, customers' bills will continue to increase when their consumption increases and decrease when their consumption decreases.

The EEP will result in small, regular rate adjustments to ensure against over- or under-recovery of the Company's Commission-approved cost of service. Monthly recovery of the EEP true-up in a per-therm charge is consistent with a policy of having those who use more, pay more of the fixed cost of service and will send appropriate price signals to customers to use energy more efficiently.

Q. 16 How does the EEP facilitate Southwest Gas' ability to harmonize rate design and the promotion of energy efficiency?

A. 16 The EEP makes it possible for Southwest Gas to propose recovery of its revenue deficiency in a different way than it has in the past. Without the revenue stability provided by the EEP, Southwest Gas deemed it necessary to seek recovery of a portion of its customer and demand-classified revenue requirement deficiency in the monthly basic service charge (BSC). In this proceeding, because of the revenue stability provided by the EEP, Southwest Gas is proposing to recover the entire revenue deficiency in variable charges – leaving the BSCs at the current levels, for example the Single Family Residential rate at $10.70.

Q. 17 Which of the Company's Arizona rate schedules will be subject to the EEP?

A. 17 The Company proposes to have the EEP apply to the rate schedules where Southwest Gas has, or expects to have, usage-lowered as a result of energy efficiency programs and where a large amount of the fixed cost of service is recovered in variable charges. Under this criterion, the EEP will be applicable to the residential, and small, medium and large general service customer classes.

Q. 18 Which of the Company's Arizona rate schedules will not subject to the EEP, and why?

A. 18 Southwest Gas does not recommend applying the EEP to customer classes where the link between sales and revenue has already been effectively eliminated through rate design, nor does Southwest Gas recommend decoupling for customer classes with a limited number of customers. As a result, Southwest Gas proposes that the EEP not apply to the following schedules: 1) Transportation Eligible General Service and Street Lighting -

because the rate structure for these schedules has effectively decoupled their allocated revenue requirement; 2) Small Essential Agricultural, Air-conditioning, Water Pumping, Electric Generation and Gas Service for Compression - because there are only a small number of customers served in each of these classes; and 3) Customers served under negotiated rates and contract terms (or special contract customers). This is consistent with the Commission's draft policy statement.

Q. 19 What efforts will Southwest Gas make to inform its Arizona customers about the EEP?

A. 19 Similar to the communication plan Southwest Gas prepared to inform its Nevada customers of the PUCN's recently enacted decoupling mechanism, a copy of which was provided to the Commission during one of the aforementioned workshops, Southwest Gas will prepare communication materials that explain how the EEP changes the relationship between the Company and its customers. The primary message to customers is that the EEP provides Southwest Gas the opportunity to partner with them in an effort to use gas more efficiently, reduce overall energy consumption, and lower energy bills.

III. RESIDENTIAL RATE DESIGN

Q. 20 What considerations directed Southwest Gas' proposed residential rate design?

A. 20 Southwest Gas considered the following objectives in designing the residential rates proposed in this application: 1) the fair and equitable recovery of costs; 2) rates that work well in tandem with the EEP; 3) customer acceptance and understandability; and 4) the effect of the rate design on the promotion of the Company's energy efficiency and conservation efforts.

Q. 21 Please explain how the concepts of fairness and equality affected Southwest Gas' rate design decisions.

A. 21 Almost 100% of Southwest Gas' cost of providing service is fixed and does not increase or decrease when customer consumption changes. These fixed costs are classified as customer- and demand-related. Customer costs are incurred as a result of connecting a customer to the distribution system, and are relatively the same for all residential customers. Demand costs are determined by how much gas a customer needs during the peak demands on the distribution system. When customer and demand-related fixed costs are recovered through variable charges, Southwest Gas will not recover the full cost of providing service from low use customers, and will recover more from high use customers than it cost to provide them service. If this shift of cost responsibility amongst similarly situated customers becomes too great, the fairness and equality of the rate design come into question. A fully cost-based rate design would recover the entire customer and demand costs in a monthly fixed charge. However, Southwest Gas' proposed rate design balances cost of service rate principles with the recognition of past Commission policy and decisions requiring that a certain portion of the fixed cost of service be collected in the variable charge.

Q. 22 How does Southwest Gas' proposed rate design accomplish the objective of working in tandem with the EEP?

A. 22 Cost-of-service based rates recognize the difference between fixed and variable costs associated with providing service and have fixed rates that recover the fixed costs, and variable rates that recover the variable costs. However, traditionally gas distribution rate design has compromised cost-based factors, with some portion of the fixed cost-of-service being recovered through volumetric rates. The greater this compromise, the greater the potential that actual cost recovery will vary from the authorized cost-of-service.

As previously stated, Southwest Gas is not proposing a full cost-of-service fixed charge in this proceeding. The basic service charges are unchanged and the entire residential revenue deficiency is recovered in the variable charge, which will facilitate providing customers an incentive to be more energy efficient. Although Southwest Gas' proposed rates do not recover all fixed costs in fixed monthly charges, its basic service charges ensure that some fixed costs are recovered in fixed charges, and mitigate deferrals associated with the EEP.

Q. 23 How does Southwest Gas' proposed residential rate design achieve the objective of customer acceptance and understandability?

A. 23 Southwest Gas is proposing to retain the monthly basic service charge and single commodity charge of its current rate design, and simply adjust the commodity rates to recover the proposed residential revenue requirement. The Company's Arizona customers have had two years of experience with the current rate design, and will likely have almost three years of experience when the rates approved in this case become effective. Accordingly, some level of understandability and acceptance can be attributed to experience and the passage of time.

Southwest Gas' customers are also accustomed to periodic rate adjustments between rate cases. For example, the gas cost rate is adjusted monthly, the gas cost surcharge is adjusted as necessary, and various other surcharges are adjusted annually. Southwest Gas concluded that retaining the current rate design and introducing the EEP would not increase the likelihood of customer confusion, that customer acceptance and understandability would not be negatively impacted, and that the introduction of the EEP would be readily accepted with proper customer education.

Q. 24 Does Southwest Gas' proposed residential rate design enhance the effectiveness of energy efficiency and conservation efforts?

A. 24 Yes. Southwest Gas' proposed residential rate design balances the distribution of its requested residential revenue increase between the fixed charge and variable charge components. As a result, customers of various consumption levels experience a similar percentage increase in their bills while sending all customers, particularly larger use residential customers, a strong price signal to use natural gas more efficiently.

Q. 25 What are the other elements of Southwest Gas' residential rate proposal?

A. 25 Southwest Gas is proposing to expand the twenty percent (20%) discount provided to its low-income customers to include all usage during the winter months of November through April. The discount currently applies only to the first 150 therms of monthly consumption. The Company's analyses show that less than one percent (1%) of low-income customer usage exceeds 150 therms a month. This change will not only simplify the Company's low-income rates, but will provide its low-income customers with an additional benefit without significantly impacting its non-low-income customers. In Southwest Gas' Arizona service area, low-income customers use nearly the same amount of gas, on average, as non-low-income customers; the result is that, on average, low-income customers with the same average monthly use of 25 therms will see winter bills approximately 28% lower than they would otherwise.

In addition, Southwest Gas is tying the summer season residential air-conditioning rate under Schedule No. G-15 to the air-conditioning rate provided under Schedule No. G-40. Since Southwest Gas has a very small number of customers currently taking this service, it has little cost data to perform a meaningful cost study. Therefore the distribution rate calculated for Schedule G-40 is being utilized as a proxy for the cost of providing this service to residential customers with installed natural gas cooling equipment.

IV. GENERAL SERVICE RATE DESIGN

Q. 26 What rate design changes is Southwest Gas proposing for its non-residential customers?

A. 26 In order to better align the recovery of margin with the costs of providing service, Southwest Gas seeks to refine its Large General Service schedule, Schedule No. G-25. Currently, this schedule applies to customers that use between 7,201 and 180,000 therms per year. Southwest Gas' analysis of the cost of providing service shows a large difference between the cost to serve the smaller customers in this class versus the cost to serve the larger customers. Therefore, Southwest Gas is proposing to further define its general service customers by breaking the currently existing large class into two separate classes. The new class General Gas Service Large-1 is comprised of customers that use more 7,200 and up to 50,000 therms per year. The new class General Gas Service Large-2 is comprised of customers that use more than 50,000 and up to 180,000 therms per year. Further defining this class allows a better allocation of cost and a fairer rate design.

Q. 27 What schedules illustrate the impact of the Company's rate design proposals on its customers?

A. 27 Statement H reflects the impact of Southwest Gas' proposed changes in revenue by rate schedule, bill comparisons at present and proposed rates by customer class at various consumption levels, and the inputs used to develop Southwest Gas' proposed rates.

V. OTHER TARIFF CHANGES

Q. 28 Is Southwest Gas proposing any other tariff changes?

A. 28 Yes. In addition to the tariff changes necessary to effect the proposed rate design changes discussed above, Southwest Gas is proposing the following changes:

- Close rate Schedule No. G-75, Small Essential Agricultural Gas Service to new customers. For the past several rate cases Southwest Gas has been moving toward eliminating this rate schedule by moving customers from Schedule No. G-75 to Schedule No. G-25, General Gas Service where it benefits the customer. In this case, Southwest Gas has continued this process by reclassifying 42 customers from Schedule No. G-75 to Schedule No. G-25. There are now only 51 customers remaining on Schedule No. G-75, and Southwest Gas seeks to close the schedule to new service; and
- Implement a variety of minor tariff "housekeeping" changes to clarify and improve Southwest Gas' tariff. These include the Applicability and Special Conditions sections of Schedule No. G-40, the Applicability section of Schedule No. G-55, the Applicability section of Schedule No. G-60, the Applicability section of Schedule No. G-80, the Rates section of Schedule No. T-1, the Applicability, Rates and Special Conditions sections of Schedule SB-1, and the Customer Responsibility section of Rule No. 7. Please refer to the Company's proposed revised tariff for additional detail filed concurrently herewith in Volume I of Southwest Gas' rate application.

Q. 29 Does this conclude your prepared direct testimony?

A. 29 Yes.

SUMMARY OF QUALIFICATIONS
EDWARD B. GIESEKING

I graduated from Sonoma State University in 1985 with a Bachelor of Arts degree in Business Management and from New Mexico State University in 1993 with a Master of Arts degree in Regulatory Economics.

From 1983 through 1993, I was employed by Pacific Gas and Electric Company in various capacities, including the position of Regulatory Analyst in the Revenue Requirements and Rates departments. My responsibilities as a Regulatory Analyst primarily involved the development of pricing structures and supporting rate requests before the California Public Utilities Commission.

I began my career with Southwest as a Specialist in the Rates department in 1993. I was assigned responsibility for monitoring and participating in California regulatory activity and reporting impacts to Company management. In 1995 I was promoted to Senior Specialist in the Regulatory Affairs department and subsequently promoted to Manager of the department in 1998. In addition to the day-to-day management of the department, my responsibilities included the supervision of regulatory filings to ensure timely and accurate submittals, and serving as the Company liaison with state regulatory agency and state consumer advocate professionals.

In August 2002, I was promoted to the position of Senior Manager of the Pricing and Tariffs department and in July 2003 was promoted to my current position.

TAB 10

IN THE MATTER OF
SOUTHWEST GAS CORPORATION
Docket No. G-01551A-10___

PREPARED DIRECT TESTIMONY
OF
BOBBI J. STERRETT

ON BEHALF OF
SOUTHWEST GAS CORPORATION

NOVEMBER 12, 2010

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of
Bobbi J. Sterrett

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BEFORE THE ARIZONA CORPORATION COMMISSION

Prepared Direct Testimony
of
BOBBI J. STERRETT

I. INTRODUCTION

Q. 1 Please state your name and business address.

A. 1 My name is Bobbi J. Sterrett. My business address is 5241 Spring Mountain Road, Las Vegas, Nevada 89150.

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

A. 2 I am employed by Southwest Gas Corporation (Southwest Gas or the Company). My title is Supervisor of the Conservation and Demand Side Management Department.

Q. 3 Please summarize your educational background and relevant business experience.

A. 3 My educational background and relevant business experience are summarized in Appendix A to this testimony.

Q. 4 Have you previously testified before any regulatory commission?

A. 4 No.

Q. 5 What is the purpose of your prepared direct testimony in this proceeding?

A. 5 I sponsor the Company's Energy Efficiency and Renewable Energy Resource Technology Portfolio Implementation Plan that was prepared pursuant to the guidelines set forth in the draft gas energy efficiency standards that have been approved by the Arizona Corporation Commission (Commission).

II. OVERVIEW OF SOUTHWEST GAS' ENERGY EFFICIENCY AND RENEWABLE ENERGY RESOURCE TECHNOLOGY PROGRAMS

Q. 6 Why is Southwest Gas proposing a new portfolio of energy efficiency (EE) and renewable energy resource technology (RET) programs in conjunction with the current application?

A. 6 Southwest Gas is proposing a portfolio of EE and RET programs to provide and encourage EE and RET opportunities with 10 different programs that will result in cost-effective energy savings, advance market transformation and achieve sustainable savings, reducing the need for future market interventions. Furthermore, if the proposed portfolio of programs is approved, a greater number of Arizona customers will have the opportunity to participate in EE and RET programs, and enjoy reduced energy consumption and lower utility bills.

Q. 7 Please identify the market segments Southwest Gas intends to reach with the programs included in its implementation plan.

A. 7 Southwest Gas intends to target three distinct market segments - residential, non-residential, and low-income. Southwest Gas has designed programs to target these three market segments using a common branding through the use of Southwest Gas' energy efficiency tag-line, *Smarter Greener Better*.

Q. 8 What programs are designed to target the residential market?

A. 8 The Residential Energy Management Programs, which include three different programs: (1) *Smarter Greener Better* Residential Rebates, (2) *Smarter Greener Better* Homes, and a (3) *Smarter Greener Better* Residential Energy Assessments Program. For additional information regarding each of these programs and each of the applicable measures, please refer to the Company's implementation plan filed concurrently herewith as Volume II to Southwest Gas' rate application.

Q. 9 What programs are designed to target the non-residential market?

A. 9 The non-residential market will be targeted with four different programs: (1) *Smarter Greener Better* Business Rebates; (2) *Smarter Greener Better* Custom Business Rebates; (3) *Smarter Greener Better* Business Energy Assessments; and (4) *Smarter Greener Better* Distributed Generation. For additional information regarding each of these programs and each of the applicable measures, please refer to the Company's implementation plan filed concurrently herewith as Volume II to Southwest Gas' rate application.

Q. 10 What programs are designed to target low-income customers?

A. 10 Southwest Gas is proposing a *Smarter Greener Better* Low-Income Energy Conservation (LIEC) program. This program focuses on assisting low-income residential customers that lack the financial resources to invest in energy efficiency measures. Assistance to low-income customers is provided through two components, weatherization and bill assistance. For additional information regarding this program, please refer to the Company's implementation plan filed concurrently herewith as Volume II to Southwest Gas' rate application.

Q. 11 What RET programs is Southwest Gas proposing?

A. 11 Southwest Gas is proposing a *Smarter Greener Better* Solar Thermal Rebates Program, in which rebates will be offered to both residential and non-residential customers on qualified solar thermal systems upon proof-of-purchase and installation. Through this program, the Company's objective is to increase public awareness of the benefits of using renewable energy through the use of solar thermal systems to reduce customer natural gas usage by providing economically beneficial rebates to install the systems. For additional information regarding this program, please refer to the Company's implementation plan filed concurrently herewith as Volume II to

Southwest Gas' rate application.

Q. 12 Is Southwest Gas proposing any other programs?

A. 12 Yes. Southwest Gas is proposing a *Smarter Greener Better* Energy Education Program as a means to provide customers with energy efficiency and conservation information and education. The Company expects that providing educational awareness and encouraging conservation behaviors will generate savings for the portfolio of EE and RET programs. For additional information regarding this program, please refer to the Company's implementation plan filed concurrently herewith as Volume II to Southwest Gas' rate application.

Q. 13 How will Southwest Gas recover the costs of the approved programs?

A. 13 Southwest Gas is requesting to continue its current Demand-Side Management Adjustor Mechanism to recover the costs of the programs.

Q. 14 Did Southwest Gas study the cost-effectiveness of the programs included within the current portfolio?

A. 14 Yes. Consistent with the draft gas EE standards, Southwest Gas used the Societal Test to evaluate cost-effectiveness at the program level.

Q. 15 Does Southwest Gas' proposed implementation plan establish a foundation for the Company to achieve the energy savings goals established by the Commission in the draft gas EE standards?

A. 15 Yes. Southwest Gas' proposed implementation plan establishes a foundation to achieve the savings goals set forth in the Commission's draft gas EE standard.

Q. 16 Does this conclude your prepared direct testimony?

A. 16 Yes.

SUMMARY OF QUALIFICATIONS
BOBBI J. STERRETT

I graduated from the University of Nevada, Las Vegas in 1994 with a Bachelor of Science degree with a major in marketing. In 1999, I earned a Masters of Business Administration from Webster University.

I have been employed at Southwest since 1995 and have held various positions throughout my career with the Company. From 1995 to 1996, I was employed as a Customer Representative I in Customer Assistance at the Southern Nevada Division. My primary role was to assist customers with billing information and service scheduling.

In 1996, I transferred to the Energy Services department at Southwest's corporate headquarters as a Customer Representative II. In this position, I advised customers about ways to save energy and also provided referrals for licensed HVAC and plumbing contractors, along with appliance dealers where natural gas equipment was sold.

In 1998, I joined the Demand Side Management (DSM) department, as an Analyst II/Marketing. Subsequent promotions in DSM entailed Specialist/Marketing in 2002, Specialist/State Regulatory Affairs in 2005 and Sr. Specialist/State Regulatory Affairs in 2006. My job duties entailed assisting in the preparation of DSM program filings and reporting, along with the daily management of DSM and low-income programs for Southwest's tri-state service territory.

In 2008, I was promoted to my current position as Supervisor of Conservation and DSM/State Regulatory Affairs. My responsibilities include overseeing the development, implementation, promotion, and reporting of the DSM programs, as well as conducting research activities and representing the Company in various regulatory proceedings concerning conservation and energy efficiency issues.

SOUTHWEST GAS CORPORATION

Docket No. G-01551A-10-

2010
ARIZONA
GENERAL RATE CASE

Supporting Schedules

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SUPPORTING SCHEDULES

Schedule A

SOUTHWEST GAS CORPORATION
ARIZONA
INCREASE IN GROSS REVENUE REQUIREMENT
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description (a)	Reference (b)	Original Cost (c)	Reconstruction Cost New Depreciated (d)	50% Original Cost 50% RCND Fair Value (e)	Line No.
1	Adjusted Rate Base	Sch B-1	$ 1,073,700,633	$ 1,839,334,300	$ 1,456,517,467	1
2	Adjusted Operating Income	Sch C-1	$ 65,065,829	$ 65,065,829	$ 65,065,829	2
3	Current Rate of Return	Ln 2 / Ln 1	6.06%	3.54%	4.47%	3
4	Required Operating Income	Sch A-1	$ 109,211,529	$ 109,211,529	$ 109,211,529	4
5	Required Rate of Return	Sch D-1	10.17%	5.94%	7.50%	5
6	Operating Income Deficiency	Ln 4 - Ln2			$ 44,145,700	6
7	Gross Revenue Conversion Factor	Sch C-3, Sh 1, Ln 8(d)			1.6579	7
8	Increase in Gross Revenue Requirements				$ 73,189,438	8

SOUTHWEST GAS CORPORATION
ARIZONA
SUMMARY OF THE OVERALL RESULTS OF OPERATIONS
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description	Recorded 6/30/2010	Adjustments	Adjusted Amounts	Deficiency	Adjusted for Deficiency	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
1	Operating Revenue	$ 834,756,858	$ (423,844,760)	$ 410,912,098	$ 73,189,438	$ 484,101,536	1
2	Gas Cost	407,320,096	(407,320,096)	0	0	0	2
3	Operating Margin	$ 427,436,762	$ (16,524,664)	$ 410,912,098	$ 73,189,438	$ 484,101,536	3
	Operating Expenses						
4	Other Gas Supply	$ 1,080,748	$ 57,398	$ 1,138,145	$ 0	$ 1,138,145	4
5	Distribution	96,282,901	4,296,967	100,579,868	0	100,579,868	5
6	Customer Accounts	31,334,890	2,546,381	33,881,272	186,105	34,067,376	6
7	Customer Service and Information	1,296,429	(91,294)	1,205,135	0	1,205,135	7
8	Sales	58,740	(58,740)	0	0	0	8
	Administrative and General						
9	Direct	5,944,630	394,772	6,339,402	0	6,339,402	9
10	System Allocable	56,860,171	1,925,925	58,786,097	0	58,786,097	10
	Depreciation and Amortization						
11	Direct	90,832,850	2,224,178	93,057,028	0	93,057,028	11
12	System Allocable	5,333,983	910,999	6,244,982	0	6,244,982	12
13	Regulatory Amortizations	4,083,462	(3,798,881)	284,581	0	284,581	13
14	Taxes Other Than Income	25,746,383	1,457,495	27,203,877	0	27,203,877	14
15	Interest on Customer Deposits	2,615,905	292,612	2,908,517	0	2,908,517	15
16	Income Taxes	24,860,511	(10,643,146)	14,217,365	28,857,634	43,074,999	16
17	Total Operating Expenses	$ 346,331,603	$ (485,334)	$ 345,846,269	$ 29,043,738	$ 374,890,007	17
18	Net Operating Income	$ 81,105,159	$ (16,039,330)	$ 65,065,829	$ 44,145,700	$ 109,211,529	18
	Rate Base						
	Gas Plant in Service						
19	Direct	$ 2,252,566,706	$ 2,806,169	$ 2,255,372,875	$ 739,655,652	$ 2,995,028,528	19
20	System Allocable	101,255,058	3,284,398	104,539,455	4,270,230	108,809,685	20
21	Total Gross Plant	$ 2,353,821,764	$ 6,090,567	$ 2,359,912,330	$ 743,925,882	$ 3,103,838,213	21
	Accumulated Provision for Depreciation and Amortization						
22	Direct	$ 886,327,699	$ 0	$ 886,327,699	$ 298,792,174	$ 1,185,119,874	22
23	System Allocable	68,873,041	0	68,873,041	1,775,324	70,648,365	23
24	Total Accumulated Provision for Depreciation and Amortization	$ 955,200,740	$ 0	$ 955,200,740	$ 300,567,499	$ 1,255,768,238	24
25	Net Plant in Service	$ 1,398,621,024	$ 6,090,567	$ 1,404,711,591	$ 443,358,384	$ 1,848,069,975	25
	Other Rate Base Items						
26	Working Capital						26
27	Cash Working Capital	$ (4,472,151)	$ 0	$ (4,472,151)	$ 0	$ (4,472,151)	27
28	Materials and Supplies	9,920,409	0	9,920,409	0	9,920,409	28
29	Prepayments	4,744,133	0	4,744,133	0	4,744,133	29
30	Customer Deposits	(48,475,278)	0	(48,475,278)	0	(48,475,278)	30
31	Customer Advances	(62,033,165)	0	(62,033,165)	0	(62,033,165)	31
32	Deferred Taxes	(230,694,907)	0	(230,694,907)	(60,541,550)	(291,236,457)	32
33	Total Other Rate Base Items	$ (331,010,958)	$ 0	$ (331,010,958)	$ (60,541,550)	$ (391,552,508)	33
34	Total Rate Base	$ 1,067,610,066	$ 6,090,567	$ 1,073,700,633	$ 382,816,834	$ 1,456,517,467	34
35	Rate of Return	7.60%		6.06%		7.50%	35

SOUTHWEST GAS CORPORATION
ARIZONA
SPREAD OF REVENUE INCREASE BY CUSTOMER CLASS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Schedule Number	Increase/(Decrease) [1] Dollars	Percent	Line No.
	(a)	(b)	(c)	(d)	
1	Single-Family Residential Gas Service	G-5	$ 60,496,693	23.19%	1
2	Multi-Family Residential Gas Service	G-6	1,455,888	21.06%	2
3	Single-Family Low Income Residential Gas Service	G-10	2,606,273	29.21%	3
4	Multi-Family Low Income Residential Gas Service	G-11	176,424	26.09%	4
5	Special Residential Gas Service for Air Conditioning	G-15	15,479	26.31%	5
6	Master Metered Mobile Home Park Gas Service	G-20	64,536	7.47%	6
	General Gas Service				
7	Small	G-25(S)	590,754	7.47%	7
8	Medium	G-25(M)	1,686,674	7.47%	8
9	Large-1	G-25(L1)	3,275,283	7.47%	9
10	Large-2	G-25(L2)	840,664	7.47%	10
11	Transportation Eligible	G-25(TE)	1,620,055	7.47%	11
12	Optional Gas Service	G-30	0	0.00%	12
13	Air Conditioning Gas Service	G-40	6,141	7.47%	13
14	Street Lighting Gas Service	G-45	12,459	23.34%	14
	Gas Service for Compression on Customer's Premises	G-55			
15	Residential		546	3.19%	15
16	Small		1,577	6.51%	16
17	Large		62,098	7.59%	17
18	Electric Generation Gas Service	G-60	222,828	7.47%	18
19	Small Essential Agriculture User Gas Service	G-75	54,336	7.47%	19
20	Natural Gas Engine Gas Service	G-80	-	0.00%	20
21	Transportation of Customer-Secured Natural Gas	T-1	$ 73,188,708	18.48%	21
22	Special Contract Gas Service	B-1	0	0.00%	22
23	Other Operating Revenue		0	0.00%	23
24	Total Arizona Revenue		$ 73,188,708	17.81%	24

[1] Schedule H-1, Sheet 1.

SOUTHWEST GAS CORPORATION
ARIZONA
SUMMARY RESULTS OF OPERATIONS

		Prior Years		Test Year		Projected Year		
Line No.	Description	Year Ending 2008 [1]	Year Ending 2009 [1]	Actual 6/30/10 [2]	Adjusted 6/30/10 [2]	Present Rates 6/30/11 [3]	Proposed Rates 6/30/11 [3]	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	
1	Operating Revenues	$ 858,315,746	$ 986,658,106	$ 427,436,762	$ 410,912,098	$ 431,711,130	$ 488,942,552	1
2	Operating Expenses and Taxes	788,470,285	914,093,362	346,331,603	345,846,269	358,156,230	380,891,893	2
3	Net Operating Income	$ 69,845,461	$ 72,564,744	$ 81,105,159	$ 65,065,829	$ 73,554,899	$ 108,050,659	3
4	Other Income and Deductions	0	0	0	0	0	0	4
5	Interest Expense	46,979,300	47,636,149	42,471,450	42,713,744	42,713,744	42,713,744	5
6	Net Income	$ 22,866,161	$ 24,928,595	$ 38,633,709	$ 22,352,085	$ 30,841,155	$ 65,336,915	6

[1] Supporting Schedule E-2.
[2] Supporting Schedule C-1, Sheets 1 and 16.
[3] Supporting Schedule F-1.
NOTE: Operating revenue and expenses reflected on a margin basis in columns (d), (e), (f), and (g).

SOUTHWEST GAS CORPORATION
TOTAL SYSTEM
SUMMARY RESULTS OF OPERATIONS [1]

Line No.	Description		Prior Years: Year Ended 2008		Prior Years: Year Ended 2009		Test Year: 12 Months Ended 6/30/2010	Line No.
	(a)		(b)		(c)		(d)	
1	Gross Revenues	$	1,779,482,984	$	1,603,416,284	$	1,570,616,116	1
2	Revenue Deductions & Operating Expenses		1,628,783,532		1,456,876,517		1,406,100,077	2
3	Operating Income	$	150,699,453	$	146,539,767	$	164,516,039	3
4	Other Income and (Deductions)		1,103,463		22,774,756		17,347,046	4
5	Income Before Interest Deductions	$	151,802,916	$	169,314,523	$	181,863,085	5
6	Interest Expense	$	91,460,124	$	82,779,269	$	80,624,519	6
7	Allowance for Debt Funds Used During Construction		630,031		947,139		571,757	7
8	Net Interest Expense	$	90,830,093	$	81,832,130	$	80,052,762	8
9	Net Income	$	60,972,823	$	87,482,393	$	101,810,322	9
10	Preferred and Preference Dividend Requirements		0		0		0	10
11	Net Income Applicable to Common Stock	$	60,972,823	$	87,482,393	$	101,810,322	11
12	Weighted Average Shares of Common Stock Outstanding		43,475,782		44,751,601		45,112,917	12
13	Earnings per Common Share	$	1.40	$	1.95	$	2.26	13
14	Dividends Paid per Common Share	$	0.90	$	0.95	$	1.00	14
15	Dividend Pay-Out Ratio		64.17%		48.60%		44.31%	15
16	Return on Average Invested Capital		5.94%		8.02%		8.85%	16
17	Return on Year-End Invested Capital		5.77%		7.78%		8.66%	17
18	Return on Average Common Equity		5.94%		8.02%		8.85%	18
19	Return on Year-End Common Equity		5.77%		7.78%		8.66%	19
20	Times Bond Interest Earned- Before Income Taxes		2.71		3.40		3.85	20
21	Times Total Interest and Preferred Dividend Earned - After Income Taxes		1.67		2.07		2.27	21

[1] In this proceeding, the Company is requesting rate relief for the Arizona rate jurisdiction of its system only. Projections for the total Company's financial position are not compiled or available.

SOUTHWEST GAS CORPORATION
TOTAL SYSTEM
SUMMARY OF CAPITAL STRUCTURE [1]

Line No.	Description	Prior Years At 12/31/08	Prior Years At 12/31/09	At 6/30/10	Projected At 6/30/11 [2]	Line No.
	(a)	(b)	(c)	(d)	(e)	
	Capital Amounts					
1	Short-Term Debt	$ 55,000,000	$ -	$ -	$ -	1
2	Long-Term Debt	1,172,113,096	1,165,115,178	1,073,126,473	1,125,740,219	2
3	Total Debt	$ 1,227,113,096	$ 1,165,115,178	$ 1,073,126,473	$ 1,125,740,219	3
4	Preferred Equity	100,000,000	100,000,000	-	-	4
5	Common Equity	1,057,267,052	1,124,376,517	1,175,133,263	1,235,213,139	5
6	Total Capital	$ 2,384,380,148	$ 2,389,491,695	$ 2,248,259,736	$ 2,360,953,358	6
	Capitalization Ratios					
7	Short-Term Debt	2.31%	0.00%	0.00%	0.00%	7
8	Long-Term Debt	49.16%	48.76%	47.73%	47.68%	8
9	Total Debt	51.46%	48.76%	47.73%	47.68%	9
10	Preferred Equity	4.19%	4.18%	0.00%	0.00%	10
11	Common Equity	44.34%	47.06%	52.27%	52.32%	11
12	Total	100.00%	100.00%	100.00%	100.00%	12
	Weighted Cost of Capital					
13	Short-Term Debt	0.03%	0.00%	0.00%	0.00%	13
14	Long-Term Debt	2.86%	2.88%	3.06%	2.77%	14
15	Preferred Equity	0.34%	0.34%	0.00%	0.00%	15
16	Common Equity	4.43%	4.71%	5.75%	5.76%	16
17	Total Weighted Cost of Capital	7.67%	7.93%	8.81%	8.52%	17

[1] Based on the equity method of accounting
[2] Estimated

SOUTHWEST GAS CORPORATION
ARIZONA
CONSTRUCTION EXPENDITURES, PLANT PLACED IN SERVICE, AND GROSS PLANT
FOR THE YEARS ENDED DECEMBER 31, 2008 AND 2009,
THE TEST YEAR ENDED JUNE 30, 2010
AND PROJECTED YEARS JUNE 2011, 2012 AND 2013

		Actual			Projected			
Line No.	Description [1]	Year Ended 2008	Year Ended 2009	Test Year Ended 6/30/2010	Year Ending 6/30/2011	Year Ending 6/30/2012	Year Ending 6/30/2013	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	
	Construction Expenditures							
1	Arizona Direct	$ 132,898,703	$ 97,089,839	$ 94,982,427	$ 81,836,180	$ 68,440,322	$ 77,158,386	1
2	System Allocable [2]	7,587,493	9,419,951	7,642,726	26,052,255	19,173,396	13,887,742	2
3	Total Construction Expenditures	$ 140,486,196	$ 106,509,790	$ 102,625,153	$ 107,888,435	$ 87,613,718	$ 91,046,128	3
	Net Plant Placed in Service							
4	Arizona Direct	$ 106,009,807	$ 69,652,922	$ 76,335,644	$ 65,468,944	$ 54,752,258	$ 61,726,709	4
5	System Allocable [2]	(2,156,521)	5,569,356	5,742,225	17,455,011	12,846,175	9,304,787	5
6	Total Net Plant Placed in Service	$ 103,853,286	$ 75,222,278	$ 82,077,869	$ 82,923,955	$ 67,598,433	$ 71,031,496	6
	Gross Utility Plant in Service							
7	Arizona Direct	$ 2,133,271,311	$ 2,202,924,233	$ 2,252,566,706	$ 2,318,035,650	$ 2,372,787,908	$ 2,434,514,617	7
8	System Allocable [2]	90,053,664	95,623,020	101,255,057	118,710,068	131,556,243	140,861,030	8
9	Total Gross Utility Plant in Service	$ 2,223,324,975	$ 2,298,547,253	$ 2,353,821,763	$ 2,436,745,718	$ 2,504,344,151	$ 2,575,375,647	9

[1] Source: Company Records
[2] Schedule C-1, Sheet 17, Ln 10 (b).

SOUTHWEST GAS CORPORATION
TOTAL SYSTEM
SUMMARY STATEMENT OF CASH FLOWS

		Prior Years [1]		Test Year [1]	Projected Year [2]		
					At Present Rates	At Proposed Rates	
Line No.	Description	Year Ended 2008	Year Ended 2009	12 Months Ended 6/30/2010	Year Ended 12/31/2011	Year Ended 12/31/2011	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
1	Cash Flows from Operating Activities	$ 256,461,930	$ 364,572,356	$ 389,578,783	$ 280,568,316	$ 324,714,016	1
2	Cash Flows from Investing Activities	(227,128,057)	(255,022,532)	(207,271,297)	(238,275,773)	(238,275,773)	2
3	Cash Flows from Financing Activities	(39,704,232)	(86,343,900)	(170,906,818)	14,750,000	14,750,000	3
4	Increase (Decrease) in Cash and Cash Equivalents	$ (10,370,359)	$ 23,205,924	$ 11,400,668	$ 57,042,543	$ 101,188,243	4

[1] Supporting Schedule E-3.
[2] Supporting Schedule F-2.

Schedule B

SOUTHWEST GAS CORPORATION
ARIZONA
ADJUSTED ORIGINAL COST AND RCND RATE BASE
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description	Reference	Adjusted Original Cost Rate Base	Adjusted RCND	Fair Value [1]	Line No.
	(a)	(b)	(c)	(d)	(e) [(c) +(d)] / 2	
	Gas Plant in Service					
1	Direct	Sch B-2 & Sch B-3	$ 2,255,372,875	$ 3,734,684,180	$ 2,995,028,528	1
2	System Allocable		104,539,455	113,079,915	108,809,685	2
3	Total Gross Plant		$ 2,359,912,330	$ 3,847,764,095	$ 3,103,838,213	3
	Accumulated Depreciation and Amortization	Sch B-2 & Sch B-3				
4	Direct		$ 886,327,699	$ 1,483,912,048	$ 1,185,119,874	4
5	System Allocable		68,873,041	72,423,689	70,648,365	5
6	Total Accumulated Depreciation and Amortization		$ 955,200,740	$ 1,556,335,737	$ 1,255,768,238	6
7	Net Gas Plant in Service		$ 1,404,711,591	$ 2,291,428,358	$ 1,848,069,975	7
	Other Rate Base Items					
	Working Capital					
8	Cash Working Capital	Sch B-5, Sh 1, Ln 1(c)	$ (4,472,151)	$ (4,472,151)	$ (4,472,151)	8
9	Materials and Supplies	Sch B-5, Sh 1, Ln 2(c)	9,920,409	9,920,409	9,920,409	9
10	Prepayments	Sch B-5, Sh 1, Ln 3(c)	4,744,133	4,744,133	4,744,133	10
11	Customer Advances for Construction	Sch B-6, Sh 1, Ln 15(b)	(62,033,165)	(62,033,165)	(62,033,165)	11
12	Customer Deposits	Sch B-6, Sh 2, Ln 15(b)	(48,475,278)	(48,475,278)	(48,475,278)	12
13	Deferred Income Taxes	Sch B-6, Sh 3, Ln 3(d)	(230,694,907)	(351,778,007)	(291,236,457)	13
14	Total Other Rate Base Items		$ (331,010,958)	$ (452,094,058)	$ (391,552,508)	14
15	Total Rate Base		$ 1,073,700,633	$ 1,839,334,300	$ 1,456,517,467	15
				Sch A-1, Sh 1, Ln 1(d)	Sch A-1, Sh 1, Ln 1(e)	

[1] 50/50 weighting of Original Cost and Reconstructed Cost.

SOUTHWEST GAS CORPORATION
ARIZONA
RECORDED RATE BASE, AS ADJUSTED
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description (a)	Reference (b)	Recorded at 6/30/2010 (c)	Adjustments (d)	Adjusted at 6/30/2010 (e)	Line No.
	Rate Base					
	Gas Plant in Service					
1	Direct	Sch B-2, Sh 1, Ln 4	$ 2,252,566,706	$ 2,806,169	$ 2,255,372,875	1
2	System Allocable	WP B-2, Sh 5, Ln 19 * [1]	101,255,058	3,284,398	104,539,455	2
3	Total Gas Plant		$ 2,353,821,764	$ 6,090,567	$ 2,359,912,330	3
	Accumulated Provision for Depreciation and Amortization					
4	Direct	WP B-2, Sh 3, Ln 31	$ 886,327,699	$ 0	$ 886,327,699	4
5	System Allocable	WP B-2, Sh 7, Ln 21 * [1]	68,873,041	0	68,873,041	5
6	Total Accumulated Provision for Depreciation and Amortization		$ 955,200,740	$ 0	$ 955,200,740	6
7	Net Plant in Service		$ 1,398,621,024	$ 6,090,567	$ 1,404,711,591	7
	Other Rate Base Items					
8	Working Capital	Sch B-5, Sh 1, Ln 4(c)	$ 10,192,391	$ 0	$ 10,192,391	8
9	Customer Advances	Sch B-6, Sh 1, Ln 15(b)	(62,033,165)	0	(62,033,165)	9
10	Customer Deposits	Sch B-6, Sh 2, Ln 15(b)	(48,475,278)	0	(48,475,278)	10
11	Deferred Taxes	Sch B-6, Sh 3, Ln 3(d)	(230,694,907)	0	(230,694,907)	11
12	Total Other Rate Base Items		$ (331,010,958)	$ 0	$ (331,010,958)	12
13	Total Rate Base		$ 1,067,610,066	$ 6,090,567	$ 1,073,700,633	13
			Sch A-1, Sh 2, Col (b)		Sch A-1, Sh 2, Col (d)	

[1] Sch C-1, Sh 17, Ln 10(b)

SOUTHWEST GAS CORPORATION
ARIZONA
SUMMARY COST OF GAS PLANT
AT JUNE 30, 2010

Line No.	Description (a)	Account Number (b)	Balance at 6/30/2010 (c) WP B-2	Adjustments (d) WP B-2	Adjusted Balance (e) WP B-2	Allocation Of System Allocable Amounts [1] (f)	Test Year Balance As Allocated at 6/30/2010 (g)	Line No.
	Direct Gas Plant in Service							
1	Intangible Plant		$ 3,649,879	$ 0	$ 3,649,879	$ 76,175,540	$ 79,825,419	1
2	Distribution Plant		2,141,652,849	2,646,045	2,144,298,894	0	2,144,298,894	2
3	General Plant		107,263,978	160,124	107,424,102	28,363,915	135,788,017	3
4	Total Gas in Service	101	$ 2,252,566,706	$ 2,806,169	$ 2,255,372,875	$ 104,539,455	$ 2,359,912,330	4
			Sch B-1, Sh 2, Ln 1(c)					
	Accumulated Provision for Depreciation and Amortization							
5	Intangible Plant		$ 2,493,351	$ 0	$ 2,493,351	$ 57,080,901	$ 59,574,253	5
6	Distribution Plant		881,133,062	0	881,133,062	0	881,133,062	6
7	General Plant		2,701,286	0	2,701,286	11,792,139	14,493,425	7
8	Total Accumulated Depreciation and Amortization	108 & 111	$ 886,327,699	$ 0	$ 886,327,699	$ 68,873,041	$ 955,200,740	8
9	Total Net Gas Plant In Service		$ 1,366,239,007	$ 2,806,169	$ 1,369,045,176	$ 35,666,415	$ 1,404,711,591	9
	System Allocable Gas Plant in Service							
10	Intangible Plant		$ 129,588,741	$ 5,839,131	$ 135,427,872			10
11	General Plant		50,426,484	0	50,426,484			11
12	Total System Allocable Gas Plant	101	$ 180,015,225	$ 5,839,131	$ 185,854,356			12
	Accumulated Provision For Depreciation and Amortization							
13	Intangible Plant		$ 101,480,672	$ 0	$ 101,480,672			13
14	General Plant		20,964,529	0	20,964,529			14
15	Total System Allocable Accumulated Depreciation and Amortization	108 &111	$ 122,445,201	$ 0	$ 122,445,201			15
16	System Allocable Net Gas Plant in Service		$ 57,570,024	$ 5,839,131	$ 63,409,155			16

[1] Allocated based on the 4-Factor, Schedule C-1, Sheet 17, Ln 10(b).

SOUTHWEST GAS CORPORATION
ARIZONA
COMPLETED CONSTRUCTION NOT CLASSIFIED ("CCNC")
ADJUSTMENT NO. 17

Line No.	Description (a)	Account Number (b)		Completed Cost of Plant [1] (c)	Line No.
	Distribution Plant				
1	Land and Land Rights	374.0	$	0	1
2	Mains	376.0		2,525,939	2
3	Regulator Station	378.0		68,669	3
4	Service Replacements	380.0		51,437	4
5	Industrial Measuring and Regulating Station	385.0		0	5
6	Total Distribution Plant		$	2,646,045	6
	General Plant				
7	Structures and Improvements	390.1	$	0	7
8	Office Furniture and Equipment	391.0		0	8
9	Computer Equipment	391.1		73,177	9
10	Transportation Equipment	392.1		0	10
11	Tools, Shop and Garage Equipment	394.0		86,947	11
12	Total General Plant		$	160,124	12
13	Total Arizona		$	2,806,169	13
				Sch C-2, Sh 2, Ln 18(i)	

Explanation
To record direct Arizona non-revenue producing plant completed, but not yet classified in plant-in-service accounts.

[1] Workpapers B-2, Sheet 9

SOUTHWEST GAS CORPORATION
SYSTEM ALLOCABLE
COMPLETED CONSTRUCTION NOT CLASSIFIED ("CCNC")
ADJUSTMENT NO. 17

Line No.	Description (a)	Account Number (b)	Completed Cost of Plant (c)	Line No.
	Intangible Plant			
1	Miscellaneous Intangible [1]	303.0	$ 5,839,131	1
2	Total Intangible Plant		$ 5,839,131	2
3	Total System Allocable		$ 5,839,131	3
4	Arizona 4-Factor [2]		56.25%	4
5	Amount Allocated to Arizona		$ 3,284,398 Sch C-2, Sh 2, Ln 19(i)	5

Explanation
To record System Allocable plant completed, but not yet classified to plant-in-service accounts and adjust *Miscellaneous Intangible* consistent with prior Commission decisions.

[1] Workpapers C-2, Adjustment No. 13, Sheet 8, Ln 41(e)
[2] Schedule C-1, Sheet 17, Ln 10(b)

SOUTHWEST GAS CORPORATION
ARIZONA
SUMMARY OF RECONSTRUCTED ("RCND") COST OF GAS PLANT IN SERVICE
AT JUNE 30, 2010

Line No.	Description	Balance at 6/30/2010	Adjustments	Adjusted Balance	Allocation Of System Allocable Amounts [3]	Test Year Balance As Allocated at 6/30/2010	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
		[1]	[2]	(b) + (c)	(e) * 56.25%	(d) + (e)	
	Gas Plant in Service						
1	Intangible Plant	$ 3,649,879	$ 0	$ 3,649,879	$ 76,175,540	$ 79,825,420	1
2	Distribution Plant	3,592,371,414	2,646,045	3,595,017,459	0	3,595,017,459	2
3	General Plant	135,856,717	160,124	136,016,841	36,904,375	172,921,216	3
4	Total Gas Plant in Service	$ 3,731,878,011	$ 2,806,169	$ 3,734,684,180	$ 113,079,915	$ 3,847,764,095	4
	Accumulated Provision for Depreciation and Amortization						
5	Intangible Plant	$ 2,493,351	$ 0	$ 2,493,351	$ 57,080,901	$ 59,574,252	5
6	Distribution Plant	1,477,997,345	0	1,477,997,345	0	1,477,997,345	6
7	General Plant	3,421,352	0	3,421,352	15,342,788	18,764,140	7
8	Total Accumulated Depreciation and Amortization	$ 1,483,912,048	$ 0	$ 1,483,912,048	$ 72,423,689	$ 1,556,335,737	8
9	Total Net Gas Plant in Service	$ 2,247,965,963	$ 2,806,169	$ 2,250,772,132	$ 40,656,226	$ 2,291,428,358	9
						Sch B-1, Sh 1, Col (d)	
	System Allocable Gas Plant in Service						
10	Intangible Plant	$ 129,588,741	$ 5,839,131	$ 135,427,872			10
11	General Plant	65,610,050	0	65,610,050			11
12	Total System Allocable Gas Plant	$ 195,198,791	$ 5,839,131	$ 201,037,922			12
	Accumulated Provision for Depreciation and Amortization [4]						
13	Intangible Plant	$ 101,480,672	$ 0	$ 101,480,672			13
14	General Plant	27,277,012	0	27,277,012			14
15	Total System Allocable Accumulated Depreciation and Amortization	$ 128,757,684	$ 0	$ 128,757,684			15
16	System Allocable Net Gas Plant in Service	$ 66,441,107	$ 5,839,131	$ 72,280,239			16

[1] Workpapers B-4, Sheet 1, Col (c)
[2] Adjustments are calculated in Schedule B-2, and are identical to the adjustments presented in Schedule B-3.
[3] Allocated based on the 4-Factor, Schedule C-1, Sheet 17, Ln 10(b).
[4] RNCD accumulated provision for depreciation and amortization reflected as a percentage of RCND gas plant in the same ratio as adjusted accumulated provision for depreciation and amortization as a percent of adjusted gas .

SOUTHWEST GAS CORPORATION
ARIZONA INCLUDING SYSTEM ALLOCABLE
RCND GAS PLANT IN SERVICE
AS OF JUNE 30, 2010

Line No.	Description	4-Factor	Total Arizona Balance At 6/30/2010	Allocation Of System Allocable Amounts [1]	Test Year Balance As Allocated At 6/30/2010	Line No.
		(b)	(c)	(d)	(e)	
	Gas Plant in Service					
1	Intangible Plant		$ 3,649,879	$ 72,891,142	$ 76,541,021	1
2	Distribution Plant		3,592,371,414	0	3,592,371,414	2
3	General Plant		135,856,717	36,904,375	172,761,092	3
4	Total Gas Plant in Service		$ 3,731,878,011	$ 109,795,517	$ 3,841,673,528	4
	Accumulated Provision for Depreciation and Amortization					
5	Intangible Plant		$ 2,493,351	$ 57,080,901	$ 59,574,252	5
6	Distribution Plant		1,477,997,345	0	1,477,997,345	6
7	General Plant		3,421,352	15,342,788	18,764,140	7
8	Total Accumulated Depreciation and Amortization		$ 1,483,912,048	$ 72,423,689	$ 1,556,335,737	8
9	Total Net Gas Plant In Service		$ 2,247,965,963	$ 37,371,828	$ 2,285,337,791	9
	System Allocable Gas Plant in Service					
10	Intangible Plant		$ 129,588,741			10
11	General Plant		65,610,050			11
12	Total System Allocable Gas Plant		$ 195,198,791			12
	Accumulated Provision For Depreciation and Amortization					
13	Intangible Plant		$ 101,480,672			13
14	General Plant		27,277,012			14
15	Total System Allocable Accumulated Depreciation and Amortization		$ 128,757,684			15
16	System Allocable Net Gas Plant In Service		$ 66,441,107			16
	Arizona 4-Factor	56.25%				

[1] Sch C-1, Sh 17, Ln 10(b)

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
HANDY - WHITMAN INDEX OF PUBLIC UTILITY CONSTRUCTION COSTS
PLATEAU DIVISION - GAS UTILITY

Line No.	Year	FERC Account Number 374 389	375 390	378 385 386 387	397 398	391 395	392 393 394 396	376 Steel	376 Plastic	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
1	1930	1	19	24	15	11	22	19	0	1
2	1931	1	17	24	15	11	20	18	0	2
3	1932	1	16	23	15	11	19	18	0	3
4	1933	1	17	22	15	11	19	17	0	4
5	1934	1	19	22	15	11	20	18	0	5
6	1935	1	18	22	15	11	21	19	0	6
7	1936	1	19	22	15	12	21	18	0	7
8	1937	1	20	24	17	13	23	20	0	8
9	1938	1	20	24	17	13	23	20	0	9
10	1939	1	20	24	17	13	23	20	0	10
11	1940	1	20	26	17	13	24	20	0	11
12	1941	1	22	26	18	13	25	20	0	12
13	1942	1	23	26	19	15	28	21	0	13
14	1943	1	23	26	19	15	29	21	0	14
15	1944	1	24	26	19	15	29	21	0	15
16	1945	1	24	26	19	16	29	22	0	16
17	1946	1	27	29	21	20	34	24	0	17
18	1947	1	32	34	24	23	37	27	0	18
19	1948	1	36	37	26	26	39	31	0	19
20	1949	1	37	39	28	26	40	33	0	20
21	1950	1	39	40	30	27	42	35	0	21
22	1951	1	42	44	31	29	45	37	0	22
23	1952	1	44	45	33	31	46	39	0	23
24	1953	1	44	46	34	33	49	41	0	24
25	1954	1	46	47	36	34	49	44	0	25
26	1955	1	48	49	37	36	51	46	0	26
27	1956	1	52	54	39	39	55	48	0	27
28	1957	1	55	57	41	41	59	52	0	28
29	1958	1	57	60	42	42	62	54	0	29
30	1959	1	58	62	45	45	64	57	0	30
31	1960	1	59	64	46	46	65	58	0	31
32	1961	1	58	64	49	51	67	61	0	32
33	1962	1	59	66	51	53	67	63	71	33
34	1963	1	60	67	52	55	68	64	72	34
35	1964	1	61	68	54	57	70	66	73	35
36	1965	1	64	68	57	60	71	68	74	36
37	1966	1	65	70	58	62	73	69	76	37
38	1967	1	67	72	62	66	76	73	79	38
39	1968	1	71	73	64	70	80	75	81	39
40	1969	1	75	76	69	74	84	80	84	40
41	1970	1	79	83	78	81	88	84	87	41
42	1971	1	87	90	88	87	93	90	92	42
43	1972	1	93	97	95	94	95	96	96	43
44	1973	1	100	100	100	100	100	100	100	44
45	1974	1	118	116	109	109	117	117	112	45
46	1975	1	133	135	122	123	141	133	130	46
47	1976	1	138	148	131	130	153	142	137	47
48	1977	1	148	158	142	141	164	155	147	48
49	1978	1	161	173	151	151	178	171	158	49
50	1979	1	177	187	160	164	197	187	174	50
51	1980	1	194	203	170	178	222	200	193	51
52	1981	1	204	224	185	186	246	219	209	52
53	1982	1	207	246	206	203	263	239	224	53
54	1983	1	215	246	218	209	269	246	232	54
55	1984	1	224	248	220	212	273	251	236	55
56	1985	1	226	243	214	211	276	245	235	56
57	1986	1	231	243	215	218	280	233	238	57
58	1987	1	232	250	216	226	286	241	245	58
59	1988	1	233	267	215	219	295	258	256	59
60	1989	1	232	278	214	213	281	270	273	60
61	1990	1	237	276	220	228	298	276	281	61
62	1991	1	233	279	225	242	320	283	288	62
63	1992	1	238	288	232	249	316	286	290	63
64	1993	1	250	298	236	260	324	294	297	64
65	1994	1	261	310	239	257	331	315	302	65
66	1995	1	265	313	247	246	333	317	305	66
67	1996	1	176	323	254	250	336	319	313	67
68	1997	1	282	332	257	251	351	327	319	68
69	1998	1	285	335	265	254	380	330	324	69
70	1999	1	287	342	275	261	385	341	329	70
71	2000	1	295	352	285	268	389	356	336	71
72	2001	1	303	358	299	280	390	362	344	72
73	2002	1	310	363	309	289	395	367	350	73
74	2003	1	320	365	318	293	401	385	356	74
75	2004	1	342	422	327	298	414	470	368	75
76	2005	1	355	480	337	303	439	568	391	76
77	2006	1	364	494	345	305	457	580	411	77
78	2007	1	382	497	354	317	469	560	431	78
79	2008	1	398	544	365	337	485	602	451	79
80	2009	1	389	544	382	359	501	632	468	80
81	2010	1	392	533	402	374	502	622	458	81

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
HANDY - WHITMAN INDEX OF PUBLIC UTILITY CONSTRUCTION COSTS
PLATEAU DIVISION - GAS UTILITY

		FERC Account Number						
Line No.	Year	380 Steel	380 Plastic	381	382	383	384	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	
1	1930	16	0	27	22	37	21	1
2	1931	15	0	26	22	36	21	2
3	1932	15	0	25	22	34	21	3
4	1933	14	0	25	21	34	19	4
5	1934	15	0	25	21	34	19	5
6	1935	15	0	25	20	34	20	6
7	1936	16	0	25	20	34	20	7
8	1937	17	0	26	22	35	22	8
9	1938	17	0	26	22	37	23	9
10	1939	17	0	26	22	40	22	10
11	1940	18	0	26	22	48	22	11
12	1941	18	0	26	22	48	23	12
13	1942	19	0	26	22	48	23	13
14	1943	19	0	26	22	48	23	14
15	1944	19	0	26	23	48	23	15
16	1945	19	0	26	23	48	24	16
17	1946	22	0	33	25	53	25	17
18	1947	25	0	41	29	63	28	18
19	1948	28	0	42	32	64	31	19
20	1949	30	0	45	34	68	34	20
21	1950	32	0	48	35	69	34	21
22	1951	33	0	55	38	74	36	22
23	1952	35	0	55	39	74	38	23
24	1953	37	45	55	40	74	40	24
25	1954	39	46	55	43	74	42	25
26	1955	41	47	56	44	74	44	26
27	1956	45	49	63	50	74	49	27
28	1957	48	52	66	55	76	53	28
29	1958	50	54	71	57	80	55	29
30	1959	53	56	71	60	80	58	30
31	1960	54	57	71	62	80	60	31
32	1961	58	59	73	63	81	61	32
33	1962	60	61	79	64	82	62	33
34	1963	60	62	79	65	82	63	34
35	1964	63	64	79	65	82	64	35
36	1965	64	65	79	66	80	64	36
37	1966	66	68	86	67	80	66	37
38	1967	69	71	88	69	80	68	38
39	1968	72	74	88	71	81	70	39
40	1969	77	78	89	75	83	74	40
41	1970	84	84	94	83	92	82	41
42	1971	90	89	100	88	98	88	42
43	1972	95	95	100	96	100	96	43
44	1973	100	100	100	100	100	100	44
45	1974	113	111	111	120	106	120	45
46	1975	129	127	128	135	125	134	46
47	1976	138	134	131	145	132	144	47
48	1977	149	144	136	157	136	156	48
49	1978	161	155	139	175	144	174	49
50	1979	176	170	143	191	171	189	50
51	1980	192	184	149	201	201	199	51
52	1981	208	197	158	223	210	220	52
53	1982	226	218	158	246	217	243	53
54	1983	232	227	146	254	221	252	54
55	1984	237	230	147	260	230	258	55
56	1985	234	226	158	249	237	247	56
57	1986	233	230	166	232	236	232	57
58	1987	241	236	165	240	243	239	58
59	1988	246	240	170	263	247	260	59
60	1989	251	247	177	280	253	277	60
61	1990	262	256	185	282	269	279	61
62	1991	272	265	190	287	283	283	62
63	1992	278	269	192	289	294	286	63
64	1993	285	277	191	296	297	293	64
65	1994	293	281	189	325	303	320	65
66	1995	292	279	190	329	302	324	66
67	1996	296	287	192	331	303	327	67
68	1997	301	292	196	341	303	337	68
69	1998	306	297	196	344	307	340	69
70	1999	313	304	193	357	306	352	70
71	2000	323	312	202	376	305	371	71
72	2001	331	323	209	381	311	377	72
73	2002	338	333	203	387	319	384	73
74	2003	347	339	191	410	317	405	74
75	2004	382	348	183	521	323	507	75
76	2005	426	364	186	649	340	625	76
77	2006	436	377	197	664	359	639	77
78	2007	435	392	226	633	380	612	78
79	2008	473	411	251	725	397	697	79
80	2009	485	432	257	717	406	693	80
81	2010	488	436	257	701	406	680	81

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 374.1 - Land and Land Rights

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 0	1	1.00	$ 0	1
2	1931	0	1	1.00	0	2
3	1932	0	1	1.00	0	3
4	1933	0	1	1.00	0	4
5	1934	0	1	1.00	0	5
6	1935	0	1	1.00	0	6
7	1936	0	1	1.00	0	7
8	1937	0	1	1.00	0	8
9	1938	0	1	1.00	0	9
10	1939	0	1	1.00	0	10
11	1940	0	1	1.00	0	11
12	1941	0	1	1.00	0	12
13	1942	0	1	1.00	0	13
14	1943	0	1	1.00	0	14
15	1944	0	1	1.00	0	15
16	1945	0	1	1.00	0	16
17	1946	0	1	1.00	0	17
18	1947	0	1	1.00	0	18
19	1948	0	1	1.00	0	19
20	1949	0	1	1.00	0	20
21	1950	0	1	1.00	0	21
22	1951	0	1	1.00	0	22
23	1952	0	1	1.00	0	23
24	1953	0	1	1.00	0	24
25	1954	0	1	1.00	0	25
26	1955	0	1	1.00	0	26
27	1956	0	1	1.00	0	27
28	1957	0	1	1.00	0	28
29	1958	9,746	1	1.00	9,746	29
30	1959	0	1	1.00	0	30
31	1960	0	1	1.00	0	31
32	1961	0	1	1.00	0	32
33	1962	0	1	1.00	0	33
34	1963	0	1	1.00	0	34
35	1964	0	1	1.00	0	35
36	1965	0	1	1.00	0	36
37	1966	0	1	1.00	0	37
38	1967	0	1	1.00	0	38
39	1968	0	1	1.00	0	39
40	1969	0	1	1.00	0	40
41	1970	0	1	1.00	0	41
42	1971	0	1	1.00	0	42
43	1972	0	1	1.00	0	43
44	1973	0	1	1.00	0	44
45	1974	0	1	1.00	0	45
46	1975	254	1	1.00	254	46
47	1976	0	1	1.00	0	47
48	1977	0	1	1.00	0	48
49	1978	0	1	1.00	0	49
50	1979	0	1	1.00	0	50
51	1980	0	1	1.00	0	51
52	1981	0	1	1.00	0	52
53	1982	0	1	1.00	0	53
54	1983	0	1	1.00	0	54
55	1984	0	1	1.00	0	55
56	1985	331,290	1	1.00	331,290	56
57	1986	0	1	1.00	0	57
58	1987	0	1	1.00	0	58
59	1988	0	1	1.00	0	59
60	1989	0	1	1.00	0	60
61	1990	0	1	1.00	0	61
62	1991	0	1	1.00	0	62
63	1992	0	1	1.00	0	63
64	1993	2,500	1	1.00	2,500	64
65	1994	0	1	1.00	0	65
66	1995	0	1	1.00	0	66
67	1996	0	1	1.00	0	67
68	1997	0	1	1.00	0	68
69	1998	0	1	1.00	0	69
70	1999	0	1	1.00	0	70
71	2000	0	1	1.00	0	71
72	2001	0	1	1.00	0	72
73	2002	0	1	1.00	0	73
74	2003	0	1	1.00	0	74
75	2004	0	1	1.00	0	75
76	2005	0	1	1.00	0	76
77	2006	0	1	1.00	0	77
78	2007	0	1	1.00	0	78
79	2008	0	1	1.00	0	79
80	2009	12,113	1	1.00	12,113	80
81	2010	0	1	1.00	0	81
82	Total	$ 355,903			$ 355,903	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010
Account 374.2 - Land and Land Rights

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 0	1	1.00	$ 0	1
2	1931	0	1	1.00	0	2
3	1932	0	1	1.00	0	3
4	1933	0	1	1.00	0	4
5	1934	0	1	1.00	0	5
6	1935	0	1	1.00	0	6
7	1936	0	1	1.00	0	7
8	1937	0	1	1.00	0	8
9	1938	0	1	1.00	0	9
10	1939	0	1	1.00	0	10
11	1940	112	1	1.00	112	11
12	1941	14	1	1.00	14	12
13	1942	0	1	1.00	0	13
14	1943	160	1	1.00	160	14
15	1944	0	1	1.00	0	15
16	1945	2	1	1.00	2	16
17	1946	0	1	1.00	0	17
18	1947	0	1	1.00	0	18
19	1948	952	1	1.00	952	19
20	1949	139	1	1.00	139	20
21	1950	101	1	1.00	101	21
22	1951	667	1	1.00	667	22
23	1952	183	1	1.00	183	23
24	1953	124	1	1.00	124	24
25	1954	104	1	1.00	104	25
26	1955	121	1	1.00	121	26
27	1956	116	1	1.00	116	27
28	1957	138	1	1.00	138	28
29	1958	146	1	1.00	146	29
30	1959	75	1	1.00	75	30
31	1960	164	1	1.00	164	31
32	1961	178	1	1.00	178	32
33	1962	896	1	1.00	896	33
34	1963	2,944	1	1.00	2,944	34
35	1964	2,322	1	1.00	2,322	35
36	1965	849	1	1.00	849	36
37	1966	1,145	1	1.00	1,145	37
38	1967	664	1	1.00	664	38
39	1968	896	1	1.00	896	39
40	1969	4,059	1	1.00	4,059	40
41	1970	20,184	1	1.00	20,184	41
42	1971	18,376	1	1.00	18,376	42
43	1972	11,259	1	1.00	11,259	43
44	1973	16,606	1	1.00	16,606	44
45	1974	29,634	1	1.00	29,634	45
46	1975	8,365	1	1.00	8,365	46
47	1976	15,469	1	1.00	15,469	47
48	1977	13,306	1	1.00	13,306	48
49	1978	12,233	1	1.00	12,233	49
50	1979	5,998	1	1.00	5,998	50
51	1980	3,835	1	1.00	3,835	51
52	1981	69,501	1	1.00	69,501	52
53	1982	21,828	1	1.00	21,828	53
54	1983	13,467	1	1.00	13,467	54
55	1984	5,304	1	1.00	5,304	55
56	1985	56,285	1	1.00	56,285	56
57	1986	20,552	1	1.00	20,552	57
58	1987	8,770	1	1.00	8,770	58
59	1988	3,206	1	1.00	3,206	59
60	1989	3,127	1	1.00	3,127	60
61	1990	0	1	1.00	0	61
62	1991	0	1	1.00	0	62
63	1992	0	1	1.00	0	63
64	1993	2,250	1	1.00	2,250	64
65	1994	6,025	1	1.00	6,025	65
66	1995	0	1	1.00	0	66
67	1996	0	1	1.00	0	67
68	1997	130,099	1	1.00	130,099	68
69	1998	1,767	1	1.00	1,767	69
70	1999	0	1	1.00	0	70
71	2000	39,620	1	1.00	39,620	71
72	2001	15,864	1	1.00	15,864	72
73	2002	36,423	1	1.00	36,423	73
74	2003	12,148	1	1.00	12,148	74
75	2004	104,102	1	1.00	104,102	75
76	2005	78,132	1	1.00	78,132	76
77	2006	284,871	1	1.00	284,871	77
78	2007	777,551	1	1.00	777,551	78
79	2008	215,233	1	1.00	215,233	79
80	2009	14,416	1	1.00	14,416	80
81	2010	133,760	1	1.00	133,760	81
82	Total	$ 2,226,837			$ 2,226,837	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 375 - Structures and Improvements

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 0	19	20.63	$ 0	1
2	1931	0	17	23.06	0	2
3	1932	0	16	24.50	0	3
4	1933	0	17	23.06	0	4
5	1934	0	19	20.63	0	5
6	1935	0	18	21.78	0	6
7	1936	0	19	20.63	0	7
8	1937	196	20	19.60	3,842	8
9	1938	94	20	19.60	1,842	9
10	1939	1,659	20	19.60	32,516	10
11	1940	373	20	19.60	7,311	11
12	1941	2,797	22	17.82	49,843	12
13	1942	0	23	17.04	0	13
14	1943	0	23	17.04	0	14
15	1944	0	24	16.33	0	15
16	1945	5,437	24	16.33	88,786	16
17	1946	2,032	27	14.52	29,505	17
18	1947	895	32	12.25	10,964	18
19	1948	4,989	36	10.89	54,330	19
20	1949	6,441	37	10.59	68,210	20
21	1950	8,724	39	10.05	87,676	21
22	1951	21,212	42	9.33	197,908	22
23	1952	1,568	44	8.91	13,971	23
24	1953	4,318	44	8.91	38,473	24
25	1954	2,625	46	8.52	22,365	25
26	1955	959	48	8.17	7,835	26
27	1956	4,816	52	7.54	36,313	27
28	1957	0	55	7.13	0	28
29	1958	0	57	6.88	0	29
30	1959	0	58	6.76	0	30
31	1960	0	59	6.64	0	31
32	1961	0	58	6.76	0	32
33	1962	0	59	6.64	0	33
34	1963	0	60	6.53	0	34
35	1964	0	61	6.43	0	35
36	1965	394	64	6.13	2,415	36
37	1966	0	65	6.03	0	37
38	1967	0	67	5.85	0	38
39	1968	0	71	5.52	0	39
40	1969	0	75	5.23	0	40
41	1970	0	79	4.96	0	41
42	1971	0	87	4.51	0	42
43	1972	0	93	4.22	0	43
44	1973	23,733	100	3.92	93,033	44
45	1974	8,122	118	3.32	26,965	45
46	1975	0	133	2.95	0	46
47	1976	0	138	2.84	0	47
48	1977	437	148	2.65	1,158	48
49	1978	674	161	2.43	1,638	49
50	1979	0	177	2.21	0	50
51	1980	0	194	2.02	0	51
52	1981	0	204	1.92	0	52
53	1982	0	207	1.89	0	53
54	1983	0	215	1.82	0	54
55	1984	0	224	1.75	0	55
56	1985	0	226	1.73	0	56
57	1986	0	231	1.70	0	57
58	1987	0	232	1.69	0	58
59	1988	0	233	1.68	0	59
60	1989	0	232	1.69	0	60
61	1990	2,068	237	1.65	3,413	61
62	1991	2,033	233	1.68	3,415	62
63	1992	0	238	1.65	0	63
64	1993	0	250	1.57	0	64
65	1994	0	261	1.50	0	65
66	1995	3,960	265	1.48	5,861	66
67	1996	0	176	2.23	0	67
68	1997	0	282	1.39	0	68
69	1998	0	285	1.38	0	69
70	1999	0	287	1.37	0	70
71	2000	0	295	1.33	0	71
72	2001	0	303	1.29	0	72
73	2002	0	310	1.26	0	73
74	2003	0	320	1.23	0	74
75	2004	0	342	1.15	0	75
76	2005	0	355	1.10	0	76
77	2006	0	364	1.08	0	77
78	2007	0	382	1.03	0	78
79	2008	0	398	0.98	0	79
80	2009	0	389	1.01	0	80
81	2010	0	392	1.00	0	81
82	Total	$ 110,556			$ 889,588	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 376 - Mains - Steel

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 93,334	19	32.74	$ 3,055,755	1
2	1931	2,467	18	34.56	85,260	2
3	1932	0	18	34.56	0	3
4	1933	0	17	36.59	0	4
5	1934	2,651	18	34.56	91,619	5
6	1935	8,066	19	32.74	264,081	6
7	1936	8	18	34.56	276	7
8	1937	15,653	20	31.10	486,808	8
9	1938	20,788	20	31.10	646,507	9
10	1939	211	20	31.10	6,562	10
11	1940	228	20	31.10	7,091	11
12	1941	43,549	20	31.10	1,354,374	12
13	1942	22,487	21	29.62	666,065	13
14	1943	33,012	21	29.62	977,815	14
15	1944	17,835	21	29.62	528,273	15
16	1945	66,187	22	28.27	1,871,106	16
17	1946	10,147	24	25.92	263,010	17
18	1947	318,550	27	23.04	7,339,392	18
19	1948	771,942	31	20.06	15,485,157	19
20	1949	549,375	33	18.85	10,355,719	20
21	1950	827,490	35	17.77	14,704,497	21
22	1951	739,912	37	16.81	12,437,921	22
23	1952	737,275	39	15.95	11,759,536	23
24	1953	523,790	41	15.17	7,945,894	24
25	1954	668,834	44	14.14	9,457,313	25
26	1955	2,790,686	46	13.52	37,730,075	26
27	1956	1,251,287	48	12.96	16,216,680	27
28	1957	1,303,046	52	11.96	15,584,430	28
29	1958	2,108,954	54	11.52	24,295,150	29
30	1959	1,945,928	57	10.91	21,230,074	30
31	1960	1,909,918	58	10.72	20,474,321	31
32	1961	2,003,419	61	10.20	20,434,874	32
33	1962	1,930,102	63	9.87	19,050,107	33
34	1963	1,575,125	64	9.72	15,310,215	34
35	1964	1,757,382	66	9.42	16,554,538	35
36	1965	1,927,551	68	9.15	17,637,092	36
37	1966	1,697,978	69	9.01	15,298,782	37
38	1967	1,102,292	73	8.52	9,391,528	38
39	1968	784,529	75	8.29	6,503,745	39
40	1969	1,624,437	80	7.78	12,638,120	40
41	1970	1,020,480	84	7.40	7,551,552	41
42	1971	2,037,456	90	6.91	14,078,821	42
43	1972	3,366,779	96	6.48	21,816,728	43
44	1973	2,656,658	100	6.22	16,524,413	44
45	1974	2,858,822	117	5.32	15,208,933	45
46	1975	1,399,848	133	4.68	6,551,289	46
47	1976	653,583	142	4.38	2,862,694	47
48	1977	1,216,766	155	4.01	4,879,232	48
49	1978	1,298,103	171	3.64	4,725,095	49
50	1979	1,162,328	187	3.33	3,870,552	50
51	1980	1,539,900	200	3.11	4,789,089	51
52	1981	3,073,465	219	2.84	8,728,641	52
53	1982	1,673,282	239	2.60	4,350,533	53
54	1983	2,461,343	246	2.53	6,227,198	54
55	1984	2,793,080	251	2.48	6,926,838	55
56	1985	1,965,938	245	2.54	4,993,483	56
57	1986	2,909,881	233	2.67	7,769,382	57
58	1987	3,079,143	241	2.58	7,944,189	58
59	1988	2,250,746	258	2.41	5,424,298	59
60	1989	2,552,919	270	2.30	5,871,714	60
61	1990	3,184,311	276	2.25	7,164,700	61
62	1991	4,495,450	283	2.20	9,889,990	62
63	1992	5,684,437	286	2.17	12,335,228	63
64	1993	5,087,511	294	2.12	10,785,523	64
65	1994	6,610,937	315	1.97	13,023,546	65
66	1995	8,593,941	317	1.96	16,844,124	66
67	1996	7,076,777	319	1.95	13,799,715	67
68	1997	7,037,998	327	1.90	13,372,196	68
69	1998	7,064,354	330	1.88	13,280,986	69
70	1999	6,757,914	341	1.82	12,299,403	70
71	2000	9,691,378	356	1.75	16,959,912	71
72	2001	12,798,581	362	1.72	22,013,559	72
73	2002	14,293,812	367	1.69	24,156,542	73
74	2003	13,458,430	385	1.62	21,802,657	74
75	2004	24,393,487	470	1.32	32,199,403	75
76	2005	30,065,664	568	1.10	33,072,230	76
77	2006	17,020,447	580	1.07	18,211,878	77
78	2007	19,627,225	560	1.11	21,786,220	78
79	2008	6,315,833	602	1.03	6,505,308	79
80	2009	14,451,943	632	0.98	14,162,904	80
81	2010	2,745,605	622	1.00	2,745,605	81
82	Total	$ 299,612,980			$ 865,646,065	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 376 - Mains - Plastic

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 0	0	0.00	$ 0	1
2	1931	0	0	0.00	0	2
3	1932	0	0	0.00	0	3
4	1933	0	0	0.00	0	4
5	1934	0	0	0.00	0	5
6	1935	0	0	0.00	0	6
7	1936	0	0	0.00	0	7
8	1937	0	0	0.00	0	8
9	1938	0	0	0.00	0	9
10	1939	0	0	0.00	0	10
11	1940	0	0	0.00	0	11
12	1941	0	0	0.00	0	12
13	1942	0	0	0.00	0	13
14	1943	0	0	0.00	0	14
15	1944	0	0	0.00	0	15
16	1945	0	0	0.00	0	16
17	1946	0	0	0.00	0	17
18	1947	0	0	0.00	0	18
19	1948	0	0	0.00	0	19
20	1949	0	0	0.00	0	20
21	1950	0	0	0.00	0	21
22	1951	0	0	0.00	0	22
23	1952	0	0	0.00	0	23
24	1953	0	0	0.00	0	24
25	1954	0	0	0.00	0	25
26	1955	0	0	0.00	0	26
27	1956	0	0	0.00	0	27
28	1957	0	0	0.00	0	28
29	1958	0	0	0.00	0	29
30	1959	0	0	0.00	0	30
31	1960	0	0	0.00	0	31
32	1961	0	0	0.00	0	32
33	1962	365,484	71	6.45	2,357,372	33
34	1963	403,783	72	6.36	2,568,060	34
35	1964	451,394	73	6.27	2,830,240	35
36	1965	296,860	74	6.19	1,837,563	36
37	1966	891,022	76	6.03	5,372,863	37
38	1967	1,055,732	79	5.80	6,123,246	38
39	1968	623,720	81	5.65	3,524,018	39
40	1969	1,191,317	84	5.45	6,492,678	40
41	1970	651,276	87	5.26	3,425,712	41
42	1971	1,423,033	92	4.98	7,086,704	42
43	1972	1,970,725	96	4.77	9,400,358	43
44	1973	1,776,661	100	4.58	8,137,107	44
45	1974	1,909,129	112	4.09	7,808,338	45
46	1975	1,533,598	130	3.52	5,398,265	46
47	1976	515,056	137	3.34	1,720,287	47
48	1977	1,062,127	147	3.12	3,313,836	48
49	1978	507,433	158	2.90	1,471,556	49
50	1979	1,543,555	174	2.63	4,059,550	50
51	1980	2,726,929	193	2.37	6,462,822	51
52	1981	3,487,681	209	2.19	7,638,021	52
53	1982	2,501,183	224	2.04	5,102,413	53
54	1983	4,151,650	232	1.97	8,178,751	54
55	1984	6,188,445	236	1.94	12,005,583	55
56	1985	5,128,594	235	1.95	10,000,758	56
57	1986	16,376,983	238	1.92	31,443,807	57
58	1987	17,847,782	245	1.87	33,375,352	58
59	1988	20,265,168	256	1.79	36,274,651	59
60	1989	16,026,391	273	1.68	26,924,337	60
61	1990	21,608,118	281	1.63	35,221,232	61
62	1991	6,662,131	288	1.59	10,592,788	62
63	1992	10,587,936	290	1.58	16,728,939	63
64	1993	28,147,083	297	1.54	43,346,508	64
65	1994	31,141,341	302	1.52	47,334,838	65
66	1995	37,494,541	305	1.50	56,241,812	66
67	1996	32,701,855	313	1.46	47,744,708	67
68	1997	28,284,890	319	1.44	40,730,242	68
69	1998	32,569,764	324	1.41	45,923,367	69
70	1999	41,875,474	329	1.39	58,206,909	70
71	2000	42,670,478	336	1.36	58,031,850	71
72	2001	57,166,975	344	1.33	76,032,077	72
73	2002	48,037,098	350	1.31	62,928,598	73
74	2003	44,584,390	356	1.29	57,513,863	74
75	2004	48,677,347	368	1.24	60,359,910	75
76	2005	41,910,250	391	1.17	49,034,993	76
77	2006	48,476,017	411	1.11	53,808,379	77
78	2007	49,335,604	431	1.06	52,295,740	78
79	2008	31,508,088	451	1.02	32,138,250	79
80	2009	29,124,214	468	0.98	28,541,730	80
81	2010	25,757,620	458	1.00	25,757,620	81
82	Total	$ 851,193,925			$ 1,218,848,601	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 378 - Measuring and Regulating Equipment - Gen.

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 0	24	22.21	$ 0	1
2	1931	0	24	22.21	0	2
3	1932	0	23	23.17	0	3
4	1933	0	22	24.23	0	4
5	1934	0	22	24.23	0	5
6	1935	0	22	24.23	0	6
7	1936	9	22	24.23	220	7
8	1937	0	24	22.21	0	8
9	1938	0	24	22.21	0	9
10	1939	0	24	22.21	0	10
11	1940	0	26	20.50	0	11
12	1941	0	26	20.50	0	12
13	1942	0	26	20.50	0	13
14	1943	0	26	20.50	0	14
15	1944	0	26	20.50	0	15
16	1945	0	26	20.50	0	16
17	1946	0	29	18.38	0	17
18	1947	0	34	15.68	0	18
19	1948	0	37	14.41	0	19
20	1949	0	39	13.67	0	20
21	1950	0	40	13.33	0	21
22	1951	0	44	12.11	0	22
23	1952	0	45	11.84	0	23
24	1953	0	46	11.59	0	24
25	1954	0	47	11.34	0	25
26	1955	0	49	10.88	0	26
27	1956	1,584	54	9.87	15,634	27
28	1957	501	57	9.35	4,684	28
29	1958	3,938	60	8.88	34,969	29
30	1959	9,479	62	8.60	81,519	30
31	1960	990	64	8.33	8,247	31
32	1961	2,245	64	8.33	18,701	32
33	1962	891	66	8.08	7,199	33
34	1963	1,396	67	7.96	11,112	34
35	1964	3,436	68	7.84	26,938	35
36	1965	9,568	68	7.84	75,013	36
37	1966	18,044	70	7.61	137,315	37
38	1967	1,213	72	7.40	8,976	38
39	1968	5,822	73	7.30	42,501	39
40	1969	9,130	76	7.01	64,001	40
41	1970	6,758	83	6.42	43,386	41
42	1971	20,532	90	5.92	121,549	42
43	1972	107,608	97	5.49	590,768	43
44	1973	5,885	100	5.33	31,367	44
45	1974	22,922	116	4.59	105,212	45
46	1975	8,724	135	3.95	34,460	46
47	1976	1,090	148	3.60	3,924	47
48	1977	31,187	158	3.37	105,100	48
49	1978	48,043	173	3.08	147,972	49
50	1979	19,178	187	2.85	54,657	50
51	1980	38,905	203	2.63	102,320	51
52	1981	14,510	224	2.38	34,534	52
53	1982	94,334	246	2.17	204,705	53
54	1983	195,817	246	2.17	424,923	54
55	1984	202,408	248	2.15	435,177	55
56	1985	26,220	243	2.19	57,422	56
57	1986	156,748	243	2.19	343,278	57
58	1987	78,659	250	2.13	167,544	58
59	1988	158,603	267	2.00	317,206	59
60	1989	49,982	278	1.92	95,965	60
61	1990	156,623	276	1.93	302,282	61
62	1991	84,049	279	1.91	160,534	62
63	1992	825,820	288	1.85	1,527,767	63
64	1993	1,744,558	298	1.79	3,122,759	64
65	1994	1,888,923	310	1.72	3,248,948	65
66	1995	1,459,034	313	1.70	2,480,358	66
67	1996	1,250,528	323	1.65	2,063,371	67
68	1997	749,152	332	1.61	1,206,135	68
69	1998	1,838,544	335	1.59	2,923,285	69
70	1999	4,340,292	342	1.56	6,770,856	70
71	2000	952,519	352	1.51	1,438,304	71
72	2001	2,552,785	358	1.49	3,803,650	72
73	2002	3,534,507	363	1.47	5,195,725	73
74	2003	1,597,358	365	1.46	2,332,143	74
75	2004	2,672,465	422	1.26	3,367,306	75
76	2005	1,983,429	480	1.11	2,201,606	76
77	2006	4,340,590	494	1.08	4,687,837	77
78	2007	3,263,334	497	1.07	3,491,767	78
79	2008	2,045,406	544	0.98	2,004,498	79
80	2009	4,652,101	544	0.98	4,559,059	80
81	2010	7,798,625	533	1.00	7,798,625	81
82	Total	$ 51,087,001			$ 68,645,313	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 380 - Services - Steel

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 8,111	16	30.50	$ 247,386	1
2	1931	0	15	32.53	0	2
3	1932	86	15	32.53	2,798	3
4	1933	0	14	34.86	0	4
5	1934	15	15	32.53	488	5
6	1935	92	15	32.53	2,993	6
7	1936	29	16	30.50	885	7
8	1937	77	17	28.71	2,211	8
9	1938	111	17	28.71	3,187	9
10	1939	2,694	17	28.71	77,345	10
11	1940	389	18	27.11	10,546	11
12	1941	5,144	18	27.11	139,454	12
13	1942	13,314	19	25.68	341,904	13
14	1943	785	19	25.68	20,159	14
15	1944	17,206	19	25.68	441,850	15
16	1945	38,471	19	25.68	987,935	16
17	1946	86,391	22	22.18	1,916,152	17
18	1947	148,263	25	19.52	2,894,094	18
19	1948	254,691	28	17.43	4,439,264	19
20	1949	156,305	30	16.27	2,543,082	20
21	1950	343,294	32	15.25	5,235,234	21
22	1951	447,662	33	14.79	6,620,921	22
23	1952	523,391	35	13.94	7,296,071	23
24	1953	399,533	37	13.19	5,269,840	24
25	1954	379,159	39	12.51	4,743,279	25
26	1955	1,031,031	41	11.90	12,269,269	26
27	1956	616,320	45	10.84	6,680,909	27
28	1957	667,745	48	10.17	6,790,967	28
29	1958	667,917	50	9.76	6,518,870	29
30	1959	318,425	53	9.21	2,932,694	30
31	1960	23,533	54	9.04	212,738	31
32	1961	39,615	58	8.41	333,162	32
33	1962	25,674	60	8.13	208,730	33
34	1963	28,753	60	8.13	233,762	34
35	1964	8,291	63	7.75	64,255	35
36	1965	47,201	64	7.63	360,144	36
37	1966	22,594	66	7.39	166,970	37
38	1967	15,822	69	7.07	111,862	38
39	1968	5,413	72	6.78	36,700	39
40	1969	1,533	77	6.34	9,719	40
41	1970	8,413	84	5.81	48,880	41
42	1971	13,522	90	5.42	73,289	42
43	1972	51,272	95	5.14	263,538	43
44	1973	41,847	100	4.88	204,213	44
45	1974	78,909	113	4.32	340,887	45
46	1975	15,147	129	3.78	57,256	46
47	1976	23,492	138	3.54	83,162	47
48	1977	19,491	149	3.28	63,930	48
49	1978	3,112	161	3.03	9,429	49
50	1979	131,439	176	2.77	364,086	50
51	1980	268,095	192	2.54	680,961	51
52	1981	256,242	208	2.35	602,169	52
53	1982	35,791	226	2.16	77,309	53
54	1983	444,629	232	2.10	933,721	54
55	1984	230,110	237	2.06	474,027	55
56	1985	39,802	234	2.09	83,186	56
57	1986	36,508	233	2.09	76,302	57
58	1987	15,205	241	2.02	30,714	58
59	1988	23,169	246	1.98	45,875	59
60	1989	17,759	251	1.94	34,452	60
61	1990	124,272	262	1.86	231,146	61
62	1991	106,094	272	1.79	189,908	62
63	1992	143,224	278	1.76	252,074	63
64	1993	1,774,041	285	1.71	3,033,610	64
65	1994	865,553	293	1.67	1,445,474	65
66	1995	925,449	292	1.67	1,545,500	66
67	1996	332,130	296	1.65	548,015	67
68	1997	514,964	301	1.62	834,242	68
69	1998	635,623	306	1.59	1,010,641	69
70	1999	330,338	313	1.56	515,327	70
71	2000	290,217	323	1.51	438,228	71
72	2001	314,367	331	1.47	462,119	72
73	2002	350,818	338	1.44	505,178	73
74	2003	379,890	347	1.41	535,645	74
75	2004	454,558	382	1.28	581,834	75
76	2005	212,707	426	1.15	244,613	76
77	2006	94,238	436	1.12	105,547	77
78	2007	487,033	435	1.12	545,477	78
79	2008	344,095	473	1.03	354,418	79
80	2009	308,472	485	1.01	311,557	80
81	2010	84,415	488	1.00	84,415	81
82	Total	$ 17,171,532			$ 98,490,183	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

		Account 380 - Services - Plastic				
Line No.	Year Installed	Original Cost Total Arizona	H - W Index	Ratio To Current Index	RCN Total Arizona	Line No.
	(a)	(b)	(c)	(d)	(e)	
1	1930	$ 0	0	0.00	$ 0	1
2	1931	0	0	0.00	0	2
3	1932	0	0	0.00	0	3
4	1933	0	0	0.00	0	4
5	1934	0	0	0.00	0	5
6	1935	0	0	0.00	0	6
7	1936	0	0	0.00	0	7
8	1937	0	0	0.00	0	8
9	1938	0	0	0.00	0	9
10	1939	0	0	0.00	0	10
11	1940	0	0	0.00	0	11
12	1941	0	0	0.00	0	12
13	1942	0	0	0.00	0	13
14	1943	0	0	0.00	0	14
15	1944	0	0	0.00	0	15
16	1945	0	0	0.00	0	16
17	1946	0	0	0.00	0	17
18	1947	0	0	0.00	0	18
19	1948	0	0	0.00	0	19
20	1949	0	0	0.00	0	20
21	1950	0	0	0.00	0	21
22	1951	0	0	0.00	0	22
23	1952	0	0	0.00	0	23
24	1953	23,997	45	9.69	232,531	24
25	1954	19,410	46	9.48	184,007	25
26	1955	83,453	47	9.28	774,444	26
27	1956	66,396	49	8.90	590,924	27
28	1957	140,667	52	8.38	1,178,789	28
29	1958	175,747	54	8.07	1,418,278	29
30	1959	426,707	56	7.79	3,324,048	30
31	1960	166,305	57	7.65	1,272,233	31
32	1961	206,157	59	7.39	1,523,500	32
33	1962	374,360	61	7.15	2,676,674	33
34	1963	394,885	62	7.03	2,776,042	34
35	1964	336,912	64	6.81	2,294,371	35
36	1965	369,023	65	6.71	2,476,144	36
37	1966	288,299	68	6.41	1,847,997	37
38	1967	323,928	71	6.14	1,988,918	38
39	1968	206,098	74	5.89	1,213,917	39
40	1969	3,654	78	5.59	20,426	40
41	1970	56,990	84	5.19	295,778	41
42	1971	112,376	89	4.90	550,642	42
43	1972	294,673	95	4.59	1,352,549	43
44	1973	173,506	100	4.36	756,486	44
45	1974	781,901	111	3.93	3,072,871	45
46	1975	180,347	127	3.43	618,590	46
47	1976	186,582	134	3.25	606,392	47
48	1977	258,142	144	3.03	782,170	48
49	1978	123,235	155	2.81	346,290	49
50	1979	1,168,968	170	2.56	2,992,558	50
51	1980	1,537,349	184	2.37	3,643,517	51
52	1981	1,807,201	197	2.21	3,993,914	52
53	1982	2,128,419	218	2.00	4,256,838	53
54	1983	17,449,721	227	1.92	33,503,464	54
55	1984	18,491,927	230	1.90	35,134,661	55
56	1985	12,250,906	226	1.93	23,644,249	56
57	1986	20,316,550	230	1.90	38,601,445	57
58	1987	18,057,828	236	1.85	33,406,982	58
59	1988	17,795,360	240	1.82	32,387,555	59
60	1989	12,736,183	247	1.77	22,543,044	60
61	1990	16,244,511	256	1.70	27,615,669	61
62	1991	7,488,977	265	1.65	12,356,812	62
63	1992	12,624,316	269	1.62	20,451,392	63
64	1993	15,554,438	277	1.57	24,420,468	64
65	1994	22,596,561	281	1.55	35,024,670	65
66	1995	25,364,815	279	1.56	39,569,111	66
67	1996	29,937,098	287	1.52	45,504,389	67
68	1997	26,642,564	292	1.49	39,697,420	68
69	1998	27,143,957	297	1.47	39,901,617	69
70	1999	33,623,829	304	1.43	48,082,075	70
71	2000	29,798,553	312	1.40	41,717,974	71
72	2001	31,040,575	323	1.35	41,904,776	72
73	2002	31,482,139	333	1.31	41,241,602	73
74	2003	30,568,964	339	1.29	39,433,964	74
75	2004	30,568,547	348	1.25	38,210,684	75
76	2005	28,564,394	364	1.20	34,277,273	76
77	2006	37,429,219	377	1.16	43,417,894	77
78	2007	29,831,544	392	1.11	33,113,014	78
79	2008	28,719,820	411	1.06	30,443,009	79
80	2009	22,622,593	432	1.01	22,848,819	80
81	2010	16,157,712	436	1.00	16,157,712	81
82	Total	$ 663,519,288			$ 983,673,582	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 381 - Meters, Regulators, and Installations

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 28,511	27	9.52	$ 271,425	1
2	1931	2,418	26	9.88	23,890	2
3	1932	1,062	25	10.28	10,917	3
4	1933	939	25	10.28	9,653	4
5	1934	6,637	25	10.28	68,228	5
6	1935	8,059	25	10.28	82,847	6
7	1936	13,315	25	10.28	136,878	7
8	1937	25,436	26	9.88	251,308	8
9	1938	14,484	26	9.88	143,102	9
10	1939	9,540	26	9.88	94,255	10
11	1940	14,208	26	9.88	140,375	11
12	1941	25,192	26	9.88	248,897	12
13	1942	21,293	26	9.88	210,375	13
14	1943	14,992	26	9.88	148,121	14
15	1944	12,290	26	9.88	121,425	15
16	1945	14,826	26	9.88	146,481	16
17	1946	33,110	33	7.79	257,927	17
18	1947	92,718	41	6.27	581,342	18
19	1948	170,761	42	6.12	1,045,057	19
20	1949	154,381	45	5.71	881,516	20
21	1950	119,851	48	5.35	641,203	21
22	1951	150,460	55	4.67	702,648	22
23	1952	148,787	55	4.67	694,835	23
24	1953	133,186	55	4.67	621,979	24
25	1954	87,105	55	4.67	406,780	25
26	1955	124,238	56	4.59	570,252	26
27	1956	142,383	63	4.08	580,923	27
28	1957	119,192	66	3.89	463,657	28
29	1958	399,990	71	3.62	1,447,964	29
30	1959	160,523	71	3.62	581,093	30
31	1960	496,728	71	3.62	1,798,155	31
32	1961	217,159	73	3.52	764,400	32
33	1962	426,645	79	3.25	1,386,596	33
34	1963	394,897	79	3.25	1,283,415	34
35	1964	85,862	79	3.25	279,052	35
36	1965	155,931	79	3.25	506,776	36
37	1966	106,823	86	2.99	319,401	37
38	1967	80,836	88	2.92	236,041	38
39	1968	99,715	88	2.92	291,168	39
40	1969	101,613	89	2.89	293,662	40
41	1970	185,926	94	2.73	507,578	41
42	1971	387,577	100	2.57	996,073	42
43	1972	523,960	100	2.57	1,346,577	43
44	1973	584,690	100	2.57	1,502,653	44
45	1974	641,288	111	2.32	1,487,788	45
46	1975	282,030	128	2.01	566,880	46
47	1976	297,216	131	1.96	582,543	47
48	1977	379,124	136	1.89	716,544	48
49	1978	203,728	139	1.85	376,897	49
50	1979	717,307	143	1.80	1,291,153	50
51	1980	1,236,392	149	1.72	2,126,594	51
52	1981	1,022,775	158	1.63	1,667,123	52
53	1982	1,126,564	158	1.63	1,836,299	53
54	1983	3,530,782	146	1.76	6,214,176	54
55	1984	1,906,954	147	1.75	3,337,170	55
56	1985	3,208,802	158	1.63	5,230,347	56
57	1986	1,484,572	166	1.55	2,301,087	57
58	1987	1,680,460	165	1.56	2,621,518	58
59	1988	3,557,549	170	1.51	5,371,899	59
60	1989	3,834,437	177	1.45	5,559,934	60
61	1990	2,756,635	185	1.39	3,831,723	61
62	1991	3,998,091	190	1.35	5,397,423	62
63	1992	2,380,997	192	1.34	3,190,536	63
64	1993	283,414	191	1.35	382,609	64
65	1994	7,456,380	189	1.36	10,140,677	65
66	1995	5,956,570	190	1.35	8,041,370	66
67	1996	5,748,628	192	1.34	7,703,162	67
68	1997	5,645,292	196	1.31	7,395,333	68
69	1998	6,248,259	196	1.31	8,185,219	69
70	1999	9,931,070	193	1.33	13,208,323	70
71	2000	8,502,389	202	1.27	10,798,034	71
72	2001	9,785,337	209	1.23	12,035,965	72
73	2002	11,378,743	203	1.27	14,451,004	73
74	2003	12,765,883	191	1.35	17,233,942	74
75	2004	16,674,690	183	1.40	23,344,566	75
76	2005	15,738,635	186	1.38	21,719,316	76
77	2006	38,261,684	197	1.30	49,740,189	77
78	2007	28,150,918	226	1.14	32,092,047	78
79	2008	14,777,931	251	1.02	15,073,490	79
80	2009	3,572,508	257	1.00	3,572,508	80
81	2010	3,958,452	257	1.00	3,958,452	81
82	Total	$ 245,180,735			$ 335,880,740	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 385 - Measuring and Regulating Equipment - Ind.

