ORIGINAL

OPEN MEETING ITEM

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COMMISSIONERS
MIKE GLEASON - Chairman
WILLIAM A. MUNDELL
JEFF HATCH-MILLER
KRISTIN K. MAYES
GARY PIERCE

BRIAN C. McNEIL
Executive Director

ARIZONA CORPORATION COMMISSION

DATE: DECEMBER 1, 2008

DOCKET NO: G-01551A-07-0504

TO ALL PARTIES:

Enclosed please find the recommendation of Administrative Law Judge Dwight D. Nodes. The recommendation has been filed in the form of an Opinion and Order on:

SOUTHWEST GAS CORPORATION
(RATES)

Pursuant to A.A.C. R14-3-110(B), you may file exceptions to the recommendation of the Administrative Law Judge by filing an original and ten (10) copies of the exceptions with the Commission's Docket Control at the address listed below by **4:00** p.m. on or before:

DECEMBER 10, 2008

The enclosed is NOT an order of the Commission, but a recommendation of the Administrative Law Judge to the Commissioners. Consideration of this matter has tentatively been scheduled for the Commission's Working Session and Open Meeting to be held on:

TO BE DETERMINED

For more information, you may contact Docket Control at (602) 542-3477 or the Hearing Division at (602)542-4250. For information about the Open Meeting, contact the Executive Director's Office at (602) 542-3931.

BRIAN C. McNEIL
EXECUTIVE DIRECTOR

Arizona Corporation Commission
DOCKETED
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BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

MIKE GLEASON, Chairman
WILLIAM A. MUNDELL
JEFF HATCH-MILLER
KRISTIN K. MAYES
GARY PIERCE

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 ITS PROPERTIES THROUGHOUT ARIZONA.	DOCKET NO. G-01551A-07-0504 DECISION NO. ____________ **OPINION AND ORDER**

DATES OF HEARING:	June 13, 2008 (Procedural Conference); June 16, 17, 18, 20, 24, 25 and 26, 2008.
PLACE OF HEARING:	Phoenix, Arizona
ADMINISTRATIVE LAW JUDGE:	Dwight D. Nodes
IN ATTENDANCE:	Mike Gleason, Chairman Jeff Hatch-Miller, Commissioner Kristin K. Mayes, Commissioner
APPEARANCES:	Ms. Karen S. Haller, Mr. Justin Lee Brown, and Ms. Meridith J. Strand, on behalf of Southwest Gas Corporation; Mr. Daniel Pozefsky, on behalf of the Residential Utility Consumer Office; Mr. Michael Grant, GALLAGHER & KENNEDY, P.A., on behalf of the Arizona Investment Council; Mr. Timothy Hogan, Arizona Center For Law In The Public Interest, on behalf of Southwest Energy Efficiency Project; and Ms. Maureen Scott, Senior Staff Counsel, and Mr. Charles Hains and Mr. Kevin Torrey, Staff Attorneys, Legal Division, on behalf of the Arizona Corporation Commission.

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BY THE COMMISSION:

INTRODUCTION

On August 31, 2007, Southwest Gas Corporation ("Southwest Gas" or "Company") filed with the Arizona Corporation Commission ("Commission") an application for a rate increase. In addition to its rate case schedules, the Company submitted the Direct Testimony of Roger C. Montgomery; Robert A. Mashas; Randi L. Aldridge; Laura Lopez Hobbs; Theodore K. Wood; Frank J. Hanley; James L. Cattanach; Frank J. Maglietti, Jr.; Ralph E. Miller; and A. Brooks Congdon.

On September 25, 2007, Southwest Gas filed revised Supporting Schedule A-2 to its Application.

On October 1, 2007, the Commission's Utilities Division Staff ("Staff") filed a letter stating that the application was found sufficient and classifying Southwest Gas as a Class A utility.

On October 16, 2007, the Residential Utility Consumer Office ("RUCO") filed an Application to Intervene.

On October 23, 2007, a Procedural Order was issued scheduling the hearing in this matter to commence on June 16, 2008; establishing various other filing deadlines; and directing the Company to mail and publish notice of the application and hearing date. RUCO was granted intervention by this same Procedural Order.

On December 11, 2007, Staff filed a Request for Procedural Order seeking amendment to certain of the filing deadlines set forth in the October 23, 2007, Procedural Order.

On December 11, 2007, a Procedural Order was issued granting Staff's request to change certain filing dates contained in the prior Procedural Order. However, the original June 16, 2008, hearing date remained intact as previously scheduled.

On February 1, 2008, Southwest Energy Efficiency Project ("SWEEP") filed a Motion to Intervene.

On March 14, 2008, the Arizona Investment Council ("AIC") filed a Motion to Intervene.

On March 20, 2008, Mr. Joseph Banchy, on behalf of the Meadows Homeowner's Association filed a Motion to Intervene.

On March 28, 2008, Staff filed the Direct Testimony of Corky Hansen, Frank W. Radigan, David C. Parcell, Phillip S. Teumim, Robert G. Gray, Rita R. Beale, and Stephen L. Thumb.

On March 28, 2008, RUCO filed the Direct Testimony of William A. Rigsby and Rodney L. Moore.

On April 11, 2008, Staff filed Mr. Radigan's Direct Testimony regarding cost of service and rate design issues.

On April 11, 2008, RUCO filed the Direct Testimony of Mr. Rigsby and Mr. Moore regarding rate design issues.

By Procedural Order issued April 11, 2008, intervention was granted to SWEEP, AIC and Mr. Banchy.

On May 9, 2008, Southwest Gas filed the Rebuttal Testimony of Mr. Montgomery, Ms. Aldridge, Mr. Mashas, Ms. Hobbs, Mr. Wood, Mr. Hanley, Mr. Maglietti, Mr. Miller, Mr. Cattanach, Mr. Congdon, Jerome T. Schmitz, and William N. Moody.

On May 27, 2008, Staff filed the Surrebuttal Testimony of Mr. Smith, Mr. Hanson, Mr. Radigan, Mr. Parcell, Mr. Teumim, Mr. Gray, Ms. Beale, and Mr. Thumb.

On May 27, 2008, RUCO filed the Surrebuttal Testimony of Mr. Rigsby, Mr. Moore, and Marylee Diaz Cortez.

On June 2, 2008, Southwest Gas filed a Motion and Consent of Local Counsel for *Pro Hac Vice* Admission of attorneys Justin Lee Brown and Meridith J. Strand. The Motion was granted at the June 13, 2008, pre-hearing conference.

On June 9, 2008, Southwest Gas filed the Rejoinder Testimony of Ms. Aldridge, Mr. Mashas, Mr. Schmitz, Ms. Hobbs, Mr. Wood, Mr. Hanley, Mr. Moody, Mr. Maglietti, Mr. Miller, and Mr. Congdon.

On June 13, 2008, the Company filed its Certification of Mailing and Publication of the required Public Notice regarding the application and hearing.

On June 13, 2008, a pre-hearing conference was conducted to discuss scheduling of witnesses and other procedural matters.

On June 16, 2008, the hearing in this matter commenced with the taking of public comment and opening statements. The presentation of witnesses for cross-examination also began on June 16, 2008, and continued on June 17, 18, 20, 24, 25, and 26, 2008.

At the conclusion of the hearing, a briefing schedule was established. Initial Briefs were filed on August 8, 2008, by Southwest Gas, Staff, RUCO, AIC, and SWEEP. Final revenue requirement schedules were filed on August 8, 2008, by the Company and Staff and on August 11, 2008, by RUCO.

On August 14, 2008, Southwest Gas filed Revenue Allocation and Rate Design Schedules With and Without any Revenue Increase to Low-Income Residential Customers.

On August 18, 2008, the Company filed an Erratum to Post-Hearing Brief setting forth corrections to the Brief.

On August 21, 2008, Staff filed an Unopposed Request for Extension of Time to File Reply Briefs. Staff's request was granted by Procedural Order issued August 22, 2008, and Reply Briefs were ordered to be filed no later than August 25, 2008.

Reply Briefs were filed on August 22, 2008, by RUCO and SWEEP and on August 25, 2008, by Southwest Gas, Staff and AIC.

On August 28, 2008, Staff filed a substitute Reply Brief that contained non-substantive corrections to the Reply Brief.

<u>Rate Application</u>

In its application, Southwest Gas proposed a net revenue increase of $50,219,828, based with a return of 9.45 percent on Original Cost Rate Base ("OCRB") and a return on Fair Value Rate Base ("FVRB") of 7.04 percent. As modified in its final schedules, in the test year ended April 30, 2007, Southwest Gas claimed adjusted operating income of $73,115,474 on OCRB of $1,069,743,402. The Company proposed a FVRB of $1,392,895,487, based on a 50/50 weighting of OCRB and Reconstruction Cost New Depreciated ("RCND") rate base of $1,716,047,572. In its Initial Brief and Final Schedules, the Company suggests, for the first time, that a revenue increase of $57,546,205, based on a FVRB rate of return of 7.74 percent, is "fair, required by the Arizona Constitution, and necessary to afford the Company a reasonable opportunity to earn its authorized rate of return."[1] (SW

[1] In its Reply Brief, Staff argues that the Commission should reject the Company's amended FVRB revenue requirement proposal because it is inconsistent with the Company's application – which requested a $50.2 million revenue increase

Gas Initial Brief at 40.)

Staff recommends a revenue increase of $28,376,480 based on an OCRB of $1,065,561,602, or alternatively a revenue increase of $28,239,870 based on FVRB of $1,388,713,687. A second FVRB option offered by Staff would result in a revenue increase of $34,919,500. RUCO recommends a gross revenue increase of $32,046,846, with OCRB and FVRB recommendations of $1,089,082,745 and $1,463,404,389, respectively.

A summary of the parties' revenue requirement positions follows:

	Company Proposed	Staff Proposed	RUCO Proposed
ORIGINAL COST			
Adjusted Rate Base	$1,069,743,402	$1,065,561,602	$1,089,082,745
Rate of Return	9.45%	8.86%	8.83%
Req'd Operating Inc.	101,091,821	94,376,024	96,205,213
Op. Income Available	73,115,474	77,267,330	76,939,110
Operating Inc. Def.	27,976,347	17,108,694	19,266,103
Rev, Conver. Factor	1.6586	1.6586	1.6634
Gross Rev. Increase	46,402,924	28,376,480	32,046,846
FAIR VALUE			
Adjusted Rate Base	$1,392,895,487	$1,388,713,687	$1,463,404,389
Rate of Return	7.74%	6.79%	6.57%
Req'd Operating Inc.	107,810,111	94,293,659	96,205,213
Op. Income Available	73,115,474	77,267,330	76,939,110
Operating Inc. Def.	34,694,637	17,026329	19,266,103
Rev, Conver. Factor	1.6586	1.6586	1.6634
Gross Rev. Increase	57,546,205	28,239,870	32,046,846

REVENUE REQUIREMENT

Rate Base Issues

Yuma Manors Pipeline Replacement

The only disputed rate base issue involves a pipe replacement project undertaken by Southwest Gas in the Yuma Manors subdivision in Yuma, Arizona. Staff Pipeline Safety Inspector, Corky Hanson, recommended that Southwest Gas's request for rate base inclusion of costs associated with the replacement of pipe in Yuma Manors be disallowed. Mr. Hanson testified that the Yuma Manors pipeline was replaced prior to the end of its useful life due to improper actions taken by a

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based on a Fair Value Rate of Return ("FVROR") of 7.04 percent applied to the Company's proposed FVRB. (Staff Reply Brief at 22.) The FVROR issue is discussed below in the Cost of Capital section of the Order.

Southwest Gas employee. (Ex. S-3 at 2.)

As explained by Staff, pipe corrosion is one the leading causes of pipeline failure. In order to protect underground pipe from corrosion, companies are required to apply cathodic protection ("CP") to metallic pipe. Mr. Hanson stated that CP is accomplished by impressing direct current onto the pipe by use of a "sacrificial anode" or "rectifier." Yearly inspections are required to ensure that CP is being maintained. (*Id.* at 3.)

According to Staff, during Southwest Gas's 2006 annual code compliance audit, it was discovered that the Company had not taken prompt remedial action regarding CP deficiencies identified in 2004 on the Yuma Manors system. After the Company installed a new anode bed and reinitialized the rectifier, the Yuma Manors pipeline experienced approximately 110 leaks, resulting in approximately 20 evacuations. (Tr. at 985.) Most of the leaks occurred in January 2007, at which time Southwest Gas decided to replace the Yuma Manors system. Mr. Hanson testified that the Southwest Gas technician responsible for making repairs to the CP rectifier system connected the wiring backwards, causing the pipeline to corrode at an accelerated rate. He stated that the pipeline corrosion failures necessitated the immediate replacement of the steel pipeline system and that the Company did not discover the mistake until the system failures occurred. (Ex. S-3 at 2.)

Mr. Hanson conceded that the Yuma Manors pipeline had been in service for approximately 50 years. However, he indicated that, had the reverse CP wiring not occurred, the pipeline system could have lasted for many more years with proper cathodic protection. (Ex. S-8 at 2-3.) Staff recommends that the entire $1,092,448 cost of the Yuma Manors pipe replacement be disallowed from rate base for this case and any future cases.

Southwest Gas contends that the evidence does not support Staff's recommendation to completely disallow the replacement cost of the pipeline. In response to the concerns raised by Staff, the Company agreed to withdraw $320,779 of the replacement costs related to overtime, shift premiums, and other costs caused by undertaking the replacement over a short period of time compared to a more routine replacement schedule. (Ex. A-16 at 13.) Southwest Gas witness Jerome Schmitz testified that Staff's recommendation fails to properly recognize: (1) the age of the replaced pipe (over 50 years old), compared to the 43-year average useful life of steel pipe in Arizona; (2) that the Yuma Manors system did not have CP until 1982, more than half way through the useful life of the pipe; (3) that not all of the pipe was replaced in the Yuma Manors subdivision, and the leaks were confined to the Manors 3 section of the subdivision; (4) that other factors could have contributed to the pipeline deterioration, such as soil and other environmental conditions; and (5) that the Company made a proactive and cost-effective decision to replace the entire distribution system despite the leaks' being confined to a small area. (Ex. A-13 at 5-10; Ex. A-14 at 2-6.)

Based on all of these factors, Southwest Gas claims that it is reasonable to conclude that the Yuma Manors steel pipeline would have needed to be replaced in the near future. Southwest Gas also asserts that the replacement of the pipe resulted in a better distribution system that benefits the Company's customers. Company witness Robert Mashas stated that Staff's recommendation for a total disallowance is inconsistent with prior Commission Orders that recognized a "betterment" from the replacement of pipeline, even in instances where the replacement was due to company error. (Ex. A-16 at 8-14.) According to Southwest Gas, the Yuma Manors system had far exceeded its useful life, and the new system is safe and more reliable and will remain in service longer with lower maintenance and repair costs. The Company points out that the Commission's Office of Pipeline Safety has not cited or fined Southwest Gas for the employee error. The Company argued that Staff's recommended 100 percent disallowance is punitive in nature and that adoption of the proposed partial disallowance would achieve a more reasonable result that recognizes betterment of the system and the Company's prudent action to replace the pipeline due to the numerous leaks that occurred.

