Decision **PROPOSED DECISION OF ALJ DeBERRY** **(Mailed 10/14/2003)**

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of Southwest Gas Corporation for Authority to Increase Rates in San Bernardino, Placer, El Dorado, and Nevada Counties, California.	Application 02-02-012 (Filed February 13, 2002)

OPINION REGARDING PROPOSED GENERAL RATE INCREASE

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OPINION REGARDING PROPOSED GENERAL RATE INCREASES

1. Summary

This decision adopts 2003 general rate increases of approximately $3.8 million each for Southwest Gas Corporation's Southern and Northern California Divisions. In order to minimize the impact on rates, these revenue requirement increases will be phased in during 2003, 2004, 2005 and 2006. As a result, 80% of the increase will be included in rates for 2003; 10% in 2004; 5% in 2005 and 5% in 2006. The phase-in of these increases recognizes the current economic climate, and the ability of customers to bear both these increases and potential increases in the cost of gas.

The total increases in revenue requirements represent an increase of approximately 9.6 % over base rates, and 4.6% over total operating revenue for Southern California, and 43.2 % over base rates, and 17.9% over total operating revenue for Northern California. The adopted increases represent approximately 66% of Southwest's requested increase in Southern California, and 86% of the requested increase in Northern California.[1] This decision also provides for attrition increases in Southern and Northern California in 2004, 2005 and 2006, that protect against labor and non-labor inflation, and inclusion of the Truckee Operational Center in Southwest's Northern California 2004 attrition year revenue requirements. Southwest is also authorized to amortize amounts currently recorded in the Revenue Recovery Shortfall Memorandum Account in

[1] During the proceeding, Southwest reduced its requested revenue requirement increases from $8.4 to $5.7 million in Southern California, and from $5.5 million to $4.4 million in Northern California.

rates for 2003 and 2004. In addition, this decision adopts a revenue balancing account that protects ratepayers against over-collections, and Southwest against under-collections due to differences between forecasted sales and actual sales.

These rate increases are the first General Rate Increases authorized for Southwest since its last General Rate Case in 1995, and are a result of increasing costs for both labor and non-labor expenses, and greater plant investment, that have occurred during the last eight years. The adopted revenue requirements are based on the use of a 2003 test year, and an overall rate of return of 9.17% on Southwest's rate base investment. The adopted revenue requirements provide for an accelerated pipeline replacement program in Southern California to reduce pipeline leak rates and increase safety. As explained in our opinion, we have not adopted recommendations by other parties for a refund of postretirement benefits other than pensions, nor have we adopted a refund of gas purchase costs that occurred in winter 2000-2001. Finally, we defer certain issues regarding other investments, and the future of the trust account for funding future retiree's benefits to Southwest's next general rate case.

2. Procedural Background

2.1. The General Rate Case Application

On December 27, 2001, Southwest tendered a Notice of Intent, and on February 13, 2002, filed its application requesting authority to increase general rates in its Northern and Southern California divisions (Application). Southwest requested increases in revenue requirements for test year 2003 of approximately $5.5 million for Northern California, and $8.4 million for Southern California. These amounts represent an increase of 62.4% over base rates, and 25.9% over total operating revenue for Northern California, and 17.6% over base rates and 10.2% over total operating revenue for Southern California.

Southwest proposes to phase-in the revenue requirement increases over a five-year period to minimize the impact of its rate increase on customers. According to Southwest's phase-in proposal, rates in 2003 would be increased by $2.73 million, and $6.75 million for Northern and Southern California, respectively. Southwest also requests expense and capital attrition rate increases for the years 2004 through 2007, and balancing account treatment for its core and non-core base revenue margin beginning in test year 2003.

The Office of Ratepayer Advocates (ORA) timely protested Southwest's Application questioning the estimated expenses, capital expenditures, and particularly Southwest's proposed pipe-replacement project. The County of San Bernardino (San Bernardino) also timely protested the Application, and at the prehearing conference held May 1, 2002, argued that Southwest's gas procurement practices should be included as an issue in this proceeding.[2] On June 5, 2002, the assigned Commissioner issued a ruling (Scoping Memo) that, among other matters, established a schedule projecting issuance of a Commission Decision by December 19, 2002, and adoption of new rates by January 1, 2003. ORA and the County submitted direct testimony on

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[2] In response to unprecedented gas price increases, the Commission opened Order Instituting Investigation (OII) 01-06-047 to investigate the gas procurement practices of Southwest during the period June 1, 1999 through May 31, 2001. In Decision (D.) 02-08-064, adopted August 22, 2002, the Commission found that Southwest's gas procurement practices were imprudent, and ordered Southwest to rebate approximately $2.7 million to customers.

In the instant proceeding, San Bernardino addressed Southwest's gas procurement practices between June 2001 and May 2002. San Bernardino generally supports the position of ORA on many of the issues discussed in this decision. In those instances where San Bernardino has a different position than ORA, San Bernardino's position is discussed.

July 19, 2002, and August 5, 2002, respectively, and Southwest submitted rebuttal testimony on August 14, 2002. Evidentiary hearings were held August 26 through August 30, 2002. Opening briefs were filed on October 4, 2002, and reply briefs were filed October 18, 2002. The matter was deemed submitted on October 18, 2002.