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 0	24	22.21	$ 0	1
2	1931	0	24	22.21	0	2
3	1932	0	23	23.17	0	3
4	1933	0	22	24.23	0	4
5	1934	0	22	24.23	0	5
6	1935	0	22	24.23	0	6
7	1936	0	22	24.23	0	7
8	1937	0	24	22.21	0	8
9	1938	0	24	22.21	0	9
10	1939	0	24	22.21	0	10
11	1940	0	26	20.50	0	11
12	1941	0	26	20.50	0	12
13	1942	0	26	20.50	0	13
14	1943	0	26	20.50	0	14
15	1944	0	26	20.50	0	15
16	1945	0	26	20.50	0	16
17	1946	0	29	18.38	0	17
18	1947	0	34	15.68	0	18
19	1948	0	37	14.41	0	19
20	1949	0	39	13.67	0	20
21	1950	0	40	13.33	0	21
22	1951	0	44	12.11	0	22
23	1952	0	45	11.84	0	23
24	1953	0	46	11.59	0	24
25	1954	0	47	11.34	0	25
26	1955	0	49	10.88	0	26
27	1956	0	54	9.87	0	27
28	1957	0	57	9.35	0	28
29	1958	0	60	8.88	0	29
30	1959	0	62	8.60	0	30
31	1960	0	64	8.33	0	31
32	1961	0	64	8.33	0	32
33	1962	0	66	8.08	0	33
34	1963	0	67	7.96	0	34
35	1964	0	68	7.84	0	35
36	1965	0	68	7.84	0	36
37	1966	0	70	7.61	0	37
38	1967	0	72	7.40	0	38
39	1968	58,143	73	7.30	424,444	39
40	1969	0	76	7.01	0	40
41	1970	0	83	6.42	0	41
42	1971	0	90	5.92	0	42
43	1972	21,891	97	5.49	120,182	43
44	1973	32,288	100	5.33	172,095	44
45	1974	103,218	116	4.59	473,771	45
46	1975	76,790	135	3.95	303,321	46
47	1976	45,302	148	3.60	163,087	47
48	1977	16,356	158	3.37	55,120	48
49	1978	17,162	173	3.08	52,859	49
50	1979	31,941	187	2.85	91,032	50
51	1980	125,188	203	2.63	329,244	51
52	1981	102,045	224	2.38	242,867	52
53	1982	140,659	246	2.17	305,230	53
54	1983	172,078	246	2.17	373,409	54
55	1984	361,574	248	2.15	777,384	55
56	1985	62,688	243	2.19	137,287	56
57	1986	156,319	243	2.19	342,339	57
58	1987	14,460	250	2.13	30,800	58
59	1988	164,131	267	2.00	328,262	59
60	1989	90,436	278	1.92	173,637	60
61	1990	52,403	276	1.93	101,138	61
62	1991	61,230	279	1.91	116,949	62
63	1992	35,239	288	1.85	65,192	63
64	1993	212,110	298	1.79	379,677	64
65	1994	310,999	310	1.72	534,918	65
66	1995	362,354	313	1.70	616,002	66
67	1996	479,977	323	1.65	791,962	67
68	1997	637,223	332	1.61	1,025,929	68
69	1998	682,982	335	1.59	1,085,941	69
70	1999	521,190	342	1.56	813,056	70
71	2000	192,335	352	1.51	290,426	71
72	2001	360,388	358	1.49	536,978	72
73	2002	347,407	363	1.47	510,688	73
74	2003	227,381	365	1.46	331,976	74
75	2004	344,321	422	1.26	433,844	75
76	2005	381,770	480	1.11	423,765	76
77	2006	332,157	494	1.08	358,730	77
78	2007	404,392	497	1.07	432,699	78
79	2008	601,486	544	0.98	589,456	79
80	2009	2,178,189	544	0.98	2,134,625	80
81	2010	243,792	533	1.00	243,792	81
82	Total	$ 10,761,994			$ 16,714,113	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 387 - Other Distribution Equipment

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 0	24	22.21	$ 0	1
2	1931	0	24	22.21	0	2
3	1932	0	23	23.17	0	3
4	1933	0	22	24.23	0	4
5	1934	0	22	24.23	0	5
6	1935	0	22	24.23	0	6
7	1936	0	22	24.23	0	7
8	1937	0	24	22.21	0	8
9	1938	0	24	22.21	0	9
10	1939	0	24	22.21	0	10
11	1940	0	26	20.50	0	11
12	1941	0	26	20.50	0	12
13	1942	0	26	20.50	0	13
14	1943	0	26	20.50	0	14
15	1944	0	26	20.50	0	15
16	1945	0	26	20.50	0	16
17	1946	0	29	18.38	0	17
18	1947	0	34	15.68	0	18
19	1948	0	37	14.41	0	19
20	1949	0	39	13.67	0	20
21	1950	0	40	13.33	0	21
22	1951	0	44	12.11	0	22
23	1952	0	45	11.84	0	23
24	1953	0	46	11.59	0	24
25	1954	0	47	11.34	0	25
26	1955	0	49	10.88	0	26
27	1956	0	54	9.87	0	27
28	1957	0	57	9.35	0	28
29	1958	0	60	8.88	0	29
30	1959	0	62	8.60	0	30
31	1960	0	64	8.33	0	31
32	1961	0	64	8.33	0	32
33	1962	0	66	8.08	0	33
34	1963	0	67	7.96	0	34
35	1964	0	68	7.84	0	35
36	1965	0	68	7.84	0	36
37	1966	0	70	7.61	0	37
38	1967	0	72	7.40	0	38
39	1968	0	73	7.30	0	39
40	1969	0	76	7.01	0	40
41	1970	0	83	6.42	0	41
42	1971	0	90	5.92	0	42
43	1972	0	97	5.49	0	43
44	1973	0	100	5.33	0	44
45	1974	0	116	4.59	0	45
46	1975	2,619	135	3.95	10,345	46
47	1976	0	148	3.60	0	47
48	1977	0	158	3.37	0	48
49	1978	0	173	3.08	0	49
50	1979	35,268	187	2.85	100,514	50
51	1980	34,199	203	2.63	89,943	51
52	1981	88,691	224	2.38	211,085	52
53	1982	254,179	246	2.17	551,568	53
54	1983	0	246	2.17	0	54
55	1984	12,674	248	2.15	27,249	55
56	1985	0	243	2.19	0	56
57	1986	4,468	243	2.19	9,785	57
58	1987	0	250	2.13	0	58
59	1988	0	267	2.00	0	59
60	1989	0	278	1.92	0	60
61	1990	0	276	1.93	0	61
62	1991	0	279	1.91	0	62
63	1992	0	288	1.85	0	63
64	1993	0	298	1.79	0	64
65	1994	0	310	1.72	0	65
66	1995	0	313	1.70	0	66
67	1996	0	323	1.65	0	67
68	1997	0	332	1.61	0	68
69	1998	0	335	1.59	0	69
70	1999	0	342	1.56	0	70
71	2000	0	352	1.51	0	71
72	2001	0	358	1.49	0	72
73	2002	0	363	1.47	0	73
74	2003	0	365	1.46	0	74
75	2004	0	422	1.26	0	75
76	2005	0	480	1.11	0	76
77	2006	0	494	1.08	0	77
78	2007	0	497	1.07	0	78
79	2008	0	544	0.98	0	79
80	2009	0	544	0.98	0	80
81	2010	0	533	1.00	0	81
82	Total	$ 432,098			$ 1,000,489	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 389 - Land and Land Rights

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 0	1	1.00	$ 0	1
2	1931	0	1	1.00	0	2
3	1932	0	1	1.00	0	3
4	1933	0	1	1.00	0	4
5	1934	0	1	1.00	0	5
6	1935	0	1	1.00	0	6
7	1936	0	1	1.00	0	7
8	1937	0	1	1.00	0	8
9	1938	0	1	1.00	0	9
10	1939	0	1	1.00	0	10
11	1940	0	1	1.00	0	11
12	1941	0	1	1.00	0	12
13	1942	0	1	1.00	0	13
14	1943	0	1	1.00	0	14
15	1944	0	1	1.00	0	15
16	1945	0	1	1.00	0	16
17	1946	0	1	1.00	0	17
18	1947	0	1	1.00	0	18
19	1948	0	1	1.00	0	19
20	1949	0	1	1.00	0	20
21	1950	0	1	1.00	0	21
22	1951	0	1	1.00	0	22
23	1952	0	1	1.00	0	23
24	1953	0	1	1.00	0	24
25	1954	0	1	1.00	0	25
26	1955	0	1	1.00	0	26
27	1956	0	1	1.00	0	27
28	1957	0	1	1.00	0	28
29	1958	0	1	1.00	0	29
30	1959	0	1	1.00	0	30
31	1960	0	1	1.00	0	31
32	1961	0	1	1.00	0	32
33	1962	0	1	1.00	0	33
34	1963	0	1	1.00	0	34
35	1964	0	1	1.00	0	35
36	1965	0	1	1.00	0	36
37	1966	0	1	1.00	0	37
38	1967	0	1	1.00	0	38
39	1968	0	1	1.00	0	39
40	1969	0	1	1.00	0	40
41	1970	27,505	1	1.00	27,505	41
42	1971	0	1	1.00	0	42
43	1972	0	1	1.00	0	43
44	1973	0	1	1.00	0	44
45	1974	0	1	1.00	0	45
46	1975	0	1	1.00	0	46
47	1976	0	1	1.00	0	47
48	1977	0	1	1.00	0	48
49	1978	0	1	1.00	0	49
50	1979	0	1	1.00	0	50
51	1980	573,337	1	1.00	573,337	51
52	1981	0	1	1.00	0	52
53	1982	0	1	1.00	0	53
54	1983	0	1	1.00	0	54
55	1984	792,870	1	1.00	792,870	55
56	1985	895,545	1	1.00	895,545	56
57	1986	355,216	1	1.00	355,216	57
58	1987	0	1	1.00	0	58
59	1988	7,000	1	1.00	7,000	59
60	1989	3,091,144	1	1.00	3,091,144	60
61	1990	0	1	1.00	0	61
62	1991	0	1	1.00	0	62
63	1992	0	1	1.00	0	63
64	1993	0	1	1.00	0	64
65	1994	0	1	1.00	0	65
66	1995	0	1	1.00	0	66
67	1996	0	1	1.00	0	67
68	1997	209,928	1	1.00	209,928	68
69	1998	0	1	1.00	0	69
70	1999	0	1	1.00	0	70
71	2000	0	1	1.00	0	71
72	2001	0	1	1.00	0	72
73	2002	0	1	1.00	0	73
74	2003	0	1	1.00	0	74
75	2004	0	1	1.00	0	75
76	2005	0	1	1.00	0	76
77	2006	0	1	1.00	0	77
78	2007	1,963,827	1	1.00	1,963,827	78
79	2008	6,724,780	1	1.00	6,724,780	79
80	2009	49,980	1	1.00	49,980	80
81	2010	0	1	1.00	0	81
82	Total	$ 14,691,132			$ 14,691,132	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 390.1 - Structures and Improvements

Line No.	Year Installed	Original Cost Total Arizona	H - W Index	Ratio To Current Index	RCN Total Arizona	Line No.
	(a)	(b)	(c)	(d)	(e)	
1	1930	$ 0	19	20.63	$ 0	1
2	1931	0	17	23.06	0	2
3	1932	0	16	24.50	0	3
4	1933	0	17	23.06	0	4
5	1934	0	19	20.63	0	5
6	1935	0	18	21.78	0	6
7	1936	0	19	20.63	0	7
8	1937	0	20	19.60	0	8
9	1938	0	20	19.60	0	9
10	1939	0	20	19.60	0	10
11	1940	0	20	19.60	0	11
12	1941	0	22	17.82	0	12
13	1942	0	23	17.04	0	13
14	1943	0	23	17.04	0	14
15	1944	0	24	16.33	0	15
16	1945	0	24	16.33	0	16
17	1946	0	27	14.52	0	17
18	1947	0	32	12.25	0	18
19	1948	0	36	10.89	0	19
20	1949	0	37	10.59	0	20
21	1950	0	39	10.05	0	21
22	1951	0	42	9.33	0	22
23	1952	0	44	8.91	0	23
24	1953	0	44	8.91	0	24
25	1954	0	46	8.52	0	25
26	1955	0	48	8.17	0	26
27	1956	0	52	7.54	0	27
28	1957	0	55	7.13	0	28
29	1958	0	57	6.88	0	29
30	1959	0	58	6.76	0	30
31	1960	0	59	6.64	0	31
32	1961	0	58	6.76	0	32
33	1962	0	59	6.64	0	33
34	1963	0	60	6.53	0	34
35	1964	0	61	6.43	0	35
36	1965	0	64	6.13	0	36
37	1966	0	65	6.03	0	37
38	1967	0	67	5.85	0	38
39	1968	0	71	5.52	0	39
40	1969	0	75	5.23	0	40
41	1970	0	79	4.96	0	41
42	1971	0	87	4.51	0	42
43	1972	15,408	93	4.22	65,022	43
44	1973	0	100	3.92	0	44
45	1974	4,015	118	3.32	13,330	45
46	1975	1,190	133	2.95	3,511	46
47	1976	0	138	2.84	0	47
48	1977	329,674	148	2.65	873,636	48
49	1978	2,837	161	2.43	6,894	49
50	1979	0	177	2.21	0	50
51	1980	5,242,161	194	2.02	10,589,165	51
52	1981	37,087	204	1.92	71,207	52
53	1982	0	207	1.89	0	53
54	1983	0	215	1.82	0	54
55	1984	2,441,523	224	1.75	4,272,665	55
56	1985	1,687,626	226	1.73	2,919,593	56
57	1986	1,019,280	231	1.70	1,732,776	57
58	1987	61,686	232	1.69	104,249	58
59	1988	5,172,716	233	1.68	8,690,163	59
60	1989	3,212,605	232	1.69	5,429,302	60
61	1990	166,074	237	1.65	274,022	61
62	1991	838,588	233	1.68	1,408,828	62
63	1992	193,045	238	1.65	318,524	63
64	1993	94,341	250	1.57	148,115	64
65	1994	52,856	261	1.50	79,284	65
66	1995	386,141	265	1.48	571,489	66
67	1996	145,000	176	2.23	323,350	67
68	1997	327,140	282	1.39	454,725	68
69	1998	441,303	285	1.38	608,998	69
70	1999	1,006,261	287	1.37	1,378,578	70
71	2000	343,691	295	1.33	457,109	71
72	2001	173,890	303	1.29	224,318	72
73	2002	330,462	310	1.26	416,382	73
74	2003	262,206	320	1.23	322,513	74
75	2004	431,383	342	1.15	496,090	75
76	2005	54,040	355	1.10	59,444	76
77	2006	143,811	364	1.08	155,316	77
78	2007	733,648	382	1.03	755,657	78
79	2008	797,245	398	0.98	781,300	79
80	2009	929,669	389	1.01	938,966	80
81	2010	656,400	392	1.00	656,400	81
82	Total	$ 27,735,002			$ 45,600,921	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 390.2 - Leasehold Structures and Improvements

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 0	19	20.63	$ 0	1
2	1931	0	17	23.06	0	2
3	1932	0	16	24.50	0	3
4	1933	0	17	23.06	0	4
5	1934	0	19	20.63	0	5
6	1935	0	18	21.78	0	6
7	1936	0	19	20.63	0	7
8	1937	0	20	19.60	0	8
9	1938	0	20	19.60	0	9
10	1939	0	20	19.60	0	10
11	1940	0	20	19.60	0	11
12	1941	0	22	17.82	0	12
13	1942	0	23	17.04	0	13
14	1943	0	23	17.04	0	14
15	1944	0	24	16.33	0	15
16	1945	0	24	16.33	0	16
17	1946	0	27	14.52	0	17
18	1947	0	32	12.25	0	18
19	1948	0	36	10.89	0	19
20	1949	0	37	10.59	0	20
21	1950	0	39	10.05	0	21
22	1951	0	42	9.33	0	22
23	1952	0	44	8.91	0	23
24	1953	0	44	8.91	0	24
25	1954	0	46	8.52	0	25
26	1955	0	48	8.17	0	26
27	1956	0	52	7.54	0	27
28	1957	0	55	7.13	0	28
29	1958	0	57	6.88	0	29
30	1959	0	58	6.76	0	30
31	1960	0	59	6.64	0	31
32	1961	0	58	6.76	0	32
33	1962	0	59	6.64	0	33
34	1963	0	60	6.53	0	34
35	1964	0	61	6.43	0	35
36	1965	0	64	6.13	0	36
37	1966	0	65	6.03	0	37
38	1967	0	67	5.85	0	38
39	1968	0	71	5.52	0	39
40	1969	0	75	5.23	0	40
41	1970	0	79	4.96	0	41
42	1971	0	87	4.51	0	42
43	1972	0	93	4.22	0	43
44	1973	0	100	3.92	0	44
45	1974	0	118	3.32	0	45
46	1975	0	133	2.95	0	46
47	1976	0	138	2.84	0	47
48	1977	0	148	2.65	0	48
49	1978	0	161	2.43	0	49
50	1979	19,087	177	2.21	42,182	50
51	1980	0	194	2.02	0	51
52	1981	0	204	1.92	0	52
53	1982	0	207	1.89	0	53
54	1983	0	215	1.82	0	54
55	1984	0	224	1.75	0	55
56	1985	22,411	226	1.73	38,771	56
57	1986	11,920	231	1.70	20,264	57
58	1987	0	232	1.69	0	58
59	1988	82,891	233	1.68	139,257	59
60	1989	102,911	232	1.69	173,920	60
61	1990	0	237	1.65	0	61
62	1991	0	233	1.68	0	62
63	1992	0	238	1.65	0	63
64	1993	89,014	250	1.57	139,752	64
65	1994	10,978	261	1.50	16,467	65
66	1995	0	265	1.48	0	66
67	1996	6,416	176	2.23	14,308	67
68	1997	9,418	282	1.39	13,091	68
69	1998	121,696	285	1.38	167,940	69
70	1999	55,047	287	1.37	75,414	70
71	2000	14,670	295	1.33	19,511	71
72	2001	234,070	303	1.29	301,950	72
73	2002	60,614	310	1.26	76,374	73
74	2003	5,638	320	1.23	6,935	74
75	2004	10,805	342	1.15	12,426	75
76	2005	2,005	355	1.10	2,206	76
77	2006	4,067	364	1.08	4,392	77
78	2007	0	382	1.03	0	78
79	2008	7,522	398	0.98	7,372	79
80	2009	0	389	1.01	0	80
81	2010	0	392	1.00	0	81
82	Total	$ 871,180			$ 1,272,532	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 391 - Office Furniture and Equipment

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 0	11	34.00	$ 0	1
2	1931	0	11	34.00	0	2
3	1932	0	11	34.00	0	3
4	1933	0	11	34.00	0	4
5	1934	0	11	34.00	0	5
6	1935	0	11	34.00	0	6
7	1936	0	12	31.17	0	7
8	1937	0	13	28.77	0	8
9	1938	0	13	28.77	0	9
10	1939	0	13	28.77	0	10
11	1940	0	13	28.77	0	11
12	1941	0	13	28.77	0	12
13	1942	0	15	24.93	0	13
14	1943	0	15	24.93	0	14
15	1944	0	15	24.93	0	15
16	1945	0	16	23.38	0	16
17	1946	0	20	18.70	0	17
18	1947	0	23	16.26	0	18
19	1948	0	26	14.38	0	19
20	1949	0	26	14.38	0	20
21	1950	0	27	13.85	0	21
22	1951	0	29	12.90	0	22
23	1952	0	31	12.06	0	23
24	1953	0	33	11.33	0	24
25	1954	0	34	11.00	0	25
26	1955	0	36	10.39	0	26
27	1956	0	39	9.59	0	27
28	1957	0	41	9.12	0	28
29	1958	0	42	8.90	0	29
30	1959	0	45	8.31	0	30
31	1960	0	46	8.13	0	31
32	1961	0	51	7.33	0	32
33	1962	0	53	7.06	0	33
34	1963	0	55	6.80	0	34
35	1964	0	57	6.56	0	35
36	1965	0	60	6.23	0	36
37	1966	0	62	6.03	0	37
38	1967	0	66	5.67	0	38
39	1968	0	70	5.34	0	39
40	1969	0	74	5.05	0	40
41	1970	0	81	4.62	0	41
42	1971	0	87	4.30	0	42
43	1972	0	94	3.98	0	43
44	1973	0	100	3.74	0	44
45	1974	0	109	3.43	0	45
46	1975	0	123	3.04	0	46
47	1976	0	130	2.88	0	47
48	1977	0	141	2.65	0	48
49	1978	0	151	2.48	0	49
50	1979	0	164	2.28	0	50
51	1980	3,221	178	2.10	6,764	51
52	1981	0	186	2.01	0	52
53	1982	0	203	1.84	0	53
54	1983	2,505	209	1.79	4,484	54
55	1984	14,502	212	1.76	25,524	55
56	1985	39,716	211	1.77	70,297	56
57	1986	4,282	218	1.72	7,365	57
58	1987	2,599	226	1.65	4,288	58
59	1988	57,371	219	1.71	98,104	59
60	1989	0	213	1.76	0	60
61	1990	2,686	228	1.64	4,405	61
62	1991	1,286	242	1.55	1,993	62
63	1992	0	249	1.50	0	63
64	1993	15,391	260	1.44	22,163	64
65	1994	14,225	257	1.46	20,769	65
66	1995	49,705	246	1.52	75,552	66
67	1996	45,087	250	1.50	67,631	67
68	1997	87,586	251	1.49	130,503	68
69	1998	73,450	254	1.47	107,972	69
70	1999	92,824	261	1.43	132,738	70
71	2000	393,360	268	1.40	550,704	71
72	2001	32,959	280	1.34	44,165	72
73	2002	519,419	289	1.29	670,051	73
74	2003	23,216	293	1.28	29,716	74
75	2004	192,535	298	1.26	242,594	75
76	2005	8,829	303	1.23	10,860	76
77	2006	140,746	305	1.23	173,118	77
78	2007	1,199,293	317	1.18	1,415,166	78
79	2008	206,478	337	1.11	229,191	79
80	2009	555,580	359	1.04	577,803	80
81	2010	144,799	374	1.00	144,799	81
82	Total	$ 3,923,650			$ 4,868,719	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 391.1 - Computer Equipment

Line No.	Year Installed	Original Cost Total Arizona	H - W Index	Ratio To Current Index	RCN Total Arizona	Line No.
	(a)	(b)	(c)	(d)	(e)	
1	1930	$ 0	11	34.00	$ 0	1
2	1931	0	11	34.00	0	2
3	1932	0	11	34.00	0	3
4	1933	0	11	34.00	0	4
5	1934	0	11	34.00	0	5
6	1935	0	11	34.00	0	6
7	1936	0	12	31.17	0	7
8	1937	0	13	28.77	0	8
9	1938	0	13	28.77	0	9
10	1939	0	13	28.77	0	10
11	1940	0	13	28.77	0	11
12	1941	0	13	28.77	0	12
13	1942	0	15	24.93	0	13
14	1943	0	15	24.93	0	14
15	1944	0	15	24.93	0	15
16	1945	0	16	23.38	0	16
17	1946	0	20	18.70	0	17
18	1947	0	23	16.26	0	18
19	1948	0	26	14.38	0	19
20	1949	0	26	14.38	0	20
21	1950	0	27	13.85	0	21
22	1951	0	29	12.90	0	22
23	1952	0	31	12.06	0	23
24	1953	0	33	11.33	0	24
25	1954	0	34	11.00	0	25
26	1955	0	36	10.39	0	26
27	1956	0	39	9.59	0	27
28	1957	0	41	9.12	0	28
29	1958	0	42	8.90	0	29
30	1959	0	45	8.31	0	30
31	1960	0	46	8.13	0	31
32	1961	0	51	7.33	0	32
33	1962	0	53	7.06	0	33
34	1963	0	55	6.80	0	34
35	1964	0	57	6.56	0	35
36	1965	0	60	6.23	0	36
37	1966	0	62	6.03	0	37
38	1967	0	66	5.67	0	38
39	1968	0	70	5.34	0	39
40	1969	0	74	5.05	0	40
41	1970	0	81	4.62	0	41
42	1971	0	87	4.30	0	42
43	1972	0	94	3.98	0	43
44	1973	0	100	3.74	0	44
45	1974	0	109	3.43	0	45
46	1975	0	123	3.04	0	46
47	1976	0	130	2.88	0	47
48	1977	0	141	2.65	0	48
49	1978	0	151	2.48	0	49
50	1979	0	164	2.28	0	50
51	1980	0	178	2.10	0	51
52	1981	0	186	2.01	0	52
53	1982	0	203	1.84	0	53
54	1983	0	209	1.79	0	54
55	1984	0	212	1.76	0	55
56	1985	0	211	1.77	0	56
57	1986	0	218	1.72	0	57
58	1987	0	226	1.65	0	58
59	1988	0	219	1.71	0	59
60	1989	0	213	1.76	0	60
61	1990	0	228	1.64	0	61
62	1991	0	242	1.55	0	62
63	1992	0	249	1.50	0	63
64	1993	16,998	260	1.44	24,477	64
65	1994	15,506	257	1.46	22,639	65
66	1995	37,950	246	1.52	57,684	66
67	1996	7,201	250	1.50	10,802	67
68	1997	26,325	251	1.49	39,224	68
69	1998	16,218	254	1.47	23,840	69
70	1999	32,215	261	1.43	46,067	70
71	2000	85,591	268	1.40	119,827	71
72	2001	299,175	280	1.34	400,895	72
73	2002	181,371	289	1.29	233,969	73
74	2003	268,435	293	1.28	343,597	74
75	2004	649,501	298	1.26	818,371	75
76	2005	47,790	303	1.23	58,782	76
77	2006	1,818,944	305	1.23	2,237,301	77
78	2007	784,257	317	1.18	925,423	78
79	2008	4,303,183	337	1.11	4,776,533	79
80	2009	838,102	359	1.04	871,626	80
81	2010	872,229	374	1.00	872,229	81
82	Total	$ 10,300,991			$ 11,883,286	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 392.1 - Transportation Equipment

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 0	22	22.82	$ 0	1
2	1931	0	20	25.10	0	2
3	1932	0	19	26.42	0	3
4	1933	0	19	26.42	0	4
5	1934	0	20	25.10	0	5
6	1935	0	21	23.90	0	6
7	1936	0	21	23.90	0	7
8	1937	0	23	21.83	0	8
9	1938	0	23	21.83	0	9
10	1939	0	23	21.83	0	10
11	1940	0	24	20.92	0	11
12	1941	0	25	20.08	0	12
13	1942	0	28	17.93	0	13
14	1943	0	29	17.31	0	14
15	1944	0	29	17.31	0	15
16	1945	0	29	17.31	0	16
17	1946	0	34	14.76	0	17
18	1947	0	37	13.57	0	18
19	1948	0	39	12.87	0	19
20	1949	0	40	12.55	0	20
21	1950	0	42	11.95	0	21
22	1951	0	45	11.16	0	22
23	1952	0	46	10.91	0	23
24	1953	0	49	10.24	0	24
25	1954	0	49	10.24	0	25
26	1955	0	51	9.84	0	26
27	1956	0	55	9.13	0	27
28	1957	0	59	8.51	0	28
29	1958	0	62	8.10	0	29
30	1959	0	64	7.84	0	30
31	1960	0	65	7.72	0	31
32	1961	0	67	7.49	0	32
33	1962	0	67	7.49	0	33
34	1963	0	68	7.38	0	34
35	1964	0	70	7.17	0	35
36	1965	0	71	7.07	0	36
37	1966	0	73	6.88	0	37
38	1967	0	76	6.61	0	38
39	1968	0	80	6.28	0	39
40	1969	0	84	5.98	0	40
41	1970	0	88	5.70	0	41
42	1971	0	93	5.40	0	42
43	1972	0	95	5.28	0	43
44	1973	0	100	5.02	0	44
45	1974	0	117	4.29	0	45
46	1975	0	141	3.56	0	46
47	1976	0	153	3.28	0	47
48	1977	0	164	3.06	0	48
49	1978	0	178	2.82	0	49
50	1979	0	197	2.55	0	50
51	1980	24,702	222	2.26	55,827	51
52	1981	0	246	2.04	0	52
53	1982	0	263	1.91	0	53
54	1983	0	269	1.87	0	54
55	1984	0	273	1.84	0	55
56	1985	0	276	1.82	0	56
57	1986	0	280	1.79	0	57
58	1987	0	286	1.76	0	58
59	1988	0	295	1.70	0	59
60	1989	0	281	1.79	0	60
61	1990	0	298	1.68	0	61
62	1991	0	320	1.57	0	62
63	1992	0	316	1.59	0	63
64	1993	58,747	324	1.55	91,058	64
65	1994	66,386	331	1.52	100,907	65
66	1995	75,559	333	1.51	114,094	66
67	1996	20,860	336	1.49	31,081	67
68	1997	90,326	351	1.43	129,166	68
69	1998	519,027	380	1.32	685,116	69
70	1999	444,327	385	1.30	577,625	70
71	2000	792,397	389	1.29	1,022,192	71
72	2001	2,239,614	390	1.29	2,889,102	72
73	2002	1,294,719	395	1.27	1,644,293	73
74	2003	993,526	401	1.25	1,241,908	74
75	2004	1,150,929	414	1.21	1,392,624	75
76	2005	1,838,491	439	1.14	2,095,880	76
77	2006	5,116,038	457	1.10	5,627,642	77
78	2007	6,001,974	469	1.07	6,422,112	78
79	2008	4,456,217	485	1.04	4,634,466	79
80	2009	5,267,571	501	1.00	5,267,571	80
81	2010	1,580,577	502	1.00	1,580,577	81
82	Total	$ 32,031,987			$ 35,603,241	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 393 - Stores Equipment

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 0	22	22.82	$ 0	1
2	1931	0	20	25.10	0	2
3	1932	0	19	26.42	0	3
4	1933	0	19	26.42	0	4
5	1934	0	20	25.10	0	5
6	1935	0	21	23.90	0	6
7	1936	0	21	23.90	0	7
8	1937	0	23	21.83	0	8
9	1938	0	23	21.83	0	9
10	1939	0	23	21.83	0	10
11	1940	0	24	20.92	0	11
12	1941	0	25	20.08	0	12
13	1942	0	28	17.93	0	13
14	1943	0	29	17.31	0	14
15	1944	0	29	17.31	0	15
16	1945	0	29	17.31	0	16
17	1946	0	34	14.76	0	17
18	1947	0	37	13.57	0	18
19	1948	0	39	12.87	0	19
20	1949	0	40	12.55	0	20
21	1950	0	42	11.95	0	21
22	1951	0	45	11.16	0	22
23	1952	0	46	10.91	0	23
24	1953	0	49	10.24	0	24
25	1954	0	49	10.24	0	25
26	1955	0	51	9.84	0	26
27	1956	0	55	9.13	0	27
28	1957	0	59	8.51	0	28
29	1958	0	62	8.10	0	29
30	1959	0	64	7.84	0	30
31	1960	0	65	7.72	0	31
32	1961	0	67	7.49	0	32
33	1962	0	67	7.49	0	33
34	1963	0	68	7.38	0	34
35	1964	0	70	7.17	0	35
36	1965	0	71	7.07	0	36
37	1966	0	73	6.88	0	37
38	1967	0	76	6.61	0	38
39	1968	0	80	6.28	0	39
40	1969	0	84	5.98	0	40
41	1970	0	88	5.70	0	41
42	1971	0	93	5.40	0	42
43	1972	0	95	5.28	0	43
44	1973	0	100	5.02	0	44
45	1974	0	117	4.29	0	45
46	1975	0	141	3.56	0	46
47	1976	0	153	3.28	0	47
48	1977	0	164	3.06	0	48
49	1978	0	178	2.82	0	49
50	1979	0	197	2.55	0	50
51	1980	31,662	222	2.26	71,556	51
52	1981	0	246	2.04	0	52
53	1982	0	263	1.91	0	53
54	1983	2,855	269	1.87	5,339	54
55	1984	0	273	1.84	0	55
56	1985	62,611	276	1.82	113,952	56
57	1986	30,615	280	1.79	54,801	57
58	1987	17,738	286	1.76	31,219	58
59	1988	36,482	295	1.70	62,019	59
60	1989	1,293	281	1.79	2,314	60
61	1990	0	298	1.68	0	61
62	1991	0	320	1.57	0	62
63	1992	0	316	1.59	0	63
64	1993	9,251	324	1.55	14,339	64
65	1994	52,958	331	1.52	80,496	65
66	1995	0	333	1.51	0	66
67	1996	0	336	1.49	0	67
68	1997	41,958	351	1.43	60,000	68
69	1998	5,158	380	1.32	6,809	69
70	1999	50,326	385	1.30	65,424	70
71	2000	19,100	389	1.29	24,639	71
72	2001	4,375	390	1.29	5,644	72
73	2002	73,301	395	1.27	93,092	73
74	2003	0	401	1.25	0	74
75	2004	26,256	414	1.21	31,770	75
76	2005	64,821	439	1.14	73,896	76
77	2006	11,760	457	1.10	12,936	77
78	2007	0	469	1.07	0	78
79	2008	81,414	485	1.04	84,671	79
80	2009	0	501	1.00	0	80
81	2010	0	502	1.00	0	81
82	Total	$ 623,934			$ 894,916	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 394 - Tools, Shop and Garage Equipment

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 0	22	22.82	$ 0	1
2	1931	0	20	25.10	0	2
3	1932	0	19	26.42	0	3
4	1933	0	19	26.42	0	4
5	1934	0	20	25.10	0	5
6	1935	0	21	23.90	0	6
7	1936	0	21	23.90	0	7
8	1937	0	23	21.83	0	8
9	1938	0	23	21.83	0	9
10	1939	0	23	21.83	0	10
11	1940	0	24	20.92	0	11
12	1941	0	25	20.08	0	12
13	1942	0	28	17.93	0	13
14	1943	0	29	17.31	0	14
15	1944	0	29	17.31	0	15
16	1945	0	29	17.31	0	16
17	1946	0	34	14.76	0	17
18	1947	0	37	13.57	0	18
19	1948	0	39	12.87	0	19
20	1949	0	40	12.55	0	20
21	1950	0	42	11.95	0	21
22	1951	0	45	11.16	0	22
23	1952	0	46	10.91	0	23
24	1953	0	49	10.24	0	24
25	1954	0	49	10.24	0	25
26	1955	0	51	9.84	0	26
27	1956	0	55	9.13	0	27
28	1957	0	59	8.51	0	28
29	1958	0	62	8.10	0	29
30	1959	0	64	7.84	0	30
31	1960	0	65	7.72	0	31
32	1961	0	67	7.49	0	32
33	1962	0	67	7.49	0	33
34	1963	0	68	7.38	0	34
35	1964	0	70	7.17	0	35
36	1965	0	71	7.07	0	36
37	1966	0	73	6.88	0	37
38	1967	0	76	6.61	0	38
39	1968	0	80	6.28	0	39
40	1969	0	84	5.98	0	40
41	1970	0	88	5.70	0	41
42	1971	0	93	5.40	0	42
43	1972	0	95	5.28	0	43
44	1973	0	100	5.02	0	44
45	1974	0	117	4.29	0	45
46	1975	0	141	3.56	0	46
47	1976	0	153	3.28	0	47
48	1977	0	164	3.06	0	48
49	1978	0	178	2.82	0	49
50	1979	0	197	2.55	0	50
51	1980	32,230	222	2.26	72,840	51
52	1981	6,080	246	2.04	12,403	52
53	1982	0	263	1.91	0	53
54	1983	0	269	1.87	0	54
55	1984	8,477	273	1.84	15,598	55
56	1985	8,558	276	1.82	15,576	56
57	1986	34,100	280	1.79	61,039	57
58	1987	17,453	286	1.76	30,717	58
59	1988	55,672	295	1.70	94,642	59
60	1989	213,282	281	1.79	381,775	60
61	1990	8,189	298	1.68	13,758	61
62	1991	11,529	320	1.57	18,101	62
63	1992	41,652	316	1.59	66,227	63
64	1993	55,563	324	1.55	86,123	64
65	1994	83,956	331	1.52	127,613	65
66	1995	304,041	333	1.51	459,102	66
67	1996	15,042	336	1.49	22,413	67
68	1997	53,955	351	1.43	77,156	68
69	1998	443,578	380	1.32	585,523	69
70	1999	208,179	385	1.30	270,633	70
71	2000	488,129	389	1.29	629,686	71
72	2001	206,491	390	1.29	266,373	72
73	2002	347,543	395	1.27	441,380	73
74	2003	145,507	401	1.25	181,884	74
75	2004	418,560	414	1.21	506,458	75
76	2005	512,713	439	1.14	584,493	76
77	2006	475,864	457	1.10	523,450	77
78	2007	539,037	469	1.07	576,770	78
79	2008	391,129	485	1.04	406,774	79
80	2009	1,854,634	501	1.00	1,854,634	80
81	2010	193,136	502	1.00	193,136	81
82	Total	$ 7,174,279			$ 8,576,277	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 395 - Laboratory Equipment

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 0	11	34.00	$ 0	1
2	1931	0	11	34.00	0	2
3	1932	0	11	34.00	0	3
4	1933	0	11	34.00	0	4
5	1934	0	11	34.00	0	5
6	1935	0	11	34.00	0	6
7	1936	0	12	31.17	0	7
8	1937	0	13	28.77	0	8
9	1938	0	13	28.77	0	9
10	1939	0	13	28.77	0	10
11	1940	0	13	28.77	0	11
12	1941	0	13	28.77	0	12
13	1942	0	15	24.93	0	13
14	1943	0	15	24.93	0	14
15	1944	0	15	24.93	0	15
16	1945	0	16	23.38	0	16
17	1946	0	20	18.70	0	17
18	1947	0	23	16.26	0	18
19	1948	0	26	14.38	0	19
20	1949	0	26	14.38	0	20
21	1950	0	27	13.85	0	21
22	1951	0	29	12.90	0	22
23	1952	0	31	12.06	0	23
24	1953	0	33	11.33	0	24
25	1954	0	34	11.00	0	25
26	1955	0	36	10.39	0	26
27	1956	0	39	9.59	0	27
28	1957	0	41	9.12	0	28
29	1958	0	42	8.90	0	29
30	1959	0	45	8.31	0	30
31	1960	0	46	8.13	0	31
32	1961	0	51	7.33	0	32
33	1962	0	53	7.06	0	33
34	1963	0	55	6.80	0	34
35	1964	0	57	6.56	0	35
36	1965	0	60	6.23	0	36
37	1966	0	62	6.03	0	37
38	1967	0	66	5.67	0	38
39	1968	0	70	5.34	0	39
40	1969	0	74	5.05	0	40
41	1970	0	81	4.62	0	41
42	1971	0	87	4.30	0	42
43	1972	0	94	3.98	0	43
44	1973	0	100	3.74	0	44
45	1974	0	109	3.43	0	45
46	1975	0	123	3.04	0	46
47	1976	0	130	2.88	0	47
48	1977	0	141	2.65	0	48
49	1978	0	151	2.48	0	49
50	1979	0	164	2.28	0	50
51	1980	0	178	2.10	0	51
52	1981	0	186	2.01	0	52
53	1982	0	203	1.84	0	53
54	1983	0	209	1.79	0	54
55	1984	0	212	1.76	0	55
56	1985	0	211	1.77	0	56
57	1986	0	218	1.72	0	57
58	1987	0	226	1.65	0	58
59	1988	0	219	1.71	0	59
60	1989	0	213	1.76	0	60
61	1990	2,960	228	1.64	4,854	61
62	1991	0	242	1.55	0	62
63	1992	0	249	1.50	0	63
64	1993	1,176	260	1.44	1,693	64
65	1994	32,133	257	1.46	46,914	65
66	1995	11,623	246	1.52	17,667	66
67	1996	7,301	250	1.50	10,952	67
68	1997	0	251	1.49	0	68
69	1998	3,633	254	1.47	5,341	69
70	1999	145,052	261	1.43	207,424	70
71	2000	0	268	1.40	0	71
72	2001	0	280	1.34	0	72
73	2002	59,897	289	1.29	77,267	73
74	2003	1,553	293	1.28	1,988	74
75	2004	4,842	298	1.26	6,101	75
76	2005	0	303	1.23	0	76
77	2006	2,466	305	1.23	3,033	77
78	2007	42,852	317	1.18	50,565	78
79	2008	2,421	337	1.11	2,687	79
80	2009	2,257	359	1.04	2,347	80
81	2010	8,738	374	1.00	8,738	81
82	Total	$ 328,904			$ 447,571	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 396 - Power Operated Equipment

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 0	22	22.82	$ 0	1
2	1931	0	20	25.10	0	2
3	1932	0	19	26.42	0	3
4	1933	0	19	26.42	0	4
5	1934	0	20	25.10	0	5
6	1935	0	21	23.90	0	6
7	1936	0	21	23.90	0	7
8	1937	0	23	21.83	0	8
9	1938	0	23	21.83	0	9
10	1939	0	23	21.83	0	10
11	1940	0	24	20.92	0	11
12	1941	0	25	20.08	0	12
13	1942	0	28	17.93	0	13
14	1943	0	29	17.31	0	14
15	1944	0	29	17.31	0	15
16	1945	0	29	17.31	0	16
17	1946	0	34	14.76	0	17
18	1947	0	37	13.57	0	18
19	1948	0	39	12.87	0	19
20	1949	0	40	12.55	0	20
21	1950	0	42	11.95	0	21
22	1951	0	45	11.16	0	22
23	1952	0	46	10.91	0	23
24	1953	0	49	10.24	0	24
25	1954	0	49	10.24	0	25
26	1955	0	51	9.84	0	26
27	1956	0	55	9.13	0	27
28	1957	0	59	8.51	0	28
29	1958	0	62	8.10	0	29
30	1959	0	64	7.84	0	30
31	1960	0	65	7.72	0	31
32	1961	0	67	7.49	0	32
33	1962	0	67	7.49	0	33
34	1963	0	68	7.38	0	34
35	1964	0	70	7.17	0	35
36	1965	0	71	7.07	0	36
37	1966	0	73	6.88	0	37
38	1967	0	76	6.61	0	38
39	1968	0	80	6.28	0	39
40	1969	0	84	5.98	0	40
41	1970	0	88	5.70	0	41
42	1971	0	93	5.40	0	42
43	1972	0	95	5.28	0	43
44	1973	0	100	5.02	0	44
45	1974	0	117	4.29	0	45
46	1975	0	141	3.56	0	46
47	1976	0	153	3.28	0	47
48	1977	0	164	3.06	0	48
49	1978	0	178	2.82	0	49
50	1979	8,127	197	2.55	20,724	50
51	1980	2,846	222	2.26	6,432	51
52	1981	0	246	2.04	0	52
53	1982	0	263	1.91	0	53
54	1983	0	269	1.87	0	54
55	1984	43,865	273	1.84	80,712	55
56	1985	3,072	276	1.82	5,591	56
57	1986	1,536	280	1.79	2,749	57
58	1987	0	286	1.76	0	58
59	1988	9,138	295	1.70	15,535	59
60	1989	0	281	1.79	0	60
61	1990	0	298	1.68	0	61
62	1991	71,031	320	1.57	111,519	62
63	1992	0	316	1.59	0	63
64	1993	7,091	324	1.55	10,991	64
65	1994	158,909	331	1.52	241,542	65
66	1995	67,634	333	1.51	102,127	66
67	1996	10,582	336	1.49	15,767	67
68	1997	25,800	351	1.43	36,894	68
69	1998	193,152	380	1.32	254,961	69
70	1999	160,970	385	1.30	209,261	70
71	2000	188,162	389	1.29	242,729	71
72	2001	298,640	390	1.29	385,246	72
73	2002	71,379	395	1.27	90,651	73
74	2003	91,305	401	1.25	114,131	74
75	2004	284,921	414	1.21	344,754	75
76	2005	455,586	439	1.14	519,368	76
77	2006	939,016	457	1.10	1,032,918	77
78	2007	818,254	469	1.07	875,532	78
79	2008	1,204,692	485	1.04	1,252,880	79
80	2009	598,438	501	1.00	598,438	80
81	2010	48,687	502	1.00	48,687	81
82	Total	$ 5,762,833			$ 6,620,139	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 397.1 - Communication Equipment

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 0	15	26.80	$ 0	1
2	1931	0	15	26.80	0	2
3	1932	0	15	26.80	0	3
4	1933	0	15	26.80	0	4
5	1934	0	15	26.80	0	5
6	1935	0	15	26.80	0	6
7	1936	0	15	26.80	0	7
8	1937	0	17	23.65	0	8
9	1938	0	17	23.65	0	9
10	1939	0	17	23.65	0	10
11	1940	0	17	23.65	0	11
12	1941	0	18	22.33	0	12
13	1942	0	19	21.16	0	13
14	1943	0	19	21.16	0	14
15	1944	0	19	21.16	0	15
16	1945	0	19	21.16	0	16
17	1946	0	21	19.14	0	17
18	1947	0	24	16.75	0	18
19	1948	0	26	15.46	0	19
20	1949	0	28	14.36	0	20
21	1950	0	30	13.40	0	21
22	1951	0	31	12.97	0	22
23	1952	0	33	12.18	0	23
24	1953	0	34	11.82	0	24
25	1954	0	36	11.17	0	25
26	1955	0	37	10.86	0	26
27	1956	0	39	10.31	0	27
28	1957	0	41	9.80	0	28
29	1958	0	42	9.57	0	29
30	1959	0	45	8.93	0	30
31	1960	0	46	8.74	0	31
32	1961	0	49	8.20	0	32
33	1962	0	51	7.88	0	33
34	1963	0	52	7.73	0	34
35	1964	0	54	7.44	0	35
36	1965	0	57	7.05	0	36
37	1966	0	58	6.93	0	37
38	1967	0	62	6.48	0	38
39	1968	0	64	6.28	0	39
40	1969	0	69	5.83	0	40
41	1970	1,328	78	5.15	6,839	41
42	1971	0	88	4.57	0	42
43	1972	0	95	4.23	0	43
44	1973	3,598	100	4.02	14,464	44
45	1974	0	109	3.69	0	45
46	1975	0	122	3.30	0	46
47	1976	0	131	3.07	0	47
48	1977	0	142	2.83	0	48
49	1978	0	151	2.66	0	49
50	1979	0	160	2.51	0	50
51	1980	0	170	2.36	0	51
52	1981	0	185	2.17	0	52
53	1982	0	206	1.95	0	53
54	1983	6,506	218	1.84	11,971	54
55	1984	0	220	1.83	0	55
56	1985	231,958	214	1.88	436,081	56
57	1986	50,148	215	1.87	93,777	57
58	1987	15,555	216	1.86	28,932	58
59	1988	13,610	215	1.87	25,451	59
60	1989	20,100	214	1.88	37,788	60
61	1990	0	220	1.83	0	61
62	1991	2,143	225	1.79	3,836	62
63	1992	0	232	1.73	0	63
64	1993	35,661	236	1.70	60,624	64
65	1994	242,093	239	1.68	406,716	65
66	1995	67,442	247	1.63	109,930	66
67	1996	28,698	254	1.58	45,343	67
68	1997	238,734	257	1.56	372,425	68
69	1998	173,935	265	1.52	264,381	69
70	1999	448,281	275	1.46	654,490	70
71	2000	90,760	285	1.41	127,972	71
72	2001	10,168	299	1.34	13,625	72
73	2002	0	309	1.30	0	73
74	2003	29,090	318	1.26	36,653	74
75	2004	46,873	327	1.23	57,654	75
76	2005	25,766	337	1.19	30,662	76
77	2006	57,712	345	1.17	67,523	77
78	2007	330,324	354	1.14	376,569	78
79	2008	62,000	365	1.10	68,200	79
80	2009	43,944	382	1.05	46,141	80
81	2010	91,611	402	1.00	91,611	81
82	Total	$ 2,368,038			$ 3,489,658	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 397.2 - Telemetering Equipment

Line No.	Year Installed (a)	Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Total Arizona (e)	Line No.
1	1930	$ 0	15	26.80	$ 0	1
2	1931	0	15	26.80	0	2
3	1932	0	15	26.80	0	3
4	1933	0	15	26.80	0	4
5	1934	0	15	26.80	0	5
6	1935	0	15	26.80	0	6
7	1936	0	15	26.80	0	7
8	1937	0	17	23.65	0	8
9	1938	0	17	23.65	0	9
10	1939	0	17	23.65	0	10
11	1940	0	17	23.65	0	11
12	1941	0	18	22.33	0	12
13	1942	0	19	21.16	0	13
14	1943	0	19	21.16	0	14
15	1944	0	19	21.16	0	15
16	1945	0	19	21.16	0	16
17	1946	0	21	19.14	0	17
18	1947	0	24	16.75	0	18
19	1948	0	26	15.46	0	19
20	1949	0	28	14.36	0	20
21	1950	0	30	13.40	0	21
22	1951	0	31	12.97	0	22
23	1952	0	33	12.18	0	23
24	1953	0	34	11.82	0	24
25	1954	0	36	11.17	0	25
26	1955	0	37	10.86	0	26
27	1956	0	39	10.31	0	27
28	1957	0	41	9.80	0	28
29	1958	0	42	9.57	0	29
30	1959	0	45	8.93	0	30
31	1960	0	46	8.74	0	31
32	1961	0	49	8.20	0	32
33	1962	0	51	7.88	0	33
34	1963	0	52	7.73	0	34
35	1964	0	54	7.44	0	35
36	1965	0	57	7.05	0	36
37	1966	0	58	6.93	0	37
38	1967	0	62	6.48	0	38
39	1968	0	64	6.28	0	39
40	1969	0	69	5.83	0	40
41	1970	0	78	5.15	0	41
42	1971	0	88	4.57	0	42
43	1972	0	95	4.23	0	43
44	1973	0	100	4.02	0	44
45	1974	0	109	3.69	0	45
46	1975	0	122	3.30	0	46
47	1976	0	131	3.07	0	47
48	1977	0	142	2.83	0	48
49	1978	0	151	2.66	0	49
50	1979	0	160	2.51	0	50
51	1980	0	170	2.36	0	51
52	1981	0	185	2.17	0	52
53	1982	0	206	1.95	0	53
54	1983	0	218	1.84	0	54
55	1984	0	220	1.83	0	55
56	1985	0	214	1.88	0	56
57	1986	0	215	1.87	0	57
58	1987	0	216	1.86	0	58
59	1988	19,285	215	1.87	36,063	59
60	1989	0	214	1.88	0	60
61	1990	0	220	1.83	0	61
62	1991	0	225	1.79	0	62
63	1992	5,275	232	1.73	9,126	63
64	1993	3,280	236	1.70	5,576	64
65	1994	27,121	239	1.68	45,563	65
66	1995	15,657	247	1.63	25,521	66
67	1996	16,779	254	1.58	26,511	67
68	1997	0	257	1.56	0	68
69	1998	0	265	1.52	0	69
70	1999	9,867	275	1.46	14,406	70
71	2000	36,919	285	1.41	52,056	71
72	2001	0	299	1.34	0	72
73	2002	0	309	1.30	0	73
74	2003	0	318	1.26	0	74
75	2004	5,834	327	1.23	7,176	75
76	2005	339,215	337	1.19	403,666	76
77	2006	0	345	1.17	0	77
78	2007	0	354	1.14	0	78
79	2008	36,415	365	1.10	40,057	79
80	2009	72,124	382	1.05	75,730	80
81	2010	0	402	1.00	0	81
82	Total	$ 587,771			$ 741,451	82

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 398 - Miscellaneous Equipment

Line No.	Year Installed (a)		Original Cost Total Arizona (b)	H - W Index (c)	Ratio To Current Index (d)		RCN Total Arizona (e)	Line No.
1	1930	$	0	15	26.80	$	0	1
2	1931		0	15	26.80		0	2
3	1932		0	15	26.80		0	3
4	1933		0	15	26.80		0	4
5	1934		0	15	26.80		0	5
6	1935		0	15	26.80		0	6
7	1936		0	15	26.80		0	7
8	1937		0	17	23.65		0	8
9	1938		0	17	23.65		0	9
10	1939		0	17	23.65		0	10
11	1940		0	17	23.65		0	11
12	1941		0	18	22.33		0	12
13	1942		0	19	21.16		0	13
14	1943		0	19	21.16		0	14
15	1944		0	19	21.16		0	15
16	1945		0	19	21.16		0	16
17	1946		0	21	19.14		0	17
18	1947		0	24	16.75		0	18
19	1948		0	26	15.46		0	19
20	1949		0	28	14.36		0	20
21	1950		0	30	13.40		0	21
22	1951		0	31	12.97		0	22
23	1952		0	33	12.18		0	23
24	1953		0	34	11.82		0	24
25	1954		0	36	11.17		0	25
26	1955		0	37	10.86		0	26
27	1956		0	39	10.31		0	27
28	1957		0	41	9.80		0	28
29	1958		0	42	9.57		0	29
30	1959		0	45	8.93		0	30
31	1960		0	46	8.74		0	31
32	1961		0	49	8.20		0	32
33	1962		0	51	7.88		0	33
34	1963		0	52	7.73		0	34
35	1964		0	54	7.44		0	35
36	1965		0	57	7.05		0	36
37	1966		0	58	6.93		0	37
38	1967		0	62	6.48		0	38
39	1968		0	64	6.28		0	39
40	1969		0	69	5.83		0	40
41	1970		0	78	5.15		0	41
42	1971		0	88	4.57		0	42
43	1972		0	95	4.23		0	43
44	1973		0	100	4.02		0	44
45	1974		0	109	3.69		0	45
46	1975		0	122	3.30		0	46
47	1976		0	131	3.07		0	47
48	1977		0	142	2.83		0	48
49	1978		0	151	2.66		0	49
50	1979		3,438	160	2.51		8,629	50
51	1980		32,264	170	2.36		76,143	51
52	1981		0	185	2.17		0	52
53	1982		0	206	1.95		0	53
54	1983		0	218	1.84		0	54
55	1984		0	220	1.83		0	55
56	1985		5,617	214	1.88		10,560	56
57	1986		32,127	215	1.87		60,077	57
58	1987		0	216	1.86		0	58
59	1988		3,370	215	1.87		6,302	59
60	1989		0	214	1.88		0	60
61	1990		0	220	1.83		0	61
62	1991		0	225	1.79		0	62
63	1992		0	232	1.73		0	63
64	1993		7,292	236	1.70		12,396	64
65	1994		0	239	1.68		0	65
66	1995		0	247	1.63		0	66
67	1996		0	254	1.58		0	67
68	1997		0	257	1.56		0	68
69	1998		11,334	265	1.52		17,228	69
70	1999		9,981	275	1.46		14,572	70
71	2000		345,507	285	1.41		487,165	71
72	2001		14,128	299	1.34		18,932	72
73	2002		55,894	309	1.30		72,662	73
74	2003		8,414	318	1.26		10,602	74
75	2004		25,222	327	1.23		31,023	75
76	2005		63,520	337	1.19		75,589	76
77	2006		40,749	345	1.17		47,676	77
78	2007		55,719	354	1.14		63,520	78
79	2008		20,465	365	1.10		22,512	79
80	2009		41,013	382	1.05		43,064	80
81	2010		88,222	402	1.00		88,222	81
82	Total	$	864,276			$	1,166,874	82

SOUTHWEST GAS CORPORATION
SYSTEM ALLOCABLE PLANT
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 389 - Land and Land Rights

Line No.	Year Installed (a)	Original Cost (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Cost (e)	Line No.
1	1930	$ 0	1	1.00	$ 0	1
2	1931	0	1	1.00	0	2
3	1932	0	1	1.00	0	3
4	1933	0	1	1.00	0	4
5	1934	0	1	1.00	0	5
6	1935	0	1	1.00	0	6
7	1936	0	1	1.00	0	7
8	1937	0	1	1.00	0	8
9	1938	0	1	1.00	0	9
10	1939	0	1	1.00	0	10
11	1940	0	1	1.00	0	11
12	1941	0	1	1.00	0	12
13	1942	0	1	1.00	0	13
14	1943	0	1	1.00	0	14
15	1944	0	1	1.00	0	15
16	1945	0	1	1.00	0	16
17	1946	0	1	1.00	0	17
18	1947	0	1	1.00	0	18
19	1948	0	1	1.00	0	19
20	1949	0	1	1.00	0	20
21	1950	0	1	1.00	0	21
22	1951	0	1	1.00	0	22
23	1952	0	1	1.00	0	23
24	1953	0	1	1.00	0	24
25	1954	0	1	1.00	0	25
26	1955	0	1	1.00	0	26
27	1956	0	1	1.00	0	27
28	1957	0	1	1.00	0	28
29	1958	0	1	1.00	0	29
30	1959	0	1	1.00	0	30
31	1960	0	1	1.00	0	31
32	1961	0	1	1.00	0	32
33	1962	0	1	1.00	0	33
34	1963	0	1	1.00	0	34
35	1964	0	1	1.00	0	35
36	1965	0	1	1.00	0	36
37	1966	0	1	1.00	0	37
38	1967	0	1	1.00	0	38
39	1968	0	1	1.00	0	39
40	1969	0	1	1.00	0	40
41	1970	0	1	1.00	0	41
42	1971	0	1	1.00	0	42
43	1972	0	1	1.00	0	43
44	1973	0	1	1.00	0	44
45	1974	0	1	1.00	0	45
46	1975	0	1	1.00	0	46
47	1976	0	1	1.00	0	47
48	1977	0	1	1.00	0	48
49	1978	0	1	1.00	0	49
50	1979	0	1	1.00	0	50
51	1980	0	1	1.00	0	51
52	1981	0	1	1.00	0	52
53	1982	0	1	1.00	0	53
54	1983	0	1	1.00	0	54
55	1984	0	1	1.00	0	55
56	1985	0	1	1.00	0	56
57	1986	0	1	1.00	0	57
58	1987	0	1	1.00	0	58
59	1988	0	1	1.00	0	59
60	1989	248,909	1	1.00	248,909	60
61	1990	0	1	1.00	0	61
62	1991	0	1	1.00	0	62
63	1992	0	1	1.00	0	63
64	1993	142,398	1	1.00	142,398	64
65	1994	0	1	1.00	0	65
66	1995	0	1	1.00	0	66
67	1996	0	1	1.00	0	67
68	1997	0	1	1.00	0	68
69	1998	0	1	1.00	0	69
70	1999	0	1	1.00	0	70
71	2000	0	1	1.00	0	71
72	2001	0	1	1.00	0	72
73	2002	0	1	1.00	0	73
74	2003	0	1	1.00	0	74
75	2004	0	1	1.00	0	75
76	2005	0	1	1.00	0	76
77	2006	0	1	1.00	0	77
78	2007	0	1	1.00	0	78
79	2008	0	1	1.00	0	79
80	2009	0	1	1.00	0	80
81	2010	0	1	1.00	0	81
82	Total	$ 391,307			$ 391,307	82

SOUTHWEST GAS CORPORATION
SYSTEM ALLOCABLE PLANT
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 390.1 - Structures

Line No.	Year Installed (a)	Original Cost (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Cost (e)	Line No.
1	1930	$ 0	19	20.63	$ 0	1
2	1931	0	17	23.06	0	2
3	1932	0	16	24.50	0	3
4	1933	0	17	23.06	0	4
5	1934	0	19	20.63	0	5
6	1935	0	18	21.78	0	6
7	1936	0	19	20.63	0	7
8	1937	0	20	19.60	0	8
9	1938	0	20	19.60	0	9
10	1939	0	20	19.60	0	10
11	1940	0	20	19.60	0	11
12	1941	0	22	17.82	0	12
13	1942	0	23	17.04	0	13
14	1943	0	23	17.04	0	14
15	1944	0	24	16.33	0	15
16	1945	0	24	16.33	0	16
17	1946	0	27	14.52	0	17
18	1947	0	32	12.25	0	18
19	1948	0	36	10.89	0	19
20	1949	0	37	10.59	0	20
21	1950	0	39	10.05	0	21
22	1951	0	42	9.33	0	22
23	1952	0	44	8.91	0	23
24	1953	0	44	8.91	0	24
25	1954	0	46	8.52	0	25
26	1955	0	48	8.17	0	26
27	1956	0	52	7.54	0	27
28	1957	0	55	7.13	0	28
29	1958	0	57	6.88	0	29
30	1959	0	58	6.76	0	30
31	1960	0	59	6.64	0	31
32	1961	0	58	6.76	0	32
33	1962	0	59	6.64	0	33
34	1963	0	60	6.53	0	34
35	1964	0	61	6.43	0	35
36	1965	0	64	6.13	0	36
37	1966	0	65	6.03	0	37
38	1967	0	67	5.85	0	38
39	1968	0	71	5.52	0	39
40	1969	0	75	5.23	0	40
41	1970	0	79	4.96	0	41
42	1971	0	87	4.51	0	42
43	1972	0	93	4.22	0	43
44	1973	0	100	3.92	0	44
45	1974	0	118	3.32	0	45
46	1975	0	133	2.95	0	46
47	1976	0	138	2.84	0	47
48	1977	0	148	2.65	0	48
49	1978	0	161	2.43	0	49
50	1979	0	177	2.21	0	50
51	1980	0	194	2.02	0	51
52	1981	0	204	1.92	0	52
53	1982	0	207	1.89	0	53
54	1983	0	215	1.82	0	54
55	1984	0	224	1.75	0	55
56	1985	0	226	1.73	0	56
57	1986	0	231	1.70	0	57
58	1987	477,495	232	1.69	806,967	58
59	1988	0	233	1.68	0	59
60	1989	10,016,737	232	1.69	16,928,286	60
61	1990	0	237	1.65	0	61
62	1991	0	233	1.68	0	62
63	1992	0	238	1.65	0	63
64	1993	21,094	250	1.57	33,118	64
65	1994	0	261	1.50	0	65
66	1995	17,115	265	1.48	25,330	66
67	1996	0	176	2.23	0	67
68	1997	50,000	282	1.39	69,500	68
69	1998	4,191	285	1.38	5,784	69
70	1999	40,000	287	1.37	54,800	70
71	2000	212,862	295	1.33	283,106	71
72	2001	24,594	303	1.29	31,726	72
73	2002	0	310	1.26	0	73
74	2003	130,232	320	1.23	160,185	74
75	2004	265,902	342	1.15	305,787	75
76	2005	2,018,721	355	1.10	2,220,593	76
77	2006	143,605	364	1.08	155,093	77
78	2007	356,318	382	1.03	367,008	78
79	2008	435,364	398	0.98	426,657	79
80	2009	256,120	389	1.01	258,681	80
81	2010	545,277	392	1.00	545,277	81
82	Total	$ 15,015,627			$ 22,677,898	82

SOUTHWEST GAS CORPORATION
SYSTEM ALLOCABLE PLANT
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 390.2 - Structures - Leasehold Improvements

Line No.	Year Installed (a)	Original Cost (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Cost (e)	Line No.
1	1930	$ 0	19	20.63	$ 0	1
2	1931	0	17	23.06	0	2
3	1932	0	16	24.50	0	3
4	1933	0	17	23.06	0	4
5	1934	0	19	20.63	0	5
6	1935	0	18	21.78	0	6
7	1936	0	19	20.63	0	7
8	1937	0	20	19.60	0	8
9	1938	0	20	19.60	0	9
10	1939	0	20	19.60	0	10
11	1940	0	20	19.60	0	11
12	1941	0	22	17.82	0	12
13	1942	0	23	17.04	0	13
14	1943	0	23	17.04	0	14
15	1944	0	24	16.33	0	15
16	1945	0	24	16.33	0	16
17	1946	0	27	14.52	0	17
18	1947	0	32	12.25	0	18
19	1948	0	36	10.89	0	19
20	1949	0	37	10.59	0	20
21	1950	0	39	10.05	0	21
22	1951	0	42	9.33	0	22
23	1952	0	44	8.91	0	23
24	1953	0	44	8.91	0	24
25	1954	0	46	8.52	0	25
26	1955	0	48	8.17	0	26
27	1956	0	52	7.54	0	27
28	1957	0	55	7.13	0	28
29	1958	0	57	6.88	0	29
30	1959	0	58	6.76	0	30
31	1960	0	59	6.64	0	31
32	1961	0	58	6.76	0	32
33	1962	0	59	6.64	0	33
34	1963	0	60	6.53	0	34
35	1964	0	61	6.43	0	35
36	1965	0	64	6.13	0	36
37	1966	0	65	6.03	0	37
38	1967	0	67	5.85	0	38
39	1968	0	71	5.52	0	39
40	1969	0	75	5.23	0	40
41	1970	0	79	4.96	0	41
42	1971	0	87	4.51	0	42
43	1972	0	93	4.22	0	43
44	1973	0	100	3.92	0	44
45	1974	0	118	3.32	0	45
46	1975	0	133	2.95	0	46
47	1976	0	138	2.84	0	47
48	1977	0	148	2.65	0	48
49	1978	0	161	2.43	0	49
50	1979	0	177	2.21	0	50
51	1980	0	194	2.02	0	51
52	1981	0	204	1.92	0	52
53	1982	0	207	1.89	0	53
54	1983	106,730	215	1.82	194,249	54
55	1984	55,160	224	1.75	96,530	55
56	1985	116,407	226	1.73	201,384	56
57	1986	23,121	231	1.70	39,306	57
58	1987	104,114	232	1.69	175,953	58
59	1988	973,774	233	1.68	1,635,940	59
60	1989	6,095	232	1.69	10,301	60
61	1990	22,597	237	1.65	37,285	61
62	1991	50,388	233	1.68	84,652	62
63	1992	8,202	238	1.65	13,533	63
64	1993	192,953	250	1.57	302,936	64
65	1994	43,645	261	1.50	65,468	65
66	1995	12,305	265	1.48	18,211	66
67	1996	19,980	176	2.23	44,555	67
68	1997	0	282	1.39	0	68
69	1998	249,788	285	1.38	344,707	69
70	1999	87,886	287	1.37	120,404	70
71	2000	151,209	295	1.33	201,108	71
72	2001	108,914	303	1.29	140,499	72
73	2002	69,752	310	1.26	87,888	73
74	2003	59,871	320	1.23	73,641	74
75	2004	491,648	342	1.15	565,395	75
76	2005	448,125	355	1.10	492,938	76
77	2006	115,702	364	1.08	124,958	77
78	2007	203,287	382	1.03	209,386	78
79	2008	49,050	398	0.98	48,069	79
80	2009	675	389	1.01	682	80
81	2010	0	392	1.00	0	81
82	Total	$ 3,771,378			$ 5,329,978	82

SOUTHWEST GAS CORPORATION
SYSTEM ALLOCABLE PLANT
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 391 - Office Furniture and Equipment

Line No.	Year Installed (a)	Original Cost (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Cost (e)	Line No.
1	1930	$ 0	11	34.00	$ 0	1
2	1931	0	11	34.00	0	2
3	1932	0	11	34.00	0	3
4	1933	0	11	34.00	0	4
5	1934	0	11	34.00	0	5
6	1935	0	11	34.00	0	6
7	1936	0	12	31.17	0	7
8	1937	0	13	28.77	0	8
9	1938	0	13	28.77	0	9
10	1939	0	13	28.77	0	10
11	1940	0	13	28.77	0	11
12	1941	0	13	28.77	0	12
13	1942	0	15	24.93	0	13
14	1943	0	15	24.93	0	14
15	1944	0	15	24.93	0	15
16	1945	0	16	23.38	0	16
17	1946	0	20	18.70	0	17
18	1947	0	23	16.26	0	18
19	1948	0	26	14.38	0	19
20	1949	0	26	14.38	0	20
21	1950	0	27	13.85	0	21
22	1951	0	29	12.90	0	22
23	1952	0	31	12.06	0	23
24	1953	0	33	11.33	0	24
25	1954	0	34	11.00	0	25
26	1955	0	36	10.39	0	26
27	1956	0	39	9.59	0	27
28	1957	0	41	9.12	0	28
29	1958	0	42	8.90	0	29
30	1959	0	45	8.31	0	30
31	1960	0	46	8.13	0	31
32	1961	0	51	7.33	0	32
33	1962	0	53	7.06	0	33
34	1963	0	55	6.80	0	34
35	1964	0	57	6.56	0	35
36	1965	0	60	6.23	0	36
37	1966	0	62	6.03	0	37
38	1967	0	66	5.67	0	38
39	1968	0	70	5.34	0	39
40	1969	0	74	5.05	0	40
41	1970	0	81	4.62	0	41
42	1971	0	87	4.30	0	42
43	1972	0	94	3.98	0	43
44	1973	0	100	3.74	0	44
45	1974	0	109	3.43	0	45
46	1975	0	123	3.04	0	46
47	1976	0	130	2.88	0	47
48	1977	0	141	2.65	0	48
49	1978	0	151	2.48	0	49
50	1979	0	164	2.28	0	50
51	1980	0	178	2.10	0	51
52	1981	0	186	2.01	0	52
53	1982	0	203	1.84	0	53
54	1983	0	209	1.79	0	54
55	1984	0	212	1.76	0	55
56	1985	0	211	1.77	0	56
57	1986	0	218	1.72	0	57
58	1987	0	226	1.65	0	58
59	1988	0	219	1.71	0	59
60	1989	0	213	1.76	0	60
61	1990	0	228	1.64	0	61
62	1991	0	242	1.55	0	62
63	1992	0	249	1.50	0	63
64	1993	0	260	1.44	0	64
65	1994	0	257	1.46	0	65
66	1995	103,284	246	1.52	156,992	66
67	1996	23,579	250	1.50	35,369	67
68	1997	243,474	251	1.49	362,776	68
69	1998	508,071	254	1.47	746,864	69
70	1999	174,794	261	1.43	249,955	70
71	2000	155,522	268	1.40	217,731	71
72	2001	236,858	280	1.34	317,390	72
73	2002	754,315	289	1.29	973,066	73
74	2003	417,821	293	1.28	534,811	74
75	2004	223,118	298	1.26	281,129	75
76	2005	146,298	303	1.23	179,947	76
77	2006	1,385,103	305	1.23	1,703,677	77
78	2007	2,833,586	317	1.18	3,343,631	78
79	2008	125,388	337	1.11	139,181	79
80	2009	313,150	359	1.04	325,676	80
81	2010	108,218	374	1.00	108,218	81
82	Total	$ 7,752,579			$ 9,676,413	82

SOUTHWEST GAS CORPORATION
SYSTEM ALLOCABLE PLANT
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 391.1 - Computer Equipment

Line No.	Year Installed (a)	Original Cost (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Cost (e)	Line No.
1	1930	$ 0	11	34.00	$ 0	1
2	1931	0	11	34.00	0	2
3	1932	0	11	34.00	0	3
4	1933	0	11	34.00	0	4
5	1934	0	11	34.00	0	5
6	1935	0	11	34.00	0	6
7	1936	0	12	31.17	0	7
8	1937	0	13	28.77	0	8
9	1938	0	13	28.77	0	9
10	1939	0	13	28.77	0	10
11	1940	0	13	28.77	0	11
12	1941	0	13	28.77	0	12
13	1942	0	15	24.93	0	13
14	1943	0	15	24.93	0	14
15	1944	0	15	24.93	0	15
16	1945	0	16	23.38	0	16
17	1946	0	20	18.70	0	17
18	1947	0	23	16.26	0	18
19	1948	0	26	14.38	0	19
20	1949	0	26	14.38	0	20
21	1950	0	27	13.85	0	21
22	1951	0	29	12.90	0	22
23	1952	0	31	12.06	0	23
24	1953	0	33	11.33	0	24
25	1954	0	34	11.00	0	25
26	1955	0	36	10.39	0	26
27	1956	0	39	9.59	0	27
28	1957	0	41	9.12	0	28
29	1958	0	42	8.90	0	29
30	1959	0	45	8.31	0	30
31	1960	0	46	8.13	0	31
32	1961	0	51	7.33	0	32
33	1962	0	53	7.06	0	33
34	1963	0	55	6.80	0	34
35	1964	0	57	6.56	0	35
36	1965	0	60	6.23	0	36
37	1966	0	62	6.03	0	37
38	1967	0	66	5.67	0	38
39	1968	0	70	5.34	0	39
40	1969	0	74	5.05	0	40
41	1970	0	81	4.62	0	41
42	1971	0	87	4.30	0	42
43	1972	0	94	3.98	0	43
44	1973	0	100	3.74	0	44
45	1974	0	109	3.43	0	45
46	1975	0	123	3.04	0	46
47	1976	0	130	2.88	0	47
48	1977	0	141	2.65	0	48
49	1978	0	151	2.48	0	49
50	1979	0	164	2.28	0	50
51	1980	0	178	2.10	0	51
52	1981	0	186	2.01	0	52
53	1982	0	203	1.84	0	53
54	1983	0	209	1.79	0	54
55	1984	0	212	1.76	0	55
56	1985	0	211	1.77	0	56
57	1986	0	218	1.72	0	57
58	1987	0	226	1.65	0	58
59	1988	0	219	1.71	0	59
60	1989	0	213	1.76	0	60
61	1990	0	228	1.64	0	61
62	1991	0	242	1.55	0	62
63	1992	0	249	1.50	0	63
64	1993	0	260	1.44	0	64
65	1994	0	257	1.46	0	65
66	1995	0	246	1.52	0	66
67	1996	0	250	1.50	0	67
68	1997	0	251	1.49	0	68
69	1998	0	254	1.47	0	69
70	1999	0	261	1.43	0	70
71	2000	0	268	1.40	0	71
72	2001	0	280	1.34	0	72
73	2002	0	289	1.29	0	73
74	2003	0	293	1.28	0	74
75	2004	0	298	1.26	0	75
76	2005	886,567	303	1.23	1,090,477	76
77	2006	1,751,764	305	1.23	2,154,670	77
78	2007	1,048,411	317	1.18	1,237,125	78
79	2008	1,041,443	337	1.11	1,156,002	79
80	2009	5,572,268	359	1.04	5,795,159	80
81	2010	669,679	374	1.00	669,679	81
82	Total	10,970,132			$ 12,103,112	82

SOUTHWEST GAS CORPORATION
SYSTEM ALLOCABLE PLANT
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 392.11 - Transportation Equip. - Light Vehicles

Line No.	Year Installed (a)	Original Cost (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Cost (e)	Line No.
1	1930	$ 0	22	22.82	$ 0	1
2	1931	0	20	25.10	0	2
3	1932	0	19	26.42	0	3
4	1933	0	19	26.42	0	4
5	1934	0	20	25.10	0	5
6	1935	0	21	23.90	0	6
7	1936	0	21	23.90	0	7
8	1937	0	23	21.83	0	8
9	1938	0	23	21.83	0	9
10	1939	0	23	21.83	0	10
11	1940	0	24	20.92	0	11
12	1941	0	25	20.08	0	12
13	1942	0	28	17.93	0	13
14	1943	0	29	17.31	0	14
15	1944	0	29	17.31	0	15
16	1945	0	29	17.31	0	16
17	1946	0	34	14.76	0	17
18	1947	0	37	13.57	0	18
19	1948	0	39	12.87	0	19
20	1949	0	40	12.55	0	20
21	1950	0	42	11.95	0	21
22	1951	0	45	11.16	0	22
23	1952	0	46	10.91	0	23
24	1953	0	49	10.24	0	24
25	1954	0	49	10.24	0	25
26	1955	0	51	9.84	0	26
27	1956	0	55	9.13	0	27
28	1957	0	59	8.51	0	28
29	1958	0	62	8.10	0	29
30	1959	0	64	7.84	0	30
31	1960	0	65	7.72	0	31
32	1961	0	67	7.49	0	32
33	1962	0	67	7.49	0	33
34	1963	0	68	7.38	0	34
35	1964	0	70	7.17	0	35
36	1965	0	71	7.07	0	36
37	1966	0	73	6.88	0	37
38	1967	0	76	6.61	0	38
39	1968	0	80	6.28	0	39
40	1969	0	84	5.98	0	40
41	1970	0	88	5.70	0	41
42	1971	0	93	5.40	0	42
43	1972	0	95	5.28	0	43
44	1973	0	100	5.02	0	44
45	1974	0	117	4.29	0	45
46	1975	0	141	3.56	0	46
47	1976	0	153	3.28	0	47
48	1977	0	164	3.06	0	48
49	1978	0	178	2.82	0	49
50	1979	0	197	2.55	0	50
51	1980	0	222	2.26	0	51
52	1981	0	246	2.04	0	52
53	1982	0	263	1.91	0	53
54	1983	0	269	1.87	0	54
55	1984	0	273	1.84	0	55
56	1985	0	276	1.82	0	56
57	1986	0	280	1.79	0	57
58	1987	0	286	1.76	0	58
59	1988	0	295	1.70	0	59
60	1989	0	281	1.79	0	60
61	1990	0	298	1.68	0	61
62	1991	0	320	1.57	0	62
63	1992	0	316	1.59	0	63
64	1993	0	324	1.55	0	64
65	1994	0	331	1.52	0	65
66	1995	16,464	333	1.51	24,861	66
67	1996	0	336	1.49	0	67
68	1997	16,181	351	1.43	23,139	68
69	1998	70,656	380	1.32	93,266	69
70	1999	55,987	385	1.30	72,783	70
71	2000	94,453	389	1.29	121,844	71
72	2001	139,904	390	1.29	180,476	72
73	2002	179,140	395	1.27	227,508	73
74	2003	227,422	401	1.25	284,278	74
75	2004	583,695	414	1.21	706,271	75
76	2005	234,986	439	1.14	267,884	76
77	2006	330,669	457	1.10	363,736	77
78	2007	196,567	469	1.07	210,327	78
79	2008	543,152	485	1.04	564,878	79
80	2009	423,940	501	1.00	423,940	80
81	2010	419,044	502	1.00	419,044	81
82	Total	$ 3,532,260			$ 3,984,235	82

SOUTHWEST GAS CORPORATION
SYSTEM ALLOCABLE PLANT
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 392.12 - Transportation Equip - Heavy Vehicles

Line No.	Year Installed (a)	Original Cost (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Cost (e)	Line No.
1	1930	$ 0	22	22.82	$ 0	1
2	1931	0	20	25.10	0	2
3	1932	0	19	26.42	0	3
4	1933	0	19	26.42	0	4
5	1934	0	20	25.10	0	5
6	1935	0	21	23.90	0	6
7	1936	0	21	23.90	0	7
8	1937	0	23	21.83	0	8
9	1938	0	23	21.83	0	9
10	1939	0	23	21.83	0	10
11	1940	0	24	20.92	0	11
12	1941	0	25	20.08	0	12
13	1942	0	28	17.93	0	13
14	1943	0	29	17.31	0	14
15	1944	0	29	17.31	0	15
16	1945	0	29	17.31	0	16
17	1946	0	34	14.76	0	17
18	1947	0	37	13.57	0	18
19	1948	0	39	12.87	0	19
20	1949	0	40	12.55	0	20
21	1950	0	42	11.95	0	21
22	1951	0	45	11.16	0	22
23	1952	0	46	10.91	0	23
24	1953	0	49	10.24	0	24
25	1954	0	49	10.24	0	25
26	1955	0	51	9.84	0	26
27	1956	0	55	9.13	0	27
28	1957	0	59	8.51	0	28
29	1958	0	62	8.10	0	29
30	1959	0	64	7.84	0	30
31	1960	0	65	7.72	0	31
32	1961	0	67	7.49	0	32
33	1962	0	67	7.49	0	33
34	1963	0	68	7.38	0	34
35	1964	0	70	7.17	0	35
36	1965	0	71	7.07	0	36
37	1966	0	73	6.88	0	37
38	1967	0	76	6.61	0	38
39	1968	0	80	6.28	0	39
40	1969	0	84	5.98	0	40
41	1970	0	88	5.70	0	41
42	1971	0	93	5.40	0	42
43	1972	0	95	5.28	0	43
44	1973	0	100	5.02	0	44
45	1974	0	117	4.29	0	45
46	1975	0	141	3.56	0	46
47	1976	0	153	3.28	0	47
48	1977	0	164	3.06	0	48
49	1978	0	178	2.82	0	49
50	1979	0	197	2.55	0	50
51	1980	0	222	2.26	0	51
52	1981	0	246	2.04	0	52
53	1982	0	263	1.91	0	53
54	1983	0	269	1.87	0	54
55	1984	0	273	1.84	0	55
56	1985	0	276	1.82	0	56
57	1986	0	280	1.79	0	57
58	1987	0	286	1.76	0	58
59	1988	0	295	1.70	0	59
60	1989	0	281	1.79	0	60
61	1990	0	298	1.68	0	61
62	1991	0	320	1.57	0	62
63	1992	0	316	1.59	0	63
64	1993	0	324	1.55	0	64
65	1994	0	331	1.52	0	65
66	1995	0	333	1.51	0	66
67	1996	0	336	1.49	0	67
68	1997	0	351	1.43	0	68
69	1998	0	380	1.32	0	69
70	1999	0	385	1.30	0	70
71	2000	37,640	389	1.29	48,556	71
72	2001	48,663	390	1.29	62,775	72
73	2002	0	395	1.27	0	73
74	2003	0	401	1.25	0	74
75	2004	0	414	1.21	0	75
76	2005	0	439	1.14	0	76
77	2006	0	457	1.10	0	77
78	2007	0	469	1.07	0	78
79	2008	0	485	1.04	0	79
80	2009	0	501	1.00	0	80
81	2010	0	502	1.00	0	81
82	Total	$ 86,303			$ 111,331	82

SOUTHWEST GAS CORPORATION
SYSTEM ALLOCABLE PLANT
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 393 - Stores Equipment

Line No.	Year Installed (a)	Original Cost (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Cost (e)	Line No.
1	1930	$ 0	22	22.82	$ 0	1
2	1931	0	20	25.10	0	2
3	1932	0	19	26.42	0	3
4	1933	0	19	26.42	0	4
5	1934	0	20	25.10	0	5
6	1935	0	21	23.90	0	6
7	1936	0	21	23.90	0	7
8	1937	0	23	21.83	0	8
9	1938	0	23	21.83	0	9
10	1939	0	23	21.83	0	10
11	1940	0	24	20.92	0	11
12	1941	0	25	20.08	0	12
13	1942	0	28	17.93	0	13
14	1943	0	29	17.31	0	14
15	1944	0	29	17.31	0	15
16	1945	0	29	17.31	0	16
17	1946	0	34	14.76	0	17
18	1947	0	37	13.57	0	18
19	1948	0	39	12.87	0	19
20	1949	0	40	12.55	0	20
21	1950	0	42	11.95	0	21
22	1951	0	45	11.16	0	22
23	1952	0	46	10.91	0	23
24	1953	0	49	10.24	0	24
25	1954	0	49	10.24	0	25
26	1955	0	51	9.84	0	26
27	1956	0	55	9.13	0	27
28	1957	0	59	8.51	0	28
29	1958	0	62	8.10	0	29
30	1959	0	64	7.84	0	30
31	1960	0	65	7.72	0	31
32	1961	0	67	7.49	0	32
33	1962	0	67	7.49	0	33
34	1963	0	68	7.38	0	34
35	1964	0	70	7.17	0	35
36	1965	0	71	7.07	0	36
37	1966	0	73	6.88	0	37
38	1967	0	76	6.61	0	38
39	1968	0	80	6.28	0	39
40	1969	0	84	5.98	0	40
41	1970	0	88	5.70	0	41
42	1971	0	93	5.40	0	42
43	1972	0	95	5.28	0	43
44	1973	0	100	5.02	0	44
45	1974	0	117	4.29	0	45
46	1975	0	141	3.56	0	46
47	1976	0	153	3.28	0	47
48	1977	0	164	3.06	0	48
49	1978	0	178	2.82	0	49
50	1979	0	197	2.55	0	50
51	1980	0	222	2.26	0	51
52	1981	0	246	2.04	0	52
53	1982	0	263	1.91	0	53
54	1983	0	269	1.87	0	54
55	1984	0	273	1.84	0	55
56	1985	0	276	1.82	0	56
57	1986	0	280	1.79	0	57
58	1987	0	286	1.76	0	58
59	1988	0	295	1.70	0	59
60	1989	0	281	1.79	0	60
61	1990	0	298	1.68	0	61
62	1991	0	320	1.57	0	62
63	1992	0	316	1.59	0	63
64	1993	0	324	1.55	0	64
65	1994	0	331	1.52	0	65
66	1995	0	333	1.51	0	66
67	1996	0	336	1.49	0	67
68	1997	0	351	1.43	0	68
69	1998	0	380	1.32	0	69
70	1999	0	385	1.30	0	70
71	2000	0	389	1.29	0	71
72	2001	0	390	1.29	0	72
73	2002	3,998	395	1.27	5,077	73
74	2003	0	401	1.25	0	74
75	2004	0	414	1.21	0	75
76	2005	0	439	1.14	0	76
77	2006	0	457	1.10	0	77
78	2007	0	469	1.07	0	78
79	2008	31,617	485	1.04	32,882	79
80	2009	0	501	1.00	0	80
81	2010	0	502	1.00	0	81
82	Total	$ 35,615			$ 37,959	82

SOUTHWEST GAS CORPORATION
SYSTEM ALLOCABLE PLANT
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 394 - Tools, Shop, and Garage Equipment

Line No.	Year Installed (a)	Original Cost (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Cost (e)	Line No.
1	1930	$ 0	22	22.82	$ 0	1
2	1931	0	20	25.10	0	2
3	1932	0	19	26.42	0	3
4	1933	0	19	26.42	0	4
5	1934	0	20	25.10	0	5
6	1935	0	21	23.90	0	6
7	1936	0	21	23.90	0	7
8	1937	0	23	21.83	0	8
9	1938	0	23	21.83	0	9
10	1939	0	23	21.83	0	10
11	1940	0	24	20.92	0	11
12	1941	0	25	20.08	0	12
13	1942	0	28	17.93	0	13
14	1943	0	29	17.31	0	14
15	1944	0	29	17.31	0	15
16	1945	0	29	17.31	0	16
17	1946	0	34	14.76	0	17
18	1947	0	37	13.57	0	18
19	1948	0	39	12.87	0	19
20	1949	0	40	12.55	0	20
21	1950	0	42	11.95	0	21
22	1951	0	45	11.16	0	22
23	1952	0	46	10.91	0	23
24	1953	0	49	10.24	0	24
25	1954	0	49	10.24	0	25
26	1955	0	51	9.84	0	26
27	1956	0	55	9.13	0	27
28	1957	0	59	8.51	0	28
29	1958	0	62	8.10	0	29
30	1959	0	64	7.84	0	30
31	1960	0	65	7.72	0	31
32	1961	0	67	7.49	0	32
33	1962	0	67	7.49	0	33
34	1963	0	68	7.38	0	34
35	1964	0	70	7.17	0	35
36	1965	0	71	7.07	0	36
37	1966	0	73	6.88	0	37
38	1967	0	76	6.61	0	38
39	1968	0	80	6.28	0	39
40	1969	0	84	5.98	0	40
41	1970	0	88	5.70	0	41
42	1971	0	93	5.40	0	42
43	1972	0	95	5.28	0	43
44	1973	0	100	5.02	0	44
45	1974	0	117	4.29	0	45
46	1975	0	141	3.56	0	46
47	1976	0	153	3.28	0	47
48	1977	0	164	3.06	0	48
49	1978	0	178	2.82	0	49
50	1979	0	197	2.55	0	50
51	1980	0	222	2.26	0	51
52	1981	0	246	2.04	0	52
53	1982	0	263	1.91	0	53
54	1983	0	269	1.87	0	54
55	1984	0	273	1.84	0	55
56	1985	0	276	1.82	0	56
57	1986	0	280	1.79	0	57
58	1987	0	286	1.76	0	58
59	1988	0	295	1.70	0	59
60	1989	0	281	1.79	0	60
61	1990	0	298	1.68	0	61
62	1991	0	320	1.57	0	62
63	1992	0	316	1.59	0	63
64	1993	0	324	1.55	0	64
65	1994	0	331	1.52	0	65
66	1995	0	333	1.51	0	66
67	1996	7,203	336	1.49	10,732	67
68	1997	0	351	1.43	0	68
69	1998	0	380	1.32	0	69
70	1999	21,393	385	1.30	27,811	70
71	2000	16,336	389	1.29	21,073	71
72	2001	28,216	390	1.29	36,399	72
73	2002	3,117	395	1.27	3,959	73
74	2003	0	401	1.25	0	74
75	2004	9,686	414	1.21	11,720	75
76	2005	26,730	439	1.14	30,472	76
77	2006	5,013	457	1.10	5,514	77
78	2007	80,661	469	1.07	86,307	78
79	2008	0	485	1.04	0	79
80	2009	32,987	501	1.00	32,987	80
81	2010	41,695	502	1.00	41,695	81
82	Total	$ 273,037			$ 308,669	82

SOUTHWEST GAS CORPORATION
SYSTEM ALLOCABLE PLANT
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 395 - Laboratory Equipment

Line No.	Year Installed (a)	Original Cost (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Cost (e)	Line No.
1	1930	$ 0	11	34.00	$ 0	1
2	1931	0	11	34.00	0	2
3	1932	0	11	34.00	0	3
4	1933	0	11	34.00	0	4
5	1934	0	11	34.00	0	5
6	1935	0	11	34.00	0	6
7	1936	0	12	31.17	0	7
8	1937	0	13	28.77	0	8
9	1938	0	13	28.77	0	9
10	1939	0	13	28.77	0	10
11	1940	0	13	28.77	0	11
12	1941	0	13	28.77	0	12
13	1942	0	15	24.93	0	13
14	1943	0	15	24.93	0	14
15	1944	0	15	24.93	0	15
16	1945	0	16	23.38	0	16
17	1946	0	20	18.70	0	17
18	1947	0	23	16.26	0	18
19	1948	0	26	14.38	0	19
20	1949	0	26	14.38	0	20
21	1950	0	27	13.85	0	21
22	1951	0	29	12.90	0	22
23	1952	0	31	12.06	0	23
24	1953	0	33	11.33	0	24
25	1954	0	34	11.00	0	25
26	1955	0	36	10.39	0	26
27	1956	0	39	9.59	0	27
28	1957	0	41	9.12	0	28
29	1958	0	42	8.90	0	29
30	1959	0	45	8.31	0	30
31	1960	0	46	8.13	0	31
32	1961	0	51	7.33	0	32
33	1962	0	53	7.06	0	33
34	1963	0	55	6.80	0	34
35	1964	0	57	6.56	0	35
36	1965	0	60	6.23	0	36
37	1966	0	62	6.03	0	37
38	1967	0	66	5.67	0	38
39	1968	0	70	5.34	0	39
40	1969	0	74	5.05	0	40
41	1970	0	81	4.62	0	41
42	1971	0	87	4.30	0	42
43	1972	0	94	3.98	0	43
44	1973	0	100	3.74	0	44
45	1974	0	109	3.43	0	45
46	1975	0	123	3.04	0	46
47	1976	0	130	2.88	0	47
48	1977	0	141	2.65	0	48
49	1978	0	151	2.48	0	49
50	1979	0	164	2.28	0	50
51	1980	0	178	2.10	0	51
52	1981	0	186	2.01	0	52
53	1982	0	203	1.84	0	53
54	1983	0	209	1.79	0	54
55	1984	0	212	1.76	0	55
56	1985	0	211	1.77	0	56
57	1986	0	218	1.72	0	57
58	1987	0	226	1.65	0	58
59	1988	0	219	1.71	0	59
60	1989	0	213	1.76	0	60
61	1990	0	228	1.64	0	61
62	1991	13,081	242	1.55	20,276	62
63	1992	1,364	249	1.50	2,046	63
64	1993	8,036	260	1.44	11,572	64
65	1994	0	257	1.46	0	65
66	1995	6,021	246	1.52	9,152	66
67	1996	0	250	1.50	0	67
68	1997	0	251	1.49	0	68
69	1998	0	254	1.47	0	69
70	1999	0	261	1.43	0	70
71	2000	0	268	1.40	0	71
72	2001	0	280	1.34	0	72
73	2002	46,970	289	1.29	60,591	73
74	2003	0	293	1.28	0	74
75	2004	15,738	298	1.26	19,830	75
76	2005	44,639	303	1.23	54,906	76
77	2006	0	305	1.23	0	77
78	2007	41,607	317	1.18	49,096	78
79	2008	15,774	337	1.11	17,509	79
80	2009	181,419	359	1.04	188,676	80
81	2010	0	374	1.00	0	81
82	Total	$ 374,649			$ 433,654	82

SOUTHWEST GAS CORPORATION
SYSTEM ALLOCABLE PLANT
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 396 - Power Operated Equipment

Line No.	Year Installed (a)	Original Cost (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Cost (e)	Line No.
1	1930	$ 0	22	22.82	$ 0	1
2	1931	0	20	25.10	0	2
3	1932	0	19	26.42	0	3
4	1933	0	19	26.42	0	4
5	1934	0	20	25.10	0	5
6	1935	0	21	23.90	0	6
7	1936	0	21	23.90	0	7
8	1937	0	23	21.83	0	8
9	1938	0	23	21.83	0	9
10	1939	0	23	21.83	0	10
11	1940	0	24	20.92	0	11
12	1941	0	25	20.08	0	12
13	1942	0	28	17.93	0	13
14	1943	0	29	17.31	0	14
15	1944	0	29	17.31	0	15
16	1945	0	29	17.31	0	16
17	1946	0	34	14.76	0	17
18	1947	0	37	13.57	0	18
19	1948	0	39	12.87	0	19
20	1949	0	40	12.55	0	20
21	1950	0	42	11.95	0	21
22	1951	0	45	11.16	0	22
23	1952	0	46	10.91	0	23
24	1953	0	49	10.24	0	24
25	1954	0	49	10.24	0	25
26	1955	0	51	9.84	0	26
27	1956	0	55	9.13	0	27
28	1957	0	59	8.51	0	28
29	1958	0	62	8.10	0	29
30	1959	0	64	7.84	0	30
31	1960	0	65	7.72	0	31
32	1961	0	67	7.49	0	32
33	1962	0	67	7.49	0	33
34	1963	0	68	7.38	0	34
35	1964	0	70	7.17	0	35
36	1965	0	71	7.07	0	36
37	1966	0	73	6.88	0	37
38	1967	0	76	6.61	0	38
39	1968	0	80	6.28	0	39
40	1969	0	84	5.98	0	40
41	1970	0	88	5.70	0	41
42	1971	0	93	5.40	0	42
43	1972	0	95	5.28	0	43
44	1973	0	100	5.02	0	44
45	1974	0	117	4.29	0	45
46	1975	0	141	3.56	0	46
47	1976	0	153	3.28	0	47
48	1977	0	164	3.06	0	48
49	1978	0	178	2.82	0	49
50	1979	0	197	2.55	0	50
51	1980	0	222	2.26	0	51
52	1981	0	246	2.04	0	52
53	1982	0	263	1.91	0	53
54	1983	0	269	1.87	0	54
55	1984	0	273	1.84	0	55
56	1985	0	276	1.82	0	56
57	1986	0	280	1.79	0	57
58	1987	0	286	1.76	0	58
59	1988	0	295	1.70	0	59
60	1989	0	281	1.79	0	60
61	1990	0	298	1.68	0	61
62	1991	0	320	1.57	0	62
63	1992	0	316	1.59	0	63
64	1993	0	324	1.55	0	64
65	1994	0	331	1.52	0	65
66	1995	0	333	1.51	0	66
67	1996	0	336	1.49	0	67
68	1997	0	351	1.43	0	68
69	1998	0	380	1.32	0	69
70	1999	0	385	1.30	0	70
71	2000	0	389	1.29	0	71
72	2001	0	390	1.29	0	72
73	2002	0	395	1.27	0	73
74	2003	0	401	1.25	0	74
75	2004	0	414	1.21	0	75
76	2005	0	439	1.14	0	76
77	2006	0	457	1.10	0	77
78	2007	0	469	1.07	0	78
79	2008	0	485	1.04	0	79
80	2009	0	501	1.00	0	80
81	2010	11,760	502	1.00	11,760	81
82	Total	$ 11,760			$ 11,760	82

SOUTHWEST GAS CORPORATION
SYSTEM ALLOCABLE PLANT
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 397 - Communication Equipment

Line No.	Year Installed (a)	Original Cost (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Cost (e)	Line No.
1	1930	$ 0	15	26.80	$ 0	1
2	1931	0	15	26.80	0	2
3	1932	0	15	26.80	0	3
4	1933	0	15	26.80	0	4
5	1934	0	15	26.80	0	5
6	1935	0	15	26.80	0	6
7	1936	0	15	26.80	0	7
8	1937	0	17	23.65	0	8
9	1938	0	17	23.65	0	9
10	1939	0	17	23.65	0	10
11	1940	0	17	23.65	0	11
12	1941	0	18	22.33	0	12
13	1942	0	19	21.16	0	13
14	1943	0	19	21.16	0	14
15	1944	0	19	21.16	0	15
16	1945	0	19	21.16	0	16
17	1946	0	21	19.14	0	17
18	1947	0	24	16.75	0	18
19	1948	0	26	15.46	0	19
20	1949	0	28	14.36	0	20
21	1950	0	30	13.40	0	21
22	1951	0	31	12.97	0	22
23	1952	0	33	12.18	0	23
24	1953	0	34	11.82	0	24
25	1954	0	36	11.17	0	25
26	1955	0	37	10.86	0	26
27	1956	0	39	10.31	0	27
28	1957	0	41	9.80	0	28
29	1958	0	42	9.57	0	29
30	1959	0	45	8.93	0	30
31	1960	0	46	8.74	0	31
32	1961	0	49	8.20	0	32
33	1962	0	51	7.88	0	33
34	1963	0	52	7.73	0	34
35	1964	0	54	7.44	0	35
36	1965	0	57	7.05	0	36
37	1966	0	58	6.93	0	37
38	1967	0	62	6.48	0	38
39	1968	0	64	6.28	0	39
40	1969	0	69	5.83	0	40
41	1970	0	78	5.15	0	41
42	1971	0	88	4.57	0	42
43	1972	0	95	4.23	0	43
44	1973	0	100	4.02	0	44
45	1974	0	109	3.69	0	45
46	1975	0	122	3.30	0	46
47	1976	0	131	3.07	0	47
48	1977	0	142	2.83	0	48
49	1978	0	151	2.66	0	49
50	1979	0	160	2.51	0	50
51	1980	0	170	2.36	0	51
52	1981	0	185	2.17	0	52
53	1982	0	206	1.95	0	53
54	1983	0	218	1.84	0	54
55	1984	0	220	1.83	0	55
56	1985	0	214	1.88	0	56
57	1986	0	215	1.87	0	57
58	1987	0	216	1.86	0	58
59	1988	0	215	1.87	0	59
60	1989	0	214	1.88	0	60
61	1990	0	220	1.83	0	61
62	1991	0	225	1.79	0	62
63	1992	0	232	1.73	0	63
64	1993	0	236	1.70	0	64
65	1994	0	239	1.68	0	65
66	1995	48,394	247	1.63	78,882	66
67	1996	1,835,734	254	1.58	2,900,460	67
68	1997	196,794	257	1.56	306,999	68
69	1998	315,211	265	1.52	479,121	69
70	1999	59,278	275	1.46	86,546	70
71	2000	450,007	285	1.41	634,510	71
72	2001	98,058	299	1.34	131,398	72
73	2002	585,439	309	1.30	761,071	73
74	2003	266,051	318	1.26	335,224	74
75	2004	53,733	327	1.23	66,092	75
76	2005	417,383	337	1.19	496,686	76
77	2006	41,782	345	1.17	48,885	77
78	2007	322,257	354	1.14	367,373	78
79	2008	405,459	365	1.10	446,005	79
80	2009	1,742,481	382	1.05	1,829,605	80
81	2010	193,611	402	1.00	193,611	81
82	Total	$ 7,031,672			$ 9,162,468	82

SOUTHWEST GAS CORPORATION
SYSTEM ALLOCABLE PLANT
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 397.2 - Telemetering Equipment

Line No.	Year Installed (a)	Original Cost (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Cost (e)	Line No.
1	1930	$ 0	15	26.80	$ 0	1
2	1931	0	15	26.80	0	2
3	1932	0	15	26.80	0	3
4	1933	0	15	26.80	0	4
5	1934	0	15	26.80	0	5
6	1935	0	15	26.80	0	6
7	1936	0	15	26.80	0	7
8	1937	0	17	23.65	0	8
9	1938	0	17	23.65	0	9
10	1939	0	17	23.65	0	10
11	1940	0	17	23.65	0	11
12	1941	0	18	22.33	0	12
13	1942	0	19	21.16	0	13
14	1943	0	19	21.16	0	14
15	1944	0	19	21.16	0	15
16	1945	0	19	21.16	0	16
17	1946	0	21	19.14	0	17
18	1947	0	24	16.75	0	18
19	1948	0	26	15.46	0	19
20	1949	0	28	14.36	0	20
21	1950	0	30	13.40	0	21
22	1951	0	31	12.97	0	22
23	1952	0	33	12.18	0	23
24	1953	0	34	11.82	0	24
25	1954	0	36	11.17	0	25
26	1955	0	37	10.86	0	26
27	1956	0	39	10.31	0	27
28	1957	0	41	9.80	0	28
29	1958	0	42	9.57	0	29
30	1959	0	45	8.93	0	30
31	1960	0	46	8.74	0	31
32	1961	0	49	8.20	0	32
33	1962	0	51	7.88	0	33
34	1963	0	52	7.73	0	34
35	1964	0	54	7.44	0	35
36	1965	0	57	7.05	0	36
37	1966	0	58	6.93	0	37
38	1967	0	62	6.48	0	38
39	1968	0	64	6.28	0	39
40	1969	0	69	5.83	0	40
41	1970	0	78	5.15	0	41
42	1971	0	88	4.57	0	42
43	1972	0	95	4.23	0	43
44	1973	0	100	4.02	0	44
45	1974	0	109	3.69	0	45
46	1975	0	122	3.30	0	46
47	1976	0	131	3.07	0	47
48	1977	0	142	2.83	0	48
49	1978	0	151	2.66	0	49
50	1979	0	160	2.51	0	50
51	1980	0	170	2.36	0	51
52	1981	0	185	2.17	0	52
53	1982	0	206	1.95	0	53
54	1983	0	218	1.84	0	54
55	1984	0	220	1.83	0	55
56	1985	0	214	1.88	0	56
57	1986	0	215	1.87	0	57
58	1987	0	216	1.86	0	58
59	1988	0	215	1.87	0	59
60	1989	0	214	1.88	0	60
61	1990	0	220	1.83	0	61
62	1991	0	225	1.79	0	62
63	1992	0	232	1.73	0	63
64	1993	0	236	1.70	0	64
65	1994	0	239	1.68	0	65
66	1995	0	247	1.63	0	66
67	1996	0	254	1.58	0	67
68	1997	0	257	1.56	0	68
69	1998	0	265	1.52	0	69
70	1999	0	275	1.46	0	70
71	2000	0	285	1.41	0	71
72	2001	0	299	1.34	0	72
73	2002	0	309	1.30	0	73
74	2003	0	318	1.26	0	74
75	2004	3,729	327	1.23	4,587	75
76	2005	22,176	337	1.19	26,389	76
77	2006	0	345	1.17	0	77
78	2007	12,014	354	1.14	13,696	78
79	2008	0	365	1.10	0	79
80	2009	332,868	382	1.05	349,511	80
81	2010	0	402	1.00	0	81
82	Total	$ 370,787			$ 394,183	82

SOUTHWEST GAS CORPORATION
SYSTEM ALLOCABLE PLANT
RCN COST OF GAS PLANT IN SERVICE AS OF JUNE 30, 2010

Account 398 - Miscellaneous Equipment

Line No.	Year Installed (a)	Original Cost (b)	H - W Index (c)	Ratio To Current Index (d)	RCN Cost (e)	Line No.
1	1930	$ 0	15	26.80	$ 0	1
2	1931	0	15	26.80	0	2
3	1932	0	15	26.80	0	3
4	1933	0	15	26.80	0	4
5	1934	0	15	26.80	0	5
6	1935	0	15	26.80	0	6
7	1936	0	15	26.80	0	7
8	1937	0	17	23.65	0	8
9	1938	0	17	23.65	0	9
10	1939	0	17	23.65	0	10
11	1940	0	17	23.65	0	11
12	1941	0	18	22.33	0	12
13	1942	0	19	21.16	0	13
14	1943	0	19	21.16	0	14
15	1944	0	19	21.16	0	15
16	1945	0	19	21.16	0	16
17	1946	0	21	19.14	0	17
18	1947	0	24	16.75	0	18
19	1948	0	26	15.46	0	19
20	1949	0	28	14.36	0	20
21	1950	0	30	13.40	0	21
22	1951	0	31	12.97	0	22
23	1952	0	33	12.18	0	23
24	1953	0	34	11.82	0	24
25	1954	0	36	11.17	0	25
26	1955	0	37	10.86	0	26
27	1956	0	39	10.31	0	27
28	1957	0	41	9.80	0	28
29	1958	0	42	9.57	0	29
30	1959	0	45	8.93	0	30
31	1960	0	46	8.74	0	31
32	1961	0	49	8.20	0	32
33	1962	0	51	7.88	0	33
34	1963	0	52	7.73	0	34
35	1964	0	54	7.44	0	35
36	1965	0	57	7.05	0	36
37	1966	0	58	6.93	0	37
38	1967	0	62	6.48	0	38
39	1968	0	64	6.28	0	39
40	1969	0	69	5.83	0	40
41	1970	0	78	5.15	0	41
42	1971	0	88	4.57	0	42
43	1972	0	95	4.23	0	43
44	1973	0	100	4.02	0	44
45	1974	0	109	3.69	0	45
46	1975	0	122	3.30	0	46
47	1976	0	131	3.07	0	47
48	1977	0	142	2.83	0	48
49	1978	0	151	2.66	0	49
50	1979	0	160	2.51	0	50
51	1980	0	170	2.36	0	51
52	1981	0	185	2.17	0	52
53	1982	0	206	1.95	0	53
54	1983	0	218	1.84	0	54
55	1984	0	220	1.83	0	55
56	1985	0	214	1.88	0	56
57	1986	0	215	1.87	0	57
58	1987	0	216	1.86	0	58
59	1988	0	215	1.87	0	59
60	1989	0	214	1.88	0	60
61	1990	0	220	1.83	0	61
62	1991	0	225	1.79	0	62
63	1992	0	232	1.73	0	63
64	1993	0	236	1.70	0	64
65	1994	0	239	1.68	0	65
66	1995	0	247	1.63	0	66
67	1996	12,268	254	1.58	19,383	67
68	1997	0	257	1.56	0	68
69	1998	2,002	265	1.52	3,043	69
70	1999	44,621	275	1.46	65,147	70
71	2000	16,114	285	1.41	22,721	71
72	2001	52,073	299	1.34	69,778	72
73	2002	81,449	309	1.30	105,884	73
74	2003	235,306	318	1.26	296,486	74
75	2004	33,110	327	1.23	40,725	75
76	2005	36,478	337	1.19	43,409	76
77	2006	88,395	345	1.17	103,422	77
78	2007	10,177	354	1.14	11,602	78
79	2008	42,617	365	1.10	46,879	79
80	2009	76,728	382	1.05	80,564	80
81	2010	78,040	402	1.00	78,040	81
82	Total	$ 809,378			$ 987,083	82

SOUTHWEST GAS CORPORATION
YEAR END TOTALS
RCND GAS PLANT IN SERVICE
AS OF JUNE 30, 2010

Line No.	Description (a)	Arizona (b)	System Allocable (c)	Line No.
	Gas Plant In Service:			
1	Intangible Plant	$ 3,649,879	$ 129,588,741	1
2	Distribution Plant	2,141,652,849	0	2
3	General Plant	107,263,978	50,426,484	3
4	Total Gas Plant In Service	$ 2,252,566,706	$ 180,015,225	4
	Accumulated Provision:			
5	Intangible Plant	$ 2,493,351	$ 101,480,672	5
6	Distribution Plant	881,133,062	0	6
7	General Plant	2,701,286	20,964,529	7
8	Total Accumulated Provision	$ 886,327,699	$ 122,445,201	8
	Percentage of Accumulated Reserve to Gas Plant In Service:			
9	Intangible Plant	68.31%	78.31%	9
10	Distribution Plant	41.14%	N/A	10
11	General Plant	2.52%	41.57%	11

Source: Company Records

SOUTHWEST GAS CORPORATION
DEFERRED TAXES BY VINTAGE - ACCOUNT 282
AT JUNE 30, 2010

		Arizona			System Allocable					Total	RCN Deferred Taxes			
Line No.	Year	Total Federal 282 Deferred Tax Liability at 6/30/10	Total State 282 Deferred Tax Liability at 6/30/10	Total Arizona Recorded Deferred Tax Liability at 6/30/10	Total Federal 282 Deferred Tax Liability at 6/30/10	Total Acct 190 Deferred Tax Liability at 6/30/10	Total System Allocable at 6/30/10	4-Factor	Total Recorded Deferred Tax Liability at 6/30/10	Total AZ Recorded Deferred Tax Liability at 6/30/10	H - W Index	Ratio to Current Index	RCN Deferred Taxes for Arizona	Line No.
1	1953	5,277	683	5,960			-	56.25%	-	5,960	47	12.19	72,654	1
2	1954	244	32	276			-	56.25%	-	276	49	11.69	3,224	2
3	1955	94	12	106			-	56.25%	-	106	51	11.24	1,190	3
4	1956	493	64	557			-	56.25%	-	557	56	10.23	5,699	4
5	1958	(518)	(67)	(585)			-	56.25%	-	(585)	61	9.39	(5,490)	5
6	1963	15,192	1,966	17,158			-	56.25%	-	17,158	68	8.43	144,644	6
7	1964	228	30	257			-	56.25%	-	257	69	8.30	2,137	7
8	1965	3,097	401	3,497			-	56.25%	-	3,497	71	8.07	28,222	8
9	1967	562	73	635			-	56.25%	-	635	74	7.74	4,913	9
10	1969	663	86	749	(21,636)		(21,636)	56.25%	(12,170)	(11,421)	79	7.25	(82,803)	10
11	1970	(709)	(92)	(801)			-	56.25%	-	(801)	84	6.82	(5,465)	11
12	1971	(594)	(77)	(671)			-	56.25%	-	(671)	90	6.37	(4,275)	12
13	1972	7,478	968	8,445			-	56.25%	-	8,445	95	6.03	50,925	13
14	1973	25,945	3,357	29,303			-	56.25%	-	29,303	100	5.73	167,904	14
15	1974	24,917	3,224	28,142			-	56.25%	-	28,142	115	4.98	140,146	15
16	1975	35,625	4,610	40,235			-	56.25%	-	40,235	133	4.31	173,414	16
17	1976	30,551	3,953	34,504			-	56.25%	-	34,504	143	4.01	138,362	17
18	1977	40,539	5,246	45,785			-	56.25%	-	45,785	155	3.70	169,405	18
19	1978	31,259	4,045	35,304			-	56.25%	-	35,304	169	3.39	119,682	19
20	1979	794,562	102,821	897,382			-	56.25%	-	897,382	184	3.11	2,790,859	20
21	1980	883,421	114,320	997,741			-	56.25%	-	997,741	198	2.89	2,883,472	21
22	1981	148,318	19,193	167,511			-	56.25%	-	167,511	223	2.57	430,504	22
23	1982	209,009	27,047	236,056			-	56.25%	-	236,056	235	2.44	575,977	23
24	1983	329,841	42,683	372,524	9,922		9,922	56.25%	5,581	378,105	241	2.38	899,890	24
25	1984	3,409,290	441,182	3,850,471	45,987		45,987	56.25%	25,868	3,876,339	246	2.33	9,031,870	25
26	1985	1,478,311	191,302	1,669,613	13,157		13,157	56.25%	7,401	1,677,014	241	2.38	3,991,294	26
27	1986	1,565,976	202,646	1,768,623	3,854		3,854	56.25%	2,168	1,770,791	234	2.45	4,338,437	27
28	1987	1,557,077	201,495	1,758,571	145		145	56.25%	81	1,758,652	242	2.37	4,168,006	28
29	1988	2,923,768	378,352	3,302,120	32,988		32,988	56.25%	18,556	3,320,676	255	2.25	7,471,522	29
30	1989	3,086,187	399,370	3,485,557	277,109		277,109	56.25%	155,874	3,641,431	264	2.17	7,901,905	30
31	1990	3,683,105	474,544	4,157,649	11,592		11,592	56.25%	6,520	4,164,169	271	2.11	8,786,396	31
32	1991	2,170,549	276,393	2,446,942	12,383		12,383	56.25%	6,966	2,453,908	278	2.06	5,055,051	32
33	1992	3,293,005	419,807	3,712,812	9,306		9,306	56.25%	5,234	3,718,046	283	2.02	7,510,452	33
34	1993	3,653,591	462,099	4,115,689	14,979		14,979	56.25%	8,426	4,124,115	291	1.97	8,124,507	34
35	1994	4,473,092	569,569	5,042,661	18,706		18,706	56.25%	10,522	5,053,183	307	1.87	9,449,453	35
36	1995	5,541,906	712,180	6,254,086	26,955		26,955	56.25%	15,162	6,269,248	309	1.85	11,598,109	36
37	1996	5,828,155	757,875	6,586,030	2,143		2,143	56.25%	1,205	6,587,235	312	1.84	12,120,513	37
38	1997	5,424,801	690,793	6,115,595	(18,175)		(18,175)	56.25%	(10,223)	6,105,372	320	1.79	10,928,615	38
39	1998	6,728,417	867,374	7,595,791	164,699		164,699	56.25%	92,643	7,688,434	323	1.77	13,608,528	39
40	1999	10,132,866	1,299,681	11,432,547	173,759		173,759	56.25%	97,739	11,530,286	331	1.73	19,947,395	40
41	2000	7,700,763	989,081	8,689,844	218,376		218,376	56.25%	122,836	8,812,680	346	1.66	14,629,049	41
42	2001	8,550,599	961,505	9,512,104	400,126	(2,196,791)	(1,796,665)	56.25%	(1,010,624)	8,501,480	352	1.63	13,857,412	42
43	2002	17,095,198	1,679,285	18,774,483	696,220		696,220	56.25%	391,624	19,166,107	358	1.60	30,665,772	43
44	2003	19,899,009	1,830,084	21,729,093	3,341,547		3,341,547	56.25%	1,879,620	23,608,713	373	1.54	36,357,418	44
45	2004	24,250,874	1,715,913	25,966,787	831,836		831,836	56.25%	467,907	26,434,694	439	1.31	34,629,449	45
46	2005	9,234,386	1,199,433	10,433,820	1,904,308	(1,056,440)	847,867	56.25%	476,925	10,910,745	517	1.11	12,110,927	46
47	2006	6,810,079	883,530	7,693,609	1,578,355	(15,568,735)	(13,990,380)	56.25%	(7,869,589)	(175,980)	529	1.08	(190,058)	47
48	2007	4,446,463	575,398	5,021,861	1,729,706		1,729,706	56.25%	972,960	5,994,821	518	1.11	6,654,251	48
49	2008	22,841,432	1,246,949	24,088,381	1,650,189		1,650,189	56.25%	928,231	25,016,612	578	0.99	24,766,446	49
50	2009	18,139,290	1,747,907	19,887,197	2,420,622		2,420,622	56.25%	1,361,600	21,248,797	581	0.99	21,036,309	50
51	2010	4,290,507	214,125	4,504,632	34,059		34,059	56.25%	19,158	4,523,790	573	1.00	4,523,790	51
52	Total	210,794,189	21,722,451	232,516,640	15,583,217	(18,821,966)	(3,238,750)		(1,821,799)	230,694,841			351,778,007	52
												RCND Adjustment	121,083,166	

SOUTHWEST GAS CORPORATION
ARIZONA
SUMMARY OF WORKING CAPITAL ALLOWANCE
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description	Reference		Balance	Line No.
	(a)	(b)		(c)	
1	Cash Working Capital (Lead-Lag Study)	Sch B-5, Sh 2, Ln 14(b)	$	(4,472,151)	1
2	Materials and Supplies	Sch B-5, Sh 3, Ln 15(f)		9,920,409	2
3	Prepayments	Sch B-5, Sh 4, Ln 17(d)		4,744,133	3
4	Total Working Capital		$	10,192,391	4
				Sch B-1, Sh 1 Ln 8-10	

SOUTHWEST GAS CORPORATION
ARIZONA
CASH WORKING CAPITAL (LEAD LAG STUDY)
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description [1] (a)		Cost (b)	Lag Days (c)	Dollar Days (d)	Line No.
1	Cost of Gas [2]	$	379,159,715	42.43	16,087,098,383	1
2	Labor Cost		130,360,854	10.90	1,421,429,041	2
3	Provision for Uncollected Accounts		2,008,980	120.00	241,077,580	3
4	Other O&M Expenses		68,719,020	2.03	139,283,378	4
5	Total O&M Expenses	$	580,248,569	30.83	17,888,888,383	5
6	Interest		42,713,744	91.00	3,886,854,393	6
7	Taxes Other Than Income Taxes		27,203,877	174.28	4,741,045,703	7
8	Income Taxes - Current		26,047,797	37.00	963,768,473	8
9	Total Operating Expenses	$	676,213,987	40.64	27,480,556,951	9
10	Number of Days in Test Period		365			10
11	Average Daily Operating Expense	$	1,852,641			11
12	Lag in Receipt of Revenue			38.22		12
13	Net Difference Revenue-Expense Lag		(2.41)			13
14	Cash Working Capital	$	(4,472,151) Sch B-5, Sh 1 Ln 1(c)			14

[1] Workpapers B-5, Sheet 1-81
[2] Gas costs adjusted for present volumes and rates.