In its Brief, Staff suggests that the Commission could adopt an outcome somewhere between full disallowance and the Company's proposed partial disallowance to prevent Southwest Gas from benefiting from its employee's error. Alternatively, Staff indicates that the Commission could defer inclusion of the costs in this case but allow them in the Company's next rate case. Staff asserts that, at a minimum, the Commission should disallow the $320,079 cost associated with expedited replacement of the pipeline. However, Staff recommends that if the Commission adopts the Company's partial disallowance position, it would be appropriate to assess an additional penalty to reflect the lack of prior fines for the numerous leaks and evacuations caused by the error of a Company employee.

We agree with Staff that, at a minimum, the costs incurred by Southwest Gas for expediting the Yuma Manors pipe replacement should be disallowed. We disagree, however, that the entire replacement cost should be disallowed. Southwest Gas raises a valid point that some recognition for system betterment should be allowed to reflect the benefit received by ratepayers from replacement of pipe that had exceeded its average useful life with a newer system that should have fewer leaks and will require less maintenance. On the other hand, the evidence shows that but for the actions of the Company's employee, it is likely that the Yuma Manors system would not have experienced the multitude of leaks that occurred and that the system could have remained in service for a number of additional years.

Based on all of the evidence and arguments presented by the parties, we find that half of the cost of the Yuma Manors pipeline replacement ($546,224) should be permanently disallowed from inclusion in the Company's rate base. We believe this disallowance gives appropriate recognition and weighting to the competing arguments presented by the Company and Staff and presents a reasonable resolution of this issue.[2]

Summary of Rate Base Adjustments

Based on the foregoing discussion, we adopt an adjusted OCRB of $1,066,107,826 and a FVRB of $1,389,259,911.

ORIGINAL COST RATE BASE:

Gas Plant in Service	$2,052,881,488
Less: Accumulated Depreciation	751,995,287
Net Plant in Service	1,300,886,201
Deductions:	
CIAC	49,194,789
Customer Meter Deposits	34,402,771
Deferred Income Tax Credits	151,878,975
Additions:	
Working Capital	698,160
Total OCRB	1,066,107,826

RCND RATE BASE:

Gas Plant in Service	$3,223,228,365
Less: Accumulated Depreciation	1,173,651,142

[2] The $546,224 disallowance also requires a reduction to the Company's depreciation property tax expense.

Net Plant in Service	2,049,577,223
Deductions:	
CIAC	49,194,789
Customer Meter Deposits	34,402,771
Deferred Income Tax Credits	254,265,827
Additions:	
Working Capital	698,160
Total RCND	1,712,411,996

FAIR VALUE RATE BASE:

Gas Plant in Service	$2,638,054,926
Less: Accumulated Depreciation	962,823,214
Net Plant in Service	1,675,231,712
Deductions:	
CIAC	49,194,789
Customer Meter Deposits	34,402,771
Deferred Income Tax Credits	203,072,401
Additions:	
Working Capital	698,160
Total FVRB	1,389,259,911

Operating Income Issues

In the test year, the Company's adjusted operating revenues were $399,234,678. In its Final Schedules, Southwest Gas reported adjusted test year operating expenses of $326,119,204 and test year net operating income of $73,115,474. As reported in its Final Schedules, Staff's proposed adjusted test year operating expenses are $321,967,348, resulting in test year operating income of $77,267,330. RUCO's Schedules show recommended adjusted operating revenues of $431,281,524, proposed adjusted test year total operating expenses of $335,076,311, yielding net operating income of $96,205,213. The disputed expense adjustments are discussed below.

Revenues

There was no dispute between the parties regarding the Company's revenues during the test year. We therefore adopt test year revenues in this proceeding of $399,234,678.

Operating Expenses

2008 Wage Increase

In this proceeding, Southwest Gas has included in proposed test year expenses a 3 percent general wage increase that was given to employees in 2008, in addition to a wage increase given in

2007. Staff does not oppose recognition of the 2008 wage increase because it is a known and measurable post-test-year event. RUCO does not object to inclusion of the 2007 wage increases that became effective in May and June 2007 (after the end of the test year), but proposes to disallow the 2008 increases on the basis that they are too far removed from the end of the test year and would create a mismatch between rate base, revenues, and expenses at the end of the test year. (RUCO Ex. 3 at 23.)

Company witness Randi Aldridge testified that, contrary to RUCO's assertion, the Company included only wage increases for employees who were employed as of the end of the test year, to avoid a mismatch. (Ex. A-10 at 6-7.) She stated that the 2008 wage increase did not apply to any employee hired after the end of the test year (April 30, 2007); therefore, the number of employees at the end of the test year is synchronized with customers served during the test year. (*Id.* at 7.)

We agree with the Company and Staff that the 2008 wage increase expense should be allowed because it is a known and measurable expense that is being incurred by Southwest Gas 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 revenues and expenses. Our conclusion is consistent with the treatment accorded this issue in the Company's prior rate case. (*See* Decision No. 68487 at 12-13.)

<u>American Gas Association Dues</u>

The American Gas Association ("AGA") is a national trade association for natural gas distribution and transmission companies. During 2007, Southwest Gas paid to the AGA dues of $401,795, with the Arizona jurisdictional amount being 56.70 percent of the total ($227,920). (Staff Final Sched. C-6.) The AGA provides services to its members in the following categories: Advertising; Public Affairs; Corporate Affairs; General Counsel; General & Administrative Expense; Policy, Planning and Regulatory Affairs; Operations & Engineering Management; Policy & Analysis; and Industry Finance & Administrative Programs. (Ex. A-11, RLA-2.)

In the Company's last rate case, Southwest Gas requested recovery of 96.36 percent of the AGA dues, excluding 3.64 percent of the dues related to the AGA's marketing and lobbying functions. In that case, Staff did not oppose the Company's request, but RUCO proposed disallowance of 39.09 percent of the AGA dues, to exclude the Communications and Public Affairs expense categories. The Commission rejected RUCO's proposed disallowance and adopted the Company's inclusion of 96.36 percent of the AGA dues, finding that "[a]lthough the descriptions of AGA activities provided by the Company [were] somewhat nebulous," Southwest Gas had satisfied its burden of showing that the AGA functions provide a benefit to the Company and its customers. (Decision No. 68487 at 14.) However, the Commission directed Southwest Gas to provide in its next rate case filing "a clearer picture of AGA functions and how the AGA's activities provide specific benefits to the Company and its Arizona customers." (*Id.*)

In this case, Southwest Gas seeks recovery of 94.52 percent of its AGA dues, excluding 5.48 percent of the dues as related to marketing and lobbying functions. To satisfy the Commission's directive in the prior Decision, Company witness Aldridge provided testimony describing the AGA's functions, as well as several attachments extolling the virtues of various AGA activities. (Ex. A-10 at 21-24; Ex. A-11, RLA-1 and RLA-2.) The Company contends that it has provided ample support for the functions provided by the AGA and the benefits that accrue to the Company and its ratepayers as a result of the AGA's activities. Southwest Gas argues that the documentation provided comes directly from the AGA and that there is no better source of information for analyzing the appropriateness of the AGA's activities. The Company cites to the testimony of Ms. Aldridge who claimed that AGA member benefits amounted to $479 million, compared to only $18 million in total membership dues. (Ex. A-11 at 9.)

RUCO did not oppose the Company's proposed recovery of AGA dues in this proceeding. However, Staff recommends disallowance of 40 percent of AGA dues on the basis that Southwest Gas has not demonstrated how the AGA's activities provide specific benefits to ratepayers. Staff witness Ralph Smith stated that Southwest Gas failed to substantiate its claims that AGA membership resulted in $479 million in member savings in 2006, and that it is not clear if the claimed benefits have ever been audited or verified. (Ex. S-12 at 40; Ex. S-13 at 33.) Mr. Smith testified that the Company failed to demonstrate why ratepayers should fund activities through membership in an industry organization that would likely be disallowed if they were performed by the Company itself. (*Id.*) Staff's 40-percent disallowance recommendation is based on decisions by other state regulatory commissions and audits of the AGA by the National Association of Regulatory Utility Commissioners ("NARUC"). Mr. Smith cited to orders issued by other commissions in which AGA dues were disallowed in the following percentages: Michigan (16.17 percent), California (25 percent), and Florida (40 percent). (*See* Ex. S-12 at 41-45.) He also cited a 1999 NARUC-sponsored audit of AGA expenditures that stated, "these expense categories may be viewed by some State commissions as potential vehicles for charging ratepayers with such costs as lobbying, advocacy or promotional activities which may not be to their benefit." (*Id.* at 43.)

Staff claims that its recommended 40-percent disallowance is consistent with a March 2005 NARUC Audit Report that quantified AGA function categories that Staff believes should not be paid by ratepayers. The categories cited by Staff are: Public Affairs (24.13 percent); Corporate Affairs and International (10.54 percent); half of General Counsel and Corporate Secretary (2.6 percent); and Marketing (2.37 percent). (*Id.* at RCS-2, Sched. C-6.) Staff contends that the 39.64-percent total represented by these activities supports its recommended disallowance. Moreover, according to Mr. Smith, based on the 2007 and 2008 AGA budgets, the recommended dues disallowance would be 43.29 percent and 46.19 percent, respectively (*Id.*; Ex. S-14 at 33-34.)

We find that Staff's recommended disallowance of 40 percent of AGA dues represents a reasonable approximation of the amount for which ratepayers receive no supportable benefit. The documentation offered by the Company to justify the AGA dues, including the alleged monetary savings to members, consists primarily of information provided by the AGA itself and must be viewed in that context. As Staff witness Ralph Smith indicated, several other states have disallowed AGA dues in substantially higher amounts than the amount proposed by Southwest Gas. Mr. Smith also pointed out that Staff's recommended disallowance is approximately the same percentage as that attained by totaling up AGA activities for Public Affairs, Corporate Affairs, half of General Counsel expenses, and marketing under a 2005 NARUC audit. Further, application of the 2007 and 2008 AGA dues would result in even greater disallowances under these categories. We therefore adopt Staff's recommendation to disallow 40 percent of the Company's AGA dues.

<u>Injuries and Damages Expenses</u>

Southwest Gas and Staff continue to dispute the appropriate amount to be allocated for injuries and damages expenses. The Company has proposed an increase in this expense of approximately $2,490,000, for a total of $8,169,000. Staff recommends reducing the Company's proposed increase to $1,638,000, for a total injuries and damages expense allowance of $7,317,000.

Southwest Gas contends that its proposal is consistent with the methodology agreed to by the parties, and adopted by the Commission, in the Company's last rate case. The Company's proposal utilizes claims in all jurisdictions over a 10-year period and includes recognition of a change in the Company's self-insurance limits during that period. Company witness Mashas testified that from January 1998 through July 2004, the Company's insurance policies provided that Southwest Gas was self-insured for up to $1 million of expenses related to a single claim. From August 2004 through July 2005, the Company provided self-insurance for the first $1 million per claim, and also for *aggregate* claims up to $10 million. In August 2005, Southwest Gas acquired an additional policy that covers aggregate claims for amounts between $5 million and $10 million. (Ex. A-16 at 3-4.)

According to Mr. Mashas, Southwest Gas has experienced only one incident since August 2004 in which the claim exceeded the $1 million per incident self-insured amount. The incident in question occurred in May 2005 when a leaking gas fire in Tucson caused several people to be severely burned, and Southwest Gas paid $10 million in a settlement of claims related to the incident. Southwest Gas argues that Staff's removal of this amount from its 10-year average is inappropriate because prior to August 2004, injuries and damages claims over $1 million would have been indemnified by the Company's insurer and would therefore not have been recorded on the Company's books. (*Id.* at 5.) Mr. Mashas claims that Staff's 10-year average is therefore skewed and is inconsistent with the treatment afforded injuries and damages expenses in the last rate case. Southwest Gas argues that Staff's exclusion of the $10 million claim does not reflect the level of self-insurance that the Company expects to experience during the period rates from this case are in effect.

Staff asserts that the $10 million payment related to the 2005 incident should be excluded because it represents an abnormal expense that is not likely to be experienced on a going-forward basis. Staff witness Ralph Smith stated that the leaking gas incident in 2005 was an abnormal event and that Southwest Gas did not demonstrate the leaking gas incident in 2005 was not due to its own negligence; therefore, ratepayers should not bear the burden of the $10 million self-insurance payment. (Ex. S-12 at 62.) Mr. Smith conceded that the Company's proposed methodology in this case is consistent with the resolution of the issue in the last Southwest Gas case, but asserts that the result in the prior case should not dictate the outcome in this case where a different set of facts is presented. (Ex. S-14 at 39.)

Staff contends that the Company's proposed methodology would overstate significantly the amounts recorded on its books for 2006 and 2007 and would far exceed the pro forma expenses allowed in the Company's last rate case. (*Id.* at 41.) Staff claims that there is no single correct method for calculating this expense and that the method used in the last case should not continue to be used if it produces unreasonable results that are not reflective of expected pro forma expenses. Staff points out that its 10-year normalization recommendation, excluding the $10 million for the 2005 incident, still results in an injuries and damages expense allowance that is $1.638 million more than the actual amount recorded for the test year. Staff therefore requests that the Commission adopt its recommendation to reduce the Company's proposal by $851,717, to a total Arizona jurisdictional injuries and damages expense allowance of $7.317 million. (*Id.*, Attach. RCS-7, Sched. C-12.)

We agree with Staff that the 10-year normalization of recorded injuries and damages expenses for Southwest Gas is an appropriate means of calculating the Company's likely pro forma expenses for the period rates will be in effect from this case. We believe Staff has presented a reasonable analysis of the issue by excluding the costs for what appears to be an extraordinary event that occurred in 2005, but is not likely to occur on a going-forward basis. As Staff points out, even under its 10-year normalization recommendation, the Company's allowable injuries and damages expense, for purposes of setting rates in this case, is 29-percent higher than the actual recorded expenses during the test year. This issue was resolved between the parties in the Company's last rate case, and was therefore not raised as a litigated issue for the Commission to decide. Based upon the evidence presented in this case, we find that the injuries and damages expense calculated by Staff represents a reasonable resolution of this issue. Staff's recommendation is therefore adopted.

Management Incentive Program

Southwest Gas provides compensation in addition to base salaries to certain eligible management employees through its Management Incentive Program ("MIP") based on achievement of the following five factors: (1) an improved customer-to-employee ratio; (2) a comparison of the Company's customer-to-employee ratio to its peer utilities; (3) the results of customer satisfaction surveys; (4) three-year weighted return on equity ("ROE"); and (5) a comparison of the Company's ROE to peer utilities. (Ex. S-12 at 27.) In this proceeding, the Company seeks $3.223 million for costs related to the MIP. Staff and RUCO recommend allowing only 50 percent of the MIP expenses, consistent with the Company's last rate case and other more recent decisions by the Commission.

Company witness Laura Hobbs claims that these five factors are directly related to the provision of natural gas service. Southwest Gas contends that achieving these goals helps the Company to attract, retain, and motivate quality employees. (Ex. A-7 at 2-3; Ex. A-8 at 1-2.) She also indicated that annual variable pay for management employees is standard in the industry and that the Company's total executive compensation is less than the market average compared to other western utilities, including Pinnacle West and UniSource. (*Id.*) Southwest Gas argues that the 50-percent disallowance proposed by Staff and RUCO is not based on comparative compensation studies but is based entirely on prior Commission decisions. The Company contends that neither Staff nor RUCO presented any substantive analysis showing that the Company's incentive compensation is unreasonable or imprudent.

Staff and RUCO propose to reduce MIP expenses by 50 percent to recognize that both shareholders and ratepayers receive benefits through achievement of the MIP performance targets, especially between rate cases. Staff witness Smith stated that shareholders and ratepayers stand to benefit from the performance goals, but added that there is no assurance that the award levels achieved during the test year will be repeated in future years. (Ex. S-4, at 9-10).

RUCO witness Rodney Moore testified that the MIP criteria include elements related to financial performance and cost containment goals, which are goals that primarily benefit shareholders. He stated that consistent with a number of prior Commission decisions on this issue, RUCO proposes disallowing 50 percent of MIP costs to recognize that both shareholders and customers receive a benefit from the performance goals included in the MIP. (RUCO Ex. 3 at 29.)

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In the last Southwest Gas rate case, as well as several subsequent cases,[3] we disallowed 50 percent of management incentive compensation on the basis that such programs provide approximately equal benefits to shareholders and ratepayers because the performance goals relate to financial performance and cost containment goals as well as customer service elements. (Decision No. 68487 at 18.) In that Decision, we stated:

> In Decision No. 64172, the Commission adopted Staff's recommendation regarding MIP expenses based on Staff's claim that two of the five performance goals were tied to return on equity and thus primarily benefited shareholders. We believe that Staff's recommendation for an equal sharing of the costs associated with MIP compensation provides an appropriate balance between the benefits attained by both shareholders and ratepayers. Although achievement of the performance goals in the MIP, and the benefits attendant thereto, cannot be precisely quantified there is little doubt that both shareholders and ratepayers derive some benefit from incentive goals. Therefore, the costs of the program should be borne by both groups and we find Staff's equal sharing recommendation to be a reasonable resolution.

(*Id.*) We believe the same rationale exists in this case to adopt the position advocated by Staff and RUCO to disallow 50 percent of the Company's proposed MIP costs.[4]

Supplemental Executive Retirement Plan

Southwest Gas also offers a Supplemental Executive Retirement Plan ("SERP") to select executives. The SERP provides supplemental benefits for high-ranking employees in excess of the limits placed by Internal Revenue Service ("IRS") regulations on pension plan calculations for salaries above specified amounts. (Ex. S-12 at 30-31.) We explained in the last Southwest Gas case:

> IRS regulations place limits on pension plan calculations for salaries exceeding $165,000 and thus salaries in excess of that level are not included in the pension calculation. Mr. Mashas stated that the SERP provides officers with a retirement benefit equal to 50 percent of the average of the last three years salary provided that they are at least 60 years old and have at least 20 years of service. In addition, IRS regulations place restrictions on the Company's 401(k) contributions to

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[3] *See UNS Gas, Inc.*, Decision No. 70011 (November 27, 2007) at 27; *Arizona Public Service Co.*, Decision No. 69663 (June 28, 2007) at 27; and *UNS Electric, Inc.*, Decision No. 70360 (May 27, 2008) at 21.

[4] On the same basis, we will also disallow 100 percent of the Southwest Gas stock incentive plan ("SIP"). The costs related to similar incentive plans were recently rejected for APS and UNS Electric. (*See* Ex. S-12 at 32-34.) As was noted in the APS case, stock performance incentive goals have the potential to negatively affect customer service, and ratepayers should not be required to pay executive compensation that is based on the performance of the Company's stock price. (Decision No. 69663 at 36.)

> the extent that "maximum contribution levels represent a significantly smaller percentage of an officer's salary compared to other employees."

[Decision No. 68487 at 18 (citations omitted).]

Company witness Hobbs testified that the MIP, SIP and SERP are "key components of [the Company's] prudently managed total executive compensation expense and are vital to the Company's attraction and retention of highly-skilled employees, which ultimately benefits customers." (Ex. A-8 at 7-8.) She explained that the SERP is an "unqualified plan," and therefore payments are not guaranteed. She also stated that contrary to the testimony provided by Staff and RUCO, virtually every other gas and electric utility offers such employees a SERP, and the costs of the SERP are reasonable. (*Id.*)

Staff witness Smith and RUCO witness Moore recommend a total disallowance of SERP expenses. Mr. Smith cites to the prior Southwest Gas rate case, as well as the subsequent UNS Gas, APS, and UNS Electric cases, wherein the Commission disallowed SERP costs. Mr. Moore stated that SERP costs are not a necessary cost for providing service and indicated that the high-ranking officers covered by the SERP are already fairly compensated for their work and are provided a comprehensive array of benefits in addition to salaries. (RUCO Ex. 3 at 30.)

We agree with Staff and RUCO that the SERP expenses sought by Southwest Gas should once again be disallowed. We do not believe any material factual difference exists in this case that would require a result that differs from the Company's prior case. In that case, we stated:

> [W]e believe that the record in this case supports a finding that the provision of additional compensation to Southwest Gas' highest paid employees to remedy a perceived deficiency in retirement benefits relative to the Company's other employees is not a reasonable expense that should be recovered in rates. Without the SERP, the Company's officers still enjoy the same retirement benefits available to any other Southwest Gas employee and the attempt to make these executives "whole" in the sense of allowing a greater percentage of retirement benefits does not meet the test of reasonableness. If the Company wishes to provide additional retirement benefits above the level permitted by IRS regulations applicable to all other employees it may do so at the expense of its shareholders. However, it is not reasonable to place this additional burden on ratepayers.

(Decision No. 68487 at 19.)

In the recent UNS Gas, APS, and UNS Electric cases, we followed the rationale cited above in disallowing SERP expenses. In Decision No. 70011, we indicated that SERP costs should not be recoverable and indicated:

> [T]he issue is not whether UNS may provide compensation to select executives in excess of the retirement limits allowed by the IRS, but whether ratepayers should be saddled with costs of executive benefits that exceed the treatment allowed for all other employees. If the Company chooses to do so, shareholders rather than ratepayers should be responsible for the retirement benefits afforded only to those executives. We see no reason to depart from the rationale on this issue in the most recent Southwest Gas rate case, and we therefore adopt the recommendations of Staff and RUCO and disallow the requested SERP costs.

[*Id.* at 28, (footnote omitted).] For these reasons, we agree with the recommendations of Staff and RUCO that the request for inclusion in rates of SERP expenses should be denied. We therefore adopt the recommendations of Staff and RUCO on this issue.

<u>Miscellaneous "Unnecessary" Expenses</u>

Based on his review of data requests, RUCO witness Rodney Moore proposed a disallowance of $185,210 from test year expenses for various miscellaneous expenses that RUCO deems unnecessary for the provision of service to the Company's customers. Mr. Moore testified that RUCO adjusted the Company's proposed operating expenses to remove payments to chambers of commerce and non-profit organizations; donations; club memberships; gifts; awards; extravagant corporate events; advertising; and various meals, lodging, and refreshments. (RUCO Ex. 3 at 27.) In his Surrebuttal Testimony, Mr. Moore cites the following specific miscellaneous expenses as examples of items that should not be recoverable: (1) massages ($2,160); (2) gift certificates to theaters, restaurants, and shopping malls ($18,230); (3) water, ice, coffee, beverages and refreshments for Company offices ($66,422); (4) breakfast, lunch, and dinner for meetings ($71,358); (5) off-site management meetings at various resorts ($8,835); and (6) a Board of Directors meeting at a golf course ($5,365). (*Id.* at 28; RUCO Ex. 6 at 7.)

Through her testimony, Company witness Randi Aldridge stated that RUCO had failed to justify the exclusion of the various miscellaneous expenses identified by Mr. Moore. Ms. Aldridge claimed that the vast majority of the expenditures are reasonable, recurring, and necessary business expenses and should remain in cost of service. (Ex. A-11 at 9-13; Ex. A-12 at 5-8.) Southwest Gas contends that RUCO did not provide specific testimony or evidence regarding its proposed disallowances other than claiming a philosophical difference with the Company regarding such expenditures.

Although Ms. Aldridge accepted exclusion of a portion ($13,904) of RUCO's proposed disallowance, she provided the following additional detail to support the Company's expenses: (1) gift certificates for employee awards and recognition are appropriate expenditures to enhance performance; (2) office refreshments help improve productivity and employee morale; (3) meals provided at meetings outside normal business hours or during training enhance cost-effective operations; and (4) off-site meetings are cost-effective because it allows the Company to avoid owning and maintaining facilities needed to accommodate occasional meetings. (Ex. A-11 at 12-13.) Southwest Gas argues that RUCO has not found the Company's expenditures related to gifts and awards to be excessive or imprudent and the Commission should reject RUCO's proposed disallowances.

In her Rejoinder testimony, Ms. Aldridge claimed that RUCO has not raised a "reasonable doubt" that the expense items identified by Mr. Moore should be excluded from rates. Rather, she indicates that RUCO simply relies on a "philosophical difference" with the Company as a basis for the disallowance. (Ex. A-12 at 7.) Ms. Aldridge asserts that she has offered explanations as to how these expenses provide customer benefits or cost savings, and she therefore believes the Company has met its "burden of proof" on this issue. (*Id.* at 8.)

We do not believe that the Company has met its burden of proving the reasonableness of all of the miscellaneous expenses for which it seeks recovery. Ms. Aldridge offered some broad, self-serving descriptions of how, in her opinion, ratepayers are provided a benefit from the Company giving gift certificates and awards to its employees, providing meals and refreshments in the office, and holding off-site meetings at resorts. Although gifts, awards, meals, refreshments, and off-site meetings at resorts may offer some employees a benefit, we do not believe Southwest Gas has provided sufficient justification for inclusion of such costs in their entirety. The issue is not just whether employees are happier because they may be a recipient of gifts, but whether those costs are truly necessary for the provision of gas service and thus whether ratepayers should bear the costs of those gifts. As RUCO points out, the Company has yet to explain adequately why the cost of massages, gift certificates, and various meals and refreshments should be the responsibility of ratepayers.

Therefore, because we find that the Company failed to sustain its burden of proof on this issue, but also recognize that many of these miscellaneous expenses may be legitimate and reasonable business expenses, consistent with the last Southwest Gas rate case, we will disallow half of RUCO's proposed disallowance ($185,210 x 50% = $92,605 disallowance).

Southwest Gas Legal Argument on Expenses

In its Brief, Southwest Gas cites the case of *West Ohio Gas v. Public Utilities Commission of Ohio*, 294 U.S. 63 (1935), to support its contention that specific expense items, including advertising and promotional costs, must be presumed reasonable. While the *West Ohio Gas* case indicates that "good faith" should be presumed on the part of a company's managers with respect to the prudence of expenditures, we disagree with the position, advocated by Southwest Gas, that our consideration of the reasonableness of any particular expense may not include recognition of the relative benefits that may be derived from such costs. As we stated in the Company's last rate case, the test of reasonableness is based on a host of considerations presented in the record and may not be reduced to a simple pass-through of costs claimed by the Company in order to pass legal muster. The Commission's ratemaking authority allows precisely the type of analysis that has been conducted with respect to these expense items and is consistent with case law interpreting that authority. (*See* Decision No. 68487 at 21-22.)

Summary of Operating Expense Adjustments

Consistent with the foregoing discussion, we determine that the Company's allowable test year operating expenses were $321,926,794.

Net Operating Income

Based on the findings above, we will allow adjusted test year operating expenses of $321,926,794, which based on test year revenues of $399,234,678, results in test year adjusted operating income of $77,307,884, a 5.56 percent rate of return on FVRB.

COST OF CAPITAL

As amended at the hearing, Southwest Gas recommends that the Commission determine the Company's cost of common equity to be 11.25 percent. Assuming adoption of a hypothetical 45-percent common equity component in its capital structure, this results in a weighted average cost of capital of 9.45 percent. Staff recommends a cost of common equity rate of 10.0 percent with an overall weighted average cost of capital determination of 8.86 percent. (Ex. S-18, DCP-1.) RUCO proposes adoption of a cost of common equity of 9.88 percent and a weighted average cost of capital of 8.83 percent. (RUCO Ex. 3, RLM-18.)

Cost of Debt and Preferred Stock

There is no dispute between the parties regarding Southwest Gas's cost of long-term debt and preferred stock. Both Staff and RUCO accepted the Company's proposal to adopt a 7.96-percent cost of long-term debt and a rate of 8.20 percent for preferred stock. (Ex. S-17 at 3; RUCO Ex. 7 at 46-7.)

Cost of Common Equity

Determining a company's cost of common equity for purposes of setting its overall cost of capital requires an estimation that is both art and science. As evidenced by the competing methodologies employed by the cost-of-capital witnesses in this case, there is no clear-cut answer as to which formula should be used for reaching the appropriate outcome. Rather, the three expert witnesses, Hanley, Parcell, and Rigsby, each rely on various analyses for their recommendations.

Southwest Gas

Southwest Gas's expert witness, Frank Hanley, based his common equity cost recommendation of 11.25 percent on the results of his common equity models, namely, the Discounted Cash Flow ("DCF"), Risk Premium Model ("RPM"), Capital Asset Pricing Model ("CAPM"), and Comparable Earnings Model ("CEM"). According to Mr. Hanley, use of these models is consistent with the Efficient Market Hypothesis ("EMH"), which is based on the premise that investors are aware of all relevant publicly available information in making their investment decisions. (Ex. A-33 at 17-22.) Mr. Hanley stated that, absent evidence to the contrary, it must be assumed that investors are aware of all of the models he used in his analysis and that those investors take the models into account in making their decisions. (*Id.*)

In his analysis, Mr. Hanley developed a proxy group of eight comparable gas distribution companies. Based on a historical comparison of financial data for the proxy group and Southwest Gas, Mr. Hanley found that Southwest Gas has earned returns well below those of the other companies in the proxy groups. According to the Company, during the 10-year period ending 2006, Southwest Gas achieved an average return on actual book common equity of 5.72 percent in Arizona, compared to the 11.83 percent average ROE realized by the rest of the proxy group. (*Id.* at 12, FJH-1.)

The Company argues that there is an even greater disparity with the proxy group ROEs if Southwest Gas's greater level of business risk is taken into account, as evidenced by the Standard & Poor's ("S&P") business profile of "strong" for Southwest Gas compared to the proxy group average profiles of "excellent." (Ex. A-34, at 4-5, FJH-15.) The Company also claims its ROE request is reasonable compared to other litigated cases for local distribution companies ("LDCs") across the country over the past year, where the average ROE granted was 10.33 percent, for companies with a common equity ratio of 52.42 percent. (*Id.* at 36, FJH-30.) The Company argues that these comparisons support the need for a higher ROE because Southwest Gas is more risky, from both business and financial risk perspectives.

Southwest Gas points out that Staff's recommended ROE is well below the 10.75 percent authorized ROE for APS in Decision No. 69663 (June 28, 2007). (*See* Tr. at 33.) The Company also points out that Southwest Gas has bond ratings from Moody's and S&P of BAA-3 and BBB-minus, respectively, whereas APS has bond ratings from Moody's and S&P of BAA-2 and BBB-minus. Similarly, the Company claims that the business risk and financial risk assigned to both Southwest Gas and APS are "strong" and "aggressive," respectively, indicating that the cost of equity for Southwest Gas should be at least as high as was adopted for APS. (*Id.*) The Company also cites to the *Hope* and *Bluefield* cases,[5] for the proposition that the Commission must consider Southwest Gas's greater risk relative to other LDCs when determining an appropriate common equity cost rate.