SOUTHWEST GAS CORPORATION
ARIZONA
MATERIALS AND SUPPLIES
FOR THE THIRTEEN MONTHS ENDED JUNE 30, 2010

Line No.	Description	Account Number [1] 154	155	163	System Allocable [2]	Total Materials and Supplies	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
1	June 2009	$ 8,805,520	$ 21,381	$ 1,257,098	$ (17,603)	$ 10,066,397	1
2	July 2009	8,508,488	22,496	1,404,690	(17,603)	9,918,071	2
3	August 2009	8,335,964	21,768	1,410,057	(17,603)	9,750,187	3
4	September 2009	8,995,472	18,253	1,336,005	(17,603)	10,332,128	4
5	October 2009	8,908,500	19,597	1,226,563	(17,603)	10,137,056	5
6	November 2009	8,911,305	20,226	1,153,353	(17,603)	10,067,282	6
7	December 2009	8,549,727	18,980	1,064,905	(17,603)	9,616,010	7
8	January 2010	8,479,046	16,042	1,196,069	(17,603)	9,673,555	8
9	February 2010	8,827,832	22,315	1,251,300	(17,603)	10,083,843	9
10	March 2010	9,010,917	24,425	1,130,542	(17,603)	10,148,281	10
11	April 2010	8,722,118	27,936	867,489	(17,603)	9,599,941	11
12	May 2010	8,835,745	27,330	883,435	(17,603)	9,728,907	12
13	June 2010	8,925,880	27,299	908,082	(17,603)	9,843,658	13
14	Thirteen Month Total	$ 113,816,514	$ 288,048	$ 15,089,588	$ (228,834)	$ 128,965,316	14
15	Thirteen Month Average	$ 8,755,116	$ 22,158	$ 1,160,738	$ (17,603)	$ 9,920,409	15
						Sch B-5, Sh 1 Ln 2(c)	

[1] Source: Company Records
[2] WP B-5, Sh 82, Ln 15(g)

SOUTHWEST GAS CORPORATION
ARIZONA
PREPAYMENTS
FOR THE THIRTEEN MONTHS ENDED JUNE 30, 2010

Line No.	Description		Balance [1]	4-Factor [2]		Allocation	Line No.
	(a)		(b)	(c)		(d)	
						(b) x (c)	
1	June 2009	$	4,273,595				1
2	July 2009		5,036,849				2
3	August 2009		10,922,677				3
4	September 2009		11,588,690				4
5	October 2009		11,509,410				5
6	November 2009		10,249,596				6
7	December 2009		10,983,489				7
8	January 2010		10,286,464				8
9	February 2010		9,281,130				9
10	March 2010		8,082,945				10
11	April 2010		7,538,168				11
12	May 2010		7,519,797				12
13	June 2010		6,673,648				13
14	Thirteen Month Total	$	113,946,457				14
15	Thirteen Month Average	$	8,765,112				15
16	Deferred Taxes		(330,806)				16
17	Net of Deferred Tax	$	8,434,306	56.25%	$	4,744,133	17
						Sch B-5, Sh 1, Ln 3 (c)	

[1] Eligible Prepayments - Account 165. Workpapers B-5, Sheet 83, Col (f)
[2] Schedule C-1, Sheet 17, Ln 10 (b).

SOUTHWEST GAS CORPORATION
ARIZONA
CUSTOMER ADVANCES FOR CONSTRUCTION
FOR THE THIRTEEN MONTHS ENDED JUNE 30, 2010

Line No.	Description		Balance [1]	Line No.
	(a)		(b)	
1	June 2009	$	62,523,519	1
2	July 2009		62,161,086	2
3	August 2009		61,837,120	3
4	September 2009		61,379,843	4
5	October 2009		61,225,139	5
6	November 2009		60,974,189	6
7	December 2009		62,862,642	7
8	January 2010		63,283,017	8
9	February 2010		62,826,116	9
10	March 2010		61,691,358	10
11	April 2010		61,431,796	11
12	May 2010		61,705,976	12
13	June 2010		62,529,338	13
14	Thirteen Month Total	$	806,431,139	14
15	Thirteen Month Average	$	62,033,165	15
			Sch B-1, Sh 1, Ln 11	

[1] Source: Company Records, Account 252

SOUTHWEST GAS CORPORATION
ARIZONA
CUSTOMER DEPOSITS
FOR THE THIRTEEN MONTHS ENDED JUNE 30, 2010

Line No.	Description (a)		Balance [1] (b)	Line No.
1	June 2009	$	46,367,307	1
2	July 2009		46,016,187	2
3	August 2009		46,180,110	3
4	September 2009		46,398,854	4
5	October 2009		47,473,974	5
6	November 2009		50,051,128	6
7	December 2009		51,079,073	7
8	January 2010		50,280,268	8
9	February 2010		49,844,907	9
10	March 2010		49,414,239	10
11	April 2010		49,314,251	11
12	May 2010		48,979,797	12
13	June 2010		48,778,514	13
14	Thirteen Month Total	$	630,178,608	14
15	Thirteen Month Average	$	48,475,278	15
			Sch B-1, Sh 1, Ln 12	

[1] Source: Company Records, Account 235

SOUTHWEST GAS CORPORATION
ARIZONA AND SYSTEM ALLOCABLE
DEFERRED TAXES
AT JUNE 30, 2010

Line No.	Description [1]	Arizona	System Allocable	Recorded Deferred Tax	Line No.
	(a)	(b)	(c)	(d)	
1	Account 282 - Deferred Tax Liability	$ 232,516,640	$ 8,765,256	$ 241,281,896	1
2	Account 190 - Deferred Tax Asset	0	(10,586,989)	(10,586,989)	2
3	Total	$ 232,516,640	$ (1,821,733)	$ 230,694,907	3
				Sch B-1, Sh 1, Ln 13	

Deferred Tax Detail

Arizona

Line No.	Description [1]	Federal	State	Total Recorded	Line No.
4	Account 282 - Deferred Tax Liability	$ 210,794,189	$ 21,722,451	$ 232,516,640	4
5	Account 190 - Deferred Tax Asset	0	0	0	5
6	Total	$ 210,794,189	$ 21,722,451	$ 232,516,640	6

System Allocable

Line No.	Description [1]	Recorded	Line No.
7	Account 282 - Deferred Tax Liability	$ 15,583,217	7
8	4-Factor [2]	56.25%	8
9	Arizona Allocation	$ 8,765,256	9
		Ln 1, Col (c)	
10	Account 190 - Deferred Tax Asset	$ (18,821,966)	10
11	4-Factor [2]	56.25%	11
12	Arizona Allocation	$ (10,586,989)	12
		Ln 2, Col (c)	

[1] Source: Company Records
[2] Schedule C-1, Sheet 17, Ln 10(b)

Schedule C

SOUTHWEST GAS CORPORATION
ARIZONA
ADJUSTED TEST YEAR INCOME STATEMENT
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description	Reference	Recorded at 6/30/2010	Adjustments [1]	Adjusted at 6/30/2010	Line No.
	(a)	(b)	(c)	(d)	(e) (c) + (d)	
1	Revenues	WP H-2, Sh 4, Ln 25	$ 834,756,858	$ (423,844,760)	$ 410,912,098	1
2	Gas Cost	Sch C-1 Sh 3	407,320,096	(407,320,096)	0	2
3	Total Margin	Ln 1 + Ln 2	$ 427,436,762	$ (16,524,664)	$ 410,912,098	3
	Expenses					
4	Other Gas Supply	Sch C-1 Sh 3	$ 1,080,748	$ 57,398	$ 1,138,145	4
5	Distribution	Sch C-1 Sh 3	96,282,901	4,296,967	100,579,868	5
6	Customer Accounts	Sch C-1 Sh 3	31,334,890	2,546,381	33,881,272	6
7	Customer Information	Sch C-1 Sh 4	1,296,429	(91,294)	1,205,135	7
8	Sales	Sch C-1 Sh 4	58,740	(58,740)	0	8
	Administrative and General					
9	Direct	Sch C-1 Sh 9, 13, Ln 24(d)	5,944,630	394,772	6,339,402	9
10	System Allocable	Sch C-1 Sh 9, 13, Ln 24(k)	56,860,171	1,925,925	58,786,097	10
	Depreciation and Amortization					
11	Direct	Sch C-1 Sh 14	90,832,850	2,224,178	93,057,028	11
12	System Allocable	Sch C-1 Sh 14	5,333,983	910,999	6,244,982	12
13	Regulatory Amortizations	Sch C-1 Sh 14	4,083,462	(3,798,881)	284,581	13
14	Other Taxes	Sch C-1 Sh 15	25,746,383	1,457,495	27,203,877	14
15	Interest on Customer Deposits	Adj. No 15	2,615,905	292,612	2,908,517	15
16	Income Taxes	Sch C-3, Sh 2	24,860,511	(10,643,146)	14,217,365	16
17	Total Expenses	Sum Lns 4-16	$ 346,331,603	$ (485,334)	$ 345,846,269	17
18	Net Income	Ln 3 - Ln 17	$ 81,105,159	$ (16,039,330)	$ 65,065,829	18
			Sch A-1, Sh 2, Col (b)	Sch A-1, Sh 2, Col (c)	Sch A-1, Sh 2, Col (d)	

[1] Schedule C-2, Sheet 2, Col (k)

SOUTHWEST GAS CORPORATION
ARIZONA
ADJUSTED SALES VOLUMES AND REVENUES
TEST YEAR ENDED JUNE 30, 2010

Line No.	Description	Recorded At 6/30/2010	Adjustment No. 1	Test Period Balance As Adjusted	Line No.
	(a)	(b)	(c)	(d)	
1	Sales Quantity (therms)	572,469,521	(55,803,973)	516,665,548	1
2	Revenue	$ 834,756,858	$ (423,844,760)	$ 410,912,098	2
3	Total Revenue Adjustment		$ (423,844,760)		3

SOUTHWEST GAS CORPORATION
ARIZONA
OPERATION AND MAINTENANCE EXPENSES SUMMARY
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010
AS ADJUSTED FOR THE TEST YEAR

Line No.	Description [1]	Account Number	Recorded at 6/30/2010	Adjustments	Adjusted at 6/30/2010	Line No.
	(a)	(b)	(c)	(d)	(e)	
	Purchased Gas Costs					
1	Natural Gas Transmission Line Purchases	803	$ 322,427,085	$ (322,427,085)	$ 0	1
2	Purchased Gas Cost Adjustments	805.1	18,144,412	(18,144,412)	0	2
3	Gas Used for Compression Station Fuel	810	0	0	0	3
4	Total Purchased Gas Costs		$ 340,571,497	$ (340,571,497)	$ 0	4
	Other Gas Supply Expenses					
5	Total Other Gas Cost Expenses	813	$ 1,080,748	$ 57,398	$ 1,138,145	5
	Transmission Expenses					
6	Transmission and Compression of Gas by Others	858	$ 66,748,599	$ (66,748,599)	$ 0	6
	Distribution Expenses					
7	Operation Supervision and Engineering	870	$ 11,107,221	$ 607,447	$ 11,714,668	7
8	Distribution Load Dispatching	871	466,531	24,600	491,131	8
9	Mains and Services Expenses	874	9,140,421	370,111	9,510,532	9
10	Measuring and Regulating Expenses - General	875	2,615,443	135,487	2,750,929	10
11	Meter and House Regulator Expenses	878	9,528,563	580,221	10,108,784	11
12	Customer Installation Expenses	879	9,738,008	613,714	10,351,722	12
13	Other Expenses	880	12,489,365	394,984	12,884,349	13
14	Rents	881	1,943,013	101,151	2,044,165	14
15	Maintenance Supervision and Engineering	885	3,347,621	215,718	3,563,339	15
16	Maintenance of Structures and Improvements	886	63,306	780	64,087	16
17	Maintenance of Mains	887	21,100,921	673,264	21,774,185	17
18	Maintenance of Measuring and Reg. Station Equipment	889	1,935,907	88,982	2,024,888	18
19	Maintenance of Services	892	9,353,229	334,151	9,687,380	19
20	Maintenance of Meters and House Regulators	893	3,116,845	142,578	3,259,422	20
21	Maintenance of Other Equipment	894	336,506	13,779	350,284	21
22	Total Distribution Expenses		$ 96,282,901	$ 4,296,967	$ 100,579,868	22
	Customer Accounts Expenses					
23	Supervision	901	$ 2,386,534	$ 157,419	$ 2,543,953	23
24	Meter Reading	902	1,862,744	101,487	1,964,231	24
25	Customer Records and Collection Expenses	903	25,133,960	1,825,835	26,959,794	25
26	Uncollectible Accounts	904	1,572,798	436,181	2,008,980	26
27	Miscellaneous Customer Accounts Expenses	905	378,854	25,460	404,314	27
28	Total Customer Accounts Expenses		$ 31,334,890	$ 2,546,381	$ 33,881,272	28

[1] Schedules C-1, Sheet 5-8

SOUTHWEST GAS CORPORATION
ARIZONA
OPERATION AND MAINTENANCE EXPENSES SUMMARY
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010
AS ADJUSTED FOR THE TEST YEAR

Line No.	Description [1] (a)	Account Number (b)	Recorded at 6/30/2010 (c)	Adjustments (d)	Adjusted at 6/30/2010 (e)	Line No.
	Customer Service and Informational Expenses					
1	Customer Assistance Expenses	908	$ 1,236,169	$ (49,607)	$ 1,186,562	1
2	Informational and Instructional Advertising Expenses	909	8,245	(2,245)	6,000	2
3	Miscellaneous Customer Service and Informational Exp.	910	52,015	(39,442)	12,573	3
4	Total Customer Service and Informational Expenses		$ 1,296,429	$ (91,294)	$ 1,205,135	4
	Sales Expenses					
5	Supervision	911	$ 0	$ 0	$ 0	5
6	Demonstrating and Selling Expenses	912	0	0	0	6
7	Advertising Expenses	913	58,740	(58,740)	0	7
8	Total Sales Expenses		$ 58,740	$ (58,740)	$ 0	8
9	Total Operations and Maintenance Expenses		$ 537,373,804	$ (400,569,384)	$ 136,804,420	9
	Administrative and General Expenses					
10	Administrative and General Salaries	920	$ 36,214,974	$ 1,813,046	$ 38,028,020	10
11	Office Supplies and Expenses	921	7,138,418	(37,097)	7,101,321	11
12	Administrative and General Expenses Transferred (Credit)	922	(6,671,604)	(312,670)	(6,984,275)	12
13	Outside Services Employed	923	9,003,009	73,879	9,076,888	13
14	Property Insurance	924	246,564	(3,405)	243,159	14
15	Injuries and Damages	925	7,229,742	692,973	7,922,714	15
16	Employee Pension and Benefits	926	43,225	0	43,225	16
17	Regulatory Commission Expenses	928	119,948	33,386	153,333	17
18	Miscellaneous General Expenses	930	3,526,901	(22,188)	3,504,714	18
19	Rents	931	2,480,694	5,154	2,485,848	19
20	*Maintenance of General Plant*	935	3,472,930	77,620	3,550,550	20
21	Total Administrative and General Expenses		$ 62,804,801	$ 2,320,698	$ 65,125,498	21
22	Total Operation, Maintenance and Administrative General Expenses		$ 600,178,605	$ (398,248,686)	$ 201,929,919	22

[1] Schedules C-1, Sheet 5-13

SOUTHWEST GAS CORPORATION
ARIZONA
OPERATION AND MAINTENANCE EXPENSES
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description	Account Number	Recorded at 6/30/2010	Purchased Gas Cost Adj. No. 2	Labor / Loading Annualization Adj. No. 3	Call Center and Support Allocation and Annualization Adj. No. 4	Cost of Service Analysis Adj. No. 5	Employee Vehicle Compensation Adj. No. 6	Uncollectible Expense Annualization Adj. No. 7	Leak Survey and Repair Adj. No. 8	Total	Line No.
	(a)	(b)	(c) [1]	(d) [2]	(e) [2]	(f) [2]	(g) [2]	(h) [2]	(i) [2]	(j) [2]	(k)	
	Purchased Gas Costs											
1	Natural Gas Transmission Line Purchases	803	$ 322,427,085	$ (322,427,085)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	1
2	Purchased Gas Cost Adjustments	805.1	18,144,412	(18,144,412)	0	0	0	0	0	0	0	2
3	Gas Used for Compressor Station Fuel	810	0	0	0	0	0	0	0	0	0	3
4	Total Gas Supply Expenses		$ 340,571,497	$ (340,571,497)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	4
	Other Gas Costs											
	Other Gas Supply Expenses	813										
5	Labor		$ 588,698	$ 0	$ 13,740	$ 0	$ 0	$ 0	$ 0	$ 0	$ 602,439	5
6	Labor Loadings		364,434	0	43,657	0	0	0	0	0	408,091	6
7	Materials and Expenses		127,615	0	0	0	0	0	0	0	127,615	7
8	Total		$ 1,080,748	$ 0	$ 57,398	$ 0	$ 0	$ 0	$ 0	$ 0	$ 1,138,145	8
	Transmission Expenses											
	Transmission and Compression of Gas	858										
9	Labor		$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	9
10	Labor Loadings		0	0	0	0	0	0	0	0	0	10
11	Materials and Expenses		66,748,599	(66,748,599)	0	0	0	0	0	0	0	11
12	Total		$ 66,748,599	$ (66,748,599)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	12
	Distribution Expenses											
	Operation											
	Operation Supervision and Engineering	870										
13	Labor		$ 5,874,671	$ 0	$ (2,590)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 5,872,082	13
14	Labor Loadings		3,815,114	0	682,454	0	0	0	0	0	4,497,568	14
15	Materials and Expenses		1,417,436	0	0	0	(11,628)	(60,789)	0	0	1,345,019	15
16	Total		$ 11,107,221	$ 0	$ 679,864	$ 0	$ (11,628)	$ (60,789)	$ 0	$ 0	$ 11,714,668	16
	Distribution Load Dispatching	871										
17	Labor		$ 251,913	$ 0	$ 5,879	$ 0	$ 0	$ 0	$ 0	$ 0	$ 257,792	17
18	Labor Loadings		156,268	0	18,721	0	0	0	0	0	174,989	18
19	Materials and Expenses		58,350	0	0	0	0	0	0	0	58,350	19
20	Total		$ 466,531	$ 0	$ 24,600	$ 0	$ 0	$ 0	$ 0	$ 0	$ 491,131	20
	Mains and Services Expenses	874										
21	Labor		$ 3,202,255	$ 0	$ (3,007)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 3,199,249	21
22	Labor Loadings		2,060,622	0	373,117	0	0	0	0	0	2,433,739	22
23	Materials and Expenses		3,877,544	0	0	0	0	0	0	0	3,877,544	23
24	Total		$ 9,140,421	$ 0	$ 370,111	$ 0	$ 0	$ 0	$ 0	$ 0	$ 9,510,532	24
	Measuring and Regulating Station Expenses	875										
25	Labor		$ 1,187,487	$ 0	$ (1,115)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 1,186,372	25
26	Labor Loadings		758,816	0	137,400	0	0	0	0	0	896,216	26
27	Materials and Expenses		669,139	0	0	0	(798)	0	0	0	668,341	27
28	Total		$ 2,615,443	$ 0	$ 136,285	$ 0	$ (798)	$ 0	$ 0	$ 0	$ 2,750,929	28
	Meter and House Regulator Expenses	878										
29	Labor		$ 5,036,788	$ 0	$ (4,729)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 5,032,059	29
30	Labor Loadings		3,230,512	0	584,950	0	0	0	0	0	3,815,462	30
31	Materials and Expenses		1,261,264	0	0	0	0	0	0	0	1,261,264	31
32	Total		$ 9,528,563	$ 0	$ 580,221	$ 0	$ 0	$ 0	$ 0	$ 0	$ 10,108,784	32
	Customer Installation Expenses	879										
33	Labor		$ 5,317,054	$ 0	$ (4,992)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 5,312,062	33
34	Labor Loadings		3,416,939	0	618,706	0	0	0	0	0	4,035,645	34
35	Materials and Expenses		1,004,015	0	0	0	0	0	0	0	1,004,015	35
36	Total		$ 9,738,008	$ 0	$ 613,714	$ 0	$ 0	$ 0	$ 0	$ 0	$ 10,351,722	36

SOUTHWEST GAS CORPORATION
ARIZONA
OPERATION AND MAINTENANCE EXPENSES
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description (a)	Account Number (b)	Recorded at 6/30/2010 (c) [1]	Purchased Gas Cost Adj. No. 2 (d) [2]	Labor / Loading Annualization Adj. No. 3 (e) [2]	Call Center and Support Allocation and Annualization Adj. No. 4 (f) [2]	Cost of Service Analysis Adj. No. 5 (g) [2]	Employee Vehicle Compensation Adj. No. 6 (h) [2]	Uncollectible Expense Annualization Adj. No. 7 (i) [2]	Leak Survey and Repair Adj. No. 8 (j) [2]	Total (k)	Line No.
	Other Expenses	880										
1	Labor		$ 4,458,075	$ 0	$ 8,534	$ 0	$ 0	$ 0	$ 0	$ 0	$ 4,466,609	1
2	Labor Loadings		2,839,364	0	494,252	0	0	0	0	0	3,333,616	2
3	Materials and Expenses		5,191,926	0	0	0	(107,801)	0	0	0	5,084,124	3
4	Total		$ 12,489,365	$ 0	$ 502,785	$ 0	$ (107,801)	$ 0	$ 0	$ 0	$ 12,884,349	4
	Rents	881										
5	Labor		$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	5
6	Labor Loadings		0	0	0	0	0	0	0	0	0	6
7	Materials and Expenses		1,943,013	0	0	0	101,151	0	0	0	2,044,165	7
8	Total		$ 1,943,013	$ 0	$ 0	$ 0	$ 101,151	$ 0	$ 0	$ 0	$ 2,044,165	8
	Maintenance											
	Maintenance Supervision and Engineering	885										
9	Labor		$ 1,850,859	$ 0	$ (1,436)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 1,849,423	9
10	Labor Loadings		1,210,348	0	217,155	0	0	0	0	0	1,427,502	10
11	Materials and Expenses		286,414	0	0	0	0	0	0	0	286,414	11
12	Total		$ 3,347,621	$ 0	$ 215,718	$ 0	$ 0	$ 0	$ 0	$ 0	$ 3,563,339	12
	Maintenance of Structures and Improvements	886										
13	Labor		$ 6,871	$ 0	$ (6)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 6,865	13
14	Labor Loadings		4,346	0	787	0	0	0	0	0	5,133	14
15	Materials and Expenses		52,089	0	0	0	0	0	0	0	52,089	15
16	Total		$ 63,306	$ 0	$ 780	$ 0	$ 0	$ 0	$ 0	$ 0	$ 64,087	16
	Maintenance of Mains	887										
17	Labor		$ 6,883,295	$ 0	$ (6,463)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 6,876,832	17
18	Labor Loadings		4,436,707	0	803,356	0	0	0	0	0	5,240,062	18
19	Materials and Expenses		9,780,920	0	0	0	0	0	0	(123,629)	9,657,291	19
20	Total		$ 21,100,921	$ 0	$ 796,893	$ 0	$ 0	$ 0	$ 0	$ (123,629)	$ 21,774,185	20
	Maintenance of Meas. and Reg. Station Equip.	889										
21	Labor		$ 770,355	$ 0	$ (723)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 769,632	21
22	Labor Loadings		495,415	0	89,705	0	0	0	0	0	585,120	22
23	Materials and Expenses		670,136	0	0	0	0	0	0	0	670,136	23
24	Total		$ 1,935,907	$ 0	$ 88,982	$ 0	$ 0	$ 0	$ 0	$ 0	$ 2,024,888	24
	Maintenance of Services	892										
25	Labor		$ 3,372,405	$ 0	$ (3,166)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 3,369,239	25
26	Labor Loadings		2,167,999	0	392,560	0	0	0	0	0	2,560,559	26
27	Materials and Expenses		3,812,825	0	0	0	0	0	0	(55,242)	3,757,582	27
28	Total		$ 9,353,229	$ 0	$ 389,394	$ 0	$ 0	$ 0	$ 0	$ (55,242)	$ 9,687,380	28
	Maintenance of Meters and House Regulators	893										
29	Labor		$ 1,234,896	$ 0	$ (1,159)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 1,233,737	29
30	Labor Loadings		793,816	0	143,737	0	0	0	0	0	937,553	30
31	Materials and Expenses		1,088,133	0	0	0	0	0	0	0	1,088,133	31
32	Total		$ 3,116,845	$ 0	$ 142,578	$ 0	$ 0	$ 0	$ 0	$ 0	$ 3,259,422	32
	Maintenance of Other Equipment	894										
33	Labor		$ 118,590	$ 0	$ (111)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 118,479	33
34	Labor Loadings		76,711	0	13,890	0	0	0	0	0	90,601	34
35	Materials and Expenses		141,204	0	0	0	0	0	0	0	141,204	35
36	Total		$ 336,506	$ 0	$ 13,779	$ 0	$ 0	$ 0	$ 0	$ 0	$ 350,284	36
	Total Distribution Expenses											
37	Labor		$ 39,565,517	$ 0	$ (15,086)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 39,550,431	37
38	Labor Loadings		25,462,976	0	4,570,789	0	0	0	0	0	30,033,765	38
39	Materials and Expenses		31,254,409	0	0	0	(19,076)	(60,789)	0	(178,871)	30,995,673	39
40	Total		$ 96,282,901	$ 0	$ 4,555,703	$ 0	$ (19,076)	$ (60,789)	$ 0	$ (178,871)	$ 100,579,868	40
	Customer Accounts Expenses											

SOUTHWEST GAS CORPORATION
ARIZONA
OPERATION AND MAINTENANCE EXPENSES
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description (a)	Account Number (b)	Recorded at 6/30/2010 (c) [1]	Purchased Gas Cost Adj. No. 2 (d) [2]	Labor / Loading Annualization Adj. No. 3 (e) [2]	Call Center and Support Allocation and Annualization Adj. No. 4 (f) [2]	Cost of Service Analysis Adj. No. 5 (g) [2]	Employee Vehicle Compensation Adj. No. 6 (h) [2]	Uncollectible Expense Annualization Adj. No. 7 (i) [2]	Leak Survey and Repair Adj. No. 8 (j) [2]	Total (k)	Line No.
	Operation											
	Supervision	901										
1	Labor		$ 1,372,023	$ 0	$ (1,288)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 1,370,735	1
2	Labor Loadings		876,494	0	158,707	0	0	0	0	0	1,035,201	2
3	Materials and Expenses		138,017	0	0	0	0	0	0	0	138,017	3
4	Total		$ 2,386,534	$ 0	$ 157,419	$ 0	$ 0	$ 0	$ 0	$ 0	$ 2,543,953	4
	Meter Reading Expenses	902										
5	Labor		$ 884,281	$ 0	$ (830)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 883,451	5
6	Labor Loadings		565,073	0	102,317	0	0	0	0	0	667,390	6
7	Materials and Expenses		413,390	0	0	0	0	0	0	0	413,390	7
8	Total		$ 1,862,744	$ 0	$ 101,487	$ 0	$ 0	$ 0	$ 0	$ 0	$ 1,964,231	8
	Customer Records and Collections - Division	903										
9	Labor		$ 9,870,928	$ 0	$ 38,401	$ 269,554	$ 0	$ 0	$ 0	$ 0	$ 10,178,883	9
10	Labor Loadings		6,199,535	0	1,157,156	172,369	0	0	0	0	7,529,060	10
11	Materials and Expenses		8,834,662	0	0	248,428	(34,050)	0	0	0	9,049,040	11
12	Total		$ 24,905,125	$ 0	$ 1,195,558	$ 690,350	$ (34,050)	$ 0	$ 0	$ 0	$ 26,756,983	12
	Customer Records and Collections - Allocation	903										
13	Labor		$	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	13
14	Labor Loadings			0	0	0	0	0	0	0	0	14
15	Materials and Expenses		228,834	0	0	0	(26,023)	0	0	0	202,812	15
16	Total		$ 228,834	$ 0	$ 0	$ 0	$ (26,023)	$ 0	$ 0	$ 0	$ 202,812	16
	Uncollectible Accounts Expenses	904										
17	Labor		$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	17
18	Labor Loadings		0	0	0	0	0	0	0	0	0	18
19	Materials and Expenses		1,572,798	0	0	0	0	0	436,181	0	2,008,980	19
20	Total		$ 1,572,798	$ 0	$ 0	$ 0	$ 0	$ 0	$ 436,181	$ 0	$ 2,008,980	20
	Miscellaneous Customer Accounts Expenses	905										
21	Labor		$ 223,151	$ 0	$ (210)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 222,942	21
22	Labor Loadings		141,762	0	25,669	0	0	0	0	0	167,432	22
23	Materials and Expenses		13,940	0	0	0	0	0	0	0	13,940	23
24	Total		$ 378,854	$ 0	$ 25,460	$ 0	$ 0	$ 0	$ 0	$ 0	$ 404,314	24
	Total Customer Accounts Expenses											
25	Labor		$ 12,350,383	$ 0	$ 36,073	$ 269,554	$ 0	$ 0	$ 0	$ 0	$ 12,656,010	25
26	Labor Loadings		7,782,864	0	1,443,850	172,369	0	0	0	0	9,399,082	26
27	Materials and Expenses		11,201,643	0	0	248,428	(60,073)	0	436,181	0	11,826,179	27
28	Total		$ 31,334,890	$ 0	$ 1,479,923	$ 690,350	$ (60,073)	$ 0	$ 436,181	$ 0	$ 33,881,272	28

SOUTHWEST GAS CORPORATION
ARIZONA
OPERATION AND MAINTENANCE EXPENSES
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description	Account Number	Recorded at 6/30/2010	Purchased Gas Cost Adj. No. 2	Labor / Loading Annualization Adj. No. 3	Call Center and Support Allocation and Annualization Adj. No. 4	Cost of Service Analysis Adj. No. 5	Employee Vehicle Compensation Adj. No. 6	Uncollectible Expense Annualization Adj. No. 7	Leak Survey and Repair Adj. No. 8	Total	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	
			[1]	[2]	[2]	[2]	[2]	[2]	[2]	[2]		
	Customer Service and Informational Expenses											
	Operation											
	Customer Assistance Expenses	908										
1	Labor		340,678	0	4,866	0	0	0	0	0	345,544	1
2	Labor Loadings		214,561	0	30,700	0	0	0	0	0	245,261	2
3	Materials and Expenses		680,930	0	0	0	(85,173)	0	0	0	595,758	3
4	Total		1,236,169	0	35,566	0	(85,173)	0	0	0	1,186,562	4
	Informational and Instructional Expenses	909										
5	Labor		0	0	0	0	0	0	0	0	0	5
6	Labor Loadings		0	0	0	0	0	0	0	0	0	6
7	Materials and Expenses		8,245	0	0	0	(2,245)	0	0	0	6,000	7
8	Total		8,245	0	0	0	(2,245)	0	0	0	6,000	8
	Misc. Customer Service and Informational Exp.	910										
9	Labor		0	0	0	0	0	0	0	0	0	9
10	Labor Loadings		0	0	0	0	0	0	0	0	0	10
11	Materials and Expenses		52,015	0	0	0	(39,442)	0	0	0	12,573	11
12	Total		52,015	0	0	0	(39,442)	0	0	0	12,573	12
	Total Customer Service and Informational Exp.											
13	Labor		340,678	0	4,866	0	0	0	0	0	345,544	13
14	Labor Loadings		214,561	0	30,700	0	0	0	0	0	245,261	14
15	Materials and Expenses		741,190	0	0	0	(126,860)	0	0	0	614,330	15
16	Total		1,296,429	0	35,566	0	(126,860)	0	0	0	1,205,135	16
	Sales Expenses											
	Supervision	911										
17	Labor		0	0	0	0	0	0	0	0	0	17
18	Labor Loadings		0	0	0	0	0	0	0	0	0	18
19	Materials and Expenses		0	0	0	0	0	0	0	0	0	19
20	Total		0	0	0	0	0	0	0	0	0	20
	Demonstration and Selling Expenses	912										
21	Labor		0	0	0	0	0	0	0	0	0	21
22	Labor Loadings		0	0	0	0	0	0	0	0	0	22
23	Materials and Expenses		0	0	0	0	0	0	0	0	0	23
24	Total		0	0	0	0	0	0	0	0	0	24
	Advertising Expenses	913										
25	Labor		0	0	0	0	0	0	0	0	0	25
26	Labor Loadings		0	0	0	0	0	0	0	0	0	26
27	Materials and Expenses		58,740	0	0	0	(58,740)	0	0	0	0	27
28	Total		58,740	0	0	0	(58,740)	0	0	0	0	28
	Total Sales Expenses											
29	Labor		0	0	0	0	0	0	0	0	0	29
30	Labor Loadings		0	0	0	0	0	0	0	0	0	30
31	Materials and Expenses		58,740	0	0	0	(58,740)	0	0	0	0	31
32	Total		58,740	0	0	0	(58,740)	0	0	0	0	32
	Total Rate Jurisdiction											
33	Labor		52,845,276	0	39,594	269,554	0	0	0	0	53,154,423	33
34	Labor Loadings		33,824,835	0	6,088,996	172,369	0	0	0	0	40,086,199	34
35	Materials and Expenses		450,703,693	(407,320,096)	0	248,428	(264,748)	(60,789)	436,181	(178,871)	43,563,798	35
36	Total		537,373,804	(407,320,096)	6,128,590	690,350	(264,748)	(60,789)	436,181	(178,871)	136,804,420	36
			Sch C-1, Sh 3-4, Col (c)								Sch C-1, Sh 3-4, Col (e)	

[1] Source: Company Records
[2] Schedule C-2, Adjustment Nos. 2-8

SOUTHWEST GAS CORPORATION
ARIZONA
ALLOCATION OF RECORDED ADMINISTRATIVE AND GENERAL EXPENSES
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description [2]	Account Number	Total Company	Direct Charges: Total Arizona	Direct Charges: Other Jurisdictions	To Be Allocated	Allocation Factor [1]: 4-Factor	Allocation Factor [1]: Factor II	Allocation Factor [1]: Factor III	Allocation Factor [1]: A&G Allocation	Allocation Factor [1]: Total Allocation	Total	Line No.
	(a)	(b)	(c)	(d)	(e)	(f) (c) - (d) - (e)	(g)	(h)	(i)	(j)	(k)	(l) (d) + (k)	
	Administrative and General Salaries	920											
1	Labor		$ 44,526,236	$ 0	$ 0	$ 44,526,236	$ 25,045,140	$ 0	$ 0	$ 0	$ 25,045,140	$ 25,045,140	1
2	Labor Loadings		22,216,403	0	0	22,216,403	12,496,294	0	0	0	12,496,294	12,496,294	2
3	Materials and Expense		(2,358,233)	0	0	(2,358,233)	(1,326,460)	0	0	0	(1,326,460)	(1,326,460)	3
4	Total Administrative and General Salaries		$ 64,384,406	$ 0	$ 0	$ 64,384,406	$ 36,214,974	$ 0	$ 0	$ 0	$ 36,214,974	$ 36,214,974	4
5	Office Supplies	921	$ 12,690,961	$ 0	$ 0	$ 12,690,961	$ 7,138,418	$ 0	$ 0	$ 0	$ 7,138,418	$ 7,138,418	5
6	Administrative Expenses Transferred - Credit	922	$ (10,494,867)	$ 0	$ 0	$ (10,494,867)	$ 0	$ 0	$ 0	$ (6,671,604)	$ (6,671,604)	$ (6,671,604)	6
7	Outside Services Employed	923	$ 15,238,822	$ 1,170,700	$ 143,535	$ 13,924,587	$ 7,832,309	$ 0	$ 0	$ 0	$ 7,832,309	$ 9,003,009	7
8	Property Insurance	924	$ 451,025	$ 0	$ 0	$ 451,025		$ 246,564	$ 0	$ 0	$ 246,564	$ 246,564	8
9	Injuries and Damages	925	$ 12,471,719	$ 1,564,501	$ 835,331	$ 10,071,888	$ 5,665,241	$ 0	$ 0	$ 0	$ 5,665,241	$ 7,229,742	9
10	Employee Pensions and Benefits	926	$ 0	$ 153,581	$ 35,814	$ (189,396)	$ 0	$ 0	$ (110,356)	$ 0	$ (110,356)	$ 43,225	10
11	Regulatory Commission Expenses	928	$ 197,084	$ 119,948	$ 77,137	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 119,948	11
	Miscellaneous General Expenses	930											
12	Labor		$ 314,072	$ 0	$ 0	$ 314,072	$ 176,659	$ 0	$ 0	$ 0	$ 176,659	$ 176,659	12
13	Labor Loadings		0	0	0	0	0	0	0	0	0	0	13
14	Materials and Expense		6,235,416	693,601	818,734	4,723,081	2,656,641	0	0	0	2,656,641	3,350,242	14
15	Total Miscellaneous General Expenses		$ 6,549,488	$ 693,601	$ 818,734	$ 5,037,153	$ 2,833,301	$ 0	$ 0	$ 0	$ 2,833,301	$ 3,526,901	15
16	Rents	931	$ 4,410,275	$ 0	$ 0	$ 4,410,275	$ 2,480,694	$ 0	$ 0	$ 0	$ 2,480,694	$ 2,480,694	16
	Maintenance of General Plant	935											
17	Labor		$ 849,617	$ 557,701	$ 54,132	$ 237,784	$ 133,749	$ 0	$ 0	$ 0	$ 133,749	$ 691,450	17
18	Labor Loadings		538,800	355,933	35,785	147,082	82,731	0	0	0	82,731	438,664	18
19	Materials and Expense		3,643,031	1,328,665	511,368	1,802,999	1,014,152	0	0	0	1,014,152	2,342,816	19
20	Total Maintenance of General Plant		$ 5,031,448	$ 2,242,299	$ 601,285	$ 2,187,865	$ 1,230,631	$ 0	$ 0	$ 0	$ 1,230,631	$ 3,472,930	20
	Total Administrative and General Expenses												
21	Labor		$ 45,689,925	$ 557,701	$ 54,132	$ 45,078,092	$ 25,355,548	$ 0	$ 0	$ 0	$ 25,355,548	$ 25,913,250	21
22	Labor Loadings		22,755,203	355,933	35,785	22,363,485	12,579,025	0	0	0	12,579,025	12,934,958	22
23	Materials and Expense		42,485,234	5,030,995	2,421,919	35,032,320	25,460,994	246,564	(110,356)	(6,671,604)	18,925,598	23,956,593	23
24	Total Administrative and General Expenses		$ 110,930,362	$ 5,944,630	$ 2,511,836	$ 102,473,897	$ 63,395,568	$ 246,564	$ (110,356)	$ (6,671,604)	$ 56,860,171	$ 62,804,801	24
												Sch C-1, Sh 4, Col (c)	

[1] Schedule C-1, Sheet 17
[2] Source: Company Records

SOUTHWEST GAS CORPORATION
ARIZONA
DIRECT ADJUSTMENTS TO ADMINISTRATIVE AND GENERAL EXPENSES
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description	Account Number	Labor / Loading Annualization Adj. No. 3	Injuries and Damages Adj. No. 9	Rate Case Expense Adj. No. 12	Total Adjustments	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
	Administrative and General Salaries	920					
1	Labor		$ 0	$ 0	$ 0	$ 0	1
2	Labor Loadings		0	0	0	0	2
3	Materials and Expense		0	0	0	0	3
4	Total Administrative and General Salaries		$ 0	$ 0	$ 0	$ 0	4
5	Office Supplies	921	$ 0	$ 0	$ 0	$ 0	5
6	Administrative Expenses Transferred - Credit	922	$ 0	$ 0	$ 0	$ 0	6
7	Outside Services Employed	923	$ 0	$ 0	$ 0	$ 0	7
8	Property Insurance	924	$ 0	$ 0	$ 0	$ 0	8
9	Injuries and Damages	925	$ 0	$ 297,461	$ 0	$ 297,461	9
10	Employee Pensions and Benefits	926	$ 0	$ 0	$ 0	$ 0	10
11	Regulatory Commission Expenses	928	$ 0	$ 0	$ 33,386	$ 33,386	11
	Miscellaneous General Expenses	930					
12	Labor		$ 0	$ 0	$ 0	$ 0	12
13	Labor Loadings		0	0	0	0	13
14	Materials and Expense		0	0	0	0	14
15	Total Miscellaneous General Expenses		$ 0	$ 0	$ 0	$ 0	15
16	Rents	931	$ 0	$ 0	$ 0	$ 0	16
	Maintenance of General Plant	935					
17	Labor		$ (524)	$ 0	$ 0	$ (524)	17
18	Labor Loadings		64,449	0	0	64,449	18
19	Materials and Expense		0	0	0	0	19
20	Total Maintenance of General Plant		$ 63,925	$ 0	$ 0	$ 63,925	20
	Total Administrative and General Expenses						
21	Labor		$ (524)	$ 0	$ 0	$ (524)	21
22	Labor Loadings		64,449	0	0	64,449	22
23	Materials and Expense		0	297,461	33,386	330,847	23
24	Total Administrative and General Expenses		$ 63,925	$ 297,461	$ 33,386	$ 394,772	24
						Sch C-1, Sh 12, Col (d)	

SOUTHWEST GAS CORPORATION
ARIZONA
SYSTEM ALLOCABLE ADJUSTMENTS TO ADMINISTRATIVE AND GENERAL EXPENSES
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description (a)	Account Number (b)	Labor / Loading Annualization Adj. No. 3 (c)	Cost of Service Analysis Adj. No. 5 (d)	Employee Vehicle Compensation Adj. No. 6 (e)	Injuries and Damages Adj. No. 9 (f)	American Gas Association ("AGA") Dues Adj. No. 10 (g)	Paiute Pipeline/SGTC Annualization Adj. No. 11 (h)	Total Adjustments (i)	Line No.
	Administrative and General Salaries	920								
1	Labor		$ 699,486	$ 0	$ 0	$ 0	$ 0	$ 0	$ 699,486	1
2	Labor Loadings		2,778,374	0	0	0	0	0	2,778,374	2
3	Materials and Expense		0	0	(295,909)	0	0	41,353	(254,556)	3
4	Total Administrative and General Salaries		$ 3,477,860	$ 0	$ (295,909)	$ 0	$ 0	$ 41,353	$ 3,223,305	4
5	Office Supplies	921	$ 0	$ (74,118)	$ 0	$ 0	$ 0	$ 8,166	$ (65,952)	5
6	Administrative Expenses Transferred - Credit	922	$ (491,851)	$ 0	$ 0	$ 0	$ 0	$ 0	$ (491,851)	6
7	Outside Services Employed	923	$ 0	$ 108,691	$ 0	$ 0	$ 0	$ 22,654	$ 131,345	7
8	Property Insurance	924	$ 0	$ 0	$ 0	$ 0	$ 0	$ (6,229)	$ (6,229)	8
9	Injuries and Damages	925	$ 0	$ 0	$ 0	$ 697,197	$ 0	$ 5,958	$ 703,156	9
10	Employee Pensions and Benefits	926	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	10
11	Regulatory Commission Expenses	928	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	11
	Miscellaneous General Expenses	930								
12	Labor		$ 6,135	$ 0	$ 0	$ 0	$ 0	$ 0	$ 6,135	12
13	Labor Loadings		0	0	0	0	0	0	0	13
14	Materials and Expense		0	(19,520)	0	0	(29,021)	2,960	(45,581)	14
15	Total Miscellaneous General Expenses		$ 6,135	$ (19,520)	$ 0	$ 0	$ (29,021)	$ 2,960	$ (39,446)	15
16	Rents	931	$ 0	$ 6,230	$ 0	$ 0	$ 0	$ 2,934	$ 9,164	16
	Maintenance of General Plant	935								
17	Labor		$ 4,645	$ 0	$ 0	$ 0	$ 0	$ 0	$ 4,645	17
18	Labor Loadings		18,394	0	0	0	0	0	18,394	18
19	Materials and Expense		0	0	0	0	0	1,308	1,308	19
20	Total Maintenance of General Plant		$ 23,039	$ 0	$ 0	$ 0	$ 0	$ 1,308	$ 24,347	20
	Total Administrative and General Expenses									
21	Labor		$ 710,266	$ 0	$ 0	$ 0	$ 0	$ 0	$ 710,266	21
22	Labor Loadings		2,796,769	0	0	0	0	0	2,796,769	22
23	Materials and Expense		(491,851)	21,283	(295,909)	697,197	(29,021)	79,104	(19,197)	23
24	Total Administrative and General Expenses		$ 3,015,184	$ 21,283	$ (295,909)	$ 697,197	$ (29,021)	$ 79,104	$ 3,487,838	24
									Sch C-1, Sh 12, Col (f)	

[2] Schedule C-2, Adjustment Nos. 3-11

SOUTHWEST GAS CORPORATION
ARIZONA
ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSE ADJUSTMENTS
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description (a)	Account Number (b)	Total Company (c) (d) + (e) + (f)	Direct Charges: Arizona [1] (d)	Direct Charges: Other Jurisdictions (e)	To Be Allocated [2] (f)	Allocation Factor [3]: 4-Factor (g)	Allocation Factor [3]: Factor II (h)	Allocation Factor [3]: Factor III (i)	Allocation Factor [3]: A&G Allocation (j)	Allocation Factor [3]: Total Allocation (k)	Total (l) (d) + (k)	Line No.
	Administrative and General Salaries	920											
1	Labor		$ 699,486	$ 0	$ 0	$ 699,486	$ 393,447	$ 0	$ 0	$ 0	$ 393,447	$ 393,447	1
2	Labor Loadings		2,778,374	0	0	2,778,374	1,562,781	0	0	0	1,562,781	1,562,781	2
3	Materials and Expense		(254,556)	0	0	(254,556)	(143,183)	0	0	0	(143,183)	(143,183)	3
4	Total Administrative and General Salaries		$ 3,223,305	$ 0	$ 0	$ 3,223,305	$ 1,813,046	$ 0	$ 0	$ 0	$ 1,813,046	$ 1,813,046	4
5	Office Supplies	921	$ (65,952)	$ 0	$ 0	$ (65,952)	$ (37,097)	$ 0	$ 0	$ 0	$ (37,097)	$ (37,097)	5
6	Administrative Expenses Transferred - Credit	922	$ (491,851)	$ 0	$ 0	$ (491,851)	$ 0	$ 0	$ 0	$ (312,670)	$ (312,670)	$ (312,670)	6
7	Outside Services Employed	923	$ 131,345	$ 0	$ 0	$ 131,345	$ 73,879	$ 0	$ 0	$ 0	$ 73,879	$ 73,879	7
8	Property Insurance	924	$ (6,229)	$ 0	$ 0	$ (6,229)	$ 0	$ (3,405)	$ 0	$ 0	$ (3,405)	$ (3,405)	8
9	Injuries and Damages	925	$ 1,000,617	$ 297,461	$ 0	$ 703,156	$ 395,511	$ 0	$ 0	$ 0	$ 395,511	$ 692,973	9
10	Employee Pensions and Benefits	926	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	10
11	Regulatory Commission Expenses	928	$ 33,386	$ 33,386	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 33,386	11
	Miscellaneous General Expenses	930											
12	Labor		$ 6,135	$ 0	$ 0	$ 6,135	$ 3,451	$ 0	$ 0	$ 0	$ 3,451	$ 3,451	12
13	Labor Loadings		0	0	0	0	0	0	0	0	0	0	13
14	Materials and Expense		(45,581)	0	0	(45,581)	(25,639)	0	0	0	(25,639)	(25,639)	14
15	Total Miscellaneous General Expenses		$ (39,446)	$ 0	$ 0	$ (39,446)	$ (22,188)	$ 0	$ 0	$ 0	$ (22,188)	$ (22,188)	15
16	Rents	931	$ 9,164	$ 0	$ 0	$ 9,164	$ 5,154	$ 0	$ 0	$ 0	$ 5,154	$ 5,154	16
	Maintenance of General Plant	935											
17	Labor		$ 4,121	$ (524)	$ 0	$ 4,645	$ 2,613	$ 0	$ 0	$ 0	$ 2,613	$ 2,089	17
18	Labor Loadings		82,843	64,449	0	18,394	10,346	0	0	0	10,346	74,795	18
19	Materials and Expense		1,308	0	0	1,308	736	0	0	0	736	736	19
20	Total Maintenance of General Plant		$ 88,272	$ 63,925	$ 0	$ 24,347	$ 13,695	$ 0	$ 0	$ 0	$ 13,695	$ 77,620	20
	Total Administrative and General Expenses												
21	Labor		$ 709,742	$ (524)	$ 0	$ 710,266	$ 399,511	$ 0	$ 0	$ 0	$ 399,511	$ 398,987	21
22	Labor Loadings		2,861,217	64,449	0	2,796,769	1,573,128	0	0	0	1,573,128	1,637,577	22
23	Materials and Expense		311,650	330,847	0	(19,197)	269,362	(3,405)	0	(312,670)	(46,713)	284,134	23
24	Total Administrative and General Expenses		$ 3,882,610	$ 394,772	$ 0	$ 3,487,838	$ 2,242,001	$ (3,405)	$ 0	$ (312,670)	$ 1,925,925	$ 2,320,698	24

[1] Schedule C-1, Sheet 10, Col (f)
[2] Schedule C-1, Sheet 11, Col (i)
[3] Schedule C-1, Sheet 17, Ln 10(b)

SOUTHWEST GAS CORPORATION
ARIZONA
ALLOCATION OF ADJUSTED ADMINISTRATIVE AND GENERAL EXPENSES
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description (a)	Account Number (b)	Total Company [1] (c)	Direct Charges: Arizona [2] (d)	Direct Charges: Other Jurisdictions [3] (e)	To Be Allocated (f) (c-d-e)	Allocation Factor [4]: 4-Factor (g)	Allocation Factor [4]: Factor II (h)	Allocation Factor [4]: Factor III (i)	Allocation Factor [4]: A&G Allocation (j)	Allocation Factor [4]: Total Allocation (k)	Total (l) (d) + (k)	Line No.
	Administrative and General Salaries	920											
1	Labor		$ 45,225,722	$ 0	$ 0	$ 45,225,722	$ 25,438,587	$ 0	$ 0	$ 0	$ 25,438,587	$ 25,438,587	1
2	Labor Loadings		24,994,778	0	0	24,994,778	14,059,075	0	0	0	14,059,075	14,059,075	2
3	Materials and Expense		(2,612,788)	0	0	(2,612,788)	(1,469,643)	0	0	0	(1,469,643)	(1,469,643)	3
4	Total Administrative and General Salaries		$ 67,607,711	$ 0	$ 0	$ 67,607,711	$ 38,028,020	$ 0	$ 0	$ 0	$ 38,028,020	$ 38,028,020	4
5	Office Supplies	921	$ 12,625,009	$ 0	$ 0	$ 12,625,009	$ 7,101,321	$ 0	$ 0	$ 0	$ 7,101,321	$ 7,101,321	5
6	Administrative Expenses Transferred - Credit	922	$ (10,986,718)	$ 0	$ 0	$ (10,986,718)	$ 0	$ 0	$ 0	$ (6,984,275)	$ (6,984,275)	$ (6,984,275)	6
7	Outside Services Employed	923	$ 15,370,167	$ 1,170,700	$ 143,535	$ 14,055,932	$ 7,906,188	$ 0	$ 0	$ 0	$ 7,906,188	$ 9,076,888	7
8	Property Insurance	924	$ 444,796	$ 0	$ 0	$ 444,796	$	$ 243,159	$ 0	$ 0	$ 243,159	$ 243,159	8
9	Injuries and Damages	925	$ 13,472,336	$ 1,861,962	$ 835,331	$ 10,775,044	$ 6,060,752	$ 0	$ 0	$ 0	$ 6,060,752	$ 7,922,714	9
10	Employee Pensions and Benefits	926	$ 0	$ 153,581	$ 35,814	$ (189,396)	$ 0	$ 0	$ (110,356)	$ 0	$ (110,356)	$ 43,225	10
11	Regulatory Commission Expenses	928	$ 230,470	$ 153,333	$ 77,137	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 153,333	11
	Miscellaneous General Expenses	930											
12	Labor		$ 320,207	$ 0	$ 0	$ 320,207	$ 180,110	$ 0	$ 0	$ 0	$ 180,110	$ 180,110	12
13	Labor Loadings		0	0	0	0	0	0	0	0	0	0	13
14	Materials and Expense		6,189,835	693,601	818,734	4,677,500	2,631,003	0	0	0	2,631,003	3,324,603	14
15	Total Miscellaneous General Expenses		$ 6,510,042	$ 693,601	$ 818,734	$ 4,997,707	$ 2,811,113	$ 0	$ 0	$ 0	$ 2,811,113	$ 3,504,714	15
16	Rents	931	$ 4,419,438	$ 0	$ 0	$ 4,419,438	$ 2,485,848	$ 0	$ 0	$ 0	$ 2,485,848	$ 2,485,848	16
	Maintenance of General Plant	935											
17	Labor		$ 853,738	$ 557,178	$ 54,132	$ 242,429	$ 136,361	$ 0	$ 0	$ 0	$ 136,361	$ 693,539	17
18	Labor Loadings		621,643	420,382	35,785	165,476	93,077	0	0	0	93,077	513,459	18
19	Materials and Expense		3,644,339	1,328,665	511,368	1,804,307	1,014,887	0	0	0	1,014,887	2,343,552	19
20	Total Maintenance of General Plant		$ 5,119,720	$ 2,306,224	$ 601,285	$ 2,212,212	$ 1,244,326	$ 0	$ 0	$ 0	$ 1,244,326	$ 3,550,550	20
	Total Administrative and General Expenses												
21	Labor		$ 46,399,667	$ 557,178	$ 54,132	$ 45,788,358	$ 25,755,059	$ 0	$ 0	$ 0	$ 25,755,059	$ 26,312,237	21
22	Labor Loadings		25,616,421	420,382	35,785	25,160,254	14,152,153	0	0	0	14,152,153	14,572,534	22
23	Materials and Expense		42,796,884	5,361,842	2,421,919	35,013,123	25,730,356	243,159	(110,356)	(6,984,275)	18,878,885	24,240,727	23
24	Total Administrative and General Expenses		$ 114,812,972	$ 6,339,402	$ 2,511,836	$ 105,961,734	$ 65,637,568	$ 243,159	$ (110,356)	$ (6,984,275)	$ 58,786,097	$ 65,125,498	24
				Sch C-1, Sh 1 Ln 9(e)								Sch C-1, Sh 4, Col (e)	

[1] Schedule C-1, Sheet 9, Col (c) + Sheet 12, Col (c)
[2] Schedule C-1, Sheet 9, Col (d) + Sheet 12, Col (d)
[3] Schedule C-1, Sheet 9, Col (e) + Sheet 12, Col (e)
[4] Schedule C-1, Sheet 17

SOUTHWEST GAS CORPORATION
ARIZONA
DEPRECIATION AND AMORTIZATION EXPENSE
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description (a)	Reference (b)	Account Number (c)	Recorded at 6/30/2010 (d)	Adjustments (e)	Adjusted at 6/30/2010 (f) (d) + (e)	Line No.
	Arizona						
1	Depreciation	WP C-2, Adj 13, Sh 1, Ln 29	403	$ 90,715,741	$ 2,222,237	$ 92,937,977	1
2	Amortization	WP C-2, Adj 13, Sh 1, Ln 30	404.3	117,109	1,941	119,050	2
3	Total Arizona Depreciation and Amortization	Ln 1 + Ln 2		$ 90,832,850	$ 2,224,178	$ 93,057,028	3
				Sch A-1, Sh 2, Ln 11(b)	Sch A-1, Sh 2, Ln 11(c)	Sch A-1, Sh 2, Ln 11(d)	
4	Amortization of Gas Plant Acquisition	Company Records	406	$ (52,943)	$ 0	$ (52,943)	4
5	Regulatory Amortizations	WP C-2, Adj 16	407.3	4,136,405	(3,798,881)	337,524	5
6	Total Arizona Regulatory Amortizations	Ln 4 + Ln 5		$ 4,083,462	$ (3,798,881)	$ 284,581	6
				Sch A-1, Sh 2, Ln 13(b)	Sch A-1, Sh 2, Ln 13(c)	Sch A-1, Sh 2, Ln 13(d)	
7	Total Depreciation and Amortization Expense	Ln 3 + Ln 6		$ 94,916,312	$ (1,574,703)	$ 93,341,609	7
	System Allocable						
8	Depreciation	WP C-2, Adj 13, Sh 3, Ln 19	403	$ 407,125	$ 11,811	$ 418,936	8
9	Amortization	WP C-2, Adj 13, Sh 3, Ln 20	404.3	9,075,840	1,607,799	10,683,639	9
10	Total System Allocable Depreciation and Amortization	Ln 8 + Ln 9		$ 9,482,964	$ 1,619,610	$ 11,102,575	10
11	Arizona 4-Factor [3]	Sch C-1, Sh 17, Ln 10(b)		56.25%	56.25%	56.25%	11
12	Arizona Allocation	Ln 10 * Ln 11		$ 5,333,983	$ 910,999	$ 6,244,982	12
				Sch A-1, Sh 2, Ln 12(b)	Sch A-1, Sh 2, Ln 12(c)	Sch A-1, Sh 2, Ln 12(d)	
13	Total Depreciation and Amortization	Ln 7 + Ln 12		$ 100,250,295	$ (663,704)	$ 99,586,591	13

SOUTHWEST GAS CORPORATION
ARIZONA
SUMMARY OF OTHER TAXES
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010
AS ADJUSTED FOR THE TEST YEAR

Line No.	Description	Reference	Recorded at 6/30/2010	Adjustments	Adjusted at 6/30/2010	Line No.
	(a)	(b)	(c)	(d)	(e)	
			[1]	[2]	(c) + (d)	
1	Property Tax	408.1	$ 25,730,392	$ 1,457,495	$ 27,187,887	1
2	Miscellaneous	408.1	15,991	0	15,991	2
3	Total Other Taxes	Ln 1 + Ln 2	$ 25,746,383	$ 1,457,495	$ 27,203,877	3
			Sch C-1, Sh 1, Col 14 (c)	Sch C-1, Sh 1, Col 14 (d)	Sch C-1, Sh 1, Col 14 (e)	

[1] Source: Company Records
[2] Schedule C-2, Adjustment No. 14

SOUTHWEST GAS CORPORATION
ARIZONA
INCOME TAXES ON OPERATIONS
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010
AS ADJUSTED FOR THE TEST YEAR

Line No.	Description [1]	Recorded at 6/30/2010	Adjusted at 6/30/2010	After Rate Relief	Line No.
	(a)	(b)	(c)	(d)	
	State Income Tax				
1	Margin	$ 427,436,762	$ 410,912,098	$ 484,101,536	1
2	Expenses	321,471,091	331,628,903	331,815,008	2
3	Taxable Income Before Interest	$ 105,965,671	$ 79,283,195	$ 152,286,528	3
4	Interest Expense (Line 24)	42,471,450	42,713,744	42,713,744	4
5	State Taxable Income	$ 63,494,221	$ 36,569,451	$ 109,572,784	5
6	Effective State Income Tax Rate [2]	6.9680%	6.9680%	6.9680%	6
7	State Income Tax	$ 4,424,277	$ 2,548,159	$ 7,635,032	7
8	South Georgia Amortization [3]	0	0	0	8
9	Investment Tax Credit [3]	0	0	0	9
10	State Income Tax	$ 4,424,277	$ 2,548,159	$ 7,635,032	10
	Federal Income Tax				
11	Margin	$ 427,436,762	$ 410,912,098	$ 484,101,536	11
12	Expenses	321,471,091	331,628,903	331,815,008	12
13	Taxable Income Before Interest	$ 105,965,671	$ 79,283,195	$ 152,286,528	13
14	Interest Expense (Line 24)	42,471,450	42,713,744	42,713,744	14
15	Federal Taxable Income	$ 63,494,221	$ 36,569,451	$ 109,572,784	15
16	Federal Income Tax Rate [2]	32.5612%	32.5612%	32.5612%	16
17	Federal Income Tax	$ 20,674,480	$ 11,907,452	$ 35,678,213	17
18	South Georgia Amortization [3]	290,114	290,114	290,114	18
19	Investment Tax Credit [3]	(528,360)	(528,360)	(528,360)	19
20	Federal Income Tax	$ 20,436,234	$ 11,669,206	$ 35,439,967	20
21	Total Federal and State Income Tax	$ 24,860,511	$ 14,217,365	$ 43,074,999	21
		Sch A-1, Sh 2, Ln 16(b)	Sch A-1, Sh 2, Ln 16(d)	Sch A-1, Sh 2, Ln 16(f)	
	Interest Calculation				
22	Rate Base	$ 1,067,610,066	$ 1,073,700,633	$ 1,456,517,467	22
23	Weighted Cost of Debt	3.98%	3.98%	2.93%	23
24	Interest Expense	$ 42,471,450	$ 42,713,744	$ 42,713,744	24

[1] Schedule A-1, Sheet 1
[2] Schedule C-3, Sheet 3
[3] Schedule C-3, Sheet 2, Ln 8-9; Ln 18-19

SOUTHWEST GAS CORPORATION
COMPUTATION OF FOUR FACTOR ALLOCATION RATE
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description [1]	Arizona	Northern California	Southern California	South Lake Tahoe	Northern Nevada	Southern Nevada	Total	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	
	Factor I								
1	Direct Operating Expenses	$ 134,196,705	$ 2,475,603	$ 19,558,856	$ 2,460,815	$ 14,370,517	$ 57,987,993	$ 231,050,489	1
2	Percent of Total	58.08%	1.07%	8.47%	1.07%	6.22%	25.10%	100.00%	2
	Factor II								
3	Average Direct Gross Plant in Service	$ 2,185,134,009	$ 90,725,492	$ 294,560,011	$ 24,268,201	$ 208,004,340	$ 1,194,443,833	$ 3,997,135,886	3
4	Percent of Total	54.67%	2.27%	7.37%	0.61%	5.20%	29.88%	100.00%	4
	Factor III								
5	Direct Labor	$ 53,402,977	$ 937,417	$ 8,294,088	$ 709,830	$ 6,288,420	$ 22,018,694	$ 91,651,426	5
6	Percent of Total	58.27%	1.02%	9.05%	0.77%	6.86%	24.02%	100.00%	6
	Factor IV								
7	Average Number of Customers	974,596	24,696	135,705	19,014	89,694	561,901	1,805,606	7
8	Percent of Total	53.98%	1.37%	7.52%	1.05%	4.97%	31.12%	100.00%	8
9	Total 4-Factor	224.99%	5.73%	32.40%	3.50%	23.25%	110.12%	400.00%	9
10	4-Factor	56.25%	1.43%	8.10%	0.87%	5.81%	27.53%	100.00%	10
	A&G Transfer Rate								
11	A&G Overheads	$ 6,670,910	$ 172,476	$ 397,351	$ 115,712	$ 283,822	$ 2,853,503	$ 10,493,775	11
12	Percent of Total	63.57%	1.64%	3.79%	1.10%	2.70%	27.19%	100.00%	12

[1] Source: Company Records

SOUTHWEST GAS CORPORATION
CALCULATION OF THE MODIFIED MASSACHUSETTS FORMULA
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description [1] (a)	Arizona (b)	Northern California (c)	South Lake Tahoe (d)	Southern California (e)	Northern Nevada (f)	Southern Nevada (g)	Paiute (h)	SGTC (i)	Total (j)	Line No.
1	Total Direct Labor	$ 53,402,977	$ 937,417	$ 709,830	$ 8,294,088	$ 6,288,420	$ 22,018,694	$ 3,047,196	$ 0	$ 94,698,624	1
2	Percent to Total	56.39%	0.99%	0.75%	8.76%	6.64%	23.25%	3.22%	0.00%	100.00%	2
3	Margin	$ 427,436,760	$ 16,130,205	$ 6,635,831	$ 59,222,636	$ 38,904,883	$ 199,774,699	$ 31,539,646	$ 456,553	$ 780,101,213	3
4	Percent to Total	54.79%	2.07%	0.85%	7.59%	4.99%	25.61%	4.04%	0.06%	100.00%	4
5	Gross Plant	$ 2,252,566,706	$ 92,366,970	$ 24,564,496	$ 298,873,734	$ 213,050,215	$ 1,249,492,109	$ 178,229,049	$ 2,208,093	$ 4,311,351,372	5
6	Percent to Total	52.25%	2.14%	0.57%	6.93%	4.94%	28.98%	4.13%	0.05%	100.00%	6
7	Total (Line 2 + Line 4 + Line 6)	163.43%	5.20%	2.17%	23.28%	16.57%	77.84%	11.39%	0.11%	300.00%	7
8	Total Modified Mass Formula (Line 7 / 3)	54.48%	1.73%	0.72%	7.76%	5.52%	25.95%	3.80%	0.04%	100.00%	8

[1] Source: Company Records

SOUTHWEST GAS CORPORATION
ARIZONA
SUMMARY OF OPERATING INCOME ADJUSTMENTS
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description [1] (a)	Revenues and Volumes Adj. No. 1 (b)	Purchased Gas Cost Adj. No. 2 (c)	Labor / Loading Annualization Adj. No. 3 (d)	Call Center and Support Allocation and Annualization Adj. No. 4 (e)	Cost of Service Analysis Adj. No. 5 (f)	Employee Vehicle Compensation Adj. No. 6 (g)	Uncollectible Expense Annualization Adj. No. 7 (h)	Leak Survey and Repair Adj. No. 8 (i)	Injuries and Damages Adj. No. 9 (j)	Line No.
1	Operating Revenue	$ (423,844,760)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	1
2	Gas Cost	0	(407,320,096)	0	0	0	0	0	0	0	2
3	Operating Margin	$ (423,844,760)	$ 407,320,096	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	3
	Operating Expenses										
4	Other Gas Supply	$ 0	$ 0	$ 57,398	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	4
5	Distribution	0	0	4,555,703	0	(19,076)	(60,789)	0	(178,871)	0	5
6	Customer Accounts	0	0	1,479,923	690,350	(60,073)	0	436,181	0	0	6
7	Customer Service and Information	0	0	35,566	0	(126,860)	0	0	0	0	7
8	Sales	0	0	0	0	(58,740)	0	0	0	0	8
	Administrative and General										
9	Direct	0	0	63,925	0	0	0	0	0	297,461	9
10	System Allocable	0	0	1,659,968	0	11,971	(166,443)	0	0	392,160	10
	Depreciation and Amortization										
11	Direct	0	0	0	0	0	0	0	0	0	11
12	System Allocable	0	0	0	0	0	0	0	0	0	12
13	Regulatory Amortizations	0	0	0	0	0	0	0	0	0	13
14	Taxes Other Than Income	0	0	0	0	0	0	0	0	0	14
15	Interest on Customer Deposits	0	0	0	0	0	0	0	0	0	15
16	Total Operating Expenses	$ 0	$ 0	$ 7,852,483	$ 690,350	$ (252,777)	$ (227,232)	$ 436,181	$ (178,871)	$ 689,621	16
17	Net Operating Income	$ (423,844,760)	$ 407,320,096	$ (7,852,483)	$ (690,350)	$ 252,777	$ 227,232	$ (436,181)	$ 178,871	$ (689,621)	17
	Rate Base										
	Gas Plant in Service										
18	Direct	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	18
19	System Allocable	0	0	0	0	0	0	0	0	0	19
20	Total Gross Plant	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	20
	Accumulated Provision for Depreciation and Amortization										
21	Direct	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	21
22	System Allocable	0	0	0	0	0	0	0	0	0	22
23	Total Accumulated Provision for Depreciation and Amortization	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	23
24	Net Plant in Service	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	24
	Other Rate Base Items										
25	Working Capital	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	25
26	Customer Advances	0	0	0	0	0	0	0	0	0	26
27	Customer Deposits	0	0	0	0	0	0	0	0	0	27
28	Deferred Taxes	0	0	0	0	0	0	0	0	0	28
29	Total Other Rate Base Items	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	29
30	Total Rate Base	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	30

[1] Schedule C-2, Adjustment No. 1-9

SOUTHWEST GAS CORPORATION
ARIZONA
SUMMARY OF OPERATING INCOME ADJUSTMENTS
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description [1] (a)	American Gas Association ("AGA") Dues Adj. No. 10 (b)	Paiute Pipeline/SGTC Annualization Adj. No. 11 (c)	Rate Case Expense Adj. No. 12 (d)	Depreciation and Amortization Expense Annualization Adj. No. 13 (e)	Property Tax Annualization Adj. No. 14 (f)	Interest on Customer Deposits Adj. No. 15 (g)	Surcharge Adjustment Adj. No. 16 (h)	Completed Construction Not Classified ("CCNC") Adj. No. 17 (i)	Total of Adjustments (j)	Line No.
1	Operating Revenue	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	0	$ 0	$ (423,844,760)	1
2	Gas Cost	0	0	0	0	0	0	0	0	(407,320,096)	2
3	Operating Margin	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	0	$ 0	$ (16,524,664)	3
	Operating Expenses										
4	Other Gas Supply	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	0	$ 0	$ 57,398	4
5	Distribution	0	0	0	0	0	0	0	0	4,296,967	5
6	Customer Accounts	0	0	0	0	0	0	0	0	2,546,381	6
7	Customer Service and Information	0	0	0	0	0	0	0	0	(91,294)	7
8	Sales	0	0	0	0	0	0	0	0	(58,740)	8
	Administrative and General										
9	Direct	0	0	33,386	0	0	0	0	0	394,772	9
10	System Allocable	(16,324)	44,593	0	0	0	0	0	0	1,925,925	10
	Depreciation and Amortization										
11	Direct	0	0	0	2,224,178	0	0	0	0	2,224,178	11
12	System Allocable	0	0	0	910,999	0	0	0	0	910,999	12
13	Regulatory Amortizations	0	0	0	0	0	0	(3,798,881)	0	(3,798,881)	13
14	Taxes Other Than Income	0	0	0	0	1,457,495	0	0	0	1,457,495	14
15	Interest on Customer Deposits	0	0	0	0	0	292,612	0	0	292,612	15
16	Total Operating Expenses	$ (16,324)	$ 44,593	$ 33,386	$ 3,135,177	$ 1,457,495	$ 292,612	(3,798,881)	$ 0	$ 10,157,812	16
17	Net Operating Income	$ 16,324	$ (44,593)	$ (33,386)	$ (3,135,177)	$ (1,457,495)	$ (292,612)	3,798,881	$ 0	$ (26,682,476)	17
	Rate Base										
	Gas Plant in Service										
18	Direct	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	0	$ 2,806,169	$ 2,806,169	18
19	System Allocable	0	0	0	0	0	0	0	3,284,398	3,284,398	19
20	Total Gross Plant	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	0	$ 6,090,567	$ 6,090,567	20
	Accumulated Provision for Depreciation and Amortization										
21	Direct	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	0	$ 0	$ 0	21
22	System Allocable	0	0	0	0	0	0	0	0	0	22
23	Total Accumulated Provision for Depreciation and Amortization	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	0	$ 0	$ 0	23
24	Net Plant in Service	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	0	$ 6,090,567	$ 6,090,567	24
	Other Rate Base Items										
25	Working Capital	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	0	$ 0	$ 0	25
26	Customer Advances	0	0	0	0	0	0	0	0	0	26
27	Customer Deposits	0	0	0	0	0	0	0	0	0	27
28	Deferred Taxes	0	0	0	0	0	0	0	0	0	28
29	Total Other Rate Base Items	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	0	$ 0	$ 0	29
30	Total Rate Base	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	0	$ 6,090,567	$ 6,090,567	30

[1] Schedule C-2, Adjustment No. 10-18

SOUTHWEST GAS CORPORATION
ARIZONA
SALES, TRANSPORTATION QUANTITY AND REVENUES - ADJUSTMENT NO. 1
TEST YEAR ENDED JUNE 30, 2010

Line No.	Description	Recorded At 6/30/2010	Adjustment No. 1	Test Period Balance As Adjusted	Line No.
	(a)	(b)	(c)	(d)	
1	Sales Quantity (Therms)	572,469,521	(55,803,973)	516,665,548	1
2	Transportation Quantity (Therms)	122,723,461	2,845,343	125,568,804	2
3	Total Quantity	695,192,982	(52,958,630)	642,234,352	3
4	Revenue	$ 834,756,858	$ (423,844,760)	$ 410,912,098	4
5	Total Revenue Adjustment		$ (423,844,760)		5

Explanation:

To adjust for changes in number of bills and sales volumes, to annualize revenues at currently effective rates, to reverse unbilled revenues and to remove gas cost from the cost of service.

SOUTHWEST GAS CORPORATION
ARIZONA
PURCHASED GAS COST - ADJUSTMENT NO. 2
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	FERC Account Number	Amount	Line No.
1	Operating Expense	401.00	$ 388,924,571	1

Explanation:
To adjust for changes in sales volumes and to adjust the average cost of purchased gas to match the average cost of purchased gas included in currently effective base tariff sales rates.

Line No.	Details	FERC Account Number	Amount	Line No.
	Gas Supply Expenses			
2	Present Volume Adjustment	803.00	(31,429,992)	2
3	Present Rate Adjustment	803.00	64,678,735	3
4	Proposed Rate Making Adjustment	803.00	355,675,828	4
5	Purchased Gas Cost Adjustments	805.10	-	5
6	Gas Used for Compressor Station Fuel	810.00	-	6
7	Transmission and Compression of Gas	858.00	-	7
8	Total Gas Supply Expenses		$ 388,924,571	8
9	Adjustments No. 2		$ 388,924,571	9

SOUTHWEST GAS CORPORATION
ARIZONA
COST OF PURCHASED GAS - ACCOUNT NO. 803 - ADJUSTED AT PRESENT RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Recorded Total	Volume Adjustment			Rate Adjustment			Adjusted Total	Line No.
			Sales	Gas Engines	Optional	Sales	Gas Engines	Optional		
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
1	Sales Volumes (Therms)	572,469,521	(55,635,625)	(69,804)	(98,544)	467,761,500	7,272,353	41,631,695	516,665,548	1
2	Recorded Average Cost of Purchasd Gas - Account No. 803	$ 0.56322	$ 0.56322	$ 0.56322	$0.56322	$ 0.56322	$ 0.56322	$ 0.56322		2
3	Cost of Purchased Gas [1]					$ 0.70873	$ 0.50345	$ 0.49236		3
4	Change in Average Cost of Purchased Gas					$ 0.14551	$ (0.05977)	$ (0.07086)		4
5	Cost of Purchased Gas - Account No. 803	$322,427,085	$(31,335,175)	$ (39,315)	$ (55,502)	$ 68,063,321	$ (434,679)	$(2,949,907)	$355,675,828	5

[1] Cost of gas effective July 30, 2010 excluding surcharges. Optional is average cost during test year.

SOUTHWEST GAS CORPORATION
ARIZONA
LABOR / LOADING ANNUALIZATION
ADJUSTMENT NO. 3

Line No.	Description	Labor [1]	Loading [2]	Total	Line No.
	(a)	(b)	(c)	(d) (b) + (c)	
	Operations				
1	Account 813	$ 13,740	$ 43,657	$ 57,398	1
2	Account 870	(2,590)	682,454	679,864	2
3	Account 871	5,879	18,721	24,600	3
4	Account 874	(3,007)	373,117	370,111	4
5	Account 875	(1,115)	137,400	136,285	5
6	Account 878	(4,729)	584,950	580,221	6
7	Account 879	(4,992)	618,706	613,714	7
8	Account 880	8,534	494,252	502,785	8
9	Account 901	(1,288)	158,707	157,419	9
10	Account 902	(830)	102,317	101,487	10
11	Account 903	38,401	1,157,156	1,195,558	11
12	Account 905	(210)	25,669	25,460	12
13	Account 908	4,866	30,700	35,566	13
14	Account 911	0	0	0	14
15	Account 920	393,447	1,562,781	1,956,229	15
16	Account 922	(62,886)	(249,784)	(312,670)	16
17	Account 930	3,451	0	3,451	17
18	Total Operating Expense	$ 386,672	$ 5,740,803	$ 6,127,475	18
	Maintenance				
19	Account 885	$ (1,436)	$ 217,155	$ 215,718	19
20	Account 886	(6)	787	780	20
21	Account 887	(6,463)	803,356	796,893	21
22	Account 889	(723)	89,705	88,982	22
23	Account 892	(3,166)	392,560	389,394	23
24	Account 893	(1,159)	143,737	142,578	24
25	Account 894	(111)	13,890	13,779	25
26	Account 935	2,089	74,795	76,884	26
27	Total Maintenance Expense	$ (10,977)	$ 1,735,985	$ 1,725,008	27
28	Total Operations and Maintenance	$ 375,695	$ 7,476,788	$ 7,852,483	28
	Functionalization				
29	Other Gas Supply	$ 13,740	$ 43,657	$ 57,398	29
30	Distribution	(15,086)	4,570,789	4,555,703	30
31	Customer Accounts	36,073	1,443,850	1,479,923	31
32	Customer Service & Information	4,866	30,700	35,566	32
33	Sales	0	0	0	33
34	Administrative and General	336,101	1,387,792	1,723,894	34
35	Total	$ 375,695	$ 7,476,788	$ 7,852,483	35
				Sch C-2, Sh 1, Col (d)	

Explanation
To annualize labor and labor related loadings as of June 30, 2010 to reflect within-grade increases through December 31, 2010, and a 2.62% general wage increase effective June 2011.

[1] Workpapers C-2, Adjustment No. 3, Sheet 1-2, Col (l)
[2] Workpapers C-2, Adjustment No. 3, Sheet 1-2, Col (m)

SOUTHWEST GAS CORPORATION
ARIZONA
CALL CENTER AND SUPPORT FUNCTION ALLOCATION AND ANNUALIZATION
ADJUSTMENT NO. 4

Line No.	Description (a)	Reference (b)	Account Number (c)	Amount (d)	Line No.
1	Call Center and Support Function Allocation	WP C-2, Adj 4, Sh 1, Ln 6(d)	903	$ 443,340	1
2	Contract Labor Annualization	WP C-2, Adj 4, Sh 2, Ln 6(d)	903	247,010	2
3	Total	Ln 1 + Ln 2		$ 690,350	3
				Sch C-2, Sh 1, Col (e)	

SOUTHWEST GAS CORPORATION
ARIZONA
COST OF SERVICE ANALYSIS
ADJUSTMENT NO. 5

Line No.	Account Number (a)	Reference (b)	Amount [1] (c)	Paiute & SGTC Allocation [2] 3.80% (d)	Net of Paiute (e) (c) - (d)	Allocation Factor [3] (f)	Total (g) (e) * (f)	Line No.
	Arizona							
1	870		$ (11,628)				$ (11,628)	1
2	875		(798)				(798)	2
3	880		(107,801)				(107,801)	3
4	881		101,151				101,151	4
5	Subtotal Distribution	Line 1 to Line 4	$ (19,076)				$ (19,076)	5
6	903		$ (34,050)				$ (34,050)	6
7	Subtotal Customer Accounts	Line 6	$ (34,050)				$ (34,050)	7
8	908		$ (90,700)				$ (90,700)	8
9	909		(2,245)				(2,245)	9
10	910		(39,442)				(39,442)	10
11	Subtotal Customer Service & Information	Line 8 to Line 10	$ (132,387)				$ (132,387)	11
12	913		$ (58,740)				$ (58,740)	12
13	Subtotal Sales	Line 12	$ (58,740)				$ (58,740)	13
14	Subtotal Arizona	Line 5 + 7 + 11 + 13	$ (244,253)				$ (244,253)	14
	System Allocable							
15	903		$ (48,211)		$ (48,211)	53.98%	$ (26,023)	15
16	Subtotal Customer Accounts	Line 15	$ (48,211)		$ (48,211)		$ (26,023)	16
17	908		$ 9,827		$ 9,827	56.25%	$ 5,527	17
18	Subtotal Customer Service & Information	Line 17	$ 9,827		$ 9,827		$ 5,527	18
19	921		$ (77,044)	$ (2,926)	$ (74,118)	56.25%	$ (41,690)	19
20	923		112,982	4,291	108,691	56.25%	61,137	20
21	930.1		(19,051)	(724)	(18,327)	56.25%	(10,309)	21
22	930.2		(1,240)	(47)	(1,193)	56.25%	(671)	22
23	931		6,476	246	6,230	56.25%	3,504	23
24	Subtotal Administrative and General	Line 19 to 23	$ 22,123	$ 840	$ 21,283		$ 11,971	24
25	Subtotal System Allocable	Line 16 + 18 + 24	$ (16,261)	$ 840	$ (17,102)		$ (8,524)	25
26	Total Adjustment	Line 14 + 25					$ (252,777) Sch C-2, Sh 1, Col (f)	26

Explanation
To remove various expenditures from the cost of service.

[1] Workpapers C-2, Adjustment No. 6, Sheet 1, Col (b)
[2] Schedule C-1, Sheet 18, Ln 8(h)
[3] Allocation factors calculated in Schedule C-1, Sheet 17. Accounts 813, 921, 930.2 and 935 are allocated using the 4-Factor and account 903 is allocated based on Factor IV.

SOUTHWEST GAS CORPORATION
ARIZONA
EMPLOYEE VEHICLE COMPENSATION
ADJUSTMENT NO. 6

Line No.	Description (a)	Reference (b)	Account Number (c)		Amount (d)	Line No.
1	Arizona	Company Records	870	$	(60,789)	1
2	System Allocable	Company Records	920	$	(307,709)	2
3	Less: Paiute & SGTC Allocation at 3.83%	Ln 2 * [Sch C-1, Sh 18, Ln 8(h)+(i)]			11,800	3
4	Adjustment Before 4-Factor Allocation			$	(295,909)	4
5	Arizona 4-Factor Allocation	Sch C-1, Sh 17, Ln 10(b)			56.25%	5
6	Adjustment Allocated to Arizona	Ln 4 * Ln 5		$	(166,443)	6
7	Total Adjustment	Ln 1 + Ln 6		$	(227,232)	7
					Sch C-2, Sh 1, Col (g)	

Explanation
To remove imputed earnings associated with an employees' personal use of a company vehicle.
Includes employees who fall under "Category D" of the Southwest Gas Standard Practice 100.1.

SOUTHWEST GAS CORPORATION
ARIZONA
UNCOLLECTIBLE EXPENSE ANNUALIZATION
ADJUSTMENT NO. 7

Line No.	Description (a)	Reference (b)	Amount (c)	Line No.
1	Revenue at Present Rates	Sch H-2, Sh 1-4	$ 790,071,813	1
2	Write-Off Percent of Revenue	Ln 8	0.2543%	2
3	Annualized Uncollectible Expense	Ln 1 * Ln 2	$ 2,008,980	3
4	Less: Recorded Uncollectible Expense	Sch C-1, Sh 7, Ln 20(c)	1,572,798	4
5	Adjustment to Uncollectible Expense	Ln 3 - Ln 4	$ 436,181 Sch C-2, Sh 1, Col (h)	5
	Detail:			
6	Net Closing Bill Write-Offs 12 Months Ended 6/30/2010	Company Records	$ 2,117,907	6
7	Recorded Revenue	Company Records	$ 832,909,433	7
8	Net Closing Bill Write-Off as a Percent of Revenue	Ln 6 / Ln 7	0.2543% Ln 2 (c)	8

SOUTHWEST GAS CORPORATION
ARIZONA
LEAK SURVEY AND REPAIR
ADJUSTMENT NO. 8

Line No.	Description (a)	Account Number (b)	Leak Repair [1] (c)	Accelerated Leak Survey [1] (d)	Total Adjustment (e)	Line No.
1	Maintenance of Mains	887	$ (58,772)	$ (64,857)	$ (123,629)	1
2	Maintenance of Services	892	(17,831)	(37,411)	(55,242)	2
3	Total Adjustment		$ (76,603)	$ (102,268)	$ (178,871)	3
					Sch C-2, Sh 1, Col (i)	

[1] Workpapers C-2, Adjustment No. 8, Sheets 1-4

SOUTHWEST GAS CORPORATION
ARIZONA
SELF-INSURED RETENTION NORMALIZATION
ADJUSTMENT NO. 9

Line No.	Description (a)	Reference (b)	Allocation Percent (c)	Arizona Direct (d)	System Allocable (e)	Total Arizona Accrual (f)	Line No.
	Claims Paid						
1	< $1,000,000	WP C-2, Adj 9, Sh 1, Ln 12(h)		$ 6,349,611	$ -		1
2	At $1,000,000	WP C-2, Adj 9, Sh 1, Ln 24(h)		2,000,000	-		2
3	$5,000,000 Aggregate	WP C-2, Adj 9, Sh 1, Ln 36(j)		-	10,000,000		3
4	Total Claims Paid	Ln 1 + Ln 2 + Ln 3		$ 8,349,611	$ 10,000,000		4
5	10-Year Average	Ln 4 / 10		$ 834,961	$ 1,000,000		5
6	Recorded Amounts	Company Records		537,500	275,000		6
7	Total Adjustment	(Ln 5 - Ln 4)		$ 297,461	$ 725,000		7
8	Less: FERC Allocation @ 3.83%	Ln 7 *- [Sch C-1, Sh 18, Ln 8(h)+(i)]	3.83%		(27,803)		8
9	Net System Allocable				$ 697,197		9
10	Arizona 4-Factor	Sch C-1, Sh 17, Ln 10(b)	56.25%				10
11	Total Adjustment to Arizona	Ln 9 * Ln 10		$ 297,461	$ 392,160	$ 689,621	11
				Sch C-2, Sh 1 Ln 9(j)	Sch C-2, Sh 1 Ln 10(j)		

SOUTHWEST GAS CORPORATION
ARIZONA
AMERICAN GAS ASSOCIATION ("AGA") DUES
ADJUSTMENT NO. 10

Line No.	Description (a)	Reference (b)	Account Number (c)		Amounts (d)	Line No.
1	2009 AGA Dues	Company Records	930.2	$	495,541	1
2	Lobbying Percentage	AGA's Budget			6.09%	2
3	Lobbying Amount of Dues	Ln 1 * Ln 2		$	(30,178)	3
4	Less: Paiute & SGTC Allocation at 3.83%	Ln 3 *-[Sch C-1, Sh 18, Ln 8(h)+(i)]			1,157	4
5	Adjustment to AGA Dues Before 4-Factor	Ln 3 + Ln 4		$	(29,021)	5
6	Arizona 4-Factor Allocation	Sch C-1, Sh 17, Ln 10(b)			56.25%	6
7	Adjustment to Arizona for Removal of Lobbying from AGA Dues	Ln 6 * Ln 7		$	(16,324)	7
					Sch C-2, Sh 2, Ln 10 (b)	

Explanation:
To remove the lobbying portion of the AGA

SOUTHWEST GAS CORPORATION
SYSTEM ALLOCABLE
ADMINISTRATIVE AND GENERAL EXPENSES
ANNUALIZED PAIUTE ALLOCATION
ADJUSTMENT NO. 11

Line No.	Description	FERC Account Number	12 Months Ended 06/30/2010 Net Recorded [1]	12 Months Ended 06/30/2010 Charged to Paiute [2]	12 Months Ended 06/30/2010 Gross Recorded	MMF Allocation Paiute [3]	Paiute Annualized	Reduction to Paiute's A&G Expenses	Amount Allocated to Arizona [4]	Line No.
	(a)	(b)	(c)	(d)	(e) (c) + (d)	(f)	(g)	(h) (d) - (g)	(i)	
1	Administrative and General Salaries	920	$ 64,384,406	$ 2,585,020	$ 66,969,426	3.80%	$ 2,543,667	$ 41,353	$ 23,260	1
2	Office Supplies	921	12,690,961	509,554	13,200,515	3.80%	501,389	8,166	4,593	2
3	Outside Services Employed	923	13,924,587	573,321	14,497,907	3.80%	550,667	22,654	12,742	3
4	Property Insurance	924	451,025	104,401	555,425	19.92% [5]	110,630	(6,229)	(3,405)	4
5	Injuries and Damages	925	10,071,888	403,853	10,475,741	3.80%	397,895	5,958	3,351	5
6	Miscellaneous General Expenses	930.2	5,037,153	201,954.56	5,239,108	3.80%	198,994	2,960	1,665	6
7	Rents	931	4,410,275	177,176	4,587,451	3.80%	174,243	2,934	1,650	7
8	Maintenance of General Plant	935	2,187,865	87,741	2,275,606	3.80%	86,433	1,308	736	8
9	Total		$ 113,158,159	$ 4,643,021	$ 117,801,180		$ 4,563,917	$ 79,104	$ 44,593 Sch C-2, Sh 2, Ln 10(c)	9

Explanation
Consistent with the methodology accepted by the Commission in previous rate cases, this adjustment annualizes the recorded amounts allocated to Paiute Pipeline to reflect Paiute's MMF allocation percentage based on the test year ended June 30, 2010.

Note:
Account 493, Rent from Gas Property, changed by -91,985 due to annualizing the Paiute rental charge at June 30, 2010. (Workpaper C-2, Adjustment No. 11.)

[1] Schedule C-1, Sheet 9, Col (f)
[2] Source: Company Records.
[3] Schedule C-1, Sheet 18, Ln 8(h)
[4] All accounts, except 924, are allocated to Arizona using the 4-Factor (Schedule C-1, Sheet 17, Ln 10(b)). Account 924 uses the Factor II percentage (Schedule C-1, Sheet 17, Ln 4(b).)
[5] Workpapers C-2, Adjustment No. 11, Sheet 3, Ln 5(b)

SOUTHWEST GAS CORPORATION
ARIZONA
SCHEDULE OF ESTIMATED INCREMENTAL RATE CASE EXPENSE
ADJUSTMENT NO. 12

Line No.	Description (a)	Account Number (b)		Estimated Amounts [1] (c)	Line No.
	2010 Arizona Rate Case				
1	Printing / Copying / Postage / Freight		$	150,000	1
2	Professional Services			175,000	2
3	Notice / Publication			30,000	3
4	Court Reporting			25,000	4
5	Travel / Transportation			80,000	5
6	Total Arizona Rate Case Expense		$	460,000	6
7	Amortization Period (In Years) [2]			3	7
8	Annual Arizona Rate Case Expense	928	$	153,333	8
9	Rate Case Expense Recorded in Test Year	928		119,948	9
10	Adjustment to Test Year Expense (Ln 8 - Ln 9)		$	33,386	10
				Sch C-2, Sh 2, Ln 9(d)	

[1] Source: Company Records
[2] The Company proposes to amortize its incremental rate case expense over three years, which is the estimated length of its Arizona rate case cycle.

SOUTHWEST GAS CORPORATION
ARIZONA
DEPRECIATION AND AMORTIZATION EXPENSE ANNUALIZATION
ADJUSTMENT NO. 13

Line No.	Description (a)	Recorded at 06/30/2010 (b)	Annualization Adjustment (c)	Adjusted at 06/30/2010 (d) (b) + (c)	Line No.
	Arizona [1]				
1	Depreciation Expense	$ 90,715,741	$ 2,222,237	$ 92,937,977	1
2	Amortization Expense	117,109	1,941	119,050	2
3	Total	$ 90,832,850	$ 2,224,178	$ 93,057,028	3
	System Allocable [1]				
4	Depreciation Expense	$ 407,125	$ 11,811	$ 418,936	4
5	Amortization Expense	9,075,840	1,607,799	10,683,639	5
6	Total	$ 9,482,964	$ 1,619,610	$ 11,102,575	6
7	Arizona 4-Factor [2]	56.25%	56.25%	56.25%	7
8	Amount Allocated to Arizona (Ln 6 * Ln 7)	$ 5,333,983	$ 910,999	$ 6,244,982	8
9	Total (Ln 3 + Ln 8)	$ 96,166,833	$ 3,135,177 Sch C-2, Sh 2, Col (e)	$ 99,302,010	9

Explanation:
This adjustment annualizes depreciation and amortization expense as of June 30, 2010.

[1] Schedule C-1, Sheet 14
[2] Schedule C-1, Sheet 17, Ln 10(b)

SOUTHWEST GAS CORPORATION
ARIZONA
PROPERTY TAX ANNUALIZATION
ADJUSTMENT NO. 14

Line No.	Description (a)	Reference (b)		Arizona (c)	Line No.
1	Adjusted Net Plant in Service	Sch B-2, Sh 1, Ln 9(e)	$	1,369,045,176	1
	Add:				
2	Materials and Supplies	Sch B-5, Sh 1, Ln 2(c)		9,920,409	2
	Less:				
3	Transportation Equipment	[1]		(34,404,441)	3
4	Land Rights	[2]		(2,122,186)	4
5	Estimated Full Cash Value	Sum (Ln 1-4)	$	1,342,438,958	5
6	2011 Assessment Rate	Company Records		20.00%	6
7	Assessed Value	Ln 5 * Ln 6	$	268,487,792	7
8	Property Tax Rate	Company Records		10.1263%	8
9	Annualized Property Tax Expense	Ln 7 * Ln 8	$	27,187,887	9
10	Recorded Property Tax Expense	Sch C-1, Sh 15, Ln 1(c)		25,730,392	10
11	Total Adjustment	Ln 10 - Ln 9	$	1,457,495	11
				Sch C-2, Sh 2, Ln 14(f)	

Explanation:

To annualize Property Tax Expense to reflect adjusted investment at 6/30/2010 based on 2010 property tax rates and the statutory 2011 assessment ratio.

[1] Adjusted balance net of accumulated depreciation. (Workpapers B-2, [Sh 3, Ln 20 (e)]- [Sh 1, Ln 20(e)])

[2] Balance as recorded at 6/30/2010. (Workpapers B-2, [Sh 3, Ln 5 + 6 (e)]- [Sh 1, Ln 5 + 6(e)])

SOUTHWEST GAS CORPORATION
ARIZONA
INTEREST ON CUSTOMER DEPOSITS
ADJUSTMENT NO. 15

Line No.	Description	Account Number	Recorded at 06/30/2010	Adjustment	Adjusted at 06/30/2010	Line No.
	(a)	(b)	(c)	(d)	(e)	
			[1]			
1	Interest Expense	431	$ 2,615,905	$ 292,612	$ 2,908,517	1
				Sch C-2, Sh 2, Ln 15(g)		
	Customer Deposits	235			[2]	
2	June 2009				$ 46,367,307	2
3	July 2009				46,016,187	3
4	August 2009				46,180,110	4
5	September 2009				46,398,854	5
6	October 2009				47,473,974	6
7	November 2009				50,051,128	7
8	December 2009				51,079,073	8
9	January 2010				50,280,268	9
10	February 2010				49,844,907	10
11	March 2010				49,414,239	11
12	April 2010				49,314,251	12
13	May 2010				48,979,797	13
14	June 2010				48,778,514	14
15	Thirteen Month Total				$ 630,178,608	15
16	Thirteen Month Average				$ 48,475,278	16
17	Interest Rate [3]				6.00%	17
18	Adjusted Interest Expense				$ 2,908,517	18
					Ln 1(e)	

Explanation:
To synchronize interest on customer deposits with the adjusted average of the thirteen monthly balances of customer deposits used as a rate base reduction.

[1] Workpapers C-2, Adjustment No. 15, Sheet 1, Ln 13(b)
[2] Schedule B-6, Sheet 2, Col (b)
[3] Source: Company Records

SOUTHWEST GAS CORPORATION
ARIZONA
SURCHARGE ADJUSTMENT
ADJUSTMENT NO. 16

Line No.	Description (a)	Reference (b)	Account Number (c)		Amount (d)	Line No.
1	Recorded Regulatory Amortization	Company Records	407.3	$	4,136,405	1
	Adjustments:	Company Records				
2	R&D			$	(828,192)	2
3	TRIMP				(542,268)	3
4	Demand Side Management (DSM)				(2,428,422)	4
5	Total Adjustments	(Ln 2 + Ln 3+ Ln 4)		$	(3,798,881)	5
					Sch C-2, Sh 2, Ln 13(h)	
6	Annualized Regulatory Amortization	(Ln 1 +Ln 5)	407.3	$	337,524	6

Explanation:
R&D,TRIMP and DSM costs are recovered through a surcharge. Since the Company is not including the offsetting revenue in revenue at present rates, the expense is being removed with this adjustment.