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[5] *Federal Power Comm'n et al. v. Hope Natural Gas Co.*, 320 U.S. 591 (1944); *Bluefield Waterworks & Improvement Co. v. Public Service Comm'n of West Virginia,* 262 U.S. 679 (1923).

RUCO

RUCO contends that its proposed 9.88-percent cost of common equity is appropriate given the Company's actual capital structure, the current environment of relatively low inflation and interest rates, and the Company's relatively higher financial risk compared to other similar LDCs. RUCO witness Rigsby employed both a DCF analysis and his CAPM to reach his recommendation. His DCF analysis yielded a 9.73 percent cost of equity ("COE") result, while the CAPM resulted in a range of 9.20 to 10.83 percent. (RUCO Ex. 7 at 28.) In reaching his 9.88 percent COE recommendation, Mr. Rigsby took the mean average of his DCF (9.73) and CAPM (10.02) results, and then averaged the DCF and CAPM estimates. (*Id.* at 29.)

RUCO argues that Mr. Rigsby took into account the additional financial risks faced by Southwest Gas and the current economic environment. RUCO points to Mr. Rigsby's testimony that his COE recommendation takes into account anticipated interest rate increases by the Federal Reserve and the impact of such increases on utility stocks. RUCO contends that Mr. Rigsby's analysis of investor views of utility stocks was confirmed by financial analysts and financial reports discussed in his testimony. RUCO asserts that Mr. Rigsby's use of DCF and CAPM models is consistent with prior Commission decisions that have relied on those methodologies. RUCO also claims that the Company's analysis arbitrarily excluded companies from its proxy group based solely on such companies' COE falling below a certain minimum. RUCO argues that its recommended COE of 9.88 percent reasonably reflects a return that is fair to both Southwest Gas and its ratepayers.

Staff

In determining Staff's cost of common equity recommendation in this proceeding, Staff witness David Parcell employed three methodologies: DCF, CAPM and CEM. Each of the models was applied to two groups of proxy utility companies, one comprised of the LDCs followed by *Value Line*, except for those companies that have not paid cash dividends, and the second group consisting of the same eight companies used by the Company. (Ex. S-17 at 21-22.)

In his analysis, Mr. Parcell used a constant growth DCF model that resulted in a range for the proxy groups of 9.3 to 10.4 percent. (*Id.* at 25.) His CAPM calculations were based on the three-month average yield for 20-year U.S. Treasury bonds compared to actual returns on equity for the

S&P 500 from 1978 through 2006. Mr. Parcell calculated mean and median risk premiums, both arithmetic and geometric, and determined a CAPM range of 9.5 to 9.8 percent for the two proxy groups. (*Id.* at 27-28.) Finally, Mr. Parcell used the CEM methodology by looking at realized returns on equity for several groups of companies (1992-2006) and evaluating investor acceptance of the returns based on the resulting market-to-book ratios. Based on his CEM analysis, Mr. Parcell concluded that an earned return of 10.0 to 10.5 percent should result in a market-to-book ratio over 100 percent and reflect current market conditions. The three methodologies employed by Mr. Parcell produced a 9.3-to 10.5-percent range for cost of equity of the proxy groups, with a mid-point of 9.9 percent. For Southwest Gas, he recommends that the Commission adopt a slightly higher cost of equity of 10.0 percent to reflect the lower equity ratio and lower debt ratings of Southwest Gas compared to those of the proxy groups. (Ex. S-17 at 30-34.) In his Surrebuttal Testimony, Mr. Parcell updated his results based on more recent data and indicated that there was a slight increase in his DCF results, a slight decrease in his CAPM results, and no change in the CEM results. He concluded that the updated data would not change his 10.0-percent recommendation. (Ex. S-18 at 24.)

Staff criticizes the Company's exclusion from its proxy group companies that had a DCF-determined ROE below 9.60 percent, whereas based on the Company's claim that such returns are not indicative of those required by reasonable investors investing in an LDC's stock. With respect to the CEM, Mr. Parcell stated that it is "designed to measure the returns expected to be earned on the original cost book value of similar risk enterprises." (*Id.* at 28.) Staff claims that the Company has not supported its argument that Southwest Gas is riskier than other LDCs. Staff contends that the reason for the Company's lower bond ratings, relative to comparable LDCs, is the lower equity ratio historically maintained by Southwest Gas, which requires the Company to incur higher debt costs. Staff asserts that Southwest Gas should not be rewarded with the higher COE determination based on the Company's historically undercapitalized equity structure. Staff also argues that, with respect to the CAPM, the Company's use of only the arithmetic mean fails to recognize that investors have access to both arithmetic and geometric means information and therefore both should be used for analyzing Southwest Gas's COE. Staff cites to the recent UNS Electric case (Decision No. 70360 at 43), wherein the Commission agreed with Staff that both means analyses are appropriate in determining a company's COE.

Conclusion on Cost of Equity

We believe that Staff's recommended cost of equity capital in this proceeding achieves an appropriate result that is supported by the evidence in the record. Staff witness Parcell's use of the DCF, CEM, and CAPM for the two proxy groups provides a broad range of results that is useful for assessing the reasonableness of Staff's COE recommendation. We agree with Staff that the Company's arbitrary elimination in its DCF calculation of all but two of the companies in its proxy group, based solely on Mr. Hanley's subjective opinion that their ROEs were too low, undermines the results achieved by Southwest Gas's DCF analysis.

As Mr. Parcell explained in his testimony, the COE calculation attempts to estimate the return on investment required by investors taking into account all available information regarding relative risk and alternatives. He stated that although the Company's COE cannot be precisely quantified, through his use of two proxy groups, including the group selected by the Company's witness, has given recognition to Southwest Gas's selected proxy companies. (Ex. S-17 at 20-21.)

After reviewing the various proposals summarized herein, and as further described in the testimony prepared by the parties' expert witnesses, we believe Staff's cost of equity capital recommendation is appropriate for determining the Company's overall cost of capital in this proceeding. Staff's overall COE calculation of 9.90 percent, with an upward adjustment of 10 basis points to 10.0 percent, gives recognition to Southwest Gas's lower equity ratio and debt ratings compared to those of comparable companies.

We are not persuaded by the Company's legal arguments that adoption of Staff's cost of equity recommendation would constitute a violation of the Commission's authority under the Arizona Constitution, the case law interpreting that authority, or the *Hope* and *Bluefield* decisions. Article 15, Section 3 of the Arizona Constitution provides, in relevant part, that the Commission "shall have full power to, and shall, prescribe just and reasonable classifications to be used and just and reasonable rates and charges to be made and collected, by public service corporations within the State for service rendered therein." In determining just and reasonable rates, the Commission has broad discretion, subject to the obligation to ascertain the fair value of the utility's property and to establish rates that "meet the overall operating costs of the utility and produce a reasonable rate of return." *Scates, et al. v. Arizona Corp. Comm'n*, 118 Ariz. 531, 534, 578 P.2d 612 (Ariz. Ct. App. 1978). Under the Arizona Constitution, a utility company is entitled to a fair rate of return on the fair value of its properties, "no more and no less." *Litchfield Park Service Co. v. Arizona Corp. Comm'n*, 178 Ariz. 431, 434, 874 P.2d 988 (Ariz. Ct. App. 1994) (citing *Arizona Corp. Comm'n v. Citizens Utilities Co.*, 120 Ariz. 184 (Ariz. Ct. App. 1978)). The oft-cited *Hope* and *Bluefield* cases provide that the return determined by the Commission must be equal to that from an investment with similar risks made at generally the same time and should be sufficient under efficient management to enable the Company to maintain its credit standing and raise funds needed for the proper discharge of its duties. We believe adoption of Staff's recommendation satisfies this obligation.

Capital Structure

During the test year, Southwest Gas had an average actual capital structure consisting of 43.44 percent common equity, 4.48 percent preferred stock, and 52.08 percent long-term debt. (Ex. S-17 at 2-3.) The Company and RUCO agree that the Commission should employ a hypothetical capital structure consisting of 45 percent common equity, 4 percent preferred equity, and 51 percent long-term debt. (Ex. A-30 at 3-13; RUCO Ex. 7 at 50). However, Staff disagrees and recommends that the Commission employ the Company's actual test year capital structure for setting rates in this case.

Southwest Gas supports adoption of a hypothetical capital structure because: (1) its actual capital structure as of March 31, 2008, was 45.1 percent; (2) the Company's proposed capital structure contains less common equity than the average common equity ratio of the proxy companies used by Staff; and (3) the Company's proposed hypothetical capital structure contains less common equity than the average common equity of the proxy companies employed by Southwest Gas and RUCO. (Ex. A-31 at 3.)

According to Southwest Gas, the Company has improved its actual common equity ratio from 31.1 percent in 1995 to 45.1 percent as of March 31, 2008, an improvement that is consistent with the Commission's directive in the last rate case for the Company to continue to improve its equity ratio. Southwest Gas also cites to the UNS Gas rate case wherein the Commission adopted a hypothetical 50/50 capital structure, compared to test year equity of 44.67, to recognize and encourage continued improvement of UNS's equity component. (Decision No. 70011 at 36-7.) Southwest Gas argues that its equity ratio improvement should be recognized in a like manner by the adoption of its proposed 45 percent equity component in this case.

The Company also contends that its proposed hypothetical capital structure, consisting of 45 percent equity, is significantly below the equity component for recent litigated cases of the Company's proxy companies (52.42 percent) and projected equity ratios for the Company's and Staff's proxy groups (57.5 and 57.8 percent, respectively). (Ex. A-33 at 36; Ex. A-31, TKW-4.) Southwest Gas claims that its proposed capital structure is consistent with the standards set forth in *Bluefield*, which the Company asserts mandates that rates must permit a utility company to earn a return equal to that generally made at the same time, in the same general area, on investments with similar risks. Southwest Gas requests that the Commission approve the hypothetical capital structure recommended by the Company and RUCO.

Although, as discussed below, RUCO disagrees with Southwest Gas' overall cost of capital recommendation, it agrees with the Company's hypothetical capital structure proposal. RUCO witness William Rigsby stated that he adopted the Company's hypothetical structure in his analysis because Southwest Gas is close to the average debt and equity percentages in his sample group of LDCs. The capital structures for his sample group averaged 45.9 percent long-term debt, 0.20 percent preferred equity, and 53.9 percent common equity. (RUCO Ex. 7 at 48-9.) Mr. Rigsby stated that RUCO's proposed hypothetical structure would provide Southwest Gas with "additional operating income and cash flows that will offset any perceived financial risk." (*Id.* at 50.) RUCO therefore recommends that the Commission adopt the hypothetical capital structure proposed by Southwest Gas.

Staff recommends that the Commission adopt the Company's actual test year capital structure, which consists of 43.44 percent common equity, 4.48 percent preferred stock, and 52.08 percent long-term debt, for purposes of determining Southwest Gas's overall cost of capital in this proceeding. Staff witness David Parcell testified that the equity ratio of Southwest Gas has been consistently lower than that of other LDCs. Mr. Parcell cited to the Company's last rate case in which the Commission adopted a hypothetical capital structure of 40 percent common equity, 5 percent preferred equity, and 55 percent long-term debt, but required Southwest Gas to submit a "recapitalization plan" to explain how the Company intended to achieve an actual 40 percent equity ratio. Staff asserts that because Southwest Gas has now exceeded the prior hypothetical equity ratio, and has achieved an equity component "more in line with that of other gas utilities," there is no need to employ a hypothetical capital structure in this case. (Ex. S-17 at 18-19.) Staff cites to Decision No. 68487 to support its position. In that case, the Commission granted Southwest Gas's 40 percent equity ratio, but warned the Company: "At some point, we must send Southwest Gas a signal that it must improve its capital structure up to the hypothetical level that has been employed for many years or it must live with the results of its actual capital structure." (*Id.* at 25.)

We agree with Staff that use of the Company's actual test year capital structure is appropriate in this proceeding. As the passage quoted above indicates, there was clearly an expectation that we would hold Southwest Gas to its actual capital structure so that its ratepayers would be relieved of the burden imposed by employment of a hypothetical capital structure. Southwest Gas is to be commended for the progress it has made over the past decade to improve its equity position relative to debt, and we recognize that the Company has now surpassed the target equity ratio that was employed in the last case to, in part, provide a continuing incentive to improve its capital structure.

We are not persuaded by the Company's argument that we should adopt a hypothetical structure in this case because the UNS Gas case employed a hypothetical equity component. As Staff witness Parcell pointed out, ratepayers have for many years been burdened with an authorized return set using a hypothetical capital structure far greater than the Company's actual equity ratio, and Southwest Gas was admonished in its last case that it must improve its equity ratio or "live with the results of its actual capital structure." (*Id.* at 25.) We wish to make clear that Southwest Gas's equity improvements are commendable. However, we do not believe that the "hypothetical equity bar" should continue to be raised in perpetuity with ratepayers consigned, like Tantalus, to see the "fruit" of an actual capital structure forever just beyond their reach. Rather, the time has come for Southwest Gas to live with its actual test year capital structure.

We are mindful of the Company's argument that a hypothetical capital structure was employed for UNS Gas in its last rate case and the Company's claim that there is no distinction that merits different treatment for Southwest Gas in this case. Although we adopted an equity ratio for UNS Gas that was higher than the ratio in its actual test year capital structure, we also indicated that "it is likely that use of [UNS Gas's] actual capital structure in future rate cases would produce a reasonable cost of capital result." (Decision No. 70011 at 39.) Thus, UNS Gas was given that, absent extraordinary circumstances, its actual capital structure would likely be used in its next rate case. We believe the treatment of both companies is consistent. Accordingly, we adopt Staff's recommended capital structure.[6]

Chaparral City Decision and Fair Value Rate of Return

On July 28, 2008, the Commission issued Decision No. 70441, which addressed a Remand Order by the Arizona Court of Appeals[7] for the Chaparral City Water Company ("Chaparral City"). In Decision No. 70441, the Commission observed that Arizona appears to be the only state that continues to have a FVRB requirement and that most other states use OCRB for determining rate base and setting rates. (*Id.* at 33.) The Commission pointed out that the methodologies commonly applied for estimating a company's cost of equity and weighted cost of capital are typically applied to OCRB and reflect inflation that indirectly compensates companies for that component. The *Chaparral City* Decision went on to state that because the FVRB also includes inflation, it is necessary to exclude an inflation component from the overall rate of return to avoid overstatement of that component. (*Id.*) The Commission concluded:

> Because the weighted average cost of capital includes inflation, if the Commission were to apply that cost of capital as the FVROR [Fair Value Rate of Return] to the FVRB (which includes inflation in the RCND portion), then the impact of inflation would be overstated, and the resulting revenues would compensate the utility for more than the fair value of its property, resulting in rates and charges that were not just and reasonable.

(*Id.*)

The Commission went on to state that although the FVRB methodologies proposed by both

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[6] Having reached this conclusion, however, as discussed below, we believe that Staff's alternative FVRB cost of capital, as modified, should be applied for purposes of calculating the Company's authorized fair value rate of return.

[7] *Chaparral City Water Co. v. Arizona Corp. Comm'n*, 1 CA-CC 05-0002, Mem. Decision (Ariz. Ct. App. 2007)

Staff and RUCO would result in a fair value rate of return on FVRB, a modified version of RUCO's method was appropriate in that case. (*Id.* at 34.) In setting the authorized FVROR for Chaparral City, the Commission agreed with RUCO that the weighted average cost of capital ("WACC") should be adjusted to remove inflation from the cost-of-equity component but not from the debt component. Accordingly, the Commission continued to apply the previously adopted weighted cost of debt (2.11 percent), but subtracted 2 percent from Chaparral City's cost of equity (from 9.3 percent to 7.3 percent). When applied to the equity portion of the capital structure, this resulted in a fair value weighted cost of equity, "excluding inflation," of 4.29 percent. By adding the weighted costs of equity and debt, the Commission concluded that a total adjusted WACC of 6.40 percent was an appropriate rate of return on FVRB for Chaparral City. (*Id.* at 36-38.)

The hearing in this matter concluded before the issuance of Decision No. 70441. Therefore, no party had the opportunity to present evidence based on the Commission's analysis of the FVRB issue in that Decision. However, in this case, Staff recommended that the Commission use a fair value capital structure to determine the weighted average cost of capital to be applied to the FVRB. Specifically, Staff recommended that, in determining the rate of return, the Commission assign a zero value to the "fair value increment" (*i.e.*, the difference between FVRB and OCRB) on the basis that applying the cost of capital to the Company's FVRB would result in a windfall to shareholders because the fair value increment is not financed with investor-supplied funds. (Ex. S-17 at 42-44.) Mr. Parcell proposed (as modified in Staff's Final Schedules) that, for purposes of determining the WACC to be applied to FVRB, the Company's capital structure be restructured with 39.96 percent assigned to long-term debt, 3.44 percent assigned to preferred stock, 33.33 percent assigned to common equity, and 23.27 percent assigned to the fair value increment. Applying these percentages to the same cost factors proposed by Staff, and adopted above (and a 0.00 percent cost for the fair value increment), would result in a total FVRB cost of capital of 6.70 percent. (*Id.* at 44; Staff Final Sched. D.)

Staff presented an alternative proposal in the event "the Commission determine[s] that there should be a specific return (greater than zero) applied to the FVRB Increment." (*Id.* at 45.) Mr. Parcell's alternative proposal would apply a 1.25 percent value to the fair value increment, if the

Commission is persuaded "that investors should receive some benefit when fair value is greater than original cost and should suffer some detriment when fair value is less than original cost." (*Id.*) Staff's alternative proposal was calculated by taking the "risk-free return" (the return on an investment that carries little or no risk) of 4.5 percent,[8] less an inflation rate of 2.0 percent, to achieve a real risk-free rate of 2.50 percent. Mr. Parcell then advocated that if the Commission chooses to adopt this alternative, it should award no more than half of the real risk-free rate (1.25 percent) to recognize that any amount above zero effectively represents a bonus on the return already earned by investors. Applying the 1.25 percent cost to the fair value increment would result in an overall FVRB cost of capital for Southwest Gas of 7.08 percent. (*Id.* at 47-48; Staff Final Sched. D.)

Southwest Gas disagrees with Staff's recommendation to apply a zero value to the fair value increment. Company witness Hanley conceded that "it has long been established in regulatory ratemaking that application of [WACC to OCRB] provides for a fair and reasonable opportunity to earn a return." (Ex. A-34 at 38.) However, Mr. Hanley testified that using Staff's primary recommendation to apply a zero value in this case would result in a dollar return that is $80,215 <u>less</u> than under a strict OCRB calculation, which he claims is illogical. (Ex. A-35 at 17.) Southwest Gas agrees in concept with Staff's alternative proposal, that applying a net of inflation risk-free rate to the fair value increment is appropriate, but Mr. Hanley believes that Staff's reduction of the calculated risk-free rate to 1.25 percent is arbitrary and should be rejected. (Ex. A-34 at 39-40.) According to Mr. Hanley, the 4.50 percent risk-free rate determined by Mr. Parcell should instead be reduced by 2.45 percent, to account for expected inflation, with the remainder of 2.05 percent applied to the fair value increment. (*Id.* at 40.) Applying the 2.05 percent risk-free rate advocated by the Company to the fair value increment under the alternative suggested by Staff would produce a total FVRB cost of capital of 7.28 percent. (*See* Ex. S-17 at 48.)

<u>Conclusion on Fair Value Rate Base Issue</u>

Based on the record before us, we believe that Staff's alternative FVRB recommendation is appropriate, with a slight modification. Although we agree with Staff that it should not be necessary

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[8] Mr. Parcell explained that "risk-free investments" are defined as U.S. Treasury Securities, with short-term maturities considered to be the risk-free rate. He used 4.5 percent as the risk-free rate for his calculation based on yields on such securities ranging from 2.0 percent for short-term to 4.5 percent for long-term Treasury Bonds. (*Id.* at 46.)

to provide the Company with any additional return on the increment between OCRB and FVRB, because that increment is not financed with investor-supplied funds, we find that applying a 1.00 percent return on the fair value increment is appropriate under the facts of this case and properly accounts for the effect of inflation. Applying the adjusted WACC to the FVRB results in a fair value rate of return of 7.02 percent.

As Staff witness Parcell points out, the nominal risk-free rate represented by long-term U.S. Treasury Securities is approximately 4.5 percent. When the inflation factor is removed from the risk-free rate, which inflation rate was determined by the Company's witness to be 2.45 percent, the resulting inflation-adjusted risk-free rate is 2.05 percent. According to Mr. Parcell's alternative recommendation, if the Commission chooses to modify the Company's fair value rate of return, the adjustment should be within the range of zero to the inflation-adjusted risk-free rate (2.05 percent according to the Company). Mr. Parcell recommended that such an adjustment should be at the low end of the range and under no circumstances greater than the mid-point of the range because returns on the fair value increment represent a bonus or windfall to investors beyond the return that is already provided for under a traditional weighted cost-of-capital calculation. Even the Company's witness concedes that application of the WACC to OCRB provides a fair and reasonable opportunity to earn a return. The Company's witness, Mr. Hanley, disagrees only with Staff's quantification of the risk-free rate, on the basis that once inflation is removed, no additional adjustment should be made. We agree with Staff, however, that an adjustment in the range identified by Mr. Parcell is within our discretion. Setting the rate at the approximate mid-point of the inflation-adjusted risk-free rate is a reasonable determination in this case.

We recognize that the methodology employed in this case differs from that used by the Commission in the *Chaparral City* Remand Order (Decision No. 70441). This is because the facts and arguments before us differ. In this case, Southwest Gas and Staff do not dispute that the weighted cost of capital is applicable only to the OCRB and that it is appropriate to recognize an inflation factor when calculating the FVROR. As set forth above, we adopted in *Chaparral City* a modified version of RUCO's proposal and deducted directly from the established cost of equity a 2.0 percent inflation factor to arrive at the overall fair value rate of return. In the instant proceeding, no similar proposal was set forth by RUCO or any other party, and we do not have a record before us to make an adjustment on the same basis as that made in *Chaparral City*. Instead, we have a record that reflects agreement between the Company and Staff (as an alternative recommendation) that it may be appropriate to determine the FVROR based on the application of a WACC adjusted to a FVRB capital structure and application of an inflation-adjusted risk-free rate to the increment between the Company's OCRB and FVRB.

We find that a FVROR based upon the WACC derived by using a 1.00 percent adjusted risk-free rate applied to the fair value increment complies with the constitutional fair value requirement and satisfies the concerns expressed by the Court of Appeals in the remanded *Chaparral City* case, is an appropriate methodology identified in Decision No. 70441 to determine the fair value rate of return without overstating the effects of inflation, and will result in just and reasonable rates. For these reasons, we believe that adoption of Staff's alternative recommendation for a 10.0 percent cost of equity capital, and an overall 7.02 percent FVRB cost of capital comply with these obligations.

	Percentage	Cost	FVRB Weighted Cost
Common Equity	33.33%	10.0%	3.33%
Preferred Equity	3.44%	8.20%	0.28%
Long-Term Debt	39.96%	7.96%	3.18%
FVRB Increment	23.27%	1.00%	0.23%
			7.02%

AUTHORIZED INCREASE

Based on our findings herein, we determine that Southwest Gas is entitled to a gross revenue increase of $33,533,844.

Fair Value Rate Base	$1,389,259,911
Adjusted Operating Income	77,307,884
Required Rate of Return	7.02%
Required Operating Income	97,526,046
Operating Income Deficiency	20,218,162
Gross Revenue Conversion Factor	1.6586
Gross Revenue Increase	33,533,844

RATE DESIGN ISSUES

In its application, Southwest Gas proposed four separate rate design changes that it asserts would help address the financial instability experienced by the Company over a number of years due to declining per customer usage and year-to-year weather variations. The Company's four proposals are: (1) increase the monthly customer charge from \$9.70 to \$12.80; (2) implement its proposed volumetric rate design ("VRD"), a partial "decoupling" mechanism that would separate revenue from gas sales; (3) implement a weather normalization adjustment provision ("WNAP"), a provision that would hold revenues at a constant rate between rate cases despite weather variations affecting usage; and (4) implement a revenue decoupling adjustment provision ("RDAP") either independently or in combination with the other rate design proposals.

Proposed Decoupling Mechanisms

In the last Southwest Gas rate case, the Company proposed adoption of a "decoupling mechanism" it called a Conservation Margin Tracker ("CMT") to address the Company's ongoing inability to achieve its authorized rate of return, due in part to declining per customer usage. A decoupling mechanism is intended to separate revenues from earnings on a per class basis and "true-up" revenues through a surcharge or credit if the Company does not recover its baseline fixed costs in subsequent periods. In Decision No. 68487, the Commission declined to implement the CMT and indicated that "the issue should be fully explored as part of usage volatility and margin recovery." (*Id.* at 34.) The Commission directed Southwest Gas to "coordinate its efforts to pursue implementation of a decoupling mechanism" through discussions with other stakeholders in the demand-side management ("DSM") policy process and in its next rate case. (*Id.*)

Southwest Gas

The Company indicated that although it participated in the DSM collaborative process, no agreement was reached with RUCO or Staff regarding a supportable decoupling mechanism. Company witness Congdon stated that Southwest Gas attempted to address the concerns raised by RUCO in the collaborative process by proposing two separate tariffs – one to recover the non-gas portion of customer bills based on weather-adjusted volumes (WNAP) and the other to recover or refund differences between actual and weather-adjusted non-gas revenues (RDAP). (Ex. A-25 at 9-

10.)

For Southwest Gas, adoption of its proposed decoupling mechanisms is the most important issue in this case. The Company claims that its ongoing revenue instability is due primarily to two factors – declining usage per residential customer and variations in margin due to weather. Southwest Gas asserts that full revenue decoupling, through implementation of the RDAP and WNAP, would offer the following benefits: (1) removing the Company's inherent incentive to increase usage and discourage energy efficiency that exists under the current rate design structure; (2) increasing the savings potential for customers who would save more per therm the more they conserve; and (3) enabling Southwest Gas and the Commission to develop cost-effective energy efficiency programs without the risk of harm to the Company.

As described by Mr. Congdon, the RDAP is based on a program approved in Utah for Questar Gas Company. (Ex. A-24 at 5.) The RDAP would allow Southwest Gas to recover "non-weather related dollar differences between actual and authorized non-gas revenue by recording monthly differences in non-gas revenue in a deferred account and recovering the balance annually through a rate adjustment (surcharge)." (*Id.*) The WNAP proposal is also based on the Questar Gas tariff, as well as a program approved in Oregon for Northwest Natural Gas. (*Id.* at 7.) Mr. Congdon described the WNAP as "a tariff mechanism that removes weather-related volatility from the non-gas component of customer bills for each winter season billing cycle." (*Id.*)

Southwest Gas contends that there is currently no mechanism in place that protects the Company and its customers from weather variations that deviate from weather normalized volumes used to establish rates in a rate case. According to Southwest Gas, the WNAP would protect the Company from warmer-than-normal weather variations and would protect customers from colder-than-normal variations. The Company also suggests that the RDAP should be implemented with the WNAP in order to isolate weather-related variations from non-weather related variations in margin recovery. At a minimum, the Company proposes that the WNAP and RDAP be implemented on a three-year pilot basis, or until the Company's next rate case, whichever occurs first, with a cap at the revenue amount necessary to yield the Company's authorized rate of return.

Southwest Gas argues that adoption of revenue decoupling would not transfer risk from the

Company to customers, but would simply ensure that the Company could recover the amount of margin per customer authorized by the Commission. The Company claims that customer usage and weather variations are beyond its control and that, even with revenue decoupling, Southwest Gas would continue to be responsible for effectively managing its costs. With respect to its authorized return on equity, the Company asserts that no downward adjustment would be appropriate if revenue decoupling were implemented in this proceeding. According to the Company, the proxy companies used in its cost-of-capital analysis have some measure of revenue stabilization in place, and therefore, the proxy group baseline already incorporates a decoupling assumption.

AIC

AIC supports the Company's WNAP and RDAP proposals. Dr. Daniel Hansen testified that the WNAP would reduce weather–related variations in the Company's revenues, while the RDAP would eliminate the Company's disincentive to support conservation and energy efficiency programs, preserve customer incentives to conserve, improve the Company's ability to attract capital at reasonable rates, and reduce regulatory effort and expenses. (AIC Ex. 2 at 2-3.)

AIC argues that LDCs such as Southwest Gas incur high fixed costs in serving customers, which costs do not vary significantly based on usage. According to Company witness Ralph Miller, 99 percent of Southwest Gas's ongoing non-gas costs are fixed, yet the current rate structure collects a majority of those costs through variable commodity charges. (Tr. at 629.) As a result, AIC asserts, less usage per customer or warmer-than-normal weather will result in Southwest Gas's being unable to recover its fixed costs regardless of the Company's efficiency in controlling costs.

AIC points out that Southwest Gas's credit ratings are only one step above "junk" status according to Moody's and S&P, and that the Company has consistently been unable to earn its authorized return due to declining usage per customer. AIC contends that if the Company's credit ratings dip below junk status, access to capital will be more difficult and more costly and could ultimately harm customers. AIC also claims that at least 20 states have adopted some form of weather normalization adjustor and that the WNAP proposed by Southwest Gas is identical to the mechanism approved by the Utah Commission for Questar Gas. AIC asserts that such a mechanism would result in a more stable revenue stream for the Company and that, according to Company witness Congdon, had a WNAP been in effect over the last 10 years, Southwest Gas's customers would have paid $5.8 million less than they actually paid. (Ex. A-25 at ABC-1.)

According to Dr. Hansen, the surcharges or refunds that usually occur through a revenue decoupling mechanism are historically not large amounts. He points to Northwest Natural Gas in Oregon where, after the first adjustment, the following rate change was approximately 0.2 to 0.5 percent. (Tr. at 574.) AIC contends that the RDAP has the added benefit of producing gradualism in rates, which benefits the Company, ratepayers, and the Commission. Finally, AIC argues that implementation of the RDAP would remove the inherent disincentive for Southwest Gas to engage in energy efficiency programs. Dr. Hansen testified that DSM efforts by Questar Gas and Northwest Natural Gas improved noticeably after decoupling was adopted.