SOUTHWEST GAS CORPORATION
ARIZONA
COMPUTATION OF GROSS REVENUE CONVERSION FACTOR

Line No.	Description (a)	Base Amount (b)	Rate (c)	Amount (d)	Line No.
1	Gross Operating Revenues			$ 1,000	1
2	Less: Uncollectibles [1]	$ 1,000.00	0.2543%	2.54	2
3	Subtotal			$ 997.46	3
4	Less: State Income Tax [2]	$ 997.46	6.9680%	69.50	4
5	Subtotal			$ 927.95	5
6	Less: Federal Income Tax [3]	$ 997.46	32.5612%	324.78	6
7	Total			$ 603.17	7
8	Gross Revenue Conversion Factor (Ln 1 / Ln 7)			1.6579	8
				Sch A-1, Sh 1 Ln 7(e)	

[1] Schedule C-2, Adj No. 7, Ln 8(c)
[2] Schedule C-3, Sheet 3, Ln 1(c)
[3] Schedule C-3, Sheet 3, Ln 3(c)

SOUTHWEST GAS CORPORATION
ARIZONA
INCOME TAXES ON OPERATIONS
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010
AS ADJUSTED

Line No.	Description [1]		Recorded at 6/30/2010		Adjustments		Adjusted at 6/30/2010	Line No.
	(a)		(b)		(c)		(d)	
1	Margin	$	427,436,762	$	(16,524,664)	$	410,912,098	1
2	Expenses		321,471,091		10,157,812		331,628,903	2
3	Taxable Income Before Interest	$	105,965,671	$	(26,682,476)	$	79,283,195	3
4	Interest Expense [2]		42,471,450		242,294		42,713,744	4
5	State Taxable Income	$	63,494,221	$	(26,924,770)	$	36,569,451	5
6	Effective State Income Tax Rate [3]		6.9680%		6.9680%		6.9680%	6
7	State Income Tax	$	4,424,277	$	(1,876,118)	$	2,548,159	7
8	South Georgia Amortization		0		0		0	8
9	Investment Tax Credit		0		0		0	9
10	State Income Tax	$	4,424,277	$	(1,876,118)	$	2,548,159	10
	Federal Income Tax							
11	Margin	$	427,436,762	$	(16,524,664)	$	410,912,098	11
12	Expenses		321,471,091		10,157,812		331,628,903	12
13	Taxable Income Before Interest	$	105,965,671	$	(26,682,476)	$	79,283,195	13
14	Interest Expense [2]		42,471,450		242,294		42,713,744	14
15	Federal Taxable Income	$	63,494,221	$	(26,924,770)	$	36,569,451	15
16	Effective Federal Income Tax Rate [4]		32.5612%		32.5612%		32.5612%	16
17	Federal Income Tax	$	20,674,480	$	(8,767,028)	$	11,907,452	17
18	South Georgia Amortization		290,114		0		290,114	18
19			(528,360)		0		(528,360)	19
20	Federal Income Tax	$	20,436,234	$	(8,767,028)	$	11,669,206	20
21	Total Federal and State Income Tax	$	24,860,511	$	(10,643,146)	$	14,217,365	21

[1] Schedule A-1, Sheet 2
[2] Interest Calculation

Line No.	Description		(b)		(c)		(d)	Line No.
22	Rate Base	$	1,067,610,066	$	6,090,567	$	1,073,700,633	22
23	Weighted Cost of Debt		3.98%		3.98%		3.98%	23
24	Interest Expense	$	42,471,450	$	242,294	$	42,713,744	24

[3] Schedule C-3, Sheet 3, Ln 1(c)
[4] Schedule C-3, Sheet 3, Ln 3(c)

SOUTHWEST GAS CORPORATION
ARIZONA
COMPUTATION OF STATE AND FEDERAL TAX RATES
AS OF JUNE 30, 2010

Line No.	Description (a)	Rate (b)	Rate (c)	Line No.
1	Current State Income Tax Rate (SIT)		6.9680%	1
			Sch C-3, Sh 2	
2	Current Federal Income Tax Rate (FIT)	35.0000%		2
	Effective Rate = FIT × (1-ESIT)			
3	.35 × (1-.06968)		32.5612%	3
			Sch C-3, Sh 2	
4	Total Effective Rate		39.5292%	4

Schedule D

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
COST OF CAPITAL AT JUNE 30, 2010

ORIGINAL COST RATE BASE (OCRB) COST OF CAPITAL

Line No.	Description (a)	Capital Ratio (b)	Capital Cost (c)		Weighted Cost of Capital (d)	Line No.
1	Long-Term Debt	47.70%	8.34%	[1]	3.98%	1
2	Common Equity	52.30%	11.00%	[2]	5.75%	2
3	Total	100.00%			9.73%	3

[1] Reference Schedule D-2, Sheet 1 of 4
[2] Reference Schedule D-4, Sheet 1 of 1

FAIR VALUE RATE OF RETURN

Line No.	Description (a)	Capital Ratio (b)	Capital Cost (c)		Weighted Cost of Capital (d)	Line No.
1	Long-Term Debt	35.16%	8.34%	[1]	2.93%	1
2	Common Equity	38.55%	11.00%	[2]	4.24%	2
3	Appreciation Above OCRB	26.28%	1.24%	[2]	0.32%	3
4	Total	100.00%			7.50%	4

[1] Reference Schedule D-2, Sheet 1 of 4
[2] Reference Schedule D-4, Sheet 1 of 1

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
NET CAPITAL AT JUNE 30, 2010

Line No.	Description	Net System Balance at 6/30/2010	Adjustments[1]	Pro Forma Net Capital Amounts	Capital Ratio	Line No.
	(a)	(b)	(c)	(d)	(e)	
	Debt					
	Long-Term Debt:					
1	Debentures & Medium Term Notes	$ 544,917,913	$ -	$ 544,917,913	31.60%	1
2	Term Facilities	(237,751)	-	(237,751)	-0.01%	2
3	Clark County IDRB's	464,830,661	(464,830,661)	-	0.00%	3
4	Big Bear IDRB's	49,409,425	(49,409,425)	-	0.00%	4
5	Total Long-Term Debt	$ 1,058,920,249	$ (514,240,086)	$ 544,680,163	31.58%	5
	Equity					
6	Preferred Equity	$ -	-	$ -	0.00%	6
7	Common Equity	1,179,859,197	-	1,179,859,197	68.42%	7
8	Total Equity	$ 1,179,859,197	$ -	$ 1,179,859,197	68.42%	8
9	Total Capital	$ 2,238,779,446	$ (514,240,086)	$ 1,724,539,360	100.00%	9

[1] Adjustments:

Clark County and Big Bear IDRB's are eliminated because those issues are used solely to fund qualified construction expenditures in Clark County, Nevada and San Bernardino County, California.

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
COST OF DEBT AT JUNE 30, 2010

Line No.	Description	Net Principal Amount Outstanding	Interest Rate	Cost of Debt	Line No.
	(a)	(b)	(c)	(d)	
1	Fixed Rate Debt [1]	$ 544,917,913	8.34%	$ 45,431,692	1
2	Variable Rate Debt [2]	(237,751)	0.00%	-	2
3	Total Long-Term Debt	$ 544,680,163	8.34%	$ 45,431,692	3

[1] Reference Schedule D-2, Sheet 2 of 4
[2] Reference Schedule D-2, Sheet 3 of 4

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
COST OF LONG-TERM FIXED RATE DEBT
AT JUNE 30, 2010

Line No.	Description (a)	Principal Amount Outstanding (b)	Unamortized Debt Expense and Discount (c)	Net Proceeds (d)	Effective Interest Rate (e)	Cost of Debt (f)	Line No.
	Debentures						
1	8.0% Debenture, Due 2026	75,000,000	5,643,965	69,356,035	8.89%	6,165,751	1
2	8.375% Note, Due 2011	200,000,000	269,521	199,730,479	8.61%	17,196,794	2
3	7.625% Note, Due 2012	200,000,000	501,616	199,498,384	7.79%	15,540,924	3
4	Total Debentures	$ 475,000,000	$ 6,415,102	$ 468,584,898	8.30%	$ 38,903,470	4
	Medium Term Notes						
5	7.59% MTN, Due 2017	$ 25,000,000	$ 110,402	$ 24,889,598	7.68%	$ 1,911,521	5
6	7.78% MTN, Due 2022	25,000,000	152,762	24,847,238	7.86%	1,952,993	6
7	7.92% MTN, Due 2027	25,000,000	189,418	24,810,582	8.00%	1,984,847	7
8	6.76% MTN, Due 2027	7,500,000	-	7,500,000	6.76%	507,000	8
9	Total Medium Term Notes	$ 82,500,000	$ 452,581	$ 82,047,419	7.75%	$ 6,356,361	9
	Unamortized Loss on						
10	Reacquired Debt[1]	$ -	$ 5,714,404	$ (5,714,404)		$ 171,862	10
11	Total Debentures and MTNs	$ 557,500,000	$ 12,582,087	$ 544,917,913	8.34%	$ 45,431,692	11
					Sch D-2, Sheet 1		
	Tax Exempt Clark County						
12	1999 Series A, Due 2038	12,410,000	529,269	11,880,731	6.53%	775,635	12
13	1999 Series C, Due 2038	14,320,000	722,364	13,597,636	6.45%	877,460	13
14	1999 Series D, Due 2038	8,270,000	416,854	7,853,146	6.03%	473,654	14
15	2003 Series C, Due 2038	30,000,000	1,300,664	28,699,336	5.86%	1,682,012	15
16	2003 Series D, Due 2038	20,000,000	1,620,221	18,379,779	6.03%	1,108,562	16
17	2003 Series E, Due 2038	15,000,000	171,154	14,828,846	5.91%	876,186	17
18	2004 Series A, Due 2034	65,000,000	2,235,271	62,764,729	5.90%	3,706,076	18
19	2004 Series B, Due 2033	31,200,000	1,587,331	29,612,669	5.81%	1,719,657	19
20	2005 Series A, Due 2034	100,000,000	2,681,564	97,318,436	5.28%	5,143,154	20
21	2006 Series B, Due 2033	24,855,000	475,760	24,379,240	5.18%	1,262,595	21
	Unamortized Gain on						
22	Reacquired Debt	-	(13,274,502)	13,274,502		(536,203)	22
23	Total Tax Exempt	$ 321,055,000	$ (1,534,052)	$ 322,589,052	5.30%	$ 17,088,789	23
24	Total Fixed-Rate Debt	$ 878,555,000	$ 11,048,035	$ 867,506,965	7.19%	$ 62,520,481	24

[1] In March 2010, the Company redeemed the $100 million, 7.70% Subordinated Debentures (Preferred Securities), due 9/15/2043, at par. The unamortized debt expenses were recorded as a reacquisition loss and will be amortized over the remaining life of the retired securities.

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
VARIABLE RATE DEBT COST OF DEBT
AT JUNE 30, 2010

Line No.	Description (a)	Net Proceeds (b)	Interest Rate (c)	Cost of Debt (d)	Line No.
1	Term Facility[1]	(237,751)	-	$ -	1
		Sch D-2, Sheet 1	Sch D-2, Sheet 1		
2	Big Bear 1993 Series A IDRB [2]	$ 49,409,425	1.23%	$ 609,355	2
3	Clark Co.2003 Series A IDRB [3]	47,717,924	1.41%	674,875	3
4	Clark Co.2008 Series A DRB [4]	45,304,384	4.47%	2,024,738	4
5	Clark Co.2009 Series A DRB [5]	49,219,301	3.79%	1,867,119	5
6	Total Clark Co. Tax Exempt	$ 142,241,609	3.21%	$ 4,566,732	6

[1] Based on $0 designated long-term of the $300 million Bank Facility
[2] The net amount represents $50 million face value less $ $591 thousand of unamortized balances.
[3] The net amount represents $50 million face value less $2.28 million of unamortized balances.
[4] The net amount represents $50 million face value less $4.70 million of unamortized balances.
[5] The net amount represents $50 million face value less $781 thousand of unamortized balances.

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
COST OF LONG-TERM DEBT
ORIGINAL NET PROCEEDS OF ISSUES OUTSTANDING [1]

Line No.	Description (a)	Origination Date (b)	Maturity Date (c)	Coupon Rate (d)	Offered (e)	Gross Proceeds (f)	Underwriter's Commission and Discounts Amount (g)	Underwriter's Commission and Discounts Percent of Gross Proceeds (h)	Debt and Issuance Expense Amount (i)	Debt and Issuance Expense Percent of Gross Proceeds (j)	Net Proceeds Amount (k)	Net Proceeds Per $100 Unit (l)	Cost of Money [2] (m)	Line No.
	Debentures													
1	8.0% Debenture, Due 2026	08/01/96	08/01/26	8.00%	75,000,000	75,000,000	894,750	1.19%	6,048,405	8.06%	68,056,845	90.74	8.89%	1
2	8.375% Note, Due 2011	02/13/01	02/15/11	8.38%	200,000,000	200,000,000	2,818,000	1.41%	288,784	0.14%	196,893,216	98.45	8.61%	2
3	7.625 Note, Due 2012	05/06/02	05/15/12	7.63%	200,000,000	200,000,000	2,052,000	1.03%	270,042	0.14%	197,677,958	98.84	7.79%	3
4	Total Debentures				$ 475,000,000	$ 475,000,000	$ 5,764,750	1.21%	$ 6,607,231	1.39%	$ 462,628,019	97.40		4
	Medium Term Notes													
5	7.59% MTN, Due 2017	01/17/97	01/17/17	7.59%	$ 25,000,000	$ 25,000,000	$ 187,500	0.75%	$ 33,400	0.13%	$ 24,779,100	99.12	7.68%	5
6	7.78% MTN, Due 2022	02/03/97	02/03/22	7.78%	25,000,000	25,000,000	187,500	0.75%	33,400	0.13%	24,779,100	99.12	7.86%	6
7	7.92% MTN, Due 2027	06/04/97	06/04/27	7.92%	25,000,000	25,000,000	187,500	0.75%	45,761	0.18%	24,766,739	99.07	8.00%	7
8	6.76% MTN, Due 2027 [3]	09/23/97	09/24/27	6.76%	7,500,000	7,500,000	46,875	0.63%	17,228	0.23%	7,435,897	99.15	6.88%	8
9	Total Medium Term Notes				$ 82,500,000	$ 82,500,000	$ 609,375	0.74%	$ 129,789	0.16%	$ 81,760,836	99.10		9
	Tax Exempt Clark County													
10	1999 Series A, Due 2038 [3]	10/05/99	12/01/38	6.10%	12,410,000	12,410,000	53,920	0.43%	658,490	5.31%	11,697,590	94.26	6.64%	10
11	1999 Series C, Due 2038 [3]	07/19/00	12/01/38	5.95%	14,320,000	14,320,000	38,342	0.27%	936,800	6.54%	13,344,858	93.19	6.45%	11
12	1999 Series D, Due 2038 [3]	09/26/01	12/01/38	5.55%	8,270,000	8,270,000	21,451	0.26%	523,760	6.33%	7,724,789	93.41	6.13%	12
13	2003 Series A, Due 2038	03/25/03	03/01/38	Var	50,000,000	50,000,000	128,076	0.26%	2,820,818	5.64%	47,051,106	94.10	Var	13
14	2003 Series C, Due 2038 [3]	03/25/03	03/01/38	5.45%	30,000,000	30,000,000	200,538	0.67%	1,440,962	4.80%	28,358,500	94.53	5.93%	14
15	2003 Series D, Due 2038 [3]	03/25/03	03/01/38	5.25%	20,000,000	20,000,000	133,692	0.67%	154,313	0.77%	19,711,995	98.56	5.37%	15
16	2003 Series E, Due 2038 [3]	03/25/03	03/01/38	5.80%	15,000,000	15,000,000	100,269	0.67%	115,735	0.77%	14,783,996	98.56	5.93%	16
17	2004 Series A, Due 2034 [3]	07/16/04	07/01/34	5.25%	65,000,000	65,000,000	1,081,500	1.66%	2,915,229	4.48%	61,003,271	93.85	6.07%	17
18	2004 Series B, Due 2033 [3]	10/16/04	12/01/33	5.00%	75,000,000	75,000,000	956,250	1.28%	5,034,263	6.71%	69,009,487	92.01	5.99%	18
19	2005 Series A, Due 2035 [3]	10/01/05	10/01/35	4.85%	100,000,000	100,000,000	1,350,000	1.35%	2,724,048	2.72%	95,925,952	95.93	5.36%	19
20	2006 Series B, Due 2036 [3]	09/01/06	09/01/36	4.75%	56,000,000	56,000,000	686,000	1.23%	801,557	1.43%	54,512,443	97.34	5.09%	20
21	2008 Series A, Due 2038	09/24/08	03/01/38	Var	50,000,000	50,000,000	178,749	0.36%	4,770,822	9.54%	45,050,429	90.10	Var	21
22	2009 Series A, Due 2038	12/09/09	12/01/39	Var	50,000,000	50,000,000	175,000	0.35%	502,959	1.01%	49,322,041	98.64	Var	22
23	Total Tax Exempt Clark County				$ 546,000,000	$ 546,000,000	$ 5,103,787	0.93%	$ 23,399,756	4.29%	$ 423,123,987	77.50		23
	Tax Exempt Big Bear													
24	1993 Series A, Due 2028	12/01/93	12/01/28	Var	$ 50,000,000	$ 50,000,000	$ 175,000	0.35%	$ 656,763	1.31%	$ 49,168,237	98.34	Var	24
25	Term Facility [4]	05/18/07	05/15/12	Var	$ 150,000,000	$ 150,000,000	$ -	0.00%	$ 590,328	0.39%	$ 149,409,672	99.61	Var	25
26	Total Debt Capital				$ 1,303,500,000	$ 1,303,500,000	$ 11,652,912	0.89%	$ 31,383,867	2.41%	$ 1,166,090,751	89.46		26

[1] Based on Company records.
[2] Based on the Net Proceeds method.
[3] Effective rate at issuance.
[4] A commercial paper program was initiated in October 2002 and is backed by $50 million of the term facility.

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
COST OF PREFERRED SECURITIES[1]
AT JUNE 30, 2010

Line No.	Description (a)	Net Proceeds Per Security (b)	Number of Securities (c)	Net Proceeds (d)	Effective Cost (e)	Annual Cost (f)	Line No.

[1] The Company has no outstanding preferred securities

SOUTHWEST GAS CORPORATION
COST OF PREFERRED SECURITIES[1]
ORIGINAL NET PROCEEDS OF ISSUES OUTSTANDING AT JUNE 30, 2010

			Total Issued		Underwriter's Commission		Reacquired Debt Expense		Issuance Expense		Net Proceeds		
Line No.	Description	Annual Dividend Rate/Share	At Par	Gross Proceeds	Amount	Percent of Gross Proceeds	Amount	Percent of Gross Proceeds	Amount	Percent of Gross Proceeds	Amount	Amount Per Share	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	

[1] The Company has no outstanding preferred securities

SOUTHWEST GAS CORPORATION
TOTAL ARIZONA
COST OF COMMON EQUITY

Line No.	Description	Line No.
	(a)	
1	Please refer to the testimony and exhibits of Mr. Robert Hevert	1

Schedule E

SOUTHWEST GAS CORPORATION
COMPARATIVE BALANCE SHEETS

Line No.	Description	Balance at 06/30/2010 Arizona	Balance at 06/30/2010 Other	Balance at 06/30/2010 Total	Balance at 12/31/2009 Arizona	Balance at 12/31/2009 Other	Balance at 12/31/2009 Total	Balance at 12/31/2008 Arizona	Balance at 12/31/2008 Other	Balance at 12/31/2008 Total	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
	Assets and Other Debits [1]										
	Utility Plant										
1	Utility Plant (101, 105, 114, 118)	$ 2,218,446,598	$ 2,030,320,360	$ 4,248,766,957	$ 2,182,029,140	$ 1,958,411,984	$ 4,140,441,124	$ 2,117,348,173	$ 1,932,243,419	$ 4,049,591,593	1
2	Completed Construction Not Classified (106)	33,607,721	30,125,294	63,733,016	20,356,235	69,396,540	89,752,774	15,331,337	10,888,734	26,220,071	2
3	Construction Work in Progress (107)	6,189,577	17,162,236	23,351,813	22,331,558	23,397,771	45,729,329	25,857,070	42,595,529	68,452,599	3
4	Total Utility Plant	$ 2,258,243,896	$ 2,077,607,891	$ 4,335,851,787	$ 2,224,716,933	$ 2,051,206,295	$ 4,275,923,228	$ 2,158,536,580	$ 1,985,727,683	$ 4,144,264,263	4
	Less: Accumulated Provision for Depreciation										
5	and Amortization (108, 111 119)	885,610,337	718,357,408	1,603,967,745	850,842,502	689,265,392	1,540,107,894	792,501,414	647,700,656	1,440,202,070	5
6	Net Utility Plant	$ 1,372,633,559	$ 1,359,250,483	$ 2,731,884,042	$ 1,373,874,431	$ 1,361,940,903	$ 2,735,815,334	$ 1,366,035,166	$ 1,338,027,027	$ 2,704,062,193	6
	Other Property and Investments										
7	Northern California Surcharge (120)	$ 0	$ 2,578,817	$ 2,578,817	$ 0	$ 3,047,534	$ 3,047,534	$ 0	$ 3,984,966	$ 3,984,966	7
8	Non-Utility Property (121)	0	80,017	80,017	0	80,017	80,017	0	80,017	80,017	8
9	Non-Utility Accumulated Depreciation (122)	0	0	0	0	0	0	0	0	0	9
	Investment in Subsidiary and Associated										
10	Companies (123, 123.1)	0	170,866,564	170,866,564	0	164,024,716	164,024,716	0	153,269,285	153,269,285	10
11	Other Investments (124)	0	0	0	0	0	0	0	0	0	11
12	Special Funds (125,128)	0	58,021,759	58,021,759	0	57,561,990	57,561,990	0	46,573,374	46,573,374	12
13	Total Other Property and Investments	$ 0	$ 231,547,157	$ 231,547,157	$ 0	$ 224,714,257	$ 224,714,257	$ 0	$ 203,907,642	$ 203,907,642	13
	Current and Accrued Assets										
14	Cash (131)	$ 0	$ (350,882)	$ (350,882)	$ 0	$ 2,386,471	$ 2,386,471	$ 0	$ (7,275,979)	$ (7,275,979)	14
15	Working Funds (135)	0	460,221	460,221	0	1,171,127	1,171,127	0	712,579	712,579	15
16	Temporary Cash Investments (136)	0	45,008,179	45,008,179	0	73,338,033	73,338,033	0	8,378,177	8,378,177	16
	Notes and Accounts Receivables Less Accumulated										
17	Provision for Uncollectible Accounts (141-144)	2,817,413	65,445,815	68,263,228	4,888,268	128,000,583	132,888,850	7,333,752	123,376,048	130,709,800	17
18	Receivables from Associated Companies (145-146)	0	(877,762)	(877,762)	0	7,757,845	7,757,845	0	13,691,279	13,691,279	18
19	Materials and Supplies (151,154, 155, 163)	1,527,538	13,534,090	15,061,628	1,503,887	14,368,140	15,872,027	1,077,160	17,563,908	18,641,067	19
20	Liquefied Natural Gas Stored (164.1, 164.2)	0	10,607,539	10,607,539	0	13,456,572	13,456,572	0	18,815,629	18,815,629	20
21	Prepayments (165)	1,763,939	6,753,754	8,517,693	0	11,185,416	11,185,416	0	10,069,715	10,069,715	21
22	Interest and Dividends Receivable (171)	0	0	0	0	0	0	0	0	0	22
23	Accrued Utility Revenue (173)	0	31,600,000	31,600,000	0	71,700,000	71,700,000	0	72,600,000	72,600,000	23
24	Miscellaneous Current and Accrued Assets (174)	0	7,603,057	7,603,057	0	9,764,570	9,764,570	0	6,563,151	6,563,151	24
25	Total Current and Accrued Assets	$ 6,108,890	$ 179,784,011	$ 185,892,901	$ 6,392,154	$ 333,128,758	$ 339,520,913	$ 8,410,912	$ 264,494,507	$ 272,905,419	25
	Deferred Debits										
26	Unamortized Debt Discount and Expenses (181)	$ 0	$ 9,509,954	$ 9,509,954	$ 0	$ 13,609,651	$ 13,609,651	$ 0	$ 13,873,846	$ 13,873,846	26
27	Other Regulatory Assets (182)	1,289,811	11,633,144	12,922,955	2,138,467	34,613,128	36,751,595	3,087,617	63,501,300	66,588,917	27
28	Preliminary Survey and Investigative Charges (183)	0	100,588	100,588	0	229,051	229,051	0	0	0	28
29	Clearing Accounts (184)	290,237	156,251	446,489	(21,272)	193,760	172,489	(179,603)	142,664	(36,939)	29
30	Miscellaneous Deferred Debits (186)	6,066,602	5,826,761	11,893,363	6,089,371	5,822,189	11,911,560	6,063,210	5,658,099	11,721,309	30
31	Research and Development (188)	0	0	0	0	0	0	0	0	0	31
32	Loss on Reacquired Debt (189)	0	20,310,014	20,310,014	0	17,095,219	17,095,219	0	17,771,678	17,771,678	32
33	Accumulated Deferred Income Taxes (190)	0	18,821,966	18,821,966	0	19,893,792	19,893,792	0	20,457,326	20,457,326	33
34	Unrecovered Purchased Gas Costs (191)	(43,689,343)	(91,646,362)	(135,335,705)	(33,250,718)	(56,724,617)	(89,975,335)	(9,622,324)	(23,450,704)	(33,073,028)	34
35	Total Deferred Debits	$ (36,042,692)	$ (25,287,685)	$ (61,330,376)	$ (25,044,151)	$ 34,732,174	$ 9,688,023	$ (651,100)	$ 97,954,208	$ 97,303,108	35
36	Total Assets and Other Debits	$ 1,342,699,757	$ 1,745,293,966	$ 3,087,993,723	$ 1,355,222,435	$ 1,954,516,091	$ 3,309,738,526	$ 1,373,794,978	$ 1,904,383,385	$ 3,278,178,362	36

NOTE: The Arizona columns above reflect only those amounts separately identified in the Southwest Gas general ledger as pertaining solely to Arizona. Allocations are not included, thus the debits and credits in the Arizona columns do not balance. The financial statements appearing herein are unaudited, and were prepared solely for the purposes of complying with the filing requirements for this general rate case.

[1] Source: Company Records

SOUTHWEST GAS CORPORATION
COMPARATIVE BALANCE SHEETS

Line No.	Description (a)	Balance at 06/30/2010 Arizona (b)	Other (c)	Total (d)	Balance at 12/31/2009 Arizona (e)	Other (f)	Total (g)	Balance at 12/31/2008 Arizona (h)	Other (i)	Total (j)	Line No.
	Liabilities and Other Credits										
	Proprietary Capital										
1	Common Stock Issued (201)	$ 0	$ 47,056,616	$ 47,056,616	$ 0	$ 46,721,610	$ 46,721,610	$ 0	$ 45,821,411	$ 45,821,411	1
2	Preferred Sock Issued (204)	0	0	0	0	0	0	0	0	0	2
3	Premium on Capital Stock (207)	0	812,636,849	812,636,849	0	802,927,183	802,927,183	0	781,044,337	781,044,337	3
4	Other Paid in Capital (208-211)	0	0	0	0	0	0	0	0	0	4
5	Reacquired Capital Stock (217)	0	0	0	0	0	0	0	0	0	5
6	Capital Stock Expense (214)	0	(10,588,217)	(10,588,217)	0	(10,588,217)	(10,588,217)	0	(10,580,342)	(10,580,342)	6
7	Retained Earnings (216)	0	326,028,015	326,028,015	0	285,315,941	285,315,941	0	240,981,646	240,981,646	7
8	Total Proprietary Capital	$ 0	$ 1,175,133,262	$ 1,175,133,262	$ 0	$ 1,124,376,517	$ 1,124,376,517	$ 0	$ 1,057,267,052	$ 1,057,267,052	8
	Long-Term Debt										
9	Bonds (221, 222)	$ 0	$ 1,078,555,000	$ 1,078,555,000	$ 0	$ 1,078,555,000	$ 1,078,555,000	$ 0	$ 1,028,555,000	$ 1,028,555,000	9
10	Other Long-Term Debt (224, 226)	0	(5,428,527)	(5,428,527)	0	86,560,178	86,560,178	0	143,558,096	143,558,096	10
11	Other Preferred Securities (224.1)	0	0	0	0	100,000,000	100,000,000	0	100,000,000	100,000,000	11
12	Total Long-Term Debt	$ 0	$ 1,073,126,473	$ 1,073,126,473	$ 0	$ 1,265,115,178	$ 1,265,115,178	$ 0	$ 1,272,113,096	$ 1,272,113,096	12
	Current and Accrued Liabilities										
13	Notes Payable (231)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 55,000,000	$ 55,000,000	13
14	Accounts Payable (232)	0	44,235,217	44,235,217	0	138,881,966	138,881,966	0	168,416,258	168,416,258	14
15	Payables to Associated Companies (233, 234)	0	13,529,436	13,529,436	0	13,752,339	13,752,339	0	10,092,856	10,092,856	15
16	Customer Deposits (235)	48,778,514	40,609,920	89,388,434	51,079,073	40,588,790	91,667,863	44,982,999	38,485,302	83,468,301	16
17	Taxes Accrued (236)	14,526,176	20,728,749	35,254,925	9,212,981	(2,417,030)	6,795,951	(7,602,847)	(6,643,372)	(14,246,219)	17
18	Interest Accrued (237)	1,389,089	17,921,625	19,310,713	1,369,628	18,274,165	19,643,793	1,280,183	18,418,560	19,698,743	18
19	Dividends Declared (238)	0	11,356,685	11,356,685	0	10,709,287	10,709,287	0	9,943,095	9,943,095	19
20	Tax Collections Payable (241)	8,305,704	9,614,226	17,919,930	13,727,101	10,973,266	24,700,367	14,335,187	10,574,368	24,909,555	20
21	Miscellaneous Current and Accrued Liabilities (242)	1,743,519	26,542,657	28,286,176	(6,680,889)	41,712,470	35,031,582	4,508,365	31,313,005	35,821,370	21
22	Total Current and Accrued Liabilities	$ 74,743,001	$ 184,538,515	$ 259,281,516	$ 68,707,894	$ 272,475,253	$ 341,183,147	$ 57,503,886	$ 335,600,073	$ 393,103,959	22
	Deferred Credits										
23	Customer Advances for Construction (252)	$ 62,529,338	$ 25,631,922	$ 88,161,261	$ 62,862,642	$ 24,932,544	$ 87,795,186	$ 63,161,374	$ 27,110,061	$ 90,271,435	23
24	Other Deferred Credits (253)	26,392	45,535,901	45,562,293	26,392	43,631,498	43,657,890	26,392	42,165,425	42,191,817	24
25	Other Regulatory Liabilities (254)	125,381	7,834,812	7,960,193	134,337	8,474,918	8,609,255	12,055	27,136,729	27,148,784	25
26	Accumulated Deferred Investment Tax Credit (255)	4,578,770	2,715,023	7,293,793	4,842,950	2,884,631	7,727,581	(6,126,866)	14,722,023	8,595,157	26
27	Unamortized Gain on Reaquired Debt (257)	0	13,274,502	13,274,502	0	13,542,603	13,542,603	0	14,099,061	14,099,061	27
28	Accumulated Deferred Income Taxes (282, 283)	225,779,045	190,692,210	416,471,255	226,561,411	189,262,757	415,824,168	209,447,462	161,960,540	371,408,002	28
29	Total Deferred Credits	$ 293,038,927	$ 285,684,370	$ 578,723,296	$ 294,427,732	$ 282,728,952	$ 577,156,684	$ 266,520,417	$ 287,193,838	$ 553,714,255	29
	Other Long-Term Liabilities										
30	Injuries and Damages Reserve (228)	$ 0	$ 1,729,176	$ 1,729,176	$ 0	$ 1,907,000	$ 1,907,000	$ 0	$ 1,980,000	$ 1,980,000	30
31	Provision for Rate Refunds (229)	0	0	0	0	0	0	0	0	0	31
32	Total Other Long-Term Liabilities	$ 0	$ 1,729,176	$ 1,729,176	$ 0	$ 1,907,000	$ 1,907,000	$ 0	$ 1,980,000	$ 1,980,000	32
33	Total Liabilities and Other Credits	$ 367,781,928	$ 2,720,211,796	$ 3,087,993,723	$ 363,135,626	$ 2,946,602,899	$ 3,309,738,526	$ 324,024,303	$ 2,954,154,059	$ 3,278,178,362	33

NOTE: The Arizona columns above reflect only those amounts separately identified in the Southwest Gas general ledger as pertaining solely to Arizona. Allocations are not included, thus the debits and credits in the Arizona columns do not balance. The financial statements appearing herein are unaudited, and were prepared solely for the purposes of complying with the filing requirements for this general rate case.

[1] Source: Company Records

SOUTHWEST GAS CORPORATION
ARIZONA
COMPARATIVE INCOME STATEMENTS

Line No.	Description	For the Test Year Ended 6/30/2010	For the Year Ended 12/31/2009	For the Year Ended 12/31/2008	Line No.
	(a)	(b)	(c) [1]	(d) [1]	
1	Operating Revenue	$ 427,436,762	$ 858,315,746	$ 986,658,106	1
2	Operating Expenses and Taxes	346,331,603	788,470,285	914,093,362	2
3	Operating Income	$ 81,105,159	$ 69,845,461	$ 72,564,744	3
4	Other Income and Deductions	0	0	0	4
5	Income Before Interest Deductions	$ 81,105,159	$ 69,845,461	$ 72,564,744	5
6	Net Interest Deductions	42,471,450	46,979,300 [2]	47,636,149 [2]	6
7	Net Income	$ 38,633,709	$ 22,866,161	$ 24,928,595	7
			Sch A-2	Sch A-2	

[1] Schedule E-6
[2] Source: Company Records

SOUTHWEST GAS CORPORATION
STATEMENTS OF INCOME

Line No.	Description (a)	Year Ended 6/30/2010 (b)	Year Ended 12/31/2009 (c)	Year Ended 12/31/2008 (d)	Line No.
	Utility Operating Income				
1	Operating Revenues (400)	$ 1,570,616,116	$ 1,603,416,284	$ 1,779,482,984	1
	Operating Expenses:				
2	Operating Expenses (401)	$ 1,093,114,204	$ 1,155,256,314	$ 1,336,575,545	2
3	Maintenance Expenses (402)	67,257,715	66,530,515	63,274,631	3
4	Depreciation Expense (403)	152,057,599	150,151,604	148,948,336	4
5	Amortization of Other Limited Term Gas Plant (404.3)	5,631,076	6,295,526	7,474,379	5
6	Amortization of Utility Plant Acquisition Adjustment (406)	153,886	153,886	153,980	6
7	Amortization of Property Losses (407.1)	0	0	0	7
8	Amortization of Regulatory Assets (407.3)	4,421,202	4,683,090	4,178,840	8
9	Amortization of Regulatory Liabilities (407.4)	(293,131)	(73,283)	0	9
10	Taxes Other than Income Taxes (408.1)	36,322,238	36,574,173	36,063,486	10
11	Income Taxes - Federal (409.1)	21,886,517	(10,000,308)	2,237,756	11
12	Income Taxes - Other (409.1)	3,914,437	2,261,930	370,082	12
13	Provision for Deferred Income Taxes (410.1)	82,287,980	104,965,541	64,037,639	13
14	Provision for Deferred Income Taxes - Credit (411.1)	(59,786,069)	(59,054,894)	(33,663,566)	14
15	Investment Tax Credit Adjustment - Net (411.4)	(867,576)	(867,576)	(867,576)	15
16	*Total Utility Operating Expenses*	$ 1,406,100,077	$ 1,456,876,517	$ 1,628,783,532	16
17	Net Utility Operating Income	$ 164,516,039	$ 146,539,767	$ 150,699,453	17
	Other Income and Deductions				
	Other Income:				
18	Non-Utility Operating Income (415-418)	$ 0	$ 0	$ 0	18
19	Equity in Earnings of Subsidiary Companies (418.1)	16,235,636	15,355,431	13,941,126	19
20	Interest and Dividend Income (419)	302,549	606,019	2,868,387	20
21	Allowance for Equity Funds Used During Construction (419.1)	931,252	1,208,254	555,920	21
22	Amortization of Investment Tax Credits (420)	0	0	0	22
23	Miscellaneous Non-Operating Income (421)	433,117	305,401	75,324	23
24	Gain on Disposition of Property (421.1)	664,988	664,988	0	24
25	Total Other Income	$ 18,567,543	$ 18,140,093	$ 17,440,757	25
	Other (Income) Deductions				
26	Miscellaneous Amortizations (425)	$ 26,361	$ 26,361	$ 26,359	26
27	Miscellaneous (Income) Deductions (426)	2,232,171	(3,876,734)	16,459,244	27
28	Total (Income) Deductions	$ 2,258,532	$ (3,850,373)	$ 16,485,603	28
	Taxes Applicable to Other Income and Deductions				
29	Taxes Other than Income Taxes (408.2)	$ 16,970	$ 21,832	$ 6,432	29
30	Income Taxes (409.2)	(870,254)	300,196	(3,047,366)	30
31	Provision for Deferred Income Taxes (410.2, 411.2)	(184,751)	(1,106,318)	2,892,625	31
32	Investment Tax Credit Adjustment - Net (411.5)	0	0	0	32
33	Total Taxes Applicable to Other Income and Deductions	$ (1,038,035)	$ (784,290)	$ (148,309)	33
34	Net Other Income and (Deductions)	$ 17,347,046	$ 22,774,756	$ 1,103,463	34
	Interest Charges				
35	Interest on Long-Term Debt (427)	$ 65,186,967	$ 67,163,316	$ 75,625,549	35
36	Amortization of Debt Discount and Expense (428)	2,961,238	2,633,325	2,879,630	36
37	Amortization of Gain on Reacquired Debt (429)	(535,969)	(536,203)	0	37
38	Other Interest Expense (430-431)	13,012,284	13,518,831	12,954,945	38
39	Total Interest Charges	$ 80,624,519	$ 82,779,269	$ 91,460,124	39
40	Allowance for Borrowed Funds Used During Construction (432)	571,757	947,139	630,031	40
41	Net Interest Charges	$ 80,052,762	$ 81,832,130	$ 90,830,093	41
42	Net Income	$ 101,810,322	$ 87,482,393	$ 60,972,823	42

SOUTHWEST GAS CORPORATION
TOTAL SYSTEM
COMPARATIVE STATEMENT OF CASH FLOWS

Line No.	Description	Test Year Ended at 06/30/2010	Year Ended 12/31/2009	Year Ended 12/31/2008	Line No.
	(a)	(b)	(c)	(d)	
	CASH FLOWS FROM OPERATING ACTIVITIES:				
1	Net Income	$ 101,810,323	$ 87,482,393	$ 60,972,823	1
	Adjustments to reconcile net income to net cash provided by operating activities:				
2	Depreciation and amortization	161,970,631	161,210,822	160,755,534	2
3	Deferred income taxes	26,622,530	44,112,123	34,446,514	3
	Changes in current assets and liabilities:				
4	Accounts receivable	8,173,714	3,255,796	26,910,077	4
5	Accrued utility revenue	1,000,000	900,000	2,300,000	5
6	Unrecovered purchased gas costs	53,119,045	56,902,307	20,931,460	6
7	Accounts payable	1,492,828	(23,181,375)	(21,253,962)	7
8	Accrued taxes	42,925,006	20,832,981	(20,421,493)	8
9	Other current assets and liabilities	0	0	0	9
10	Other	(7,535,294)	13,057,309	(8,179,023)	10
11	Net cash provided by operating activities	$ 389,578,783	$ 364,572,356	$ 256,461,930	11
	CASH FLOWS FROM INVESTING ACTIVITIES:				
12	Construction expenditures	$ (173,995,524)	$ (206,795,258)	$ (274,506,382)	12
13	Other	(33,275,773)	(48,227,274)	47,378,325	13
14	Net cash used in investing activities	$ (207,271,297)	$ (255,022,532)	$ (227,128,057)	14
	CASH FLOWS FROM FINANCING ACTIVITIES:				
15	Issuance of common stock	$ 13,691,475	$ 18,401,471	$ 35,390,810	15
16	Issuance of preferred securities, net	0	0	0	16
17	Retirement of preferred securities, net	(100,000,000)	0	0	17
18	Dividends paid	(43,423,293)	(41,950,116)	(38,704,993)	18
19	Issuance of long-term debt, net	49,825,000	49,825,000	49,821,251	19
20	Retirement of long-term debt	(91,000,000)	(57,620,255)	(132,211,300)	20
21	Issuance (repayment) of short-term debt	0	(55,000,000)	46,000,000	21
22	Net cash provided by (used in) financing activities	$ (170,906,818)	$ (86,343,900)	$ (39,704,232)	22
23	Change in cash and temporary cash investments	$ 11,400,668	$ 23,205,924	$ (10,370,359)	23
24	Cash at beginning of period	8,051,192	16,211,076	26,581,435	24
25	Cash at end of period	$ 19,451,860	$ 39,417,000	$ 16,211,076	25
		Sch A-5			

SOUTHWEST GAS CORPORATION
TOTAL SYSTEM
STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY AND PREFERRED SECURITIES

Line No.	Description	Preferred Securities Shares/Units	Preferred Securities Amount	Common Shares	Common Amount	Additional Paid-In Capital	Retained Earnings	Capital Stock Expense	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	
1	Balance December 31, 2007	0	$ 0	42,805,706	$ 44,435,582	$ 742,900,160	$ 219,767,949	$ (10,580,342)	1
2	Net Earnings	0	0				60,972,823		2
	Cash Dividend Declared -								
3	Common	0	0				(39,759,126)		3
4	Common Stock Issue	0	0	1,385,829	1,385,829	38,144,177	0	0	4
5	Balance December 31, 2008	0	$ 0	44,191,535	$ 45,821,411	$ 781,044,337	$ 240,981,646	$ (10,580,342)	5
6	Net Earnings	0	0				87,482,393		6
	Cash Dividend Declared -								
7	Common	0	0				(43,148,098)		7
8	Common Stock Issue	0	0	900,199	900,199	21,882,846	0	(7,875)	8
9	Balance December 31, 2009	0	$ 0	45,091,734	$ 46,721,610	$ 802,927,183	$ 285,315,941	$ (10,588,217)	9
10	Net Earnings	0	0				63,714,879		10
	Cash Dividend Declared -								
11	Common	0	0				(23,002,805)		11
12	Common Stock Issue	0	0	335,006	335,006	9,709,666	0	0	12
13	Balance June 30, 2010	0	$ 0	45,426,740	$ 47,056,616	$ 812,636,849	$ 326,028,015	$ (10,588,217)	13

SOUTHWEST GAS CORPORATION
ARIZONA
DETAIL OF UTILITY PLANT - NET ADDITIONS
FOR THE YEAR ENDED JUNE 30, 2010

Line No.	Description	Account Number	Balance at June 30, 2010	Net Plant Additions (Deletions)	Balance at Dec. 31, 2009	Line No.
	(a)	(b)	(c)	(d)	(e)	
	Intangible					
1	Organizational Costs	301	$ 42,653	$ 0	$ 42,653	1
2	Franchise and Consents	302	1,638,603	0	1,638,603	2
3	Miscellaneous Intangible	303	1,968,623	0	1,968,623	3
4	Total Intangible		$ 3,649,879	$ 0	$ 3,649,879	4
	Distribution					
5	Land and Land Rights	374.1	$ 355,903	$ 0	$ 355,903	5
6	Rights of Way	374.2	2,226,837	133,760	2,093,077	6
7	Structures	375	110,557	0	110,557	7
8	Mains	376	1,150,806,905	24,048,000	1,126,758,905	8
9	Measuring and Regulating Station	378	51,087,001	6,309,765	44,777,236	9
10	Services	380	680,690,820	13,233,170	667,457,650	10
11	Meters	381	245,180,735	2,348,115	242,832,620	11
12	Industrial Measuring and Reg Station	385	10,761,994	175,892	10,586,102	12
13	Other Equipment	387	432,098	0	432,098	13
14	Total Distribution		$ 2,141,652,849	$ 46,248,703	$ 2,095,404,146	14
	General					
15	Land and Land Rights	389	$ 14,691,132	$ 49,980	$ 14,641,152	15
16	Structures and Improve. - General	390.1	27,735,002	1,107,588	26,627,415	16
17	Structures and Improve. - Leasehold	390.2	871,180	0	871,180	17
18	Office Furniture and Equipment	391	3,923,650	137,212	3,786,438	18
19	Computer Equipment	391.1	10,300,991	877,622	9,423,369	19
20	Transportation Equipment	392.1	32,031,987	980,837	31,051,150	20
21	Stores Equipment	393	623,934	0	623,934	21
22	Tools, Shop, Garage Equipment	394	7,174,279	102,369	7,071,910	22
23	Laboratory Equipment	395	328,904	5,690	323,214	23
24	Power Operated Equipment	396	5,762,833	(42,301)	5,805,134	24
25	Communication Equipment - General	397	2,368,038	91,611	2,276,427	25
26	Telemetering Equipment	397.2	587,771	0	587,771	26
27	Miscellaneous Equipment	398	864,276	83,163	781,113	27
28	Total General		$ 107,263,978	$ 3,393,770	$ 103,870,208	28
29	Total Plant in Service		$ 2,252,566,706	$ 49,642,473	$ 2,202,924,233	29
30	Construction Work in Progress		5,699,300	(16,063,639)	21,762,939	30
31	Less: Accumulated Depreciation/Amort.		886,327,699	35,134,016	851,193,683	31
32	Total Net Plant		$ 1,371,938,307	$ (1,555,182)	$ 1,373,493,489	32

SOUTHWEST GAS CORPORATION
SYSTEM ALLOCABLE PLANT
DETAIL OF UTILITY PLANT - NET ADDITIONS
FOR THE YEAR ENDED JUNE 30, 2010

Line No.	Description	Account Number	Balance at June 30, 2010	Net Plant Additions (Deletions)	Balance at Dec. 31, 2009	Line No.
	(a)	(b)	(c)	(d)	(e)	
	Intangible					
1	Organizational Costs	301	$ 61,816	$ 0	$ 61,816	1
2	Miscellaneous Intangible	303	129,526,925	9,055,539	120,471,386	2
3	Total Intangible		$ 129,588,741	$ 9,055,539	$ 120,533,202	3
	General					
4	Land and Land Rights	389.00	$ 391,307	$ 0	$ 391,307	4
5	Structures and Improve. - General	390.10	15,015,627	545,277	14,470,350	5
6	Structures and Improve. - Leasehold	390.20	3,771,379	0	3,771,379	6
7	Office Furniture and Equipment	391.00	7,752,579	(7,099)	7,759,678	7
8	Computer Equipment	391.10	10,970,132	172,333	10,797,799	8
9	Transportation Equipment - Light	392.11	3,532,260	(6,122)	3,538,381	9
10	Transportation Equipment - Heavy	392.12	86,303	0	86,303	10
11	Stores Equipment	393.00	35,615	0	35,615	11
12	Tools, Shop, Garage Equipment	394.00	273,037	34,827	238,210	12
13	Laboratory Equipment	395.00	374,649	(3,315)	377,963	13
14	Power Operated Equipment	396.00	11,760	11,760	0	14
15	Communication Equipment	397.10	7,031,672	135,518	6,896,154	15
16	Telemetering Equipment	397.20	370,787	0	370,787	16
17	Miscellaneous Equipment	398.00	809,378	74,140	735,238	17
18	Total General		$ 50,426,484	$ 957,320	$ 49,469,164	18
19	Total Systems - Plant in Service		$ 180,015,225	$ 10,012,859	$ 170,002,367	19
20	Construction Work in Progress		23,700,778	6,662,268	17,038,510	20
21	Less: Accumulated Depreciation/Amort.		122,445,201	3,656,707	118,788,495	21
22	Total Net Plant		$ 81,270,801	$ 13,018,420	$ 68,252,382	22

SOUTHWEST GAS CORPORATION
ARIZONA
COMPARATIVE DEPARTMENTAL OPERATING INCOME STATEMENTS

Line No.	Description	For the Test Year Ended 6/30/2010	For the Year Ended 12/31/2009	For the Year Ended 12/31/2008	Line No.
	(a)	(b)	(c)	(d)	
		Company Records	Company Records	Company Records	
	Revenues				
1	Residential	$ 499,657,317	$ 495,041,097	$ 545,841,239	1
2	Small Commercial	210,750,323	221,510,400	247,024,954	2
3	Large Commercial	38,785,944	51,162,617	67,059,362	3
4	Small Industrial	14,162,070	18,954,388	35,578,621	4
5	Commercial-Compressed Nat. Gas	1,407,390	1,535,518	2,135,207	5
6	Irrigation/Water Pumping	8,995,004	11,171,152	11,964,443	6
7	Industrial-Essential Agriculture	6,113,775	7,057,294	8,182,588	7
8	Procurement Sales	20,810,993	20,552,844	42,602,952	8
9	Other Gas Sales	124,530	196,469	181,270	9
10	Transportation of Gas for Others	20,353,947	18,660,766	14,901,197	10
11	Rent from Gas Property	448,377	444,436	460,057	11
12	Other Gas Revenues				12
13	Miscellaneous Service Revenues	11,647,975	11,579,776	11,850,772	13
14	LIRA Program Recovery	(348,212)	86,624	178,644	14
15	Accrued Unbilled Revenues	1,847,425	362,365	(1,303,200)	15
16	Total Revenues	$ 834,756,858	$ 858,315,746	$ 986,658,106	16
	Operating Expenses				
17	Other Gas Supply and Gas Cost	$ 408,400,844	$ 449,570,269	$ 586,384,943	17
18	Transmission	0	0	0	18
19	Distribution	96,282,901	96,554,836	91,942,383	19
20	Customer Accounts	31,334,890	31,522,481	35,484,436	20
21	Customer Service and Information	1,296,429	1,393,785	1,418,889	21
22	Sales	58,740	415,171	199,633	22
23	Administrative and General	62,804,801	61,959,573	58,255,114	23
24	Depreciation and Amortization	100,250,295	99,571,907	96,161,912	24
25	Interest on Customer Deposits	2,615,905	2,846,429	2,505,534	25
26	Taxes Other than Income	25,746,383	26,455,091	26,130,335	26
27	Income Taxes - Federal	20,436,234	14,909,488	12,792,053	27
28	Income Taxes - State	4,424,277	3,271,256	2,818,131	28
29	Total Expenses	$ 753,651,699	$ 788,470,285	$ 914,093,362	29
30	Operating Income	$ 81,105,159	$ 69,845,461	$ 72,564,744	30
		Sch E-8	Sch E-2	Sch E-2	

SOUTHWEST GAS CORPORATION
ARIZONA
OPERATING STATISTICS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Schedule Number	Average Customers	Sales (Therms)	Average per Customer	Line No.
	(a)	(b)	(c)	(d)	(e)	
1	Single-Family Residential Gas Service	G-5	868,529	261,884,645	302	1
2	Multi-Family Residential Gas Service	G-6	31,177	5,800,509	186	2
3	Single-Family Low Income Residential Gas Service	G-10	34,591	10,495,198	303	3
4	Multi-Family Low Income Residential Gas Service	G-11	3,144	710,445	226	4
5	Special Residential Gas Service for Air Conditioning	G-15	90	89,219	991	5
6	Master Metered Mobile Home Park Gas Service	G-20	151	1,823,059	12,073	6
	General Gas Service	G-25				
7	Small		17,175	4,475,125	261	7
8	Medium		15,372	41,223,271	2,682	8
9	Large		7,037	133,075,801	18,912	9
10	Transportation Eligible		93	33,841,783	363,890	10
11	Optional Gas Service	G-30	36	41,631,695	1,156,436	11
12	Air Conditioning Gas Service	G-40	3,360	359,940	107	12
13	Street Lighting Gas Service	G-45	15	87,447	5,830	13
	Gas Service for Compression on Customer's Premises	G-55				
14	Residential		82	35,148	429	14
15	Small		16	101,442	6,340	15
16	Large		2,880	1,244,594	432	16
17	Electric Generation Gas Service	G-60	1,440	1,235,925	858	17
18	Small Essential Agriculture User Gas Service	G-75	82	4,413,114	53,818	18
19	Natural Gas Engine Gas Service	G-80	325	7,272,353	22,371	19
20	Total Gas Sales		985,594	549,800,713	558	20
21	Transportation Service	B-1/T-1	274	128,304,561	467,554	21
22	Total Arizona		985,869	678,105,274	688	22

SOUTHWEST GAS CORPORATION
ARIZONA
OPERATING STATISTICS
FOR TWELVE-MONTHS ENDED DECEMBER 31, 2009

Line No.	Description	Schedule Number	Average Customers	Sales (Therms)	Average per Customer	Line No.
	(a)	(b)	(c)	(d)	(e)	
1	Single-Family Residential Gas Service	G-5	865,943	249,175,855	288	1
2	Multi-Family Residential Gas Service	G-6	31,322	5,650,450	180	2
3	Single-Family Low Income Residential Gas Service	G-10	30,330	8,751,693	289	3
4	Multi-Family Low Income Residential Gas Service	G-11	2,765	598,199	216	4
5	Special Residential Gas Service for Air Conditioning	G-15	95	95,414	1,005	5
6	Master Metered Mobile Home Park Gas Service	G-20	151	1,799,462	11,943	6
	General Gas Service	G-25				
7	Small		16,848	3,769,960	224	7
8	Medium		15,698	40,065,287	2,552	8
9	Large		7,313	136,205,935	18,624	9
10	Transportation Eligible		106	43,258,206	406,498	10
11	Optional Gas Service	G-30	31	47,457,448	1,535,012	11
12	Air Conditioning Gas Service	G-40	27	543,574	20,257	12
13	Street Lighting Gas Service	G-45	18	90,312	4,926	13
	Gas Service for Compression on Customer's Premises	G-55				
14	Residential		96	46,505	483	14
15	Small		17	113,019	6,681	15
16	Large		24	1,252,662	52,376	16
17	Electric Generation Gas Service	G-60	14	7,773,826	558,598	17
18	Small Essential Agriculture User Gas Service	G-75	82	5,645,120	68,634	18
19	Natural Gas Engine Gas Service	G-80	338	8,839,082	26,158	19
20	Total Gas Sales		971,220	561,132,009	578	20
21	Transportation Service	B-1/T-1	234	107,408,655	458,521	21
22	Total Arizona		971,454	668,540,664	688	22

SOUTHWEST GAS CORPORATION
ARIZONA
OPERATING STATISTICS
FOR TWELVE-MONTHS ENDED DECEMBER 31, 2008

Line No.	Description	Schedule Number	Average Customers	Sales (Therms)	Average per Customer	Line No.
	(a)	(b)	(c)	(d)	(e)	
1	Single-Family Residential Gas Service	G-5	866,097	281,976,044	326	1
2	Multi-Family Residential Gas Service	G-6	31,488	6,199,169	197	2
3	Single-Family Low Income Residential Gas Service	G-10	27,947	9,008,878	322	3
4	Multi-Family Low Income Residential Gas Service	G-11	2,530	586,933	232	4
5	Special Residential Gas Service for Air Conditioning	G-15	101	107,092	1,063	5
6	Master Metered Mobile Home Park Gas Service	G-20	156	2,067,369	13,245	6
	General Gas Service	G-25				
7	Small		16,374	4,398,136	269	7
8	Medium		16,423	43,845,547	2,670	8
9	Large		7,406	146,137,272	19,732	9
10	Transportation Eligible		126	56,088,165	446,029	10
11	Optional Gas Service	G-30	8	50,799,624	6,349,953	11
12	Air Conditioning Gas Service	G-40	28	530,794	19,185	12
13	Street Lighting Gas Service	G-45	22	87,231	3,891	13
	Gas Service for Compression on Customer's Premises	G-55				
14	Residential		103	68,999	669	14
15	Small		19	139,241	7,426	15
16	Large		25	1,699,747	68,217	16
17	Electric Generation Gas Service	G-60	21	21,278,332	1,025,462	17
18	Small Essential Agriculture User Gas Service	G-75	83	6,852,760	83,064	18
19	Natural Gas Engine Gas Service	G-80	376	12,450,184	33,076	19
20	Total Gas Sales		969,332	644,321,517	665	20
21	Transportation Service	B-1/T-1	204	94,577,612	464,565	21
22	Total Arizona		969,536	738,899,129	762	22

SOUTHWEST GAS CORPORATION
ARIZONA
TAXES CHARGED TO OPERATIONS
AS RECORDED AT JUNE 30, 2010

Line No.	Description (a)	For the Test Year Ended 6/30/2010 (b)	For the Year Ended 12/31/2009 (c)	For the Year Ended 12/31/2008 (d)	Line No.
	Federal Taxes				
1	Federal Income Tax	$ 20,436,234	$ 14,909,488	$ 12,792,053	1
	State Taxes				
2	State Income Tax	$ 4,424,277	$ 3,271,256	$ 2,818,131	2
	Local Taxes				
3	Property and Miscellaneous	$ 25,746,383	$ 26,455,091	$ 26,130,335	3

SOUTHWEST GAS CORPORATION
ARIZONA
NOTES TO FINANCIAL STATEMENTS

1. The Company uses the accrual method of accounting as prescribed by the Uniform System of Accounts.

2. The Company uses the straight-line method for calculating depreciation expense. Depreciation rates by major classification can be found in the Workpapers, Schedule C-2.

3. The Allowance for Funds Used During Construction (AFUDC) rate used in 2010 was 7.95%.

Schedule F

SOUTHWEST GAS CORPORATION
ARIZONA
PROJECTED INCOME STATEMENTS - PRESENT AND PROPOSED RATES

Line No.	Description	Test Year Ended 6/30/2010	Projected Year Present Rates 6/30/2011	Projected Year Proposed Rates 6/30/2011	Line No.
	(a)	(b)	(c)	(d)	
1	Operating Margin	$ 427,436,762	$ 431,711,130	$ 488,942,552	1
	Operating Expenses				
2	Other Gas Supply Expenses	$ 1,080,748	$ 1,139,006	$ 1,139,006	2
3	Distribution Expenses	96,282,901	100,648,204	100,648,204	3
4	Customer Accounts Expenses	31,334,890	33,910,099	34,096,204	4
5	Customer Service and Information Expenses	1,296,429	1,205,668	1,205,668	5
6	Sales Expenses	58,740	0	0	6
7	Administrative and General Expenses	62,804,801	65,738,770	65,738,770	7
8	Depreciation and Amortization Expenses	100,250,295	104,833,454	104,833,454	8
9	Taxes Other than Income	25,746,383	27,611,935	27,611,935	9
10	Interest on Customer Deposits	2,615,905	2,908,517	2,908,517	10
11	Federal Income Taxes	20,436,234	16,606,776	35,181,416	11
12	State Income Taxes	4,424,277	3,553,801	7,528,718	12
13	Total Operating Expenses	$ 346,331,603	$ 358,156,230	$ 380,891,893	13
14	Operating Income	$ 81,105,159	$ 73,554,899	$ 108,050,659	14
15	Less: Interest Expense	42,471,450	42,713,744	42,713,744	15
16	Net Income	$ 38,633,709	$ 30,841,155	$ 65,336,915	16
			Sch A-2	Sch A-2	
17	Earnings per Share of Average Common Stock Outstanding	N/A	N/A	N/A	17
18	Percent Return on Common Equity	N/A	N/A	N/A	18

SOUTHWEST GAS CORPORATION
TOTAL SYSTEM
COMPARATIVE STATEMENT OF CASHFLOWS

Line No.	Description	Test Year [1] Ended at 06/30/2010	Projected Year At Present Rates Year Ended 6/30/2011	Projected Year At Proposed Rates Year Ended 6/30/2011	Line No.
	(a)	(b)	(c)	(d)	
	CASH FLOWS FROM OPERATING ACTIVITIES:				
1	Net Income	$ 101,810,323	$ 101,810,323	$ 145,956,023	1
	Adjustments to reconcile net income to net cash provided by operating activities:				
2	Depreciation and amortization	161,970,631	167,630,451	167,630,451	2
3	Deferred income taxes	26,622,530	26,622,530	26,622,530	3
	Changes in current assets and liabilities:	0	0	0	
4	Accounts receivable	8,173,714	8,173,714	8,173,714	4
5	Accrued utility revenue	1,000,000	1,000,000	1,000,000	5
6	Unrecovered purchased gas costs	53,119,045	(61,551,242)	(61,551,242)	6
7	Accounts payable	1,492,828	1,492,828	1,492,828	7
8	Accrued taxes	42,925,006	42,925,006	42,925,006	8
9	Other current assets and liabilities	0	0	0	9
10	Other	(7,535,294)	(7,535,294)	(7,535,294)	10
11	Net cash provided by operating activities	$ 389,578,783	$ 280,568,316	$ 324,714,016	11
	CASH FLOWS FROM INVESTING ACTIVITIES:				
12	Construction expenditures	$ (173,995,524)	$ (205,000,000)	$ (205,000,000)	12
13	Other	(33,275,773)	(33,275,773)	(33,275,773)	13
14	Net cash used in investing activities	$ (207,271,297)	$ (238,275,773)	$ (238,275,773)	14
	CASH FLOWS FROM FINANCING ACTIVITIES:				
15	Issuance of common stock	$ 13,691,475	$ 4,950,000	$ 4,950,000	15
16	Issuance of preferred securities, net	0	0	0	16
17	Retirement of preferred securities, net	(100,000,000)	0	0	17
18	Dividends paid	(43,423,293)	(48,200,000)	(48,200,000)	18
19	Issuance of long-term debt, net	49,825,000	258,000,000	258,000,000	19
20	Retirement of long-term debt	(91,000,000)	(200,000,000)	(200,000,000)	20
21	Issuance (repayment) of short-term debt	0	0	0	21
22	Net cash provided by (used in) financing activities	$ (170,906,818)	$ 14,750,000	$ 14,750,000	22
23	Change in cash and temporary cash investments	$ 11,400,668	$ 57,042,543	$ 101,188,243	23
24	Cash at beginning of period	8,051,192	19,451,860	19,451,860	24
25	Cash at end of period	$ 19,451,860	$ 76,494,403	$ 120,640,103	25
			Sch A-5	Sch A-5	

[1] *Supporting Schedule E-3.*

SOUTHWEST GAS CORPORATION
ARIZONA
CONSTRUCTION EXPENDITURES BY PROPERTY CLASSIFICATION
FOR THE TWELVE MONTHS ENDED JUNE 30, 2010
AND PROJECTED TWELVE MONTHS ENDING JUNE 30, 2011, 2012 AND 2013

Line No.	Description	Test Year Ended 6/30/2010	Projected Year Ending 6/30/2011	Projected Year Ending 6/30/2012	Projected Year Ending 6/30/2013	Line No.
	(a)	(b)	(c)	(d)	(e)	
	Intangible Plant					
1	Arizona Direct	$ 300	$ 260,000	$ 0	$ 90,000	1
2	System Allocable [1]	4,958,040	10,846,593	9,084,342	3,471,911	2
3	Total Intangible Plant	$ 4,958,340	$ 11,106,593	$ 9,084,342	$ 3,561,911	3
	Distribution Plant					
4	Arizona Direct	$ 87,237,498	$ 73,886,928	$ 66,998,185	$ 75,719,925	4
5	System Allocable [1]	0	0	0	0	5
6	Total Distribution Plant	$ 87,237,498	$ 73,886,928	$ 66,998,185	$ 75,719,925	6
	General Plant					
7	Arizona Direct	$ 7,744,629	$ 7,689,252	$ 1,442,137	$ 1,348,461	7
8	System Allocable [1]	2,684,686	15,205,662	10,089,054	10,415,831	8
9	Total General Plant	$ 10,429,315	$ 22,894,914	$ 11,531,191	$ 11,764,292	9
10	Total Arizona Plant Construction	$ 102,625,153	$ 107,888,435	$ 87,613,718	$ 91,046,128	10

[1] Schedule C-1, Sheet 17, Ln 10 (b).

SOUTHWEST GAS CORPORATION
ARIZONA
ASSUMPTIONS USED IN DEVELOPING PROJECTIONS

1. Customer Growth

2. Growth in Consumption and Customer Demand
   Margin related to customer growth and consumption is anticipated to increase by 1% in the year following the test year.

3. Changes in Expenses
   Operation and Maintenance Expenses – The actual amounts for the recorded test year ended June 30, 2010, were adjusted to give the annual effect for known and measurable changes occurring during the test year ending June 30, 2010. The operation and maintenance expenses for the projected year ending June 30, 2010 were calculated by taking the adjusted test year and generally increasing the non-labor expenses by 1.5%.

   Depreciation and Amortization Expenses – The actual amounts for the recorded test year ended June 30, 2010 were adjusted to annualize depreciation expense at the end of the test period plant balances, and to reflect depreciation expense on projected construction expenditures.

4. Construction Requirements, Including Production Reserves and Changes in Plant Capacity
   Additions to gas plant were based upon anticipated construction expenditures.

5. Capital Structures Changes

6. Financing Costs, Interest Rates
   Items 5 and 6 are not applicable. In this proceeding, Southwest Gas Corporation is requesting rate relief for only a portion of its three-state system.

Schedule G

SCHEDULE G-1
SHEET 1 OF 2

SOUTHWEST GAS CORPORATION
ARIZONA
CLASS COST OF SERVICE STUDY
SUMMARY-PRESENT RATES
FOR TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description	Allocation Factor	Total Amount	Single-Family Residential	Multi-Family Residential	MMMHP	Small General	Medium General	Large-1 General
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
	Rate Base								
1	Total Direct Net Plant		$ 1,809,908,655	$ 1,397,040,982	$ 39,117,897	$ 2,531,118	$ 25,709,734	$ 91,238,638	$ 115,249,313
2	Total Common Systems Allocable Net Plant		38,161,320	29,456,143	824,788	53,368	542,081	1,923,736	2,429,993
3	Cash Working Capital	11.2	(4,472,151)	(3,627,828)	(124,396)	(3,978)	(67,658)	(172,061)	(221,316)
4	Materials & Supplies	1.1	9,920,409	7,657,413	214,412	13,873	140,919	500,094	631,701
5	Prepayments	Direct Net Plant	4,744,133	3,661,924	102,536	6,635	67,390	239,155	302,092
6	Other		-	-	-	-	-	-	-
7	Customer Deposits	8.0	(62,033,165)	(57,743,519)	(2,217,488)	(9,657)	(1,095,747)	(966,753)	-
8	Customer Advances	8.0	(48,475,278)	(45,123,172)	(1,732,836)	(7,547)	(856,262)	(755,461)	-
9	Deferred Taxes	1.1	(291,236,457)	(224,800,994)	(6,294,548)	(407,288)	(4,137,011)	(14,681,414)	(18,545,025)
10	Other	4.0	-	-	-	-	-	-	-
11	Total Rate Base		$ 1,456,517,467	$ 1,106,520,949	$ 29,890,364	$ 2,176,524	$ 20,303,447	$ 77,325,935	$ 99,846,757
	Margin								
12	Net Operating Margin	Direct	$ 392,027,615	$ 269,876,468	$ 7,590,591	$ 863,947	$ 7,908,814	$ 22,579,171	$ 43,845,416
13	Special Contract Margin	Net Op. Marg.	6,788,127	4,673,028	131,434	14,960	136,945	390,968	759,202
14	Other Revenue	Various	12,096,356	10,449,547	869,413	2,377	145,178	248,108	275,318
15	Total Revenue		$ 410,912,098	$ 284,999,042	$ 8,591,439	$ 881,284	$ 8,190,937	$ 23,218,247	$ 44,879,936
	Operating Expenses								
16	Operations & Maintenance Expenses	-	$ (136,804,420)	$ (110,976,336)	$ (3,805,296)	$ (121,689)	$ (2,069,671)	$ (5,263,397)	$ (6,770,127)
17	Administrative & General Expenses	O&M	(65,125,498)	(52,830,085)	(1,811,505)	(57,930)	(985,263)	(2,505,631)	(3,222,907)
18	Depreciation Expenses		(99,586,591)	(76,869,376)	(2,152,384)	(139,270)	(1,414,627)	(5,020,223)	(6,341,362)
19	Interest on Customer Deposits	8.0	(2,908,517)	(2,707,390)	(103,970)	(453)	(51,376)	(45,328)	-
20	Taxes other than Income	1.1	(27,203,877)	(20,998,259)	(587,963)	(38,044)	(386,431)	(1,371,365)	(1,732,258)
21	Total Operating Deductions		$ (331,628,903)	$ (264,381,447)	$ (8,461,117)	$ (357,385)	$ (4,907,367)	$ (14,205,942)	$ (18,066,653)
	Taxable Income								
22	Taxable Income before Interest Expense		$ 79,283,195	$ 20,617,595	$ 130,321	$ 523,898	$ 3,283,570	$ 9,012,305	$ 26,813,283
23	Interest Expenses	1.1	(42,713,744)	(32,970,090)	(923,180)	(59,734)	(606,748)	(2,153,227)	(2,719,877)
24	Total Taxable Income		$ 36,569,451	$ (12,352,495)	$ (792,859)	$ 464,164	$ 2,676,821	$ 6,859,078	$ 24,093,405
	State Income Tax								
25	State Income Tax	6.9680%	$ 2,548,159	$ (860,722)	$ (55,246)	$ 32,343	$ 186,521	$ 477,941	$ 1,678,828
26	South Georgia State	1.1	-	-	-	-	-	-	-
27	*Total State Income Tax*		$ 2,548,159	$ (860,722)	$ (55,246)	$ 32,343	$ 186,521	$ 477,941	$ 1,678,828
	Federal Income Tax								
28	Federal Income Tax	32.56120%	$ 11,907,452	$ (4,022,121)	$ (258,164)	$ 151,137	$ 871,605	$ 2,233,398	$ 7,845,102
29	Investment Tax Credit (I.T.C.)	1.1	(528,360)	(407,833)	(11,420)	(739)	(7,505)	(26,635)	(33,644)
30	South Georgia Federal	1.1	290,114	223,935	6,270	406	4,121	14,625	18,474
31	Total Federal Income Tax		$ 11,669,206	$ (4,206,019)	$ (263,314)	$ 150,804	$ 868,221	$ 2,221,388	$ 7,829,931
32	Regulatory Amortization	Depr. Exp.	$ -	$ -	$ -	$ -	$ -	$ -	$ -
33	Net Income		$ 65,065,829	$ 25,684,336	$ 448,881	$ 340,751	$ 2,228,828	$ 6,312,976	$ 17,304,523
34	Rate of Return on Rate Base		4.47%	2.32%	1.50%	15.66%	10.98%	8.16%	17.33%

SOUTHWEST GAS CORPORATION
ARIZONA
CLASS COST OF SERVICE STUDY
SUMMARY-PRESENT RATES
FOR TWELVE MONTHS ENDED JUNE 30, 2010

Line No.	Description (a)	Allocation Factor (b)	Total Amount (c)	Transportation Eligible (d)	Large-2 General (e)	Air Conditioning (f)	Street Lighting (g)	Compression on Customer's Premises (CNG) (h)	Electric Generation (i)	Small Essential Agricultural (j)	Natural Gas Engines (k)
	Rate Base										
1	Total Direct Net Plant		$ 1,809,908,655	$ 68,164,677	$ 49,836,748	$ 225,727	$ 370,549	$ 2,818,607	$ 11,841,511	$ 2,652,976	$ 3,110,178
2	Total Common Systems Allocable Net Plant		38,161,320	1,437,229	1,050,791	4,759	7,813	59,429	249,674	55,937	65,577
3	Cash Working Capital	11.2	(4,472,151)	(140,027)	(73,294)	(438)	(626)	(4,630)	(19,703)	(4,606)	(11,591)
4	Materials & Supplies	1.1	9,920,409	373,622	273,163	1,237	2,031	15,449	64,905	14,541	17,047
5	Prepayments	Direct Net Plant	4,744,133	178,673	130,632	592	971	7,388	31,039	6,954	8,152
6	Other		-	-	-	-	-	-	-	-	-
7	Customer Deposits	8.0	(62,033,165)	-	-	-	-	-	-	-	-
8	Customer Advances	8.0	(48,475,278)	-	-	-	-	-	-	-	-
9	Deferred Taxes	1.1	(291,236,457)	(10,968,531)	(8,019,343)	(36,322)	(59,626)	(453,548)	(1,905,444)	(426,896)	(500,466)
10	Other	4.0	-	-	-	-	-	-	-	-	-
11	Total Rate Base		$ 1,456,517,467	$ 59,045,644	$ 43,198,698	$ 195,555	$ 321,112	$ 2,442,696	$ 10,261,982	$ 2,298,906	$ 2,688,898
	Margin										
12	Net Operating Margin	Direct	$ 392,027,615	$ 21,689,599	$ 11,254,459	$ 82,169	$ 53,386	$ 859,687	$ 2,982,640	$ 727,284	$ 1,713,984
13	Special Contract Margin	Net Op. Marg.	6,788,127	375,565	194,876	1,423	924	14,886	51,646	12,593	29,678
14	Other Revenue	Various	12,096,356	49,393	26,882	472	3,536	1,277	4,792	6,177	13,884
15	Total Revenue		$ 410,912,098	$ 22,114,557	$ 11,476,217	$ 84,064	$ 57,847	$ 875,850	$ 3,039,078	$ 746,054	$ 1,757,546
	Operating Expenses										
16	Operations & Maintenance Expenses	-	$ (136,804,420)	$ (4,283,465)	$ (2,242,076)	$ (13,391)	$ (19,145)	$ (141,637)	$ (602,718)	$ (140,894)	$ (354,577)
17	Administrative & General Expenses	O&M	(65,125,498)	(2,039,136)	(1,067,336)	(6,375)	(9,114)	(67,426)	(286,923)	$ (67,072)	(168,796)
18	Depreciation Expenses		(99,586,591)	(3,750,625)	(2,742,167)	(12,420)	(20,389)	(155,088)	(651,555)	$ (145,975)	(171,131)
19	Interest on Customer Deposits	8.0	(2,908,517)	-	-	-	-	-	-	$ -	-
20	Taxes other than Income	1.1	(27,203,877)	(1,024,551)	(749,072)	(3,393)	(5,570)	(42,365)	(177,984)	$ (39,876)	(46,748)
21	Total Operating Deductions		$ (331,628,903)	$ (11,097,777)	$ (6,800,652)	$ (35,578)	$ (54,217)	$ (406,517)	$ (1,719,181)	$ (393,817)	$ (741,252)
	Taxable Income										
22	Taxable Income before Interest Expense		$ 79,283,195	$ 11,016,780	$ 4,675,565	$ 48,485	$ 3,630	$ 469,333	$ 1,319,897	$ 352,237	$ 1,016,295
23	Interest Expenses	1.1	(42,713,744)	(1,608,683)	(1,176,144)	(5,327)	(8,745)	(66,519)	(279,459)	(62,610)	(73,400)
24	Total Taxable Income		$ 36,569,451	$ 9,408,097	$ 3,499,421	$ 43,158	$ (5,115)	$ 402,814	$ 1,040,438	$ 289,627	$ 942,895
	State Income Tax										
25	State Income Tax	6.9680%	$ 2,548,159	$ 655,556	$ 243,840	$ 3,007	$ (356)	$ 28,068	$ 72,498	$ 20,181	$ 65,701
26	South Georgia State	1.1	-	-	-	-	-	-	-	-	-
27	Total State Income Tax		$ 2,548,159	$ 655,556	$ 243,840	$ 3,007	$ (356)	$ 28,068	$ 72,498	$ 20,181	$ 65,701
	Federal Income Tax										
28	Federal Income Tax	32.56120%	$ 11,907,452	$ 3,063,389	$ 1,139,453	$ 14,053	$ (1,666)	$ 131,161	$ 338,779	$ 94,306	$ 307,018
29	Investment Tax Credit (I.T.C.)	1.1	(528,360)	(19,899)	(14,549)	(66)	(108)	(823)	(3,457)	(774)	(908)
30	South Georgia Federal	1.1	290,114	10,926	7,988	36	59	452	1,898	425	499
31	Total Federal Income Tax		$ 11,669,206	$ 3,054,417	$ 1,132,893	$ 14,023	$ (1,714)	$ 130,790	$ 337,220	$ 93,957	$ 306,608
32	Regulatory Amortization	Depr. Exp.	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
33	Net Income		$ 65,065,829	$ 7,306,807	$ 3,298,832	$ 31,455	$ 5,700	$ 310,475	$ 910,179	$ 238,099	$ 643,985
34	Rate of Return on Rate Base		4.47%	12.37%	7.64%	16.08%	1.78%	12.71%	8.87%	10.36%	23.95%

SOUTHWEST GAS CORPORATION
ARIZONA
CLASS COST OF SERVICE STUDY SUMMARY - PROPOSED RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description (a)	Allocation Factor (b)	Total Amount (c)	Single-Family Residential (d)	Multi-Family Residential (e)	MMMHP (f)	Small General (g)	Medium General (h)	Large-1 General (i)	Transportation Eligible (j)
	Rate Base									
1	Total Direct Net Plant		1,809,908,655	1,397,040,982	39,117,897	2,531,118	25,709,734	91,238,638	115,249,313	68,164,677
2	Total Common Systems Allocable Net Plant		38,161,320	29,456,143	824,788	53,368	542,081	1,923,736	2,429,993	1,437,229
3	Cash Working Capital	11.2	(4,472,151)	(3,627,828)	(124,396)	(3,978)	(67,658)	(172,061)	(221,316)	(140,027)
4	Materials & Supplies	1.1	9,920,409	7,657,413	214,412	13,873	140,919	500,094	631,701	373,622
5	Prepayments	Direct Net Plant	4,744,133	3,661,924	102,536	6,635	67,390	239,155	302,092	178,673
6	Other		-	-	-	-	-	-	-	-
7	Customer Deposits	8.0	(62,033,165)	(57,743,519)	(2,217,488)	(9,657)	(1,095,747)	(966,753)	-	-
8	Customer Advances	8.0	(48,475,278)	(45,123,172)	(1,732,836)	(7,547)	(856,262)	(755,461)	-	-
9	Deferred Taxes	1.1	(291,236,457)	(224,800,994)	(6,294,548)	(407,288)	(4,137,011)	(14,681,414)	(18,545,025)	(10,968,531)
10	Other		-	-	-	-	-	-	-	-
11	Total Rate Base		1,456,517,467	1,106,520,949	29,890,364	2,176,524	20,303,447	77,325,935	99,846,757	59,045,644
	Margin									
12	Net Operating Margin	Direct	465,217,053	332,857,067	9,361,994	928,479	8,499,555	24,265,700	47,120,407	23,309,683
13	Special Contract Margin	Net Op. Marg.	6,788,127	4,856,821	136,604	13,548	124,020	354,068	687,549	340,119
14	Other Revenue	Various	12,096,356	10,449,547	869,413	2,377	145,178	248,108	275,318	49,393
15	Total Revenue		484,101,536	348,163,435	10,368,011	944,404	8,768,753	24,867,877	48,083,273	23,699,194
	Operating Deductions									
16	Operations & Maintenance Expenses		(136,804,420)	(110,976,336)	(3,805,296)	(121,689)	(2,069,671)	(5,263,397)	(6,770,127)	(4,283,465)
17	Incremental Uncollectible Expenses		(186,105)	(146,035)	(4,444)	(226)	(2,701)	(8,602)	(11,017)	(6,674)
18	Administrative & General Expenses	O&M	(65,125,498)	(52,830,085)	(1,811,505)	(57,930)	(985,263)	(2,505,631)	(3,222,907)	(2,039,136)
19	Depreciation Expenses		(99,586,591)	(76,869,376)	(2,152,384)	(139,270)	(1,414,627)	(5,020,223)	(6,341,362)	(3,750,625)
20	Interest on Customer Deposits	8.0	(2,908,517)	(2,707,390)	(103,970)	(453)	(51,376)	(45,328)	-	-
21	Taxes other than Income	1.1	(27,203,877)	(20,998,259)	(587,963)	(38,044)	(386,431)	(1,371,365)	(1,732,258)	(1,024,551)
22	Total Operating Deductions		(331,815,008)	(264,527,482)	(8,465,561)	(357,611)	(4,910,068)	(14,214,545)	(18,077,670)	(11,104,451)
	State Income Tax									
23	Taxable Income before Interest Expense		152,286,528	83,635,953	1,902,450	586,792	3,858,685	10,653,332	30,005,603	12,594,744
24	Interest Expenses	1.1	(42,713,744)	(32,970,090)	(923,180)	(59,734)	(606,748)	(2,153,227)	(2,719,877)	(1,608,683)
25	State Taxable Income		109,572,784	50,665,863	979,270	527,058	3,251,937	8,500,106	27,285,726	10,986,061
26	State Income Tax	6.97%	7,635,032	3,530,397	68,236	36,725	226,595	592,287	1,901,269	765,509
27	South Georgia State	1.1	-	-	-	-	-	-	-	-
28	Total State Income Tax		7,635,032	3,530,397	68,236	36,725	226,595	592,287	1,901,269	765,509
	Federal Income Tax									
29	Taxable Income before Interest Expense		152,286,528	83,635,953	1,902,450	586,792	3,858,685	10,653,332	30,005,603	12,594,744
30	Interest Expenses		(42,713,744)	(32,970,090)	(923,180)	(59,734)	(606,748)	(2,153,227)	(2,719,877)	(1,608,683)
31	Federal Taxable Income		109,572,784	50,665,863	979,270	527,058	3,251,937	8,500,106	27,285,726	10,986,061
32	Federal Income Tax	32.56%	35,678,214	16,497,413	318,862	171,616	1,058,870	2,767,736	8,884,560	3,577,193
33	Investment Tax Credit (I.T.C.)	1.1	(528,360)	(407,833)	(11,420)	(739)	(7,505)	(26,635)	(33,644)	(19,899)
34	South Georgia Federal	1.1	290,114	223,935	6,270	406	4,121	14,625	18,474	10,926
35	Total Federal Income Tax		35,439,968	16,313,515	313,713	171,283	1,055,485	2,755,726	8,869,389	3,568,221
36	Regulatory Amortization	Depr. Exp.	-	-	-	-	-	-	-	-
37	Net Income		109,211,529	63,792,041	1,520,502	378,784	2,576,605	7,305,319	19,234,945	8,261,014
38	Rate of Return on Rate Base		7.50%	5.77%	5.09%	17.40%	12.69%	9.45%	19.26%	13.99%

SOUTHWEST GAS CORPORATION
ARIZONA
CLASS COST OF SERVICE STUDY SUMMARY - PROPOSED RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Allocation Factor	Total Amount	Large-2 General	Air Conditioning	Street Lighting	Compression on Customer's Premises (CNG)	Electric Generation	Small Essential Agricultural	Natural Gas Engines	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
	Rate Base										
1	Total Direct Net Plant		$ 1,809,908,655	$ 49,836,748	$ 225,727	$ 370,549	$ 2,818,607	$ 11,841,511	$ 2,652,976	$ 3,110,178	1
2	Total Common Systems Allocable Net Plant		38,161,320	$ 1,050,791	$ 4,759	$ 7,813	$ 59,429	$ 249,674	$ 55,937	$ 65,577	2
3	Cash Working Capital	11.2	(4,472,151)	$ (73,294)	$ (438)	$ (626)	$ (4,630)	$ (19,703)	$ (4,606)	$ (11,591)	3
4	Materials & Supplies	1.1	9,920,409	$ 273,163	$ 1,237	$ 2,031	$ 15,449	$ 64,905	$ 14,541	$ 17,047	4
5	Prepayments	Direct Net Plant	4,744,133	$ 130,632	$ 592	$ 971	$ 7,388	$ 31,039	$ 6,954	$ 8,152	5
6	Other		-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	6
7	Customer Deposits	8.0	(62,033,165)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	7
8	Customer Advances	8.0	(48,475,278)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	8
9	Deferred Taxes	1.1	(291,236,457)	$ (8,019,343)	$ (36,322)	$ (59,626)	$ (453,548)	$ (1,905,444)	$ (426,896)	$ (500,466)	9
10	Other		-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	10
11	Total Rate Base		$ 1,456,517,467	$ 43,198,698	$ 195,555	$ 321,112	$ 2,442,696	$ 10,261,982	$ 2,298,906	$ 2,688,898	11
	Margin										
12	Net Operating Margin	Direct	$ 465,217,053	$ 12,095,100	$ 88,307	$ 65,845	$ 923,900	$ 3,205,425	$ 781,608	$ 1,713,984	12
13	Special Contract Margin	Net Op. Marg.	6,788,127	$ 176,483	$ 1,289	$ 961	$ 13,481	$ 46,771	$ 11,405	$ 25,009	13
14	Other Revenue	Various	12,096,356	26,882	472	3,536	1,277	4,792	6,177	13,884	14
15	Total Revenue		$ 484,101,536	$ 12,298,465	$ 90,067	$ 70,341	$ 938,659	$ 3,256,989	$ 799,189	$ 1,752,877	15
	Operating Deductions										
16	Operations & Maintenance Expenses		$ (136,804,420)	$ (2,242,076)	$ (13,391)	$ (19,145)	$ (141,637)	$ (602,718)	$ (140,894)	$ (354,577)	16
17	Incremental Uncollectible Expenses		$ (186,105)	$ (4,376)	$ (22)	$ (34)	$ (256)	$ (1,079)	$ (245)	$ (395)	17
18	Administrative & General Expenses	O&M	$ (65,125,498)	$ (1,067,336)	$ (6,375)	$ (9,114)	$ (67,426)	$ (286,923)	$ (67,072)	$ (168,796)	18
19	Depreciation Expenses		$ (99,586,591)	$ (2,742,167)	$ (12,420)	$ (20,389)	$ (155,088)	$ (651,555)	$ (145,975)	$ (171,131)	19
20	Interest on Customer Deposits	8.0	$ (2,908,517)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	20
21	Taxes other than Income	1.1	$ (27,203,877)	$ (749,072)	$ (3,393)	$ (5,570)	$ (42,365)	$ (177,984)	$ (39,876)	$ (46,748)	21
22	Total Operating Deductions		$ (331,815,008)	$ (6,805,028)	$ (35,600)	$ (54,251)	$ (406,773)	$ (1,720,260)	$ (394,062)	$ (741,646)	22
	State Income Tax										
23	Taxable Income before Interest Expense		$ 152,286,528	$ 5,493,438	$ 54,467	$ 16,091	$ 531,886	$ 1,536,729	$ 405,127	$ 1,011,231	23
24	Interest Expenses	1.1	(42,713,744)	$ (1,176,144)	$ (5,327)	$ (8,745)	$ (66,519)	$ (279,459)	$ (62,610)	$ (73,400)	24
25	State Taxable Income		$ 109,572,784	$ 4,317,293	$ 49,140	$ 7,346	$ 465,367	$ 1,257,270	$ 342,517	$ 937,831	25
26	State Income Tax	6.97%	$ 7,635,032	$ 300,829	$ 3,424	$ 512	$ 32,427	$ 87,607	$ 23,867	$ 65,348	26
27	South Georgia State	1.1	-	-	-	-	-	-	-	-	27
28	Total State Income Tax		$ 7,635,032	$ 300,829	$ 3,424	$ 512	$ 32,427	$ 87,607	$ 23,867	$ 65,348	28
	Federal Income Tax										
29	Taxable Income before Interest Expense		$ 152,286,528	$ 5,493,438	$ 54,467	$ 16,091	$ 531,886	$ 1,536,729	$ 405,127	$ 1,011,231	29
30	Interest Expenses		(42,713,744)	(1,176,144)	(5,327)	(8,745)	(66,519)	(279,459)	(62,610)	(73,400)	30
31	Federal Taxable Income		$ 109,572,784	$ 4,317,293	$ 49,140	$ 7,346	$ 465,367	$ 1,257,270	$ 342,517	$ 937,831	31
32	Federal Income Tax	32.56%	$ 35,678,214	$ 1,405,762	$ 16,000	$ 2,392	$ 151,529	$ 409,382	$ 111,528	$ 305,369	32
33	Investment Tax Credit (I.T.C.)	1.1	(528,360)	$ (14,549)	$ (66)	$ (108)	$ (823)	$ (3,457)	$ (774)	$ (908)	33
34	South Georgia Federal	1.1	290,114	$ 7,988	$ 36	$ 59	$ 452	$ 1,898	$ 425	$ 499	34
35	Total Federal Income Tax		$ 35,439,968	$ 1,399,202	$ 15,971	$ 2,343	$ 151,158	$ 407,823	$ 111,179	$ 304,960	35
36	Regulatory Amortization	Depr. Exp.	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	36
37	Net Income		$ 109,211,529	$ 3,793,406	$ 35,072	$ 13,236	$ 348,301	$ 1,041,299	$ 270,082	$ 640,923	37
38	Rate of Return on Rate Base		7.50%	8.78%	17.93%	4.12%	14.26%	10.15%	11.75%	23.84%	38

SOUTHWEST GAS CORPORATION
ARIZONA
RATE BASE ALLOCATION TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Single-Family Residential Demand	Customer	Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Direct					
		Intangible Plant					
1	301.00	Organization	1.1	$ 42,653	$ 7,444	$ 25,387	$ 92
2	302.00	Franchise & Consents	1.1	1,108,278	193,416	659,649	2,399
3	303.00	Miscellaneous Intangible Plant	1.1	5,597	977	3,331	12
4		Total Direct Intangible Plant		$ 1,156,528	$ 201,836	$ 688,367	$ 2,503
5		Allocation Percentage	Intang. Plant	100.00%	17.45%	59.52%	0.22%
		Distribution Plant					
6	374.10	Land & Land Rights	1.0	$ 282,689	$ 165,547	$ -	$ -
7	374.20	Rights of Way	1.0	1,538,470	900,950	-	-
8	375.00	Structures & Improvements	1.0	283,643	166,106	-	-
9	376.00	Mains - Demand	1.0	479,842,484	281,002,718	-	-
10	376.00	Mains - Customer	5.0	479,842,484	-	442,815,508	-
11	376.00	Mains - Commodity	3.0	-	-	-	-
12	378.00	Measuring & Regulating Station Equip.	2.2	42,975,214	12,583,454	19,829,519	-
13	380.00	Services - Demand	1.0	0	0	-	-
14	380.00	Services - Customer	7.0	471,631,931	-	374,598,672	-
15	381.00	Meters	6.0	205,391,538	-	168,701,831	-
16	385.00	Indust Measuring & Reg. Station Equip.	3.0	8,075,089	-	-	3,658,416
17	387.00	Miscellaneous Equipment	1.0	229,431	134,358	-	-
18		Total Direct Distribution Plant		$ 1,690,092,974	$ 294,953,133	$1,005,945,530	$ 3,658,416
19		Allocation Percentage	Dist. Plant	100.00%	17.45%	59.52%	0.22%
20	389-398	Total Direct General Plant	1.1	$ 118,659,153	$ 20,708,262	$ 70,626,082	$ 256,852
21		Total Direct Net Plant		$ 1,809,908,655	$ 315,863,232	$1,077,259,978	$ 3,917,772
		Common - Systems Allocable					
22	301-303	Total Common Intangible Plant	1.1	$ 19,094,639	$ 3,332,375	$ 11,365,154	$ 41,333
23	389-398	Total Common General Plant	1.1	$ 19,066,682	$ 3,327,496	$ 11,348,514	$ 41,272
24		Total Systems Allocable		38,161,320	6,659,871	22,713,667	82,605
25		Total Net Plant		$ 1,848,069,976	$ 322,523,103	$ 1,099,973,646	$ 4,000,377
		Other Rate Base Items					
26		Cash Working Capital	11.2	$ (4,472,151)	$ (410,747)	$ (3,187,116)	$ (29,965)
27		Materials & Supplies	1.1	9,920,409	1,731,299	5,904,640	21,474
28		Prepayments	1.1	4,744,133	827,941	2,823,714	10,269
29		Other	1.1	-	-	-	-
30		Customer Deposits	8.0	(62,033,165)	-	(57,743,519)	-
31		Customer Advances	8.0	(48,475,278)	-	(45,123,172)	-
32		Deferred Taxes	1.1	(291,236,457)	(50,826,260)	(173,344,317)	(630,418)
33		Other	4.0	-	-	-	-
34		Total Allocated Rate Base		$ 1,456,517,468	$ 273,845,335	$ 829,303,876	$ 3,371,738

SOUTHWEST GAS CORPORATION
ARIZONA
RATE BASE ALLOCATION TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Multi-Family Residential Demand (e)	Multi-Family Residential Customer (f)	Multi-Family Residential Commodity (g)
		Direct					
		Intangible Plant					
1	301.00	Organization	1.1	$ 42,653	$ 142	$ 778	$ 2
2	302.00	Franchise & Consents	1.1	1,108,278	3,681	20,214	58
3	303.00	Miscellaneous Intangible Plant	1.1	5,597	19	102	0
4		Total Direct Intangible Plant		$ 1,156,528	$ 3,841	$ 21,095	$ 60
5		Allocation Percentage	Intang. Plant	100.00%	0.33%	1.82%	0.01%
		Distribution Plant					
6	374.10	Land & Land Rights	1.0	$ 282,689	$ 3,151	$ -	$ -
7	374.20	Rights of Way	1.0	1,538,470	17,147	-	-
8	375.00	Structures & Improvements	1.0	283,643	3,161	-	-
9	376.00	Mains - Demand	1.0	479,842,484	5,347,998	-	-
10	376.00	Mains - Customer	5.0	479,842,484	-	17,005,162	-
11	376.00	Mains - Commodity	3.0	-	-	-	-
12	378.00	Measuring & Regulating Station Equip.	2.2	42,975,214	239,486	761,500	-
13	380.00	Services - Demand	1.0	0	0	-	-
14	380.00	Services - Customer	7.0	471,631,931	-	6,145,075	-
15	381.00	Meters	6.0	205,391,538	-	6,914,783	-
16	385.00	Indust Measuring & Reg. Station Equip.	3.0	8,075,089	-	-	88,277
17	387.00	Miscellaneous Equipment	1.0	229,431	2,557	-	-
18		Total Direct Distribution Plant		$ 1,690,092,974	$5,613,500	$30,826,521	$ 88,277
19		Allocation Percentage	Dist. Plant	100.00%	0.33%	1.82%	0.01%
20	389-398	Total Direct General Plant	1.1	$ 118,659,153	$ 394,116	$ 2,164,289	$ 6,198
21		Total Direct Net Plant		$ 1,809,908,655	$6,011,457	$33,011,904	$ 94,536
		Common - Systems Allocable					
22	301-303	Total Common Intangible Plant	1.1	$ 19,094,639	$ 63,421	$ 348,277	$ 997
23	389-398	Total Common General Plant	1.1	$ 19,066,682	$ 63,328	$ 347,768	$ 996
24		Total Systems Allocable		38,161,320	126,750	696,045	1,993
25		Total Net Plant		$ 1,848,069,976	$ 6,138,207	$ 33,707,949	$ 96,529
		Other Rate Base Items					
26		Cash Working Capital	11.2	$ (4,472,151)	$ (7,817)	$ (115,855)	$ (723)
27		Materials & Supplies	1.1	9,920,409	32,950	180,944	518
28		Prepayments	1.1	4,744,133	15,757	86,531	248
29		Other	1.1	-	-	-	-
30		Customer Deposits	8.0	(62,033,165)	-	(2,217,488)	-
31		Customer Advances	8.0	(48,475,278)	-	(1,732,836)	-
32		Deferred Taxes	1.1	(291,236,457)	(967,317)	(5,312,020)	(15,212)
33		Other	4.0	-	-	-	-
34		Total Allocated Rate Base		$ 1,456,517,468	$5,211,779	$24,597,225	$ 81,360

SOUTHWEST GAS CORPORATION
ARIZONA
RATE BASE ALLOCATION TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Master Meter Mobile Home Park Demand (e)	Master Meter Mobile Home Park Customer (f)	Master Meter Mobile Home Park Commodity (g)
		Direct					
		Intangible Plant					
1	301.00	Organization	1.1	$ 42,653	$ 47	$ 12	$ 1
2	302.00	Franchise & Consents	1.1	1,108,278	1,228	306	16
3	303.00	Miscellaneous Intangible Plant	1.1	5,597	6	2	0
4		Total Direct Intangible Plant		$ 1,156,528	$ 1,281	$ 320	$ 17
5		Allocation Percentage	Intang. Plant	100.00%	0.11%	0.03%	0.00%
		Distribution Plant					
6	374.10	Land & Land Rights	1.0	$ 282,689	$ 1,051	$ -	$ -
7	374.20	Rights of Way	1.0	1,538,470	5,718	-	-
8	375.00	Structures & Improvements	1.0	283,643	1,054	-	-
9	376.00	Mains - Demand	1.0	479,842,484	1,783,404	-	-
10	376.00	Mains - Customer	5.0	479,842,484	-	74,059	-
11	376.00	Mains - Commodity	3.0	-	-	-	-
12	378.00	Measuring & Regulating Station Equip.	2.2	42,975,214	79,862	3,316	-
13	380.00	Services - Demand	1.0	0	0	-	-
14	380.00	Services - Customer	7.0	471,631,931	-	305,302	-
15	381.00	Meters	6.0	205,391,538	-	84,456	-
16	385.00	Indust Measuring & Reg. Station Equip.	3.0	8,075,089	-	-	24,484
17	387.00	Miscellaneous Equipment	1.0	229,431	853	-	-
18		Total Direct Distribution Plant		$ 1,690,092,974	$1,871,942	$ 467,133	$ 24,484
19		Allocation Percentage	Dist. Plant	100.00%	0.11%	0.03%	0.00%
20	389-398	Total Direct General Plant	1.1	$ 118,659,153	$ 131,426	$ 32,797	$ 1,719
21		Total Direct Net Plant		$ 1,809,908,655	$2,004,649	$ 500,250	$ 26,219
		Common - Systems Allocable					
22	301-303	Total Common Intangible Plant	1.1	$ 19,094,639	$ 21,149	$ 5,278	$ 277
23	389-398	Total Common General Plant	1.1	$ 19,066,682	$ 21,118	$ 5,270	$ 276
24		Total Systems Allocable		38,161,320	42,267	10,548	553
25		Total Net Plant		$ 1,848,069,976	$ 2,046,916	$ 510,797	$ 26,772
		Other Rate Base Items					
26		Cash Working Capital	11.2	$ (4,472,151)	$ (2,607)	$ (1,171)	$ (201)
27		Materials & Supplies	1.1	9,920,409	10,988	2,742	144
28		Prepayments	1.1	4,744,133	5,255	1,311	69
29		Other	1.1	-	-	-	-
30		Customer Deposits	8.0	(62,033,165)	-	(9,657)	-
31		Customer Advances	8.0	(48,475,278)	-	(7,547)	-
32		Deferred Taxes	1.1	(291,236,457)	(322,573)	(80,496)	(4,219)
33		Other	4.0	-	-	-	-
34		Total Allocated Rate Base		$ 1,456,517,468	$1,737,979	$ 415,979	$ 22,565

SOUTHWEST GAS CORPORATION
ARIZONA
RATE BASE ALLOCATION TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Small General Demand	Small General Customer	Small General Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Direct					
		Intangible Plant					
1	301.00	Organization	1.1	$ 42,653	$ 120	$ 485	$ 1
2	302.00	Franchise & Consents	1.1	1,108,278	3,109	12,599	35
3	303.00	Miscellaneous Intangible Plant	1.1	5,597	16	64	0
4		Total Direct Intangible Plant		$ 1,156,528	$ 3,245	$ 13,147	$ 36
5		Allocation Percentage	Intang. Plant	100.00%	0.28%	1.14%	0.00%
		Distribution Plant					
6	374.10	Land & Land Rights	1.0	$ 282,689	$ 2,661	$ -	$ -
7	374.20	Rights of Way	1.0	1,538,470	14,484	-	-
8	375.00	Structures & Improvements	1.0	283,643	2,670	-	-
9	376.00	Mains - Demand	1.0	479,842,484	4,517,548	-	-
10	376.00	Mains - Customer	5.0	479,842,484	-	8,402,916	-
11	376.00	Mains - Commodity	3.0	-	-	-	-
12	378.00	Measuring & Regulating Station Equip.	2.2	42,975,214	202,298	376,287	-
13	380.00	Services - Demand	1.0	0	0	-	-
14	380.00	Services - Customer	7.0	471,631,931	-	7,232,348	-
15	381.00	Meters	6.0	205,391,538	-	3,201,304	-
16	385.00	Indust Measuring & Reg. Station Equip.	3.0	8,075,089	-	-	53,076
17	387.00	Miscellaneous Equipment	1.0	229,431	2,160	-	-
18		Total Direct Distribution Plant		$ 1,690,092,974	$4,741,822	$19,212,855	$ 53,076
19		Allocation Percentage	Dist. Plant	100.00%	0.28%	1.14%	0.00%
20	389-398	Total Direct General Plant	1.1	$ 118,659,153	$ 332,917	$ 1,348,909	$ 3,726
21		Total Direct Net Plant		$ 1,809,908,655	$5,077,984	$20,574,911	$ 56,839
		Common - Systems Allocable					
22	301-303	Total Common Intangible Plant	1.1	$ 19,094,639	$ 53,573	$ 217,066	$ 600
23	389-398	Total Common General Plant	1.1	$ 19,066,682	$ 53,495	$ 216,749	$ 599
24		Total Systems Allocable		38,161,320	107,068	433,815	1,198
25		Total Net Plant		$ 1,848,069,976	$ 5,185,052	$ 21,008,726	$ 58,037
		Other Rate Base Items					
26		Cash Working Capital	11.2	$ (4,472,151)	$ (6,603)	$ (60,620)	$ (435)
27		Materials & Supplies	1.1	9,920,409	27,833	112,774	312
28		Prepayments	1.1	4,744,133	13,310	53,931	149
29		Other	1.1	-	-	-	-
30		Customer Deposits	8.0	(62,033,165)	-	(1,095,747)	-
31		Customer Advances	8.0	(48,475,278)	-	(856,262)	-
32		Deferred Taxes	1.1	(291,236,457)	(817,110)	(3,310,755)	(9,146)
33		Other	4.0	-	-	-	-
34		Total Allocated Rate Base		$ 1,456,517,468	$4,402,482	$15,852,047	$ 48,917