<u>SWEEP</u>

SWEEP fully supports implementation of the proposed WNAP and RDAP proposals as a means of encouraging a significant increase of DSM expenditures by Southwest Gas. SWEEP witness Jeff Schlegel testified that current DSM funding of $4.4 million should be increased to $12 million by 2010, with a ramp-up in spending in 2009. (SWEEP Ex. 1 at 2-3.) Mr. Schlegel indicated that implementation of revenue decoupling would remove the disincentive that currently exists for Southwest Gas to pursue cost-effective DSM and to support energy efficiency standards, building energy codes, and other measures that encourage reductions in energy usage. (*Id.* at 4.)

SWEEP states that its objective is to decrease customer gas usage and save customers money. It contends that to achieve these objectives, DSM and energy efficiency efforts must reach more customers, and that support from the utility company is an important factor in those efforts. According to SWEEP, without decoupling, utilities like Southwest Gas only have an incentive to sell more gas in order to increase revenues.

Mr. Schlegel supports implementation of the WNAP and RDAP as three-year pilot programs, with annual tracking and evaluation at the end of the pilot. (SWEEP Ex. 2 at 3.) He claims that pilot implementation will assist in resolving the differences between the parties on the decoupling issue, by providing data regarding the programs. However, SWEEP believes that adoption of the decoupling programs should be conditioned on a substantial increase, to $12 million per year, in cost-effective

DSM programs.

SWEEP also argues that implementation of the decoupling pilot should not be delayed by the Commission's recently opened generic investigation into regulatory and rate incentives for natural gas and electric companies (Docket Nos. G-00000C-08-0314 and E-00000J-08-0314). SWEEP asserts that the WNAP/RDAP pilot proposed in this case would provide useful, real-world information that could be reviewed as part of the generic investigation.

RUCO

RUCO argues that although Southwest Gas participated in collaborative efforts regarding rate design alternatives, no consensus was achieved with the participating stakeholders, including RUCO and Staff. RUCO contends that the proposed RDAP differs little from the CMP rejected in the Company's last rate case because it would effectively provide Southwest Gas a guaranteed method of recovering revenues.

RUCO asserts that a revenue decoupling tariff would require customers to pay for a level of gas service that they do not use and, citing the Company's last rate case Decision, "could result in disincentives for such customers to undertake conservation efforts." (Decision No. 68487 at 34.) RUCO disagrees with the Company's claim that the RDAP would encourage conservation and claims that the RDAP could be counterproductive to conservation efforts because customers that reduce their demand would receive diluted price signals. (RUCO Ex. 8 at 8.) RUCO argues that if the Commission's goal is to promote conservation, it should not adopt decoupling mechanisms that provide a guaranteed level of revenue recovery.

RUCO also claims that the RDAP should be rejected because declining usage is a normal risk faced by utility companies. According to Mr. Rigsby, a number of variables exist between rate cases including customer growth, inflation, weather, and interest rates. (*Id.* at 5.) RUCO contends that regulatory lag between cases is common to all utilities and that lag may provide benefits that counter the detrimental effects of declining usage. RUCO claims that the proposed RDAP and WNAP are simply an attempt by Southwest Gas to shift shareholder risk to ratepayers and that the RDAP is a form of single-issue ratemaking that would be inconsistent with the holding of *Scates v. Arizona Corporation Commission*, 118 Ariz. 531 (Ariz. Ct. App. 1978). According to RUCO, adoption of the

RDAP would expand the definition of a permissible automatic adjustment clause under *Scates* to include not only costs incurred by the Company, but also adjustments for specifically defined sales volumes.

With respect to the WNAP specifically, RUCO points out that weather, like other variable components inherent in regulatory lag, is a risk faced by all utilities and that such fluctuations are reflected in stock prices and returns expected by investors. (RUCO Ex. 8 at 11-12.) As with the RDAP, RUCO contends that ratepayers would be required to pay for a level of gas service they do not receive, because the WNAP would be calculated for each customer, during each winter billing cycle, to reflect the difference between the customer's actual usage and usage assuming normal weather. RUCO points out that the Company's rate case revenues are annualized over a ten-year period to smooth out year-to-year fluctuation and determine a weather normalized amount of revenues.

Staff

Staff opposes the Company's decoupling proposals for many of the same reasons described by RUCO. Staff argues that the RDAP and WNAP would together achieve the same result as the CMT proposed by Southwest Gas in its last rate case (*i.e.*, to ensure a guaranteed stream to offset declining usage caused by many factors).

Staff witness Frank Radigan testified that "the only thing the Company wants to achieve through its proposed rate design is avoidance of financial risk, nothing more nothing less." (Ex. S-11 at 4.) According to Mr. Radigan, the Company's various rate design proposals would result in shifting almost all shareholder risk onto ratepayers. He indicated that the Commission is obligated only to allow the Company an opportunity to earn a reasonable return, not a guarantee. (*Id.*)

Staff also contends that adoption of the proposed decoupling mechanisms is premature because the Company's DSM programs are relatively new, and the $4.4 million budget authorized through a DSM surcharge in the last rate case has not yet been reached. In addition, Staff witness Robert Gray stated that the Commission recently opened a generic docket to evaluate regulatory and rate incentives for both gas and electric companies, which could encompass consideration of decoupling mechanisms. (Tr. at 966-67.) Mr. Gray testified that the generic docket was initiated in response to a letter by Commissioner Mundell asking Staff to look into alignment of utility incentives with energy-efficient investments. (*Id.*) Mr. Gray also pointed to the Energy Independence and Security Act of 2007, through which Congress directed states to look into rate designs that encourage energy efficiency, as a reason for allowing the Commission to evaluate revenue decoupling on a generic basis. (*Id.*)

With respect to the conservation benefits touted by Southwest Gas, Staff claims the Company has not demonstrated that lack of decoupling has impeded its DSM efforts. Staff contends that the Company's decoupling proposals are overly broad with respect to the definition of conservation because, as described by Mr. Radigan, declining usage could be related to economic downturns, changes in customer conditions, collapse of the housing market, and other factors. (Tr. at 871.)

Staff also asserts that Southwest Gas has not demonstrated that a traditional rate design jeopardizes its ability to earn its authorized return. Staff claims that the Company did not isolate and exclude important variables, such as choice differences between old and new customers, and did not demonstrate that declining average usage threatens the Company's revenues under traditional rate design methods. According to Staff, it was this type of information the Commission indicated it was seeking when it stated in the last rate case that "[t]here is conflicting evidence in the record as to whether the recent level of declining per customer usage will continue into the foreseeable future." (Decision No. 68487 at 34.)

Staff also expressed concern with the effect of the proposed decoupling mechanisms on low-income and low-usage customers, who may be required to pay more through fixed costs, with little or no ability to save through reduced usage. With respect to the risk factor, Staff argues that the shift of risk from shareholders to ratepayers, if decoupling were to be adopted, would necessitate a downward adjustment to the authorized return on equity. Finally, Staff claims that it is unclear what changes would need to be made to the Company's purchased gas adjustor ("PGA") mechanism if the decoupling proposals were adopted.

<u>Resolution</u>

We are not persuaded that the decoupling mechanisms proposed by Southwest Gas in this proceeding should be adopted. Both Staff and RUCO have raised valid concerns regarding the

Company's proposals, and we believe that consideration of revenue decoupling through the pending generic docket is the appropriate method of addressing those issues. As indicated in the Company's last rate case, "[decoupling mechanisms] should be fully explored as part of a broader investigation of usage volatility and margin recovery." (Decision No. 68487 at 34.)

We remain concerned that the decoupling proposals could provide a disincentive to customers to undertake conservation efforts, because they would be required to pay for gas they did not use. It appears that, first and foremost, revenue decoupling is a means of providing the Company with what is effectively a guaranteed method of recovering authorized revenues, thereby shifting a significant portion of the Company's risk to ratepayers.

Although we appreciate that SWEEP and AIC support revenue decoupling as a means of providing substantial increases to Southwest Gas's DSM budget, the generic docket will provide an opportunity to evaluate a number of potentially viable energy efficiency alternatives in addition to revenue decoupling. We expect the generic docket will enable stakeholders to bring forth a comprehensive array of options that could be employed by gas and electric companies to encourage greater participation in efficiency programs, while minimizing the rate impact on participating and non-participating customers alike.

We expect that the consideration of decoupling mechanisms and other related rate design proposals within the pending generic docket will also include an Integrated Resource Planning ("IRP") process to better enable the Commission and affected stakeholders to review capacity additions, energy efficiency programs, and decoupling measures in a comprehensive manner. Staff should continue to take comments and conduct workshops to ensure that all relevant factors are considered prior to making recommendations with respect to the generic docket.

<u>Volumetric Rate Design</u>

In the event the Commission rejects its RDAP and WNAP proposals, Southwest Gas requests that an alternative volumetric rate design ("VRD") be adopted. Under the VRD proposal, smaller users would pay a greater percentage of non-gas costs and a smaller percentage of gas costs than under traditional rate design. Larger users, on the other hand, would pay a smaller percentage of non-gas costs and a greater percentage of gas costs. The Company claims that the VRD is a form of revenue decoupling and reflects a more accurate cost-based rate design. Company witness Congdon indicated that the VRD is revenue neutral to customers because it has the same effective rate per therm for all gas consumed compared to a traditional rate design. (Ex. A-26 at 4.)

As described by RUCO witness Marylee Diaz Cortez, the VRD would include "a higher than normal non-gas commodity charge in the first tier and a $0.00 non-gas commodity charge in the second tier." (RUCO Ex. 2 at 10.) Ms. Diaz Cortez disputes the Company's claim that this rate design proposal is revenue neutral to customers stating that it would shift a portion of non-gas costs from large users to small users. (*Id.* at 11.) RUCO claims that the VRD would cause customers with less than 55 therms of usage to pay more than under a traditional rate design and that the Company would be guaranteed a level of revenue recovery from the lower usage blocks. RUCO asserts that the VRD is simply a different method of guaranteeing the Company revenue recovery due to declining usage. (*Id.*)

Staff also opposes adoption of the Company's VRD proposal for the same reasons it objects to the RDAP and WNAP. Staff witness Radigan testified that the Company's proposed rate design would flatten rates charged to customers, by allocating recovery of revenue between rate blocks of the commodity charge and gas cost, but not the overall rate collected by the Company. Mr. Radigan states that, contrary to the Company's claim that the VRD would encourage conservation, the real goal is full margin recovery. According to Mr. Radigan, Southwest Gas currently collects 80 percent of its margin through the customer charge and the first block of the commodity charge. Under the VRD proposal, however, he claims that the Company would collect 100 percent of margin costs through the customer charge and first tier commodity block, thereby removing any ability by customers with lower usage to benefit by conservation efforts. (Ex. S-10 at 5-7.)

We agree with Staff and RUCO that the VRD proposed by Southwest Gas is simply an alternative method of enabling the Company to collect more of its margin costs through a shifting of risk from the Company to ratepayers. Although the Company's stated intent with the VRD is to encourage conservation efforts by sending better price signals to customers, as Staff points out the VRD would have the opposite effect by removing the ability of customers to reduce their bills through decreased usage. For lower use customers, the variable commodity charge would have a lesser effect on overall bills, and for customers with usage solely in the first tier there would be virtually no incentive to reduce usage. We therefore decline to adopt the Company's proposed volumetric rate design.

Basic Service Charge

Southwest Gas

In the event that the Commission does not adopt its decoupling rate design tariffs, Southwest Gas witness Congdon proposes that the Commission adopt an increase in the residential single-family basic monthly service charge from the current $9.70 to $12.80, as well as increases for the basic monthly charge for other customer classes, as a means of allowing the Company to recover a larger percentage of its fixed costs through the basic monthly service fee. (Ex. A-24 at 9.) Mr. Congdon stated that the current monthly charge recovers approximately 40 percent of the Company's fixed costs, with the balance recovered through commodity charges. He indicated that the proposed increase would enable Southwest Gas to increase its recovery of fixed costs through the customer charge to approximately 45 percent. (*Id.*)

The Company opposes the more modest customer charge increases proposed by Staff and RUCO, which would raise the fixed monthly charge to $10.70 and $11.52, respectively. Southwest Gas contends that adoption of these smaller increases would not address the ongoing problem related to declining per customer consumption because too much of the Company's revenues would remain tied to commodity charges. According to Company witness James Cattanach, usage per residential customer has declined from 332 therms during the test year to 319 therms as of March 31, 2008. (Ex. A-22 at 3.) Mr. Congdon testified that if the rates approved in this case are based on the test year usage per customer, rather than the lower usage after the test year, Southwest Gas would experience an immediate annual revenue shortfall of $6.7 million. (Ex. A-25 at 16-17.)

Southwest Gas argues that even if the Commission adopts its proposed $12.80 per month customer charge, the Company still needs approval of rate design measures that separate revenues from weather fluctuations and declining usage. Otherwise, according to the Company, it will continue to experience an inability to earn its authorized return on a going-forward basis. However, the Company claims that if the Commission grants full revenue decoupling, it would not be opposed to a smaller customer charge increase or retaining the customer charge at its current level.

SWEEP

SWEEP opposes any increase to the monthly customer charge, but supports full revenue decoupling for Southwest Gas. SWEEP witness Jeff Schlegel testified that SWEEP opposes higher fixed charges because an increase to fixed charges (*i.e.*, the monthly service charge) would reduce the price signal customers receive from reducing their energy usage and becoming more efficient. (SWEEP Ex. 1 at 6; SWEEP Ex. 2 at 4.)

RUCO

RUCO does not dispute that Southwest Gas is experiencing declining per customer usage, but believes the situation is not as dire as suggested by the Company. Mr. Rigsby stated that utilities operate in a dynamic environment in which there is constant fluctuation in revenues and expenses between rate cases. He points out that during these interim periods, utility companies may see inflation, increased revenues due to customer growth, decreased revenues due to warmer weather or declining usage per customer, returns that may increase or decrease due to plant additions and depreciation, and changes in interest rates. (RUCO Ex. 8 at 5-6.) Mr. Rigsby testified that RUCO's proposed rate design would mirror the Company's current rate design except for allowing slightly more revenues to be recovered through the fixed monthly charge rather than variable commodity charges. (*Id.* at 13-14.) RUCO asserts that its rate design would allow the Company to recover more of its fixed costs and that it therefore is a better alternative than Southwest Gas's various decoupling mechanisms.

Staff

With respect to the single-family residential monthly customer charge, Staff witness Frank Radigan recommends increasing the customer charge by approximately 10 percent, from $9.70 to $10.70 per month. (Ex. S-10 at 9-10.) The multi-family residential customer charge would also be increased by $1.00 per month, from $8.70 to $9.70, and low-income customers' customer charge would be increased from $7.00 to $7.50 per month. Mr. Radigan's rate design methodology was intended to minimize rate shock concerns by employing a two-step process. The first step of Staff's revenue allocation was to bring the rate of return for each class within 10 percent of the overall rate of return, while the second step would mitigate the increase to be borne by any individual class by limiting each class increase to no more than one percent of the overall increase. (*Id.* at 3-4.)