SOUTHWEST GAS CORPORATION
ARIZONA
RATE BASE ALLOCATION TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Medium General Demand	Medium General Customer	Medium General Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Direct					
		Intangible Plant					
1	301.00	Organization	1.1	$ 42,653	$ 744	$ 1,394	$ 13
2	302.00	Franchise & Consents	1.1	1,108,278	19,320	36,209	340
3	303.00	Miscellaneous Intangible Plant	1.1	5,597	98	183	2
4		Total Direct Intangible Plant		$ 1,156,528	$ 20,161	$ 37,785	$ 355
5		Allocation Percentage	Intang. Plant	100.00%	1.74%	3.27%	0.03%
		Distribution Plant					
6	374.10	Land & Land Rights	1.0	$ 282,689	$ 16,536	$ -	$ -
7	374.20	Rights of Way	1.0	1,538,470	89,993	-	-
8	375.00	Structures & Improvements	1.0	283,643	16,592	-	-
9	376.00	Mains - Demand	1.0	479,842,484	28,068,568	-	-
10	376.00	Mains - Customer	5.0	479,842,484	-	7,413,700	-
11	376.00	Mains - Commodity	3.0	-	-	-	-
12	378.00	Measuring & Regulating Station Equip.	2.2	42,975,214	1,256,926	331,990	-
13	380.00	Services - Demand	1.0	0	0	-	-
14	380.00	Services - Customer	7.0	471,631,931	-	39,017,313	-
15	381.00	Meters	6.0	205,391,538	-	8,454,432	-
16	385.00	Indust Measuring & Reg. Station Equip.	3.0	8,075,089	-	-	519,183
17	387.00	Miscellaneous Equipment	1.0	229,431	13,421	-	-
18		Total Direct Distribution Plant		$ 1,690,092,974	$29,462,036	$55,217,434	$ 519,183
19		Allocation Percentage	Dist. Plant	100.00%	1.74%	3.27%	0.03%
20	389-398	Total Direct General Plant	1.1	$ 118,659,153	$ 2,068,490	$ 3,876,742	$ 36,451
21		Total Direct Net Plant		$ 1,809,908,655	$31,550,686	$59,131,961	$ 555,990
		Common - Systems Allocable					
22	301-303	Total Common Intangible Plant	1.1	$ 19,094,639	$ 332,862	$ 623,846	$ 5,866
23	389-398	Total Common General Plant	1.1	$ 19,066,682	$ 332,374	$ 622,932	$ 5,857
24		Total Systems Allocable		38,161,320	665,236	1,246,778	11,723
25		Total Net Plant		$ 1,848,069,976	$ 32,215,922	$ 60,378,739	$ 567,713
		Other Rate Base Items					
26		Cash Working Capital	11.2	$ (4,472,151)	$ (41,028)	$ (126,780)	$ (4,252)
27		Materials & Supplies	1.1	9,920,409	172,935	324,112	3,047
28		Prepayments	1.1	4,744,133	82,701	154,997	1,457
29		Other	1.1	-	-	-	-
30		Customer Deposits	8.0	(62,033,165)	-	(966,753)	-
31		Customer Advances	8.0	(48,475,278)	-	(755,461)	-
32		Deferred Taxes	1.1	(291,236,457)	(5,076,892)	(9,515,056)	(89,466)
33		Other	4.0	-	-	-	-
34		Total Allocated Rate Base		$ 1,456,517,468	$27,353,637	$49,493,798	$ 478,499

SOUTHWEST GAS CORPORATION
ARIZONA
RATE BASE ALLOCATION TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Large General Demand	Large General Customer	Large General Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Direct					
		Intangible Plant					
1	301.00	Organization	1.1	$ 42,653	$ 1,897	$ 784	$ 35
2	302.00	Franchise & Consents	1.1	1,108,278	49,301	20,364	906
3	303.00	Miscellaneous Intangible Plant	1.1	5,597	249	103	5
4		Total Direct Intangible Plant		$ 1,156,528	$ 51,448	$ 21,251	$ 945
5		Allocation Percentage	Intang. Plant	100.00%	4.45%	1.84%	0.08%
		Distribution Plant					
6	374.10	Land & Land Rights	1.0	$ 282,689	$ 42,198	$ -	$ -
7	374.20	Rights of Way	1.0	1,538,470	229,651	-	-
8	375.00	Structures & Improvements	1.0	283,643	42,340	-	-
9	376.00	Mains - Demand	1.0	479,842,484	71,627,331	-	-
10	376.00	Mains - Customer	5.0	479,842,484	-	3,465,912	-
11	376.00	Mains - Commodity	3.0	-	-	-	-
12	378.00	Measuring & Regulating Station Equip.	2.2	42,975,214	3,207,511	155,205	-
13	380.00	Services - Demand	1.0	0	0	-	-
14	380.00	Services - Customer	7.0	471,631,931	-	21,275,495	-
15	381.00	Meters	6.0	205,391,538	-	6,158,351	-
16	385.00	Indust Measuring & Reg. Station Equip.	3.0	8,075,089	-	-	1,381,583
17	387.00	Miscellaneous Equipment	1.0	229,431	34,248	-	-
18		Total Direct Distribution Plant		$ 1,690,092,974	$75,183,279	$31,054,963	$ 1,381,583
19		Allocation Percentage	Dist. Plant	100.00%	4.45%	1.84%	0.08%
20	389-398	Total Direct General Plant	1.1	$ 118,659,153	$ 5,278,517	$ 2,180,327	$ 96,999
21		Total Direct Net Plant		$ 1,809,908,655	$80,513,244	$33,256,541	$ 1,479,528
		Common - Systems Allocable					
22	301-303	Total Common Intangible Plant	1.1	$ 19,094,639	$ 849,419	$ 350,858	$ 15,609
23	389-398	Total Common General Plant	1.1	$ 19,066,682	$ 848,176	$ 350,345	$ 15,586
24		Total Systems Allocable		38,161,320	1,697,595	701,203	31,195
25		Total Net Plant		$ 1,848,069,976	$ 82,210,839	$ 33,957,745	$ 1,510,723
		Other Rate Base Items					
26		Cash Working Capital	11.2	$ (4,472,151)	$ (104,699)	$ (105,301)	$ (11,316)
27		Materials & Supplies	1.1	9,920,409	441,306	182,285	8,110
28		Prepayments	1.1	4,744,133	211,041	87,172	3,878
29		Other	1.1	-	-	-	-
30		Customer Deposits	8.0	(62,033,165)	-	-	-
31		Customer Advances	8.0	(48,475,278)	-	-	-
32		Deferred Taxes	1.1	(291,236,457)	(12,955,566)	(5,351,385)	(238,074)
33		Other	4.0	-	-	-	-
34		Total Allocated Rate Base		$ 1,456,517,468	$69,802,921	$28,770,516	$ 1,273,320

SOUTHWEST GAS CORPORATION
ARIZONA
RATE BASE ALLOCATION TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Transportation Eligible Demand	Transportation Eligible Customer	Transportation Eligible Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Direct					
		Intangible Plant					
1	301.00	Organization	1.1	$ 42,653	$ 1,350	$ 222	$ 34
2	302.00	Franchise & Consents	1.1	1,108,278	35,080	5,767	893
3	303.00	Miscellaneous Intangible Plant	1.1	5,597	177	29	5
4		Total Direct Intangible Plant		$ 1,156,528	$ 36,608	$ 6,018	$ 931
5		Allocation Percentage	Intang. Plant	100.00%	3.17%	0.52%	0.08%
		Distribution Plant					
6	374.10	Land & Land Rights	1.0	$ 282,689	$ 30,026	$ -	$ -
7	374.20	Rights of Way	1.0	1,538,470	163,408	-	-
8	375.00	Structures & Improvements	1.0	283,643	30,127	-	-
9	376.00	Mains - Demand	1.0	479,842,484	50,966,332	-	-
10	376.00	Mains - Customer	5.0	479,842,484	-	95,149	-
11	376.00	Mains - Commodity	3.0	-	-	-	-
12	378.00	Measuring & Regulating Station Equip.	2.2	42,975,214	2,282,300	4,261	-
13	380.00	Services - Demand	1.0	0	0	-	-
14	380.00	Services - Customer	7.0	471,631,931	-	523,689	-
15	381.00	Meters	6.0	205,391,538	-	8,171,445	-
16	385.00	Indust Measuring & Reg. Station Equip.	3.0	8,075,089	-	-	1,361,080
17	387.00	Miscellaneous Equipment	1.0	229,431	24,369	-	-
18		Total Direct Distribution Plant		$ 1,690,092,974	$ 53,496,562	$ 8,794,544	$ 1,361,080
19		Allocation Percentage	Dist. Plant	100.00%	3.17%	0.52%	0.08%
20	389-398	Total Direct General Plant	1.1	$ 118,659,153	$ 3,755,922	$ 617,453	$ 95,560
21		Total Direct Net Plant		$ 1,809,908,655	$ 57,289,091	$ 9,418,015	$ 1,457,571
		Common - Systems Allocable					
22	301-303	Total Common Intangible Plant	1.1	$ 19,094,639	$ 604,403	$ 99,361	$ 15,377
23	389-398	Total Common General Plant	1.1	$ 19,066,682	$ 603,518	$ 99,215	$ 15,355
24		Total Systems Allocable		38,161,320	1,207,921	198,576	30,732
25		Total Net Plant		$ 1,848,069,976	$ 58,497,013	$ 9,616,591	$ 1,488,303
		Other Rate Base Items					
26		Cash Working Capital	11.2	$ (4,472,151)	$ (74,498)	$ (54,380)	$ (11,148)
27		Materials & Supplies	1.1	9,920,409	314,011	51,622	7,989
28		Prepayments	1.1	4,744,133	150,166	24,687	3,821
29		Other	1.1	-	-	-	-
30		Customer Deposits	8.0	(62,033,165)	-	-	-
31		Customer Advances	8.0	(48,475,278)	-	-	-
32		Deferred Taxes	1.1	(291,236,457)	(9,218,516)	(1,515,474)	(234,541)
33		Other	4.0	-	-	-	-
34		Total Allocated Rate Base		$ 1,456,517,468	$ 49,668,175	$ 8,123,045	$ 1,254,424

SOUTHWEST GAS CORPORATION
ARIZONA
RATE BASE ALLOCATION TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Large-2 Demand	Large-2 Customer	Large-2 Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Direct					
		Intangible Plant					
1	301.00	Organization	1.1	$ 42,653	$ 578	$ 584	$ 13
2	302.00	Franchise & Consents	1.1	1,108,278	15,008	15,182	326
3	303.00	Miscellaneous Intangible Plant	1.1	5,597	76	77	2
4		Total Direct Intangible Plant		$ 1,156,528	$ 15,662	$ 15,843	$ 341
5		Allocation Percentage	Intang. Plant	100.00%	1.35%	1.37%	0.03%
		Distribution Plant					
6	374.10	Land & Land Rights	1.0	$ 282,689	$ 12,846	$ -	$ -
7	374.20	Rights of Way	1.0	1,538,470	69,910	-	-
8	375.00	Structures & Improvements	1.0	283,643	12,889	-	-
9	376.00	Mains - Demand	1.0	479,842,484	21,804,748	-	-
10	376.00	Mains - Customer	5.0	479,842,484	-	212,859	-
11	376.00	Mains - Commodity	3.0	-	-	-	-
12	378.00	Measuring & Regulating Station Equip.	2.2	42,975,214	976,428	9,532	-
13	380.00	Services - Demand	1.0	0	0	-	-
14	380.00	Services - Customer	7.0	471,631,931	-	21,275,495	-
15	381.00	Meters	6.0	205,391,538	-	1,654,694	-
16	385.00	Indust Measuring & Reg. Station Equip.	3.0	8,075,089	-	-	497,735
17	387.00	Miscellaneous Equipment	1.0	229,431	10,426	-	-
18		Total Direct Distribution Plant		$ 1,690,092,974	$22,887,247	$ 23,152,580	$ 497,735
19		Allocation Percentage	Dist. Plant	100.00%	1.35%	1.37%	0.03%
20	389-398	Total Direct General Plant	1.1	$ 118,659,153	$ 1,606,883	$ 1,625,511	$ 34,945
21		Total Direct Net Plant		$ 1,809,908,655	$24,509,792	$ 24,793,935	$ 533,021
		Common - Systems Allocable					
22	301-303	Total Common Intangible Plant	1.1	$ 19,094,639	$ 258,580	$ 261,577	$ 5,623
23	389-398	Total Common General Plant	1.1	$ 19,066,682	$ 258,201	$ 261,194	$ 5,615
24		Total Systems Allocable		38,161,320	516,781	522,772	11,239
25		Total Net Plant		$ 1,848,069,976	$ 25,026,573	$ 25,316,707	$ 544,260
		Other Rate Base Items					
26		Cash Working Capital	11.2	$ (4,472,151)	$ (31,872)	$ (37,345)	$ (4,077)
27		Materials & Supplies	1.1	9,920,409	134,342	135,900	2,922
28		Prepayments	1.1	4,744,133	64,245	64,990	1,397
29		Other	1.1	-	-	-	-
30		Customer Deposits	8.0	(62,033,165)	-	-	-
31		Customer Advances	8.0	(48,475,278)	-	-	-
32		Deferred Taxes	1.1	(291,236,457)	(3,943,926)	(3,989,648)	(85,770)
33		Other	4.0	-	-	-	-
34		Total Allocated Rate Base		$ 1,456,517,468	$21,249,362	$ 21,490,604	$ 458,732

SOUTHWEST GAS CORPORATION
ARIZONA
RATE BASE ALLOCATION TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Air Conditioning Demand	Air Conditioning Customer	Air Conditioning Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Direct					
		Intangible Plant					
1	301.00	Organization	1.1	$ 42,653	$ 4	$ 1	$ 0
2	302.00	Franchise & Consents	1.1	1,108,278	98	35	6
3	303.00	Miscellaneous Intangible Plant	1.1	5,597	0	0	0
4		Total Direct Intangible Plant		$ 1,156,528	$ 102	$ 36	$ 6
5		Allocation Percentage	Intang. Plant	100.00%	0.01%	0.00%	0.00%
		Distribution Plant					
6	374.10	Land & Land Rights	1.0	$ 282,689	$ 84	$ -	$ -
7	374.20	Rights of Way	1.0	1,538,470	456	-	-
8	375.00	Structures & Improvements	1.0	283,643	84	-	-
9	376.00	Mains - Demand	1.0	479,842,484	142,276	-	-
10	376.00	Mains - Customer	5.0	479,842,484	-	11,935	-
11	376.00	Mains - Commodity	3.0	-	-	-	-
12	378.00	Measuring & Regulating Station Equip.	2.2	42,975,214	6,371	534	-
13	380.00	Services - Demand	1.0	0	0	-	-
14	380.00	Services - Customer	7.0	471,631,931	-	27,431	-
15	381.00	Meters	6.0	205,391,538	-	13,134	-
16	385.00	Indust Measuring & Reg. Station Equip.	3.0	8,075,089	-	-	8,410
17	387.00	Miscellaneous Equipment	1.0	229,431	68	-	-
18		Total Direct Distribution Plant		$ 1,690,092,974	$ 149,339	$ 53,034	$ 8,410
19		Allocation Percentage	Dist. Plant	100.00%	0.01%	0.00%	0.00%
20	389-398	Total Direct General Plant	1.1	$ 118,659,153	$ 10,485	$ 3,723	$ 590
21		Total Direct Net Plant		$ 1,809,908,655	$ 159,926	$ 56,794	$ 9,007
		Common - Systems Allocable					
22	301-303	Total Common Intangible Plant	1.1	$ 19,094,639	$ 1,687	$ 599	$ 95
23	389-398	Total Common General Plant	1.1	$ 19,066,682	$ 1,685	$ 598	$ 95
24		Total Systems Allocable		38,161,320	3,372	1,197	190
25		Total Net Plant		$ 1,848,069,976	$ 163,298	$ 57,992	$ 9,197
		Other Rate Base Items					
26		Cash Working Capital	11.2	$ (4,472,151)	$ (208)	$ (161)	$ (69)
27		Materials & Supplies	1.1	9,920,409	877	311	49
28		Prepayments	1.1	4,744,133	419	149	24
29		Other	1.1	-	-	-	-
30		Customer Deposits	8.0	(62,033,165)	-	-	-
31		Customer Advances	8.0	(48,475,278)	-	-	-
32		Deferred Taxes	1.1	(291,236,457)	(25,734)	(9,139)	(1,449)
33		Other	4.0	-	-	-	-
34		Total Allocated Rate Base		$ 1,456,517,468	$ 138,652	$ 49,152	$ 7,751

SOUTHWEST GAS CORPORATION
ARIZONA
RATE BASE ALLOCATION TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Street Lighting Demand (e)	Street Lighting Customer (f)	Street Lighting Commodity (g)
		Direct					
		Intangible Plant					
1	301.00	Organization	1.1	$ 42,653	$ 1	$ 8	$ 0
2	302.00	Franchise & Consents	1.1	1,108,278	22	204	1
3	303.00	Miscellaneous Intangible Plant	1.1	5,597	0	1	0
4		Total Direct Intangible Plant		$ 1,156,528	$ 23	$ 213	$ 1
5		Allocation Percentage	Intang. Plant	100.00%	0.00%	0.02%	0.00%
		Distribution Plant					
6	374.10	Land & Land Rights	1.0	$ 282,689	$ 19	$ -	$ -
7	374.20	Rights of Way	1.0	1,538,470	102	-	-
8	375.00	Structures & Improvements	1.0	283,643	19	-	-
9	376.00	Mains - Demand	1.0	479,842,484	31,791	-	-
10	376.00	Mains - Customer	5.0	479,842,484	-	88,283	-
11	376.00	Mains - Commodity	3.0	-	-	-	-
12	378.00	Measuring & Regulating Station Equip.	2.2	42,975,214	1,424	3,953	-
13	380.00	Services - Demand	1.0	0	0	-	-
14	380.00	Services - Customer	7.0	471,631,931	-	219,239	-
15	381.00	Meters	6.0	205,391,538	-	-	-
16	385.00	Indust Measuring & Reg. Station Equip.	3.0	8,075,089	-	-	1,174
17	387.00	Miscellaneous Equipment	1.0	229,431	15	-	-
18		Total Direct Distribution Plant		$ 1,690,092,974	$ 33,369	$ 311,475	$ 1,174
19		Allocation Percentage	Dist. Plant	100.00%	0.00%	0.02%	0.00%
20	389-398	Total Direct General Plant	1.1	$ 118,659,153	$ 2,343	$ 21,868	$ 82
21		Total Direct Net Plant		$ 1,809,908,655	$ 35,735	$ 333,556	$ 1,258
		Common - Systems Allocable					
22	301-303	Total Common Intangible Plant	1.1	$ 19,094,639	$ 377	$ 3,519	$ 13
23	389-398	Total Common General Plant	1.1	$ 19,066,682	$ 376	$ 3,514	$ 13
24		Total Systems Allocable		38,161,320	753	7,033	27
25		Total Net Plant		$ 1,848,069,976	$ 36,488	$ 340,589	$ 1,284
		Other Rate Base Items					
26		Cash Working Capital	11.2	$ (4,472,151)	$ (46)	$ (570)	$ (10)
27		Materials & Supplies	1.1	9,920,409	196	1,828	7
28		Prepayments	1.1	4,744,133	94	874	3
29		Other	1.1	-	-	-	-
30		Customer Deposits	8.0	(62,033,165)	-	-	-
31		Customer Advances	8.0	(48,475,278)	-	-	-
32		Deferred Taxes	1.1	(291,236,457)	(5,750)	(53,673)	(202)
33		Other	4.0	-	-	-	-
34		Total Allocated Rate Base		$ 1,456,517,468	$ 30,981	$ 289,049	$ 1,082

SOUTHWEST GAS CORPORATION
ARIZONA
RATE BASE ALLOCATION TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Compression on Customer's Premises Demand	Customer	Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Direct					
		Intangible Plant					
1	301.00	Organization	1.1	$ 42,653	$ 57	$ 8	$ 1
2	302.00	Franchise & Consents	1.1	1,108,278	1,469	221	36
3	303.00	Miscellaneous Intangible Plant	1.1	5,597	7	1	0
4		Total Direct Intangible Plant		$ 1,156,528	$ 1,533	$ 230	$ 38
5		Allocation Percentage	Intang. Plant	100.00%	0.13%	0.02%	0.00%
		Distribution Plant					
6	374.10	Land & Land Rights	1.0	$ 282,689	$ 1,257	$ -	$ -
7	374.20	Rights of Way	1.0	1,538,470	6,842	-	-
8	375.00	Structures & Improvements	1.0	283,643	1,261	-	-
9	376.00	Mains - Demand	1.0	479,842,484	2,133,913	-	-
10	376.00	Mains - Customer	5.0	479,842,484	-	59,836	-
11	376.00	Mains - Commodity	3.0	-	-	-	-
12	378.00	Measuring & Regulating Station Equip.	2.2	42,975,214	95,558	2,679	-
13	380.00	Services - Demand	1.0	0	0	-	-
14	380.00	Services - Customer	7.0	471,631,931	-	176,379	-
15	381.00	Meters	6.0	205,391,538	-	97,770	-
16	385.00	Indust Measuring & Reg. Station Equip.	3.0	8,075,089	-	-	55,500
17	387.00	Miscellaneous Equipment	1.0	229,431	1,020	-	-
18		Total Direct Distribution Plant		$ 1,690,092,974	$ 2,239,851	$ 336,664	$ 55,500
19		Allocation Percentage	Dist. Plant	100.00%	0.13%	0.02%	0.00%
20	389-398	Total Direct General Plant	1.1	$ 118,659,153	$ 157,257	$ 23,637	$ 3,897
21		Total Direct Net Plant		$ 1,809,908,655	$ 2,398,641	$ 360,532	$ 59,435
		Common - Systems Allocable					
22	301-303	Total Common Intangible Plant	1.1	$ 19,094,639	$ 25,306	$ 3,804	$ 627
23	389-398	Total Common General Plant	1.1	$ 19,066,682	$ 25,269	$ 3,798	$ 626
24		Total Systems Allocable		38,161,320	50,575	7,602	1,253
25		Total Net Plant		$ 1,848,069,976	$ 2,449,216	$ 368,133	$ 60,688
		Other Rate Base Items					
26		Cash Working Capital	11.2	$ (4,472,151)	$ (3,119)	$ (1,056)	$ (455)
27		Materials & Supplies	1.1	9,920,409	13,147	1,976	326
28		Prepayments	1.1	4,744,133	6,287	945	156
29		Other	1.1	-	-	-	-
30		Customer Deposits	8.0	(62,033,165)	-	-	-
31		Customer Advances	8.0	(48,475,278)	-	-	-
32		Deferred Taxes	1.1	(291,236,457)	(385,971)	(58,014)	(9,564)
33		Other	4.0	-	-	-	-
34		Total Allocated Rate Base		$ 1,456,517,468	$ 2,079,560	$ 311,984	$ 51,151

SOUTHWEST GAS CORPORATION
ARIZONA
RATE BASE ALLOCATION TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Electric Generation Demand (e)	Electric Generation Customer (f)	Electric Generation Commodity (g)
		Direct					
		Intangible Plant					
1	301.00	Organization	1.1	$ 42,653	$ 258	$ 14	$ 7
2	302.00	Franchise & Consents	1.1	1,108,278	6,705	358	188
3	303.00	Miscellaneous Intangible Plant	1.1	5,597	34	2	1
4		Total Direct Intangible Plant		$ 1,156,528	$ 6,997	$ 373	$ 196
5		Allocation Percentage	Intang. Plant	100.00%	0.60%	0.03%	0.02%
		Distribution Plant					
6	374.10	Land & Land Rights	1.0	$ 282,689	$ 5,739	$ -	$ -
7	374.20	Rights of Way	1.0	1,538,470	31,233	-	-
8	375.00	Structures & Improvements	1.0	283,643	5,758	-	-
9	376.00	Mains - Demand	1.0	479,842,484	9,741,320	-	-
10	376.00	Mains - Customer	5.0	479,842,484	-	8,828	-
11	376.00	Mains - Commodity	3.0	-	-	-	-
12	378.00	Measuring & Regulating Station Equip.	2.2	42,975,214	436,222	395	-
13	380.00	Services - Demand	1.0	0	0	-	-
14	380.00	Services - Customer	7.0	471,631,931	-	84,565	-
15	381.00	Meters	6.0	205,391,538	-	451,838	-
16	385.00	Indust Measuring & Reg. Station Equip.	3.0	8,075,089	-	-	287,050
17	387.00	Miscellaneous Equipment	1.0	229,431	4,658	-	-
18		Total Direct Distribution Plant		$ 1,690,092,974	$ 10,224,929	$ 545,626	$ 287,050
19		Allocation Percentage	Dist. Plant	100.00%	0.60%	0.03%	0.02%
20	389-398	Total Direct General Plant	1.1	$ 118,659,153	$ 717,878	$ 38,308	$ 20,153
21		Total Direct Net Plant		$ 1,809,908,655	$ 10,949,804	$ 584,307	$ 307,400
		Common - Systems Allocable					
22	301-303	Total Common Intangible Plant	1.1	$ 19,094,639	$ 115,521	$ 6,164	$ 3,243
23	389-398	Total Common General Plant	1.1	$ 19,066,682	$ 115,352	$ 6,155	$ 3,238
24		Total Systems Allocable		38,161,320	230,873	12,320	6,481
25		Total Net Plant		$ 1,848,069,976	$ 11,180,677	$ 596,627	$ 313,881
		Other Rate Base Items					
26		Cash Working Capital	11.2	$ (4,472,151)	$ (14,239)	$ (3,113)	$ (2,351)
27		Materials & Supplies	1.1	9,920,409	60,018	3,203	1,685
28		Prepayments	1.1	4,744,133	28,702	1,532	806
29		Other	1.1	-	-	-	-
30		Customer Deposits	8.0	(62,033,165)	-	-	-
31		Customer Advances	8.0	(48,475,278)	-	-	-
32		Deferred Taxes	1.1	(291,236,457)	(1,761,958)	(94,022)	(49,464)
33		Other	4.0	-	-	-	-
34		Total Allocated Rate Base		$ 1,456,517,468	$ 9,493,200	$ 504,226	$ 264,556

SOUTHWEST GAS CORPORATION
ARIZONA
RATE BASE ALLOCATION TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Small Essential Agricultural User Demand	Customer	Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Direct					
		Intangible Plant					
1	301.00	Organization	1.1	$ 42,653	$ 44	$ 18	$ 1
2	302.00	Franchise & Consents	1.1	1,108,278	1,133	468	24
3	303.00	Miscellaneous Intangible Plant	1.1	5,597	6	2	0
4		Total Direct Intangible Plant		$ 1,156,528	$ 1,182	$ 488	$ 25
5		Allocation Percentage	Intang. Plant	100.00%	0.10%	0.04%	0.00%
		Distribution Plant					
6	374.10	Land & Land Rights	1.0	$ 282,689	$ 970	$ -	$ -
7	374.20	Rights of Way	1.0	1,538,470	5,278	-	-
8	375.00	Structures & Improvements	1.0	283,643	973	-	-
9	376.00	Mains - Demand	1.0	479,842,484	1,646,125	-	-
10	376.00	Mains - Customer	5.0	479,842,484	-	24,973	-
11	376.00	Mains - Commodity	3.0	-	-	-	-
12	378.00	Measuring & Regulating Station Equip.	2.2	42,975,214	73,714	1,118	-
13	380.00	Services - Demand	1.0	0	0	-	-
14	380.00	Services - Customer	7.0	471,631,931	-	493,282	-
15	381.00	Meters	6.0	205,391,538	-	194,128	-
16	385.00	Indust Measuring & Reg. Station Equip.	3.0	8,075,089	-	-	36,001
17	387.00	Miscellaneous Equipment	1.0	229,431	787	-	-
18		Total Direct Distribution Plant		$ 1,690,092,974	$ 1,727,847	$ 713,501	$ 36,001
19		Allocation Percentage	Dist. Plant	100.00%	0.10%	0.04%	0.00%
20	389-398	Total Direct General Plant	1.1	$ 118,659,153	$ 121,310	$ 50,094	$ 2,528
21		Total Direct Net Plant		$ 1,809,908,655	$ 1,850,340	$ 764,083	$ 38,553
		Common - Systems Allocable					
22	301-303	Total Common Intangible Plant	1.1	$ 19,094,639	$ 19,521	$ 8,061	$ 407
23	389-398	Total Common General Plant	1.1	$ 19,066,682	$ 19,493	$ 8,049	$ 406
24		Total Systems Allocable		38,161,320	39,014	16,110	813
25		Total Net Plant		$ 1,848,069,976	$ 1,889,353	$ 780,194	$ 39,366
		Other Rate Base Items					
26		Cash Working Capital	11.2	$ (4,472,151)	$ (2,406)	$ (1,905)	$ (295)
27		Materials & Supplies	1.1	9,920,409	10,142	4,188	211
28		Prepayments	1.1	4,744,133	4,850	2,003	101
29		Other	1.1	-	-	-	-
30		Customer Deposits	8.0	(62,033,165)	-	-	-
31		Customer Advances	8.0	(48,475,278)	-	-	-
32		Deferred Taxes	1.1	(291,236,457)	(297,742)	(122,950)	(6,204)
33		Other	4.0	-	-	-	-
34		Total Allocated Rate Base		$ 1,456,517,468	$ 1,604,197	$ 661,529	$ 33,180

SOUTHWEST GAS CORPORATION
ARIZONA
RATE BASE ALLOCATION TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Natural Gas Engine Demand	Customer	Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Direct					
		Intangible Plant					
1	301.00	Organization	1.1	$ 42,653	$ 27	$ 43	$ 3
2	302.00	Franchise & Consents	1.1	1,108,278	708	1,129	68
3	303.00	Miscellaneous Intangible Plant	1.1	5,597	4	6	0
4		Total Direct Intangible Plant		$ 1,156,528	$ 739	$ 1,178	$ 71
5		Allocation Percentage	Intang. Plant	100.00%	0.06%	0.10%	0.01%
		Distribution Plant					
6	374.10	Land & Land Rights	1.0	$ 282,689	$ 606	$ -	$ -
7	374.20	Rights of Way	1.0	1,538,470	3,297	-	-
8	375.00	Structures & Improvements	1.0	283,643	608	-	-
9	376.00	Mains - Demand	1.0	479,842,484	1,028,411	-	-
10	376.00	Mains - Customer	5.0	479,842,484	-	163,364	-
11	376.00	Mains - Commodity	3.0	-	-	-	-
12	378.00	Measuring & Regulating Station Equip.	2.2	42,975,214	46,053	7,316	-
13	380.00	Services - Demand	1.0	0	0	-	-
14	380.00	Services - Customer	7.0	471,631,931	-	257,647	-
15	381.00	Meters	6.0	205,391,538	-	1,293,372	-
16	385.00	Indust Measuring & Reg. Station Equip.	3.0	8,075,089	-	-	103,119
17	387.00	Miscellaneous Equipment	1.0	229,431	492	-	-
18		Total Direct Distribution Plant		$ 1,690,092,974	$1,079,467	$1,721,699	$ 103,119
19		Allocation Percentage	Dist. Plant	100.00%	0.06%	0.10%	0.01%
20	389-398	Total Direct General Plant	1.1	$ 118,659,153	$ 75,788	$ 120,878	$ 7,240
21		Total Direct Net Plant		$ 1,809,908,655	$1,155,994	$1,843,755	$ 110,430
		Common - Systems Allocable					
22	301-303	Total Common Intangible Plant	1.1	$ 19,094,639	$ 12,196	$ 19,452	$ 1,165
23	389-398	Total Common General Plant	1.1	$ 19,066,682	$ 12,178	$ 19,423	$ 1,163
24		Total Systems Allocable		38,161,320	24,374	38,875	2,328
25		Total Net Plant		$ 1,848,069,976	$ 1,180,367	$ 1,882,630	$ 112,758
		Other Rate Base Items					
26		Cash Working Capital	11.2	$ (4,472,151)	$ (1,503)	$ (9,243)	$ (845)
27		Materials & Supplies	1.1	9,920,409	6,336	10,106	605
28		Prepayments	1.1	4,744,133	3,030	4,833	289
29		Other	1.1	-	-	-	-
30		Customer Deposits	8.0	(62,033,165)	-	-	-
31		Customer Advances	8.0	(48,475,278)	-	-	-
32		Deferred Taxes	1.1	(291,236,457)	(186,014)	(296,683)	(17,769)
33		Other	4.0	-	-	-	-
34		Total Allocated Rate Base		$ 1,456,517,468	$1,002,217	$1,591,643	$ 95,039

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Single-Family Residential Demand	Single-Family Residential Customer	Single-Family Residential Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Depreciation Expense & Amortization					
		Direct					
1	301 - 303	Intangible Plant	Intang. Plant	$ 58,852	$ 10,271	$ 35,029	$ 127
2	374.1-387	Distribution Plant	Dist. Plant	87,634,565	15,293,886	52,160,207	189,696
3	389-398	General	1.1	5,363,611	936,051	3,192,428	11,610
4		Total Direct Depreciation Expense		$ 93,057,028	$ 16,240,208	$ 55,387,664	$ 201,434
		System Allocable Amortization					
5		Miscellaneous Intangible	1.1	6,009,339	1,048,743	3,576,766	13,008
6		Structures-Leasehold Improvemen	1.1	235,643	41,124	140,255	510
7		Total System Allocable Amortization		$ 6,244,982	$ 1,089,867	$ 3,717,021	$ 13,518
8							
9		Total System Depreciation Expense	1.1	$ 235,643	41,124	140,255	510
10		Total Depreciation Expense		$ 99,302,010	$ 17,330,076	$ 59,104,685	$ 214,952
11		Amortization Gas Plant Acquisition	1.1	(52,943)	(9,240)	(31,512)	(115)
12		Regulatory Amortizations	7.0	337,524	-	268,082	-
13		Total Depreciation Expenses	1.1	$ 284,581	$ 49,665	$ 169,383	$ 616
14							
15		Total Depreciation & Amortization Expense		$ 99,586,591	$ 17,379,740	$ 59,274,068	$ 215,568
		Operation and Maintenance Expense					
		Gas Supply Expense					
16	803.00	Natural Gas Transmission Line Purch	3.0	$ -	$ -	$ -	$ -
17	805.10	Purchased Gas Cost Adjustments	3.0	-	-	-	-
18	810.00	Gas Used for Compression Station Fı	3.0	-	-	-	-
19	813.00	Other Gas Supply Expenses	3.0	1,138,145	-	-	515,636
20		Total Gas Supply Expenses		$ 1,138,145	$ -	$ -	$ 515,636
		Distribution Expenses					
21	870.00	Operation Supervision and Engineering					
22		Labor & Labor Loading	5.5	$ 10,369,650	$ 834,441	$ 7,339,036	$ 69,470
23		Materials & Expenses	5.5	1,345,019	108,233	951,926	9,011
24	871.00	Distribution Load Dispatching					
25		Labor & Labor Loading	3.0	432,781	-	-	196,071
26		Materials & Expenses	3.0	58,350	-	-	26,436
27	874.00	Mains and Services Expenses					
28		Labor & Labor Loading	4.4	5,632,988	1,105,894	3,216,956	-
29		Materials & Expenses	4.4	3,877,544	761,257	2,214,436	-
30	875.00	Measuring & Regulating Exps. - General					
31		Labor & Labor Loading	2.2	2,082,588	609,797	960,943	-
32		Materials & Expenses	2.2	668,341	195,695	308,384	-
33	878.00	Meter and House Regulator Expenses					
34		Labor & Labor Loading	6.0	8,847,520	-	7,267,061	-
35		Materials & Expenses	6.0	1,261,264	-	1,035,960	-
36	879.00	Customer Installation Expense					
37		Labor & Labor Loading	6.0	9,347,707	-	7,677,898	-
38		Materials & Expenses	6.0	1,004,015	-	824,665	-
39	880.00	Other Expenses					
40		Labor & Labor Loading	5.5	7,800,225	627,681	5,520,546	52,257
41		Materials & Expenses	5.5	5,084,124	409,117	3,598,248	34,060
42	881.00	Rents	5.5	2,044,165	164,493	1,446,741	13,695
43		Total Distribution Operating Expenses		$ 59,856,281	$ 4,816,609	$ 42,362,802	$ 401,000
44							
45		Total Distribution & Gas Supply Expenses		$ 60,994,426	$ 4,816,609	$ 42,362,802	$ 916,636

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Single-Family Residential Demand (e)	Single-Family Residential Customer (f)	Single-Family Residential Commodity (g)
		Maintenance Expenses					
1	885.00	Maintenance Supervision & Engineering					
2		Labor & Labor Loading	6.6	$ 3,276,925	$ 621,441	$ 1,904,200	$ -
3		Materials & Expenses	6.6	286,414	54,316	166,434	-
4	886.00	Maintenance of Structures & Improvement					
5		Labor & Labor Loading	1.0	11,997	7,026	-	-
6		Materials & Expenses	1.0	52,089	30,504	-	-
7	887.00	Maintenance of Mains					
8		Labor & Labor Loading	2.2	12,116,895	3,547,915	5,590,948	-
9		Materials & Expenses	2.2	9,657,291	2,827,725	4,456,044	-
10	889.00	Maint. of Measuring & Reg. Station Equip.					
11		Labor & Labor Loading	2.2	1,354,752	396,681	625,106	-
12		Materials & Expenses	2.2	670,136	196,221	309,213	-
13	892.00	Maintenance of Services					
14		Labor & Labor Loading	3.3	5,929,798	0	4,709,805	-
15		Materials & Expenses	3.3	3,757,582	0	2,984,500	-
16	893.00	Maintenance of Meter & House Regulators					
17		Labor & Labor Loading	6.0	2,171,290	-	1,783,426	-
18		Materials & Expenses	6.0	1,088,133	-	893,756	-
19	894.00	Maintenance of Other Equipment					
20		Labor & Labor Loading	6.6	209,080	39,650	121,495	-
21		Materials & Expenses	6.6	141,204	26,778	82,053	-
22		Total Distribution-Maintenance		$ 40,723,587	$ 7,748,257	$ 23,626,980	$ -
23		Total Distribution O & M		$ 100,579,868	$ 12,564,865	$ 65,989,782	$ 401,000
		Customer Accounts Expenses					
24	901.00	Supervision Expenses					
25		Labor & Labor Loading	10.1	$ 2,405,936	$ -	$ 2,158,224	$ -
26		Materials & Expenses	10.1	138,017	-	123,807	-
27	902.00	Meter Reading Expenses					
28		Labor & Labor Loading	11.0	1,550,841	-	1,431,434	-
29		Materials & Expenses	11.0	413,390	-	381,561	-
30	903.00	Customer Records & Collections Expenses					
31		Labor & Labor Loading	4.0	16,896,473	-	15,592,659	-
32		Materials & Expenses	4.0	9,198,375	-	8,488,583	-
33	903.00	Customer Records & Collections - KAM					
34		Labor & Labor Loading - KAM	15.0	811,470	-	-	-
35		Materials & Expenses - KAM	15.0	53,477	-	-	-
36	904.00	Uncollectible Accounts Expense	4.0	2,008,980	-	1,853,957	-
37	905.00	Miscellaneous Customer Accounts Expenses					
38		Labor & Labor Loading	10.1	390,373	-	350,181	-
39		Materials & Expenses	10.1	13,940	-	12,505	-
40		Total Customer Accounts Expenses		$ 33,881,272	$ -	$ 30,392,912	$ -
		Customer Service & Informational Expenses					
41	908.00	Customer Assistance Expense					
42		Labor & Labor Loading	4.0	$ 590,805	$ -	$ 545,215	$ -
43		Materials & Expenses	4.0	595,758	-	549,786	-
44	909.00	Info. & Instructional Advertising Exps.					
45		Labor & Labor Loading	4.0	-	-	-	-
46		Materials & Expenses	4.0	6,000	-	5,537	-
47	910.00	Misc. Customer Service & Info. Exp.					
48		Labor & Labor Loading	4.0	-	-	-	-
49		Materials & Expenses	4.0	12,573	-	11,603	-
50		Total Customer Service & Info. Exp.		$ 1,205,135	$ -	$ 1,112,141	$ -
		Sales Expense					
51	911-913						
52		Labor & Labor Loading	4.0	$ -	$ -	$ -	$ -
53		Materials & Expenses	4.0	-	-	-	-
54		Total Sales Expense		$ -	$ -	$ -	$ -
55		Total O & M Expense		$ 136,804,420	$ 12,564,865	$ 97,494,835	$ 916,636
56		Allocation Percentage	Total O&M	100.00%	9.18%	71.27%	0.67%
		Other Operating Deductions					
57		Administrative & General Expense	Total O&M	$ 65,125,498	5,981,482	46,412,241	436,363
58		Interest on Customer Deposits	8.0	2,908,517	-	2,707,390	-
59		Taxes Other Than Income	1.1	27,203,877	4,747,590	16,191,783	58,886
60		Total Allocated Operating Deductions		$ 232,042,312	$ 23,293,937	$ 162,806,249	$ 1,411,885
		Tax Adjustments					
61		Interest Expense	1.1	42,713,744	7,454,355	25,423,276	92,459
62		South Georgia - State	1.1	-	-	-	-
63		Investment Tax Credit (I.T.C.)	1.1	(528,360)	(92,209)	(314,481)	(1,144)
64		South Georgia - Federal	1.1	290,114	50,630	172,676	628

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Single-Family Residential Demand	Single-Family Residential Customer	Single-Family Residential Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Summary of Allocated Cost of Service					
		Rate Base					
1		Total Direct Net Plant		$ 1,809,908,655	315,863,232	1,077,259,978	3,917,772
2		Total Common Systems Alloc Net Plant		38,161,320	6,659,871	22,713,667	82,605
3		Cash Working Capital	1.1	(4,472,151)	(410,747)	(3,187,116)	(29,965)
4		Materials & Supplies	1.1	9,920,409	1,731,299	5,904,640	21,474
5		Prepayments	1.1	4,744,133	827,941	2,823,714	10,269
6		Other	1.1	-	-	-	-
7		Customer Deposits	8.0	(62,033,165)	-	(57,743,519)	-
8		Customer Advances	8.0	(48,475,278)	-	(45,123,172)	-
9		Deferred Taxes	1.1	(291,236,457)	(50,826,260)	(173,344,317)	(630,418)
10		Other	7.0	-	-	-	-
11		Total Rate Base		$ 1,456,517,468	$ 273,845,335	$ 829,303,876	$ 3,371,738
		Revenues					
12		Net Operating Margin	Direct	$ 392,027,615	155,277,690	114,598,778	-
13		Special Contract & Optional Margin	Net Op Margi	6,788,127	2,688,700	1,984,327	-
14		Late Charges	12.0	1,929,221	-	1,501,541	-
15		Service Establishment Charges	9.0	8,075,816	-	7,162,841	-
16		Reconnect / Reread Charges	9.0	868,969	-	770,732	-
17		Other Revenue - Labor	Net Op Margi	6,985	2,767	2,042	-
18		Other Revenue - Parts & Material	Net Op Margi	1,305	517	382	-
19		Other Revenue - Field Collection Fee	14.0	569,766	-	521,586	-
20		Other Revenue - Returned Item Fee	13.0	195,916	-	178,472	-
21		Other Revenue - Rental Income	Net Op Margi	448,378	177,597	131,071	-
22		Total Revenue		$ 410,912,098	158,147,271	126,851,771	-
		Operating Deductions					
23		O & M		$ (136,804,420)	(12,564,865)	(97,494,835)	(916,636)
24		A & G	Total O&M	(65,125,498)	(5,981,482)	(46,412,241)	(436,363)
25		Depreciation Expense	Deprec Exp	(99,586,591)	(17,379,740)	(59,274,068)	(215,568)
26		Interest on Customer Deposits	8.0	(2,908,517)	-	(2,707,390)	-
27		Taxes other than Income	1.1	(27,203,877)	(4,747,590)	(16,191,783)	(58,886)
28							
		State Income Tax					
29		Taxable Income before Interest Exp.		$ 79,283,195	117,473,594	(95,228,546)	(1,627,452)
30		Interest Expense	1.1	(42,713,744)	(7,454,355)	(25,423,276)	(92,459)
31		State Taxable Income		$ 36,569,451	110,019,239	(120,651,822)	(1,719,912)
32		State Income Tax	6.968%	2,548,159	7,666,141	(8,407,019)	(119,843)
33		South Georgia	1.1	-	-	-	-
34		State Income Tax		2,548,159	7,666,141	(8,407,019)	(119,843)
		Federal Income Tax					
35		Taxable Income before Interest Exp.		79,283,195	117,473,594	(95,228,546)	(1,627,452)
36		Interest Expense	1.1	(42,713,744)	(7,454,355)	(25,423,276)	(92,459)
37		Federal Taxable Income		36,569,451	110,019,239	(120,651,822)	(1,719,912)
38		Federal Income Tax	32.56%	11,907,452	35,823,584	(39,285,681)	(560,024)
39		I T C	1.1	(528,360)	(92,209)	(314,481)	(1,144)
40		South Georgia	1.1	290,114	50,630	172,676	628
41		Total Federal Income Tax		11,669,206	35,782,006	(39,427,485)	(560,540)
42		Regulatory Amortization	1.1	-	-	-	-

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Multi-Family Residential Demand	Multi-Family Residential Customer	Multi-Family Residential Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Depreciation Expense & Amortization					
		Direct					
1	301 - 303	Intangible Plant	Intang. Plant	$ 58,852	$ 195	$ 1,073	$ 3
2	374.1-387	Distribution Plant	Dist. Plant	87,634,565	291,071	1,598,414	4,577
3	389-398	General	1.1	5,363,611	17,815	97,830	280
4		Total Direct Depreciation Expense		$ 93,057,028	$ 309,081	$ 1,697,318	$ 4,861
		System Allocable Amortization					
5		Miscellaneous Intangible	1.1	6,009,339	19,960	109,608	314
6		Structures-Leasehold Improvemen	1.1	235,643	783	4,298	12
7		Total System Allocable Amortization		$ 6,244,982	$ 20,742	$ 113,906	$ 326
8							
9		Total System Depreciation Expense	1.1	$ 235,643	783	4,298	12
10		Total Depreciation Expense		$ 99,302,010	$ 329,823	$ 1,811,223	$ 5,187
11		Amortization Gas Plant Acquisition	1.1	(52,943)	(176)	(966)	(3)
12		Regulatory Amortizations	7.0	337,524	-	4,398	-
13		Total Depreciation Expenses	1.1	$ 284,581	$ 945	$ 5,191	$ 15
14							
15		Total Depreciation & Amortization Expense		$ 99,586,591	$ 330,768	$ 1,816,414	$ 5,202
		Operation and Maintenance Expense					
		Gas Supply Expense					
16	803.00	Natural Gas Transmission Line Purch	3.0	$ -	$ -	$ -	$ -
17	805.10	Purchased Gas Cost Adjustments	3.0	-	-	-	-
18	810.00	Gas Used for Compression Station Fι	3.0	-	-	-	-
19	813.00	Other Gas Supply Expenses	3.0	1,138,145	-	-	12,442
20		Total Gas Supply Expenses		$ 1,138,145	$ -	$ -	$ 12,442
		Distribution Expenses					
21	870.00	Operation Supervision and Engineering					
22		Labor & Labor Loading	5.5	$ 10,369,650	$ 15,881	$ 278,309	$ 1,676
23		Materials & Expenses	5.5	1,345,019	2,060	36,099	217
24	871.00	Distribution Load Dispatching					
25		Labor & Labor Loading	3.0	432,781	-	-	4,731
26		Materials & Expenses	3.0	58,350	-	-	638
27	874.00	Mains and Services Expenses					
28		Labor & Labor Loading	4.4	5,632,988	21,047	91,108	-
29		Materials & Expenses	4.4	3,877,544	14,488	62,716	-
30	875.00	Measuring & Regulating Exps. - General					
31		Labor & Labor Loading	2.2	2,082,588	11,606	36,902	-
32		Materials & Expenses	2.2	668,341	3,724	11,843	-
33	878.00	Meter and House Regulator Expenses					
34		Labor & Labor Loading	6.0	8,847,520	-	297,864	-
35		Materials & Expenses	6.0	1,261,264	-	42,462	-
36	879.00	Customer Installation Expense					
37		Labor & Labor Loading	6.0	9,347,707	-	314,703	-
38		Materials & Expenses	6.0	1,004,015	-	33,802	-
39	880.00	Other Expenses					
40		Labor & Labor Loading	5.5	7,800,225	11,946	209,349	1,261
41		Materials & Expenses	5.5	5,084,124	7,786	136,452	822
42	881.00	Rents	5.5	2,044,165	3,131	54,863	330
43		Total Distribution Operating Expenses		$ 59,856,281	$ 91,669	$ 1,606,471	$ 9,676
44							
45		Total Distribution & Gas Supply Expenses		$ 60,994,426	$ 91,669	$ 1,606,471	$ 22,118

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Multi-Family Residential Demand	Multi-Family Residential Customer	Multi-Family Residential Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Maintenance Expenses					
1	885.00	Maintenance Supervision & Engineering					
2		Labor & Labor Loading	6.6	$ 3,276,925	$ 11,827	$ 58,649	$ -
3		Materials & Expenses	6.6	286,414	1,034	5,126	-
4	886.00	Maintenance of Structures & Improvement					
5		Labor & Labor Loading	1.0	11,997	134	-	-
6		Materials & Expenses	1.0	52,089	581	-	-
7	887.00	Maintenance of Mains					
8		Labor & Labor Loading	2.2	12,116,895	67,523	214,706	-
9		Materials & Expenses	2.2	9,657,291	53,817	171,123	-
10	889.00	Maint. of Measuring & Reg. Station Equip.					
11		Labor & Labor Loading	2.2	1,354,752	7,550	24,006	-
12		Materials & Expenses	2.2	670,136	3,734	11,874	-
13	892.00	Maintenance of Services					
14		Labor & Labor Loading	3.3	5,929,798	0	77,262	-
15		Materials & Expenses	3.3	3,757,582	0	48,959	-
16	893.00	Maintenance of Meter & House Regulators					
17		Labor & Labor Loading	6.0	2,171,290	-	73,099	-
18		Materials & Expenses	6.0	1,088,133	-	36,633	-
19	894.00	Maintenance of Other Equipment					
20		Labor & Labor Loading	6.6	209,080	755	3,742	-
21		Materials & Expenses	6.6	141,204	510	2,527	-
22		Total Distribution-Maintenance		$ 40,723,587	$ 147,464	$ 727,706	$ -
23		Total Distribution O & M		$ 100,579,868	$ 239,132	$ 2,334,177	$ 9,676
		Customer Accounts Expenses					
24	901.00	Supervision Expenses					
25		Labor & Labor Loading	10.1	$ 2,405,936	$ -	$ 82,881	$ -
26		Materials & Expenses	10.1	138,017	-	4,754	-
27	902.00	Meter Reading Expenses					
28		Labor & Labor Loading	11.0	1,550,841	-	54,970	-
29		Materials & Expenses	11.0	413,390	-	14,653	-
30	903.00	Customer Records & Collections Expenses					
31		Labor & Labor Loading	4.0	16,896,473	-	598,795	-
32		Materials & Expenses	4.0	9,198,375	-	325,982	-
33	903.00	Customer Records & Collections - KAM					
34		Labor & Labor Loading - KAM	15.0	811,470	-	-	-
35		Materials & Expenses - KAM	15.0	53,477	-	-	-
36	904.00	Uncollectible Accounts Expense	4.0	2,008,980	-	71,196	-
37	905.00	Miscellaneous Customer Accounts Expenses					
38		Labor & Labor Loading	10.1	390,373	-	13,448	-
39		Materials & Expenses	10.1	13,940	-	480	-
40		Total Customer Accounts Expenses		$ 33,881,272	$ -	$ 1,167,160	$ -
		Customer Service & Informational Expenses					
41	908.00	Customer Assistance Expense					
42		Labor & Labor Loading	4.0	$ 590,805	$ -	$ 20,938	$ -
43		Materials & Expenses	4.0	595,758	-	21,113	-
44	909.00	Info. & Instructional Advertising Exps.					
45		Labor & Labor Loading	4.0	-	-	-	-
46		Materials & Expenses	4.0	6,000	-	213	-
47	910.00	Misc. Customer Service & Info. Exp.					
48		Labor & Labor Loading	4.0	-	-	-	-
49		Materials & Expenses	4.0	12,573	-	446	-
50		Total Customer Service & Info. Exp.		$ 1,205,135	$ -	$ 42,709	$ -
		Sales Expense					
51	911-913						
52		Labor & Labor Loading	4.0	$ -	$ -	$ -	$ -
53		Materials & Expenses	4.0	-	-	-	-
54		Total Sales Expense		$ -	$ -	$ -	$ -
55		Total O & M Expense		$ 136,804,420	$ 239,132	$ 3,544,046	$ 22,118
56		Allocation Percentage	Total O&M	100.00%	0.17%	2.59%	0.02%
		Other Operating Deductions					
57		Administrative & General Expense	Total O&M	$ 65,125,498	113,839	1,687,137	10,529
58		Interest on Customer Deposits	8.0	2,908,517	-	103,970	-
59		Taxes Other Than Income	1.1	27,203,877	90,355	496,186	1,421
60		Total Allocated Operating Deductions		$ 232,042,312	$ 443,326	$ 5,831,339	$ 34,069
		Tax Adjustments					
61		Interest Expense	1.1	42,713,744	141,870	779,079	2,231
62		South Georgia - State	1.1	-	-	-	-
63		Investment Tax Credit (I.T.C.)	1.1	(528,360)	(1,755)	(9,637)	(28)
64		South Georgia - Federal	1.1	290,114	964	5,292	15

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Multi-Family Residential Demand	Multi-Family Residential Customer	Multi-Family Residential Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Summary of Allocated Cost of Service					
		Rate Base					
1		Total Direct Net Plant		$ 1,809,908,655	6,011,457	33,011,904	94,536
2		Total Common Systems Alloc Net Plant		38,161,320	126,750	696,045	1,993
3		Cash Working Capital	1.1	(4,472,151)	(7,817)	(115,855)	(723)
4		Materials & Supplies	1.1	9,920,409	32,950	180,944	518
5		Prepayments	1.1	4,744,133	15,757	86,531	248
6		Other	1.1	-	-	-	-
7		Customer Deposits	8.0	(62,033,165)	-	(2,217,488)	-
8		Customer Advances	8.0	(48,475,278)	-	(1,732,836)	-
9		Deferred Taxes	1.1	(291,236,457)	(967,317)	(5,312,020)	(15,212)
10		Other	7.0	-	-	-	-
11		Total Rate Base		$ 1,456,517,468	$ 5,211,779	$ 24,597,225	$ 81,360
		Revenues					
12		Net Operating Margin	Direct	$ 392,027,615	3,637,783	3,952,808	-
13		Special Contract & Optional Margin	Net Op Margi	6,788,127	62,990	68,445	-
14		Late Charges	12.0	1,929,221	-	72,012	-
15		Service Establishment Charges	9.0	8,075,816	-	684,292	-
16		Reconnect / Reread Charges	9.0	868,969	-	73,631	-
17		Other Revenue - Labor	Net Op Margi	6,985	65	70	-
18		Other Revenue - Parts & Material	Net Op Margi	1,305	12	13	-
19		Other Revenue - Field Collection Fee	14.0	569,766	-	21,900	-
20		Other Revenue - Returned Item Fee	13.0	195,916	-	8,736	-
21		Other Revenue - Rental Income	Net Op Margi	448,378	4,161	4,521	-
22		Total Revenue		$ 410,912,098	3,705,010	4,886,428	-
		Operating Deductions					
23		O & M		$ (136,804,420)	(239,132)	(3,544,046)	(22,118)
24		A & G	Total O&M	(65,125,498)	(113,839)	(1,687,137)	(10,529)
25		Depreciation Expense	Deprec Exp	(99,586,591)	(330,768)	(1,816,414)	(5,202)
26		Interest on Customer Deposits	8.0	(2,908,517)	-	(103,970)	-
27		Taxes other than Income	1.1	(27,203,877)	(90,355)	(496,186)	(1,421)
28							
		State Income Tax					
29		Taxable Income before Interest Exp.		$ 79,283,195	2,930,916	(2,761,324)	(39,270)
30		Interest Expense	1.1	(42,713,744)	(141,870)	(779,079)	(2,231)
31		State Taxable Income		$ 36,569,451	2,789,046	(3,540,403)	(41,501)
32		State Income Tax	6.968%	2,548,159	194,341	(246,695)	(2,892)
33		South Georgia	1.1	-	-	-	-
34		State Income Tax		2,548,159	194,341	(246,695)	(2,892)
		Federal Income Tax					
35		Taxable Income before Interest Exp.		79,283,195	2,930,916	(2,761,324)	(39,270)
36		Interest Expense	1.1	(42,713,744)	(141,870)	(779,079)	(2,231)
37		Federal Taxable Income		36,569,451	2,789,046	(3,540,403)	(41,501)
38		Federal Income Tax	32.56%	11,907,452	908,147	(1,152,798)	(13,513)
39		I T C	1.1	(528,360)	(1,755)	(9,637)	(28)
40		South Georgia	1.1	290,114	964	5,292	15
41		Total Federal Income Tax		11,669,206	907,355	(1,157,143)	(13,526)
42		Regulatory Amortization	1.1	-	-	-	-

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Master Meter Mobile Home Park Demand	Customer	Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Depreciation Expense & Amortization					
		Direct					
1	301 - 303	Intangible Plant	Intang. Plant	$ 58,852	$ 65	$ 16	$ 1
2	374.1-387	Distribution Plant	Dist. Plant	87,634,565	97,064	24,222	1,270
3	389-398	General	1.1	5,363,611	5,941	1,482	78
4		Total Direct Depreciation Expense		$ 93,057,028	$ 103,070	$ 25,720	$ 1,348
		System Allocable Amortization					
5		Miscellaneous Intangible	1.1	6,009,339	6,656	1,661	87
6		Structures-Leasehold Improvemen	1.1	235,643	261	65	3
7		Total System Allocable Amortization		$ 6,244,982	$ 6,917	$ 1,726	$ 90
8							
9		Total System Depreciation Expense	1.1	$ 235,643	261	65	3
10		Total Depreciation Expense		$ 99,302,010	$ 109,987	$ 27,447	$ 1,439
11		Amortization Gas Plant Acquisition	1.1	(52,943)	(59)	(15)	(1)
12		*Regulatory Amortizations*	7.0	337,524	-	218	-
13		Total Depreciation Expenses	1.1	$ 284,581	$ 315	$ 79	$ 4
14							
15		Total Depreciation & Amortization Expense		$ 99,586,591	$ 110,302	$ 27,525	$ 1,443
		Operation and Maintenance Expense					
		Gas Supply Expense					
16	803.00	Natural Gas Transmission Line Purch	3.0	$ -	$ -	$ -	$ -
17	805.10	Purchased Gas Cost Adjustments	3.0	-	-	-	-
18	810.00	*Gas Used for Compression Station Fu*	3.0	-	-	-	-
19	813.00	Other Gas Supply Expenses	3.0	1,138,145	-	-	3,451
20		Total Gas Supply Expenses		$ 1,138,145	$ -	$ -	$ 3,451
		Distribution Expenses					
21	870.00	Operation Supervision and Engineering					
22		Labor & Labor Loading	5.5	$ 10,369,650	$ 5,296	$ 3,480	$ 465
23		Materials & Expenses	5.5	1,345,019	687	451	60
24	871.00	Distribution Load Dispatching					
25		Labor & Labor Loading	3.0	432,781	-	-	1,312
26		Materials & Expenses	3.0	58,350	-	-	177
27	874.00	Mains and Services Expenses					
28		Labor & Labor Loading	4.4	5,632,988	7,019	1,493	-
29		Materials & Expenses	4.4	3,877,544	4,831	1,028	-
30	875.00	Measuring & Regulating Exps. - General					
31		Labor & Labor Loading	2.2	2,082,588	3,870	161	-
32		Materials & Expenses	2.2	668,341	1,242	52	-
33	878.00	Meter and House Regulator Expenses					
34		Labor & Labor Loading	6.0	8,847,520	-	3,638	-
35		Materials & Expenses	6.0	1,261,264	-	519	-
36	879.00	Customer Installation Expense					
37		Labor & Labor Loading	6.0	9,347,707	-	3,844	-
38		Materials & Expenses	6.0	1,004,015	-	413	-
39	880.00	Other Expenses					
40		Labor & Labor Loading	5.5	7,800,225	3,984	2,618	350
41		Materials & Expenses	5.5	5,084,124	2,596	1,706	228
42	881.00	Rents	5.5	2,044,165	1,044	686	92
43		Total Distribution Operating Expenses		$ 59,856,281	$ 30,569	$ 20,088	$ 2,684
44							
45		Total Distribution & Gas Supply Expenses		$ 60,994,426	$ 30,569	$ 20,088	$ 6,135

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Master Meter Mobile Home Park Demand	Customer	Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Maintenance Expenses					
1	885.00	Maintenance Supervision & Engineering					
2		Labor & Labor Loading	6.6	$ 3,276,925	$ 3,944	$ 843	$ -
3		Materials & Expenses	6.6	286,414	345	74	-
4	886.00	Maintenance of Structures & Improvement					
5		Labor & Labor Loading	1.0	11,997	45	-	-
6		Materials & Expenses	1.0	52,089	194	-	-
7	887.00	Maintenance of Mains					
8		Labor & Labor Loading	2.2	12,116,895	22,517	935	-
9		Materials & Expenses	2.2	9,657,291	17,946	745	-
10	889.00	Maint. of Measuring & Reg. Station Equip.					
11		Labor & Labor Loading	2.2	1,354,752	2,518	105	-
12		Materials & Expenses	2.2	670,136	1,245	52	-
13	892.00	Maintenance of Services					
14		Labor & Labor Loading	3.3	5,929,798	0	3,839	-
15		Materials & Expenses	3.3	3,757,582	0	2,432	-
16	893.00	Maintenance of Meter & House Regulators					
17		Labor & Labor Loading	6.0	2,171,290	-	893	-
18		Materials & Expenses	6.0	1,088,133	-	447	-
19	894.00	Maintenance of Other Equipment					
20		Labor & Labor Loading	6.6	209,080	252	54	-
21		Materials & Expenses	6.6	141,204	170	36	-
22		Total Distribution-Maintenance		$ 40,723,587	$ 49,175	$ 10,454	$ -
23		Total Distribution O & M		$ 100,579,868	$ 79,744	$ 30,542	$ 2,684
		Customer Accounts Expenses					
24	901.00	Supervision Expenses					
25		Labor & Labor Loading	10.1	$ 2,405,936	$ -	$ 361	$ -
26		Materials & Expenses	10.1	138,017	-	21	-
27	902.00	Meter Reading Expenses					
28		Labor & Labor Loading	11.0	1,550,841	-	239	-
29		Materials & Expenses	11.0	413,390	-	64	-
30	903.00	Customer Records & Collections Expenses					
31		Labor & Labor Loading	4.0	16,896,473	-	2,608	-
32		Materials & Expenses	4.0	9,198,375	-	1,420	-
33	903.00	Customer Records & Collections - KAM					
34		Labor & Labor Loading - KAM	15.0	811,470	-	-	-
35		Materials & Expenses - KAM	15.0	53,477	-	-	-
36	904.00	Uncollectible Accounts Expense	4.0	2,008,980	-	310	-
37	905.00	Miscellaneous Customer Accounts Expenses					
38		Labor & Labor Loading	10.1	390,373	-	59	-
39		Materials & Expenses	10.1	13,940	-	2	-
40		Total Customer Accounts Expenses		$ 33,881,272	$ -	$ 5,083	$ -
		Customer Service & Informational Expenses					
41	908.00	Customer Assistance Expense					
42		Labor & Labor Loading	4.0	$ 590,805	$ -	$ 91	$ -
43		Materials & Expenses	4.0	595,758	-	92	-
44	909.00	Info. & Instructional Advertising Exps.					
45		Labor & Labor Loading	4.0	-	-	-	-
46		Materials & Expenses	4.0	6,000	-	1	-
47	910.00	Misc. Customer Service & Info. Exp.					
48		Labor & Labor Loading	4.0	-	-	-	-
49		Materials & Expenses	4.0	12,573	-	2	-
50		Total Customer Service & Info. Exp.		$ 1,205,135	$ -	$ 186	$ -
		Sales Expense					
51	911-913						
52		Labor & Labor Loading	4.0	$ -	$ -	$ -	$ -
53		Materials & Expenses	4.0	-	-	-	-
54		Total Sales Expense		$ -	$ -	$ -	$ -
55		Total O & M Expense		$ 136,804,420	$ 79,744	$ 35,811	$ 6,135
56		Allocation Percentage	Total O&M	100.00%	0.06%	0.03%	0.00%
		Other Operating Deductions					
57		Administrative & General Expense	Total O&M	$ 65,125,498	37,962	17,048	2,920
58		Interest on Customer Deposits	8.0	2,908,517	-	453	-
59		Taxes Other Than Income	1.1	27,203,877	30,131	7,519	394
60		Total Allocated Operating Deductions		$ 232,042,312	$ 147,837	$ 60,830	$ 9,449
		Tax Adjustments					
61		Interest Expense	1.1	42,713,744	47,310	11,806	619
62		*South Georgia - State*	1.1	-	-	-	-
63		Investment Tax Credit (I.T.C.)	1.1	(528,360)	(585)	(146)	(8)
64		South Georgia - Federal	1.1	290,114	321	80	4

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Master Meter Mobile Home Park Demand (e)	Customer (f)	Commodity (g)
		Summary of Allocated Cost of Service					
		Rate Base					
1		Total Direct Net Plant		$ 1,809,908,655	2,004,649	500,250	26,219
2		Total Common Systems Alloc Net Plant		38,161,320	42,267	10,548	553
3		Cash Working Capital	1.1	(4,472,151)	(2,607)	(1,171)	(201)
4		Materials & Supplies	1.1	9,920,409	10,988	2,742	144
5		Prepayments	1.1	4,744,133	5,255	1,311	69
6		Other	1.1	-	-	-	-
7		Customer Deposits	8.0	(62,033,165)	-	(9,657)	-
8		Customer Advances	8.0	(48,475,278)	-	(7,547)	-
9		Deferred Taxes	1.1	(291,236,457)	(322,573)	(80,496)	(4,219)
10		Other	7.0	-	-	-	-
11		Total Rate Base		$ 1,456,517,468	$ 1,737,979	$ 415,979	$ 22,565
		Revenues					
12		Net Operating Margin	Direct	$ 392,027,615	744,355	119,592	
13		Special Contract & Optional Margin	Net Op Margi	6,788,127	12,889	2,071	-
14		Late Charges	12.0	1,929,221	-	963	-
15		Service Establishment Charges	9.0	8,075,816	-	325	-
16		Reconnect / Reread Charges	9.0	868,969	-	35	-
17		Other Revenue - Labor	Net Op Margi	6,985	13	2	-
18		Other Revenue - Parts & Material	Net Op Margi	1,305	2	0	-
19		Other Revenue - Field Collection Fee	14.0	569,766	-	20	-
20		Other Revenue - Returned Item Fee	13.0	195,916	-	28	-
21		Other Revenue - Rental Income	Net Op Margi	448,378	851	137	-
22		Total Revenue		$ 410,912,098	758,111	123,173	-
		Operating Deductions					
23		O & M		$ (136,804,420)	(79,744)	(35,811)	(6,135)
24		A & G	Total O&M	(65,125,498)	(37,962)	(17,048)	(2,920)
25		Depreciation Expense	Deprec Exp	(99,586,591)	(110,302)	(27,525)	(1,443)
26		Interest on Customer Deposits	8.0	(2,908,517)	-	(453)	-
27		Taxes other than Income	1.1	(27,203,877)	(30,131)	(7,519)	(394)
28							
		State Income Tax					
29		Taxable Income before Interest Exp.		$ 79,283,195	499,972	34,818	(10,892)
30		Interest Expense	1.1	(42,713,744)	(47,310)	(11,806)	(619)
31		State Taxable Income		$ 36,569,451	452,663	23,012	(11,510)
32		State Income Tax	6.968%	2,548,159	31,542	1,603	(802)
33		South Georgia	1.1	-	-	-	-
34		State Income Tax		2,548,159	31,542	1,603	(802)
		Federal Income Tax					
35		Taxable Income before Interest Exp.		79,283,195	499,972	34,818	(10,892)
36		Interest Expense	1.1	(42,713,744)	(47,310)	(11,806)	(619)
37		Federal Taxable Income		36,569,451	452,663	23,012	(11,510)
38		Federal Income Tax	32.56%	11,907,452	147,392	7,493	(3,748)
39		I T C	1.1	(528,360)	(585)	(146)	(8)
40		South Georgia	1.1	290,114	321	80	4
41		Total Federal Income Tax		11,669,206	147,129	7,427	(3,751)
42		Regulatory Amortization	1.1	-	-	-	-

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Small General Demand (e)	Small General Customer (f)	Small General Commodity (g)
		Depreciation Expense & Amortization					
		Direct					
1	301 - 303	Intangible Plant	Intang. Plant	$ 58,852	$ 165	$ 669	$ 2
2	374.1-387	Distribution Plant	Dist. Plant	87,634,565	245,873	996,223	2,752
3	389-398	General	1.1	5,363,611	15,048	60,973	168
4		Total Direct Depreciation Expense		$ 93,057,028	$ 261,086	$ 1,057,866	$ 2,922
		System Allocable Amortization					
5		Miscellaneous Intangible	1.1	6,009,339	16,860	68,314	189
6		Structures-Leasehold Improvemen	1.1	235,643	661	2,679	7
7		Total System Allocable Amortization		$ 6,244,982	$ 17,521	$ 70,993	$ 196
8							
9		Total System Depreciation Expense	1.1	$ 235,643	661	2,679	7
10		Total Depreciation Expense		$ 99,302,010	$ 278,607	$ 1,128,858	$ 3,119
11		Amortization Gas Plant Acquisition	1.1	(52,943)	(149)	(602)	(2)
12		Regulatory Amortizations	7.0	337,524	-	5,176	-
13		Total Depreciation Expenses	1.1	$ 284,581	$ 798	$ 3,235	$ 9
14							
15		Total Depreciation & Amortization Expense		$ 99,586,591	$ 279,406	$ 1,132,093	$ 3,127
		Operation and Maintenance Expense					
		Gas Supply Expense					
16	803.00	Natural Gas Transmission Line Purch	3.0	$ -	$ -	$ -	$ -
17	805.10	Purchased Gas Cost Adjustments	3.0	-	-	-	-
18	810.00	Gas Used for Compression Station Fı	3.0	-	-	-	-
19	813.00	Other Gas Supply Expenses	3.0	1,138,145	-	-	7,481
20		Total Gas Supply Expenses		$ 1,138,145	$ -	$ -	$ 7,481
		Distribution Expenses					
21	870.00	Operation Supervision and Engineering					
22		Labor & Labor Loading	5.5	$ 10,369,650	$ 13,415	$ 139,523	$ 1,008
23		Materials & Expenses	5.5	1,345,019	1,740	18,097	131
24	871.00	Distribution Load Dispatching					
25		Labor & Labor Loading	3.0	432,781	-	-	2,845
26		Materials & Expenses	3.0	58,350	-	-	384
27	874.00	Mains and Services Expenses					
28		Labor & Labor Loading	4.4	5,632,988	17,779	61,533	-
29		Materials & Expenses	4.4	3,877,544	12,238	42,357	-
30	875.00	Measuring & Regulating Exps. - General					
31		Labor & Labor Loading	2.2	2,082,588	9,803	18,235	-
32		Materials & Expenses	2.2	668,341	3,146	5,852	-
33	878.00	Meter and House Regulator Expenses					
34		Labor & Labor Loading	6.0	8,847,520	-	137,901	-
35		Materials & Expenses	6.0	1,261,264	-	19,658	-
36	879.00	Customer Installation Expense					
37		Labor & Labor Loading	6.0	9,347,707	-	145,697	-
38		Materials & Expenses	6.0	1,004,015	-	15,649	-
39	880.00	Other Expenses					
40		Labor & Labor Loading	5.5	7,800,225	10,091	104,952	758
41		Materials & Expenses	5.5	5,084,124	6,577	68,407	494
42	881.00	Rents	5.5	2,044,165	2,644	27,504	199
43		Total Distribution Operating Expenses		$ 59,856,281	$ 77,434	$ 805,365	$ 5,818
44							
45		Total Distribution & Gas Supply Expenses		$ 60,994,426	$ 77,434	$ 805,365	$ 13,298

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Small General Demand (e)	Small General Customer (f)	Small General Commodity (g)
		Maintenance Expenses					
1	885.00	Maintenance Supervision & Engineering					
2		Labor & Labor Loading	6.6	$ 3,276,925	$ 9,991	$ 36,361	$ -
3		Materials & Expenses	6.6	286,414	873	3,178	-
4	886.00	Maintenance of Structures & Improvement					
5		Labor & Labor Loading	1.0	11,997	113	-	-
6		Materials & Expenses	1.0	52,089	490	-	-
7	887.00	Maintenance of Mains					
8		Labor & Labor Loading	2.2	12,116,895	57,038	106,094	-
9		Materials & Expenses	2.2	9,657,291	45,460	84,558	-
10	889.00	Maint. of Measuring & Reg. Station Equip.					
11		Labor & Labor Loading	2.2	1,354,752	6,377	11,862	-
12		Materials & Expenses	2.2	670,136	3,155	5,868	-
13	892.00	Maintenance of Services					
14		Labor & Labor Loading	3.3	5,929,798	0	90,932	-
15		Materials & Expenses	3.3	3,757,582	0	57,622	-
16	893.00	Maintenance of Meter & House Regulators					
17		Labor & Labor Loading	6.0	2,171,290	-	33,842	-
18		Materials & Expenses	6.0	1,088,133	-	16,960	-
19	894.00	Maintenance of Other Equipment					
20		Labor & Labor Loading	6.6	209,080	637	2,320	-
21		Materials & Expenses	6.6	141,204	431	1,567	-
22		Total Distribution-Maintenance		$ 40,723,587	$ 124,565	$ 451,165	$ -
23		Total Distribution O & M		$ 100,579,868	$ 201,999	$ 1,256,530	$ 5,818
		Customer Accounts Expenses					
24	901.00	Supervision Expenses					
25		Labor & Labor Loading	10.1	$ 2,405,936	$ -	$ 40,955	$ -
26		Materials & Expenses	10.1	138,017	-	2,349	-
27	902.00	Meter Reading Expenses					
28		Labor & Labor Loading	11.0	1,550,841	-	27,163	-
29		Materials & Expenses	11.0	413,390	-	7,241	-
30	903.00	Customer Records & Collections Expenses					
31		Labor & Labor Loading	4.0	16,896,473	-	295,888	-
32		Materials & Expenses	4.0	9,198,375	-	161,080	-
33	903.00	Customer Records & Collections - KAM					
34		Labor & Labor Loading - KAM	15.0	811,470	-	-	-
35		Materials & Expenses - KAM	15.0	53,477	-	-	-
36	904.00	Uncollectible Accounts Expense	4.0	2,008,980	-	35,181	-
37	905.00	Miscellaneous Customer Accounts Expenses					
38		Labor & Labor Loading	10.1	390,373	-	6,645	-
39		Materials & Expenses	10.1	13,940	-	237	-
40		Total Customer Accounts Expenses		$ 33,881,272	$ -	$ 576,739	$ -
		Customer Service & Informational Expenses					
41	908.00	Customer Assistance Expense					
42		Labor & Labor Loading	4.0	$ 590,805	$ -	$ 10,346	$ -
43		Materials & Expenses	4.0	595,758	-	10,433	-
44	909.00	Info. & Instructional Advertising Exps.					
45		Labor & Labor Loading	4.0	-	-	-	-
46		Materials & Expenses	4.0	6,000	-	105	-
47	910.00	Misc. Customer Service & Info. Exp.					
48		Labor & Labor Loading	4.0	-	-	-	-
49		Materials & Expenses	4.0	12,573	-	220	-
50		Total Customer Service & Info. Exp.		$ 1,205,135	$ -	$ 21,104	$ -
		Sales Expense					
51	911-913						
52		Labor & Labor Loading	4.0	$ -	$ -	$ -	$ -
53		Materials & Expenses	4.0	-	-	-	-
54		Total Sales Expense		$ -	$ -	$ -	$ -
55		Total O & M Expense		$ 136,804,420	$ 201,999	$ 1,854,373	$ 13,298
56		Allocation Percentage	Total O&M	100.00%	0.15%	1.36%	0.01%
		Other Operating Deductions					
57		Administrative & General Expense	Total O&M	$ 65,125,498	96,161	882,771	6,331
58		Interest on Customer Deposits	8.0	2,908,517	-	51,376	-
59		Taxes Other Than Income	1.1	27,203,877	76,325	309,252	854
60		Total Allocated Operating Deductions		$ 232,042,312	$ 374,486	$ 3,097,772	$ 20,484
		Tax Adjustments					
61		Interest Expense	1.1	42,713,744	119,840	485,567	1,341
62		South Georgia - State	1.1	-	-	-	-
63		Investment Tax Credit (I.T.C.)	1.1	(528,360)	(1,482)	(6,006)	(17)
64		South Georgia - Federal	1.1	290,114	814	3,298	9

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Small General Demand (e)	Customer (f)	Commodity (g)
		Summary of Allocated Cost of Service					
		Rate Base					
1		Total Direct Net Plant		$ 1,809,908,655	5,077,984	20,574,911	56,839
2		Total Common Systems Alloc Net Plant		38,161,320	107,068	433,815	1,198
3		Cash Working Capital	1.1	(4,472,151)	(6,603)	(60,620)	(435)
4		Materials & Supplies	1.1	9,920,409	27,833	112,774	312
5		Prepayments	1.1	4,744,133	13,310	53,931	149
6		Other	1.1	-	-	-	-
7		Customer Deposits	8.0	(62,033,165)	-	(1,095,747)	-
8		Customer Advances	8.0	(48,475,278)	-	(856,262)	-
9		Deferred Taxes	1.1	(291,236,457)	(817,110)	(3,310,755)	(9,146)
10		Other	7.0	-	-	-	-
11		Total Rate Base		$ 1,456,517,468	$ 4,402,482	$ 15,852,047	$ 48,917
		Revenues					
12		Net Operating Margin	Direct	$ 392,027,615	2,255,006	5,653,808	
13		Special Contract & Optional Margin	Net Op Margi	6,788,127	39,046	97,898	-
14		Late Charges	12.0	1,929,221	-	20,276	-
15		Service Establishment Charges	9.0	8,075,816	-	98,113	-
16		Reconnect / Reread Charges	9.0	868,969	-	10,557	-
17		Other Revenue - Labor	Net Op Margi	6,985	40	101	-
18		Other Revenue - Parts & Material	Net Op Margi	1,305	8	19	-
19		Other Revenue - Field Collection Fee	14.0	569,766	-	5,200	-
20		Other Revenue - Returned Item Fee	13.0	195,916	-	1,820	-
21		Other Revenue - Rental Income	Net Op Margi	448,378	2,579	6,466	-
22		Total Revenue		$ 410,912,098	2,296,679	5,894,258	-
		Operating Deductions					
23		O & M		$ (136,804,420)	(201,999)	(1,854,373)	(13,298)
24		A & G	Total O&M	(65,125,498)	(96,161)	(882,771)	(6,331)
25		Depreciation Expense	Deprec Exp	(99,586,591)	(279,406)	(1,132,093)	(3,127)
26		Interest on Customer Deposits	8.0	(2,908,517)	-	(51,376)	-
27		Taxes other than Income	1.1	(27,203,877)	(76,325)	(309,252)	(854)
28							
		State Income Tax					
29		Taxable Income before Interest Exp.		$ 79,283,195	1,642,788	1,664,393	(23,611)
30		Interest Expense	1.1	(42,713,744)	(119,840)	(485,567)	(1,341)
31		State Taxable Income		$ 36,569,451	1,522,948	1,178,826	(24,952)
32		State Income Tax	6.968%	2,548,159	106,119	82,141	(1,739)
33		South Georgia	1.1	-	-	-	-
34		State Income Tax		2,548,159	106,119	82,141	(1,739)
		Federal Income Tax					
35		Taxable Income before Interest Exp.		79,283,195	1,642,788	1,664,393	(23,611)
36		Interest Expense	1.1	(42,713,744)	(119,840)	(485,567)	(1,341)
37		Federal Taxable Income		36,569,451	1,522,948	1,178,826	(24,952)
38		Federal Income Tax	32.56%	11,907,452	495,890	383,840	(8,125)
39		I T C	1.1	(528,360)	(1,482)	(6,006)	(17)
40		South Georgia	1.1	290,114	814	3,298	9
41		Total Federal Income Tax		11,669,206	495,222	381,132	(8,132)
42		Regulatory Amortization	1.1	-	-	-	-

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Medium General Demand	Medium General Customer	Medium General Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Depreciation Expense & Amortization					
		Direct					
1	301 - 303	Intangible Plant	Intang. Plant	$ 58,852	$ 1,026	$ 1,923	$ 18
2	374.1-387	Distribution Plant	Dist. Plant	87,634,565	1,527,663	2,863,130	26,921
3	389-398	General	1.1	5,363,611	93,500	175,236	1,648
4		Total Direct Depreciation Expense		$ 93,057,028	$ 1,622,189	$ 3,040,289	$ 28,586
		System Allocable Amortization					
5		Miscellaneous Intangible	1.1	6,009,339	104,756	196,333	1,846
6		Structures-Leasehold Improvemen	1.1	235,643	4,108	7,699	72
7		Total System Allocable Amortization		$ 6,244,982	$ 108,864	$ 204,031	$ 1,918
8							
9		Total System Depreciation Expense	1.1	$ 235,643	4,108	7,699	72
10		Total Depreciation Expense		$ 99,302,010	$ 1,731,052	$ 3,244,320	$ 30,505
11		Amortization Gas Plant Acquisition	1.1	(52,943)	(923)	(1,730)	(16)
12		Regulatory Amortizations	7.0	337,524	-	27,923	-
13		Total Depreciation Expenses	1.1	$ 284,581	$ 4,961	$ 9,298	$ 87
14							
15		Total Depreciation & Amortization Expense		$ 99,586,591	$ 1,736,013	$ 3,253,617	$ 30,592
		Operation and Maintenance Expense					
		Gas Supply Expense					
16	803.00	Natural Gas Transmission Line Purch	3.0	$ -	$ -	$ -	$ -
17	805.10	Purchased Gas Cost Adjustments	3.0	-	-	-	-
18	810.00	Gas Used for Compression Station Fı	3.0	-	-	-	-
19	813.00	Other Gas Supply Expenses	3.0	1,138,145	-	-	73,176
20		Total Gas Supply Expenses		$ 1,138,145	$ -	$ -	$ 73,176
		Distribution Expenses					
21	870.00	Operation Supervision and Engineering					
22		Labor & Labor Loading	5.5	$ 10,369,650	$ 83,350	$ 365,908	$ 9,859
23		Materials & Expenses	5.5	1,345,019	10,811	47,461	1,279
24	871.00	Distribution Load Dispatching					
25		Labor & Labor Loading	3.0	432,781	-	-	27,825
26		Materials & Expenses	3.0	58,350	-	-	3,752
27	874.00	Mains and Services Expenses					
28		Labor & Labor Loading	4.4	5,632,988	110,465	182,731	-
29		Materials & Expenses	4.4	3,877,544	76,040	125,785	-
30	875.00	Measuring & Regulating Exps. - General					
31		Labor & Labor Loading	2.2	2,082,588	60,911	16,088	-
32		Materials & Expenses	2.2	668,341	19,547	5,163	-
33	878.00	Meter and House Regulator Expenses					
34		Labor & Labor Loading	6.0	8,847,520	-	364,186	-
35		Materials & Expenses	6.0	1,261,264	-	51,917	-
36	879.00	Customer Installation Expense					
37		Labor & Labor Loading	6.0	9,347,707	-	384,775	-
38		Materials & Expenses	6.0	1,004,015	-	41,328	-
39	880.00	Other Expenses					
40		Labor & Labor Loading	5.5	7,800,225	62,697	275,242	7,416
41		Materials & Expenses	5.5	5,084,124	40,866	179,401	4,834
42	881.00	Rents	5.5	2,044,165	16,431	72,131	1,943
43		Total Distribution Operating Expenses		$ 59,856,281	$ 481,117	$ 2,112,116	$ 56,908
44							
45		Total Distribution & Gas Supply Expenses		$ 60,994,426	$ 481,117	$ 2,112,116	$ 130,084

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Medium General Demand (e)	Medium General Customer (f)	Medium General Commodity (g)
		Maintenance Expenses					
1	885.00	Maintenance Supervision & Engineering					
2		Labor & Labor Loading	6.6	$ 3,276,925	$ 62,074	$ 99,829	$ -
3		Materials & Expenses	6.6	286,414	5,425	8,725	-
4	886.00	Maintenance of Structures & Improvement					
5		Labor & Labor Loading	1.0	11,997	702	-	-
6		Materials & Expenses	1.0	52,089	3,047	-	-
7	887.00	Maintenance of Mains					
8		Labor & Labor Loading	2.2	12,116,895	354,391	93,605	-
9		Materials & Expenses	2.2	9,657,291	282,453	74,604	-
10	889.00	Maint. of Measuring & Reg. Station Equip.					
11		Labor & Labor Loading	2.2	1,354,752	39,623	10,466	-
12		Materials & Expenses	2.2	670,136	19,600	5,177	-
13	892.00	Maintenance of Services					
14		Labor & Labor Loading	3.3	5,929,798	0	490,562	-
15		Materials & Expenses	3.3	3,757,582	0	310,858	-
16	893.00	Maintenance of Meter & House Regulators					
17		Labor & Labor Loading	6.0	2,171,290	-	89,376	-
18		Materials & Expenses	6.0	1,088,133	-	44,790	-
19	894.00	Maintenance of Other Equipment					
20		Labor & Labor Loading	6.6	209,080	3,961	6,369	-
21		Materials & Expenses	6.6	141,204	2,675	4,302	-
22		Total Distribution-Maintenance		$ 40,723,587	$ 773,952	$ 1,238,664	$ -
23		Total Distribution O & M		$ 100,579,868	$ 1,255,069	$ 3,350,780	$ 56,908
		Customer Accounts Expenses					
24	901.00	Supervision Expenses					
25		Labor & Labor Loading	10.1	$ 2,405,936	$ -	$ 36,133	$ -
26		Materials & Expenses	10.1	138,017	-	2,073	-
27	902.00	Meter Reading Expenses					
28		Labor & Labor Loading	11.0	1,550,841	-	23,965	-
29		Materials & Expenses	11.0	413,390	-	6,388	-
30	903.00	Customer Records & Collections Expenses					
31		Labor & Labor Loading	4.0	16,896,473	-	261,055	-
32		Materials & Expenses	4.0	9,198,375	-	142,117	-
33	903.00	Customer Records & Collections - KAM					
34		Labor & Labor Loading - KAM	15.0	811,470	-	-	-
35		Materials & Expenses - KAM	15.0	53,477	-	-	-
36	904.00	Uncollectible Accounts Expense	4.0	2,008,980	-	31,039	-
37	905.00	Miscellaneous Customer Accounts Expenses					
38		Labor & Labor Loading	10.1	390,373	-	5,863	-
39		Materials & Expenses	10.1	13,940	-	209	-
40		Total Customer Accounts Expenses		$ 33,881,272	$ -	$ 508,844	$ -
		Customer Service & Informational Expenses					
41	908.00	Customer Assistance Expense					
42		Labor & Labor Loading	4.0	$ 590,805	$ -	$ 9,128	$ -
43		Materials & Expenses	4.0	595,758	-	9,205	-
44	909.00	Info. & Instructional Advertising Exps.					
45		Labor & Labor Loading	4.0	-	-	-	-
46		Materials & Expenses	4.0	6,000	-	93	-
47	910.00	Misc. Customer Service & Info. Exp.					
48		Labor & Labor Loading	4.0	-	-	-	-
49		Materials & Expenses	4.0	12,573	-	194	-
50		Total Customer Service & Info. Exp.		$ 1,205,135	$ -	$ 18,620	$ -
		Sales Expense					
51	911-913						
52		Labor & Labor Loading	4.0	$ -	$ -	$ -	$ -
53		Materials & Expenses	4.0	-	-	-	-
54		Total Sales Expense		$ -	$ -	$ -	$ -
55		Total O & M Expense		$ 136,804,420	$ 1,255,069	$ 3,878,244	$ 130,084
56		Allocation Percentage	Total O&M	100.00%	0.92%	2.83%	0.10%
		Other Operating Deductions					
57		Administrative & General Expense	Total O&M	$ 65,125,498	597,473	1,846,231	61,926
58		Interest on Customer Deposits	8.0	2,908,517	-	45,328	-
59		Taxes Other Than Income	1.1	27,203,877	474,223	888,784	8,357
60		Total Allocated Operating Deductions		$ 232,042,312	$ 2,326,766	$ 6,658,587	$ 200,367
		Tax Adjustments					
61		Interest Expense	1.1	42,713,744	744,594	1,395,511	13,121
62		South Georgia - State	1.1	-	-	-	-
63		Investment Tax Credit (I.T.C.)	1.1	(528,360)	(9,210)	(17,262)	(162)
64		South Georgia - Federal	1.1	290,114	5,057	9,478	89

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Medium General Demand	Medium General Customer	Medium General Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Summary of Allocated Cost of Service					
		Rate Base					
1		Total Direct Net Plant		$ 1,809,908,655	31,550,686	59,131,961	555,990
2		Total Common Systems Alloc Net Plant		38,161,320	665,236	1,246,778	11,723
3		Cash Working Capital	1.1	(4,472,151)	(41,028)	(126,780)	(4,252)
4		Materials & Supplies	1.1	9,920,409	172,935	324,112	3,047
5		Prepayments	1.1	4,744,133	82,701	154,997	1,457
6		Other	1.1	-	-	-	-
7		Customer Deposits	8.0	(62,033,165)	-	(966,753)	-
8		Customer Advances	8.0	(48,475,278)	-	(755,461)	-
9		Deferred Taxes	1.1	(291,236,457)	(5,076,892)	(9,515,056)	(89,466)
10		Other	7.0	-	-	-	-
11		Total Rate Base		$ 1,456,517,468	$ 27,353,637	$ 49,493,798	$ 478,499
		Revenues					
12		Net Operating Margin	Direct	$ 392,027,615	14,688,706	7,890,465	
13		Special Contract & Optional Margin	Net Op Margi	6,788,127	254,341	136,627	-
14		Late Charges	12.0	1,929,221	-	96,452	-
15		Service Establishment Charges	9.0	8,075,816	-	94,628	-
16		Reconnect / Reread Charges	9.0	868,969	-	10,182	-
17		Other Revenue - Labor	Net Op Margi	6,985	262	141	-
18		Other Revenue - Parts & Material	Net Op Margi	1,305	49	26	-
19		Other Revenue - Field Collection Fee	14.0	569,766	-	15,840	-
20		Other Revenue - Returned Item Fee	13.0	195,916	-	4,704	-
21		Other Revenue - Rental Income	Net Op Margi	448,378	16,800	9,025	-
22		Total Revenue		$ 410,912,098	14,960,158	8,258,089	-
		Operating Deductions					
23		O & M		$ (136,804,420)	(1,255,069)	(3,878,244)	(130,084)
24		A & G	Total O&M	(65,125,498)	(597,473)	(1,846,231)	(61,926)
25		Depreciation Expense	Deprec Exp	(99,586,591)	(1,736,013)	(3,253,617)	(30,592)
26		Interest on Customer Deposits	8.0	(2,908,517)	-	(45,328)	-
27		Taxes other than Income	1.1	(27,203,877)	(474,223)	(888,784)	(8,357)
28							
		State Income Tax					
29		Taxable Income before Interest Exp.		$ 79,283,195	10,897,379	(1,654,115)	(230,960)
30		Interest Expense	1.1	(42,713,744)	(744,594)	(1,395,511)	(13,121)
31		State Taxable Income		$ 36,569,451	10,152,785	(3,049,626)	(244,081)
32		State Income Tax	6.968%	2,548,159	707,446	(212,498)	(17,008)
33		South Georgia	1.1	-	-	-	-
34		State Income Tax		2,548,159	707,446	(212,498)	(17,008)
		Federal Income Tax					
35		Taxable Income before Interest Exp.		79,283,195	10,897,379	(1,654,115)	(230,960)
36		Interest Expense	1.1	(42,713,744)	(744,594)	(1,395,511)	(13,121)
37		Federal Taxable Income		36,569,451	10,152,785	(3,049,626)	(244,081)
38		Federal Income Tax	32.56%	11,907,452	3,305,869	(992,995)	(79,476)
39		I T C	1.1	(528,360)	(9,210)	(17,262)	(162)
40		South Georgia	1.1	290,114	5,057	9,478	89
41		Total Federal Income Tax		11,669,206	3,301,715	(1,000,778)	(79,549)
42		Regulatory Amortization	1.1	-	-	-	-

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Large -1 General Demand	Large -1 General Customer	Large -1 General Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Depreciation Expense & Amortization					
		Direct					
1	301 - 303	Intangible Plant	Intang. Plant	$ 58,852	$ 2,618	$ 1,081	$ 48
2	374.1-387	Distribution Plant	Dist. Plant	87,634,565	3,898,397	1,610,259	71,638
3	389-398	General	1.1	5,363,611	238,599	98,555	4,385
4		Total Direct Depreciation Expense		$ 93,057,028	$ 4,139,614	$ 1,709,896	$ 76,070
		System Allocable Amortization					
5		Miscellaneous Intangible	1.1	6,009,339	267,324	110,420	4,912
6		Structures-Leasehold Improvemen	1.1	235,643	10,483	4,330	193
7		Total System Allocable Amortization		$ 6,244,982	$ 277,806	$ 114,750	$ 5,105
8							
9		Total System Depreciation Expense	1.1	$ 235,643	10,483	4,330	193
10		Total Depreciation Expense		$ 99,302,010	$ 4,417,420	$ 1,824,645	$ 81,175
11		Amortization Gas Plant Acquisition	1.1	(52,943)	(2,355)	(973)	(43)
12		Regulatory Amortizations	7.0	337,524	-	15,226	-
13		Total Depreciation Expenses	1.1	$ 284,581	$ 12,660	$ 5,229	$ 233
14							
15		Total Depreciation & Amortization Expense		$ 99,586,591	$ 4,430,080	$ 1,829,874	$ 81,408
		Operation and Maintenance Expense					
		Gas Supply Expense					
16	803.00	Natural Gas Transmission Line Purch	3.0	$ -	$ -	$ -	$ -
17	805.10	Purchased Gas Cost Adjustments	3.0	-	-	-	-
18	810.00	Gas Used for Compression Station Fı	3.0	-	-	-	-
19	813.00	Other Gas Supply Expenses	3.0	1,138,145	-	-	194,728
20		Total Gas Supply Expenses		$ 1,138,145	$ -	$ -	$ 194,728
		Distribution Expenses					
21	870.00	Operation Supervision and Engineering					
22		Labor & Labor Loading	5.5	$ 10,369,650	$ 212,698	$ 245,966	$ 26,235
23		Materials & Expenses	5.5	1,345,019	27,589	31,904	3,403
24	871.00	Distribution Load Dispatching					
25		Labor & Labor Loading	3.0	432,781	-	-	74,045
26		Materials & Expenses	3.0	58,350	-	-	9,983
27	874.00	Mains and Services Expenses					
28		Labor & Labor Loading	4.4	5,632,988	281,891	97,371	-
29		Materials & Expenses	4.4	3,877,544	194,044	67,026	-
30	875.00	Measuring & Regulating Exps. - General					
31		Labor & Labor Loading	2.2	2,082,588	155,437	7,521	-
32		Materials & Expenses	2.2	668,341	49,883	2,414	-
33	878.00	Meter and House Regulator Expenses					
34		Labor & Labor Loading	6.0	8,847,520	-	265,279	-
35		Materials & Expenses	6.0	1,261,264	-	37,817	-
36	879.00	Customer Installation Expense					
37		Labor & Labor Loading	6.0	9,347,707	-	280,277	-
38		Materials & Expenses	6.0	1,004,015	-	30,104	-
39	880.00	Other Expenses					
40		Labor & Labor Loading	5.5	7,800,225	159,995	185,020	19,734
41		Materials & Expenses	5.5	5,084,124	104,284	120,595	12,863
42	881.00	Rents	5.5	2,044,165	41,929	48,487	5,172
43		Total Distribution Operating Expenses		$ 59,856,281	$ 1,227,749	$ 1,419,780	$ 151,436
44							
45		Total Distribution & Gas Supply Expenses		$ 60,994,426	$ 1,227,749	$ 1,419,780	$ 346,163

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Large -1 General Demand	Large -1 General Customer	Large -1 General Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Maintenance Expenses					
1	885.00	Maintenance Supervision & Engineering					
2		Labor & Labor Loading	6.6	$ 3,276,925	$ 158,405	$ 55,351	$ -
3		Materials & Expenses	6.6	286,414	13,845	4,838	-
4	886.00	Maintenance of Structures & Improvement					
5		Labor & Labor Loading	1.0	11,997	1,791	-	-
6		Materials & Expenses	1.0	52,089	7,776	-	-
7	887.00	Maintenance of Mains					
8		Labor & Labor Loading	2.2	12,116,895	904,360	43,760	-
9		Materials & Expenses	2.2	9,657,291	720,784	34,877	-
10	889.00	Maint. of Measuring & Reg. Station Equip.					
11		Labor & Labor Loading	2.2	1,354,752	101,114	4,893	-
12		Materials & Expenses	2.2	670,136	50,016	2,420	-
13	892.00	Maintenance of Services					
14		Labor & Labor Loading	3.3	5,929,798	0	267,495	-
15		Materials & Expenses	3.3	3,757,582	0	169,506	-
16	893.00	Maintenance of Meter & House Regulators					
17		Labor & Labor Loading	6.0	2,171,290	-	65,103	-
18		Materials & Expenses	6.0	1,088,133	-	32,626	-
19	894.00	Maintenance of Other Equipment					
20		Labor & Labor Loading	6.6	209,080	10,107	3,532	-
21		Materials & Expenses	6.6	141,204	6,826	2,385	-
22		Total Distribution-Maintenance		$ 40,723,587	$ 1,975,023	$ 686,786	$ -
23		Total Distribution O & M		$ 100,579,868	$ 3,202,773	$ 2,106,567	$ 151,436
		Customer Accounts Expenses					
24	901.00	Supervision Expenses					
25		Labor & Labor Loading	10.1	$ 2,405,936	$ -	$ 78,532	$ -
26		Materials & Expenses	10.1	138,017	-	4,505	-
27	902.00	Meter Reading Expenses					
28		Labor & Labor Loading	11.0	1,550,841	-	11,204	-
29		Materials & Expenses	11.0	413,390	-	2,986	-
30	903.00	Customer Records & Collections Expenses					
31		Labor & Labor Loading	4.0	16,896,473	-	122,044	-
32		Materials & Expenses	4.0	9,198,375	-	66,440	-
33	903.00	Customer Records & Collections - KAM					
34		Labor & Labor Loading - KAM	15.0	811,470	-	743,503	-
35		Materials & Expenses - KAM	15.0	53,477	-	48,998	-
36	904.00	Uncollectible Accounts Expense	4.0	2,008,980	-	14,511	-
37	905.00	Miscellaneous Customer Accounts Expenses					
38		Labor & Labor Loading	10.1	390,373	-	12,742	-
39		Materials & Expenses	10.1	13,940	-	455	-
40		Total Customer Accounts Expenses		$ 33,881,272	$ -	$ 1,105,920	$ -
		Customer Service & Informational Expenses					
41	908.00	Customer Assistance Expense					
42		Labor & Labor Loading	4.0	$ 590,805	$ -	$ 4,267	$ -
43		Materials & Expenses	4.0	595,758	-	4,303	-
44	909.00	Info. & Instructional Advertising Exps.					
45		Labor & Labor Loading	4.0	-	-	-	-
46		Materials & Expenses	4.0	6,000	-	43	-
47	910.00	Misc. Customer Service & Info. Exp.					
48		Labor & Labor Loading	4.0	-	-	-	-
49		Materials & Expenses	4.0	12,573	-	91	-
50		Total Customer Service & Info. Exp.		$ 1,205,135	$ -	$ 8,705	$ -
		Sales Expense					
51	911-913						
52		Labor & Labor Loading	4.0	$ -	$ -	$ -	$ -
53		Materials & Expenses	4.0	-	-	-	-
54		Total Sales Expense		$ -	$ -	$ -	$ -
55		Total O & M Expense		$ 136,804,420	$ 3,202,773	$ 3,221,191	$ 346,163
56		Allocation Percentage	Total O&M	100.00%	2.34%	2.35%	0.25%
		Other Operating Deductions					
57		Administrative & General Expense	Total O&M	$ 65,125,498	1,524,674	1,533,442	164,790
58		Interest on Customer Deposits	8.0	2,908,517	-	-	-
59		Taxes Other Than Income	1.1	27,203,877	1,210,156	499,863	22,238
60		Total Allocated Operating Deductions		$ 232,042,312	$ 5,937,603	$ 5,254,497	$ 533,191
		Tax Adjustments					
61		Interest Expense	1.1	42,713,744	1,900,108	784,853	34,917
62		South Georgia - State	1.1	-	-	-	-
63		Investment Tax Credit (I.T.C.)	1.1	(528,360)	(23,504)	(9,708)	(432)
64		South Georgia - Federal	1.1	290,114	12,906	5,331	237

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Large -1 General Demand	Large -1 General Customer	Large -1 General Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Summary of Allocated Cost of Service					
		Rate Base					
1		Total Direct Net Plant		$ 1,809,908,655	80,513,244	33,256,541	1,479,528
2		Total Common Systems Alloc Net Plant		38,161,320	1,697,595	701,203	31,195
3		Cash Working Capital	1.1	(4,472,151)	(104,699)	(105,301)	(11,316)
4		Materials & Supplies	1.1	9,920,409	441,306	182,285	8,110
5		Prepayments	1.1	4,744,133	211,041	87,172	3,878
6		Other	1.1	-	-	-	-
7		Customer Deposits	8.0	(62,033,165)	-	-	-
8		Customer Advances	8.0	(48,475,278)	-	-	-
9		Deferred Taxes	1.1	(291,236,457)	(12,955,566)	(5,351,385)	(238,074)
10		Other	7.0	-	-	-	-
11		Total Rate Base		$ 1,456,517,468	$ 69,802,921	$ 28,770,516	$ 1,273,320
		Revenues					
12		Net Operating Margin	Direct	$ 392,027,615	30,265,896	13,579,520	
13		Special Contract & Optional Margin	Net Op Margi	6,788,127	524,067	235,135	-
14		Late Charges	12.0	1,929,221	-	184,015	-
15		Service Establishment Charges	9.0	8,075,816	-	30,086	-
16		Reconnect / Reread Charges	9.0	868,969	-	3,237	-
17		Other Revenue - Labor	Net Op Margi	6,985	539	242	-
18		Other Revenue - Parts & Material	Net Op Margi	1,305	101	45	-
19		Other Revenue - Field Collection Fee	14.0	569,766	-	4,899	-
20		Other Revenue - Returned Item Fee	13.0	195,916	-	2,005	-
21		Other Revenue - Rental Income	Net Op Margi	448,378	34,616	15,531	-
22		Total Revenue		$ 410,912,098	30,825,219	14,054,717	-
		Operating Deductions					
23		O & M		$ (136,804,420)	(3,202,773)	(3,221,191)	(346,163)
24		A & G	Total O&M	(65,125,498)	(1,524,674)	(1,533,442)	(164,790)
25		Depreciation Expense	Deprec Exp	(99,586,591)	(4,430,080)	(1,829,874)	(81,408)
26		Interest on Customer Deposits	8.0	(2,908,517)	-	-	-
27		Taxes other than Income	1.1	(27,203,877)	(1,210,156)	(499,863)	(22,238)
28							
		State Income Tax					
29		Taxable Income before Interest Exp.		$ 79,283,195	20,457,537	6,970,345	(614,599)
30		Interest Expense	1.1	(42,713,744)	(1,900,108)	(784,853)	(34,917)
31		State Taxable Income		$ 36,569,451	18,557,429	6,185,493	(649,516)
32		State Income Tax	6.968%	2,548,159	1,293,082	431,005	(45,258)
33		South Georgia	1.1	-	-	-	-
34		State Income Tax		2,548,159	1,293,082	431,005	(45,258)
		Federal Income Tax					
35		Taxable Income before Interest Exp.		79,283,195	20,457,537	6,970,345	(614,599)
36		Interest Expense	1.1	(42,713,744)	(1,900,108)	(784,853)	(34,917)
37		Federal Taxable Income		36,569,451	18,557,429	6,185,493	(649,516)
38		Federal Income Tax	32.56%	11,907,452	6,042,521	2,014,071	(211,490)
39		I T C	1.1	(528,360)	(23,504)	(9,708)	(432)
40		South Georgia	1.1	290,114	12,906	5,331	237
41		Total Federal Income Tax		11,669,206	6,031,923	2,009,693	(211,685)
42		Regulatory Amortization	1.1	-	-	-	-