Staff disagrees with the Company regarding the proper allocation of revenues between various customer classes. Staff witness Radigan contends that the Company's proposed allocation methodology, which is intended to bring the rate of return for classes closer to the overall rate of return, was not applied in a consistent manner. Staff asserts that its proposed rate design is consistent with the Decision in the last Southwest Gas rate case, in which the Commission stated its goal of using rate designs that follow cost of service principles and encourage gradualism, fairness, and conservation. (Decision No. 68487 at 38.) According to Mr. Radigan, Staff's recommended rate design would eliminate the declining block rate structure so as to encourage conservation, while at the same time avoiding large increases to the fixed customer charge which could send an improper price signal that discourages conservation. (*Id.*)

<u>Resolution</u>

We agree with Staff's rate design recommendation because it balances the objectives of allowing Southwest Gas to continue to recover more of its fixed costs through the customer charge while, at the same time, minimizing the burden on any individual rate class. We also agree with Staff's proposal to flatten the volumetric charge into a single rate for all usage, rather than continuing the current declining block rate structure. As Staff's witness stated, eliminating the declining rate block structure will send customers price signals that are more appropriate and should encourage greater conservation efforts.

Although the Company contends that Staff's recommendation fails to allow recovery of fixed costs through the fixed customer charge, we believe the approximately 10 percent increase of the monthly residential customer charge (from $9.70 to $10.70) provides adequate movement in the direction of fixed cost recovery. The Company's proposed 32-percent increase in the residential customer charge would diminish the ability of many customers to control their gas bills by engaging in conservation and would undermine the gradualism concept in setting rates. As we stated in the Company's last rate case, "[w]e agree with all parties that movement closer to cost-based rates is in principle a laudable goal. However, that goal must be balanced with consideration of the principles of gradualism, fairness, and encouragement of conservation." (Decision No. 68487 at 38.)

We will therefore adopt Staff's recommended customer charges for all customer classes and volumetric commodity charges commensurate with Staff's rate design, as modified by the revenue requirement adopted hereinabove. For rate class G-5 (single-family residential), the basic monthly charge will be set at $10.70 per month with a single block commodity base rate of $0.57016 per therm. For rate class G-6 (multi-family residential), the basic monthly charge will be increased to $9.70 per month with a commodity base rate of $0.55289 per therm. Low-income-customer basic monthly charges will increase to $7.50 with the same $0.55289 commodity base rate.

Based on the rate design adopted in this case, residential customers in the G-5 rate class with average summer monthly usage of 16 therms would experience an overall monthly increase of $1.45, from $33.36 to $34.81 (4.35 percent).[9] G-5 rate class customers with average winter usage of 56 therms per month would see an overall monthly increase of $3.43, from $91.66 to $95.09 (3.74 percent). Multi-family residential customers (G-6) with average summer usage of 12 therms would experience an overall monthly increase of $1.13, from $26.45 to $27.58 (4.27 percent). G-6 customers with average winter usage of 30 therms per month would experience a monthly increase of $1.32, from $53.07 to $54.39 (2.49 percent).

For small general service commercial customers (G-25S), average winter usage of 39 therms would increase monthly customer bills by $2.83, from $83.45 to $86.28 (3.39 percent). For medium general service commercial customers (G-25M), average winter usage of 315 therms would increase monthly customer bills by $6.23, from $451.94 to $458.17 (1.38 percent). For large general service commercial customers (G-25L), average winter usage of 2,220 therms would increase monthly customer bills by $56.54, from $2,823.16 to $2,879.70 (2.00 percent). Other rate classes would experience varying percentage increases depending on the time of year and individual customer usage.

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[9] This overall increase, and the examples that follow, include an additional gas cost of $0.93689 per therm.

MISCELLANEOUS ISSUES

Demand-Side Management

In the Company's last rate case, the Commission authorized $4.4 million for Commission-approved energy efficiency and DSM programs, to be collected through a DSM surcharge and held and disbursed through a balancing account. (Decision No. 68487 at 61-63.) Southwest Gas claims that it did not request an increase to the current DSM budget because it is continuing to ramp up its DSM programs, and has not received Commission approval to spend the entire authorized amount. The Company also asserts that absent approval of revenue decoupling, it would be unfair to increase Southwest Gas's energy efficiency and DSM obligations because additional declines in usage could exacerbate the Company's financial situation. The Company states in its brief that it is willing to investigate and pursue aggressive promotion of DSM if the Commission grants full revenue decoupling. The Company also attached to its brief a plan of action for pursuing additional DSM, but only on the condition that decoupling is approved. (SW Gas Initial Brief at 74-77.)

As described above, SWEEP witness Jeff Schlegel advocates an increase in the Company's DSM budget to $12 million annually. Although SWEEP supports the Company's decoupling proposals, Mr. Schlegel recommends the DSM budget increase regardless of the Commission's adoption of decoupling. (SWEEP Ex. 1 at 5.)

Staff does not support SWEEP's proposal to increase the Company's DSM budget to $12 million, but does recommend an increase in the current $4.4 million budget. Staff witness Phillip Teumim testified that a reasonable approach would be to increase the DSM budget by $1 million per year for the years 2010 through 2012. He stated that this recommended increase would allow for continuing analysis of the existing programs, modifications if necessary, and reasonable development of new programs. (Ex. S-6 at 3-4.) Mr. Teumim points out that Southwest Gas's DSM budget has increased from $750,000 to over $3 million since 2006, but that the data collected by the Company does not provide a payback period for the programs and utilizes a cost-benefit analysis premised on the ratio between total resource costs and lifetime energy savings. He recommends that the Company be required to record and report estimated and actual dollar benefit analyses and payback periods and to segregate direct cost and benefit information. (Ex. S-5 at 12-13.) However, Staff's recommendation would apply only to new DSM measures and not to existing Energy Star Home and Low-Income Energy Conservation Programs. (*Id.* at 14.)

We agree with Staff's recommendations regarding the appropriate level of Southwest Gas's DSM budget. As the Staff witness stated, the Company's DSM programs are still in a startup phase, with full implementation and evaluation expected at the end of 2008. Since the 2008 budget was just over $3 million, it is reasonable to assume that the current $4.4 million will be achieved in 2009 and that additional $1 million incremental increases for the following three years will provide a reasonable level of DSM revenues over that period of time. We also agree with Staff that Southwest Gas should adopt the data collection and reporting requirements recommended by the Staff witness for new DSM programs.

<u>Gas Pipeline and Procurement Issues</u>

<u>Interstate Pipeline Capacity Portfolio</u>

Staff witness Stephen Thumb conducted an analysis of Southwest Gas's interstate pipeline capacity portfolio, the Company's management of its pipeline capacity, and penalties incurred by the Company from September 2004 through April 2007. (Ex. S-3.) Based on his review, Mr. Thumb concluded:

> 1. The El Paso Natural Gas ("EPNG") pipeline tariff (i.e., EPNG tariff effective January 1, 2006, subject to revision) enacted during this time frame represented a total and complete restructuring of interstate pipeline services for Southwest Gas.
>
> 2. As a result of this new EPNG tariff, the annual fixed charges paid by Southwest Gas for interstate pipeline capacity increased appreciably.
>
> 3. Southwest Gas, under this new EPNG tariff, did incur additional charges and penalties, but … of these additional charges and penalties [appear] to have been reasonable.
>
> 4. Southwest Gas is attempting to diversify its interstate pipeline capacity portfolio and Southwest Gas should continue seeking access to storage capacity, particularly market-area storage capacity. Concerning the latter, it is suggested that the Commission may want to consider taking an active role in promoting the development of market-area storage in Arizona.

5. Additionally, Southwest Gas should increase the documentation and requirements for its transportation-only customers. Also, Southwest Gas should make its Daily Forecasting Accuracy Improvement Task Force a permanent entity.

(*Id.* at 2-3.)

Through the testimony of Company witness William Moody, Southwest Gas accepted all of Mr. Thumb's recommendations. (Ex. A-6 at 2.) As a result, there is no remaining dispute regarding this issue, and we direct the Company to abide by Staff's recommendations.

Gas Procurement Policies, Practices, and Procedures

Staff witness Rita Beale conducted an evaluation of Southwest Gas's gas procurement strategies, prices, policies, and procedures and performed audits of the Company's monthly bank balance statements. Based on her analysis, Ms. Beale concluded that Southwest Gas's supply strategies and transactions were prudent and effective at stabilizing supply and price and reducing price volatility. (Ex. S-1 at 3.) She also indicated that the premium paid to EPNG was prudent in the context of the changes to the EPNG tariff and that such penalties are unlikely to be repeated in the future. Ms. Beale concluded that Southwest Gas did a good job of following its policies and procedures, but made the following total of ten management recommendations related to the Company's policies, practices, procedures, and gas supply transactions:

1. Consolidate all strategies, policies, and procedures into a minimal number of official company documents with sufficient detail such that new employees could read them and immediately perform the bulk of their work.

2. Clarify the APSP [Southwest Gas's Arizona Price Stabilization Plan] supply element by documenting expected volumes and timing for the next one to two years forward.

3. Clarify the precise nature of the APSP strategy. Is it a programmatic hedge, a judgmental hedge, or a hybrid of the two? The precise strategy should be recognized and declared in company policies and procedures to guide employees and decision makers, as well as the ACC oversight.

4. Designate the *Arizona Dispatch Guidelines* as the buyers' limits and authorization to execute and meet the forecasted daily demand requirement in company policies and procedures.

5. Company policies regarding the "unbuying" of gas, as well as the reasons for the policies and the potential consequences, should be reevaluated, and then explicitly documented in official policies and procedures.

6. Ensure all confirmations with gas suppliers, also known as Exhibit A, include deal transaction dates.

7. Ensure all confirmations with suppliers, also known as Exhibit A, include dates of the internal approval next to authorized signature.

8. Considerably shorten the time lapsed between deal execution and deal confirmation with gas suppliers.

9. Include a list of attendees present during the solicitation and purchase of the APSP fixed price gas supply element (as well as during selection and approval of the index gas supply element) to ensure independence, proper monitoring, and to improve the quality of the audit trail.

10. Update old master supply agreements that limit the buyers' liquidated damages at 50 cents per mmBtu into supply agreements that are based on true-up to actual market during non-performance.

(*Id.* at 6-7.)

At the time of the hearing, Southwest Gas accepted all but two of Ms. Beale's recommendations, numbers (1) and (4) listed above. (Ex. A-6 at 2.) At the hearing, Ms. Beale proposed a modification to her first recommendation, which would require the Company to compile a listing of its gas procurement policies, practices, and strategies indicating the names, ownership, and location of documents. (Tr. at 665.) In its brief, Southwest Gas states that it does not oppose this modified recommendation. (SW Gas Initial Brief at 68.)

The only remaining issue in dispute is Staff's recommendation that the *Arizona Dispatch Guidelines* be designated as the buyers' limits and authorization to execute and meet the forecasted daily demand requirement in company policies and procedures. Company witness Moody stated that Southwest Gas opposes this recommendation because the Company uses a "system generated report from its Gas Transaction System to produce a daily/monthly economic dispatch list of available contracts….[and] 'Gas Day' provides a system generated daily load forecast multiple times a day to identify load limits." (Ex. A-6 at 5.) Mr. Moody indicated that Staff's recommendation is unnecessary because its current documents are used for the same purpose that Ms. Beale suggested for the *Arizona Dispatch Guidelines*. (*Id.*) At the hearing, Ms. Beale testified that the alternative document used by Southwest Gas is insufficient because it is "not a limits and control document." (Tr. at 666.) However, in its brief, Staff proposes a "revised recommendation (4) that would require the Company to create a new limits and control document that would be in line with industry best practices." (Staff Initial Brief at 48.) It is not clear whether Southwest Gas is in agreement with this latest revised Staff recommendation, but it appears to be a reasonable compromise of the positions taken by Staff and the Company as of the date of the hearing.

We will therefore adopt Staff's recommendations, as modified in accordance with the discussion above. With respect to the final disputed issue, Southwest Gas should develop, within 60 days from the effective date of this Decision, in a form acceptable to Staff, a new limits and control document that would be in line with industry best practices.

Line Extension Policy and Hookup Fees

The Company's current line extension policy allows a certain distance of "free footage" before assessing a new customer for the additional mains and service lines necessary to connect the customer to the system. Staff witness Phillip Teumim explained that "line extension fees" are intended to compensate utilities for costs of extending mains and service lines to customers beyond a free footage allowance, whereas "hookup fees" are intended to compensate utilities for all other costs of connecting a new customer, other than specific main and service line costs, where the incremental cost of the new customer exceeds the embedded cost of existing customers. (Ex. S-5 at 2.)

Mr. Teumim stated that under "Rule 6" of the Company's tariff, the allowable investment in line extensions is determined based on the following criteria: (1) application of an Incremental Contribution Model ("ICM"); (2) the customer must provide a return equal to the Company's allowed rate of return; and (3) the customer must pay for additional amounts. (Ex. S-5 at 7.) He indicated that "[c]onceptually, this is a reasonable methodology," but stated that because the ICM and Rule 6 of the tariff have not been evaluated for a substantial period of time, Southwest Gas should be required in its next rate case to file "an explanation, with sample calculations, of how it has been implementing those tariff provisions." (*Id.* at 8.) He also indicated that the pending generic hookup fee docket

(Docket Nos. E-00000K-07-0052 and G-00000E-07-0052) may generate useful information on this issue. (*Id.*)

Company witness Robert Mashas responded with Rebuttal Testimony that explained the Company's line extension policy and stated that no party expressed concerns with the Company's policies when Southwest Gas provided testimony and documentation regarding the line extension policies in its last rate case. (Ex. A-16 at 17-25.) He also described the mechanics of the ICM and how the Company incorporates its most recent cost data. (*Id.* at 20-23.) In his Rejoinder Testimony, Mr. Mashas indicated that any changes to the Company's line extension policy that may result from the generic hookup fee docket will be incorporated into its tariff and that Southwest Gas is willing to meet with Staff on an informal basis at any time to explain the line extension policy. (Ex. A-17 at 15-16.) The Company contends that because this is the third consecutive rate case in which its line extension policies have been analyzed, Staff's recommendation on this issue is unnecessary and should be rejected.

We believe Staff's recommendation is reasonable and should be adopted. Although the Company's offer to meet with Staff on a informal basis regarding the tariff is commendable, it does not alter the underlying concern expressed by the Staff witness that the Company has not submitted the Rule 6 portion of its tariff for Staff or Commission review in nearly 10 years, despite the Company's indication that it has made significant changes to the ICM during that period. We therefore direct Southwest Gas, in its next rate case application, to provide an explanation, with sample calculations and documentation, of how it has been implementing the ICM and Rule 6 tariff provisions.

<u>Purchased Gas Adjustor Mechanism</u>

Southwest Gas's PGA mechanism was initially implemented in 1999, following a period of relative price stability in the natural gas markets. Subsequently, gas prices became much more volatile, which has created difficulties in determining the best, most equitable means of flowing through to ratepayers the rising gas costs incurred by utilities.

Staff witness Robert Gray explained that, as currently configured, the Company's PGA bandwidth of $0.13 per therm limits the movement of the monthly PGA rate over a 12-month period.