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Transportation Eligible Demand (e)	Transportation Eligible Customer (f)	Transportation Eligible Commodity (g)
		Depreciation Expense & Amortization					
		Direct					
1	301 - 303	Intangible Plant	Intang. Plant	$ 58,852	$ 1,863	$ 306	$ 47
2	374.1-387	Distribution Plant	Dist. Plant	87,634,565	2,773,899	456,014	70,575
3	389-398	General	1.1	5,363,611	169,775	27,910	4,319
4		Total Direct Depreciation Expense		$ 93,057,028	$ 2,945,537	$ 484,230	$ 74,941
		System Allocable Amortization					
5		Miscellaneous Intangible	1.1	6,009,339	190,214	31,270	4,839
6		Structures-Leasehold Improvemen	1.1	235,643	7,459	1,226	190
7		Total System Allocable Amortization		$ 6,244,982	$ 197,673	$ 32,496	$ 5,029
8							
9		Total System Depreciation Expense	1.1	$ 235,643	7,459	1,226	190
10		Total Depreciation Expense		$ 99,302,010	$ 3,143,209	$ 516,727	$ 79,971
11		Amortization Gas Plant Acquisition	1.1	(52,943)	(1,676)	(275)	(43)
12		Regulatory Amortizations	7.0	337,524	-	375	-
13		Total Depreciation Expenses	1.1	$ 284,581	$ 9,008	$ 1,481	$ 229
14							
15		Total Depreciation & Amortization Expense		$ 99,586,591	$ 3,152,217	$ 518,207	$ 80,200
		Operation and Maintenance Expense					
		Gas Supply Expense					
16	803.00	Natural Gas Transmission Line Purch	3.0	$ -	$ -	$ -	$ -
17	805.10	Purchased Gas Cost Adjustments	3.0	-	-	-	-
18	810.00	Gas Used for Compression Station Fı	3.0	-	-	-	-
19	813.00	Other Gas Supply Expenses	3.0	1,138,145	-	-	191,838
20		Total Gas Supply Expenses		$ 1,138,145	$ -	$ -	$ 191,838
		Distribution Expenses					
21	870.00	Operation Supervision and Engineering					
22		Labor & Labor Loading	5.5	$ 10,369,650	$ 151,345	$ 255,517	$ 25,846
23		Materials & Expenses	5.5	1,345,019	19,631	33,142	3,352
24	871.00	Distribution Load Dispatching					
25		Labor & Labor Loading	3.0	432,781	-	-	72,947
26		Materials & Expenses	3.0	58,350	-	-	9,835
27	874.00	Mains and Services Expenses					
28		Labor & Labor Loading	4.4	5,632,988	200,579	2,435	-
29		Materials & Expenses	4.4	3,877,544	138,072	1,676	-
30	875.00	Measuring & Regulating Exps. - General					
31		Labor & Labor Loading	2.2	2,082,588	110,601	206	-
32		Materials & Expenses	2.2	668,341	35,494	66	-
33	878.00	Meter and House Regulator Expenses					
34		Labor & Labor Loading	6.0	8,847,520	-	351,996	-
35		Materials & Expenses	6.0	1,261,264	-	50,179	-
36	879.00	Customer Installation Expense					
37		Labor & Labor Loading	6.0	9,347,707	-	371,896	-
38		Materials & Expenses	6.0	1,004,015	-	39,944	-
39	880.00	Other Expenses					
40		Labor & Labor Loading	5.5	7,800,225	113,844	192,204	19,442
41		Materials & Expenses	5.5	5,084,124	74,203	125,277	12,672
42	881.00	Rents	5.5	2,044,165	29,835	50,370	5,095
43		Total Distribution Operating Expenses		$ 59,856,281	$ 873,603	$ 1,474,912	$ 149,188
44							
45		Total Distribution & Gas Supply Expenses		$ 60,994,426	$ 873,603	$ 1,474,912	$ 341,026

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Transportation Eligible Demand	Customer	Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Maintenance Expenses					
1	885.00	Maintenance Supervision & Engineering					
2		Labor & Labor Loading	6.6	$ 3,276,925	$ 112,713	$ 12,734	$ -
3		Materials & Expenses	6.6	286,414	9,851	1,113	-
4	886.00	Maintenance of Structures & Improvement					
5		Labor & Labor Loading	1.0	11,997	1,274	-	-
6		Materials & Expenses	1.0	52,089	5,533	-	-
7	887.00	Maintenance of Mains					
8		Labor & Labor Loading	2.2	12,116,895	643,496	1,201	-
9		Materials & Expenses	2.2	9,657,291	512,873	957	-
10	889.00	Maint. of Measuring & Reg. Station Equip.					
11		Labor & Labor Loading	2.2	1,354,752	71,947	134	-
12		Materials & Expenses	2.2	670,136	35,589	66	-
13	892.00	Maintenance of Services					
14		Labor & Labor Loading	3.3	5,929,798	0	6,584	-
15		Materials & Expenses	3.3	3,757,582	0	4,172	-
16	893.00	Maintenance of Meter & House Regulators					
17		Labor & Labor Loading	6.0	2,171,290	-	86,384	-
18		Materials & Expenses	6.0	1,088,133	-	43,291	-
19	894.00	Maintenance of Other Equipment					
20		Labor & Labor Loading	6.6	209,080	7,191	812	-
21		Materials & Expenses	6.6	141,204	4,857	549	-
22		Total Distribution-Maintenance		$ 40,723,587	$ 1,405,325	$ 157,999	$ -
23		Total Distribution O & M		$ 100,579,868	$ 2,278,928	$ 1,632,911	$ 149,188
		Customer Accounts Expenses					
24	901.00	Supervision Expenses					
25		Labor & Labor Loading	10.1	$ 2,405,936	$ -	$ 2,156	$ -
26		Materials & Expenses	10.1	138,017	-	124	-
27	902.00	Meter Reading Expenses					
28		Labor & Labor Loading	11.0	1,550,841	-	308	-
29		Materials & Expenses	11.0	413,390	-	82	-
30	903.00	Customer Records & Collections Expenses					
31		Labor & Labor Loading	4.0	16,896,473	-	3,350	-
32		Materials & Expenses	4.0	9,198,375	-	1,824	-
33	903.00	Customer Records & Collections - KAM					
34		Labor & Labor Loading - KAM	15.0	811,470	-	20,411	-
35		Materials & Expenses - KAM	15.0	53,477	-	1,345	-
36	904.00	Uncollectible Accounts Expense	4.0	2,008,980	-	398	-
37	905.00	*Miscellaneous Customer Accounts Expenses*					
38		Labor & Labor Loading	10.1	390,373	-	350	-
39		Materials & Expenses	10.1	13,940	-	12	-
40		Total Customer Accounts Expenses		$ 33,881,272	$ -	$ 30,361	$ -
		Customer Service & Informational Expenses					
41	908.00	Customer Assistance Expense					
42		Labor & Labor Loading	4.0	$ 590,805	$ -	$ 117	$ -
43		Materials & Expenses	4.0	595,758	-	118	-
44	909.00	Info. & Instructional Advertising Exps.					
45		Labor & Labor Loading	4.0	-	-	-	-
46		Materials & Expenses	4.0	6,000	-	1	-
47	910.00	Misc. Customer Service & Info. Exp.					
48		Labor & Labor Loading	4.0	-	-	-	-
49		Materials & Expenses	4.0	12,573	-	2	-
50		Total Customer Service & Info. Exp.		$ 1,205,135	$ -	$ 239	$ -
		Sales Expense					
51	911-913						
52		Labor & Labor Loading	4.0	$ -	$ -	$ -	$ -
53		Materials & Expenses	4.0	-	-	-	-
54		Total Sales Expense		$ -	$ -	$ -	$ -
55		Total O & M Expense		$ 136,804,420	$ 2,278,928	$ 1,663,511	$ 341,026
56		Allocation Percentage	Total O&M	100.00%	1.67%	1.22%	0.25%
		Other Operating Deductions					
57		Administrative & General Expense	Total O&M	$ 65,125,498	1,084,880	791,911	162,345
58		Interest on Customer Deposits	8.0	2,908,517	-	-	-
59		Taxes Other Than Income	1.1	27,203,877	861,085	141,558	21,908
60		Total Allocated Operating Deductions		$ 232,042,312	$ 4,224,893	$ 2,596,980	$ 525,279
		Tax Adjustments					
61		Interest Expense	1.1	42,713,744	1,352,019	222,265	34,399
62		South Georgia - State	1.1	-	-	-	-
63		Investment Tax Credit (I.T.C.)	1.1	(528,360)	(16,724)	(2,749)	(426)
64		South Georgia - Federal	1.1	290,114	9,183	1,510	234

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Transportation Eligible Demand (e)	Customer (f)	Commodity (g)
		Summary of Allocated Cost of Service					
		Rate Base					
1		Total Direct Net Plant		$ 1,809,908,655	57,289,091	9,418,015	1,457,571
2		Total Common Systems Alloc Net Plant		38,161,320	1,207,921	198,576	30,732
3		Cash Working Capital	1.1	(4,472,151)	(74,498)	(54,380)	(11,148)
4		Materials & Supplies	1.1	9,920,409	314,011	51,622	7,989
5		Prepayments	1.1	4,744,133	150,166	24,687	3,821
6		Other	1.1	-	-	-	-
7		Customer Deposits	8.0	(62,033,165)	-	-	-
8		Customer Advances	8.0	(48,475,278)	-	-	-
9		Deferred Taxes	1.1	(291,236,457)	(9,218,516)	(1,515,474)	(234,541)
10		Other	7.0	-	-	-	-
11		Total Rate Base		$ 1,456,517,468	$ 49,668,175	$ 8,123,045	$ 1,254,424
		Revenues					
12		Net Operating Margin	Direct	$ 392,027,615	10,921,094	10,768,505	
13		Special Contract & Optional Margin	Net Op Margi	6,788,127	189,103	186,461	-
14		Late Charges	12.0	1,929,221	-	23,947	-
15		Service Establishment Charges	9.0	8,075,816	-	163	-
16		Reconnect / Reread Charges	9.0	868,969	-	17	-
17		Other Revenue - Labor	Net Op Margi	6,985	195	192	-
18		Other Revenue - Parts & Material	Net Op Margi	1,305	36	36	-
19		Other Revenue - Field Collection Fee	14.0	569,766	-	-	-
20		Other Revenue - Returned Item Fee	13.0	195,916	-	-	-
21		Other Revenue - Rental Income	Net Op Margi	448,378	12,491	12,316	-
22		Total Revenue		$ 410,912,098	11,122,919	10,991,637	-
		Operating Deductions					
23		O & M		$ (136,804,420)	(2,278,928)	(1,663,511)	(341,026)
24		A & G	Total O&M	(65,125,498)	(1,084,880)	(791,911)	(162,345)
25		Depreciation Expense	Deprec Exp	(99,586,591)	(3,152,217)	(518,207)	(80,200)
26		Interest on Customer Deposits	8.0	(2,908,517)	-	-	-
27		Taxes other than Income	1.1	(27,203,877)	(861,085)	(141,558)	(21,908)
28							
		State Income Tax					
29		Taxable Income before Interest Exp.		$ 79,283,195	3,745,809	7,876,450	(605,479)
30		Interest Expense	1.1	(42,713,744)	(1,352,019)	(222,265)	(34,399)
31		State Taxable Income		$ 36,569,451	2,393,789	7,654,185	(639,877)
32		State Income Tax	6.968%	2,548,159	166,799	533,344	(44,587)
33		South Georgia	1.1	-	-	-	-
34		State Income Tax		2,548,159	166,799	533,344	(44,587)
		Federal Income Tax					
35		Taxable Income before Interest Exp.		79,283,195	3,745,809	7,876,450	(605,479)
36		Interest Expense	1.1	(42,713,744)	(1,352,019)	(222,265)	(34,399)
37		Federal Taxable Income		36,569,451	2,393,789	7,654,185	(639,877)
38		Federal Income Tax	32.56%	11,907,452	779,447	2,492,295	(208,352)
39		I T C	1.1	(528,360)	(16,724)	(2,749)	(426)
40		South Georgia	1.1	290,114	9,183	1,510	234
41		Total Federal Income Tax		11,669,206	771,905	2,491,055	(208,544)
42		Regulatory Amortization	1.1	-	-	-	-

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Large-2 General Demand (e)	Large-2 General Customer (f)	Large-2 General Commodity (g)
		Depreciation Expense & Amortization					
		Direct					
1	301 - 303	Intangible Plant	Intang. Plant	$ 58,852	$ 797	$ 806	$ 17
2	374.1-387	Distribution Plant	Dist. Plant	87,634,565	1,186,748	1,200,506	25,809
3	389-398	General	1.1	5,363,611	72,634	73,476	1,580
4		Total Direct Depreciation Expense		$ 93,057,028	$ 1,260,179	$ 1,274,788	$ 27,405
		System Allocable Amortization					
5		Miscellaneous Intangible	1.1	6,009,339	81,378	82,322	1,770
6		Structures-Leasehold Improvemen	1.1	235,643	3,191	3,228	69
7		Total System Allocable Amortization		$ 6,244,982	$ 84,570	$ 85,550	$ 1,839
8							
9		Total System Depreciation Expense	1.1	$ 235,643	3,191	3,228	69
10		Total Depreciation Expense		$ 99,302,010	$ 1,344,748	$ 1,360,338	$ 29,245
11		Amortization Gas Plant Acquisition	1.1	(52,943)	(717)	(725)	(16)
12		Regulatory Amortizations	7.0	337,524	-	15,226	-
13		Total Depreciation Expenses	1.1	$ 284,581	$ 3,854	$ 3,898	$ 84
14							
15		Total Depreciation & Amortization Expense		$ 99,586,591	$ 1,348,602	$ 1,364,237	$ 29,328
		Operation and Maintenance Expense					
		Gas Supply Expense					
16	803.00	Natural Gas Transmission Line Purch	3.0	$ -	$ -	$ -	$ -
17	805.10	Purchased Gas Cost Adjustments	3.0	-	-	-	-
18	810.00	Gas Used for Compression Station Fı	3.0	-	-	-	-
19	813.00	Other Gas Supply Expenses	3.0	1,138,145	-	-	70,153
20		Total Gas Supply Expenses		$ 1,138,145	$ -	$ -	$ 70,153
		Distribution Expenses					
21	870.00	Operation Supervision and Engineering					
22		Labor & Labor Loading	5.5	$ 10,369,650	$ 64,749	$ 96,233	$ 9,452
23		Materials & Expenses	5.5	1,345,019	8,398	12,482	1,226
24	871.00	Distribution Load Dispatching					
25		Labor & Labor Loading	3.0	432,781	-	-	26,676
26		Materials & Expenses	3.0	58,350	-	-	3,597
27	874.00	Mains and Services Expenses					
28		Labor & Labor Loading	4.4	5,632,988	85,813	84,568	-
29		Materials & Expenses	4.4	3,877,544	59,071	58,214	-
30	875.00	Measuring & Regulating Exps. - General					
31		Labor & Labor Loading	2.2	2,082,588	47,318	462	-
32		Materials & Expenses	2.2	668,341	15,185	148	-
33	878.00	Meter and House Regulator Expenses					
34		Labor & Labor Loading	6.0	8,847,520	-	71,278	-
35		Materials & Expenses	6.0	1,261,264	-	10,161	-
36	879.00	Customer Installation Expense					
37		Labor & Labor Loading	6.0	9,347,707	-	75,308	-
38		Materials & Expenses	6.0	1,004,015	-	8,089	-
39	880.00	Other Expenses					
40		Labor & Labor Loading	5.5	7,800,225	48,706	72,388	7,110
41		Materials & Expenses	5.5	5,084,124	31,746	47,182	4,634
42	881.00	Rents	5.5	2,044,165	12,764	18,970	1,863
43		Total Distribution Operating Expenses		$ 59,856,281	$ 373,751	$ 555,484	$ 54,557
44							
45		Total Distribution & Gas Supply Expenses		$ 60,994,426	$ 373,751	$ 555,484	$ 124,710

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Large-2 General Demand	Large-2 General Customer	Large-2 General Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Maintenance Expenses					
1	885.00	Maintenance Supervision & Engineering					
2		Labor & Labor Loading	6.6	$ 3,276,925	$ 48,221	$ 41,783	$ -
3		Materials & Expenses	6.6	286,414	4,215	3,652	-
4	886.00	Maintenance of Structures & Improvement					
5		Labor & Labor Loading	1.0	11,997	545	-	-
6		Materials & Expenses	1.0	52,089	2,367	-	-
7	887.00	Maintenance of Mains					
8		Labor & Labor Loading	2.2	12,116,895	275,305	2,688	-
9		Materials & Expenses	2.2	9,657,291	219,421	2,142	-
10	889.00	Maint. of Measuring & Reg. Station Equip.					
11		Labor & Labor Loading	2.2	1,354,752	30,781	300	-
12		Materials & Expenses	2.2	670,136	15,226	149	-
13	892.00	Maintenance of Services					
14		Labor & Labor Loading	3.3	5,929,798	0	267,495	-
15		Materials & Expenses	3.3	3,757,582	0	169,506	-
16	893.00	Maintenance of Meter & House Regulators					
17		Labor & Labor Loading	6.0	2,171,290	-	17,493	-
18		Materials & Expenses	6.0	1,088,133	-	8,766	-
19	894.00	Maintenance of Other Equipment					
20		Labor & Labor Loading	6.6	209,080	3,077	2,666	-
21		Materials & Expenses	6.6	141,204	2,078	1,800	-
22		Total Distribution-Maintenance		$ 40,723,587	$ 601,235	$ 518,441	$ -
23		Total Distribution O & M		$ 100,579,868	$ 974,986	$ 1,073,925	$ 54,557
		Customer Accounts Expenses					
24	901.00	Supervision Expenses					
25		Labor & Labor Loading	10.1	$ 2,405,936	$ -	$ 4,823	$ -
26		Materials & Expenses	10.1	138,017	-	277	-
27	902.00	Meter Reading Expenses					
28		Labor & Labor Loading	11.0	1,550,841	-	688	-
29		Materials & Expenses	11.0	413,390	-	183	-
30	903.00	Customer Records & Collections Expenses					
31		Labor & Labor Loading	4.0	16,896,473	-	7,495	-
32		Materials & Expenses	4.0	9,198,375	-	4,080	-
33	903.00	Customer Records & Collections - KAM					
34		Labor & Labor Loading - KAM	15.0	811,470	-	45,662	-
35		Materials & Expenses - KAM	15.0	53,477	-	3,009	-
36	904.00	Uncollectible Accounts Expense	4.0	2,008,980	-	891	-
37	905.00	Miscellaneous Customer Accounts Expenses					
38		Labor & Labor Loading	10.1	390,373	-	783	-
39		Materials & Expenses	10.1	13,940	-	28	-
40		Total Customer Accounts Expenses		$ 33,881,272	$ -	$ 67,920	$ -
		Customer Service & Informational Expenses					
41	908.00	Customer Assistance Expense					
42		Labor & Labor Loading	4.0	$ 590,805	$ -	$ 262	$ -
43		Materials & Expenses	4.0	595,758	-	264	-
44	909.00	Info. & Instructional Advertising Exps.					
45		Labor & Labor Loading	4.0	-	-	-	-
46		Materials & Expenses	4.0	6,000	-	3	-
47	910.00	Misc. Customer Service & Info. Exp.					
48		Labor & Labor Loading	4.0	-	-	-	-
49		Materials & Expenses	4.0	12,573	-	6	-
50		Total Customer Service & Info. Exp.		$ 1,205,135	$ -	$ 535	$ -
		Sales Expense					
51	911-913						
52		Labor & Labor Loading	4.0	$ -	$ -	$ -	$ -
53		Materials & Expenses	4.0	-	-	-	-
54		Total Sales Expense		$ -	$ -	$ -	$ -
55		Total O & M Expense		$ 136,804,420	$ 974,986	$ 1,142,380	$ 124,710
56		Allocation Percentage	Total O&M	100.00%	0.71%	0.84%	0.09%
		Other Operating Deductions					
57		Administrative & General Expense	Total O&M	$ 65,125,498	464,140	543,828	59,368
58		Interest on Customer Deposits	8.0	2,908,517	-	-	-
59		Taxes Other Than Income	1.1	27,203,877	368,395	372,666	8,012
60		Total Allocated Operating Deductions		$ 232,042,312	$ 1,807,521	$ 2,058,873	$ 192,090
		Tax Adjustments					
61		Interest Expense	1.1	42,713,744	578,430	585,135	12,579
62		South Georgia - State	1.1	-	-	-	-
63		Investment Tax Credit (I.T.C.)	1.1	(528,360)	(7,155)	(7,238)	(156)
64		*South Georgia - Federal*	1.1	290,114	3,929	3,974	85

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Large-2 General Demand (e)	Large-2 General Customer (f)	Large-2 General Commodity (g)
		Summary of Allocated Cost of Service					
		Rate Base					
1		Total Direct Net Plant		$ 1,809,908,655	24,509,792	24,793,935	533,021
2		Total Common Systems Alloc Net Plant		38,161,320	516,781	522,772	11,239
3		Cash Working Capital	1.1	(4,472,151)	(31,872)	(37,345)	(4,077)
4		Materials & Supplies	1.1	9,920,409	134,342	135,900	2,922
5		Prepayments	1.1	4,744,133	64,245	64,990	1,397
6		Other	1.1	-	-	-	-
7		Customer Deposits	8.0	(62,033,165)	-	-	-
8		Customer Advances	8.0	(48,475,278)	-	-	-
9		Deferred Taxes	1.1	(291,236,457)	(3,943,926)	(3,989,648)	(85,770)
10		Other	7.0	-	-	-	-
11		Total Rate Base		$ 1,456,517,468	$ 21,249,362	$ 21,490,604	$ 458,732
		Revenues					
12		Net Operating Margin	Direct	$ 392,027,615	10,432,699	821,760	-
13		Special Contract & Optional Margin	Net Op Margi	6,788,127	180,647	14,229	-
14		Late Charges	12.0	1,929,221	-	11,301	-
15		Service Establishment Charges	9.0	8,075,816	-	1,848	-
16		Reconnect / Reread Charges	9.0	868,969	-	199	-
17		Other Revenue - Labor	Net Op Margi	6,985	186	15	-
18		Other Revenue - Parts & Material	Net Op Margi	1,305	35	3	-
19		Other Revenue - Field Collection Fee	14.0	569,766	-	301	-
20		Other Revenue - Returned Item Fee	13.0	195,916	-	123	-
21		Other Revenue - Rental Income	Net Op Margi	448,378	11,932	940	-
22		Total Revenue		$ 410,912,098	10,625,499	850,718	-
		Operating Deductions					
23		O & M		$ (136,804,420)	(974,986)	(1,142,380)	(124,710)
24		A & G	Total O&M	(65,125,498)	(464,140)	(543,828)	(59,368)
25		Depreciation Expense	Deprec Exp	(99,586,591)	(1,348,602)	(1,364,237)	(29,328)
26		Interest on Customer Deposits	8.0	(2,908,517)	-	-	-
27		Taxes other than Income	1.1	(27,203,877)	(368,395)	(372,666)	(8,012)
28							
		State Income Tax					
29		Taxable Income before Interest Exp.		$ 79,283,195	7,469,375	(2,572,392)	(221,418)
30		Interest Expense	1.1	(42,713,744)	(578,430)	(585,135)	(12,579)
31		State Taxable Income		$ 36,569,451	6,890,945	(3,157,527)	(233,998)
32		State Income Tax	6.968%	2,548,159	480,161	(220,016)	(16,305)
33		South Georgia	1.1	-	-	-	-
34		State Income Tax		2,548,159	480,161	(220,016)	(16,305)
		Federal Income Tax					
35		Taxable Income before Interest Exp.		79,283,195	7,469,375	(2,572,392)	(221,418)
36		Interest Expense	1.1	(42,713,744)	(578,430)	(585,135)	(12,579)
37		Federal Taxable Income		36,569,451	6,890,945	(3,157,527)	(233,998)
38		Federal Income Tax	32.56%	11,907,452	2,243,775	(1,028,129)	(76,192)
39		I T C	1.1	(528,360)	(7,155)	(7,238)	(156)
40		South Georgia	1.1	290,114	3,929	3,974	85
41		Total Federal Income Tax		11,669,206	2,240,548	(1,031,392)	(76,263)
42		Regulatory Amortization	1.1	-	-	-	-

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Air Conditioning Demand	Air Conditioning Customer	Air Conditioning Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Depreciation Expense & Amortization					
		Direct					
1	301 - 303	Intangible Plant	Intang. Plant	$ 58,852	$ 5	$ 2	$ 0
2	374.1-387	Distribution Plant	Dist. Plant	87,634,565	7,744	2,750	436
3	389-398	General	1.1	5,363,611	474	168	27
4		Total Direct Depreciation Expense		$ 93,057,028	$ 8,223	$ 2,920	$ 463
		System Allocable Amortization					
5		Miscellaneous Intangible	1.1	6,009,339	531	189	30
6		Structures-Leasehold Improvemen	1.1	235,643	21	7	1
7		Total System Allocable Amortization		$ 6,244,982	$ 552	$ 196	$ 31
8							
9		Total System Depreciation Expense	1.1	$ 235,643	21	7	1
10		Total Depreciation Expense		$ 99,302,010	$ 8,774	$ 3,116	$ 494
11		Amortization Gas Plant Acquisition	1.1	(52,943)	(5)	(2)	(0)
12		Regulatory Amortizations	7.0	337,524	-	20	-
13		Total Depreciation Expenses	1.1	$ 284,581	$ 25	$ 9	$ 1
14							
15		Total Depreciation & Amortization Expense		$ 99,586,591	$ 8,800	$ 3,125	$ 496
		Operation and Maintenance Expense					
		Gas Supply Expense					
16	803.00	*Natural Gas Transmission Line Purch*	3.0	$ -	$ -	$ -	$ -
17	805.10	Purchased Gas Cost Adjustments	3.0	-	-	-	-
18	810.00	Gas Used for Compression Station Fu	3.0	-	-	-	-
19	813.00	Other Gas Supply Expenses	3.0	1,138,145	-	-	1,185
20		Total Gas Supply Expenses		$ 1,138,145	$ -	$ -	$ 1,185
		Distribution Expenses					
21	870.00	Operation Supervision and Engineering					
22		Labor & Labor Loading	5.5	$ 10,369,650	$ 422	$ 501	$ 160
23		Materials & Expenses	5.5	1,345,019	55	65	21
24	871.00	Distribution Load Dispatching					
25		Labor & Labor Loading	3.0	432,781	-	-	451
26		Materials & Expenses	3.0	58,350	-	-	61
27	874.00	Mains and Services Expenses					
28		Labor & Labor Loading	4.4	5,632,988	560	155	-
29		Materials & Expenses	4.4	3,877,544	385	107	-
30	875.00	Measuring & Regulating Exps. - General					
31		Labor & Labor Loading	2.2	2,082,588	309	26	-
32		Materials & Expenses	2.2	668,341	99	8	-
33	878.00	Meter and House Regulator Expenses					
34		Labor & Labor Loading	6.0	8,847,520	-	566	-
35		Materials & Expenses	6.0	1,261,264	-	81	-
36	879.00	Customer Installation Expense					
37		Labor & Labor Loading	6.0	9,347,707	-	598	-
38		Materials & Expenses	6.0	1,004,015	-	64	-
39	880.00	Other Expenses					
40		Labor & Labor Loading	5.5	7,800,225	318	377	120
41		Materials & Expenses	5.5	5,084,124	207	246	78
42	881.00	Rents	5.5	2,044,165	83	99	31
43		Total Distribution Operating Expenses		$ 59,856,281	$ 2,439	$ 2,891	$ 922
44							
45		Total Distribution & Gas Supply Expenses		$ 60,994,426	$ 2,439	$ 2,891	$ 2,107

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Air Conditioning Demand	Air Conditioning Customer	Air Conditioning Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Maintenance Expenses					
1	885.00	Maintenance Supervision & Engineering					
2		Labor & Labor Loading	6.6	$ 3,276,925	$ 315	$ 95	$ -
3		Materials & Expenses	6.6	286,414	28	8	-
4	886.00	Maintenance of Structures & Improvement					
5		Labor & Labor Loading	1.0	11,997	4	-	-
6		Materials & Expenses	1.0	52,089	15	-	-
7	887.00	Maintenance of Mains					
8		Labor & Labor Loading	2.2	12,116,895	1,796	151	-
9		Materials & Expenses	2.2	9,657,291	1,432	120	-
10	889.00	Maint. of Measuring & Reg. Station Equip.					
11		Labor & Labor Loading	2.2	1,354,752	201	17	-
12		Materials & Expenses	2.2	670,136	99	8	-
13	892.00	Maintenance of Services					
14		Labor & Labor Loading	3.3	5,929,798	0	345	-
15		Materials & Expenses	3.3	3,757,582	0	219	-
16	893.00	Maintenance of Meter & House Regulators					
17		Labor & Labor Loading	6.0	2,171,290	-	139	-
18		Materials & Expenses	6.0	1,088,133	-	70	-
19	894.00	Maintenance of Other Equipment					
20		Labor & Labor Loading	6.6	209,080	20	6	-
21		Materials & Expenses	6.6	141,204	14	4	-
22		Total Distribution-Maintenance		$ 40,723,587	$ 3,923	$ 1,182	$ -
23		Total Distribution O & M		$ 100,579,868	$ 6,362	$ 4,073	$ 922
		Customer Accounts Expenses					
24	901.00	Supervision Expenses					
25		Labor & Labor Loading	10.1	$ 2,405,936	$ -	$ 58	$ -
26		Materials & Expenses	10.1	138,017	-	3	-
27	902.00	Meter Reading Expenses					
28		Labor & Labor Loading	11.0	1,550,841	-	39	-
29		Materials & Expenses	11.0	413,390	-	10	-
30	903.00	Customer Records & Collections Expenses					
31		Labor & Labor Loading	4.0	16,896,473	-	420	-
32		Materials & Expenses	4.0	9,198,375	-	229	-
33	903.00	Customer Records & Collections - KAM					
34		Labor & Labor Loading - KAM	15.0	811,470	-	-	-
35		Materials & Expenses - KAM	15.0	53,477	-	-	-
36	904.00	Uncollectible Accounts Expense	4.0	2,008,980	-	50	-
37	905.00	Miscellaneous Customer Accounts Expenses					
38		Labor & Labor Loading	10.1	390,373	-	9	-
39		Materials & Expenses	10.1	13,940	-	0	-
40		Total Customer Accounts Expenses		$ 33,881,272	$ -	$ 819	$ -
		Customer Service & Informational Expenses					
41	908.00	Customer Assistance Expense					
42		Labor & Labor Loading	4.0	$ 590,805	$ -	$ 15	$ -
43		Materials & Expenses	4.0	595,758	-	15	-
44	909.00	Info. & Instructional Advertising Exps.					
45		Labor & Labor Loading	4.0	-	-	-	-
46		Materials & Expenses	4.0	6,000	-	0	-
47	910.00	Misc. Customer Service & Info. Exp.					
48		Labor & Labor Loading	4.0	-	-	-	-
49		Materials & Expenses	4.0	12,573	-	0	-
50		Total Customer Service & Info. Exp.		$ 1,205,135	$ -	$ 30	$ -
		Sales Expense					
51	911-913						
52		Labor & Labor Loading	4.0	$ -	$ -	$ -	$ -
53		Materials & Expenses	4.0	-	-	-	-
54		Total Sales Expense		$ -	$ -	$ -	$ -
55		Total O & M Expense		$ 136,804,420	$ 6,362	$ 4,922	$ 2,107
56		Allocation Percentage	Total O&M	100.00%	0.00%	0.00%	0.00%
		Other Operating Deductions					
57		Administrative & General Expense	Total O&M	$ 65,125,498	3,029	2,343	1,003
58		Interest on Customer Deposits	8.0	2,908,517	-	-	-
59		Taxes Other Than Income	1.1	27,203,877	2,404	854	135
60		Total Allocated Operating Deductions		$ 232,042,312	$ 11,794	$ 8,118	$ 3,246
		Tax Adjustments					
61		Interest Expense	1.1	42,713,744	3,774	1,340	213
62		South Georgia - State	1.1	-	-	-	-
63		Investment Tax Credit (I.T.C.)	1.1	(528,360)	(47)	(17)	(3)
64		South Georgia - Federal	1.1	290,114	26	9	1

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Air Conditioning Demand (e)	Air Conditioning Customer (f)	Air Conditioning Commodity (g)
		Summary of Allocated Cost of Service					
		Rate Base					
1		Total Direct Net Plant		$ 1,809,908,655	159,926	56,794	9,007
2		Total Common Systems Alloc Net Plant		38,161,320	3,372	1,197	190
3		Cash Working Capital	1.1	(4,472,151)	(208)	(161)	(69)
4		Materials & Supplies	1.1	9,920,409	877	311	49
5		Prepayments	1.1	4,744,133	419	149	24
6		Other	1.1	-	-	-	-
7		Customer Deposits	8.0	(62,033,165)	-	-	-
8		Customer Advances	8.0	(48,475,278)	-	-	-
9		Deferred Taxes	1.1	(291,236,457)	(25,734)	(9,139)	(1,449)
10		Other	7.0	-	-	-	-
11		Total Rate Base		$ 1,456,517,468	$138,652	$ 49,152	$ 7,751
		Revenues					
12		Net Operating Margin	Direct	$ 392,027,615	68,949	13,220	
13		Special Contract & Optional Margin	Net Op Margi	6,788,127	1,194	229	-
14		Late Charges	12.0	1,929,221	-	16	-
15		Service Establishment Charges	9.0	8,075,816	-	325	-
16		Reconnect / Reread Charges	9.0	868,969	-	35	-
17		Other Revenue - Labor	Net Op Margi	6,985	1	0	-
18		Other Revenue - Parts & Material	Net Op Margi	1,305	0	0	-
19		Other Revenue - Field Collection Fee	14.0	569,766	-	-	-
20		Other Revenue - Returned Item Fee	13.0	195,916	-	-	-
21		Other Revenue - Rental Income	Net Op Margi	448,378	79	15	-
22		Total Revenue		$ 410,912,098	70,223	13,840	-
		Operating Deductions					
23		O & M		$ (136,804,420)	(6,362)	(4,922)	(2,107)
24		A & G	Total O&M	(65,125,498)	(3,029)	(2,343)	(1,003)
25		Depreciation Expense	Deprec Exp	(99,586,591)	(8,800)	(3,125)	(496)
26		Interest on Customer Deposits	8.0	(2,908,517)	-	-	-
27		Taxes other than Income	1.1	(27,203,877)	(2,404)	(854)	(135)
28							
		State Income Tax					
29		Taxable Income before Interest Exp.		$ 79,283,195	49,629	2,597	(3,741)
30		Interest Expense	1.1	(42,713,744)	(3,774)	(1,340)	(213)
31		State Taxable Income		$ 36,569,451	45,855	1,257	(3,954)
32		State Income Tax	6.968%	2,548,159	3,195	88	(276)
33		South Georgia	1.1	-	-	-	-
34		State Income Tax		2,548,159	3,195	88	(276)
		Federal Income Tax					
35		Taxable Income before Interest Exp.		79,283,195	49,629	2,597	(3,741)
36		Interest Expense	1.1	(42,713,744)	(3,774)	(1,340)	(213)
37		Federal Taxable Income		36,569,451	45,855	1,257	(3,954)
38		Federal Income Tax	32.56%	11,907,452	14,931	409	(1,287)
39		I T C	1.1	(528,360)	(47)	(17)	(3)
40		South Georgia	1.1	290,114	26	9	1
41		Total Federal Income Tax		11,669,206	14,910	402	(1,289)
42		Regulatory Amortization	1.1	-	-	-	-

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Street Lighting Demand (e)	Customer (f)	Commodity (g)
		Depreciation Expense & Amortization					
		Direct					
1	301 - 303	Intangible Plant	Intang. Plant	$ 58,852	$ 1	$ 11	$ 0
2	374.1-387	Distribution Plant	Dist. Plant	87,634,565	1,730	16,151	61
3	389-398	General	1.1	5,363,611	106	988	4
4		Total Direct Depreciation Expense		$ 93,057,028	$ 1,837	$ 17,150	$ 65
		System Allocable Amortization					
5		Miscellaneous Intangible	1.1	6,009,339	119	1,107	4
6		Structures-Leasehold Improvemen	1.1	235,643	5	43	0
7		Total System Allocable Amortization		$ 6,244,982	$ 123	$ 1,151	$ 4
8							
9		Total System Depreciation Expense	1.1	$ 235,643	5	43	0
10		Total Depreciation Expense		$ 99,302,010	$ 1,961	$ 18,301	$ 69
11		*Amortization Gas Plant Acquisition*	1.1	(52,943)	(1)	(10)	(0)
12		Regulatory Amortizations	7.0	337,524	-	157	-
13		Total Depreciation Expenses	1.1	$ 284,581	$ 6	$ 52	$ 0
14							
15		Total Depreciation & Amortization Expense		$ 99,586,591	$ 1,966	$ 18,353	$ 69
		Operation and Maintenance Expense					
		Gas Supply Expense					
16	803.00	Natural Gas Transmission Line Purch	3.0	$ -	$ -	$ -	$ -
17	805.10	Purchased Gas Cost Adjustments	3.0	-	-	-	-
18	810.00	Gas Used for Compression Station Fı	3.0	-	-	-	-
19	813.00	Other Gas Supply Expenses	3.0	1,138,145	-	-	166
20		Total Gas Supply Expenses		$ 1,138,145	$ -	$ -	$ 166
		Distribution Expenses					
21	870.00	Operation Supervision and Engineering					
22		Labor & Labor Loading	5.5	$ 10,369,650	$ 94	$ 717	$ 22
23		Materials & Expenses	5.5	1,345,019	12	93	3
24	871.00	Distribution Load Dispatching					
25		Labor & Labor Loading	3.0	432,781	-	-	63
26		Materials & Expenses	3.0	58,350	-	-	8
27	874.00	Mains and Services Expenses					
28		Labor & Labor Loading	4.4	5,632,988	125	1,210	-
29		Materials & Expenses	4.4	3,877,544	86	833	-
30	875.00	Measuring & Regulating Exps. - General					
31		Labor & Labor Loading	2.2	2,082,588	69	192	-
32		Materials & Expenses	2.2	668,341	22	61	-
33	878.00	Meter and House Regulator Expenses					
34		Labor & Labor Loading	6.0	8,847,520	-	-	-
35		Materials & Expenses	6.0	1,261,264	-	-	-
36	879.00	Customer Installation Expense					
37		Labor & Labor Loading	6.0	9,347,707	-	-	-
38		Materials & Expenses	6.0	1,004,015	-	-	-
39	880.00	Other Expenses					
40		Labor & Labor Loading	5.5	7,800,225	71	539	17
41		Materials & Expenses	5.5	5,084,124	46	352	11
42	881.00	Rents	5.5	2,044,165	19	141	4
43		Total Distribution Operating Expenses		$ 59,856,281	$ 545	$ 4,139	$ 129
44							
45		Total Distribution & Gas Supply Expenses		$ 60,994,426	$ 545	$ 4,139	$ 294

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Street Lighting Demand (e)	Street Lighting Customer (f)	Street Lighting Commodity (g)
		Maintenance Expenses					
1	885.00	Maintenance Supervision & Engineering					
2		Labor & Labor Loading	6.6	$ 3,276,925	$ 70	$ 597	$ -
3		Materials & Expenses	6.6	286,414	6	52	-
4	886.00	Maintenance of Structures & Improvement					
5		Labor & Labor Loading	1.0	11,997	1	-	-
6		Materials & Expenses	1.0	52,089	3	-	-
7	887.00	Maintenance of Mains					
8		Labor & Labor Loading	2.2	12,116,895	401	1,115	-
9		Materials & Expenses	2.2	9,657,291	320	888	-
10	889.00	Maint. of Measuring & Reg. Station Equip.					
11		Labor & Labor Loading	2.2	1,354,752	45	125	-
12		Materials & Expenses	2.2	670,136	22	62	-
13	892.00	Maintenance of Services					
14		Labor & Labor Loading	3.3	5,929,798	0	2,756	-
15		Materials & Expenses	3.3	3,757,582	0	1,747	-
16	893.00	Maintenance of Meter & House Regulators					
17		Labor & Labor Loading	6.0	2,171,290	-	-	-
18		Materials & Expenses	6.0	1,088,133	-	-	-
19	894.00	Maintenance of Other Equipment					
20		Labor & Labor Loading	6.6	209,080	4	38	-
21		Materials & Expenses	6.6	141,204	3	26	-
22		Total Distribution-Maintenance		$ 40,723,587	$ 877	$ 7,405	$ -
23		Total Distribution O & M		$ 100,579,868	$ 1,422	$ 11,544	$ 129
		Customer Accounts Expenses					
24	901.00	Supervision Expenses					
25		Labor & Labor Loading	10.1	$ 2,405,936	$ -	$ 402	$ -
26		Materials & Expenses	10.1	138,017	-	23	-
27	902.00	Meter Reading Expenses					
28		Labor & Labor Loading	11.0	1,550,841	-	-	-
29		Materials & Expenses	11.0	413,390	-	-	-
30	903.00	Customer Records & Collections Expenses					
31		Labor & Labor Loading	4.0	16,896,473	-	3,109	-
32		Materials & Expenses	4.0	9,198,375	-	1,692	-
33	903.00	Customer Records & Collections - KAM					
34		Labor & Labor Loading - KAM	15.0	811,470	-	-	-
35		Materials & Expenses - KAM	15.0	53,477	-	-	-
36	904.00	Uncollectible Accounts Expense	4.0	2,008,980	-	370	-
37	905.00	Miscellaneous Customer Accounts Expenses					
38		Labor & Labor Loading	10.1	390,373	-	65	-
39		Materials & Expenses	10.1	13,940	-	2	-
40		Total Customer Accounts Expenses		$ 33,881,272	$ -	$ 5,663	$ -
		Customer Service & Informational Expenses					
41	908.00	Customer Assistance Expense					
42		Labor & Labor Loading	4.0	$ 590,805	$ -	$ 109	$ -
43		Materials & Expenses	4.0	595,758	-	110	-
44	909.00	Info. & Instructional Advertising Exps.					
45		Labor & Labor Loading	4.0	-	-	-	-
46		Materials & Expenses	4.0	6,000	-	1	-
47	910.00	Misc. Customer Service & Info. Exp.					
48		Labor & Labor Loading	4.0	-	-	-	-
49		Materials & Expenses	4.0	12,573	-	2	-
50		Total Customer Service & Info. Exp.		$ 1,205,135	$ -	$ 222	$ -
		Sales Expense					
51	911-913						
52		Labor & Labor Loading	4.0	$ -	$ -	$ -	$ -
53		Materials & Expenses	4.0	-	-	-	-
54		Total Sales Expense		$ -	$ -	$ -	$ -
55		Total O & M Expense		$ 136,804,420	$ 1,422	$ 17,429	$ 294
56		Allocation Percentage	Total O&M	100.00%	0.00%	0.01%	0.00%
		Other Operating Deductions					
57		Administrative & General Expense	Total O&M	$ 65,125,498	677	8,297	140
58		Interest on Customer Deposits	8.0	2,908,517	-	-	-
59		Taxes Other Than Income	1.1	27,203,877	537	5,014	19
60		Total Allocated Operating Deductions		$ 232,042,312	$ 2,635	$ 30,740	$ 453
		Tax Adjustments					
61		Interest Expense	1.1	42,713,744	843	7,872	30
62		South Georgia - State	1.1	-	-	-	-
63		Investment Tax Credit (I.T.C.)	1.1	(528,360)	(10)	(97)	(0)
64		South Georgia - Federal	1.1	290,114	6	53	0

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Street Lighting Demand (e)	Street Lighting Customer (f)	Street Lighting Commodity (g)
		Summary of Allocated Cost of Service					
		Rate Base					
1		Total Direct Net Plant		$ 1,809,908,655	35,735	333,556	1,258
2		Total Common Systems Alloc Net Plant		38,161,320	753	7,033	27
3		Cash Working Capital	1.1	(4,472,151)	(46)	(570)	(10)
4		Materials & Supplies	1.1	9,920,409	196	1,828	7
5		Prepayments	1.1	4,744,133	94	874	3
6		Other	1.1	-	-	-	-
7		Customer Deposits	8.0	(62,033,165)	-	-	-
8		Customer Advances	8.0	(48,475,278)	-	-	-
9		Deferred Taxes	1.1	(291,236,457)	(5,750)	(53,673)	(202)
10		Other	7.0	-	-	-	-
11		Total Rate Base		$ 1,456,517,468	$ 30,981	$ 289,049	$ 1,082
		Revenues					
12		Net Operating Margin	Direct	$ 392,027,615	53,386	-	
13		Special Contract & Optional Margin	Net Op Margi	6,788,127	924	-	-
14		Late Charges	12.0	1,929,221	-	3,295	-
15		Service Establishment Charges	9.0	8,075,816	-	162	-
16		Reconnect / Reread Charges	9.0	868,969	-	17	-
17		Other Revenue - Labor	Net Op Margi	6,985	1	-	-
18		Other Revenue - Parts & Material	Net Op Margi	1,305	0	-	-
19		Other Revenue - Field Collection Fee	14.0	569,766	-	-	-
20		Other Revenue - Returned Item Fee	13.0	195,916	-	-	-
21		Other Revenue - Rental Income	Net Op Margi	448,378	61	-	-
22		Total Revenue		$ 410,912,098	54,373	3,474	-
		Operating Deductions					
23		O & M		$ (136,804,420)	(1,422)	(17,429)	(294)
24		A & G	Total O&M	(65,125,498)	(677)	(8,297)	(140)
25		Depreciation Expense	Deprec Exp	(99,586,591)	(1,966)	(18,353)	(69)
26		Interest on Customer Deposits	8.0	(2,908,517)	-	-	-
27		Taxes other than Income	1.1	(27,203,877)	(537)	(5,014)	(19)
28							
		State Income Tax					
29		Taxable Income before Interest Exp.		$ 79,283,195	49,771	(45,619)	(522)
30		Interest Expense	1.1	(42,713,744)	(843)	(7,872)	(30)
31		State Taxable Income		$ 36,569,451	48,928	(53,491)	(552)
32		State Income Tax	6.968%	2,548,159	3,409	(3,727)	(38)
33		South Georgia	1.1	-	-	-	-
34		State Income Tax		2,548,159	3,409	(3,727)	(38)
		Federal Income Tax					
35		Taxable Income before Interest Exp.		79,283,195	49,771	(45,619)	(522)
36		Interest Expense	1.1	(42,713,744)	(843)	(7,872)	(30)
37		Federal Taxable Income		36,569,451	48,928	(53,491)	(552)
38		Federal Income Tax	32.56%	11,907,452	15,931	(17,417)	(180)
39		I T C	1.1	(528,360)	(10)	(97)	(0)
40		South Georgia	1.1	290,114	6	53	0
41		Total Federal Income Tax		11,669,206	15,927	(17,461)	(180)
42		Regulatory Amortization	1.1	-	-	-	-

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Compression on Customer's Premises Demand	Customer	Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Depreciation Expense & Amortization					
		Direct					
1	301 - 303	Intangible Plant	Intang. Plant	$ 58,852	$ 78	$ 12	$ 2
2	374.1-387	Distribution Plant	Dist. Plant	87,634,565	116,141	17,457	2,878
3	389-398	General	1.1	5,363,611	7,108	1,068	176
4		Total Direct Depreciation Expense		$ 93,057,028	$ 123,327	$ 18,537	$ 3,056
		System Allocable Amortization					
5		Miscellaneous Intangible	1.1	6,009,339	7,964	1,197	197
6		Structures-Leasehold Improvemen	1.1	235,643	312	47	8
7		*Total System Allocable Amortization*		$ 6,244,982	$ 8,276	$ 1,244	$ 205
8							
9		Total System Depreciation Expense	1.1	$ 235,643	312	47	8
10		Total Depreciation Expense		$ 99,302,010	$ 131,603	$ 19,781	$ 3,261
11		Amortization Gas Plant Acquisition	1.1	(52,943)	(70)	(11)	(2)
12		Regulatory Amortizations	7.0	337,524	-	126	-
13		Total Depreciation Expenses	1.1	$ 284,581	$ 377	$ 57	$ 9
14							
15		Total Depreciation & Amortization Expense		$ 99,586,591	$ 131,980	$ 19,838	$ 3,270
		Operation and Maintenance Expense					
		Gas Supply Expense					
16	803.00	Natural Gas Transmission Line Purch	3.0	$ -	$ -	$ -	$ -
17	805.10	Purchased Gas Cost Adjustments	3.0	-	-	-	-
18	810.00	Gas Used for Compression Station Fι	3.0	-	-	-	-
19	813.00	Other Gas Supply Expenses	3.0	1,138,145	-	-	7,822
20		*Total Gas Supply Expenses*		$ 1,138,145	$ -	$ -	$ 7,822
		Distribution Expenses					
21	870.00	Operation Supervision and Engineering					
22		Labor & Labor Loading	5.5	$ 10,369,650	$ 6,337	$ 3,584	$ 1,054
23		Materials & Expenses	5.5	1,345,019	822	465	137
24	871.00	Distribution Load Dispatching					
25		Labor & Labor Loading	3.0	432,781	-	-	2,975
26		Materials & Expenses	3.0	58,350	-	-	401
27	874.00	Mains and Services Expenses					
28		Labor & Labor Loading	4.4	5,632,988	8,398	930	-
29		Materials & Expenses	4.4	3,877,544	5,781	640	-
30	875.00	Measuring & Regulating Exps. - General					
31		Labor & Labor Loading	2.2	2,082,588	4,631	130	-
32		Materials & Expenses	2.2	668,341	1,486	42	-
33	878.00	Meter and House Regulator Expenses					
34		Labor & Labor Loading	6.0	8,847,520	-	4,212	-
35		Materials & Expenses	6.0	1,261,264	-	600	-
36	879.00	Customer Installation Expense					
37		Labor & Labor Loading	6.0	9,347,707	-	4,450	-
38		Materials & Expenses	6.0	1,004,015	-	478	-
39	880.00	Other Expenses					
40		Labor & Labor Loading	5.5	7,800,225	4,767	2,696	793
41		Materials & Expenses	5.5	5,084,124	3,107	1,757	517
42	881.00	Rents	5.5	2,044,165	1,249	707	208
43		Total Distribution Operating Expenses		$ 59,856,281	$ 36,577	$ 20,690	$ 6,083
44							
45		Total Distribution & Gas Supply Expenses		$ 60,994,426	$ 36,577	$ 20,690	$ 13,906

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Compression on Customer's Premises Demand	Customer	Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Maintenance Expenses					
1	885.00	Maintenance Supervision & Engineering					
2		Labor & Labor Loading	6.6	$ 3,276,925	$ 4,719	$ 594	$ -
3		Materials & Expenses	6.6	286,414	412	52	-
4	886.00	Maintenance of Structures & Improvement					
5		Labor & Labor Loading	1.0	11,997	53	-	-
6		Materials & Expenses	1.0	52,089	232	-	-
7	887.00	Maintenance of Mains					
8		Labor & Labor Loading	2.2	12,116,895	26,943	755	-
9		Materials & Expenses	2.2	9,657,291	21,474	602	-
10	889.00	Maint. of Measuring & Reg. Station Equip.					
11		Labor & Labor Loading	2.2	1,354,752	3,012	84	-
12		Materials & Expenses	2.2	670,136	1,490	42	-
13	892.00	Maintenance of Services					
14		Labor & Labor Loading	3.3	5,929,798	0	2,218	-
15		Materials & Expenses	3.3	3,757,582	0	1,405	-
16	893.00	Maintenance of Meter & House Regulators					
17		Labor & Labor Loading	6.0	2,171,290	-	1,034	-
18		Materials & Expenses	6.0	1,088,133	-	518	-
19	894.00	Maintenance of Other Equipment					
20		Labor & Labor Loading	6.6	209,080	301	38	-
21		Materials & Expenses	6.6	141,204	203	26	-
22		Total Distribution-Maintenance		$ 40,723,587	$ 58,840	$ 7,367	$ -
23		Total Distribution O & M		$ 100,579,868	$ 95,417	$ 28,056	$ 6,083
		Customer Accounts Expenses					
24	901.00	Supervision Expenses					
25		Labor & Labor Loading	10.1	$ 2,405,936	$ -	$ 292	$ -
26		Materials & Expenses	10.1	138,017	-	17	-
27	902.00	Meter Reading Expenses					
28		Labor & Labor Loading	11.0	1,550,841	-	193	-
29		Materials & Expenses	11.0	413,390	-	52	-
30	903.00	Customer Records & Collections Expenses					
31		Labor & Labor Loading	4.0	16,896,473	-	2,107	-
32		Materials & Expenses	4.0	9,198,375	-	1,147	-
33	903.00	Customer Records & Collections - KAM					
34		Labor & Labor Loading - KAM	15.0	811,470	-	-	-
35		Materials & Expenses - KAM	15.0	53,477	-	-	-
36	904.00	Uncollectible Accounts Expense	4.0	2,008,980	-	251	-
37	905.00	Miscellaneous Customer Accounts Expenses					
38		Labor & Labor Loading	10.1	390,373	-	47	-
39		Materials & Expenses	10.1	13,940	-	2	-
40		Total Customer Accounts Expenses		$ 33,881,272	$ -	$ 4,107	$ -
		Customer Service & Informational Expenses					
41	908.00	Customer Assistance Expense					
42		Labor & Labor Loading	4.0	$ 590,805	$ -	$ 74	$ -
43		Materials & Expenses	4.0	595,758	-	74	-
44	909.00	Info. & Instructional Advertising Exps.					
45		Labor & Labor Loading	4.0	-	-	-	-
46		Materials & Expenses	4.0	6,000	-	1	-
47	910.00	Misc. Customer Service & Info. Exp.					
48		Labor & Labor Loading	4.0	-	-	-	-
49		Materials & Expenses	4.0	12,573	-	2	-
50		Total Customer Service & Info. Exp.		$ 1,205,135	$ -	$ 150	$ -
		Sales Expense					
51	911-913						
52		Labor & Labor Loading	4.0	$ -	$ -	$ -	$ -
53		Materials & Expenses	4.0	-	-	-	-
54		Total Sales Expense		$ -	$ -	$ -	$ -
55		Total O & M Expense		$ 136,804,420	$ 95,417	$ 32,315	$ 13,906
56		Allocation Percentage	Total O&M	100.00%	0.07%	0.02%	0.01%
		Other Operating Deductions					
57		Administrative & General Expense	Total O&M	$ 65,125,498	45,423	15,383	6,620
58		Interest on Customer Deposits	8.0	2,908,517	-	-	-
59		Taxes Other Than Income	1.1	27,203,877	36,053	5,419	893
60		Total Allocated Operating Deductions		$ 232,042,312	$ 176,892	$ 53,117	$ 21,419
		Tax Adjustments					
61		Interest Expense	1.1	42,713,744	56,608	8,509	1,403
62		South Georgia - State	1.1	-	-	-	-
63		Investment Tax Credit (I.T.C.)	1.1	(528,360)	(700)	(105)	(17)
64		South Georgia - Federal	1.1	290,114	384	58	10

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Compression on Customer's Premises Demand	Customer	Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Summary of Allocated Cost of Service					
		Rate Base					
1		Total Direct Net Plant		$ 1,809,908,655	2,398,641	360,532	59,435
2		Total Common Systems Alloc Net Plant		38,161,320	50,575	7,602	1,253
3		Cash Working Capital	1.1	(4,472,151)	(3,119)	(1,056)	(455)
4		Materials & Supplies	1.1	9,920,409	13,147	1,976	326
5		Prepayments	1.1	4,744,133	6,287	945	156
6		Other	1.1	-	-	-	-
7		Customer Deposits	8.0	(62,033,165)	-	-	-
8		Customer Advances	8.0	(48,475,278)	-	-	-
9		Deferred Taxes	1.1	(291,236,457)	(385,971)	(58,014)	(9,564)
10		Other	7.0	-	-	-	-
11		Total Rate Base		$ 1,456,517,468	$ 2,079,560	$ 311,984	$ 51,151
		Revenues					
12		Net Operating Margin	Direct	$ 392,027,615	771,878	87,809	-
13		Special Contract & Optional Margin	Net Op Margi	6,788,127	13,365	1,520	-
14		Late Charges	12.0	1,929,221	-	36	-
15		Service Establishment Charges	9.0	8,075,816	-	217	-
16		Reconnect / Reread Charges	9.0	868,969	-	23	-
17		Other Revenue - Labor	Net Op Margi	6,985	14	2	-
18		Other Revenue - Parts & Material	Net Op Margi	1,305	3	0	-
19		Other Revenue - Field Collection Fee	14.0	569,766	-	-	-
20		Other Revenue - Returned Item Fee	13.0	195,916	-	-	-
21		Other Revenue - Rental Income	Net Op Margi	448,378	883	100	-
22		Total Revenue		$ 410,912,098	786,143	89,708	-
		Operating Deductions					
23		O & M		$ (136,804,420)	(95,417)	(32,315)	(13,906)
24		A & G	Total O&M	(65,125,498)	(45,423)	(15,383)	(6,620)
25		Depreciation Expense	Deprec Exp	(99,586,591)	(131,980)	(19,838)	(3,270)
26		Interest on Customer Deposits	8.0	(2,908,517)	-	-	-
27		Taxes other than Income	1.1	(27,203,877)	(36,053)	(5,419)	(893)
28							
		State Income Tax					
29		Taxable Income before Interest Exp.		$ 79,283,195	477,270	16,753	(24,689)
30		Interest Expense	1.1	(42,713,744)	(56,608)	(8,509)	(1,403)
31		State Taxable Income		$ 36,569,451	420,662	8,244	(26,092)
32		State Income Tax	6.968%	2,548,159	29,312	574	(1,818)
33		South Georgia	1.1	-	-	-	-
34		State Income Tax		2,548,159	29,312	574	(1,818)
		Federal Income Tax					
35		Taxable Income before Interest Exp.		79,283,195	477,270	16,753	(24,689)
36		Interest Expense	1.1	(42,713,744)	(56,608)	(8,509)	(1,403)
37		Federal Taxable Income		36,569,451	420,662	8,244	(26,092)
38		Federal Income Tax	32.56%	11,907,452	136,973	2,684	(8,496)
39		I T C	1.1	(528,360)	(700)	(105)	(17)
40		South Georgia	1.1	290,114	384	58	10
41		Total Federal Income Tax		11,669,206	136,657	2,637	(8,504)
42		Regulatory Amortization	1.1	-	-	-	-

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Electric Generation Demand (e)	Electric Generation Customer (f)	Electric Generation Commodity (g)
		Depreciation Expense & Amortization					
		Direct					
1	301 - 303	Intangible Plant	Intang. Plant	$ 58,852	$ 356	$ 19	$ 10
2	374.1-387	Distribution Plant	Dist. Plant	87,634,565	530,182	28,292	14,884
3	389-398	General	1.1	5,363,611	32,449	1,732	911
4		Total Direct Depreciation Expense		$ 93,057,028	$ 562,988	$ 30,042	$ 15,805
		System Allocable Amortization					
5		Miscellaneous Intangible	1.1	6,009,339	36,356	1,940	1,021
6		Structures-Leasehold Improvemen	1.1	235,643	1,426	76	40
7		Total System Allocable Amortization		$ 6,244,982	$ 37,782	$ 2,016	$ 1,061
8							
9		Total System Depreciation Expense	1.1	$ 235,643	1,426	76	40
10		Total Depreciation Expense		$ 99,302,010	$ 600,769	$ 32,058	$ 16,866
11		Amortization Gas Plant Acquisition	1.1	(52,943)	(320)	(17)	(9)
12		Regulatory Amortizations	7.0	337,524	-	61	-
13		Total Depreciation Expenses	1.1	$ 284,581	$ 1,722	$ 92	$ 48
14							
15		Total Depreciation & Amortization Expense		$ 99,586,591	$ 602,491	$ 32,150	$ 16,914
		Operation and Maintenance Expense					
		Gas Supply Expense					
16	803.00	Natural Gas Transmission Line Purch	3.0	$ -	$ -	$ -	$ -
17	805.10	Purchased Gas Cost Adjustments	3.0	-	-	-	-
18	810.00	Gas Used for Compression Station Fı	3.0	-	-	-	-
19	813.00	Other Gas Supply Expenses	3.0	1,138,145	-	-	40,458
20		Total Gas Supply Expenses		$ 1,138,145	$ -	$ -	$ 40,458
		Distribution Expenses					
21	870.00	Operation Supervision and Engineering					
22		Labor & Labor Loading	5.5	$ 10,369,650	$ 28,927	$ 14,255	$ 5,451
23		Materials & Expenses	5.5	1,345,019	3,752	1,849	707
24	871.00	Distribution Load Dispatching					
25		Labor & Labor Loading	3.0	432,781	-	-	15,384
26		Materials & Expenses	3.0	58,350	-	-	2,074
27	874.00	Mains and Services Expenses					
28		Labor & Labor Loading	4.4	5,632,988	38,337	368	-
29		Materials & Expenses	4.4	3,877,544	26,390	253	-
30	875.00	Measuring & Regulating Exps. - General					
31		Labor & Labor Loading	2.2	2,082,588	21,139	19	-
32		Materials & Expenses	2.2	668,341	6,784	6	-
33	878.00	Meter and House Regulator Expenses					
34		Labor & Labor Loading	6.0	8,847,520	-	19,464	-
35		Materials & Expenses	6.0	1,261,264	-	2,775	-
36	879.00	Customer Installation Expense					
37		Labor & Labor Loading	6.0	9,347,707	-	20,564	-
38		Materials & Expenses	6.0	1,004,015	-	2,209	-
39	880.00	Other Expenses					
40		Labor & Labor Loading	5.5	7,800,225	21,759	10,723	4,100
41		Materials & Expenses	5.5	5,084,124	14,183	6,989	2,672
42	881.00	Rents	5.5	2,044,165	5,702	2,810	1,075
43		Total Distribution Operating Expenses		$ 59,856,281	$ 166,974	$ 82,282	$ 31,464
44							
45		Total Distribution & Gas Supply Expenses		$ 60,994,426	$ 166,974	$ 82,282	$ 71,922

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Electric Generation Demand (e)	Electric Generation Customer (f)	Electric Generation Commodity (g)
		Maintenance Expenses					
1	885.00	Maintenance Supervision & Engineering					
2		Labor & Labor Loading	6.6	$ 3,276,925	$ 21,543	$ 814	$ -
3		Materials & Expenses	6.6	286,414	1,883	71	-
4	886.00	Maintenance of Structures & Improvement					
5		Labor & Labor Loading	1.0	11,997	244	-	-
6		Materials & Expenses	1.0	52,089	1,057	-	-
7	887.00	Maintenance of Mains					
8		Labor & Labor Loading	2.2	12,116,895	122,993	111	-
9		Materials & Expenses	2.2	9,657,291	98,027	89	-
10	889.00	Maint. of Measuring & Reg. Station Equip.					
11		Labor & Labor Loading	2.2	1,354,752	13,751	12	-
12		Materials & Expenses	2.2	670,136	6,802	6	-
13	892.00	Maintenance of Services					
14		Labor & Labor Loading	3.3	5,929,798	0	1,063	-
15		Materials & Expenses	3.3	3,757,582	0	674	-
16	893.00	Maintenance of Meter & House Regulators					
17		Labor & Labor Loading	6.0	2,171,290	-	4,777	-
18		Materials & Expenses	6.0	1,088,133	-	2,394	-
19	894.00	Maintenance of Other Equipment					
20		Labor & Labor Loading	6.6	209,080	1,375	52	-
21		Materials & Expenses	6.6	141,204	928	35	-
22		Total Distribution-Maintenance		$ 40,723,587	$ 268,603	$ 10,098	$ -
23		Total Distribution O & M		$ 100,579,868	$ 435,577	$ 92,380	$ 31,464
		Customer Accounts Expenses					
24	901.00	Supervision Expenses					
25		Labor & Labor Loading	10.1	$ 2,405,936	$ -	$ 200	$ -
26		Materials & Expenses	10.1	138,017	-	11	-
27	902.00	Meter Reading Expenses					
28		Labor & Labor Loading	11.0	1,550,841	-	29	-
29		Materials & Expenses	11.0	413,390	-	8	-
30	903.00	Customer Records & Collections Expenses					
31		Labor & Labor Loading	4.0	16,896,473	-	311	-
32		Materials & Expenses	4.0	9,198,375	-	169	-
33	903.00	Customer Records & Collections - KAM					
34		Labor & Labor Loading - KAM	15.0	811,470	-	1,894	-
35		Materials & Expenses - KAM	15.0	53,477	-	125	-
36	904.00	Uncollectible Accounts Expense	4.0	2,008,980	-	37	-
37	905.00	Miscellaneous Customer Accounts Expenses					
38		Labor & Labor Loading	10.1	390,373	-	32	-
39		Materials & Expenses	10.1	13,940	-	1	-
40		Total Customer Accounts Expenses		$ 33,881,272	$ -	$ 2,817	$ -
		Customer Service & Informational Expenses					
41	908.00	Customer Assistance Expense					
42		Labor & Labor Loading	4.0	$ 590,805	$ -	$ 11	$ -
43		Materials & Expenses	4.0	595,758	-	11	-
44	909.00	Info. & Instructional Advertising Exps.					
45		Labor & Labor Loading	4.0	-	-	-	-
46		Materials & Expenses	4.0	6,000	-	0	-
47	910.00	Misc. Customer Service & Info. Exp.					
48		Labor & Labor Loading	4.0	-	-	-	-
49		Materials & Expenses	4.0	12,573	-	0	-
50		Total Customer Service & Info. Exp.		$ 1,205,135	$ -	$ 22	$ -
		Sales Expense					
51	911-913						
52		Labor & Labor Loading	4.0	$ -	$ -	$ -	$ -
53		Materials & Expenses	4.0	-	-	-	-
54		Total Sales Expense		$ -	$ -	$ -	$ -
55		Total O & M Expense		$ 136,804,420	$ 435,577	$ 95,219	$ 71,922
56		Allocation Percentage	Total O&M	100.00%	0.32%	0.07%	0.05%
		Other Operating Deductions					
57		Administrative & General Expense	Total O&M	$ 65,125,498	207,356	45,329	34,238
58		Interest on Customer Deposits	8.0	2,908,517	-	-	-
59		Taxes Other Than Income	1.1	27,203,877	164,581	8,782	4,620
60		Total Allocated Operating Deductions		$ 232,042,312	$ 807,514	$ 149,331	$ 110,781
		Tax Adjustments					
61		Interest Expense	1.1	42,713,744	258,415	13,790	7,255
62		South Georgia - State	1.1	-	-	-	-
63		Investment Tax Credit (I.T.C.)	1.1	(528,360)	(3,197)	(171)	(90)
64		South Georgia - Federal	1.1	290,114	1,755	94	49

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Electric Generation Demand (e)	Customer (f)	Commodity (g)
		Summary of Allocated Cost of Service					
		Rate Base					
1		Total Direct Net Plant		$ 1,809,908,655	10,949,804	584,307	307,400
2		Total Common Systems Alloc Net Plant		38,161,320	230,873	12,320	6,481
3		Cash Working Capital	1.1	(4,472,151)	(14,239)	(3,113)	(2,351)
4		Materials & Supplies	1.1	9,920,409	60,018	3,203	1,685
5		Prepayments	1.1	4,744,133	28,702	1,532	806
6		Other	1.1	-	-	-	-
7		Customer Deposits	8.0	(62,033,165)	-	-	-
8		Customer Advances	8.0	(48,475,278)	-	-	-
9		Deferred Taxes	1.1	(291,236,457)	(1,761,958)	(94,022)	(49,464)
10		Other	7.0	-	-	-	-
11		Total Rate Base		$ 1,456,517,468	$9,493,200	$ 504,226	$ 264,556
		Revenues					
12		Net Operating Margin	Direct	$ 392,027,615	2,892,946	89,694	
13		Special Contract & Optional Margin	Net Op Margi	6,788,127	50,093	1,553	-
14		Late Charges	12.0	1,929,221	-	1,318	-
15		Service Establishment Charges	9.0	8,075,816	-	-	-
16		Reconnect / Reread Charges	9.0	868,969	-	-	-
17		Other Revenue - Labor	Net Op Margi	6,985	52	2	-
18		Other Revenue - Parts & Material	Net Op Margi	1,305	10	0	-
19		Other Revenue - Field Collection Fee	14.0	569,766	-	-	-
20		Other Revenue - Returned Item Fee	13.0	195,916	-	-	-
21		Other Revenue - Rental Income	Net Op Margi	448,378	3,309	103	-
22		Total Revenue		$ 410,912,098	2,946,409	92,669	-
		Operating Deductions					
23		O & M		$ (136,804,420)	(435,577)	(95,219)	(71,922)
24		A & G	Total O&M	(65,125,498)	(207,356)	(45,329)	(34,238)
25		Depreciation Expense	Deprec Exp	(99,586,591)	(602,491)	(32,150)	(16,914)
26		Interest on Customer Deposits	8.0	(2,908,517)	-	-	-
27		Taxes other than Income	1.1	(27,203,877)	(164,581)	(8,782)	(4,620)
28							
		State Income Tax					
29		Taxable Income before Interest Exp.		$ 79,283,195	1,536,403	(88,812)	(127,695)
30		Interest Expense	1.1	(42,713,744)	(258,415)	(13,790)	(7,255)
31		State Taxable Income		$ 36,569,451	1,277,989	(102,601)	(134,949)
32		State Income Tax	6.968%	2,548,159	89,050	(7,149)	(9,403)
33		South Georgia	1.1	-	-	-	-
34		State Income Tax		2,548,159	89,050	(7,149)	(9,403)
		Federal Income Tax					
35		Taxable Income before Interest Exp.		79,283,195	1,536,403	(88,812)	(127,695)
36		Interest Expense	1.1	(42,713,744)	(258,415)	(13,790)	(7,255)
37		Federal Taxable Income		36,569,451	1,277,989	(102,601)	(134,949)
38		Federal Income Tax	32.56%	11,907,452	416,128	(33,408)	(43,941)
39		I T C	1.1	(528,360)	(3,197)	(171)	(90)
40		South Georgia	1.1	290,114	1,755	94	49
41		Total Federal Income Tax		11,669,206	414,687	(33,485)	(43,982)
42		Regulatory Amortization	1.1	-	-	-	-

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No. (a)	Description (b)	Allocation Factor No. (c)	Total Amount (d)	Small Essential Agricultural User Demand (e)	Customer (f)	Commodity (g)
		Depreciation Expense & Amortization					
		Direct					
1	301 - 303	Intangible Plant	Intang. Plant	$ 58,852	$ 60	$ 25	$ 1
2	374.1-387	Distribution Plant	Dist. Plant	87,634,565	89,592	36,996	1,867
3	389-398	General	1.1	5,363,611	5,483	2,264	114
4		Total Direct Depreciation Expense		$ 93,057,028	$ 95,136	$ 39,286	$ 1,982
		System Allocable Amortization					
5		Miscellaneous Intangible	1.1	6,009,339	6,144	2,537	128
6		Structures-Leasehold Improvemen	1.1	235,643	241	99	5
7		Total System Allocable Amortization		$ 6,244,982	$ 6,384	$ 2,636	$ 133
8							
9		Total System Depreciation Expense	1.1	$ 235,643	241	99	5
10		Total Depreciation Expense		$ 99,302,010	$ 101,520	$ 41,922	$ 2,115
11		Amortization Gas Plant Acquisition	1.1	(52,943)	(54)	(22)	(1)
12		Regulatory Amortizations	7.0	337,524	-	353	-
13		Total Depreciation Expenses	1.1	$ 284,581	$ 291	$ 120	$ 6
14							
15		Total Depreciation & Amortization Expense		$ 99,586,591	$ 101,811	$ 42,042	$ 2,121
		Operation and Maintenance Expense					
		Gas Supply Expense					
16	803.00	Natural Gas Transmission Line Purch	3.0	$ -	$ -	$ -	$ -
17	805.10	Purchased Gas Cost Adjustments	3.0	-	-	-	-
18	810.00	Gas Used for Compression Station Fu	3.0	-	-	-	-
19	813.00	Other Gas Supply Expenses	3.0	1,138,145	-	-	5,074
20		Total Gas Supply Expenses		$ 1,138,145	$ -	$ -	$ 5,074
		Distribution Expenses					
21	870.00	Operation Supervision and Engineering					
22		Labor & Labor Loading	5.5	$ 10,369,650	$ 4,888	$ 7,135	$ 684
23		Materials & Expenses	5.5	1,345,019	634	925	89
24	871.00	Distribution Load Dispatching					
25		Labor & Labor Loading	3.0	432,781	-	-	1,929
26		Materials & Expenses	3.0	58,350	-	-	260
27	874.00	Mains and Services Expenses					
28		Labor & Labor Loading	4.4	5,632,988	6,478	2,040	-
29		Materials & Expenses	4.4	3,877,544	4,459	1,404	-
30	875.00	Measuring & Regulating Exps. - General					
31		Labor & Labor Loading	2.2	2,082,588	3,572	54	-
32		Materials & Expenses	2.2	668,341	1,146	17	-
33	878.00	Meter and House Regulator Expenses					
34		Labor & Labor Loading	6.0	8,847,520	-	8,362	-
35		Materials & Expenses	6.0	1,261,264	-	1,192	-
36	879.00	Customer Installation Expense					
37		Labor & Labor Loading	6.0	9,347,707	-	8,835	-
38		Materials & Expenses	6.0	1,004,015	-	949	-
39	880.00	Other Expenses					
40		Labor & Labor Loading	5.5	7,800,225	3,677	5,367	514
41		Materials & Expenses	5.5	5,084,124	2,397	3,498	335
42	881.00	Rents	5.5	2,044,165	964	1,407	135
43		Total Distribution Operating Expenses		$ 59,856,281	$ 28,216	$ 41,187	$ 3,946
44							
45		Total Distribution & Gas Supply Expenses		$ 60,994,426	$ 28,216	$ 41,187	$ 9,020

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Small Essential Agricultural User Demand	Small Essential Agricultural User Customer	Small Essential Agricultural User Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Maintenance Expenses					
1	885.00	Maintenance Supervision & Engineering					
2		Labor & Labor Loading	6.6	$ 3,276,925	$ 3,640	$ 1,234	$ -
3		Materials & Expenses	6.6	286,414	318	108	-
4	886.00	Maintenance of Structures & Improvement					
5		Labor & Labor Loading	1.0	11,997	41	-	-
6		Materials & Expenses	1.0	52,089	179	-	-
7	887.00	Maintenance of Mains					
8		Labor & Labor Loading	2.2	12,116,895	20,784	315	-
9		Materials & Expenses	2.2	9,657,291	16,565	251	-
10	889.00	Maint. of Measuring & Reg. Station Equip.					
11		Labor & Labor Loading	2.2	1,354,752	2,324	35	-
12		Materials & Expenses	2.2	670,136	1,149	17	-
13	892.00	Maintenance of Services					
14		Labor & Labor Loading	3.3	5,929,798	0	6,202	-
15		Materials & Expenses	3.3	3,757,582	0	3,930	-
16	893.00	Maintenance of Meter & House Regulators					
17		Labor & Labor Loading	6.0	2,171,290	-	2,052	-
18		Materials & Expenses	6.0	1,088,133	-	1,028	-
19	894.00	Maintenance of Other Equipment					
20		Labor & Labor Loading	6.6	209,080	232	79	-
21		Materials & Expenses	6.6	141,204	157	53	-
22		Total Distribution-Maintenance		$ 40,723,587	$ 45,390	$ 15,305	$ -
23		Total Distribution O & M		$ 100,579,868	$ 73,605	$ 56,492	$ 3,946
		Customer Accounts Expenses					
24	901.00	Supervision Expenses					
25		Labor & Labor Loading	10.1	$ 2,405,936	$ -	$ 122	$ -
26		Materials & Expenses	10.1	138,017	-	7	-
27	902.00	Meter Reading Expenses					
28		Labor & Labor Loading	11.0	1,550,841	-	81	-
29		Materials & Expenses	11.0	413,390	-	22	-
30	903.00	Customer Records & Collections Expenses					
31		Labor & Labor Loading	4.0	16,896,473	-	879	-
32		Materials & Expenses	4.0	9,198,375	-	479	-
33	903.00	Customer Records & Collections - KAM					
34		Labor & Labor Loading - KAM	15.0	811,470	-	-	-
35		Materials & Expenses - KAM	15.0	53,477	-	-	-
36	904.00	Uncollectible Accounts Expense	4.0	2,008,980	-	105	-
37	905.00	Miscellaneous Customer Accounts Expenses					
38		Labor & Labor Loading	10.1	390,373	-	20	-
39		Materials & Expenses	10.1	13,940	-	1	-
40		Total Customer Accounts Expenses		$ 33,881,272	$ -	$ 1,714	$ -
		Customer Service & Informational Expenses					
41	908.00	Customer Assistance Expense					
42		Labor & Labor Loading	4.0	$ 590,805	$ -	$ 31	$ -
43		Materials & Expenses	4.0	595,758	-	31	-
44	909.00	Info. & Instructional Advertising Exps.					
45		Labor & Labor Loading	4.0	-	-	-	-
46		Materials & Expenses	4.0	6,000	-	0	-
47	910.00	Misc. Customer Service & Info. Exp.					
48		Labor & Labor Loading	4.0	-	-	-	-
49		Materials & Expenses	4.0	12,573	-	1	-
50		Total Customer Service & Info. Exp.		$ 1,205,135	$ -	$ 63	$ -
		Sales Expense					
51	911-913						
52		Labor & Labor Loading	4.0	$ -	$ -	$ -	$ -
53		Materials & Expenses	4.0	-	-	-	-
54		Total Sales Expense		$ -	$ -	$ -	$ -
55		Total O & M Expense		$ 136,804,420	$ 73,605	$ 58,269	$ 9,020
56		Allocation Percentage	Total O&M	100.00%	0.05%	0.04%	0.01%
		Other Operating Deductions					
57		Administrative & General Expense	Total O&M	$ 65,125,498	35,040	27,739	4,294
58		Interest on Customer Deposits	8.0	2,908,517	-	-	-
59		Taxes Other Than Income	1.1	27,203,877	27,812	11,485	579
60		Total Allocated Operating Deductions		$ 232,042,312	$ 136,457	$ 97,492	$ 13,894
		Tax Adjustments					
61		Interest Expense	1.1	42,713,744	43,668	18,032	910
62		South Georgia - State	1.1	-	-	-	-
63		Investment Tax Credit (I.T.C.)	1.1	(528,360)	(540)	(223)	(11)
64		South Georgia - Federal	1.1	290,114	297	122	6

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Small Essential Agricultural User Demand	Small Essential Agricultural User Customer	Small Essential Agricultural User Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Summary of Allocated Cost of Service					
		Rate Base					
1		Total Direct Net Plant		$ 1,809,908,655	1,850,340	764,083	38,553
2		Total Common Systems Alloc Net Plant		38,161,320	39,014	16,110	813
3		Cash Working Capital	1.1	(4,472,151)	(2,406)	(1,905)	(295)
4		Materials & Supplies	1.1	9,920,409	10,142	4,188	211
5		Prepayments	1.1	4,744,133	4,850	2,003	101
6		Other	1.1	-	-	-	-
7		Customer Deposits	8.0	(62,033,165)	-	-	-
8		Customer Advances	8.0	(48,475,278)	-	-	-
9		Deferred Taxes	1.1	(291,236,457)	(297,742)	(122,950)	(6,204)
10		Other	7.0	-	-	-	-
11		Total Rate Base		$ 1,456,517,468	$1,604,197	$ 661,529	$ 33,180
		Revenues					
12		Net Operating Margin	Direct	$ 392,027,615	653,964	73,320	-
13		Special Contract & Optional Margin	Net Op Margi	6,788,127	11,324	1,270	-
14		Late Charges	12.0	1,929,221	-	3,770	-
15		Service Establishment Charges	9.0	8,075,816	-	1,408	-
16		Reconnect / Reread Charges	9.0	868,969	-	152	-
17		Other Revenue - Labor	Net Op Margi	6,985	12	1	-
18		Other Revenue - Parts & Material	Net Op Margi	1,305	2	0	-
19		Other Revenue - Field Collection Fee	14.0	569,766	-	-	-
20		Other Revenue - Returned Item Fee	13.0	195,916	-	-	-
21		Other Revenue - Rental Income	Net Op Margi	448,378	748	84	-
22		Total Revenue		$ 410,912,098	666,049	80,005	-
		Operating Deductions					
23		O & M		$ (136,804,420)	(73,605)	(58,269)	(9,020)
24		A & G	Total O&M	(65,125,498)	(35,040)	(27,739)	(4,294)
25		Depreciation Expense	Deprec Exp	(99,586,591)	(101,811)	(42,042)	(2,121)
26		Interest on Customer Deposits	8.0	(2,908,517)	-	-	-
27		Taxes other than Income	1.1	(27,203,877)	(27,812)	(11,485)	(579)
28							
		State Income Tax					
29		Taxable Income before Interest Exp.		$ 79,283,195	427,781	(59,529)	(16,015)
30		Interest Expense	1.1	(42,713,744)	(43,668)	(18,032)	(910)
31		State Taxable Income		$ 36,569,451	384,113	(77,561)	(16,925)
32		State Income Tax	6.968%	2,548,159	26,765	(5,404)	(1,179)
33		South Georgia	1.1	-	-	-	-
34		State Income Tax		2,548,159	26,765	(5,404)	(1,179)
		Federal Income Tax					
35		Taxable Income before Interest Exp.		79,283,195	427,781	(59,529)	(16,015)
36		Interest Expense	1.1	(42,713,744)	(43,668)	(18,032)	(910)
37		Federal Taxable Income		36,569,451	384,113	(77,561)	(16,925)
38		Federal Income Tax	32.56%	11,907,452	125,072	(25,255)	(5,511)
39		I T C	1.1	(528,360)	(540)	(223)	(11)
40		South Georgia	1.1	290,114	297	122	6
41		Total Federal Income Tax		11,669,206	124,828	(25,356)	(5,516)
42		Regulatory Amortization	1.1	-	-	-	-

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Natural Gas Engine Demand	Natural Gas Engine Customer	Natural Gas Engine Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Depreciation Expense & Amortization					
		Direct					
1	301 - 303	Intangible Plant	Intang. Plant	$ 58,852	$ 38	$ 60	$ 4
2	374.1-387	Distribution Plant	Dist. Plant	87,634,565	55,972	89,273	5,347
3	389-398	General	1.1	5,363,611	3,426	5,464	327
4		Total Direct Depreciation Expense		$ 93,057,028	$ 59,436	$ 94,797	$ 5,678
		System Allocable Amortization					
5		Miscellaneous Intangible	1.1	6,009,339	3,838	6,122	367
6		Structures-Leasehold Improvemen	1.1	235,643	151	240	14
7		Total System Allocable Amortization		$ 6,244,982	$ 3,989	$ 6,362	$ 381
8							
9		Total System Depreciation Expense	1.1	$ 235,643	151	240	14
10		Total Depreciation Expense		$ 99,302,010	$ 63,424	$ 101,159	$ 6,059
11		Amortization Gas Plant Acquisition	1.1	(52,943)	(34)	(54)	(3)
12		Regulatory Amortizations	7.0	337,524	-	184	-
13		Total Depreciation Expenses	1.1	$ 284,581	$ 182	$ 290	$ 17
14							
15		Total Depreciation & Amortization Expense		$ 99,586,591	$ 63,606	$ 101,449	$ 6,076
		Operation and Maintenance Expense					
		Gas Supply Expense					
16	803.00	Natural Gas Transmission Line Purch	3.0	$ -	$ -	$ -	$ -
17	805.10	Purchased Gas Cost Adjustments	3.0	-	-	-	-
18	810.00	Gas Used for Compression Station Fu	3.0	-	-	-	-
19	813.00	Other Gas Supply Expenses	3.0	1,138,145	-	-	14,534
20		Total Gas Supply Expenses		$ 1,138,145	$ -	$ -	$ 14,534
		Distribution Expenses					
21	870.00	Operation Supervision and Engineering					
22		Labor & Labor Loading	5.5	$ 10,369,650	$ 3,054	$ 41,246	$ 1,958
23		Materials & Expenses	5.5	1,345,019	396	5,350	254
24	871.00	Distribution Load Dispatching					
25		Labor & Labor Loading	3.0	432,781	-	-	5,527
26		Materials & Expenses	3.0	58,350	-	-	745
27	874.00	Mains and Services Expenses					
28		Labor & Labor Loading	4.4	5,632,988	4,047	1,657	-
29		Materials & Expenses	4.4	3,877,544	2,786	1,141	-
30	875.00	Measuring & Regulating Exps. - General					
31		Labor & Labor Loading	2.2	2,082,588	2,232	355	-
32		Materials & Expenses	2.2	668,341	716	114	-
33	878.00	Meter and House Regulator Expenses					
34		Labor & Labor Loading	6.0	8,847,520	-	55,714	-
35		Materials & Expenses	6.0	1,261,264	-	7,942	-
36	879.00	Customer Installation Expense					
37		Labor & Labor Loading	6.0	9,347,707	-	58,863	-
38		Materials & Expenses	6.0	1,004,015	-	6,322	-
39	880.00	Other Expenses					
40		Labor & Labor Loading	5.5	7,800,225	2,297	31,026	1,473
41		Materials & Expenses	5.5	5,084,124	1,497	20,223	960
42	881.00	Rents	5.5	2,044,165	602	8,131	386
43		Total Distribution Operating Expenses		$ 59,856,281	$ 17,628	$ 238,083	$ 11,303
44							
45		Total Distribution & Gas Supply Expenses		$ 60,994,426	$ 17,628	$ 238,083	$ 25,837

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Natural Gas Engine Demand	Natural Gas Engine Customer	Natural Gas Engine Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Maintenance Expenses					
1	885.00	Maintenance Supervision & Engineering					
2		Labor & Labor Loading	6.6	$ 3,276,925	$ 2,274	$ 2,664	$ -
3		Materials & Expenses	6.6	286,414	199	233	-
4	886.00	Maintenance of Structures & Improvement					
5		Labor & Labor Loading	1.0	11,997	26	-	-
6		Materials & Expenses	1.0	52,089	112	-	-
7	887.00	Maintenance of Mains					
8		Labor & Labor Loading	2.2	12,116,895	12,985	2,063	-
9		Materials & Expenses	2.2	9,657,291	10,349	1,644	-
10	889.00	Maint. of Measuring & Reg. Station Equip.					
11		Labor & Labor Loading	2.2	1,354,752	1,452	231	-
12		Materials & Expenses	2.2	670,136	718	114	-
13	892.00	Maintenance of Services					
14		Labor & Labor Loading	3.3	5,929,798	0	3,239	-
15		Materials & Expenses	3.3	3,757,582	0	2,053	-
16	893.00	Maintenance of Meter & House Regulators					
17		Labor & Labor Loading	6.0	2,171,290	-	13,673	-
18		Materials & Expenses	6.0	1,088,133	-	6,852	-
19	894.00	Maintenance of Other Equipment					
20		Labor & Labor Loading	6.6	209,080	145	170	-
21		Materials & Expenses	6.6	141,204	98	115	-
22		Total Distribution-Maintenance		$ 40,723,587	$ 28,357	$ 33,049	$ -
23		Total Distribution O & M		$ 100,579,868	$ 45,985	$ 271,132	$ 11,303
		Customer Accounts Expenses					
24	901.00	Supervision Expenses					
25		Labor & Labor Loading	10.1	$ 2,405,936	$ -	$ 796	$ -
26		Materials & Expenses	10.1	138,017	-	46	-
27	902.00	Meter Reading Expenses					
28		Labor & Labor Loading	11.0	1,550,841	-	528	-
29		Materials & Expenses	11.0	413,390	-	141	-
30	903.00	Customer Records & Collections Expenses					
31		Labor & Labor Loading	4.0	16,896,473	-	5,752	-
32		Materials & Expenses	4.0	9,198,375	-	3,132	-
33	903.00	Customer Records & Collections - KAM					
34		Labor & Labor Loading - KAM	15.0	811,470	-	-	-
35		Materials & Expenses - KAM	15.0	53,477	-	-	-
36	904.00	Uncollectible Accounts Expense	4.0	2,008,980	-	684	-
37	905.00	Miscellaneous Customer Accounts Expenses					
38		Labor & Labor Loading	10.1	390,373	-	129	-
39		Materials & Expenses	10.1	13,940	-	5	-
40		Total Customer Accounts Expenses		$ 33,881,272	$ -	$ 11,213	$ -
		Customer Service & Informational Expenses					
41	908.00	Customer Assistance Expense					
42		Labor & Labor Loading	4.0	$ 590,805	$ -	$ 201	$ -
43		Materials & Expenses	4.0	595,758	-	203	-
44	909.00	Info. & Instructional Advertising Exps.					
45		Labor & Labor Loading	4.0	-	-	-	-
46		Materials & Expenses	4.0	6,000	-	2	-
47	910.00	Misc. Customer Service & Info. Exp.					
48		Labor & Labor Loading	4.0	-	-	-	-
49		Materials & Expenses	4.0	12,573	-	4	-
50		Total Customer Service & Info. Exp.		$ 1,205,135	$ -	$ 410	$ -
		Sales Expense					
51	911-913						
52		Labor & Labor Loading	4.0	$ -	$ -	$ -	$ -
53		Materials & Expenses	4.0	-	-	-	-
54		Total Sales Expense		$ -	$ -	$ -	$ -
55		Total O & M Expense		$ 136,804,420	$ 45,985	$ 282,755	$ 25,837
56		Allocation Percentage	Total O&M	100.00%	0.03%	0.21%	0.02%
		Other Operating Deductions					
57		Administrative & General Expense	Total O&M	$ 65,125,498	21,891	134,605	12,300
58		Interest on Customer Deposits	8.0	2,908,517	-	-	-
59		Taxes Other Than Income	1.1	27,203,877	17,375	27,713	1,660
60		Total Allocated Operating Deductions		$ 232,042,312	$ 85,251	$ 445,073	$ 39,797
		Tax Adjustments					
61		Interest Expense	1.1	42,713,744	27,281	43,513	2,606
62		South Georgia - State	1.1	-	-	-	-
63		Investment Tax Credit (I.T.C.)	1.1	(528,360)	(337)	(538)	(32)
64		South Georgia - Federal	1.1	290,114	185	296	18

SOUTHWEST GAS CORPORATION
ALLOCATION OF EXPENSES TO CLASSES OF SERVICE
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Account No.	Description	Allocation Factor No.	Total Amount	Natural Gas Engine Demand	Customer	Commodity
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Summary of Allocated Cost of Service					
		Rate Base					
1		Total Direct Net Plant		$ 1,809,908,655	1,155,994	1,843,755	110,430
2		Total Common Systems Alloc Net Plant		38,161,320	24,374	38,875	2,328
3		Cash Working Capital	1.1	(4,472,151)	(1,503)	(9,243)	(845)
4		Materials & Supplies	1.1	9,920,409	6,336	10,106	605
5		Prepayments	1.1	4,744,133	3,030	4,833	289
6		Other	1.1	-	-	-	-
7		Customer Deposits	8.0	(62,033,165)	-	-	-
8		Customer Advances	8.0	(48,475,278)	-	-	-
9		Deferred Taxes	1.1	(291,236,457)	(186,014)	(296,683)	(17,769)
10		Other	7.0	-	-	-	-
11		Total Rate Base		$ 1,456,517,468	$ 1,002,217	$ 1,591,643	$ 95,039
		Revenues					
12		Net Operating Margin	Direct	$ 392,027,615	1,464,171	249,813	
13		Special Contract & Optional Margin	Net Op Margi	6,788,127	25,353	4,326	-
14		Late Charges	12.0	1,929,221	-	10,279	-
15		Service Establishment Charges	9.0	8,075,816	-	1,408	-
16		Reconnect / Reread Charges	9.0	868,969	-	152	-
17		Other Revenue - Labor	Net Op Margi	6,985	26	4	-
18		Other Revenue - Parts & Material	Net Op Margi	1,305	5	1	-
19		Other Revenue - Field Collection Fee	14.0	569,766	-	20	-
20		Other Revenue - Returned Item Fee	13.0	195,916	-	28	-
21		Other Revenue - Rental Income	Net Op Margi	448,378	1,675	286	-
22		Total Revenue		$ 410,912,098	1,491,229	266,317	-
		Operating Deductions					
23		O & M		$ (136,804,420)	(45,985)	(282,755)	(25,837)
24		A & G	Total O&M	(65,125,498)	(21,891)	(134,605)	(12,300)
25		Depreciation Expense	Deprec Exp	(99,586,591)	(63,606)	(101,449)	(6,076)
26		Interest on Customer Deposits	8.0	(2,908,517)	-	-	-
27		Taxes other than Income	1.1	(27,203,877)	(17,375)	(27,713)	(1,660)
28							
		State Income Tax					
29		Taxable Income before Interest Exp.		$ 79,283,195	1,342,372	(280,205)	(45,873)
30		Interest Expense	1.1	(42,713,744)	(27,281)	(43,513)	(2,606)
31		State Taxable Income		$ 36,569,451	1,315,091	(323,717)	(48,479)
32		State Income Tax	6.968%	2,548,159	91,636	(22,557)	(3,378)
33		South Georgia	1.1	-	-	-	-
34		State Income Tax		2,548,159	91,636	(22,557)	(3,378)
		Federal Income Tax					
35		Taxable Income before Interest Exp.		79,283,195	1,342,372	(280,205)	(45,873)
36		Interest Expense	1.1	(42,713,744)	(27,281)	(43,513)	(2,606)
37		Federal Taxable Income		36,569,451	1,315,091	(323,717)	(48,479)
38		Federal Income Tax	32.56%	11,907,452	428,209	(105,406)	(15,785)
39		I T C	1.1	(528,360)	(337)	(538)	(32)
40		South Georgia	1.1	290,114	185	296	18
41		Total Federal Income Tax		11,669,206	428,057	(105,649)	(15,800)
42		Regulatory Amortization	1.1	-	-	-	-

SOUTHWEST GAS CORPORATION
ARIZONA
DISTRIBUTION OF RATE BASE BY FUNCTION - DATA ENTRY AND CLASSIFICATION OF COSTS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Acct No.	Description	Allocation	Amount	Production Specific	Production Demand	Production Customer	Production Commodity	Transmission Specific	Transmission Demand	Transmission Customer	Transmission Commodity	Distribution Specific	Distribution Demand	Distribution Customer	Distribution Commodity	Customer Accounting Specific	Customer Accounting Demand	Customer Accounting Customer	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	
		Cost of Service																		
		Direct																		
		Intangible Plant																		
1	301.00	Organization	Net Plant	$ 42,653	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 12,169	$ 30,280	$ 204	$ -	$ -	$ -	1
2	302.00	Franchise & Consents	Net Plant	1,108,278	-	-	-	-	-	-	-	-	-	316,187	786,796	5,295	-	-	-	2
3	303.00	Miscellaneous Intangible Plant	Net Plant	5,597	-	-	-	-	-	-	-	-	-	1,597	3,974	27	-	-	-	3
4		Total Direct Intangible Plant		$ 1,156,528	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 329,953	$ 821,050	$ 5,526	$ -	$ -	$ -	4
		Distribution Plant																		
5	374.10	Land & Land Rights	Demand	$ 282,689	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 282,689	$ -	$ -	$ -	$ -	$ -	5
6	374.20	Rights of Way	Demand	1,538,470	-	-	-	-	-	-	-	-	-	1,538,470	-	-	-	-	-	6
7	375.00	Structures & Improvements	Demand	283,643	-	-	-	-	-	-	-	-	-	283,643	-	-	-	-	-	7
8	376.00	Mains	Dmd/Cust	959,684,968	-	-	-	-	-	-	-	-	-	479,842,484	479,842,484	-	-	-	-	8
9	378.00	Measuring & Regulating Station Equip./Gen.	Commodity	42,975,214	-	-	-	-	-	-	-	-	-	-	42,975,214	-	-	-	-	9
10	380.00	Services	Customer	471,631,931	-	-	-	-	-	-	-	-	-	0	471,631,931	0	-	-	-	10
11	381.00	Meters	Customer	205,391,538	-	-	-	-	-	-	-	-	-	-	205,391,538	-	-	-	-	11
12	385.00	Industrial Measuring & Reg. Station Equip.	Commodity	8,075,089	-	-	-	-	-	-	-	-	-	-	-	8,075,089	-	-	-	12
13	387.00	Miscellaneous Equipment	Demand	229,431	-	-	-	-	-	-	-	-	-	229,431	-	-	-	-	-	13
14		Total Direct Distribution Plant		$ 1,690,092,974	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 482,176,717	$ 1,199,841,167	$ 8,075,090	$ -	$ -	$ -	14
		Total Percent Direct Distribution Plant		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	28.53%	70.99%	0.48%	0.00%	0.00%	0.00%	
		General Plant																		
15	389.00	Land & Land Rights	Net Plant	$ 14,506,145	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,138,545	$ 10,298,292	$ 69,309	$ -	$ -	$ -	15
16	390.20	Structures & Improvements Leasehold	Net Plant	31,836,617	-	-	-	-	-	-	-	-	-	9,082,858	22,601,646	152,112	-	-	-	16
17	390.10	Structures & Improvements	Net Plant	666,050	-	-	-	-	-	-	-	-	-	190,021	472,846	3,182	-	-	-	17
18	391.00	Office Furniture & Fixtures	Net Plant	5,262,501	-	-	-	-	-	-	-	-	-	1,501,370	3,735,987	25,144	-	-	-	18
19	391.10	Computer Software & Hardware	Net Plant	11,589,633	-	-	-	-	-	-	-	-	-	3,306,476	8,227,783	55,374	-	-	-	19
20	392.10	Transportation Equipment Motor Vehicles	Net Plant	34,555,533	-	-	-	-	-	-	-	-	-	9,858,554	24,531,876	165,103	-	-	-	20
21	393.00	Stores Equipment	Net Plant	715,304	-	-	-	-	-	-	-	-	-	204,073	507,813	3,418	-	-	-	21
22	394.00	Tools, Shop & Garage Equipment	Net Plant	9,957,204	-	-	-	-	-	-	-	-	-	2,840,750	7,068,879	47,574	-	-	-	22
23	395.00	Laboratory Equipment	Net Plant	502,473	-	-	-	-	-	-	-	-	-	143,353	356,718	2,401	-	-	-	23
24	396.00	Power Operated Equipment	Net Plant	5,776,637	-	-	-	-	-	-	-	-	-	1,648,051	4,100,986	27,600	-	-	-	24
25	397.10	Communication Equipment	Net Plant	1,620,818	-	-	-	-	-	-	-	-	-	462,413	1,150,661	7,744	-	-	-	25
26	397.20	Communication / Telemetry Equipment	Net Plant	641,041	-	-	-	-	-	-	-	-	-	182,886	455,092	3,063	-	-	-	26
27	398.00	Miscellaneous Equipment	Net Plant	1,029,197	-	-	-	-	-	-	-	-	-	293,626	730,654	4,917	-	-	-	27
28		Total Direct General Plant		$ 118,659,153	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 33,852,978	$ 84,239,233	$ 566,941	$ -	$ -	$ -	28
		Common - Systems Allocable																		
		Intangible Plant																		
29	301.00	Organization	Net Plant	$ 34,770	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 9,920	$ 24,684	$ 166	$ -	$ -	$ -	29
30	303.00	Miscellaneous Intangible Plant	Net Plant	19,059,868	-	-	-	-	-	-	-	-	-	5,437,704	13,531,099	91,066	-	-	-	30
31		Total Common Intangible Plant		$ 19,094,639	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,447,624	$ 13,555,783	$ 91,232	$ -	$ -	$ -	31
		General Plant																		
32	389.00	Land & Land Rights	Net Plant	$ 174,349	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 49,741	$ 123,775	$ 833	$ -	$ -	$ -	32
33	390.10	Structures & Improvements	Net Plant	6,614,804	-	-	-	-	-	-	-	-	-	1,887,177	4,696,023	31,605	-	-	-	33
34	390.20	Structures & Improvements Leasehold	Net Plant	1,035,552	-	-	-	-	-	-	-	-	-	295,439	735,165	4,948	-	-	-	34
35	391.00	Office Furniture & Fixtures	Net Plant	3,550,005	-	-	-	-	-	-	-	-	-	1,012,802	2,520,241	16,962	-	-	-	35
36	391.10	Computer Software & Hardware	Net Plant	2,886,135	-	-	-	-	-	-	-	-	-	823,403	2,048,943	13,790	-	-	-	36
37	392.11	Transportation Equipment, Light	Net Plant	1,601,540	-	-	-	-	-	-	-	-	-	456,913	1,136,975	7,652	-	-	-	37
38	392.12	Transportation Equipment, Heavy	Net Plant	46,896	-	-	-	-	-	-	-	-	-	13,379	33,293	224	-	-	-	38
39	393.00	Stores Equipment	Net Plant	17,205	-	-	-	-	-	-	-	-	-	4,908	12,214	82	-	-	-	39
40	394.00	Tools, Shop & Garage Equipment	Net Plant	143,386	-	-	-	-	-	-	-	-	-	40,907	101,794	685	-	-	-	40
41	395.00	Laboratory Equipment	Net Plant	179,095	-	-	-	-	-	-	-	-	-	51,095	127,144	856	-	-	-	41
42	396.00	Power Operated Equipment	Net Plant	5,177	-	-	-	-	-	-	-	-	-	1,477	3,675	25	-	-	-	42
43	397.00	Communication Equipment	Net Plant	2,238,796	-	-	-	-	-	-	-	-	-	638,719	1,589,380	10,697	-	-	-	43
44	397.20	Communication / Telemetry Equipment	Net Plant	165,162	-	-	-	-	-	-	-	-	-	47,120	117,253	789	-	-	-	44
45	398.00	Miscellaneous Equipment	Net Plant	408,579	-	-	-	-	-	-	-	-	-	116,566	290,061	1,952	-	-	-	45
46		Total Common General Plant		$ 19,066,682	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,439,647	$ 13,535,935	$ 91,099	$ -	$ -	$ -	46
		Net Plant																		
47		Total Direct Net Plant		$ 1,809,908,655	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 516,359,648	$ 1,284,901,450	$ 8,647,557	$ -	$ -	$ -	47
48		Total Common/System Allocation Net Plant	56.248052%	$ 38,161,320	-	-	-	-	-	-	-	-	-	10,887,271	27,091,719	182,331	-	-	-	48
49		Total Net Plant		$ 1,848,069,975	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 527,246,919	$ 1,311,993,169	$ 8,829,888	$ -	$ -	$ -	49
		Rate Base																		
50		Cash Working Capital	Total Plant	$ (4,472,151)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (1,275,887)	$ (3,174,897)	$ (21,367)	$ -	$ -	$ -	50
51		Materials & Supplies	Total Plant	9,920,409	-	-	-	-	-	-	-	-	-	2,830,253	7,042,758	47,399	-	-	-	51
52		Prepayments	Total Plant	4,744,133	-	-	-	-	-	-	-	-	-	1,353,482	3,367,984	22,667	-	-	-	52
53		Other		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	53
54		Customer Advances	Customer	(62,033,165)	-	-	-	-	-	-	-	-	-	(17,697,812)	(44,038,965)	(296,388)	-	-	-	54
55		Customer Deposits	Customer	(48,475,278)	-	-	-	-	-	-	-	-	-	(13,829,801)	(34,413,866)	(231,610)	-	-	-	55
56		Deferred Taxes	Total Plant	(291,236,457)	-	-	-	-	-	-	-	-	-	(83,088,588)	(206,756,371)	(1,391,498)	-	-	-	56
57		Other		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57
58		Total Rate Base		$ 1,456,517,467	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 415,538,566	$ 1,034,019,812	$ 6,959,090	$ -	$ -	$ -	58

SOUTHWEST GAS CORPORATION
ARIZONA
DISTRIBUTION OF EXPENSES BY FUNCTION - DATA ENTRY AND CLASSIFICATION OF COSTS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Acct No.	Description	Allocation	Amount	Production Specific	Production Demand	Production Customer	Production Commodity	Transmission Specific	Transmission Demand	Transmission Customer	Transmission Commodity	Specific	Distribution Demand	Distribution Customer	Distribution Commodity	Customer Accounting Specific	Customer Accounting Demand	Customer Accounting Customer	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	
		Depreciation Expenses & Amortization																		
		Direct																		
		Intangible Plant																		
1	301.00	Organization	Plant Acct.	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	1
2	302.00	Franchise & Consents	Plant Acct.	53,255	-	-	-	-	-	-	-	-	-	15,193	37,807	254	-	-	-	2
3	303.00	Miscellaneous Intangible Plant	Plant Acct.	5,597	-	-	-	-	-	-	-	-	-	1,597	3,974	27	-	-	-	3
4		Total Direct Intangible Plant		$ 58,852	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 16,790	$ 41,780	$ 281	$ -	$ -	$ -	4
		Distribution Plant																		
5	374.10	Land & Land Rights	Plant Acct.	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	5
6	374.20	Rights of Way	Plant Acct.	47,877	-	-	-	-	-	-	-	-	-	47,877	-	-	-	-	-	6
7	375.00	Structures & Improvements	Plant Acct.	1,272	-	-	-	-	-	-	-	-	-	1,272	-	-	-	-	-	7
8	376.00	Mains	Plant Acct.	44,057,315	-	-	-	-	-	-	-	-	-	22,028,657	22,028,657	-	-	-	-	8
9	378.00	Measuring & Regulating Station Equip./Gen.	Plant Acct.	2,107,614	-	-	-	-	-	-	-	-	-	-	2,107,614	-	-	-	-	9
10	380.00	Services	Plant Acct.	36,079,340	-	-	-	-	-	-	-	-	-	0	36,079,340	0	-	-	-	10
11	381.00	Meters	Plant Acct.	4,854,579	-	-	-	-	-	-	-	-	-	-	4,854,579	-	-	-	-	11
12	385.00	Industrial Measuring & Reg. *Station Equip.*	Plant Acct.	463,842	-	-	-	-	-	-	-	-	-	-	-	463,842	-	-	-	12
13	387.00	Miscellaneous Equipment	Plant Acct.	22,728	-	-	-	-	-	-	-	-	-	22,728	-	-	-	-	-	13
14		Total Direct Distribution Plant		$ 87,634,565	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 22,100,534	$ 65,070,189	$ 463,842	$ -	$ -	$ -	14
		General Plant																		
15	389.00	Land & Land Rights	Plant Acct.	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	15
16	390.10	Structures & Improvements	Plant Acct.	510,324	-	-	-	-	-	-	-	-	-	145,593	362,292	2,438	-	-	-	16
17	390.20	Structures & Improvements Leasehold	Plant Acct.	60,199	-	-	-	-	-	-	-	-	-	17,174	42,737	288	-	-	-	17
18	391.00	Office Furniture & Fixtures	Plant Acct.	107,116	-	-	-	-	-	-	-	-	-	30,560	76,044	512	-	-	-	18
19	391.10	Computer Software & Hardware	Plant Acct.	1,542,639	-	-	-	-	-	-	-	-	-	440,109	1,095,160	7,371	-	-	-	19
20	392.10	Transportation Equipment Motor Vehicles	Plant Acct.	2,450,447	-	-	-	-	-	-	-	-	-	699,103	1,739,636	11,708	-	-	-	20
21	393.00	Stores Equipment	Plant Acct.	12,978	-	-	-	-	-	-	-	-	-	3,703	9,213	62	-	-	-	21
22	394.00	Tools, Shop & Garage Equipment	Plant Acct.	157,569	-	-	-	-	-	-	-	-	-	44,954	111,862	753	-	-	-	22
23	395.00	Laboratory Equipment	Plant Acct.	12,926	-	-	-	-	-	-	-	-	-	3,688	9,176	62	-	-	-	23
24	396.00	Power Operated Equipment	Plant Acct.	223,598	-	-	-	-	-	-	-	-	-	63,792	158,738	1,068	-	-	-	24
25	397.10	Communication Equipment	Plant Acct.	210,282	-	-	-	-	-	-	-	-	-	59,993	149,284	1,005	-	-	-	25
26	397.20	Communication / Telemetry Equipment	Plant Acct.	36,383	-	-	-	-	-	-	-	-	-	10,380	25,829	174	-	-	-	26
27	398.00	Miscellaneous Equipment	Plant Acct.	39,152	-	-	-	-	-	-	-	-	-	11,170	27,795	187	-	-	-	27
28		Total Direct General Plant		$ 5,363,611	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,530,217	$ 3,807,767	$ 25,627	$ -	$ -	$ -	28
		Common - Systems Allocable																		
29		Common - Systems Allocation	56.248052%																	29
		Intangible Plant																		
30	301.00	Organization	Plant Acct.	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	30
31	303.01	Payroll & Personnel	Plant Acct.	3,822,294	-	-	-	-	-	-	-	-	-	1,090,485	2,713,546	18,263	-	-	-	31
32		Total Common Intangible Plant		$ 3,822,294	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,090,485	$ 2,713,546	$ 18,263	$ -	$ -	$ -	32
		General Plant																		
33	389.00	Land & Land Rights	Plant Acct.	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	33
34	390.10	Structures & Improvements	Plant Acct.	235,643	-	-	-	-	-	-	-	-	-	67,228	167,289	1,126	-	-	-	34
35	390.20	Structures & Improvements Leasehold	Plant Acct.	107,118	-	-	-	-	-	-	-	-	-	30,560	76,046	512	-	-	-	35
36	391.00	Office Furniture & Fixtures	Plant Acct.	290,857	-	-	-	-	-	-	-	-	-	82,980	206,487	1,390	-	-	-	36
37	391.10	Computer Software & Hardware	Plant Acct.	1,234,097	-	-	-	-	-	-	-	-	-	352,083	876,118	5,896	-	-	-	37
38	392.11	Transportation Equipment, Light	Plant Acct.	198,683	-	-	-	-	-	-	-	-	-	56,683	141,050	949	-	-	-	38
39	392.12	Transportation Equipment, Heavy	Plant Acct.	4,854	-	-	-	-	-	-	-	-	-	1,385	3,446	23	-	-	-	39
40	393.00	Stores Equipment	Plant Acct.	1,336	-	-	-	-	-	-	-	-	-	381	949	6	-	-	-	40
41	394.00	Tools, Shop & Garage Equipment	Plant Acct.	10,244	-	-	-	-	-	-	-	-	-	2,922	7,272	49	-	-	-	41
42	395.00	Laboratory Equipment	Plant Acct.	10,537	-	-	-	-	-	-	-	-	-	3,006	7,480	50	-	-	-	42
43	396.00	Power Operated Equipment	Plant Acct.	397	-	-	-	-	-	-	-	-	-	113	282	2	-	-	-	43
44	397.00	Communication Equipment	Plant Acct.	263,810	-	-	-	-	-	-	-	-	-	75,264	187,286	1,260	-	-	-	44
45	397.20	Communication / Telemetry Equipment	Plant Acct.	34,746	-	-	-	-	-	-	-	-	-	9,913	24,667	166	-	-	-	45
46	398.00	Miscellaneous Equipment	Plant Acct.	30,366	-	-	-	-	-	-	-	-	-	8,663	21,557	145	-	-	-	46
47		Total Common General Plant		$ 2,422,688	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 691,183	$ 1,719,930	$ 11,575	$ -	$ -	$ -	47

SOUTHWEST GAS CORPORATION
ARIZONA
DISTRIBUTION OF EXPENSES BY FUNCTION - DATA ENTRY AND CLASSIFICATION OF COSTS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Acct No.	Description	Allocation	Amount	Production Specific	Production Demand	Production Customer	Production Commodity	Transmission Specific	Transmission Demand	Transmission Customer	Transmission Commodity	Distribution Specific	Distribution Demand	Distribution Customer	Distribution Commodity	Customer Accounting Specific	Customer Accounting Demand	Customer Accounting Customer	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	
		System Allocable Amortization																		
1	303.00	Miscellaneous Intangible	Gen. Plant.	$ 6,009,339	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,714,440	$ 4,266,187	$ 28,712	$ -	$ -	$ -	1
2	309.2-398	General Plant	Gen. Plant.	235,643	-	-	-	-	-	-	-	-	-	67,228	167,289	1,126	-	-	-	2
3		Total System Allocable Amortization		$ 6,244,982	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,781,668	$ 4,433,476	$ 29,838	$ -	$ -	$ -	3
4	389-390.1	Total System Depreciation Expense	Gen Plant	$ 235,643	-	-	-	-	-	-	-	-	-	$ 67,228	$ 167,289	$ 1,126	-	-	-	4
5		Total Direct Depreciation Expense	Dir. Depr.	$ 93,057,028	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 23,647,541	$ 68,919,737	$ 489,750	$ -	$ -	$ -	5
6		Amortization Gas Plant Acquisition	Dir. Depr.	(52,943)	-	-	-	-	-	-	-	-	-	(13,454)	(39,210)	(279)	-	-	-	6
7		Regulatory Amortizations	Dir. Depr.	337,524	-	-	-	-	-	-	-	-	-	85,771	249,976	1,776	-	-	-	7
8		Total Depreciation Expenses		$ 99,822,234	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 25,568,755	$ 73,731,268	$ 522,211	$ -	$ -	$ -	8
		Operation and Maintenance Expenses																		
		Operation Expenses																		
		Gas Supply Expenses																		
9	803.00	Natural Gas Transmission Line Purchases	Commodity	$ -																9
10	805.10	Purchased Gas Cost Adjustments	Commodity	-																10
11	810.00	Gas Used for Compression Station Fuel	Specific	-																11
12	813.00	Other Gas Supply Expenses	Commodity																	12
13		Labor	Commodity	602,439												602,439				13
14		Labor Loadings	Commodity	408,091												408,091				14
15		Materials and Expenses	Commodity	127,615												127,615				15
16		Total Gas Supply Expenses		$ 1,138,145	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,138,145	$ -	$ -	$ -	16
		Distribution Expenses																		
	870.00	Operation Supervision and Engineering																		
17		Labor	Dst.Op.Exp.	$ 5,872,082									$ -	$ 607,119	$ 4,735,182	$ 529,781				17
18		Labor Loadings	Dst.Op.Exp.	4,497,568									-	465,007	3,626,789	405,772				18
19		Materials and Expenses		1,345,019									-	139,063	1,084,608	121,348				19
	871.00	Distribution Load Dispatching																		
20		Labor	Specific	257,792										128,896		128,896				20
21		Labor Loadings	Specific	174,989										87,494		87,494				21
22		Materials and Expenses		58,350										29,175		29,175				22
	874.00	Mains and Services Expenses																		
23		Labor	Plant Acct.	3,199,249										1,072,534	2,126,715	0				23
24		Labor Loadings	Plant Acct.	2,433,739										815,900	1,617,839	0				24
25		Materials and Expenses		3,877,544										1,299,929	2,577,615	0				25
	875.00	Measuring & Regulating Exps. - General																		
26		Labor	Plant Acct.	1,186,372												1,186,372				26
27		Labor Loadings	Plant Acct.	896,216												896,216				27
28		Materials and Expenses		668,341												668,341				28
	878.00	Meter and House Regulator Expenses																		
29		Labor	Plant Acct.	5,032,059											5,032,059					29
30		Labor Loadings	Plant Acct.	3,815,462											3,815,462					30
31		Materials and Expenses		1,261,264											1,261,264					31
	879.00	Customer Installation Expense																		
32		Labor	Plant Acct.	5,312,062											5,312,062					32
33		Labor Loadings	Plant Acct.	4,035,645											4,035,645					33
34		Materials and Expenses		1,004,015											1,004,015					34
	880.00	Other Expenses																		
35		Labor	Dst.Op.Exp.	4,466,609									-	461,806	3,601,824	402,979				35
36		Labor Loadings	Dst.Op.Exp.	3,333,616									-	344,665	2,688,191	300,760				36
37		Materials and Expenses		5,084,124									-	525,652	4,099,782	458,691				37
	881.00	Rents																		
38		Labor		-																38
39		Labor Loadings		-																39
40		Materials and Expenses	Dst.Op.Exp.	2,044,165									-	211,348	1,648,392	184,425				40
41		Total Distribution Expenses		$ 59,856,281	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,188,588	$ 48,267,443	$ 5,400,251	$ -	$ -	$ -	41
42		Total Operation & Distribution Expenses		$ 60,994,426	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,188,588	$ 48,267,443	$ 6,538,396	$ -	$ -	$ -	42

SCHEDULE G-6
SHEET 2 OF 6

SOUTHWEST GAS CORPORATION
ARIZONA
DISTRIBUTION OF EXPENSES BY FUNCTION - DATA ENTRY AND CLASSIFICATION OF COSTS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Acct No.	Description	Allocation	Amount	Production Specific	Production Demand	Production Customer	Production Commodity	Transmission Specific	Transmission Demand	Transmission Customer	Transmission Commodity	Distribution Specific	Distribution Demand	Distribution Customer	Distribution Commodity	Customer Accounting Specific	Customer Accounting Demand	Customer Accounting Customer	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	
		Maintenance Expenses																		
	885.00	Maintenance Supervision & Engineering																		
1		Labor	Dst.Mn.Exp.	$ 1,849,423									$ -	$ 550,214	$ 1,197,473	$ 101,735				1
2		Labor Loadings	Dst.Mn.Exp.	1,427,502									-	424,690	924,286	78,526				2
3		Materials and Expenses		286,414									-	85,210	185,449	15,755				3
	886.00	Maintenance of Structures & Improvement																		
4		Labor	Plant Acct.	6,865										6,865						4
5		Labor Loadings	Plant Acct.	5,133										5,133						5
6		Materials and Expenses		52,089										52,089						6
	887.00	Maintenance of Mains																		
7		Labor	Plant Acct.	6,876,832									-	3,438,416	3,438,416	-				7
8		Labor Loadings	Plant Acct.	5,240,062									-	2,620,031	2,620,031	-				8
9		Materials and Expenses		9,657,291									-	4,828,645	4,828,645	-				9
	889.00	Maint. of Measuring & Reg. Station Equip.																		
10		Labor	Plant Acct.	769,632												769,632				10
11		Labor Loadings	Plant Acct.	585,120												585,120				11
12		Materials and Expenses		670,136												670,136				12
	892.00	Maintenance of Services																		
13		Labor	Plant Acct.	3,369,239									-	0	3,369,239	0				13
14		Labor Loadings	Plant Acct.	2,560,559									-	0	2,560,559	0				14
15		Materials and Expenses		3,757,582									-	0	3,757,582	0				15
	893.00	Maintenance of Meter & House Regulators																		
16		Labor	Plant Acct.	1,233,737											1,233,737					16
17		Labor Loadings	Plant Acct.	937,553											937,553					17
18		Materials and Expenses		1,088,133											1,088,133					18
	894.00	Maintenance of Other Equipment																		
19		Labor	Dst.Mn.Exp.	118,479									-	35,248	76,713	6,517				19
20		Labor Loadings	Dst.Mn.Exp.	90,601									-	26,954	58,663	4,984				20
21		Materials and Expenses		141,204									-	42,009	91,428	7,768				21
22		Total Maintenance Expenses		$ 40,723,587	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 12,115,506	$ 26,367,908	$ 2,240,174	$ -	$ -	$ -	22
23		Total Operation, Distribution & Maint. Exps		$ 101,718,014	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 18,304,093	$ 74,635,351	$ 8,778,570	$ -	$ -	$ -	23
		Customer Accounts Expenses																		
	901.00	Supervision Expenses																		
24		Labor	Customer	$ 1,370,735															1,370,735	24
25		Labor Loadings	Customer	1,035,201															1,035,201	25
26		Materials and Expenses		138,017															138,017	26
	902.00	Meter Reading Expenses																		
27		Labor	Customer	883,451															883,451	27
28		Labor Loadings	Customer	667,390															667,390	28
29		Materials and Expenses		413,390															413,390	29
	903.00	Customer Records & Collections Expenses																	-	
30		Labor & Loadings	KAM Direct	811,470															811,470	30
31		Materials and Expenses	KAM Direct	53,477															53,477	31
	903.00	Customer Records & Collections Expenses																	-	
32		Labor & Loadings	Customer	16,896,473															16,896,473	32
33		Materials and Expenses	Customer	9,198,375															9,198,375	33
	904.00	Uncollectible Accounts Expense	Customer																	
34		Labor		-															-	34
35		Labor Loadings		-															-	35
36		Materials and Expenses		2,008,980															2,008,980	36
	905.00	Miscellaneous Customer Accounts Expenses																		
37		Labor	Customer	222,942															222,942	37
38		Labor Loadings	Customer	167,432															167,432	38
39		Materials and Expenses		13,940															13,940	39
40		Total Customer Accounts Expenses		$ 33,881,272	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 33,881,272	40

SOUTHWEST GAS CORPORATION
ARIZONA
DISTRIBUTION OF EXPENSES BY FUNCTION - DATA ENTRY AND CLASSIFICATION OF COSTS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Acct No.	Description	Allocation	Amount	Production Specific	Production Demand	Production Customer	Production Commodity	Transmission Specific	Transmission Demand	Transmission Customer	Transmission Commodity	Distribution Specific	Distribution Demand	Distribution Customer	Distribution Commodity	Customer Accounting Specific	Customer Accounting Demand	Customer Accounting Customer	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	
		Customer Service & Informational Expenses																		
	908.00	Customer Assistance Expense																		
1		Labor	Customer	$ 345,544															345,544	1
2		Labor Loadings	Customer	245,261															245,261	2
3		Materials and Expenses		595,758															595,758	3
	909.00	Info. & Instructional Advertising Exps.																		
4		Labor	Customer	-															-	4
5		Labor Loadings	Customer	-															-	5
6		Materials and Expenses		6,000															6,000	6
	910.00	Misc. Customer Service & Info. Exp.																		
7		Labor	Customer	-															-	7
8		Labor Loadings	Customer	-															-	8
9		Materials and Expenses		12,573															12,573	9
10		Total Customer Service & Info. Expenses		$ 1,205,135	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,205,135	10
		Sales Expenses																		
	911.00	Supervision																		
11		Labor	Customer	$ -															-	11
12		Labor Loadings	Customer	-															-	12
13		Materials and Expenses		-															-	13
	912.00	Demonstrating & Selling Expense																		
14		Labor	Customer	-																14
15		Labor Loadings	Customer	-																15
16		Materials and Expenses		-																16
	913.00	Advertising Expenses																		
17		Labor	Customer	-																17
18		Labor Loadings	Customer	-																18
19		Materials and Expenses		-															-	19
20		Total Sales Expenses		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	20
21		Total O&M Expenses		$ 136,804,420	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 18,304,093	$ 74,635,351	$ 8,778,570	$ -	$ -	$ 35,086,407	21
		Administrative & General Expenses																		
	920.00	Administrative & General Salaries	Total O&M																	
22		Labor		$ 25,438,587	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,403,620	$ 13,878,337	$ 1,632,363	$ -	$ -	$ 6,524,267	22
23		Labor Loadings		14,059,075	-	-	-	-	-	-	-	-	-	1,881,070	7,670,103	902,153	-	-	3,605,749	23
24		Materials and Expense		(1,469,643)	-	-	-	-	-	-	-	-	-	(196,635)	(801,782)	(94,305)	-	-	(376,921)	24
25		Total Admin. & General Salaries Exps.		$ 38,028,020	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,088,055	$ 20,746,659	$ 2,440,211	$ -	$ -	$ 9,753,096	25
		Other Administrative & General Exps.																		
26	921.00	Office Supplies		$ 7,101,321	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 950,139	$ 3,874,214	$ 455,683	$ -	$ -	$ 1,821,285	26
27	922.00	Administrative Expenses Transferred - Credit		(6,984,275)	-	-	-	-	-	-	-	-	-	(934,479)	(3,810,358)	(448,172)	-	-	(1,791,266)	27
28	923.00	Outside Services Employed		9,076,888	-	-	-	-	-	-	-	-	-	1,214,465	4,952,009	582,453	-	-	2,327,961	28
29	924.00	Property Insurance		243,159	-	-	-	-	-	-	-	-	-	32,534	132,658	15,603	-	-	62,363	29
30	925.00	Injuries and Damages		7,922,714	-	-	-	-	-	-	-	-	-	1,060,040	4,322,335	508,391	-	-	2,031,949	30
31	926.00	Employee Pensions and Benefits		43,225	-	-	-	-	-	-	-	-	-	5,783	23,582	2,774	-	-	11,086	31
32	928.00	Regulatory Commission Expenses		153,333	-	-	-	-	-	-	-	-	-	20,516	83,653	9,839	-	-	39,326	32
	930.00	Miscellaneous General Expenses			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
33		Labor		180,110	-	-	-	-	-	-	-	-	-	24,098	98,261	11,557	-	-	46,193	33
34		Labor Loadings		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34
35		Materials and Expense		3,324,603	-	-	-	-	-	-	-	-	-	444,824	1,813,779	213,336	-	-	852,665	35
36	931.00	Rents		2,485,848	-	-	-	-	-	-	-	-	-	332,600	1,356,185	159,514	-	-	637,549	36
	935.00	Maintenance of General Plant			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
37		Labor		693,539	-	-	-	-	-	-	-	-	-	92,794	378,369	44,504	-	-	177,873	37
38		Labor Loadings		513,459	-	-	-	-	-	-	-	-	-	68,700	280,124	32,948	-	-	131,687	38
39		Materials and Expense		2,343,552	-	-	-	-	-	-	-	-	-	313,561	1,278,554	150,383	-	-	601,054	39
40		Total Other Administrative & General Exps.		$ 27,097,478	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,625,576	$ 14,783,366	$ 1,738,812	$ -	$ -	$ 6,949,725	40
41		Total Administrative and General Exps.		$ 65,125,498	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 8,713,631	$ 35,530,024	$ 4,179,022	$ -	$ -	$ 16,702,821	41
42		Total O&M and A&G Expenses		$ 201,929,919	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 27,017,724	$ 110,165,375	$ 12,957,592	$ -	$ -	$ 51,789,227	42

SOUTHWEST GAS CORPORATION
ARIZONA
DISTRIBUTION OF EXPENSES BY FUNCTION - DATA ENTRY AND CLASSIFICATION OF COSTS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Acct No. (a)	Description (b)	Allocation (c)	Amount (d)	Production Specific (e)	Production Demand (f)	Production Customer (g)	Production Commodity (h)	Transmission Specific (i)	Transmission Demand (j)	Transmission Customer (k)	Transmission Commodity (l)	Distribution Specific (m)	Distribution Demand (n)	Distribution Customer (o)	Distribution Commodity (p)	Customer Accounting Specific (q)	Customer Accounting Demand (r)	Customer Accounting Customer (s)	Line No.
1		Interest on Customer Deposits	Customer	$ 2,908,517	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 389,152	$ 1,586,777	$ 186,636	$ -	$ -	$ 745,951	1
2		Taxes other than Income	Rate Base	27,203,877															27,203,877	2
3		Interest Expenses	Rate Base	42,713,744	-	-	-	-	-	-	-	-	-	12,186,059	30,323,603	204,082	-	-	-	3
4		South Georgia State	Rate Base	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
5		Investment Tax Credit (I.T.C.)	Rate Base	(528,360)	-	-	-	-	-	-	-	-	-	(150,739)	(375,097)	(2,524)	-	-	-	5
6		South Georgia Federal	Rate Base	290,114	-	-	-	-	-	-	-	-	-	82,768	205,960	1,386	-	-	-	6
7		Regulatory Amortization	Rate Base	337,524	-	-	-	-	-	-	-	-	-	96,294	239,617	1,613	-	-	-	7
		Rate Base																		
8		Total Direct Net Plant		$ 1,809,908,655	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$516,359,648	$1,284,901,450	$ 8,647,557	$ -	$ -	$ -	8
9		Total Common Systems Allocable Net Plant		38,161,320	-	-	-	-	-	-	-	-	-	10,887,271	27,091,719	182,331	-	-	-	9
10		Total Net Plant		$ 1,848,069,975	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$527,246,919	$1,311,993,169	$ 8,829,888	$ -	$ -	$ -	10
11		Cash Working Capital		(4,472,151)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (1,275,887)	$ (3,174,897)	$ (21,387)	$ -	$ -	$ -	11
12		Materials & Supplies		9,920,409	-	-	-	-	-	-	-	-	-	2,830,253	7,042,758	47,399	-	-	-	12
13		Prepayments		4,744,133	-	-	-	-	-	-	-	-	-	1,353,482	3,367,984	22,667	-	-	-	13
14		Gas Plant Acquisition Adjustment		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14
15		Customer Deposits		(62,033,165)	-	-	-	-	-	-	-	-	-	(17,697,812)	(44,038,965)	(296,388)	-	-	-	15
16		Customer Advances		(48,475,278)	-	-	-	-	-	-	-	-	-	(13,829,801)	(34,413,866)	(231,610)	-	-	-	16
17		Deferred Taxes		(291,236,457)	-	-	-	-	-	-	-	-	-	(83,088,588)	(206,756,371)	(1,391,498)	-	-	-	17
18		Deferred Gain Headquarters Building		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18
19		Total Rate Base		$ 1,456,517,467	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$415,538,566	$1,034,019,812	$ 6,959,090	$ -	$ -	$ -	19
		Revenues																		
20		Net Operating Margin		$ 392,027,615	-	-	-	-	-	-	-	-	-	111,843,899	278,310,648	1,873,068	-	-	-	20
21		Special Contract & Optional Margin			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21
22		Late Charges		1,929,221	-	-	-	-	-	-	-	-	-				-	-	1,929,221	22
23		Service Establishment Charges		8,075,816	-	-	-	-	-	-	-	-	-				-	-	8,075,816	23
24		Reconnect / Reread Charges		868,969	-	-	-	-	-	-	-	-	-				-	-	868,969	24
25		Other Revenue - Labor		6,985	-	-	-	-	-	-	-	-	-				-	-	6,985	25
26		Other Revenue - Parts & Material		1,305	-	-	-	-	-	-	-	-	-				-	-	1,305	26
27		Other Revenue - Field Collection Fee		569,766	-	-	-	-	-	-	-	-	-				-	-	569,766	27
28		Other Revenue - Returned Item Fee		195,916	-	-	-	-	-	-	-	-	-				-	-	195,916	28
29		Other Revenue - Rental Income		448,378	-	-	-	-	-	-	-	-	-				-	-	448,378	29
30		Total Revenues		$ 404,123,971	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$111,843,899	$ 278,310,648	$ 1,873,068	$ -	$ -	$ 12,096,356	30
		Operating Deductions																		
31		Operations & Maintenance Expenses		$ (136,804,420)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (18,304,093)	$ (74,635,351)	$ (8,778,570)	$ -	$ -	$(35,086,407)	31
32		Administrative & General Expenses		(27,097,478)	-	-	-	-	-	-	-	-	-	(3,625,576)	(14,783,366)	(1,738,812)	-	-	(6,949,725)	32
33		Depreciation Expenses		(99,822,234)	-	-	-	-	-	-	-	-	-	(25,568,755)	(73,731,268)	(522,211)	-	-	-	33
34		Interest on Customer Deposits		(2,908,517)	-	-	-	-	-	-	-	-	-	(389,152)	(1,586,777)	(186,636)	-	-	(745,951)	34
35		Taxes other than Income		(27,203,877)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(27,203,877)	35
36		Total Operating Deductions		$ (293,836,526)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (47,887,576)	$ (164,736,762)	$ (11,226,229)	$ -	$ -	$(69,985,960)	36

SOUTHWEST GAS CORPORATION
ARIZONA
DISTRIBUTION OF EXPENSES BY FUNCTION - DATA ENTRY AND CLASSIFICATION OF COSTS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Acct No.	Description	Allocation	Amount	Production				Transmission					Distribution			Customer Accounting			Line No.
					Specific	Demand	Customer	Commodity	Specific	Demand	Customer	Commodity	Specific	Demand	Customer	Commodity	Specific	Demand	Customer	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	
		State Income Tax																		
1		Taxable Income before Interest Expense		$ 110,287,444	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 63,956,324	$ 113,573,886	$ (9,353,161)	$ -	$ -	$(57,889,604)	1
2		Interest Expenses		42,713,744	-	-	-	-	-	-	-	-	-	12,186,059	30,323,603	204,082	-	-	-	2
3		State Taxable Income		$ 153,001,188	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 76,142,383	$ 143,897,489	$ (9,149,079)	$ -	$ -	$(57,889,604)	3
4		State Income Tax	6.9680%	$ 10,661,123	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,305,601	$ 10,026,777	$ (637,508)	$ -	$ -	$ (4,033,748)	4
5		South Georgia State		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
6		Total State Income Tax		$ 10,661,123	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,305,601	$ 10,026,777	$ (637,508)	$ -	$ -	$ (4,033,748)	6
		Federal Income Tax																		
7		Taxable Income before Interest Expense		$ 110,287,444	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 63,956,324	$ 113,573,886	$ (9,353,161)	$ -	$ -	$(57,889,604)	7
8		Interest Expenses		42,713,744	-	-	-	-	-	-	-	-	-	12,186,059	30,323,603	204,082	-	-	-	8
9		Federal Taxable Income		$ 153,001,188	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 76,142,383	$ 143,897,489	$ (9,149,079)	$ -	$ -	$(57,889,604)	9
10		Federal Income Tax	32.56120%	$ 49,819,023	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 24,792,874	$ 46,854,749	$ (2,979,050)	$ -	$ -	$(18,849,550)	10
11		Investment Tax Credit (I.T.C.)		(528,360)	-	-	-	-	-	-	-	-	-	(150,739)	(375,097)	(2,524)	-	-	-	11
12		South Georgia Federal		290,114	-	-	-	-	-	-	-	-	-	82,768	205,960	1,386	-	-	-	12
13		Total Federal Income Tax		$ 49,580,777	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 24,724,903	$ 46,685,612	$ (2,980,188)	$ -	$ -	$(18,849,550)	13
14		Regulatory Amortization	Direct Depr. Exp.	$ 337,524	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 85,771	$ 249,976	$ 1,776	$ -	$ -	$ -	14

SOUTHWEST GAS CORPORATION
ARIZONA
DEVELOPMENT OF ALLOCATION FACTORS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Allocation Factor No.	Total	Single-Family Residential Demand	Customer	Commodity
	(a)	(b)	(c)	(d)	(e)	(f)
	Allocation Factors					
1	Coincident Peak (CP) Monthly Demand		98,999,768	57,975,700		
2	Allocation Percent -	1	100.0000%	58.561450%	0.000000%	0.000000%
3	Exta					
4	Allocation Percent -	2	0.0000%	0.000000%	0.000000%	0.000000%
5	Throughput		601,273,772			272,406,858
6	Allocation Percent -	3	100.0000%	0.000000%	0.000000%	45.304963%
7	Customers		978,353		902,859	
8	Allocation Percent -	4	100.0000%	0.000000%	92.283514%	0.000000%
9	Customers With Mains		978,353	-	902,859	-
10	Allocation Percent -	5	100.0000%	0.000000%	92.283514%	0.000000%
11	Meters for Customers		1,099,215	-	902,859	-
12	Allocation Percent -	6	100.0000%	0.000000%	82.136700%	0.000000%
13	Service Lines for Customers		1,136,729	-	902,859	
14	Allocation Percent -	7	100.0000%	0.000000%	79.426062%	0.000000%
15	Residential, MMMHP, Small & Medium		969,930	-	902,859	-
16	Allocation Percent -	8	100.0000%	0.000000%	93.084916%	0.000000%
17	Service Establishment & Reconnect Charges		8,944,785	-	7,933,573	-
18	Allocation Percent -	9	100.0000%	0.000000%	88.694955%	0.000000%
19	Industrial Meas & Reg		7,695	-	-	-
20	Allocation Percent -	10	100.0000%	0.000000%	0.000000%	0.000000%
21	Meter Reading (Bills with Meters)		978,173		902,859	
22	Allocation Percent -	11	100.0000%	0.000000%	92.300496%	0.000000%
23	Late Fees		1,860,965	-	1,448,416	-
24	Allocation Percent -	12	100.0000%	0.000000%	77.831445%	0.000000%
25	Return Item Fees		195,916	-	178,472	-
26	Allocation Percent -	13	100.0000%	0.000000%	91.096184%	0.000000%
27	Field Collection Fees		569,766	-	521,586	-
28	Allocation Percent -	14	100.0000%	0.000000%	91.543890%	0.000000%
29	KAM Direct Allocation		7,713			
30	Allocation Percent -	15	100.0000%	0.000000%	0.000000%	0.000000%
31	Customers with Gas Light Count		978,604		902,859	-
32	Allocation Percent -	16	100.0000%	0.000000%	92.259845%	0.000000%
	Internally Generated Allocation Factors					
33	Net Distribution Plant		1,690,092,974	294,953,133	1,005,945,530	3,658,416
34	Allocation Percent -	1.1	100.0000%	17.451888%	59.520130%	0.216462%
35	Distribution Mains (Account 376)		959,684,968	281,002,718	442,815,508	-
36	Allocation Percent -	2.2	100.0000%	29.280725%	46.141757%	0.000000%
37	Distribution Services (Account 380)		471,631,932	0	374,598,672	-
38	Allocation Percent -	3.3	100.0000%	0.000000%	79.426062%	0.000000%
						0.000000%
39	Distribution Mains & Services (Accounts 376, 380)		1,431,316,899	281,002,718	817,414,180	-
40	Allocation Percent -	4.4	100.0000%	19.632460%	57.109238%	0.000000%
41	Allocable Distribution Operating Expenses		33,213,099	2,672,643	23,506,304	222,507
42	Allocation Percent -	5.5	100.0000%	8.046956%	70.774197%	0.669937%
43	Allocable Distribution Maintenance Expenses		36,745,877	6,968,541	21,352,798	-
44	Allocation Percent -	6.6	100.0000%	18.964145%	58.109371%	0.000000%
45	Net Operating Margin w/o SPECC and Optional		392,027,615	155,277,690	114,598,778	-
46	Allocation Percent -	Net Op Margin	100.0000%	39.608865%	29.232323%	0.000000%
47	Customer Accounting Expense (Accounts 902-904)		30,933,005	-	27,748,194	-
48	Allocation Percent -	10.1	100.0000%	0.000000%	89.704166%	0.000000%
49	Total Operations and Maintenance Expense		136,804,420	12,564,865	97,494,835	916,636
50	Allocation Percent -	11.2	100.0000%	9.184546%	71.265852%	0.670034%

SOUTHWEST GAS CORPORATION
ARIZONA
DEVELOPMENT OF ALLOCATION FACTORS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Allocation Factor No.	Total	Multi-Family Residential Demand	Multi-Family Residential Customer	Multi-Family Residential Commodity
	(a)	(b)	(c)	(d)	(e)	(f)
	Allocation Factors					
1	Coincident Peak (CP) Monthly Demand		98,999,768	1,103,384		
2	Allocation Percent -	1	100.0000%	1.114532%	0.000000%	0.000000%
3	Exta					
4	Allocation Percent -	2	0.0000%	0.000000%	0.000000%	0.000000%
5	Throughput		601,273,772			6,573,158
6	Allocation Percent -	3	100.0000%	0.000000%	0.000000%	1.093206%
7	Customers		978,353		34,672	
8	Allocation Percent -	4	100.0000%	0.000000%	3.543905%	0.000000%
9	Customers With Mains		978,353	-	34,672	-
10	Allocation Percent -	5	100.0000%	0.000000%	3.543905%	0.000000%
11	Meters for Customers		1,099,215	-	37,007	-
12	Allocation Percent -	6	100.0000%	0.000000%	3.366635%	0.000000%
13	Service Lines for Customers		1,136,729		14,811	
14	Allocation Percent -	7	100.0000%	0.000000%	1.302939%	0.000000%
15	Residential, MMMHP, Small & Medium		969,930	-	34,672	-
16	Allocation Percent -	8	100.0000%	0.000000%	3.574681%	0.000000%
17	Service Establishment & Reconnect Charges		8,944,785	-	757,923	-
18	Allocation Percent -	9	100.0000%	0.000000%	8.473351%	0.000000%
19	Industrial Meas & Reg		7,695	-	-	-
20	Allocation Percent -	10	100.0000%	0.000000%	0.000000%	0.000000%
21	Meter Reading (Bills with Meters)		978,173		34,672	
22	Allocation Percent -	11	100.0000%	0.000000%	3.544557%	0.000000%
23	Late Fees		1,860,965	-	69,464	-
24	Allocation Percent -	12	100.0000%	0.000000%	3.732709%	0.000000%
25	Return Item Fees		195,916	-	8,736	-
26	Allocation Percent -	13	100.0000%	0.000000%	4.459054%	0.000000%
27	Field Collection Fees		569,766	-	21,900	-
28	Allocation Percent -	14	100.0000%	0.000000%	3.843686%	0.000000%
29	KAM Direct Allocation		7,713			
30	Allocation Percent -	15	100.0000%	0.000000%	0.000000%	0.000000%
31	Customers with Gas Light Count		978,604	-	34,672	-
32	Allocation Percent -	16	100.0000%	0.000000%	3.542996%	0.000000%
	Internally Generated Allocation Factors					
33	Net Distribution Plant		1,690,092,974	5,613,500	30,826,521	88,277
34	Allocation Percent -	1.1	100.0000%	0.332141%	1.823954%	0.005223%
35	Distribution Mains (Account 376)		959,684,968	5,347,998	17,005,162	-
36	Allocation Percent -	2.2	100.0000%	0.557266%	1.771953%	0.000000%
37	Distribution Services (Account 380)		471,631,932	0	6,145,075	-
38	Allocation Percent -	3.3	100.0000%	0.000000%	1.302939%	0.000000%
39	Distribution Mains & Services (Accounts 376, 380)		1,431,316,899	5,347,998	23,150,238	-
40	Allocation Percent -	4.4	100.0000%	0.373642%	1.617408%	0.000000%
41	Allocable Distribution Operating Expenses		33,213,099	50,865	891,400	5,369
42	Allocation Percent -	5.5	100.0000%	0.153148%	2.683880%	0.016166%
43	Allocable Distribution Maintenance Expenses		36,745,877	132,624	657,662	-
44	Allocation Percent -	6.6	100.0000%	0.360922%	1.789757%	0.000000%
45	Net Operating Margin w/o SPECC and Optional		392,027,615	3,637,783	3,952,808	-
46	Allocation Percent -	Net Op Margin	100.0000%	0.927940%	1.008298%	0.000000%
47	Customer Accounting Expense (Accounts 902-904)		30,933,005	-	1,065,596	-
48	Allocation Percent -	10.1	100.0000%	0.000000%	3.444852%	0.000000%
49	Total Operations and Maintenance Expense		136,804,420	239,132	3,544,046	22,118
50	Allocation Percent -	11.2	100.0000%	0.174799%	2.590593%	0.016168%

SOUTHWEST GAS CORPORATION
ARIZONA
DEVELOPMENT OF ALLOCATION FACTORS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Allocation Factor No.	Total	Master Meter Mobile Home Park Demand	Customer	Commodity
	(a)	(b)	(c)	(d)	(e)	(f)
	Allocation Factors					
1	Coincident Peak (CP) Monthly Demand		98,999,768	367,947		
2	Allocation Percent -	1	100.0000%	0.371665%	0.000000%	0.000000%
3	Exta					
4	Allocation Percent -	2	0.0000%	0.000000%	0.000000%	0.000000%
5	Throughput		601,273,772			1,823,059
6	Allocation Percent -	3	100.0000%	0.000000%	0.000000%	0.303199%
7	Customers		978,353		151	
8	Allocation Percent -	4	100.0000%	0.000000%	0.015434%	0.000000%
9	Customers With Mains		978,353	-	151	-
10	Allocation Percent -	5	100.0000%	0.000000%	0.015434%	0.000000%
11	Meters for Customers		1,099,215	-	452	-
12	Allocation Percent -	6	100.0000%	0.000000%	0.041119%	0.000000%
13	Service Lines for Customers		1,136,729		736	
14	Allocation Percent -	7	100.0000%	0.000000%	0.064733%	0.000000%
15	Residential, MMMHP, Small & Medium		969,930		151	
16	Allocation Percent -	8	100.0000%	0.000000%	0.015568%	0.000000%
17	Service Establishment & Reconnect Charges		8,944,785	-	360	-
18	Allocation Percent -	9	100.0000%	0.000000%	0.004025%	0.000000%
19	Industrial Meas & Reg		7,695	-	-	-
20	Allocation Percent -	10	100.0000%	0.000000%	0.000000%	0.000000%
21	Meter Reading (Bills with Meters)		978,173		151	
22	Allocation Percent -	11	100.0000%	0.000000%	0.015437%	0.000000%
23	Late Fees		1,860,965	-	929	-
24	Allocation Percent -	12	100.0000%	0.000000%	0.049911%	0.000000%
25	Return Item Fees		195,916	-	28	-
26	Allocation Percent -	13	100.0000%	0.000000%	0.014292%	0.000000%
27	Field Collection Fees		569,766	-	20	-
28	Allocation Percent -	14	100.0000%	0.000000%	0.003510%	0.000000%
29	KAM Direct Allocation		7,713			
30	Allocation Percent -	15	100.0000%	0.000000%	0.000000%	0.000000%
31	Customers with Gas Light Count		978,604	-	151	-
32	Allocation Percent -	16	100.0000%	0.000000%	0.015430%	0.000000%
	Internally Generated Allocation Factors					
33	Net Distribution Plant		1,690,092,974	1,871,942	467,133	24,484
34	Allocation Percent -	1.1	100.0000%	0.110760%	0.027639%	0.001449%
35	Distribution Mains (Account 376)		959,684,968	1,783,404	74,059	-
36	Allocation Percent -	2.2	100.0000%	0.185832%	0.007717%	0.000000%
37	Distribution Services (Account 380)		471,631,932	0	305,302	-
38	Allocation Percent -	3.3	100.0000%	0.000000%	0.064733%	0.000000%
39	Distribution Mains & Services (Accounts 376, 380)		1,431,316,899	1,783,404	379,361	-
40	Allocation Percent -	4.4	100.0000%	0.124599%	0.026504%	0.000000%
41	Allocable Distribution Operating Expenses		33,213,099	16,962	11,146	1,489
42	Allocation Percent -	5.5	100.0000%	0.051071%	0.033560%	0.004483%
43	Allocable Distribution Maintenance Expenses		36,745,877	44,226	9,448	-
44	Allocation Percent -	6.6	100.0000%	0.120357%	0.025711%	0.000000%
45	Net Operating Margin w/o SPECC and Optional		392,027,615	744,355	119,592	-
46	Allocation Percent -	Net Op Margin	100.0000%	0.189873%	0.030506%	0.000000%
47	Customer Accounting Expense (Accounts 902-904)		30,933,005	-	4,641	-
48	Allocation Percent -	10.1	100.0000%	0.000000%	0.015003%	0.000000%
49	Total Operations and Maintenance Expense		136,804,420	79,744	35,811	6,135
50	Allocation Percent -	11.2	100.0000%	0.058290%	0.026177%	0.004484%

SOUTHWEST GAS CORPORATION
ARIZONA
DEVELOPMENT OF ALLOCATION FACTORS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Allocation Factor No.	Total	Small General Demand	Small General Customer	Small General Commodity
	(a)	(b)	(c)	(d)	(e)	(f)
	Allocation Factors					
1	Coincident Peak (CP) Monthly Demand		98,999,768	932,048		
2	Allocation Percent -	1	100.0000%	0.941465%	0.000000%	0.000000%
3	Exta					
4	Allocation Percent -	2	0.0000%	0.000000%	0.000000%	0.000000%
5	Throughput		601,273,772			3,952,061
6	Allocation Percent -	3	100.0000%	0.000000%	0.000000%	0.657281%
7	Customers		978,353		17,133	
8	Allocation Percent -	4	100.0000%	0.000000%	1.751182%	0.000000%
9	Customers With Mains		978,353	-	17,133	-
10	Allocation Percent -	5	100.0000%	0.000000%	1.751182%	0.000000%
11	Meters for Customers		1,099,215	-	17,133	-
12	Allocation Percent -	6	100.0000%	0.000000%	1.558635%	0.000000%
13	Service Lines for Customers		1,136,729		17,431	
14	Allocation Percent -	7	100.0000%	0.000000%	1.533473%	0.000000%
15	Residential, MMMHP, Small & Medium		969,930		17,133	
16	Allocation Percent -	8	100.0000%	0.000000%	1.766390%	0.000000%
17	Service Establishment & Reconnect Charges		8,944,785	-	108,670	-
18	Allocation Percent -	9	100.0000%	0.000000%	1.214898%	0.000000%
19	Industrial Meas & Reg		7,695	-	-	-
20	Allocation Percent -	10	100.0000%	0.000000%	0.000000%	0.000000%
21	Meter Reading (Bills with Meters)		978,173		17,133	
22	Allocation Percent -	11	100.0000%	0.000000%	1.751504%	0.000000%
23	Late Fees		1,860,965	-	19,558	-
24	Allocation Percent -	12	100.0000%	0.000000%	1.050970%	0.000000%
25	Return Item Fees		195,916	-	1,820	-
26	Allocation Percent -	13	100.0000%	0.000000%	0.928970%	0.000000%
27	Field Collection Fees		569,766	-	5,200	-
28	Allocation Percent -	14	100.0000%	0.000000%	0.912656%	0.000000%
29	KAM Direct Allocation		7,713			
30	Allocation Percent -	15	100.0000%	0.000000%	0.000000%	0.000000%
31	Customers with Gas Light Count		978,604	-	17,133	-
32	Allocation Percent -	16	100.0000%	0.000000%	1.750733%	0.000000%
	Internally Generated Allocation Factors					
33	Net Distribution Plant		1,690,092,974	4,741,822	19,212,855	53,076
34	Allocation Percent -	1.1	100.0000%	0.280566%	1.136793%	0.003140%
35	Distribution Mains (Account 376)		959,684,968	4,517,548	8,402,916	-
36	Allocation Percent -	2.2	100.0000%	0.470732%	0.875591%	0.000000%
37	Distribution Services (Account 380)		471,631,932	0	7,232,348	-
38	Allocation Percent -	3.3	100.0000%	0.000000%	1.533473%	0.000000%
39	Distribution Mains & Services (Accounts 376, 380)		1,431,316,899	4,517,548	15,635,263	-
40	Allocation Percent -	4.4	100.0000%	0.315622%	1.092369%	0.000000%
41	Allocable Distribution Operating Expenses		33,213,099	42,967	446,882	3,228
42	Allocation Percent -	5.5	100.0000%	0.129367%	1.345498%	0.009719%
43	Allocable Distribution Maintenance Expenses		36,745,877	112,030	407,738	-
44	Allocation Percent -	6.6	100.0000%	0.304878%	1.109617%	0.000000%
45	Net Operating Margin w/o SPECC and Optional		392,027,615	2,255,006	5,653,808	-
46	Allocation Percent -	Net Op Margin	100.0000%	0.575216%	1.442196%	0.000000%
47	Customer Accounting Expense (Accounts 902-904)		30,933,005	-	526,553	-
48	Allocation Percent -	10.1	100.0000%	0.000000%	1.702236%	0.000000%
49	Total Operations and Maintenance Expense		136,804,420	201,999	1,854,373	13,298
50	Allocation Percent -	11.2	100.0000%	0.147656%	1.355492%	0.009721%

SOUTHWEST GAS CORPORATION
ARIZONA
DEVELOPMENT OF ALLOCATION FACTORS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Allocation Factor No.	Total	Medium General Demand	Medium General Customer	Medium General Commodity
	(a)	(b)	(c)	(d)	(e)	(f)
	Allocation Factors					
1	Coincident Peak (CP) Monthly Demand		98,999,768	5,791,029		
2	Allocation Percent -	1	100.0000%	5.849538%	0.000000%	0.000000%
3	Exta					
4	Allocation Percent -	2	0.0000%	0.000000%	0.000000%	0.000000%
5	Throughput		601,273,772			38,658,561
6	Allocation Percent -	3	100.0000%	0.000000%	0.000000%	6.429444%
7	Customers		978,353		15,116	
8	Allocation Percent -	4	100.0000%	0.000000%	1.545028%	0.000000%
9	Customers With Mains		978,353	-	15,116	-
10	Allocation Percent -	5	100.0000%	0.000000%	1.545028%	0.000000%
11	Meters for Customers		1,099,215	-	45,246	-
12	Allocation Percent -	6	100.0000%	0.000000%	4.116251%	0.000000%
13	Service Lines for Customers		1,136,729		94,040	
14	Allocation Percent -	7	100.0000%	0.000000%	8.272831%	0.000000%
15	Residential, MMMHP, Small & Medium		969,930		15,116	
16	Allocation Percent -	8	100.0000%	0.000000%	1.558445%	0.000000%
17	Service Establishment & Reconnect Charges		8,944,785	-	104,810	-
18	Allocation Percent -	9	100.0000%	0.000000%	1.171744%	0.000000%
19	Industrial Meas & Reg		7,695	-	-	-
20	Allocation Percent -	10	100.0000%	0.000000%	0.000000%	0.000000%
21	Meter Reading (Bills with Meters)		978,173		15,116	
22	Allocation Percent -	11	100.0000%	0.000000%	1.545312%	0.000000%
23	Late Fees		1,860,965	-	93,040	-
24	Allocation Percent -	12	100.0000%	0.000000%	4.999539%	0.000000%
25	Return Item Fees		195,916	-	4,704	-
26	Allocation Percent -	13	100.0000%	0.000000%	2.401029%	0.000000%
27	Field Collection Fees		569,766	-	15,840	-
28	Allocation Percent -	14	100.0000%	0.000000%	2.780091%	0.000000%
29	KAM Direct Allocation		7,713			
30	Allocation Percent -	15	100.0000%	0.000000%	0.000000%	0.000000%
31	Customers with Gas Light Count		978,604	-	15,116	-
32	Allocation Percent -	16	100.0000%	0.000000%	1.544632%	0.000000%
	Internally Generated Allocation Factors					
33	Net Distribution Plant		1,690,092,974	29,462,036	55,217,434	519,183
34	Allocation Percent -	1.1	100.0000%	1.743220%	3.267124%	0.030719%
35	Distribution Mains (Account 376)		959,684,968	28,068,568	7,413,700	-
36	Allocation Percent -	2.2	100.0000%	2.924769%	0.772514%	0.000000%
37	Distribution Services (Account 380)		471,631,932	0	39,017,313	-
38	Allocation Percent -	3.3	100.0000%	0.000000%	8.272831%	0.000000%
39	Distribution Mains & Services (Accounts 376, 380)		1,431,316,899	28,068,568	46,431,013	-
40	Allocation Percent -	4.4	100.0000%	1.961031%	3.243937%	0.000000%
41	Allocable Distribution Operating Expenses		33,213,099	266,963	1,171,973	31,577
42	Allocation Percent -	5.5	100.0000%	0.803788%	3.528646%	0.095074%
43	Allocable Distribution Maintenance Expenses		36,745,877	696,068	1,119,438	-
44	Allocation Percent -	6.6	100.0000%	1.894275%	3.046431%	0.000000%
45	Net Operating Margin w/o SPECC and Optional		392,027,615	14,688,706	7,890,465	-
46	Allocation Percent -	Net Op Margin	100.0000%	3.746855%	2.012732%	0.000000%
47	Customer Accounting Expense (Accounts 902-904)		30,933,005	-	464,565	-
48	Allocation Percent -	10.1	100.0000%	0.000000%	1.501844%	0.000000%
49	Total Operations and Maintenance Expense		136,804,420	1,255,069	3,878,244	130,084
50	Allocation Percent -	11.2	100.0000%	0.917418%	2.834882%	0.095088%

SOUTHWEST GAS CORPORATION
ARIZONA
DEVELOPMENT OF ALLOCATION FACTORS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Allocation Factor No.	Total	Large-1 General Demand	Large-1 General Customer	Large-1 General Commodity
	(a)	(b)	(c)	(d)	(e)	(f)
	Allocation Factors					
1	Coincident Peak (CP) Monthly Demand		98,999,768	14,777,952		
2	Allocation Percent -	1	100.0000%	14.927259%	0.000000%	0.000000%
3	Exta					
4	Allocation Percent -	2	0.0000%	0.000000%	0.000000%	0.000000%
5	Throughput		601,273,772			102,873,127
6	Allocation Percent -	3	100.0000%	0.000000%	0.000000%	17.109199%
7	Customers		978,353		7,067	
8	Allocation Percent -	4	100.0000%	0.000000%	0.722302%	0.000000%
9	Customers With Mains		978,353	-	7,067	-
10	Allocation Percent -	5	100.0000%	0.000000%	0.722302%	0.000000%
11	Meters for Customers		1,099,215	-	32,958	-
12	Allocation Percent -	6	100.0000%	0.000000%	2.998347%	0.000000%
13	Service Lines for Customers		1,136,729		51,278	
14	Allocation Percent -	7	100.0000%	0.000000%	4.511038%	0.000000%
15	Residential, MMMHP, Small & Medium		969,930			
16	Allocation Percent -	8	100.0000%	0.000000%	0.000000%	0.000000%
17	Service Establishment & Reconnect Charges		8,944,785	-	33,323	-
18	Allocation Percent -	9	100.0000%	0.000000%	0.372546%	0.000000%
19	Industrial Meas & Reg		7,695	-	7,067	-
20	Allocation Percent -	10	100.0000%	0.000000%	91.838503%	0.000000%
21	Meter Reading (Bills with Meters)		978,173		7,067	
22	Allocation Percent -	11	100.0000%	0.000000%	0.722435%	0.000000%
23	Late Fees		1,860,965	-	177,505	-
24	Allocation Percent -	12	100.0000%	0.000000%	9.538323%	0.000000%
25	Return Item Fees		195,916	-	2,005	-
26	Allocation Percent -	13	100.0000%	0.000000%	1.023332%	0.000000%
27	Field Collection Fees		569,766	-	4,899	-
28	Allocation Percent -	14	100.0000%	0.000000%	0.859848%	0.000000%
29	KAM Direct Allocation		7,713		7,067	
30	Allocation Percent -	15	100.0000%	0.000000%	91.624168%	0.000000%
31	Customers with Gas Light Count		978,604	-	7,067	-
32	Allocation Percent -	16	100.0000%	0.000000%	0.722117%	0.000000%
	Internally Generated Allocation Factors					
33	Net Distribution Plant		1,690,092,974	75,183,279	31,054,963	1,381,583
34	Allocation Percent -	1.1	100.0000%	4.448470%	1.837471%	0.081746%
35	Distribution Mains (Account 376)		959,684,968	71,627,331	3,465,912	-
36	Allocation Percent -	2.2	100.0000%	7.463630%	0.361151%	0.000000%
37	Distribution Services (Account 380)		471,631,932	0	21,275,495	-
38	Allocation Percent -	3.3	100.0000%	0.000000%	4.511038%	0.000000%
39	Distribution Mains & Services (Accounts 376, 380)		1,431,316,899	71,627,332	24,741,407	-
40	Allocation Percent -	4.4	100.0000%	5.004296%	1.728576%	0.000000%
41	Allocable Distribution Operating Expenses		33,213,099	681,254	787,809	84,029
42	Allocation Percent -	5.5	100.0000%	2.051162%	2.371982%	0.252999%
43	Allocable Distribution Maintenance Expenses		36,745,877	1,776,275	620,681	-
44	Allocation Percent -	6.6	100.0000%	4.833943%	1.689117%	0.000000%
45	Net Operating Margin w/o SPECC and Optional		392,027,615	30,265,896	13,579,520	-
46	Allocation Percent -	Net Op Margin	100.0000%	7.720348%	3.463919%	0.000000%
47	Customer Accounting Expense (Accounts 902-904)		30,933,005	-	1,009,685	-
48	Allocation Percent -	10.1	100.0000%	0.000000%	3.264104%	0.000000%
49	Total Operations and Maintenance Expense		136,804,420	3,202,773	3,221,191	346,163
50	Allocation Percent -	11.2	100.0000%	2.341132%	2.354596%	0.253035%

SOUTHWEST GAS CORPORATION
ARIZONA
DEVELOPMENT OF ALLOCATION FACTORS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Allocation Factor No.	Total	Transportation Eligible General Demand	Customer	Commodity
	(a)	(b)	(c)	(d)	(e)	(f)
	Allocation Factors					
1	Coincident Peak (CP) Monthly Demand		98,999,768	10,515,232		
2	Allocation Percent -	1	100.0000%	10.621471%	0.000000%	0.000000%
3	Exta					
4	Allocation Percent -	2	0.0000%	0.000000%	0.000000%	0.000000%
5	Throughput		601,273,772			101,346,455
6	Allocation Percent -	3	100.0000%	0.000000%	0.000000%	16.855293%
7	Customers		978,353		194	
8	Allocation Percent -	4	100.0000%	0.000000%	0.019829%	0.000000%
9	Customers With Mains		978,353	-	194	-
10	Allocation Percent -	5	100.0000%	0.000000%	0.019829%	0.000000%
11	Meters for Customers		1,099,215	-	43,732	-
12	Allocation Percent -	6	100.0000%	0.000000%	3.978472%	0.000000%
13	Service Lines for Customers		1,136,729		1,262	
14	Allocation Percent -	7	100.0000%	0.000000%	0.111038%	0.000000%
15	Residential, MMMHP, Small & Medium		969,930			
16	Allocation Percent -	8	100.0000%	0.000000%	0.000000%	0.000000%
17	Service Establishment & Reconnect Charges		8,944,785	-	180	-
18	Allocation Percent -	9	100.0000%	0.000000%	0.002012%	0.000000%
19	Industrial Meas & Reg		7,695	-	194	-
20	Allocation Percent -	10	100.0000%	0.000000%	2.521227%	0.000000%
21	Meter Reading (Bills with Meters)		978,173		194	
22	Allocation Percent -	11	100.0000%	0.000000%	0.019833%	0.000000%
23	Late Fees		1,860,965	-	23,100	-
24	Allocation Percent -	12	100.0000%	0.000000%	1.241275%	0.000000%
25	Return Item Fees		195,916	-	-	-
26	Allocation Percent -	13	100.0000%	0.000000%	0.000000%	0.000000%
27	Field Collection Fees		569,766	-	-	-
28	Allocation Percent -	14	100.0000%	0.000000%	0.000000%	0.000000%
29	KAM Direct Allocation		7,713		194	
30	Allocation Percent -	15	100.0000%	0.000000%	2.515343%	0.000000%
31	Customers with Gas Light Count		978,604	-	194	-
32	Allocation Percent -	16	100.0000%	0.000000%	0.019824%	0.000000%
	Internally Generated Allocation Factors					
33	Net Distribution Plant		1,690,092,974	53,496,562	8,794,544	1,361,080
34	Allocation Percent -	1.1	100.0000%	3.165303%	0.520359%	0.080533%
35	Distribution Mains (Account 376)		959,684,968	50,966,332	95,149	-
36	Allocation Percent -	2.2	100.0000%	5.310736%	0.009915%	0.000000%
37	Distribution Services (Account 380)		471,631,932	0	523,689	-
38	Allocation Percent -	3.3	100.0000%	0.000000%	0.111038%	0.000000%
39	Distribution Mains & Services (Accounts 376, 380)		1,431,316,899	50,966,332	618,838	-
40	Allocation Percent -	4.4	100.0000%	3.560800%	0.043236%	0.000000%
41	Allocable Distribution Operating Expenses		33,213,099	484,746	818,400	82,782
42	Allocation Percent -	5.5	100.0000%	1.459501%	2.464089%	0.249244%
43	Allocable Distribution Maintenance Expenses		36,745,877	1,263,906	142,791	-
44	Allocation Percent -	6.6	100.0000%	3.439586%	0.388592%	0.000000%
45	Net Operating Margin w/o SPECC and Optional		392,027,615	10,921,094	10,768,505	-
46	Allocation Percent -	Net Op Margin	100.0000%	2.785797%	2.746874%	0.000000%
47	Customer Accounting Expense (Accounts 902-904)		30,933,005	-	27,719	-
48	Allocation Percent -	10.1	100.0000%	0.000000%	0.089609%	0.000000%
49	Total Operations and Maintenance Expense		136,804,420	2,278,928	1,663,511	341,026
50	Allocation Percent -	11.2	100.0000%	1.665830%	1.215977%	0.249280%

SOUTHWEST GAS CORPORATION
ARIZONA
DEVELOPMENT OF ALLOCATION FACTORS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Allocation Factor No.	Total	Large-2 General Demand	Customer	Commodity
	(a)	(b)	(c)	(d)	(e)	(f)
	Allocation Factors					
1	Coincident Peak (CP) Monthly Demand		98,999,768	4,498,695		
2	Allocation Percent -	1	100.0000%	4.544147%	0.000000%	0.000000%
3	Exta			-		
4	Allocation Percent -	2	0.0000%	0.000000%	0.000000%	0.000000%
5	Throughput		601,273,772			37,061,525
6	Allocation Percent -	3	100.0000%	0.000000%	0.000000%	6.163835%
7	Customers		978,353		434	
8	Allocation Percent -	4	100.0000%	0.000000%	0.044360%	0.000000%
9	Customers With Mains		978,353	-	434	-
10	Allocation Percent -	5	100.0000%	0.000000%	0.044360%	0.000000%
11	Meters for Customers		1,099,215	-	8,856	-
12	Allocation Percent -	6	100.0000%	0.000000%	0.805629%	0.000000%
13	Service Lines for Customers		1,136,729		51,278	
14	Allocation Percent -	7	100.0000%	0.000000%	4.511038%	0.000000%
15	Residential, MMMHP, Small & Medium		969,930			
16	Allocation Percent -	8	100.0000%	0.000000%	0.000000%	0.000000%
17	Service Establishment & Reconnect Charges		8,944,785	-	2,047	-
18	Allocation Percent -	9	100.0000%	0.000000%	0.022880%	0.000000%
19	Industrial Meas & Reg		7,695	-	434	-
20	Allocation Percent -	10	100.0000%	0.000000%	5.640270%	0.000000%
21	Meter Reading (Bills with Meters)		978,173		434	
22	Allocation Percent -	11	100.0000%	0.000000%	0.044368%	0.000000%
23	Late Fees		1,860,965	-	10,901	-
24	Allocation Percent -	12	100.0000%	0.000000%	0.585796%	0.000000%
25	Return Item Fees		195,916	-	123	-
26	Allocation Percent -	13	100.0000%	0.000000%	0.062848%	0.000000%
27	Field Collection Fees		569,766	-	301	-
28	Allocation Percent -	14	100.0000%	0.000000%	0.052808%	0.000000%
29	KAM Direct Allocation		7,713		434	
30	Allocation Percent -	15	100.0000%	0.000000%	5.627107%	0.000000%
31	Customers with Gas Light Count		978,604	-	434	-
32	Allocation Percent -	16	100.0000%	0.000000%	0.044349%	0.000000%
	Internally Generated Allocation Factors					
33	Net Distribution Plant		1,690,092,974	22,887,247	23,152,580	497,735
34	Allocation Percent -	1.1	100.0000%	1.354200%	1.369900%	0.029450%
35	Distribution Mains (Account 376)		959,684,968	21,804,748	212,859	-
36	Allocation Percent -	2.2	100.0000%	2.272074%	0.022180%	0.000000%
37	Distribution Services (Account 380)		471,631,932	0	21,275,495	-
38	Allocation Percent -	3.3	100.0000%	0.000000%	4.511038%	0.000000%
39	Distribution Mains & Services (Accounts 376, 380)		1,431,316,899	21,804,748	21,488,355	-
40	Allocation Percent -	4.4	100.0000%	1.523405%	1.501300%	0.000000%
41	Allocable Distribution Operating Expenses		33,213,099	207,387	308,227	30,273
42	Allocation Percent -	5.5	100.0000%	0.624413%	0.928030%	0.091146%
43	Allocable Distribution Maintenance Expenses		36,745,877	540,732	468,539	-
44	Allocation Percent -	6.6	100.0000%	1.471546%	1.275079%	0.000000%
45	Net Operating Margin w/o SPECC and Optional		392,027,615	10,432,699	821,760	-
46	Allocation Percent -	Net Op Margin	100.0000%	2.661215%	0.209618%	0.000000%
47	Customer Accounting Expense (Accounts 902-904)		30,933,005	-	62,010	-
48	Allocation Percent -	10.1	100.0000%	0.000000%	0.200465%	0.000000%
49	Total Operations and Maintenance Expense		136,804,420	974,986	1,142,380	124,710
50	Allocation Percent -	11.2	100.0000%	0.712686%	0.835046%	0.091160%

SOUTHWEST GAS CORPORATION
ARIZONA
DEVELOPMENT OF ALLOCATION FACTORS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Allocation Factor No.	Total	Air Conditioning Demand	Customer	Commodity
	(a)	(b)	(c)	(d)	(e)	(f)
	Allocation Factors					
1	Coincident Peak (CP) Monthly Demand		98,999,768	29,354		
2	Allocation Percent -	1	100.0000%	0.029651%	0.000000%	0.000000%
3	Exta					
4	Allocation Percent -	2	0.0000%	0.000000%	0.000000%	0.000000%
5	Throughput		601,273,772			626,245
6	Allocation Percent -	3	100.0000%	0.000000%	0.000000%	0.104153%
7	Customers		978,353		24	
8	Allocation Percent -	4	100.0000%	0.000000%	0.002487%	0.000000%
9	Customers With Mains		978,353	-	24	-
10	Allocation Percent -	5	100.0000%	0.000000%	0.002487%	0.000000%
11	Meters for Customers		1,099,215	-	70	-
12	Allocation Percent -	6	100.0000%	0.000000%	0.006395%	0.000000%
13	Service Lines for Customers		1,136,729		66	
14	Allocation Percent -	7	100.0000%	0.000000%	0.005816%	0.000000%
15	Residential, MMMHP, Small & Medium		969,930			
16	Allocation Percent -	8	100.0000%	0.000000%	0.000000%	0.000000%
17	Service Establishment & Reconnect Charges		8,944,785	-	360	-
18	Allocation Percent -	9	100.0000%	0.000000%	0.004025%	0.000000%
19	Industrial Meas & Reg		7,695	-	-	-
20	Allocation Percent -	10	100.0000%	0.000000%	0.000000%	0.000000%
21	Meter Reading (Bills with Meters)		978,173		24	
22	Allocation Percent -	11	100.0000%	0.000000%	0.002488%	0.000000%
23	Late Fees		1,860,965	-	16	-
24	Allocation Percent -	12	100.0000%	0.000000%	0.000834%	0.000000%
25	Return Item Fees		195,916	-	-	-
26	Allocation Percent -	13	100.0000%	0.000000%	0.000000%	0.000000%
27	Field Collection Fees		569,766	-	-	-
28	Allocation Percent -	14	100.0000%	0.000000%	0.000000%	0.000000%
29	KAM Direct Allocation		7,713			
30	Allocation Percent -	15	100.0000%	0.000000%	0.000000%	0.000000%
31	Customers with Gas Light Count		978,604	-	24	-
32	Allocation Percent -	16	100.0000%	0.000000%	0.002487%	0.000000%
	Internally Generated Allocation Factors					
33	Net Distribution Plant		1,690,092,974	149,339	53,034	8,410
34	Allocation Percent -	1.1	100.0000%	0.008836%	0.003138%	0.000498%
35	Distribution Mains (Account 376)		959,684,968	142,276	11,935	-
36	Allocation Percent -	2.2	100.0000%	0.014825%	0.001244%	0.000000%
37	Distribution Services (Account 380)		471,631,932	0	27,431	-
38	Allocation Percent -	3.3	100.0000%	0.000000%	0.005816%	0.000000%
39	Distribution Mains & Services (Accounts 376, 380)		1,431,316,899	142,276	39,366	-
40	Allocation Percent -	4.4	100.0000%	0.009940%	0.002750%	0.000000%
41	Allocable Distribution Operating Expenses		33,213,099	1,353	1,604	512
42	Allocation Percent -	5.5	100.0000%	0.004074%	0.004830%	0.001540%
43	Allocable Distribution Maintenance Expenses		36,745,877	3,528	1,068	-
44	Allocation Percent -	6.6	100.0000%	0.009602%	0.002906%	0.000000%
45	Net Operating Margin w/o SPECC and Optional		392,027,615	68,949	13,220	-
46	Allocation Percent -	Net Op Margin	100.0000%	0.017588%	0.003372%	0.000000%
47	Customer Accounting Expense (Accounts 902-904)		30,933,005	-	748	-
48	Allocation Percent -	10.1	100.0000%	0.000000%	0.002418%	0.000000%
49	Total Operations and Maintenance Expense		136,804,420	6,362	4,922	2,107
50	Allocation Percent -	11.2	100.0000%	0.004650%	0.003598%	0.001540%

SOUTHWEST GAS CORPORATION
ARIZONA
DEVELOPMENT OF ALLOCATION FACTORS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Allocation Factor No.	Total	Street Lighting Demand	Street Lighting Customer	Street Lighting Commodity
	(a)	(b)	(c)	(d)	(e)	(f)
	Allocation Factors					
1	Coincident Peak (CP) Monthly Demand		98,999,768	6,559		
2	Allocation Percent -	1	100.0000%	0.006625%	0.000000%	0.000000%
3	Exta					
4	Allocation Percent -	2	0.0000%	0.000000%	0.000000%	0.000000%
5	Throughput		601,273,772			87,447
6	Allocation Percent -	3	100.0000%	0.000000%	0.000000%	0.014544%
7	Customers		978,353		180	
8	Allocation Percent -	4	100.0000%	0.000000%	0.018398%	0.000000%
9	Customers With Mains		978,353	-	180	-
10	Allocation Percent -	5	100.0000%	0.000000%	0.018398%	0.000000%
11	Meters for Customers		1,099,215	-	-	-
12	Allocation Percent -	6	100.0000%	0.000000%	0.000000%	0.000000%
13	Service Lines for Customers		1,136,729		528	
14	Allocation Percent -	7	100.0000%	0.000000%	0.046485%	0.000000%
15	Residential, MMMHP, Small & Medium		969,930			
16	Allocation Percent -	8	100.0000%	0.000000%	0.000000%	0.000000%
17	Service Establishment & Reconnect Charges		8,944,785	-	179	-
18	Allocation Percent -	9	100.0000%	0.000000%	0.002001%	0.000000%
19	Industrial Meas & Reg		7,695	-	-	-
20	Allocation Percent -	10	100.0000%	0.000000%	0.000000%	0.000000%
21	Meter Reading (Bills with Meters)		978,173		-	
22	Allocation Percent -	11	100.0000%	0.000000%	0.000000%	0.000000%
23	Late Fees		1,860,965	-	3,178	-
24	Allocation Percent -	12	100.0000%	0.000000%	0.170789%	0.000000%
25	Return Item Fees		195,916	-	-	-
26	Allocation Percent -	13	100.0000%	0.000000%	0.000000%	0.000000%
27	Field Collection Fees		569,766	-	-	-
28	Allocation Percent -	14	100.0000%	0.000000%	0.000000%	0.000000%
29	KAM Direct Allocation		7,713			
30	Allocation Percent -	15	100.0000%	0.000000%	0.000000%	0.000000%
31	Customers with Gas Light Count		978,604	-	431	-
32	Allocation Percent -	16	100.0000%	0.000000%	0.044042%	0.000000%
	Internally Generated Allocation Factors					
33	Net Distribution Plant		1,690,092,974	33,369	311,475	1,174
34	Allocation Percent -	1.1	100.0000%	0.001974%	0.018429%	0.000069%
35	Distribution Mains (Account 376)		959,684,968	31,791	88,283	-
36	Allocation Percent -	2.2	100.0000%	0.003313%	0.009199%	0.000000%
37	Distribution Services (Account 380)		471,631,932	0	219,239	-
38	Allocation Percent -	3.3	100.0000%	0.000000%	0.046485%	0.000000%
39	Distribution Mains & Services (Accounts 376, 380)		1,431,316,899	31,791	307,522	-
40	Allocation Percent -	4.4	100.0000%	0.002221%	0.021485%	0.000000%
41	Allocable Distribution Operating Expenses		33,213,099	302	2,296	71
42	Allocation Percent -	5.5	100.0000%	0.000910%	0.006914%	0.000215%
43	Allocable Distribution Maintenance Expenses		36,745,877	788	6,693	-
44	Allocation Percent -	6.6	100.0000%	0.002145%	0.018213%	0.000000%
45	Net Operating Margin w/o SPECC and Optional		392,027,615	53,386	-	-
46	Allocation Percent -	Net Op Margin	100.0000%	0.013618%	0.000000%	0.000000%
47	Customer Accounting Expense (Accounts 902-904)		30,933,005	-	5,171	-
48	Allocation Percent -	10.1	100.0000%	0.000000%	0.016716%	0.000000%
49	Total Operations and Maintenance Expense		136,804,420	1,422	17,429	294
50	Allocation Percent -	11.2	100.0000%	0.001039%	0.012740%	0.000215%

SOUTHWEST GAS CORPORATION
ARIZONA
DEVELOPMENT OF ALLOCATION FACTORS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Allocation Factor No.	Total	Compression on Customer's Premises Demand	Customer	Commodity
	(a)	(b)	(c)	(d)	(e)	(f)
	Allocation Factors					
1	Coincident Peak (CP) Monthly Demand		98,999,768	440,263		
2	Allocation Percent -	1	100.0000%	0.444711%	0.000000%	0.000000%
3	Exta					
4	Allocation Percent -	2	0.0000%	0.000000%	0.000000%	0.000000%
5	Throughput		601,273,772			4,132,556
6	Allocation Percent -	3	100.0000%	0.000000%	0.000000%	0.687300%
7	Customers		978,353		122	
8	Allocation Percent -	4	100.0000%	0.000000%	0.012470%	0.000000%
9	Customers With Mains		978,353	-	122	-
10	Allocation Percent -	5	100.0000%	0.000000%	0.012470%	0.000000%
11	Meters for Customers		1,099,215	-	523	-
12	Allocation Percent -	6	100.0000%	0.000000%	0.047602%	0.000000%
13	Service Lines for Customers		1,136,729		425	
14	Allocation Percent -	7	100.0000%	0.000000%	0.037398%	0.000000%
15	Residential, MMMHP, Small & Medium		969,930			
16	Allocation Percent -	8	100.0000%	0.000000%	0.000000%	0.000000%
17	Service Establishment & Reconnect Charges		8,944,785	-	240	-
18	Allocation Percent -	9	100.0000%	0.000000%	0.002683%	0.000000%
19	Industrial Meas & Reg		7,695	-	-	-
20	Allocation Percent -	10	100.0000%	0.000000%	0.000000%	0.000000%
21	Meter Reading (Bills with Meters)		978,173		122	
22	Allocation Percent -	11	100.0000%	0.000000%	0.012472%	0.000000%
23	Late Fees		1,860,965	-	35	-
24	Allocation Percent -	12	100.0000%	0.000000%	0.001868%	0.000000%
25	Return Item Fees		195,916	-	-	-
26	Allocation Percent -	13	100.0000%	0.000000%	0.000000%	0.000000%
27	Field Collection Fees		569,766	-	-	-
28	Allocation Percent -	14	100.0000%	0.000000%	0.000000%	0.000000%
29	KAM Direct Allocation		7,713			
30	Allocation Percent -	15	100.0000%	0.000000%	0.000000%	0.000000%
31	Customers with Gas Light Count		978,604	-	122	-
32	Allocation Percent -	16	100.0000%	0.000000%	0.012467%	0.000000%
	Internally Generated Allocation Factors					
33	Net Distribution Plant		1,690,092,974	2,239,851	336,664	55,500
34	Allocation Percent -	1.1	100.0000%	0.132528%	0.019920%	0.003284%
35	Distribution Mains (Account 376)		959,684,968	2,133,913	59,836	-
36	Allocation Percent -	2.2	100.0000%	0.222356%	0.006235%	0.000000%
37	Distribution Services (Account 380)		471,631,932	0	176,379	-
38	Allocation Percent -	3.3	100.0000%	0.000000%	0.037398%	0.000000%
39	Distribution Mains & Services (Accounts 376, 380)		1,431,316,899	2,133,913	236,215	-
40	Allocation Percent -	4.4	100.0000%	0.149087%	0.016503%	0.000000%
41	Allocable Distribution Operating Expenses		33,213,099	20,296	11,481	3,376
42	Allocation Percent -	5.5	100.0000%	0.061108%	0.034567%	0.010163%
43	Allocable Distribution Maintenance Expenses		36,745,877	52,919	6,658	-
44	Allocation Percent -	6.6	100.0000%	0.144012%	0.018120%	0.000000%
45	Net Operating Margin w/o SPECC and Optional		392,027,615	771,878	87,809	-
46	Allocation Percent -	Net Op Margin	100.0000%	0.196894%	0.022399%	0.000000%
47	Customer Accounting Expense (Accounts 902-904)		30,933,005	-	3,750	-
48	Allocation Percent -	10.1	100.0000%	0.000000%	0.012121%	0.000000%
49	Total Operations and Maintenance Expense		136,804,420	95,417	32,315	13,906
50	Allocation Percent -	11.2	100.0000%	0.069747%	0.023621%	0.010165%

SOUTHWEST GAS CORPORATION
ARIZONA
DEVELOPMENT OF ALLOCATION FACTORS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Allocation Factor No.	Total	Electric Generation Demand	Customer	Commodity
	(a)	(b)	(c)	(d)	(e)	(f)
	Allocation Factors					
1	Coincident Peak (CP) Monthly Demand		98,999,768	2,009,802		
2	Allocation Percent -	1	100.0000%	2.030108%	0.000000%	0.000000%
3	Exta					
4	Allocation Percent -	2	0.0000%	0.000000%	0.000000%	0.000000%
5	Throughput		601,273,772			21,373,819
6	Allocation Percent -	3	100.0000%	0.000000%	0.000000%	3.554757%
7	Customers		978,353		18	
8	Allocation Percent -	4	100.0000%	0.000000%	0.001840%	0.000000%
9	Customers With Mains		978,353	-	18	-
10	Allocation Percent -	5	100.0000%	0.000000%	0.001840%	0.000000%
11	Meters for Customers		1,099,215	-	2,418	-
12	Allocation Percent -	6	100.0000%	0.000000%	0.219988%	0.000000%
13	Service Lines for Customers		1,136,729		204	
14	Allocation Percent -	7	100.0000%	0.000000%	0.017930%	0.000000%
15	Residential, MMMHP, Small & Medium		969,930			
16	Allocation Percent -	8	100.0000%	0.000000%	0.000000%	0.000000%
17	*Service Establishment & Reconnect Charges*		8,944,785	-	-	-
18	Allocation Percent -	9	100.0000%	0.000000%	0.000000%	0.000000%
19	Industrial Meas & Reg		7,695	-	-	-
20	Allocation Percent -	10	100.0000%	0.000000%	0.000000%	0.000000%
21	Meter Reading (Bills with Meters)		978,173		18	
22	Allocation Percent -	11	100.0000%	0.000000%	0.001840%	0.000000%
23	Late Fees		1,860,965	-	1,271	-
24	Allocation Percent -	12	100.0000%	0.000000%	0.068308%	0.000000%
25	Return Item Fees		195,916	-	-	-
26	Allocation Percent -	13	100.0000%	0.000000%	0.000000%	0.000000%
27	Field Collection Fees		569,766	-	-	-
28	Allocation Percent -	14	100.0000%	0.000000%	0.000000%	0.000000%
29	KAM Direct Allocation		7,713		18	
30	Allocation Percent -	15	100.0000%	0.000000%	0.233382%	0.000000%
31	Customers with Gas Light Count		978,604	-	18	-
32	Allocation Percent -	16	100.0000%	0.000000%	0.001839%	0.000000%
	Internally Generated Allocation Factors					
33	Net Distribution Plant		1,690,092,974	10,224,929	545,626	287,050
34	Allocation Percent -	1.1	100.0000%	0.604992%	0.032284%	0.016984%
35	Distribution Mains (Account 376)		959,684,968	9,741,320	8,828	-
36	Allocation Percent -	2.2	100.0000%	1.015054%	0.000920%	0.000000%
37	Distribution Services (Account 380)		471,631,932	0	84,565	-
38	Allocation Percent -	3.3	100.0000%	0.000000%	0.017930%	0.000000%
39	Distribution Mains & Services (Accounts 376, 380)		1,431,316,899	9,741,320	93,393	-
40	Allocation Percent -	4.4	100.0000%	0.680584%	0.006525%	0.000000%
41	Allocable Distribution Operating Expenses		33,213,099	92,651	45,657	17,459
42	Allocation Percent -	5.5	100.0000%	0.278958%	0.137466%	0.052565%
43	Allocable Distribution Maintenance Expenses		36,745,877	241,573	9,126	-
44	Allocation Percent -	6.6	100.0000%	0.657416%	0.024836%	0.000000%
45	Net Operating Margin w/o SPECC and Optional		392,027,615	2,892,946	89,694	-
46	Allocation Percent -	Net Op Margin	100.0000%	0.737944%	0.022880%	0.000000%
47	Customer Accounting Expense (Accounts 902-904)		30,933,005	-	2,572	-
48	Allocation Percent -	10.1	100.0000%	0.000000%	0.008314%	0.000000%
49	Total Operations and Maintenance Expense		136,804,420	435,577	95,219	71,922
50	Allocation Percent -	11.2	100.0000%	0.318394%	0.069602%	0.052573%

SOUTHWEST GAS CORPORATION
ARIZONA
DEVELOPMENT OF ALLOCATION FACTORS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Allocation Factor No.	Total	Small Essential Agricultural User Demand	Customer	Commodity
	(a)	(b)	(c)	(d)	(e)	(f)
	Allocation Factors					
1	Coincident Peak (CP) Monthly Demand		98,999,768	339,624		
2	Allocation Percent -	1	100.0000%	0.343055%	0.000000%	0.000000%
3	Exta					
4	Allocation Percent -	2	0.0000%	0.000000%	0.000000%	0.000000%
5	Throughput		601,273,772			2,680,620
6	Allocation Percent -	3	100.0000%	0.000000%	0.000000%	0.445824%
7	Customers		978,353		51	
8	Allocation Percent -	4	100.0000%	0.000000%	0.005204%	0.000000%
9	Customers With Mains		978,353	-	51	-
10	Allocation Percent -	5	100.0000%	0.000000%	0.005204%	0.000000%
11	Meters for Customers		1,099,215	-	1,039	-
12	Allocation Percent -	6	100.0000%	0.000000%	0.094516%	0.000000%
13	Service Lines for Customers		1,136,729		1,189	
14	Allocation Percent -	7	100.0000%	0.000000%	0.104591%	0.000000%
15	Residential, MMMHP, Small & Medium		969,930			
16	Allocation Percent -	8	100.0000%	0.000000%	0.000000%	0.000000%
17	Service Establishment & Reconnect Charges		8,944,785	-	1,560	-
18	Allocation Percent -	9	100.0000%	0.000000%	0.017440%	0.000000%
19	Industrial Meas & Reg		7,695	-	-	-
20	Allocation Percent -	10	100.0000%	0.000000%	0.000000%	0.000000%
21	Meter Reading (Bills with Meters)		978,173		51	
22	Allocation Percent -	11	100.0000%	0.000000%	0.005205%	0.000000%
23	Late Fees		1,860,965	-	3,636	-
24	Allocation Percent -	12	100.0000%	0.000000%	0.195402%	0.000000%
25	Return Item Fees		195,916	-	-	-
26	Allocation Percent -	13	100.0000%	0.000000%	0.000000%	0.000000%
27	Field Collection Fees		569,766	-	-	-
28	Allocation Percent -	14	100.0000%	0.000000%	0.000000%	0.000000%
29	KAM Direct Allocation		7,713			
30	Allocation Percent -	15	100.0000%	0.000000%	0.000000%	0.000000%
31	Customers with Gas Light Count		978,604	-	51	-
32	Allocation Percent -	16	100.0000%	0.000000%	0.005203%	0.000000%
	Internally Generated Allocation Factors					
33	Net Distribution Plant		1,690,092,974	1,727,847	713,501	36,001
34	Allocation Percent -	1.1	100.0000%	0.102234%	0.042217%	0.002130%
35	Distribution Mains (Account 376)		959,684,968	1,646,125	24,973	-
36	Allocation Percent -	2.2	100.0000%	0.171528%	0.002602%	0.000000%
37	Distribution Services (Account 380)		471,631,932	0	493,282	-
38	Allocation Percent -	3.3	100.0000%	0.000000%	0.104591%	0.000000%
39	Distribution Mains & Services (Accounts 376, 380)		1,431,316,899	1,646,125	518,255	-
40	Allocation Percent -	4.4	100.0000%	0.115008%	0.036208%	0.000000%
41	Allocable Distribution Operating Expenses		33,213,099	15,656	22,854	2,190
42	Allocation Percent -	5.5	100.0000%	0.047139%	0.068809%	0.006593%
43	Allocable Distribution Maintenance Expenses		36,745,877	40,822	13,832	-
44	Allocation Percent -	6.6	100.0000%	0.111093%	0.037642%	0.000000%
45	Net Operating Margin w/o SPECC and Optional		392,027,615	653,964	73,320	-
46	Allocation Percent -	Net Op Margin	100.0000%	0.166816%	0.018703%	0.000000%
47	Customer Accounting Expense (Accounts 902-904)		30,933,005	-	1,565	-
48	Allocation Percent -	10.1	100.0000%	0.000000%	0.005059%	0.000000%
49	Total Operations and Maintenance Expense		136,804,420	73,605	58,269	9,020
50	Allocation Percent -	11.2	100.0000%	0.053803%	0.042593%	0.006593%

SOUTHWEST GAS CORPORATION
ARIZONA
DEVELOPMENT OF ALLOCATION FACTORS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Allocation Factor No.	Total	Natural Gas Engine Demand	Natural Gas Engine Customer	Natural Gas Engine Commodity
	(a)	(b)	(c)	(d)	(e)	(f)
	Allocation Factors					
1	Coincident Peak (CP) Monthly Demand		98,999,768	212,179		
2	Allocation Percent -	1	100.0000%	0.214323%	0.000000%	0.000000%
3	Exta					
4	Allocation Percent -	2	0.0000%	0.000000%	0.000000%	0.000000%
5	Throughput		601,273,772			7,678,281
6	Allocation Percent -	3	100.0000%	0.000000%	0.000000%	1.277002%
7	Customers		978,353		333	
8	Allocation Percent -	4	100.0000%	0.000000%	0.034045%	0.000000%
9	Customers With Mains		978,353	-	333	-
10	Allocation Percent -	5	100.0000%	0.000000%	0.034045%	0.000000%
11	Meters for Customers		1,099,215	-	6,922	-
12	Allocation Percent -	6	100.0000%	0.000000%	0.629711%	0.000000%
13	Service Lines for Customers		1,136,729		621	
14	Allocation Percent -	7	100.0000%	0.000000%	0.054629%	0.000000%
15	Residential, MMMHP, Small & Medium		969,930			
16	Allocation Percent -	8	100.0000%	0.000000%	0.000000%	0.000000%
17	Service Establishment & Reconnect Charges		8,944,785	-	1,560	-
18	Allocation Percent -	9	100.0000%	0.000000%	0.017440%	0.000000%
19	Industrial Meas & Reg		7,695	-	-	-
20	Allocation Percent -	10	100.0000%	0.000000%	0.000000%	0.000000%
21	Meter Reading (Bills with Meters)		978,173		333	
22	Allocation Percent -	11	100.0000%	0.000000%	0.034052%	0.000000%
23	Late Fees		1,860,965	-	9,916	-
24	Allocation Percent -	12	100.0000%	0.000000%	0.532830%	0.000000%
25	Return Item Fees		195,916	-	28	-
26	Allocation Percent -	13	100.0000%	0.000000%	0.014292%	0.000000%
27	Field Collection Fees		569,766	-	20	-
28	Allocation Percent -	14	100.0000%	0.000000%	0.003510%	0.000000%
29	KAM Direct Allocation		7,713			
30	Allocation Percent -	15	100.0000%	0.000000%	0.000000%	0.000000%
31	Customers with Gas Light Count		978,604	-	333	-
32	Allocation Percent -	16	100.0000%	0.000000%	0.034037%	0.000000%
	Internally Generated Allocation Factors					
33	Net Distribution Plant		1,690,092,974	1,079,467	1,721,699	103,119
34	Allocation Percent -	1.1	100.0000%	0.063870%	0.101870%	0.006101%
35	Distribution Mains (Account 376)		959,684,968	1,028,411	163,364	-
36	Allocation Percent -	2.2	100.0000%	0.107161%	0.017023%	0.000000%
37	Distribution Services (Account 380)		471,631,932	0	257,647	-
38	Allocation Percent -	3.3	100.0000%	0.000000%	0.054629%	0.000000%
39	Distribution Mains & Services (Accounts 376, 380)		1,431,316,899	1,028,411	421,011	-
40	Allocation Percent -	4.4	100.0000%	0.071851%	0.029414%	0.000000%
41	Allocable Distribution Operating Expenses		33,213,099	9,781	132,108	6,272
42	Allocation Percent -	5.5	100.0000%	0.029450%	0.397758%	0.018883%
43	Allocable Distribution Maintenance Expenses		36,745,877	25,503	29,868	-
44	Allocation Percent -	6.6	100.0000%	0.069405%	0.081283%	0.000000%
45	Net Operating Margin w/o SPECC and Optional		392,027,615	1,464,171	249,813	-
46	Allocation Percent -	Net Op Margin	100.0000%	0.373487%	0.063723%	0.000000%
47	Customer Accounting Expense (Accounts 902-904)		30,933,005	-	10,237	-
48	Allocation Percent -	10.1	100.0000%	0.000000%	0.033094%	0.000000%
49	Total Operations and Maintenance Expense		136,804,420	45,985	282,755	25,837
50	Allocation Percent -	11.2	100.0000%	0.033614%	0.206686%	0.018886%

Schedule H

SOUTHWEST GAS CORPORATION
ARIZONA
SUMMARY OF REVENUES AT PRESENT AND PROPOSED RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Schedule Number	Revenues: Present Rates [1]	Revenues: Proposed Rates [2]	Increase/(Decrease): Dollars	Increase/(Decrease): Percent	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
1	Single-Family Residential Gas Service	G-5	$ 446,457,488	$ 506,954,181	$ 60,496,693	13.55%	1
2	Multi-Family Residential Gas Service	G-6	11,069,522	12,525,410	1,455,888	13.15%	2
3	Single-Family Low Income Residential Gas Service	G-10	16,359,839	18,966,112	2,606,273	15.93%	3
4	Multi-Family Low Income Residential Gas Service	G-11	1,179,663	1,356,087	176,424	14.96%	4
5	Special Residential Gas Service for Air Conditioning	G-15	122,055	137,534	15,479	12.68%	5
6	Master Metered Mobile Home Park Gas Service	G-20	2,156,004	2,220,540	64,536	2.99%	6
	General Gas Service						
7	Small	G-25(S)	10,709,328	11,300,082	590,754	5.52%	7
8	Medium	G-25(M)	49,894,508	51,581,182	1,686,674	3.38%	8
9	Large-1	G-25(L1)	116,144,518	119,419,801	3,275,283	2.82%	9
10	Large-2	G-25(L2)	34,738,344	35,579,008	840,664	2.42%	10
11	Transportation Eligible	G-23(TE)	47,729,238	49,349,293	1,620,055	3.39%	11
12	Optional Gas Service	G-30	24,522,491	24,522,491	0	0.00%	12
13	Air Conditioning Gas Service	G-40	337,269	343,410	6,141	1.82%	13
14	Street Lighting Gas Service	G-45	115,362	127,821	12,459	10.80%	14
	Compression on Customer's Premises						
15	Residential	G-55	42,004	42,550	546	1.30%	15
16	Small		96,122	97,699	1,577	1.64%	16
17	Large		1,700,447	1,762,545	62,098	3.65%	17
18	Electric Generation Gas Service	G-60	3,858,577	4,081,405	222,828	5.77%	18
19	Small Essential Agriculture User Gas Service	G-75	2,603,837	2,658,173	54,336	2.09%	19
20	Natural Gas Engine Gas Service	G-80	5,375,250	5,375,250	0	0.00%	20
21	Total Gas Sales & Full Margin Transportation		$ 775,211,866	$ 848,400,574	73,188,708	9.44%	21
22	Special Contract Service	B-1	2,763,591	2,763,591	0	0.00%	22
23	Other Operating Revenue		12,096,356	12,096,356	0	0.00%	23
24	Total Arizona Revenue		$ 790,071,813	$ 863,260,521	$ 73,188,708	9.26%	24
25	Total Requirement			$ 863,261,252			25
26	Over/(Under) Requirement			$ (730)			26
27	Compression on Customer's Premises Total Class	G-55	1,838,573.0	$ 1,902,794	64,221	3.49%	27

[1] Schedule H-2, Sheets 5-8.
[2] Schedule H-2, Sheets 1-4.

SOUTHWEST GAS CORPORATION
ARIZONA
SUMMARY OF MARGIN AT PRESENT AND PROPOSED RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Schedule Number	Margin Present Rates [1]	Margin Proposed Rates [2]	Increase/(Decrease) Dollars	Increase/(Decrease) Percent	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
1	Single-Family Residential Gas Service	G-5	$ 260,896,069	$ 321,392,762	$ 60,496,693	23.19%	1
2	Multi-Family Residential Gas Service	G-6	6,914,441	8,370,329	1,455,888	21.06%	2
3	Single-Family Low Income Residential Gas Service	G-10	8,921,577	11,527,850	2,606,273	29.21%	3
4	Multi-Family Low Income Residential Gas Service	G-11	676,150	852,574	176,424	26.09%	4
5	Special Residential Gas Service for Air Conditioning	G-15	58,822	74,301	15,479	26.31%	5
6	Master Metered Mobile Home Park Gas Service	G-20	863,947	928,483	64,536	7.47%	6
	General Gas Service						
7	Small	G-25(S)	7,908,814	8,499,568	590,754	7.47%	7
8	Medium	G-25(M)	22,579,171	24,265,845	1,686,674	7.47%	8
9	Large-1	G-25(L1)	43,845,416	47,120,699	3,275,283	7.47%	9
10	Large-2	G-25(L2)	11,254,459	12,095,123	840,664	7.47%	10
11	Transportation Eligible	G-25(TE)	21,689,599	23,309,654	1,620,055	7.47%	11
12	Optional Gas Service	G-30	4,024,536	4,024,536	0	0.00%	12
13	Air Conditioning Gas Service	G-40	82,169	88,310	6,141	7.47%	13
14	Street Lighting Gas Service	G-45	53,386	65,845	12,459	23.34%	14
	Compression on Customer's Premises	G-55					
15	Residential		17,094	17,640	546	3.19%	15
16	Small		24,227	25,804	1,577	6.51%	16
17	Large		818,366	880,464	62,098	7.59%	17
18	Electric Generation Gas Service	G-60	2,982,640	3,205,468	222,828	7.47%	18
19	Small Essential Agriculture User Gas Service	G-75	727,284	781,620	54,336	7.47%	19
20	Natural Gas Engine Gas Service	G-80	1,713,984	1,713,984	0	0.00%	20
21	Total Sales and Full Margin Transportation		$ 396,052,151	$ 469,240,859	$ 73,188,708	18.48%	21
22	Special Contract Service	B-1	2,763,591.4	2,763,591	0	0.00%	22
23	Other Operating Revenue		12,096,355.6	12,096,356	0	0.00%	23
24	Total Arizona Revenue		$ 410,912,098	$ 484,100,806	$ 73,188,708	17.81%	24
25	Total Margin Requirement			$ 484,101,536			25
26	Over/(Under) Requirement			$ (730)			26
27	Gas Service for Compression on Customer's Premises Total Class		859,687	923,908	64,221	7.47%	27

[1] Schedule H-2, Sheets 5-8.
[2] Schedule H-2, Sheets 1-4.

SOUTHWEST GAS CORPORATION
ARIZONA
PRESENT AND PROPOSED REVENUES BY RATE COMPONENT
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description (a)	Proposed Schedule Number (b)	Billing Determinants: Number of Bills (c)	Billing Determinants: Sales (Therms) (d)	Basic Service Charge [1] (e)	Delivery Charge [1] (f)	Revenue at Proposed Rates: Basic Service Charge (g)	Revenue at Proposed Rates: Delivery Charge (h)	Revenue at Proposed Rates: Total Margin (i)	Revenue at Proposed Rates: Gas Cost [2] (j)	Revenue at Proposed Rates: Total Revenue (k)	Revenue at Present Rates [3] (l)	Increase / Decrease: Dollars (m)	Increase / Decrease: Percent (n)	Line No.
	Single-Family Residential Gas Service	G-5													
1	Basic Service Charge per Month		10,418,131		$ 10.70		$ 111,474,002		$ 111,474,002		$ 111,474,002	$ 111,474,002	$ 0	0.0%	1
	Delivery Charge per Therm														
2	Sales-All Usage			261,822,441		$ 0.80176		$ 209,918,760	209,918,760	$ 185,561,419	395,480,179	334,983,486	60,496,693	18.1%	2
3	Total Single-Family Residential		10,418,131	261,822,441			$ 111,474,002	$ 209,918,760	$ 321,392,762	$ 185,561,419	$ 506,954,181	$ 446,457,488	$ 60,496,693	13.6%	3
	Multi-Family Residential Gas Service	G-6													
4	Basic Service Charge per Month		378,334		$ 9.70		$ 3,669,840		$ 3,669,840		$ 3,669,840	$ 3,669,840	$ 0	0.0%	4
	Delivery Charge per Therm														
5	Sales-All Usage			5,862,713		$ 0.80176		$ 4,700,489	4,700,489	$ 4,155,081	8,855,570	7,399,682	1,455,888	19.7%	5
6	Total Multi-Family Residential		378,334	5,862,713			$ 3,669,840	$ 4,700,489	$ 8,370,329	$ 4,155,081	$ 12,525,410	$ 11,069,522	$ 1,455,888	13.2%	6
	Single-Family Low Income Residential	G-10													
7	Basic Service Charge		415,096		$ 7.50		$ 3,113,220		$ 3,113,220		$ 3,113,220	$ 3,113,220	$ 0	0.0%	7
	Delivery Charge per Therm														
	Summer (May - October)														
8	Sales-All Usage			2,301,968		$ 0.80176		$ 1,845,626	1,845,626	$ 1,631,474	3,477,100	2,905,452	571,648	19.7%	8
	Winter (November - April)														
9	Sales-All Usage			8,193,230		0.80176		6,569,004	6,569,004	5,806,788	12,375,792	10,341,167	2,034,625	19.7%	9
10	Total Single-Family Low Income		415,096	10,495,198			$ 3,113,220	$ 8,414,630	$ 11,527,850	$ 7,438,262	$ 18,966,112	$ 16,359,839	$ 2,606,273	15.9%	10
	Multi-Family Low Income Residential	G-11													
11	Basic Service Charge per Month		37,729		$ 7.50		$ 282,968		$ 282,968		$ 282,968	$ 282,968	$ 0	0.0%	11
	Delivery Charge per Therm														
	Summer (May - October)														
12	Sales-All Usage			210,209		$ 0.80176		$ 168,537	168,537	$ 148,981	317,518	265,317	52,201	19.7%	12
	Winter (November - April)														
13	Sales-All Usage			500,236		0.80176		401,069	401,069	354,532	755,601	631,378	124,223	19.7%	13
14	Total Multi-Family Low Income		37,729	710,445			$ 282,968	$ 569,606	$ 852,574	$ 503,513	$ 1,356,087	$ 1,179,663	$ 176,424	15.0%	14
	Special Residential Gas Service for Air Conditioning	G-15													
15	Basic Service Charge per Month		1,080		$ 10.70		$ 11,556		$ 11,556		$ 11,556	$ 11,556	$ 0	0.0%	15
	Delivery Charge per Therm														
	Summer (May - October)														
16	Sales-First 15 Therms			23,038		$ 0.80176		$ 18,471	18,471	$ 16,328	34,799	29,476	5,323	18.1%	16
17	Sales-Over 15 Therms			12,945		0.12297		1,592	1,592	9,175	10,767	12,911	(2,144)	-16.6%	17
	Winter (November - April)														
18	Sales-All Usage			53,236		0.80176		42,682	42,682	37,730	80,412	68,112	12,300	18.1%	18
19	Total Special Residential		1,080	89,219			$ 11,556	$ 62,745	$ 74,301	$ 63,233	$ 137,534	$ 122,055	$ 15,479	12.7%	19
20	Total Residential Gas Service		11,250,370	278,980,016			$ 118,551,586	$ 223,666,230	$ 342,217,816	$ 197,721,508	$ 539,939,324	$ 475,188,567	$ 64,750,757	13.6%	20
	Master Metered Mobile Home Park (MMMHP) Gas Service	G-20													
21	Basic Service Charge per Month		1,812		$ 66.00		$ 119,592		$ 119,592		$ 119,592	$ 119,592	$ 0	0.0%	21
	Delivery Charge per Therm														
22	Sales-All Usage			1,823,059		$ 0.44370		$ 808,891	808,891	$ 1,292,057	2,100,948	2,036,412	64,536	3.2%	22
23	Total MMMHP Gas Service		1,812	1,823,059			$ 119,592	$ 808,891	$ 928,483	$ 1,292,057	$ 2,220,540	$ 2,156,004	$ 64,536	3.0%	23

[1] Rates to recover proposed margin per Sch H-2, Sh 9-10.
[2] Gas cost effective June 28, 2010.
[3] Sch H-2, Sh 5-8.