This means that when the new PGA rate is calculated each month, the new rate may not be more than $0.13 different than the monthly PGA rate in any of the prior 12 months. (Ex. S-15 at 1-2.)

In the last Southwest Gas rate case, the Commission expanded the bandwidth from $0.10 to $0.13 per therm, increased the PGA "trigger level" (the amount to be carried by the Company in the PGA bank balance before collection is triggered) from $22.4 million to $29.2 million, and set the base cost of gas at zero. (Decision No. 68487 at 51-55.) In a more recent case involving UNS Gas, the Commission increased that company's PGA bandwidth to $0.15 per therm, finding that the 50 percent increase balanced appropriately the interests of UNS Gas and its customers. (Decision No. 70011 at 81-82.)

In this case, Southwest Gas proposed to increase the PGA bandwidth to $0.24 per therm. According to Company witness Frank Maglietti, the proposed increase would set the bandwidth limit, as a percent of market gas prices, at the same level established in 1999 of $0.07 per therm. (Ex. A-18 at 6-7.) Southwest Gas contends that increasing the bandwidth to $0.24 would allow the PGA rate to more closely track the natural gas market, would send more accurate price signals to customers, and would reduce the need for future surcharge rate adjustments. (*Id.*)

The Company also argues that its proposed bandwidth increase would not affect Commission oversight of the PGA because the Company is obligated to file monthly gas purchase information and an annual report. Southwest Gas claims that it is also subjected to regular PGA reviews when the Commission evaluates the prudence of its gas purchases during rate case audits. (Ex. A-20 at 2.) The Company asserts that its bandwidth proposal promotes customer interests by smoothing out the peaks and valleys of the PGA bank balancing account, thereby reducing price volatility and sending customers more accurate price signals. (*Id.* at 3.)

Staff witness Gray testified that although Staff understands the Company's desire for greater flexibility in the PGA bandwidth, Staff believes that an increase to $0.15 per therm would provide a reasonable balance of Company and customer interests and is consistent with the Commission's decision in the recent UNS Gas case. (Ex. S-15 at 5.)

Mr. Gray also recommended that the current PGA bank balance threshold for under-collected balances be eliminated. He explained that the threshold "identifies the bank balance level, whether over-collected or under-collected, where [the Company] is required to take action at the Commission to either address the over- or under-collection, or explain why they should not do so at that given point in time." (*Id.* at 6.) Mr. Gray stated that given the high and volatile natural gas prices that are likely to continue in the near future, it is appropriate to eliminate the PGA bank balance threshold for under-collected balances in order to allow the Company discretion to apply for a PGA surcharge, if warranted, and provide flexibility for the Company to avoid a surcharge if it believes changing market conditions do not require such a request. (*Id.* at 8-9.)

Staff's final recommendation[10] regarding the Southwest Gas PGA is that the threshold on the PGA bank balance for over-collected balances be set at $55.78 million. Mr. Gray stated that the over-collection threshold for UNS Gas was recently set at $10 million, which represents a level of approximately $0.09 per therm based on 2006 gas sales volume for UNS Gas. He indicated that application of the same $0.09 per therm standard to gas sales for Southwest Gas results in an over-collection threshold of $55.78 million. (Ex. S-15 at 10.) Mr. Gray claims that an increase of the over-collection threshold to this level is reasonable, considering the Company's size and ongoing volatility in the gas markets. (*Id.*) Southwest Gas does not oppose Staff's recommendations regarding the PGA bank balance thresholds for either under- or over-collection. (Ex. A-19 at 4.)

We find that Staff's recommendations regarding Southwest Gas's PGA should be implemented. With respect to increasing the bandwidth, we believe Staff's more modest proposal for an increase to $0.15 per therm provides recognition that additional flexibility is needed for the Company to respond to volatility in the gas markets, while at the same time insulating customers from drastic and sudden increases in gas prices. Southwest Gas's proposal to increase the bandwidth to $0.24 per therm could leave a number of customers exposed to an unacceptable level of rate automatic rate increases without any formal Commission review or approval. Staff's concurrent recommendation to eliminate the threshold for under-collected bank balances, and to increase the over-collection threshold to $55.78 million, are also reasonable measures that should be adopted. These measures will allow Southwest Gas greater flexibility in dealing with market volatility, while

[10] Staff also recommended that a revised PGA mechanism be submitted by Southwest Gas if the Commission were to adopt the Company's decoupling proposals. Given our rejection of the decoupling mechanisms, it is not necessary to address this Staff recommendation.

providing a measure of protection to customers from sudden prices increases. Adoption of the Staff recommendations is also consistent with the PGA mechanism approved recently for UNS Gas. Accordingly, Staff's recommendations are approved.

SemStream Arizona (Service to Payson)

During the hearing, Commissioner Mayes questioned Southwest Gas regarding available options for extending natural gas infrastructure to the Payson area. Commissioner Mayes referred to a Staff Report regarding SemStream, Arizona, and asked whether Southwest Gas had investigated the possibility of serving the Payson area. (Tr. at 443.)

Southwest Gas recalled William Moody to the witness stand to respond to the Report. Mr. Moody indicated that the Company generally agreed with Section 7 of the Report and offered to update Staff with cost estimates for serving the Payson area. (Tr. at 1217.) Commissioner Mayes subsequently asked Company witness Roger Montgomery whether Southwest Gas would be willing to prepare a study regarding providing service to Payson. (Tr. at 1348.)

In its brief, Southwest Gas states that it is willing to submit, within 180 days from the Commission's Decision in this case, a study regarding the potential for extending service to the Payson area. The Company indicated that the potential provision of service to Payson would depend on the results of the study. (SW Gas Initial Brief at 74.)

Given the Company's willingness to prepare and submit a study regarding providing service to the Payson area, we find that Southwest Gas shall file such a study or report within 180 days of the effective date of this Decision.

* * * * * * * * * *

Having considered the entire record herein and being fully advised in the premises, the Commission finds, concludes, and orders that:

FINDINGS OF FACT

1. On August 31, 2007, Southwest Gas filed an application with the Commission for an increase in rates.

2. On September 25, 2007, Southwest Gas filed revised Supporting Schedule A-2 to its Application.

3. On October 1, 2007, the Commission's Utilities Division Staff filed a Sufficiency Letter, notifying the Company that its application met the sufficiency requirements and classifying Southwest Gas as a Class A utility.

4. By Procedural Order issued October 23, 2007, procedural timeframes were established and a hearing was scheduled to commence on June 16, 2008.

5. Intervention was granted to RUCO, Southwest Energy Efficiency Project, the Arizona Investment Council, and Mr. Banchy.

6. Southwest Gas filed Direct Testimony with its application on August 31, 2007.

7. Direct testimony was filed on March 28, 2008, by Staff, RUCO, AIC, and SWEEP. Additional Direct Testimony on rate design issues was filed by Staff and RUCO on April 11, 2008.

8. Rebuttal testimony was filed by Southwest Gas on May 9, 2008. Surrebuttal testimony was filed on May 27, 2008, by Staff, RUCO, and SWEEP. Rejoinder testimony was filed by the Company and AIC on June 9, 2008.

9. An evidentiary hearing was conducted at the Commission's offices in Phoenix, Arizona, commencing with public comment and opening statements on June 13, 2008, and concluding on June 26, 2008.

10. Initial Post-Hearing Briefs were filed on August 8, 2008, by Southwest Gas, Staff RUCO, AIC, and SWEEP. Southwest Gas filed an Erratum to its Initial Brief on August 18, 2008.

11. Reply Briefs were filed on August 22, 2008, by RUCO and SWEEP and on August 25, 2008, by Southwest Gas and Staff. Staff filed a substitute Reply Brief on August 28, 2008, that contained non-substantive corrections.

12. According to the Company's Final Schedules, in the test year Southwest Gas had adjusted operating income of $73,115,474 on an adjusted OCRB of $1,069,743,402.

13. In its Final Schedules, the Company calculated a revenue increase of $46,402,924, based on an OCRB of $1,069,743,402 and a rate of return of 9.45 percent. In its Final Schedules, the Company proposed FVRB of $1,392,895,487, and a FVROR of 7.74 percent, which would yield a revenue increase of $57,546,205.

14. Staff recommends a revenue increase of $28,376,480, based on an OCRB of

$1,065,561,602 and a recommended rate of return on OCRB of 8.86 percent. Staff's FVRB recommendation of $1,388,713,687 and FVROR of 6.79 percent would yield a revenue increase of $28,239,870.

15. RUCO recommends an overall revenue increase of $32,046,846, based on an OCRB of $1,089,082,745 and an OCRB rate of return of 8.83 percent. RUCO's proposed FVRB of $1,463,404,389, with a FVROR of 6.57 percent, would yield the same revenue increase.

16. Half of the cost of the Yuma Manors pipeline replacement ($546,224) should be permanently disallowed from inclusion in the Company's rate base.

17. For purposes of this proceeding, we determine that Southwest Gas has an Arizona FVRB of $1,389,259,911.

18. A rate of return on FVRB of 7.02 percent is reasonable and appropriate.

19. The position advocated by Southwest Gas and Staff with respect to recognizing 2008 wage increase expenses shall be adopted.

20. Staff's position regarding a reasonable allowance for AGA dues, and injuries and damages expenses shall be adopted.

21. The positions advocated by Staff and RUCO, to disallow 50 percent of MIP expenses, 100 percent of SIP expenses, and 100 percent of SERP incentives, are adopted.

22. With respect to RUCO's position that certain miscellaneous expenses should not be recovered through rates, 50 percent of RUCO's proposed disallowance is adopted.

23. Staff's proposed actual test year capital structure, consisting of 43.44 percent common equity, 4.48 percent preferred stock, and 52.08 percent long-term debt, is adopted. A 7.96 percent cost of long-term debt and 8.20 percent cost of preferred equity are also adopted, as is Staff's recommended 10.0 percent cost of common equity.

24. To establish a FVROR, Staff's alternative recommendation adjusting the weighted average cost of capital by applying an inflation-adjusted risk-free rate, reduced by approximately half, to the increment between the Company's OCRB and FVRB, is adopted. Assigning the applicable values to the actual capital structure produces a FVROR of 7.02 percent.

25. Southwest Gas is entitled to a gross revenue increase of $33,533,844.

26. The Company's decoupling mechanism proposals are not adopted in this proceeding for the reasons set forth hereinabove.

27. The class responsibility for the revenue requirement shall be allocated using the methodology of Staff's rate design expert witness, Mr. Radigan.

28. For residential customers under Schedule G-5, the basic monthly customer charge should be increased from $9.70 to $10.70, and a single-tier rate design structure is appropriate in accordance with Staff's recommendation.

29. A separate multi-family residential basic monthly customer charge of $9.70 is appropriate under the new Schedule G-6 rate.

30. The low-income residential rate (G-10) should be increased slightly from $7.00 to $7.50 per month.

31. Staff's rate design recommendations for the other classes of customers, as set forth in its testimony and exhibits, are reasonable and shall be adopted.

32. The billing determinants proposed by the Company and Staff shall be employed for setting rates in this proceeding.

33. With respect to the Company's PGA mechanism, the current $0.13 per therm bandwidth shall be increased to $0.15 per therm, the threshold for under-collected bank balances shall be eliminated, and the over-collection threshold shall be increased to $55.78 million.

34. Southwest Gas shall, in its next rate case application, provide an explanation, with sample calculations and documentation, of how it has been implementing the ICM and Rule 6 tariff provisions regarding line extension policies.

35. Southwest Gas shall implement, within 60 days of the effective date of this Decision, Staff's Pipeline and Procurement recommendations, as described hereinabove.

36. Southwest Gas shall develop, within 60 days from the effective date of this Decision, in a form acceptable to Staff, a new limits and control document that would be in line with industry best practices in accordance with Staff's modified recommendation.

37. Southwest Gas's DSM budget shall be funded initially at the $4.4 million level recommended by Staff, with additional $1 million incremental increases for the years 2010 through

2012, and shall adopt the data collection and reporting requirements recommended by the Staff witness for new DSM programs.

CONCLUSIONS OF LAW

1. Southwest Gas is a public service corporation within the meaning of Article XV of the Arizona Constitution and A.R.S. §§ 40-250, 40-251, and 40-367.

2. The Commission has jurisdiction over Southwest Gas and the subject matter of the Company's rate application.

3. The rates, charges, and conditions of service established herein are just and reasonable and in the public interest.

ORDER

IT IS THEREFORE ORDERED that Southwest Gas Corporation is hereby authorized and directed to file with the Commission, on or before December 31, 2008, revised schedules of rates and charges consistent with the discussion herein and a proof of revenues showing that, based on the adjusted test year level of sales, the revised rates will produce no more than the authorized increase in gross revenues.

IT IS FURTHER ORDERED that the revised schedules of rates and charges shall be effective for all service rendered on and after December 1, 2008.

IT IS FURTHER ORDERED that Southwest Gas Corporation shall notify its customers of the revised schedules or rates and charges authorized herein by means of an insert in its next regularly scheduled billing, in a form acceptable to Staff.

IT IS FURTHER ORDERED that Southwest Gas Corporation shall, within 60 days of the effective date of this Decision, implement Staff's Pipeline and Procurement recommendations, as described hereinabove, and shall file in this docket as a Compliance Item a copy of the revised procedures.

IT IS FURTHER ORDERED that Southwest Gas Corporation shall, within 60 days from the effective date of this Decision, develop in a form acceptable to Staff, a new limits and control document that would be in line with industry best practices, in accordance with Staff's modified recommendation, and shall file in this docket as a Compliance Item a copy of the revised procedures.

IT IS FURTHER ORDERED that, in its next rate case, Southwest Gas Corporation shall provide an explanation, with sample calculations and documentation, of how it has been implementing its tariff provisions regarding line extensions.

IT IS FURTHER ORDERED that Southwest Gas Corporation shall revise its Purchased Gas Adjustor mechanism to increase the PGA bandwidth to $0.15 per therm, to eliminate the threshold for under-collected bank balances, and to increase the over-collection threshold to $55.78 million. Within 10 days of the effective date of this Decision, the Company shall file as a Compliance Item in this docket, a revised PGA tariff consistent with the Decision.

IT IS FURTHER ORDERED that, as discussed hereinabove, half of the cost of the Yuma Manors pipeline replacement project shall be permanently disallowed from inclusion in the Company's rate base.

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IT IS FURTHER ORDERED that Southwest Gas Corporation shall fund its DSM budget initially at the $4.4 million level recommended by Staff, with additional $1 million incremental increases for the years 2010 through 2012, and shall adopt the data collection and reporting requirements recommended by the Staff witness for new DSM programs.

IT IS FURTHER ORDERED that this Decision shall become effective immediately.

BY ORDER OF THE ARIZONA CORPORATION COMMISSION.

CHAIRMAN COMMISSIONER

COMMISSIONER COMMISSIONER COMMISSIONER

IN WITNESS WHEREOF, I, BRIAN C. McNEIL, Executive Director of the Arizona Corporation Commission, have hereunto set my hand and caused the official seal of the Commission to be affixed at the Capitol, in the City of Phoenix, this _______ day of _____________, 2008.

BRIAN C. McNEIL
EXECUTIVE DIRECTOR

DISSENT ______________________

DISSENT ______________________

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