SOUTHWEST GAS CORPORATION
ARIZONA
PRESENT AND PROPOSED REVENUES BY RATE COMPONENT
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Proposed Schedule Number	Billing Determinants: Number of Bills	Billing Determinants: Sales (Therms)	Basic Service Charge [1]	Delivery Charge [1]	Revenue at Proposed Rates: Basic Service Charge	Revenue at Proposed Rates: Delivery Charge	Revenue at Proposed Rates: Total Margin	Revenue at Proposed Rates: Gas Cost [2]	Revenue at Proposed Rates: Total Revenue	Revenue at Present Rates [3]	Increase / Decrease: Dollars	Increase / Decrease: Percent	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	
	General Gas Service - Small	G-25(S)													
	Basic Service Charge per Month														
1	Sales		205,557		$ 27.50		$ 5,652,818		$ 5,652,818		$ 5,652,818	$ 5,652,818	$ 0	0.0%	1
2	Transportation		36		27.50		990		990		990	990	0	0.0%	2
	Delivery Charge per Therm														
3	Sales-All Usage			3,951,454		$ 0.72007		$ 2,845,323	2,845,323	$ 2,800,514	5,645,837	5,055,174	590,663	11.7%	3
4	Transportation-All Usage			607		0.72007		437	437	0	437	346	91	26.3%	4
5	Total Small General		205,593	3,952,061			$ 5,653,808	$ 2,845,760	$ 8,499,568	$ 2,800,514	$ 11,300,082	$ 10,709,328	$ 590,754	5.5%	5
	General Gas Service - Medium	G-25(M)													
	Basic Service Charge per Month														
6	Sales		181,042		$ 43.50		$ 7,875,327		$ 7,875,327		$ 7,875,327	$ 7,875,327	$ 0	0.0%	6
7	Transportation		348		43.50		15,138		15,138		15,138	15,138	0	0.0%	7
	Delivery Charge per Therm														
8	Sales-All Usage			38,541,245		$ 0.42359		$ 16,325,686	16,325,686	$ 27,315,337	43,641,023	41,959,468	1,681,555	4.0%	8
9	Transportation-All Usage			117,316		0.42359		49,694	49,694	0	49,694	44,575	5,119	11.5%	9
10	Total Medium General		181,390	38,658,561			$ 7,890,465	$ 16,375,380	$ 24,265,845	$ 27,315,337	$ 51,581,182	$ 49,894,508	$ 1,686,674	3.4%	10
	General Gas Service - Large-1	G-25(L1)													
	Basic Service Charge per Month														
11	Sales		83,792		$ 80.00		$ 6,703,360		$ 6,703,360		$ 6,703,360	$ 13,406,720	$(6,703,360)	-50.0%	11
12	Transportation		1,080		80.00		86,400		86,400		86,400	172,800	(86,400)	-50.0%	12
	Delivery Charge per Therm														
13	Sales-All Usage			102,012,194		$ 0.38756		$ 39,535,846	39,535,846	$ 72,299,102	111,834,948	101,968,329	9,866,619	9.7%	13
14	Transportation-All Usage			2,051,536		0.38756		795,093	795,093	0	795,093	596,669	198,424	33.3%	14
15	Total Large General Gas Service		84,872	104,063,730			6,789,760	40,330,939	47,120,699	72,299,102	119,419,801	116,144,518	3,275,283	2.8%	15
	General Gas Service - Large-2	G-25(L2)													
	Basic Service Charge per Month														
16	Sales		4,848		$ 470.00		$ 2,278,560		$ 2,278,560		$ 2,278,560	$ 787,200	$ 1,491,360	189.5%	16
17	Transportation		288		470.00		135,360		135,360		135,360	34,560	100,800	291.7%	17
	Delivery Charge per Therm														
18	Sales-All Usage			33,135,165		$ 0.26989		$ 8,942,850	8,942,850	$ 23,483,885	32,426,735	33,120,916	(694,181)	-2.1%	18
19	Transportation-All Usage			2,735,757		0.26989		738,353	738,353	0	738,353	795,668	(57,315)	-7.2%	19
20	Total Large General Gas Service		5,136	35,870,922			2,413,920	9,681,203	12,095,123	23,483,885	35,579,008	34,738,344	840,664	2.4%	20
	General Gas Service - Transportation Eligible (TE)	G-25(TE)													
	Basic Service Charge per Month														
21	Sales		1,308		$ 950.00		$ 1,242,600		$ 1,242,600		$ 1,242,600	$ 1,242,600	$ 0	0.0%	21
22	Transportation		1,020		950.00		969,000		969,000		969,000	969,000	0	0.0%	22
	Demand Charge per Month														
23	Sales			4,702,698	0.077288			$ 4,361,545	4,361,545		4,361,545	3,517,994	843,551	24.0%	23
24	Transportation			6,735,792	0.077288			$ 6,247,151	6,247,151		6,247,151	5,038,911	1,208,240	24.0%	24
	Delivery Charge per Therm														
25	Sales-All Usage			36,741,268		$ 0.10350		3,802,721	3,802,721	$ 26,039,639	29,842,360	29,998,878	(156,518)	-0.5%	25
26	Transportation-All Usage			64,605,187		0.10350		6,686,637	6,686,637	0	6,686,637	6,961,855	(275,218)	-4.0%	26
27	Total Transportation Eligible General		2,328	101,346,455			$ 2,211,600	$ 21,098,054	$ 23,309,654	$ 26,039,639	$ 49,349,293	$ 47,729,238	$ 1,620,055	3.4%	27
28	Total General Gas Service		479,319	283,891,729			$ 24,959,553	$ 90,331,336	$ 115,290,889	$ 151,938,477	$ 267,229,366	$ 259,215,936	$ 8,013,430	3.1%	28

[1] Rates to recover proposed margin per Sch H-2, Sh 9-10.
[2] Gas cost effective June 28, 2010.
[3] Sch H-2, Sh 5-8.

SOUTHWEST GAS CORPORATION
ARIZONA
PRESENT AND PROPOSED REVENUES BY RATE COMPONENT
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Proposed Schedule Number	Billing Determinants: Number of Bills	Billing Determinants: Sales (Therms)	Basic Service Charge [1]	Delivery Charge [1]	Revenue at Proposed Rates: Basic Service Charge	Revenue at Proposed Rates: Delivery Charge	Revenue at Proposed Rates: Total Margin	Revenue at Proposed Rates: Gas Cost [2]	Revenue at Proposed Rates: Total Revenue	Revenue at Present Rates [3]	Increase / Decrease: Dollars	Increase / Decrease: Percent	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	
	Air Conditioning Gas Service	G-40													
	Basic Service Charge per Month														
1	Sales - With Other Service - No BSC		36		$ 0.00		$ 0		$ 0		$ 0	$ 0	$ 0	0.0%	1
2	Sales-General Service - Small		184		27.50		5,060		5,060		5,060	$ 5,060	0	0.0%	2
3	Sales-General Service - Medium		0		43.50		0		0		0	$ 0	0	0.0%	3
4	Sales-General Service - Large 1		24		80.00		1,920		1,920		1,920	$ 3,840	(1,920)	-50.0%	4
5	Sales-Essential Agricultural		36		120.00		4,320		4,320		4,320	$ 4,320	0	0.0%	5
6	Transportation - With Other Service - No BSC		12		0.00		0		0		0	$ 0	0	0.0%	6
	Delivery Charge per Therm														
7	Sales-All Usage			359,940		$ 0.12297		$ 44,262	44,262	$ 255,100	299,362	294,729	4,633	1.6%	7
8	*Transportation-Usage*			266,305		0.12297		32,748	32,748	0	32,748	29,320	3,428	11.7%	8
9	Total Air Conditioning		292	626,245			$ 11,300	$ 77,010	$ 88,310	$ 255,100	$ 343,410	$ 337,269	$ 6,141	1.8%	9
	Street Lighting Gas Service	G-45													
	Delivery Charge per Therm														
10	All Usage		180	87,447		$ 0.75297		$ 65,845	$ 65,845	$ 61,976	$ 127,821	$ 115,362	$ 12,459	10.8%	10
11	Total Street Lighting Gas Service		180	87,447			$ 0	$ 65,845	$ 65,845	$ 61,976	$ 127,821	$ 115,362	$ 12,459	10.8%	11
	Gas Service for Compression on Customer's Premises	G-55													
	Basic Service Charge per Month														
12	Sales-Small		192		$ 27.50		$ 5,280		$ 5,280		$ 5,280	$ 5,280	$ 0	0.0%	12
13	Sales-Large		240		250.00		60,000		60,000		60,000	$ 60,000	0	0.0%	13
14	Sales-Residential		984		10.70		10,529		10,529		10,529	$ 10,529	0	0.0%	14
15	Transportation-Large		48		250.00		12,000		12,000		12,000	$ 12,000	0	0.0%	15
	Delivery Charge per Therm														
16	Sales-Small			101,442		$ 0.20232		$ 20,524	20,524	$ 71,895	92,419	90,842	1,577	1.7%	16
17	Sales-Large			1,244,594		0.20232		251,806	251,806	882,081	1,133,887	1,114,546	19,341	1.7%	17
18	Sales-Residential			35,148		0.20232		7,111	7,111	24,910	32,021	31,475	546	1.7%	18
19	Transportation-Large			2,751,372		0.20232		556,658	556,658	0	556,658	513,901	42,757	8.3%	19
20	Total CNG		1,464	4,132,556			$ 87,809	$ 836,099	$ 923,908	$ 978,886	$ 1,902,794	$ 1,838,573	$ 64,221	3.5%	20
	Electric Generation Gas Service	G-60													
	Basic Service Charge per Month														
21	Sales-General Service - Small		36		$ 27.50		$ 990		$ 990		$ 990	$ 990	$ 0	0.0%	21
22	Sales-General Service - Medium		24		43.50		1,044		1,044		1,044	$ 1,044	0	0.0%	22
23	Sales-General Service - Large-1		36		80.00		2,880		2,880		2,880	$ 5,760	(2,880)	-50.0%	23
24	Sales-General Service - TE		12		950.00		11,400		11,400		11,400	$ 11,400	0	0.0%	24
25	Sales-Essential Agricultural		12		120.00		1,440		1,440		1,440	$ 1,440	0	0.0%	25
26	Transportation - General Service - Small		24		27.50		660		660		660	$ 660	0	0.0%	26
27	Transportation - General Service - TE		72		950.00		68,400		68,400		68,400	$ 68,400	0	0.0%	27
	Delivery Charge per Therm														
28	Sales-All Usage			1,235,925		$ 0.14591		$ 180,334	180,334	$ 875,937	1,056,271	1,043,219	13,052	1.3%	28
29	Transportation-All Usage			20,137,894		0.14591		2,938,320	2,938,320	0	2,938,320	2,725,664	212,656	7.8%	29
30	Total Electric Generation		216	21,373,819			$ 86,814	$ 3,118,654	$ 3,205,468	$ 875,937	$ 4,081,405	$ 3,858,577	$ 222,828	5.8%	30

[1] Rates to recover proposed margin per Sch H-2, Sh 9-10.
[2] Gas cost effective June 28, 2010.
[3] Sch H-2, Sh 5-8.

SOUTHWEST GAS CORPORATION
ARIZONA
PRESENT AND PROPOSED REVENUES BY RATE COMPONENT
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Proposed Schedule Number	Billing Determinants: Number of Bills	Billing Determinants: Sales (Therms)	Basic Service Charge [1]	Delivery Charge [1]	Revenue at Proposed Rates: Basic Service Charge	Revenue at Proposed Rates: Delivery Charge	Revenue at Proposed Rates: Total Margin	Revenue at Proposed Rates: Gas Cost [2]	Revenue at Proposed Rates: Total Revenue	Revenue at Present Rates [3]	Increase / Decrease: Dollars	Increase / Decrease: Percent	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	
	Sm. Essential Agriculture User Gas Service	G-75													
	Basic Service Charge per Month														
1	Sales		587		$ 120.00		$ 70,440		$ 70,440		$ 70,440	$ 70,440	$ 0	0.0%	1
2	Transportation		24		120.00		2,880		2,880		2,880	$ 2,880	0	0.0%	2
	Delivery Charge per Therm														
3	Sales-All Usage			2,647,768		$ 0.26423		$ 699,620	699,620	$ 1,876,553	2,576,173	2,522,502	53,671	2.1%	3
4	Transportation-All Usage			32,852		0.26423		8,680	8,680	0	8,680	8,015	665	8.3%	4
5	Total Small Essential Agricultural		611	2,680,620			$ 73,320	$ 708,300	$ 781,620	$ 1,876,553	$ 2,658,173	$ 2,603,837	$ 54,336	2.1%	5
	Natural Gas Engine Gas Service	G-80													
	Basic Service Charge per Month														
6	Sales-Off-Peak Season		1,951		$ 0.00		$ 0		$ 0		$ 0	$ 0	$ 0	0.0%	6
7	Sales-Peak Season		1,951		125.00		243,813		243,813		243,813	243,813	0	0.0%	7
8	Transportation-Off-Peak Season		48		0.00		0		0		0	-	0	0.0%	8
9	Transportation-Peak Season		48		125.00		6,000		6,000		6,000	6,000	0	0.0%	9
	Delivery Charge per Therm														
10	Sales-All Usage			7,272,353		$ 0.19069		$ 1,386,765	1,386,765	$ 3,661,266	5,048,031	5,048,031	0	0.0%	10
11	Transportation-All Usage			405,928		0.19069		77,406	77,406	0	77,406	77,406	0	0.0%	11
12	Total Natural Gas Engine		3,997	7,678,281			$ 249,813	$ 1,464,171	$ 1,713,984	$ 3,661,266	$ 5,375,250	$ 5,375,250	$ 0	0.0%	12
13	Total Tariff Sales		11,738,261	601,273,772			144,139,787	321,076,536	465,216,323	358,661,760	823,878,083	750,689,375	73,188,708	9.7%	13
14	Optional Gas Service	G-30	432	41,631,695					$ 4,024,536	$ 20,497,955	$ 24,522,491	$ 24,522,491	$ 0	0.0%	14
15	Special Contract Service	B-1	209	35,199,807					$ 2,763,591		$ 2,763,591	$ 2,763,591	$ 0	0.0%	15
16	Other Operating Revenues						$ 12,096,356		$ 12,096,356		$ 12,096,356	$ 12,096,356	$ 0	0.0%	16
17	Total		11,738,902	678,105,274			$ 156,236,143	$ 321,076,536	$ 484,100,806	$ 379,159,715	$ 863,260,521	$ 790,071,813	$ 73,188,708	9.26%	17
18	Total Revenue Requirement								484,101,536						18
19	Over/(Under)								$ (730)						19

[1] Rates to recover proposed margin per Sch H-2, Sh 9-10.
[2] Gas cost effective June 28, 2010.
[3] Sch H-2, Sh 5-8.

SOUTHWEST GAS CORPORATION
ARIZONA
REVENUES AT PRESENT RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Schedule Number	Billing Determinants: Number of Bills	Billing Determinants: Sales (Therms)	Present Margin Rates [1]: Basic Service Charge	Present Margin Rates [1]: Delivery Charge	Margin at Present Rates: Basic Service Charge	Margin at Present Rates: Delivery Charge	Margin at Present Rates: Total Margin	Revenue at Present Rates: Gas Cost [2]	Revenue at Present Rates: Total Revenue	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	
	Single-Family Residential Gas Service	G-5										
1	Basic Service Charge per Month		10,418,131		$ 10.70		$ 111,474,002		$ 111,474,002		$ 111,474,002	1
	Delivery Charge per Therm											
2	Sales-All Usage			261,822,441		$ 0.57070		$ 149,422,067	149,422,067	$ 185,561,419	334,983,486	2
3	Total Single-Family Residential		10,418,131	261,822,441			$ 111,474,002	$ 149,422,067	$ 260,896,069	$ 185,561,419	$ 446,457,488	3
	Multi-Family Residential Gas Service	G-6										
4	Basic Service Charge per Month		378,334		$ 9.70		$ 3,669,840		$ 3,669,840		$ 3,669,840	4
	Delivery Charge per Therm											
5	Sales-All Usage			5,862,713		$ 0.55343		$ 3,244,601	3,244,601	$ 4,155,081	7,399,682	5
6	Total Multi-Family Residential		378,334	5,862,713			$ 3,669,840	$ 3,244,601	$ 6,914,441	$ 4,155,081	$ 11,069,522	6
	Single-Family Low Income Residential	G-10										
7	Basic Service Charge		415,096		$ 7.50		$ 3,113,220		$ 3,113,220		$ 3,113,220	7
	Delivery Charge per Therm											
	Summer (May - October)											
8	Sales-All Usage			2,301,968		$ 0.55343		$ 1,273,978	1,273,978	$ 1,631,474	2,905,452	8
	Winter (November - April)											
9	Sales-First 150 Therms per month			8,193,230		0.55343		4,534,379	4,534,379	5,806,788	10,341,167	9
10	Sales-Over 150 Therms per month			0		0.55343		0	0	0	0	10
11	Total Single-Family Low-Income		415,096	10,495,198			$ 3,113,220	$ 5,808,357	$ 8,921,577	$ 7,438,262	$ 16,359,839	11
	Multi-Family Low Income Residential	G-11										
12	Basic Service Charge per Month		37,729		$ 7.50		$ 282,968		$ 282,968		$ 282,968	12
	Delivery Charge per Therm											
	Summer (May - October)											
13	Sales-All Usage			210,209		$ 0.55343		$ 116,336	116,336	$ 148,981	265,317	13
	Winter (November - April)											
14	Sales-First 150 Therms per month			500,236		0.55343		276,846	276,846	354,532	631,378	14
15	Sales-Over 150 Therms per month			0		0.55343		0	0	0	0	15
16	Total Multi-Family Low-Income		37,729	710,445			$ 282,968	$ 393,182	$ 676,150	$ 503,513	$ 1,179,663	16
	Special Residential Gas Service for Air Conditioning	G-15										
17	Basic Service Charge per Month		1,080		$ 10.70		$ 11,556		$ 11,556		$ 11,556	17
	Delivery Charge per Therm											
	Summer (May - October)											
18	Sales-First 15 Therms per month			23,038		$ 0.57070		$ 13,148	13,148	$ 16,328	29,476	18
19	Sales-Over 15 Therms per month			12,945		0.28860		3,736	3,736	9,175	12,911	19
	Winter (November - April)											
20	Sales--All Usage			53,236		0.57070		30,382	30,382	37,730	68,112	20
21	Total Special Residential		1,080	89,219			$ 11,556	$ 47,266	$ 58,822	$ 63,233	$ 122,055	21
22	Total Residential Gas Service		11,250,370	278,980,016			$ 118,551,586	$ 158,915,473	$ 277,467,059	$ 197,721,508	$ 475,188,567	22
	Master Metered Mobile Home Park (MMMHP) Gas Service	G-20										
23	Basic Service Charge per Month		1,812		$ 66.00		$ 119,592		$ 119,592		$ 119,592	23
	Delivery Charge per Therm											
24	Sales--All Usage			1,823,059		$ 0.40830		$ 744,355	744,355	$ 1,292,057	2,036,412	24
25	Total MMMHP Gas Service		1,812	1,823,059			$ 119,592	$ 744,355	$ 863,947	$ 1,292,057	$ 2,156,004	25

[1] Present margin rates effective December 1, 2008.
[2] Gas cost effective June 28, 2010.

SOUTHWEST GAS CORPORATION
ARIZONA
REVENUES AT PRESENT RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description (a)	Schedule Number (b)	Billing Determinants: Number of Bills (c)	Billing Determinants: Sales (Therms) (d)	Present Margin Rates [1]: Basic Service Charge (e)	Present Margin Rates [1]: Delivery Charge (f)	Margin at Present Rates: Basic Service Charge (g)	Margin at Present Rates: Delivery Charge (h)	Margin at Present Rates: Total Margin (i)	Revenue at Present Rates: Gas Cost [2] (j)	Revenue at Present Rates: Total Revenue (k)	Line No.
	General Gas Service - Small	G-25(S)										
	Basic Service Charge Per Month											
1	Sales		205,557		$ 27.50		$ 5,652,818		$ 5,652,818		$ 5,652,818	1
2	Transportation		36		27.50		990		990		990	2
	Delivery Charge per Therm											
3	Sales--All Usage			3,951,454		$ 0.57059		$ 2,254,660	2,254,660	$ 2,800,514	5,055,174	3
4	Transportation--All Usage			607		0.57059		346	346	0	346	4
5	Total Small General		205,593	3,952,061			$ 5,653,808	$ 2,255,006	$ 7,908,814	$ 2,800,514	$ 10,709,328	5
	General Gas Service - Medium	G-25(M)										
	Basic Service Charge Per Month											
6	Sales		181,042		$ 43.50		$ 7,875,327		$ 7,875,327		$ 7,875,327	6
7	Transportation		348		43.50		15,138		15,138		15,138	7
	Delivery Charge per Therm											
8	Sales--All Usage			38,541,245		$ 0.37996		$ 14,644,131	14,644,131	$ 27,315,337	41,959,468	8
9	Transportation--All Usage			117,316		0.37996		44,575	44,575	0	44,575	9
10	Total Medium General		181,390	38,658,561			$ 7,890,465	$ 14,688,706	$ 22,579,171	$ 27,315,337	$ 49,894,508	10
	General Gas Service - Large	G-25(L)										
	Basic Service Charge per Month											
11	Sales		83,792		$ 160.00		$ 13,406,720		$ 13,406,720		$ 13,406,720	11
12	Sales moving to L-2		4,920		$ 160.00		$ 787,200		$ 787,200		$ 787,200	12
13	Transportation		1,080		160.00		172,800		172,800		172,800	13
14	Transportation moving to L-2		216		160.00		34,560		34,560		34,560	14
	Delivery Charge per Therm											
15	Sales--All Usage			102,012,194		$ 0.29084		$ 29,669,227	29,669,227	$ 72,299,102	101,968,329	15
16	Sales Moving to L-2--All Usage			33,135,165		$ 0.29084		$ 9,637,031	9,637,031	$ 23,483,885	33,120,916	16
17	Transportation--All Usage			2,051,536		0.29084		596,669	596,669	0	596,669	17
18	Transportation moving to L-2--All Usage			2,735,757		0.29084		795,668	795,668	0	795,668	18
19	Total Large General Gas Service		90,008	139,934,652			14,401,280	40,698,595	55,099,875	95,782,987	150,882,862	19
	General Gas Service - Transportation Eligible	G-25(TE)										
	Basic Service Charge per Month											
20	Sales		1,308		$ 950.00		$ 1,242,600		$ 1,242,600		$ 1,242,600	20
21	Transportation		1,020		950.00		969,000		969,000		969,000	21
	Demand Charge per Month											
22	Sales			4,702,698	0.062340		$ 3,517,994		3,517,994		3,517,994	22
23	Transportation			6,735,792	0.062340		$ 5,038,911		5,038,911		5,038,911	23
	Delivery Charge per Therm											
24	Sales--All Usage			36,741,268		$ 0.10776		3,959,239	3,959,239	$ 26,039,639	29,998,878	24
25	Transportation--All Usage			64,605,187		0.10776		6,961,855	6,961,855	0	6,961,855	25
26	Total Transportation Eligible General		2,328	101,346,455			$ 10,768,505	$ 10,921,094	$ 21,689,599	$ 26,039,639	$ 47,729,238	26
27	Total General Gas Service		479,319	283,891,729			$ 38,714,058	$ 68,563,401	$ 107,277,459	$ 151,938,477	$ 259,215,936	27

[1] Present margin rates effective December 1, 2008.
[2] Gas cost effective June 28, 2010.

SOUTHWEST GAS CORPORATION
ARIZONA
REVENUES AT PRESENT RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

			Billing Determinants		Present Margin Rates [1]		Margin at Present Rates			Revenue at Present Rates		
Line No.	Description	Schedule Number	Number of Bills	Sales (Therms)	Basic Service Charge	Delivery Charge	Basic Service Charge	Delivery Charge	Total Margin	Gas Cost [2]	Total Revenue	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	
	Air Conditioning Gas Service	G-40										
	Basic Service Charge per Month											
1	Sales - With Other Service - No BSC		36		$ 0.00		$ 0		$ 0		$ 0	1
2	Sales-General Service - Small		184		27.50		5,060		5,060		5,060	2
3	Sales-General Service - Medium		0		43.50		0		0		0	3
4	Sales-General Service - Large		24		160.00		3,840		3,840		3,840	4
5	Sales-Essential Agricultural		36		120.00		4,320		4,320		4,320	5
6	Transportation - With Other Service - No BSC		12		0.00		0		0		0	6
	Delivery Charge per Therm											
7	Sales--All Usage			359,940		$ 0.11010		$ 39,629	39,629	$ 255,100	294,729	7
8	Transportation--All Usage			266,305		0.11010		29,320	29,320	0	29,320	8
9	Total Air Conditioning		292	626,245			$ 13,220	$ 68,949	$ 82,169	$ 255,100	$ 337,269	9
	Street Lighting Gas Service	G-45										
	Delivery Charge per Therm of Rated Capacity											
10	All Usage		180	87,447		$ 0.61050		$ 53,386	$ 53,386	$ 61,976	$ 115,362	10
11	Total Street Lighting		180	87,447			$ 0	$ 53,386	$ 53,386	$ 61,976	$ 115,362	11
	Gas Service for Compression on Customer's Premises	G-55										
	Basic Service Charge per Month											
12	Sales-Small		192		$ 27.50		$ 5,280		$ 5,280		$ 5,280	12
13	Sales-Large		240		250.00		60,000		60,000		60,000	13
14	Sales-Residential		984		10.70		10,529		10,529		10,529	14
15	Transportation-Large		48		250.00		12,000		12,000		12,000	15
	Delivery Charge per Therm											
16	Sales-Small All Usage			101,442		$ 0.18678		$ 18,947	18,947	$ 71,895	90,842	16
17	Sales-Large All Usage			1,244,594		0.18678		232,465	232,465	882,081	1,114,546	17
18	Sales-Residential All Usage			35,148		0.18678		6,565	6,565	24,910	31,475	18
19	Transportation-Large All Usage			2,751,372		0.18678		513,901	513,901	0	513,901	19
20	Total CNG		1,464	4,132,556			$ 87,809	$ 771,878	$ 859,687	$ 978,886	$ 1,838,573	20
	Electric Generation Gas Service	G-60										
	Basic Service Charge per Month											
21	Sales-General Service - Small		36		$ 27.50		$ 990		$ 990		$ 990	21
22	Sales-General Service - Medium		24		43.50		1,044		1,044		1,044	22
23	Sales-General Service - Large		36		160.00		5,760		5,760		5,760	23
24	Sales-General Service - TE		12		950.00		11,400		11,400		11,400	24
25	Sales-Essential Agricultural		12		120.00		1,440		1,440		1,440	25
26	Transportation - General Service - Small		24		27.50		660		660		660	26
27	Transportation - General Service - TE		72		950.00		68,400		68,400		68,400	27
	Delivery Charge per Therm											
28	Sales--All Usage			1,235,925		$ 0.13535		$ 167,282	167,282	$ 875,937	1,043,219	28
29	Transportation--All Usage			20,137,894		0.13535		2,725,664	2,725,664	0	2,725,664	29
30	Total Electric Generation		216	21,373,819			$ 89,694	$ 2,892,946	$ 2,982,640	$ 875,937	$ 3,858,577	30

[1] Present margin rates effective December 1, 2008.
[2] Gas cost effective June 28, 2010.

SOUTHWEST GAS CORPORATION
ARIZONA
REVENUES AT PRESENT RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description (a)	Schedule Number (b)	Billing Determinants: Number of Bills (c)	Billing Determinants: Sales (Therms) (d)	Present Margin Rates [1]: Basic Service Charge (e)	Present Margin Rates [1]: Delivery Charge (f)	Margin at Present Rates: Basic Service Charge (g)	Margin at Present Rates: Delivery Charge (h)	Margin at Present Rates: Total Margin (i)	Revenue at Present Rates: Gas Cost [2] (j)	Revenue at Present Rates: Total Revenue (k)	Line No.
	Small Essential Agriculture User Gas Service	G-75										
	Basic Service Charge per Month											
1	Sales		587		$ 120.00		$ 70,440		$ 70,440		$ 70,440	1
2	Transportation		24		120.00		2,880		2,880		2,880	2
	Delivery Charge per Therm											
3	Sales--All Usage			2,647,768		$ 0.24396		$ 645,949	645,949	$ 1,876,553	2,522,502	3
4	Transportation--All Usage			32,852		0.24396		8,015	8,015	0	8,015	4
5	Total Small Essential Agricultural		611	2,680,620			$ 73,320	$ 653,964	$ 727,284	$ 1,876,553	$ 2,603,837	5
	Natural Gas Engine Gas Service	G-80										
	Basic Service Charge per Month											
6	Sales-Off-Peak Season		1,951		$ 0.00		$ 0		$ 0		$ 0	6
7	Sales-Peak Season		1,951		125.00		243,813		243,813		243,813	7
8	Transportation-Off-Peak Season		48		0.00		0		0		0	8
9	Transportation -Peak Season		48		125.00		6,000		6,000		6,000	9
	Delivery Charge per Therm											
10	Sales--All Usage			7,272,353		$ 0.19069		$ 1,386,765	1,386,765	$ 3,661,266	5,048,031	10
11	Transportation--All Usage			405,928		0.19069		77,406	77,406	0	77,406	11
12	Total Natural Gas Engine		3,997	7,678,281			$ 249,813	$ 1,464,171	$ 1,713,984	$ 3,661,266	$ 5,375,250	12
13	Total Tariff Sales		11,738,261	601,273,772			157,899,092	234,128,523	392,027,615	358,661,760	750,689,375	13
14	Optional Gas Service	G-30	432	41,631,695					$ 4,024,536	$ 20,497,955	$ 24,522,491	14
15	Special Contract Service	B-1	209	35,199,807					$ 2,763,591		$ 2,763,591	15
16	Other Operating Revenues								$ 12,096,356		$ 12,096,356	16
17	Total		11,738,902	678,105,274			$ 157,899,092	$ 234,128,523	$ 410,912,098	$ 379,159,715	$ 790,071,813	17

[1] Present margin rates effective December 1, 2008.
[2] Gas cost effective June 28, 2010.

SOUTHWEST GAS CORPORATION
ARIZONA
SUMMARY OF MARGIN SPREAD ALLOCATION TO CLASSES
TEST YEAR ENDED JUNE 30, 2010

Line No.	Description (a)	Total (b)	Single-Family Residential (c)	Multi-Family Residential (d)	MMMHP (e)	General Gas Service: Small (f)	General Gas Service: Medium (g)	General Gas Service: Large-1 (h)	General Gas Service: Transportation Eligible (i)	General Gas Service: Large-2 (j)	Line No.
1	Margin at Requested System Rate of Return [1]	$ 484,101,536	$ 364,095,613	$ 10,537,335	$ 577,334	$ 6,784,329	$ 21,808,084	$ 27,985,474	$ 17,062,961	$ 11,189,484	1
2	Margin at Present Rates [2]	$ 410,912,098	$ 269,876,468	$ 7,590,591	$ 863,947	$ 7,908,814	$ 22,579,171	$ 43,845,416	$ 21,689,599	$ 11,254,459	2
3	Difference	$ 73,189,438									3
4	System Average Increase Excluding B-1, G-30 and Other Revenues	18.67%									4
5	Maximum Margin Increase Capped at 1.25x Fair Value System ROR if Class less than requested fair value ROR	23.34%	23.34%	23.34%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5
6	Calculated Proposed Increase to Classes not at Fair Value System ROR [3]	$ 64,764,460	$ 62,980,599	$ 1,771,403	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	6
7	Present Margin for Classes not Receiving first increase and those not 3x Proposed Fair Value System ROR	$ 112,793,186	$ 0	$ 0	$ 863,947	$ 7,908,814	$ 22,579,171	$ 43,845,416	$ 21,689,599	$ 11,254,459	7
8	Remaining Allocation of Deficiency [4]	$ 8,424,978	$ 0	$ 0	$ 64,532	$ 590,741	$ 1,686,529	$ 3,274,991	$ 1,620,084	$ 840,641	8
9	Calculated Margin Requirement	$ 484,101,536	$ 332,857,067	$ 9,361,994	$ 928,479	$ 8,499,555	$ 24,265,700	$ 47,120,407	$ 23,309,683	$ 12,095,100	9
10	Proposed Margin Requirement	$ 484,101,536	$ 332,857,067	$ 9,361,994	$ 928,479	$ 8,499,555	$ 24,265,700	$ 47,120,407	$ 23,309,683	$ 12,095,100	10
11	Proposed Percentage Increase in Margin	17.81%	23.34%	23.34%	7.47%	7.47%	7.47%	7.47%	7.47%	7.47%	11
12	Rate of Return on Rate Base at Present Rates [5]	4.47%	2.32%	1.50%	15.66%	10.98%	8.16%	17.33%	12.37%	7.64%	12
13	Rate of Return on Rate Base at Proposed Rates [6]	7.50%	5.77%	5.09%	17.40%	12.69%	9.45%	19.26%	13.99%	8.78%	13

[1] Workpaper G-1, Sh 1-2.
[2] Sch H-2, Sh 5-8.
[3] Percentage increase in margin capped at 1.25 times the system average percent increase in margin.
[4] Remaining deficiency spread to classes whose return on rate base is less than three times the requested system average ROR.
[5] Sch G-2, Sh 1-2.
[6] Sch G-2, Sh 3-4.

SOUTHWEST GAS CORPORATION
ARIZONA
SUMMARY OF MARGIN SPREAD ALLOCATION TO CLASSES
TEST YEAR ENDED JUNE 30, 2010

Line No.	Description (a)	Total (b)	Air Conditioning (c)	Street Lighting (d)	CNG (e)	Electric Generation (f)	Small Essential Agriculture (g)	Natural Gas Engines (h)	Optional & Bypass Transp. (i)	Other Revenue (j)	Line No.
1	Margin at Requested System Rate of Return [1]	$ 484,101,536	$ 55,066	$ 83,496	$ 654,854	$ 2,762,039	$ 622,355	$ 998,630	$ 6,788,127	$ 12,096,356	1
2	Margin at Present Rates [2]	$ 410,912,098	$ 82,169	$ 53,386	$ 859,687	$ 2,982,640	$ 727,284	$ 1,713,984	$ 6,788,127	$ 12,096,356	2
3	Difference	$ 73,189,438									3
4	System Average Increase Excluding B-1, G-30 and Other Revenues	18.67%									4
5	Maximum Margin Increase Capped at 1.25x Fair Value System ROR if Class less than requested fair value ROR	23.34%	0.00%	23.34%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5
6	Calculated Proposed Increase to Classes not at Fair Value System ROR [3]	$ 64,764,460	$ 0	$ 12,459	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	6
7	Present Margin for Classes not Receiving first increase and those not 3x Proposed Fair Value System ROR	$ 112,793,186	$ 82,169	$ 0	$ 859,687	$ 2,982,640	$ 727,284	$ 0	$ 0	$ 0	7
8	Remaining Allocation of Deficiency [4]	$ 8,424,978	$ 6,138	$ 0	$ 64,213	$ 222,785	$ 54,324	$ 0	$ 0	$ 0	8
9	Calculated Margin Requirement	$ 484,101,536	$ 88,307	$ 65,845	$ 923,900	$ 3,205,425	$ 781,608	$ 1,713,984	$ 6,788,127	$ 12,096,356	9
10	Proposed Margin Requirement	$ 484,101,536	$ 88,307	$ 65,845	$ 923,900	$ 3,205,425	$ 781,608	$ 1,713,984	$ 6,788,127	$ 12,096,356	10
11	Proposed Percentage Increase in Margin	17.81%	7.47%	23.34%	7.47%	7.47%	7.47%	0.00%	0.00%	0.00%	11
12	Rate of Return on Rate Base at Present Rates [5]	4.47%	16.08%	1.78%	12.71%	8.87%	10.36%	23.95%	n/a	n/a	12
13	Rate of Return on Rate Base at Proposed Rates [6]	7.50%	17.93%	4.12%	14.26%	10.15%	11.75%	23.84%	n/a	n/a	13

[1] Workpaper G-1, Sh 1-2.
[2] Sch H-2, Sh 5-8.
[3] Percentage increase in margin capped at 1.25 times the system average percent increase in margin.
[4] Remaining deficiency spread to classes whose return on rate base is less than three times the requested system average ROR.
[5] Sch G-2, Sh 1-2.
[6] Sch G-2, Sh 3-4.

SOUTHWEST GAS CORPORATION
ARIZONA
SUMMARY OF BILLS AND VOLUMES WITH POST TEST PERIOD RATEMAKING ADJUSTMENTS
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

			Annual Number of Bills			Annual Sales Volumes (Therms)			
Line No.	Description (a)	Schedule Number (b)	Test Period as Adjusted at 6/30/2010 (c)	Ratemaking Adjustments [1] (d)	Post Test Period (e)	Test Period as Adjusted at 6/30/2010 (f)	Ratemaking Adjustments [1] (g)	Post Test Period (h)	Line No.
1	Residential Gas Service	G-5	10,422,343	(4,212)	10,418,131	261,884,645	(62,204)	261,822,441	1
2	Multi Family Residential Gas Service	G-6	374,122	4,212	378,334	5,800,509	62,204	5,862,713	2
3	Low Income Residential Gas Service	G-10	415,096	-	415,096	10,495,198	-	10,495,198	3
4	Low Income Multi Family Residential	G-11	37,729	-	37,729	710,445	-	710,445	4
5	Special Residential Gas Service	G-15	1,080	-	1,080	89,219	-	89,219	5
	Master Metered Mobile Home Park								
6	Gas Service	G-20	1,812	-	1,812	1,823,059	-	1,823,059	6
	General Gas Service	G-25							
7	Small		206,130	(537)	205,593	4,475,732	(523,671)	3,952,061	7
8	Medium		184,812	(3,422)	181,390	41,340,587	(2,682,026)	38,658,561	8
9	Large-1		85,736	(864)	84,872	137,863,094	(33,799,364)	104,063,730	9
10	Large-2		-	5,136	5,136	-	35,870,922	35,870,922	10
11	Transportation Eligible		2,136	192	2,328	94,182,480	7,163,975	101,346,455	11
12	Optional Gas Service	G-30	432	-	432	41,631,695	-	41,631,695	12
13	Air Conditioning Gas Service	G-40	292	-	292	626,245	-	626,245	13
14	Street Lighting Gas Service	G-45	180	-	180	87,447	-	87,447	14
	Gas Service for Compression on								
	Customer's Premises	G-55							
15	Residential		984	-	984	35,148	-	35,148	15
16	Small		192	-	192	101,442	-	101,442	16
17	Large		288	-	288	3,995,966	-	3,995,966	17
18	Electric Generation Gas Service	G-60	216	-	216	21,373,819	-	21,373,819	18
	Small Essential Agriculture User								
19	Gas Service	G-75	1,116	(505)	611	8,710,456	(6,029,836)	2,680,620	19
20	Natural Gas Engine Gas Service	G-80	3,997	-	3,997	7,678,281	-	7,678,281	20
21	Total Gas Sales		11,738,693	-	11,738,693	642,905,467	-	642,905,467	21
22	Full Margin Transportation Service	T-1		-	-		-	-	22
23	Special Contract Service	B-1	209	-	209	35,199,807	-	35,199,807	23
24	Other Operating Revenue								24
25	Total Arizona		11,738,902	-	11,738,902	678,105,274	-	678,105,274	25

[1] Move customers and volumes to proper schedules at proposed rates.

SOUTHWEST GAS CORPORATION
ARIZONA
RATE SUMMARY AT PRESENT AND PROPOSED RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description (a)	Schedule (b)	Present Rates: Delivery Charge [1] (c)	Present Rates: Rate Adjustment [2] (d)	Present Rates: Gas Cost [2] (e)	Present Rates: Currently Effective Tariff Rate (f)	Description (g)	Schedule (h)	Proposed Rates: Delivery Charge [3] (i)	Proposed Rates: Rate Adjustment [2] (j)	Proposed Rates: Gas Cost [2] (k)	Proposed Rates: Effective Tariff Rate (l)	Line No.
	Single-Family Residential Gas Service	G-5					Single-Family Residential Gas Service	G-5					
1	Basic Service Charge per Month		$ 10.70			$ 10.70	Basic Service Charge per Month		$ 10.70			$ 10.70	1
	Delivery Charge per Therm						Delivery Charge per Therm						
2	All Usage		$ 0.57070	$(0.06400)	$0.70873	$ 1.21543	All Usage		$ 0.80176	$(0.06400)	$0.70873	$ 1.44649	2
	Multi-Family Residential Gas Service	G-6					Multi-Family Residential Gas Service	G-6					
3	Basic Service Charge per Month		$ 9.70			$ 9.70	Basic Service Charge per Month		$ 9.70			$ 9.70	3
	Delivery Charge per Therm						Delivery Charge per Therm						
4	All Usage		$ 0.55343	$(0.06400)	$0.70873	$ 1.19816	All Usage		$ 0.80176	$(0.06400)	$0.70873	$ 1.44649	4
	Single-Family Low Income Residential Gas Service	G-10					Single-Family Low Income Residential Gas Service	G-10					
5	Basic Service Charge per Month		$ 7.50			$ 7.50	Basic Service Charge per Month		$ 7.50			$ 7.50	5
	Delivery Charge per Therm						Delivery Charge per Therm						
	Summer (May - October)						Summer (May - October)						
6	All Usage		$ 0.55343	$(0.07622)	$0.70873	$ 1.18594	All Usage		$ 0.80176	$(0.07622)	$0.70873	$ 1.43427	6
	Winter (November - April)						Winter (November - April)						
7	First 150 Therms		$ 0.31624	$(0.07622)	$0.70873	$ 0.94875	All Usage		$ 0.51491	$(0.07622)	$0.70873	$ 1.14742	7
8	Over 150 Therms		0.55343	$(0.07622)	$0.70873	1.18594							8
	Multi-Family Low Income Residential Gas Service	G-11					Multi-Family Low Income Residential Gas Service	G-11					
9	Basic Service Charge per Month		$ 7.50			$ 7.50	Basic Service Charge per Month		$ 7.50			$ 7.50	9
	Delivery Charge per Therm						Delivery Charge per Therm						
	Summer (May - October)						Summer (May - October)						
10	All Usage		$ 0.55343	$(0.07622)	$0.70873	$ 1.18594	All Usage		$ 0.80176	$(0.07622)	$0.70873	$ 1.43427	10
	Winter (November - April)						Winter (November - April)						
11	First 150 Therms		$ 0.31624	$(0.07622)	$0.70873	$ 0.94875	All Usage		$ 0.51491	$(0.07622)	$0.70873	$ 1.14742	11
12	Over 150 Therms		0.55343	$(0.07622)	$0.70873	1.18594							12
	Special Residential Gas Service for Air Conditioning	G-15					Special Residential Gas Service for Air Conditioning	G-15					
13	Basic Service Charge per Month		$ 10.70			$ 10.70	Basic Service Charge per Month		$ 10.70			$ 10.70	13
	Delivery Charge per Therm						Delivery Charge per Therm						
	Summer (May - October)						Summer (May - October)						
14	First 15 Therms		$ 0.57070	$(0.07622)	$0.70873	$ 1.20321	First 15 Therms		$ 0.80176	$(0.07622)	$0.70873	$ 1.43427	14
15	Over 15 Therms		0.28860	$(0.07622)	$0.70873	0.92111	Over 15 Therms		0.12297	$(0.07622)	$0.70873	0.75548	15
	Winter (November - April)						Winter (November - April)						
16	All Usage		$ 0.57070	$(0.07622)	$0.70873	$ 1.20321	All Usage		$ 0.80176	$(0.07622)	$0.70873	$ 1.43427	16

[1] Delivery changes effective December 1, 2008.
[2] Rate Adjustment and Gas Cost effective June 28, 2010.
[3] Sch H-2, Sh 1-4.

SOUTHWEST GAS CORPORATION
ARIZONA
RATE SUMMARY AT PRESENT AND PROPOSED RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description	Schedule	Present Rates: Delivery Charge [1]	Present Rates: Rate Adjustment [2]	Present Rates: Gas Cost [2]	Present Rates: Currently Effective Tariff Rate	Description	Schedule	Proposed Rates: Delivery Charge [3]	Proposed Rates: Rate Adjustment [2]	Proposed Rates: Gas Cost [2]	Proposed Rates: Effective Tariff Rate	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	
	Master Metered Mobile Home Park Gas Service	G-20					Master Metered Mobile Home Park Gas Service	G-20					
1	Basic Service Charge per Month		$ 66.00			$ 66.00	Basic Service Charge per Month		$ 66.00			$ 66.00	1
	Delivery Charge per Therm						Delivery Charge per Therm						
2	All Usage		$ 0.40830	$ (0.06400)	$0.70873	$ 1.05303	All Usage		$ 0.44370	$ (0.06400)	$0.70873	$ 1.08843	2
	General Gas Service	G-25					General Gas Service	G-25					
	Basic Service Charge per Month						Basic Service Charge per Month						
3	Small		$ 27.50			$ 27.50	Small		$ 27.50			$ 27.50	3
4	Medium		43.50			43.50	Medium		43.50			43.50	4
5	Large		160.00			160.00	Large-1		80.00			80.00	5
6							Large-2		470.00			470.00	6
7	Transportation Eligible		950.00			950.00	Transportation Eligible		950.00			950.00	7
	Delivery Charge per Therm						Delivery Charge per Therm						
8	Small, All Usage		$ 0.57059	$ (0.07622)	$0.70873	$ 1.20310	Small, All Usage		$ 0.72007	$ (0.07622)	$0.70873	$ 1.35258	8
9	Medium, All Usge		0.37996	$ (0.07622)	$0.70873	1.01247	Medium, All Usge		0.42359	$ (0.07622)	$0.70873	1.05610	9
10	Large, All Usage		0.29084	$ (0.07622)	$0.70873	0.92335	Large-1, All Usage		0.38756	$ (0.07622)	$0.70873	1.02007	10
11							Large-2, All Usage		0.26989	$ (0.07622)	$0.70873	0.90240	11
12	Transportation Eligible		0.10776	$ (0.07622)	$0.70873	0.74027	Transportation Eligible		0.10350	$ (0.07622)	$0.70873	0.73601	12
	Demand Charge						Demand Charge						
13	Transportation Eligible		$0.062340			$0.062340	Transportation Eligible		$0.077288			$0.077288	13
	Optional Gas Service	G-30					Optional Gas Service	G-30					
14	Basic Service Charge per Month		As Specified on A.C.C. Sheet No. 27.				Basic Service Charge per Month		As Specified on A.C.C. Sheet No. 27.				14
	Delivery Charge per Therm						Delivery Charge per Therm						
15	All Usage		As Specified on A.C.C. Sheet No. 28.				All Usage		As Specified on A.C.C. Sheet No. 28.				15
	Air Conditioning Gas Service	G-40					Air Conditioning Gas Service	G-40					
16	Basic Service Charge per Month		As Specified on A.C.C. Sheet No. 32.				Basic Service Charge per Month		As Specified on A.C.C. Sheet No. 32.				16
	Delivery Charge per Therm						Delivery Charge per Therm						
17	All Usage		$ 0.11010	$ (0.07622)	$0.70873	$ 0.74261	All Usage		$ 0.12297	$ (0.07622)	$0.70873	$ 0.75548	17
	Street Lighting Gas Service	G-45					Street Lighting Gas Service	G-45					
	Delivery Charge per Therm						Delivery Charge per Therm						
	of Rated Capacity						of Rated Capacity						
18	All Usage		$ 0.61050	$ (0.07622)	$0.70873	$ 1.24301	All Usage		$ 0.75297	$ (0.07622)	$0.70873	$ 1.38548	18

[1] Delivery changes effective December 1, 2008.
[2] Rate Adjustment and Gas Cost effective June 28, 2010.
[3] Sch H-2, Sh 1-4.

SOUTHWEST GAS CORPORATION
ARIZONA
RATE SUMMARY AT PRESENT AND PROPOSED RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

			Present Rates						Proposed Rates				
Line No.	Description	Schedule	Delivery Charge [1]	Rate Adjustment [2]	Gas Cost [2]	Currently Effective Tariff Rate	Description	Schedule	Delivery Charge [3]	Rate Adjustment [2]	Gas Cost [2]	Effective Tariff Rate	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	
	Gas Service for Compression						Gas Service for Compression						
	on Customer's Premises	G-55					on Customer's Premises	G-55					
	Basic Service Charge per Month						Basic Service Charge per Month						
1	Small		$ 27.50			$ 27.50	Small		$ 27.50			$ 27.50	1
2	Large		250.00			250.00	Large		250.00			250.00	2
3	Residential		10.70			10.70	Residential		10.70			10.70	3
	Delivery Charge per Therm						Delivery Charge per Therm						
4	All Usage		$ 0.18678	$(0.07622)	$0.70873	$ 0.81929	All Usage		$ 0.20232	$(0.07622)	$0.70873	$ 0.83483	4
	Electric Generation Gas Service	G-60					Electric Generation Gas Service	G-60					
5	Basic Service Charge per Month		As Specified on A.C.C. Sheet No. 40.				Basic Service Charge per Month		As Specified on A.C.C. Sheet No. 40.				5
	Delivery Charge per Therm						Delivery Charge per Therm						
6	All Usage		$ 0.13535	$(0.07622)	$0.70873	$ 0.76786	All Usage		$ 0.14591	$(0.07622)	$0.70873	$ 0.77842	6
	Small Essential Agriculture User Gas Service	G-75					Small Essential Agriculture User Gas Service	G-75					
7	Basic Service Charge per Month		$ 120.00			$ 120.00	Basic Service Charge per Month		$ 120.00			$ 120.00	7
	Delivery Charge per Therm						Delivery Charge per Therm						
8	All Usage		$ 0.24396	$(0.07622)	$0.70873	$ 0.87647	All Usage		$ 0.26423	$(0.07622)	$0.70873	$ 0.89674	8
	Natural Gas Engine Gas Service	G-80					Natural Gas Engine Gas Service	G-80					
	Basic Service Charge per Month						Basic Service Charge per Month						
9	Off-Peak Season (October - March)		$ 0.00			$ 0.00	Off-Peak Season (October - March)		$ 0.00			$ 0.00	9
10	Peak Season (April - September)		125.00			125.00	Peak Season (April - September)		125.00			125.00	10
	Delivery Charge per Therm						Delivery Charge per Therm						
11	All Usage		$ 0.19069	$ 0.00378	$0.50345	$ 0.69792	All Usage		$ 0.19069	$ 0.00378	$0.50345	$ 0.69792	11

[1] Delivery changes effective December 1, 2008.
[2] Rate Adjustment and Gas Cost effective June 28, 2010.
[3] Sch H-2, Sh 1-4.

SOUTHWEST GAS CORPORATION
ARIZONA
TYPICAL BILL COMPARISON - PROPOSED VS. CURRENTLY EFFECTIVE RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010
SINGLE-FAMILY RESIDENTIAL GAS SERVICE

Line No.	Description	Monthly Consumption (Therms)	Monthly Bill: At Currently Effective Rates	Monthly Bill: At Proposed Tariff Rates	Increase/(Decrease): Dollars	Increase/(Decrease): Percent	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
	Summer Season Bills						
1	75 Percent Average Use	8	$ 20.42	$ 22.27	$ 1.85	9.06%	1
2	Average Summer Use [1]	11	24.07	26.61	2.54	10.55%	2
3	125 Percent Average Use	14	27.72	30.95	3.23	11.65%	3
	Winter Season Bills						
4	75 Percent Average Use	29	$ 45.95	$ 52.65	$ 6.70	14.58%	4
5	Average Winter Use [1]	39	58.10	67.11	9.01	15.51%	5
6	125 Percent Average Use	49	70.26	81.58	11.32	16.11%	6
7	Annual Average Use	25	41.24	47.05	5.81	14.09%	7

Effective Tariff Rates [2]	Amount
Basic Service Charge per Month	$ 10.70
Commodity Charge	
All Usage	$ 1.21543
Proposed Tariff Rates [3]	
Basic Service Charge per Month	$ 10.70
Commodity Charge	
All Usage	$ 1.44649

[1] Workpapers, Schedule H-2, Sheets 5-7.
[2] Rates effective June 28, 2010 including all adjustments.
[3] Schedule H-3, Sheets 1 - 3.

SOUTHWEST GAS CORPORATION
ARIZONA
TYPICAL BILL COMPARISON - PROPOSED VS. CURRENTLY EFFECTIVE RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010
MULTI-FAMILY RESIDENTIAL GAS SERVICE

Line No.	Description	Monthly Consumption (Therms)	Monthly Bill: At Currently Effective Rates	Monthly Bill: At Proposed Tariff Rates	Increase/(Decrease): Dollars	Increase/(Decrease): Percent	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
	Summer Season Bills						
1	75 Percent Average Use	8	$ 19.29	$ 21.27	$ 1.98	10.26%	1
2	Average Summer Use [1]	10	21.68	24.16	2.48	11.44%	2
3	125 Percent Average Use	13	25.28	28.50	3.22	12.74%	3
	Winter Season Bills						
4	75 Percent Average Use	16	$ 28.87	$ 32.84	$ 3.97	13.75%	4
5	Average Winter Use [1]	21	34.86	40.08	5.22	14.97%	5
6	125 Percent Average Use	26	40.85	47.31	6.46	15.81%	6
7	Annual Average Use	16	28.28	32.13	3.85	13.61%	7

Effective Tariff Rates [2]	Amount
Basic Service Charge per Month	$ 9.70
Commodity Charge	
All Usage	$ 1.19816

Proposed Tariff Rates [3]	
Basic Service Charge per Month	$ 9.70
Commodity Charge	
All Usage	$ 1.44649

[1] Workpapers, Schedule H-2, Sheets 5-7.
[2] Rates effective June 28, 2010 including all adjustments.
[3] Schedule H-3, Sheets 1 - 3.

SOUTHWEST GAS CORPORATION
ARIZONA
TYPICAL BILL COMPARISON - PROPOSED VS. CURRENTLY EFFECTIVE RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010
SINGLE-FAMILY LOW-INCOME RESIDENTIAL GAS SERVICE

Line No.	Description	Monthly Consumption (Therms)	Monthly Bill At Currently Effective Rates	Monthly Bill At Proposed Tariff Rates	Increase/(Decrease) Dollars	Increase/(Decrease) Percent	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
	Summer Season Bills						
1	75 Percent Average Use	8	$ 16.99	$ 18.97	$ 1.98	11.65%	1
2	Average Summer Use [1]	11	20.55	23.28	2.73	13.28%	2
3	125 Percent Average Use	14	24.10	27.58	3.48	14.44%	3
	Winter Season Bills						
4	75 Percent Average Use	29	$ 35.01	$ 40.78	$ 5.77	16.48%	4
5	Average Winter Use [1]	39	44.50	52.25	7.75	17.42%	5
6	125 Percent Average Use	49	53.99	63.72	9.73	18.02%	6
7	Annual Average Monthly Bill	25	32.53	37.77	5.24	16.11%	7

Effective Tariff Rates [2]	Amount
Basic Service Charge per Month	$ 7.50
Commodity Charge Summer	
All Usage	1.18594
Commodity Charge Winter	
First 150 Therms	$ 0.94875
Over 150 Therms	1.18594
Proposed Tariff Rates [3]	
Basic Service Charge per Month	$ 7.50
Commodity Charge Summer	
All Usage	$ 1.43427
Commodity Charge Winter	
All Usage	1.14742

[1] Workpapers, Schedule H-2, Sheets 5-7.
[2] Rates effective June 28, 2010 including all adjustments.
[3] Schedule H-3, Sheets 1 - 3.

SOUTHWEST GAS CORPORATION
ARIZONA
TYPICAL BILL COMPARISON - PROPOSED VS. CURRENTLY EFFECTIVE RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010
MULTIFAMILY LOW-INCOME RESIDENTIAL GAS SERVICE

Line No.	Description	Monthly Consumption (Therms)	At Currently Effective Rates	At Proposed Tariff Rates	Increase/(Decrease) Dollars	Increase/(Decrease) Percent	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
	Summer Season Bills						
1	75 Percent Average Use	8	$ 16.99	$ 18.97	$ 1.98	11.65%	1
2	Average Summer Use [1]	11	20.55	23.28	2.73	13.28%	2
3	125 Percent Average Use	14	24.10	27.58	3.48	14.44%	3
	Winter Season Bills						
4	75 Percent Average Use	20	$ 26.48	$ 30.45	$ 3.97	14.99%	4
5	Average Winter Use [1]	26	32.17	37.33	5.16	16.04%	5
6	125 Percent Average Use	33	38.81	45.36	6.55	16.88%	6
7	Annual Average Monthly Bill	19	26.36	30.31	3.94	14.97%	7

Effective Tariff Rates [2]	Amount
Basic Service Charge per Month	$ 7.50
Commodity Charge Summer	
All Usage	$ 1.18594
Commodity Charge Winter	
First 150 Therms	$ 0.94875
Over 150 Therms	1.18594

Proposed Tariff Rates [3]	
Basic Service Charge per Month	$ 7.50
Commodity Charge Summer	
All Usage	$ 1.43427
Commodity Charge Winter	
All Usage	$ 1.14742

[1] Workpapers, Schedule H-2, Sheets 5-7.
[2] Rates effective June 28, 2010 including all adjustments.
[3] Schedule H-3, Sheets 1 - 3.

SOUTHWEST GAS CORPORATION
ARIZONA
TYPICAL BILL COMPARISON - PROPOSED VS. CURRENTLY EFFECTIVE RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010
MASTER METERED MOBILE HOME PARK GAS SERVICE

Line No.	Description	Monthly Consumption (Therms)	Monthly Bill: At Currently Effective Rates	Monthly Bill: At Proposed Tariff Rates	Increase/(Decrease): Dollars	Increase/(Decrease): Percent	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
	Summer Season Bills						
1	75 Percent Average Use	319	$ 401.92	$ 413.21	$ 11.29	2.81%	1
2	Average Summer Use [1]	425	513.54	528.58	15.04	2.93%	2
3	125 Percent Average Use	531	625.16	643.96	18.80	3.01%	3
	Winter Season Bills						
4	75 Percent Average Use	1,190	$ 1,319.11	$ 1,361.23	$ 42.12	3.19%	4
5	Average Winter Use [1]	1,587	1,737.16	1,793.34	56.18	3.23%	5
6	125 Percent Average Use	1,984	2,155.21	2,225.45	70.24	3.26%	6
7	Annual Average Use	1,006	1,125.35	1,160.96	35.61	3.16%	7

Effective Tariff Rates [2]	Amount
Basic Service Charge	$ 66.00
Commodity Charge	
All Usage	$ 1.05303

Proposed Tariff Rates [3]	Amount
Basic Service Charge	$ 66.00
Commodity Charge	
All Usage	$ 1.08843

[1] Workpapers, Schedule H-2, Sheets 5-7.
[2] Rates effective June 28, 2010 including all adjustments.
[3] Schedule H-3, Sheets 1 - 3.

SOUTHWEST GAS CORPORATION
ARIZONA
TYPICAL BILL COMPARISON - PROPOSED VS. CURRENTLY EFFECTIVE RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010
GENERAL GAS SERVICE - SMALL

Line No.	Description	Monthly Consumption (Therms)	Monthly Bill At Currently Effective Rates	Monthly Bill At Proposed Tariff Rates	Increase/(Decrease) Dollars	Increase/(Decrease) Percent	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
	Summer Season Bills						
1	75 Percent Average Use	7	$ 35.92	$ 36.97	$ 1.05	2.92%	1
2	Average Summer Use [1]	9	38.33	39.67	1.34	3.50%	2
3	125 Percent Average Use	11	40.73	42.38	1.65	4.05%	3
	Winter Season Bills						
4	75 Percent Average Use	26	$ 58.78	$ 62.67	$ 3.89	6.62%	4
5	Average Winter Use [1]	34	68.41	73.49	5.08	7.43%	5
6	125 Percent Average Use	43	79.23	85.66	6.43	8.12%	6
7	Annual Average Use	22	53.97	57.26	3.29	6.10%	7

Effective Tariff Rates [2]	Amount
Basic Service Charge	$ 27.50
Commodity Charge	
All Usage	$ 1.20310

Proposed Tariff Rates [3]	
Basic Service Charge	$ 27.50
Commodity Charge	
All Usage	$ 1.35258

[1] Workpapers, Schedule H-2, Sheets 5-7.
[2] Rates effective June 28, 2010 including all adjustments.
[3] Schedule H-3, Sheets 1 - 3.

SOUTHWEST GAS CORPORATION
ARIZONA
TYPICAL BILL COMPARISON - PROPOSED VS. CURRENTLY EFFECTIVE RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010
GENERAL GAS SERVICE - MEDIUM

Line No.	Description	Monthly Consumption (Therms)	Monthly Bill At Currently Effective Rates	Monthly Bill At Proposed Tariff Rates	Increase/(Decrease) Dollars	Increase/(Decrease) Percent	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
	Summer Season Bills						
1	75 Percent Average Use	114	$ 158.92	$ 163.90	$ 4.98	3.13%	1
2	Average Summer Use [1]	152	197.40	204.03	6.63	3.36%	2
3	125 Percent Average Use	190	235.87	244.16	8.29	3.51%	3
	Winter Season Bills						
4	75 Percent Average Use	221	$ 267.26	$ 276.90	$ 9.64	3.61%	4
5	Average Winter Use [1]	295	342.18	355.05	12.87	3.76%	5
6	125 Percent Average Use	369	417.10	433.20	16.10	3.86%	6
7	Annual Average Use	223	269.28	279.01	9.73	3.61%	7

Effective Tariff Rates [2]	Amount
Basic Service Charge	$ 43.50
Commodity Charge	
All Usage	$ 1.01247

Proposed Tariff Rates [3]	
Basic Service Charge	$ 43.50
Commodity Charge	
All Usage	$ 1.05610

[1] Workpapers, Schedule H-2, Sheets 5-7.
[2] Rates effective June 28, 2010 including all adjustments.
[3] Schedule H-3, Sheets 1 - 3.

SOUTHWEST GAS CORPORATION
ARIZONA
TYPICAL BILL COMPARISON - PROPOSED VS. CURRENTLY EFFECTIVE RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010
GENERAL GAS SERVICE - LARGE-1

Line No.	Description	Monthly Consumption (Therms)	Monthly Bill: At Currently Effective Rates	Monthly Bill: At Proposed Tariff Rates	Increase/(Decrease): Dollars	Increase/(Decrease): Percent	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
	Summer Season Bills						
1	75 Percent Average Use	668	$ 776.80	$ 761.41	$(15.39)	(1.98%)	1
2	Average Summer Use [1]	890	981.78	987.86	6.08	0.62%	2
3	125 Percent Average Use	1,113	1,187.69	1,215.34	27.65	2.33%	3
	Winter Season Bills						
4	75 Percent Average Use	1,149	$ 1,220.93	$ 1,252.06	$ 31.13	2.55%	4
5	Average Winter Use [1]	1,532	1,574.57	1,642.75	68.18	4.33%	5
6	125 Percent Average Use	1,915	1,928.22	2,033.43	105.21	5.46%	6
7	Annual Average Use	1,212	1,279.10	1,316.32	37.22	2.91%	7

Effective Tariff Rates [2]	Amount
Basic Service Charge	$ 160.00
Commodity Charge	
All Usage	$ 0.92335
Proposed Tariff Rates [3]	
Basic Service Charge	$ 80.00
Commodity Charge	
All Usage	$ 1.02007

[1] Workpapers, Schedule H-2, Sheets 5-7.
[2] Rates effective June 28, 2010 including all adjustments.
[3] Schedule H-3, Sheets 1 - 3.

SOUTHWEST GAS CORPORATION
ARIZONA
TYPICAL BILL COMPARISON - PROPOSED VS. CURRENTLY EFFECTIVE RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010
GENERAL GAS SERVICE - LARGE-2

Line No.	Description	Monthly Consumption (Therms)	Monthly Bill At Currently Effective Rates	Monthly Bill At Proposed Tariff Rates	Increase/(Decrease) Dollars	Increase/(Decrease) Percent	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
	Summer Season Bills						
1	75 Percent Average Use	3,931	$ 3,789.69	$ 4,017.33	$ 227.64	6.01%	1
2	Average Summer Use [1]	5,241	4,999.28	5,199.48	200.20	4.00%	2
3	125 Percent Average Use	6,551	6,208.87	6,381.62	172.75	2.78%	3
	Winter Season Bills						
4	75 Percent Average Use	6,743	$ 6,386.15	$ 6,554.88	$ 168.73	2.64%	4
5	Average Winter Use [1]	8,991	8,461.84	8,583.48	121.64	1.44%	5
6	125 Percent Average Use	11,239	10,537.53	10,612.07	74.54	0.71%	6
7	Annual Average Use	7,116	6,730.56	6,891.48	160.92	2.39%	7

Effective Tariff Rates [2]	Amount
Basic Service Charge	$ 160.00
Commodity Charge	
All Usage	$ 0.92335
Proposed Tariff Rates [3]	
Basic Service Charge	$ 470.00
Commodity Charge	
All Usage	$ 0.90240

[1] Workpapers, Schedule H-2, Sheets 5-7.
[2] Rates effective June 28, 2010 including all adjustments.
[3] Schedule H-3, Sheets 1 - 3.

SOUTHWEST GAS CORPORATION
ARIZONA
TYPICAL BILL COMPARISON - PROPOSED VS. CURRENTLY EFFECTIVE RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010
GAS SERVICE FOR COMPRESSION ON CUSTOMER PREMISES - SMALL

Line No.	Description	Monthly Consumption (Therms)	Monthly Bill At Currently Effective Rates	Monthly Bill At Proposed Tariff Rates	Increase/(Decrease) Dollars	Increase/(Decrease) Percent	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
	Summer Season Bills						
1	75 Percent Average Use	462	$ 406.01	$ 413.19	$ 7.18	1.77%	1
2	Average Summer Use [1]	616	532.18	541.76	9.58	1.80%	2
3	125 Percent Average Use	770	658.35	670.32	11.97	1.82%	3
	Winter Season Bills						
4	75 Percent Average Use	373	$ 333.10	$ 338.89	$ 5.79	1.74%	4
5	Average Winter Use [1]	497	434.69	442.41	7.72	1.78%	5
6	125 Percent Average Use	621	536.28	545.93	9.65	1.80%	6
7	Annual Average Use	556	483.03	491.67	8.64	1.79%	7

Effective Tariff Rates [2]	Amount
Basic Service Charge	$ 27.50
Commodity Charge	
All Usage	$ 0.81929
Proposed Tariff Rates [3]	
Basic Service Charge	$ 27.50
Commodity Charge	
All Usage	$ 0.83483

[1] Workpapers, Schedule H-2, Sheets 5-7.
[2] Rates effective June 28, 2010 including all adjustments.
[3] Schedule H-3, Sheets 1 - 3.

SOUTHWEST GAS CORPORATION
ARIZONA
TYPICAL BILL COMPARISON - PROPOSED VS. CURRENTLY EFFECTIVE RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010
GAS SERVICE FOR COMPRESSION ON CUSTOMER PREMISES - LARGE

Line No.	Description	Monthly Consumption (Therms)	Monthly Bill: At Currently Effective Rates	Monthly Bill: At Proposed Tariff Rates	Increase/(Decrease): Dollars	Increase/(Decrease): Percent	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
	Summer Season Bills						
1	75 Percent Average Use	3,933	$ 3,472.27	$ 3,533.39	$ 61.12	1.76%	1
2	Average Summer Use [1]	5,244	4,546.36	4,627.85	81.49	1.79%	2
3	125 Percent Average Use	6,555	5,620.45	5,722.31	101.86	1.81%	3
	Winter Season Bills						
4	75 Percent Average Use	4,331	$ 3,798.34	$ 3,865.65	$ 67.31	1.77%	4
5	Average Winter Use [1]	5,775	4,981.40	5,071.14	89.74	1.80%	5
6	125 Percent Average Use	7,219	6,164.45	6,276.64	112.19	1.82%	6
7	Annual Average Use	5,510	4,764.29	4,849.91	85.62	1.80%	7

Effective Tariff Rates [2]	Amount
Basic Service Charge	$ 250.00
Commodity Charge	
All Usage	$ 0.81929
Proposed Tariff Rates [3]	
Basic Service Charge	$ 250.00
Commodity Charge	
All Usage	$ 0.83483

[1] Workpapers, Schedule H-2, Sheets 5-7.
[2] Rates effective June 28, 2010 including all adjustments.
[3] Schedule H-3, Sheets 1 - 3.

SOUTHWEST GAS CORPORATION
ARIZONA
TYPICAL BILL COMPARISON - PROPOSED VS. CURRENTLY EFFECTIVE RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010
GAS SERVICE FOR COMPRESSION ON CUSTOMER PREMISES - RESIDENTIAL

Line No.	Description	Monthly Consumption (Therms)	Monthly Bill At Currently Effective Rates	Monthly Bill At Proposed Tariff Rates	Increase/(Decrease) Dollars	Increase/(Decrease) Percent	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
	Summer Season Bills						
1	75 Percent Average Use	28	$ 33.64	$ 34.08	$ 0.44	1.31%	1
2	Average Summer Use [1]	37	41.01	41.59	0.58	1.41%	2
3	125 Percent Average Use	46	48.39	49.10	0.71	1.47%	3
	Winter Season Bills						
4	75 Percent Average Use	26	$ 32.00	$ 32.41	$ 0.41	1.28%	4
5	Average Winter Use [1]	34	38.56	39.08	0.52	1.35%	5
6	125 Percent Average Use	43	45.93	46.60	0.67	1.46%	6
7	Annual Average Use	36	40.19	40.75	0.56	1.39%	7

Effective Tariff Rates [2]	Amount
Basic Service Charge	$ 10.70
Commodity Charge	
All Usage	$ 0.81929
Proposed Tariff Rates [3]	
Basic Service Charge	$ 10.70
Commodity Charge	
All Usage	$ 0.83483

[1] Workpapers, Schedule H-2, Sheets 5-7.
[2] Rates effective June 28, 2010 including all adjustments.
[3] Schedule H-3, Sheets 1 - 3.

SOUTHWEST GAS CORPORATION
ARIZONA
TYPICAL BILL COMPARISON - PROPOSED VS. CURRENTLY EFFECTIVE RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010
ESSENTIAL AGRICULTURAL USER GAS SERVICE

Line No.	Description	Monthly Consumption (Therms)	Monthly Bill At Currently Effective Rates	Monthly Bill At Proposed Tariff Rates	Increase/(Decrease) Dollars	Increase/(Decrease) Percent	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
	Summer Season Bills						
1	75 Percent Average Use	3,222	$ 2,943.99	$ 3,009.30	$ 65.31	2.22%	1
2	Average Summer Use [1]	4,296	3,885.32	3,972.40	87.08	2.24%	2
3	125 Percent Average Use	5,370	4,826.64	4,935.49	108.85	2.26%	3
	Winter Season Bills						
4	75 Percent Average Use	3,481	$ 3,170.99	$ 3,241.55	$ 70.56	2.23%	4
5	Average Winter Use [1]	4,641	4,187.70	4,281.77	94.07	2.25%	5
6	125 Percent Average Use	5,801	5,204.40	5,321.99	117.59	2.26%	6
7	Annual Average Use	4,485	4,050.97	4,141.88	90.91	2.24%	7

Effective Tariff Rates [2]	Amount
Basic Service Charge	$ 120.00
Commodity Charge	
All Usage	$ 0.87647
Proposed Tariff Rates [3]	
Basic Service Charge	$ 120.00
Commodity Charge	
All Usage	$ 0.89674

[1] Workpapers, Schedule H-2, Sheets 5-7.
[2] Rates effective June 28, 2010 including all adjustments.
[3] Schedule H-3, Sheets 1 - 3.

SOUTHWEST GAS CORPORATION
ARIZONA
TYPICAL BILL COMPARISON - PROPOSED VS. CURRENTLY EFFECTIVE RATES
FOR TWELVE-MONTHS ENDED JUNE 30, 2010
NATURAL GAS ENGINE GAS SERVICE

Line No.	Description	Monthly Consumption (Therms)	Monthly Bill At Currently Effective Rates	Monthly Bill At Proposed Tariff Rates	Increase/(Decrease) Dollars	Increase/(Decrease) Percent	Line No.
	(a)	(b)	(c)	(d)	(e)	(f)	
	Peak Season Bills						
1	75 Percent Average	2,060	$ 1,562.72	$ 1,562.72	$ 0.00	0.00%	1
2	Average	2,746	2,041.49	2,041.49	0.00	0.00%	2
3	125 Percent Average	3,433	2,520.96	2,520.96	0.00	0.00%	3
	Off-Peak Season Bills						
4	75 Percent Average	731	$ 510.18	$ 510.18	$ 0.00	0.00%	4
5	Average	974	679.77	679.77	0.00	0.00%	5
6	125 Percent Average	1,218	850.07	850.07	0.00	0.00%	6

Effective Tariff Rates [2]	Amount
Basic Service Charge	
Peak Season	$ 125.00
Off-Peak Season	$ 0.00
Commodity Charge	
All Usage	$ 0.69792
Proposed Tariff Rates [3]	
Basic Service Charge	
Peak Season	$ 125.00
Off-Peak Season	$ 0.00
Commodity Charge	
All Usage	$ 0.69792

[1] Workpapers, Schedule H-2, Sheets 5-7.
[2] Rates effective June 28, 2010 including all adjustments.
[3] Schedule H-3, Sheets 1 - 3.

SOUTHWEST GAS CORPORATION

BILL FREQUENCY ANALYSIS

TEST YEAR AS ADJUSTED

RATE SCHEDULE = G-15 CLASS = SPECIAL RESIDENTIAL AREA = ARIZONA PERIOD = SUMMER

INTERVAL UPPER LIMIT	THERMS IN INTERVAL	CUMULATIVE THERMS	BILLS IN INTERVAL	CUMULATIVE BILLS	CUMULATIVE USAGE PERCENT	CUMULATIVE BILLS PERCENT	BILLS PASSING INTERVAL UPPER LIMIT	THERMS FROM BILLS PASSING UPPER LIMIT	CONSOLIDATED THERMS	FACTOR PERCENT
0	0	0	6	6	0.00	1.11	534	0	0	0.00
1	6	6	6	12	0.02	2.22	528	528	534	1.48
2	8	14	4	16	0.04	2.96	524	1,048	1,062	2.95
3	42	56	14	30	0.16	5.56	510	1,530	1,586	4.41
4	88	144	22	52	0.40	9.63	488	1,952	2,096	5.82
5	110	254	22	74	0.71	13.70	466	2,330	2,584	7.18
6	174	428	29	103	1.19	19.07	437	2,622	3,050	8.48
7	126	554	18	121	1.54	22.41	419	2,933	3,487	9.69
8	160	714	20	141	1.98	26.11	399	3,192	3,906	10.86
9	126	840	14	155	2.33	28.70	385	3,465	4,305	11.96
10	110	950	11	166	2.64	30.74	374	3,740	4,690	13.03
11	99	1,049	9	175	2.92	32.41	365	4,015	5,064	14.07
12	155	1,204	13	188	3.35	34.81	352	4,224	5,428	15.08
13	130	1,334	10	198	3.71	36.67	342	4,446	5,780	16.06
14	183	1,517	13	211	4.22	39.07	329	4,606	6,123	17.02
15	195	1,712	13	224	4.76	41.48	316	4,740	6,452	17.93
16	144	1,856	9	233	5.16	43.15	307	4,912	6,768	18.81
17	289	2,145	17	250	5.96	46.30	290	4,930	7,075	19.66
18	90	2,235	5	255	6.21	47.22	285	5,130	7,365	20.47
19	210	2,445	11	266	6.79	49.26	274	5,206	7,651	21.26
20	260	2,705	13	279	7.52	51.67	261	5,220	7,925	22.02
25	782	3,487	34	313	9.69	57.96	227	5,675	9,162	25.46
30	648	4,135	23	336	11.49	62.22	204	6,120	10,255	28.50
35	432	4,567	13	349	12.69	64.63	191	6,685	11,252	31.27
40	568	5,135	15	364	14.27	67.41	176	7,040	12,175	33.84
45	725	5,860	17	381	16.29	70.56	159	7,155	13,015	36.17
50	866	6,726	18	399	18.69	73.89	141	7,050	13,776	38.28
55	798	7,524	15	414	20.91	76.67	126	6,930	14,454	40.17
60	409	7,933	7	421	22.05	77.96	119	7,140	15,073	41.89
65	253	8,186	4	425	22.75	78.70	115	7,475	15,661	43.52
70	132	8,318	2	427	23.12	79.07	113	7,910	16,228	45.10

SOUTHWEST GAS CORPORATION

BILL FREQUENCY ANALYSIS

TEST YEAR AS ADJUSTED

RATE SCHEDULE = G-15 CLASS = SPECIAL RESIDENTIAL AREA = ARIZONA PERIOD = SUMMER

INTERVAL UPPER LIMIT	THERMS IN INTERVAL	CUMULATIVE THERMS	BILLS IN INTERVAL	CUMULATIVE BILLS	CUMULATIVE USAGE PERCENT	CUMULATIVE BILLS PERCENT	BILLS PASSING INTERVAL UPPER LIMIT	THERMS FROM BILLS PASSING UPPER LIMIT	CONSOLIDATED THERMS	FACTOR PERCENT
75	442	8,760	6	433	24.34	80.19	107	8,025	16,785	46.65
80	472	9,232	6	439	25.66	81.30	101	8,080	17,312	48.11
85	85	9,317	1	440	25.89	81.48	100	8,500	17,817	49.52
90	270	9,587	3	443	26.64	82.04	97	8,730	18,317	50.90
95	467	10,054	5	448	27.94	82.96	92	8,740	18,794	52.23
100	194	10,248	2	450	28.48	83.33	90	9,000	19,248	53.49
105	417	10,665	4	454	29.64	84.07	86	9,030	19,695	54.73
110	108	10,773	1	455	29.94	84.26	85	9,350	20,123	55.92
115	456	11,229	4	459	31.21	85.00	81	9,315	20,544	57.09
120	233	11,462	2	461	31.85	85.37	79	9,480	20,942	58.20
125	618	12,080	5	466	33.57	86.30	74	9,250	21,330	59.28
130	382	12,462	3	469	34.63	86.85	71	9,230	21,692	60.28
135	264	12,726	2	471	35.37	87.22	69	9,315	22,041	61.25
140	272	12,998	2	473	36.12	87.59	67	9,380	22,378	62.19
145	145	13,143	1	474	36.53	87.78	66	9,570	22,713	63.12
150	295	13,438	2	476	37.35	88.15	64	9,600	23,038	64.02
155	156	13,594	1	477	37.78	88.33	63	9,765	23,359	64.92
160	156	13,750	1	478	38.21	88.52	62	9,920	23,670	65.78
165	0	13,750	0	478	38.21	88.52	62	10,230	23,980	66.64
170	507	14,257	3	481	39.62	89.07	59	10,030	24,287	67.50
175	175	14,432	0	481	40.11	89.07	59	10,325	24,757	68.80
180	359	14,791	2	483	41.11	89.44	57	10,260	25,051	69.62
185	0	14,791	0	483	41.11	89.44	57	10,545	25,336	70.41
190	0	14,791	0	483	41.11	89.44	57	10,830	25,621	71.20
195	191	14,982	1	484	41.64	89.63	56	10,920	25,902	71.98
200	0	14,982	0	484	41.64	89.63	56	11,200	26,182	72.76
999,999	21,001	35,983	56	540	100.00	100.00	0	0	35,983	100.00
TOTAL	35,983		540							
AVG. USE	66.6									

SOUTHWEST GAS CORPORATION

BILL FREQUENCY ANALYSIS

TEST YEAR AS ADJUSTED

RATE SCHEDULE = G-15 CLASS = SPECIAL RESIDENTIAL AREA = ARIZONA PERIOD = WINTER

INTERVAL UPPER LIMIT	THERMS IN INTERVAL	CUMULATIVE THERMS	BILLS IN INTERVAL	CUMULATIVE BILLS	CUMULATIVE USAGE PERCENT	CUMULATIVE BILLS PERCENT	BILLS PASSING INTERVAL UPPER LIMIT	THERMS FROM BILLS PASSING UPPER LIMIT	CONSOLIDATED THERMS	FACTOR PERCENT
0	0	0	4	4	0.00	0.74	536	0	0	0.00
1	6	6	6	10	0.01	1.85	530	530	536	1.01
2	2	8	1	11	0.02	2.04	529	1,058	1,066	2.00
3	6	14	2	13	0.03	2.41	527	1,581	1,595	3.00
4	4	18	1	14	0.03	2.59	526	2,104	2,122	3.99
5	0	18	0	14	0.03	2.59	526	2,630	2,648	4.97
6	30	48	5	19	0.09	3.52	521	3,126	3,174	5.96
7	28	76	4	23	0.14	4.26	517	3,619	3,695	6.94
8	65	141	8	31	0.26	5.74	509	4,072	4,213	7.91
9	45	186	5	36	0.35	6.67	504	4,536	4,722	8.87
10	50	236	5	41	0.44	7.59	499	4,990	5,226	9.82
11	33	269	3	44	0.51	8.15	496	5,456	5,725	10.75
12	12	281	1	45	0.53	8.33	495	5,940	6,221	11.69
13	39	320	3	48	0.60	8.89	492	6,396	6,716	12.62
14	28	348	2	50	0.65	9.26	490	6,860	7,208	13.54
15	60	408	4	54	0.77	10.00	486	7,290	7,698	14.46
16	64	472	4	58	0.89	10.74	482	7,712	8,184	15.37
17	51	523	3	61	0.98	11.30	479	8,143	8,666	16.28
18	163	686	9	70	1.29	12.96	470	8,460	9,146	17.18
19	115	801	6	76	1.50	14.07	464	8,816	9,617	18.06
20	140	941	7	83	1.77	15.37	457	9,140	10,081	18.94
25	833	1,774	36	119	3.33	22.04	421	10,525	12,299	23.10
30	505	2,279	18	137	4.28	25.37	403	12,090	14,369	26.99
35	1,180	3,459	35	172	6.50	31.85	368	12,880	16,339	30.69
40	762	4,221	20	192	7.93	35.56	348	13,920	18,141	34.08
45	819	5,040	19	211	9.47	39.07	329	14,805	19,845	37.28
50	872	5,912	18	229	11.11	42.41	311	15,550	21,462	40.31
55	893	6,805	17	246	12.78	45.56	294	16,170	22,975	43.16
60	1,455	8,260	25	271	15.52	50.19	269	16,140	24,400	45.83
65	940	9,200	15	286	17.28	52.96	254	16,510	25,710	48.29
70	1,232	10,432	18	304	19.60	56.30	236	16,520	26,952	50.63

SOUTHWEST GAS CORPORATION

BILL FREQUENCY ANALYSIS

TEST YEAR AS ADJUSTED

RATE SCHEDULE = G-15 CLASS = SPECIAL RESIDENTIAL AREA = ARIZONA PERIOD = WINTER

INTERVAL UPPER LIMIT	THERMS IN INTERVAL	CUMULATIVE THERMS	BILLS IN INTERVAL	CUMULATIVE BILLS	CUMULATIVE USAGE PERCENT	CUMULATIVE BILLS PERCENT	BILLS PASSING INTERVAL UPPER LIMIT	THERMS FROM BILLS PASSING UPPER LIMIT	CONSOLIDATED THERMS	FACTOR PERCENT
75	958	11,390	13	317	21.40	58.70	223	16,725	28,115	52.81
80	945	12,335	12	329	23.17	60.93	211	16,880	29,215	54.88
85	1,001	13,336	12	341	25.05	63.15	199	16,915	30,251	56.82
90	706	14,042	8	349	26.38	64.63	191	17,190	31,232	58.67
95	1,218	15,260	13	362	28.66	67.04	178	16,910	32,170	60.43
100	1,180	16,440	12	374	30.88	69.26	166	16,600	33,040	62.06
105	928	17,368	9	383	32.62	70.93	157	16,485	33,853	63.59
110	1,082	18,450	10	393	34.66	72.78	147	16,170	34,620	65.03
115	1,361	19,811	12	405	37.21	75.00	135	15,525	35,336	66.38
120	947	20,758	8	413	38.99	76.48	127	15,240	35,998	67.62
125	244	21,002	2	415	39.45	76.85	125	15,625	36,627	68.80
130	893	21,895	7	422	41.13	78.15	118	15,340	37,235	69.94
135	397	22,292	3	425	41.87	78.70	115	15,525	37,817	71.04
140	825	23,117	6	431	43.42	79.81	109	15,260	38,377	72.09
145	1,288	24,405	9	440	45.84	81.48	100	14,500	38,905	73.08
150	590	24,995	4	444	46.95	82.22	96	14,400	39,395	74.00
155	610	25,605	4	448	48.10	82.96	92	14,260	39,865	74.88
160	157	25,762	1	449	48.39	83.15	91	14,560	40,322	75.74
165	328	26,090	2	451	49.01	83.52	89	14,685	40,775	76.59
170	1,004	27,094	6	457	50.89	84.63	83	14,110	41,204	77.40
175	866	27,960	5	462	52.52	85.56	78	13,650	41,610	78.16
180	893	28,853	5	467	54.20	86.48	73	13,140	41,993	78.88
185	370	29,223	2	469	54.89	86.85	71	13,135	42,358	79.57
190	567	29,790	3	472	55.96	87.41	68	12,920	42,710	80.23
195	579	30,369	3	475	57.05	87.96	65	12,675	43,044	80.86
200	796	31,165	4	479	58.54	88.70	61	12,200	43,365	81.46
999,999	22,071	53,236	61	540	100.00	100.00	0	0	53,236	100.00
TOTAL	53,236		540							
AVG. USE	98.6									

SOUTHWEST GAS CORPORATION
ARIZONA
CALCULATION OF MONTHLY MARGIN PER CUSTOMER
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description (a)	July 2009 (b)	August 2009 (c)	September 2009 (d)	October 2009 (e)	November 2009 (f)	December 2009 (g)	January 2010 (h)	February 2010 (i)	March 2010 (j)	April 2010 (k)	May 2010 (l)	June 2010 (m)	Total (n)	Line No.
	Single-Family Residential														
	Monthly Billing Determinants														
1	Customers	863,297	862,116	859,108	860,344	866,521	873,086	875,792	875,738	875,295	872,308	868,487	866,039	10,418,131	1
2	Total Volume	8,831,004	7,638,384	8,233,534	9,520,021	12,449,974	35,864,652	55,584,964	46,243,144	34,030,584	20,033,693	12,202,987	11,189,500	261,822,441	2
	Proposed Margin Rates														
3	Basic Service Charge (BSC)	$ 10.70	$ 10.70	$ 10.70	$ 10.70	$ 10.70	$ 10.70	$ 10.70	$ 10.70	$ 10.70	$ 10.70	$ 10.70	$ 10.70		3
4	Margin Rate	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176		4
	Proposed Margin														
5	Margin Revenue	$ 7,080,346	$ 6,124,151	$ 6,601,318	$ 7,632,772	$ 9,981,891	$ 28,754,843	$ 44,565,801	$ 37,075,903	$ 27,284,361	$ 16,062,214	$ 9,783,867	$ 8,971,294	$ 208,918,760	5
6	BSC Revenue	9,237,278	9,224,641	9,192,456	9,205,681	9,271,775	9,342,020	9,370,974	9,370,397	9,365,657	9,333,696	9,292,811	9,266,617	111,474,002	6
7	Total Margin Revenue	$ 16,317,624	$ 15,348,792	$ 15,793,774	$ 16,838,453	$ 19,253,666	$ 38,096,864	$ 53,936,775	$ 46,446,300	$ 36,650,018	$ 25,395,909	$ 19,076,678	$ 18,237,911	$ 321,392,762	7
8	Margin per Customer	$ 18.90	$ 17.80	$ 18.38	$ 19.57	$ 22.22	$ 43.63	$ 61.59	$ 53.04	$ 41.87	$ 29.11	$ 21.97	$ 21.06	$ 369.15	8
	Multi-Family Residential														
	Monthly Billing Determinants														
9	Customers	31,240	31,199	30,912	30,979	31,260	31,722	32,000	31,981	32,010	31,899	31,645	31,487	378,334	9
10	Total Volume	285,432	255,808	268,646	286,877	350,674	704,562	984,564	857,062	672,798	483,066	365,892	347,332	5,862,713	10
	Proposed Margin Rates														
11	Basic Service Charge (BSC)	$ 9.70	$ 9.70	$ 9.70	$ 9.70	$ 9.70	$ 9.70	$ 9.70	$ 9.70	$ 9.70	$ 9.70	$ 9.70	$ 9.70		11
12	Margin Rate	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176		12
	Proposed Margin														
13	Margin Revenue	$ 228,848	$ 205,097	$ 215,390	$ 230,007	$ 281,156	$ 564,890	$ 789,384	$ 687,158	$ 539,423	$ 387,303	$ 293,358	$ 278,477	$ 4,700,489	13
14	BSC Revenue	303,028	302,630	299,846	300,496	303,222	307,703	310,400	310,216	310,497	309,420	306,957	305,424	3,669,840	14
15	Total Margin Revenue	$ 531,876	$ 507,727	$ 515,236	$ 530,503	$ 584,378	$ 872,593	$ 1,099,784	$ 997,374	$ 849,920	$ 696,723	$ 600,314	$ 583,901	$ 8,370,329	15
16	Margin per Customer	$ 17.03	$ 16.27	$ 16.67	$ 17.12	$ 18.69	$ 27.51	$ 34.37	$ 31.19	$ 26.55	$ 21.84	$ 18.97	$ 18.54	$ 264.76	16
	Single-Family Low Income Residential														
	Monthly Billing Determinants														
17	Customers	33,911	32,222	33,395	34,102	34,264	34,260	34,768	35,633	36,430	35,882	35,402	34,827	415,096	17
18	First Block Volumes	357,483	299,025	326,146	372,004	510,827	1,409,106	2,133,213	1,887,586	1,379,042	817,990	496,432	448,715	10,437,569	18
19	Second Block Volumes	30	547	270	4	84	7,011	34,052	11,903	2,124	292	71	1,241	57,629	19
20	Total Volume	357,513	299,572	326,416	372,008	510,911	1,416,117	2,167,265	1,899,489	1,381,166	818,282	496,503	449,956	10,495,198	20
21	Proposed Margin Rates														21
22	Basic Service Charge	$ 7.50	$ 7.50	$ 7.50	$ 7.50	$ 7.50	$ 7.50	$ 7.50	$ 7.50	$ 7.50	$ 7.50	$ 7.50	$ 7.50		22
23	First Block Margin Rate	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176		23
24	Second Block Margin Rate	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176		24
	Proposed Margin														
25	First Block Margin Revenue	$ 286,616	$ 239,746	$ 261,491	$ 298,258	$ 409,561	$ 1,129,765	$ 1,710,325	$ 1,513,391	$ 1,105,661	$ 655,832	$ 398,019	$ 359,762	$ 8,368,425	25
26	Second Block Margin Revenue	24	439	216	3	67	5,621	27,302	9,543	1,703	234	57	995	46,205	26
27	Basic Service Charge Revenue	254,333	241,665	250,463	255,765	256,980	256,950	260,760	267,248	273,225	269,115	265,515	261,203	3,113,220	27
28	Total Margin Revenue	$ 540,972	$ 481,850	$ 512,170	$ 554,026	$ 666,608	$ 1,392,336	$ 1,998,386	$ 1,790,182	$ 1,380,589	$ 925,181	$ 663,591	$ 621,959	$ 11,527,850	28
29	Margin per Customer	$ 15.95	$ 14.95	$ 15.34	$ 16.25	$ 19.46	$ 40.64	$ 57.48	$ 50.24	$ 37.90	$ 25.78	$ 18.74	$ 17.86	$ 330.59	29
	Multi-Family Low Income Residential														
	Monthly Billing Determinants														
30	Customers	3,102	2,967	3,039	3,087	3,154	3,144	3,162	3,208	3,261	3,228	3,209	3,168	37,729	30
31	First Block Volumes	28,686	25,576	26,903	28,536	33,079	41,946	42,849	44,166	42,730	39,319	34,378	32,887	421,055	31
32	Second Block Volumes	4,873	3,381	3,913	4,352	7,773	44,321	80,599	64,484	40,846	18,124	8,251	8,473	289,390	32
33	Total Volume	33,559	28,957	30,816	32,888	40,852	86,267	123,448	108,650	83,576	57,443	42,629	41,360	710,445	33
34	Proposed Margin Rates														34
35	Basic Service Charge	$ 7.50	$ 7.50	$ 7.50	$ 7.50	$ 7.50	$ 7.50	$ 7.50	$ 7.50	$ 7.50	$ 7.50	$ 7.50	$ 7.50		35
36	First Block Margin Rate	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176		36
37	Second Block Margin Rate	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176	$ 0.80176		37
38	Proposed Margin														38
39	First Block Margin Revenue	$ 22,999	$ 20,506	$ 21,570	$ 22,879	$ 26,521	$ 33,631	$ 34,355	$ 35,411	$ 34,259	$ 31,524	$ 27,563	$ 26,367	$ 337,585	39
40	Second Block Margin Revenue	3,907	2,711	3,137	3,489	6,232	35,535	64,621	51,701	32,749	14,531	6,615	6,793	232,021	40
41	Basic Service Charge Revenue	23,265	22,253	22,793	23,153	23,655	23,580	23,715	24,060	24,458	24,210	24,068	23,760	282,968	41
42	Total Margin Revenue	$ 50,171	$ 45,469	$ 47,500	$ 49,521	$ 56,408	$ 92,745	$ 122,691	$ 111,171	$ 91,465	$ 70,265	$ 58,246	$ 56,921	$ 852,574	42
43	Margin per Customer	$ 16.17	$ 15.32	$ 15.63	$ 16.04	$ 17.88	$ 29.50	$ 38.80	$ 34.65	$ 28.05	$ 21.77	$ 18.15	$ 17.97	$ 269.94	43

SOUTHWEST GAS CORPORATION
ARIZONA
CALCULATION OF MONTHLY MARGIN PER CUSTOMER
FOR TWELVE-MONTHS ENDED JUNE 30, 2010

Line No.	Description (a)	July 2009 (b)	August 2009 (c)	September 2009 (d)	October 2009 (e)	November 2009 (f)	December 2009 (g)	January 2010 (h)	February 2010 (i)	March 2010 (j)	April 2010 (k)	May 2010 (l)	June 2010 (m)	Total (n)	Line No.
	Small General Service														
	Monthly Billing Determinants														
1	Customers	16,815	16,854	16,834	16,906	17,170	17,493	17,652	17,660	17,557	17,152	16,830	16,665	205,593	1
2	Therms	123,523	110,979	116,927	127,333	170,060	526,873	921,982	750,112	532,324	256,977	161,335	153,638	3,952,061	2
	Proposed Margin Rates														
3	Basic Service Charge (BSC)	$ 27.50	$ 27.50	$ 27.50	$ 27.50	$ 27.50	$ 27.50	$ 27.50	$ 27.50	$ 27.50	$ 27.50	$ 27.50	$ 27.50		3
4	Margin Rate	$ 0.72007	$ 0.72007	$ 0.72007	$ 0.72007	$ 0.72007	$ 0.72007	$ 0.72007	$ 0.72007	$ 0.72007	$ 0.72007	$ 0.72007	$ 0.72007		4
	Proposed Margin														
5	Margin Revenue	$ 88,945	$ 79,912	$ 84,195	$ 91,689	$ 122,455	$ 379,386	$ 663,891	$ 540,133	$ 383,310	$ 185,041	$ 116,172	$ 110,630	$ 2,845,761	5
6	BSC Revenue	462,419	463,492	462,942	464,977	472,182	481,064	485,437	485,657	482,824	471,687	462,832	458,294	5,653,808	6
7	Total Margin Revenue	$ 551,364	$ 543,404	$ 547,137	$ 556,666	$ 594,637	$ 860,450	$ 1,149,328	$ 1,025,790	$ 866,135	$ 656,728	$ 579,004	$ 568,924	$ 8,499,568	7
8	Margin per Customer	$ 32.79	$ 32.24	$ 32.50	$ 32.92	$ 34.63	$ 49.19	$ 65.11	$ 58.08	$ 49.33	$ 38.29	$ 34.40	$ 34.14	$ 493.63	8
	Medium General Service														
	Monthly Billing Determinants														
9	Customers	15,037	14,938	14,964	14,973	15,007	15,122	15,167	15,126	15,149	15,295	15,327	15,287	181,390	9
10	Therms	1,971,670	1,841,284	1,996,008	2,223,410	2,684,962	4,461,615	5,730,734	5,206,229	4,208,100	3,280,629	2,612,416	2,441,504	38,658,561	10
	Proposed Margin Rates														
11	Basic Service Charge (BSC)	$ 43.50	$ 43.50	$ 43.50	$ 43.50	$ 43.50	$ 43.50	$ 43.50	$ 43.50	$ 43.50	$ 43.50	$ 43.50	$ 43.50		11
12	Margin Rate	$ 0.42359	$ 0.42359	$ 0.42359	$ 0.42359	$ 0.42359	$ 0.42359	$ 0.42359	$ 0.42359	$ 0.42359	$ 0.42359	$ 0.42359	$ 0.42359		12
	Proposed Margin														
13	Margin Revenue	$ 835,180	$ 779,950	$ 845,489	$ 941,814	$ 1,137,323	$ 1,889,895	$ 2,427,482	$ 2,205,307	$ 1,782,509	$ 1,389,642	$ 1,106,593	$ 1,034,197	$ 16,375,380	13
14	BSC Revenue	654,102	649,796	650,927	651,318	652,797	657,800	659,757	657,974	658,974	665,325	666,717	664,977	7,890,465	14
15	Total Margin Revenue	$ 1,489,282	$ 1,429,745	$ 1,496,416	$ 1,593,133	$ 1,790,120	$ 2,547,695	$ 3,087,239	$ 2,863,280	$ 2,441,483	$ 2,054,967	$ 1,773,310	$ 1,699,174	$ 24,265,845	15
16	Margin per Customer	$ 99.04	$ 95.71	$ 100.00	$ 106.40	$ 119.29	$ 168.48	$ 203.55	$ 189.30	$ 161.17	$ 134.36	$ 115.70	$ 111.15	$ 1,604.15	16
	Large General Service - Large - 1														
	Monthly Billing Determinants														
17	Customers	7,065	7,016	7,042	7,027	7,036	7,076	7,071	7,100	7,124	7,107	7,106	7,102	84,872	17
18	Therms	5,605,797	5,371,260	5,694,116	6,401,961	7,768,370	11,514,508	13,736,858	12,707,031	10,805,441	9,332,923	7,791,525	7,133,941	104,063,730	18
	Proposed Margin Rates														
19	Basic Service Charge (BSC)	$ 80.00	$ 80.00	$ 80.00	$ 80.00	$ 80.00	$ 80.00	$ 80.00	$ 80.00	$ 80.00	$ 80.00	$ 80.00	$ 80.00		19
20	Margin Rate	$ 0.38756	$ 0.38756	$ 0.38756	$ 0.38756	$ 0.38756	$ 0.38756	$ 0.38756	$ 0.38756	$ 0.38756	$ 0.38756	$ 0.38756	$ 0.38756		20
	Proposed Margin														
21	Margin Revenue	$ 2,250,095	$ 2,081,686	$ 2,206,811	$ 2,481,144	$ 3,010,710	$ 4,462,563	$ 5,323,857	$ 4,924,737	$ 4,187,757	$ 3,617,067	$ 3,019,683	$ 2,764,830	$ 40,330,939	21
22	BSC Revenue	565,200	561,280	563,360	562,160	562,880	566,080	565,680	568,000	569,920	568,560	568,480	568,160	6,789,760	22
23	Total Margin Revenue	$ 2,815,295	$ 2,642,966	$ 2,770,171	$ 3,043,304	$ 3,573,590	$ 5,028,643	$ 5,889,537	$ 5,492,737	$ 4,757,677	$ 4,185,627	$ 3,588,163	$ 3,332,990	$ 47,120,699	23
24	Margin per Customer	$ 398.48	$ 376.71	$ 393.38	$ 433.09	$ 507.90	$ 710.66	$ 832.91	$ 773.62	$ 667.84	$ 588.94	$ 504.95	$ 469.30	$ 6,657.79	24
	Large General Service - Large - 2														
	Monthly Billing Determinants														
25	Customers	428	428	428	428	428	428	428	428	428	428	428	428	5,136	25
26	Therms	1,935,309	1,803,276	1,920,596	2,184,933	2,862,899	3,880,643	4,479,226	4,112,716	4,009,390	3,316,237	2,797,524	2,568,175	35,870,922	26
	Proposed Margin Rates														
27	Basic Service Charge (BSC)	$ 470.00	$ 470.00	$ 470.00	$ 470.00	$ 470.00	$ 470.00	$ 470.00	$ 470.00	$ 470.00	$ 470.00	$ 470.00	$ 470.00		27
28	Margin Rate	$ 0.26989	$ 0.26989	$ 0.26989	$ 0.26989	$ 0.26989	$ 0.26989	$ 0.26989	$ 0.26989	$ 0.26989	$ 0.26989	$ 0.26989	$ 0.26989		28
	Proposed Margin														
29	Margin Revenue	$ 522,320	$ 486,686	$ 518,350	$ 589,692	$ 772,668	$ 1,047,347	$ 1,208,898	$ 1,109,981	$ 1,082,094	$ 895,019	$ 755,024	$ 693,125	$ 9,681,203	29
30	BSC Revenue	201,160	201,160	201,160	201,160	201,160	201,160	201,160	201,160	201,160	201,160	201,160	201,160	2,413,920	30
31	Total Margin Revenue	$ 723,480	$ 687,846	$ 719,510	$ 790,852	$ 973,828	$ 1,248,507	$ 1,410,058	$ 1,311,141	$ 1,283,254	$ 1,096,179	$ 956,184	$ 894,285	$ 12,095,123	31
32	Margin per Customer	$ 1,690.37	$ 1,607.12	$ 1,681.10	$ 1,847.78	$ 2,275.30	$ 2,917.07	$ 3,294.53	$ 3,063.41	$ 2,998.26	$ 2,561.17	$ 2,234.07	$ 2,089.45	$ 28,259.63	32