On January 31, 2003, Southwest filed a motion requesting that the assigned Administrative Law Judge (ALJ) authorize establishment of a Revenue Recovery Shortfall Memorandum Account (RRSMA). The RRSMA records the margin revenue shortfalls[3] due to any delay in the requested rate relief ultimately adopted in this proceeding. In D.03-05-032, adopted May 8, 2003, the Commission authorized Southwest to establish the RRSMA.

2.2. Public Participation Hearings

The Commission held public participation hearings (PPH) in Hesperia on August 12, 2002 in Big Bear Lake on August 13, 2002, and in Tahoe City on August 19, 2002. Dozens of customers, as well as representatives of Southwest, the County, local organizations, and ORA attended the hearings to express their views on a variety of issues, including the following:

Many customers are retired, and cannot afford increases in rates;

Some customers would like to switch to an alternate gas company;

Southwest's problems in procuring gas should not be passed on to customers;

Individual customers have problems with their monthly gas bills.

[3] Marginal revenue shortfall is the difference between current rates and any new rates ultimately authorized by the Commission.

We consider these issues in this decision. We express our appreciation to the individuals who took the time to attend public participation hearings in this proceeding.

3. Burden of Proof

The briefs for ORA and Southwest discuss the Commission's standard regarding burden of proof in a ratemaking proceeding. ORA argues that Southwest has the burden of proof to demonstrate by clear and convincing evidence that Southwest is entitled to the rate increase it is seeking. In support of its position, ORA cites D.92496,[4] and D.83-05-036[5] that explain the Commission's standard for burden of proof. ORA also references the Commission's recent Pacific Gas and Electric (PG&E) general rate decision, that explains that clear and convincing evidence is "proof by evidence that is clear, explicit and unequivocal; that is so clear as to leave no substantial doubt; or that is sufficiently strong to demand the unhesitating assent of every reasonable mind." (D.00-02-046, pp. 36-37.)

Southwest does not dispute ORA's position, and agrees that the burden of proof is its responsibility. However, Southwest argues that a clarification is necessary to explain the difference between the ultimate burden of proof, and the burden of going forward to produce evidence from a party presenting a counterpoint. In support of its position, Southwest points out that D.00-02-046,

[4] 4 CPUC 2d 693,701 (1980).

[5] 11 CPUC 2d 474, 475.

also cites D.87-12-067,[6] a general rate increase proceeding for Pacific Bell Company, in which, the Commission states:

> [W]here other parties propose a result different from that asserted by the utility, they have the burden of going forward to produce evidence, distinct from the ultimate burden of proof. The burden of going forward to produce evidence relates to raising a reasonable doubt as to the utility's position and presenting evidence explaining the counterpoint position. Where this counterpoint causes the Commission to entertain a reasonable doubt regarding the utility's position, and the utility does not overcome this doubt, the utility has not met its ultimate burden of proof. (Pacific Bell, D.97-12-067, 27 CPUC 2d 1, 22.)

Southwest contends it has met its ultimate burden of proof when it presented evidence on its expenses; but, when ORA estimated expenses, ORA did not produce evidence sufficient to cause the Commission to entertain a reasonable doubt regarding Southwest's position. Even if reasonable doubt had been raised by ORA's evidence, Southwest asserts that the doubt was overcome through Southwest's rebuttal presentation on expenses.

3.1. Discussion

We conclude that the burden of proof clearly rests with Southwest. Although a counterpoint may be raised by another party, Southwest must first justify the reasonableness of its position. As we stated in D.00-02-046, "To meet the burden of presenting clear and convincing evidence of the need for an increase the applicant must produce evidence having the greatest probative value."[7] As ORA points out, it is Southwest's direct showing that must provide

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[6] Re Pacific Bell, 27 CPUC 2d p.22 (1987).

[7] D.00-02-046, p. 38 quoting from D.90462, 2 CPUC 2d 89, pp.98-99.

the clear and convincing evidence. Without establishing that basis, Southwest will not have met its burden of proof. As we discuss herein, we have considered the evidence from this perspective, and reached conclusions regarding factual matters. Where applicable, we have then used those findings of fact in reaching conclusions on the reasonableness of each issue in Southwest's application.

4. Revenues and Expenses

4.1. Revenues

Southwest and ORA forecast sales in therms[8] per month for each customer, by class, through regression analysis. Total sales forecasts[9] were developed by multiplying the consumption per customer by the number of customers[10]. Revenues at present rates were developed by multiplying the sales forecast by the current rates for each customer class.

The primary impact of the sales forecast is on the development of new rates. The higher the forecast of revenues at present rates, the lower the rates will have to be to recover the revenue requirement in the test year. Because of this direct relationship between forecasts and rates, revenue forecasts can be controversial.

In this case, ORA's sales forecast is slightly higher than the forecast by Southwest. ORA's sales forecasts exceed Southwest's forecasts by about 271,000 therms, or 1.4% for Northern California, and 2,858,000 therms, or 2.41% for Southern California. ORA and Southwest agree these variances are a result of

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[8] A therm is equivalent to 100,000 British Thermal Units or BTUs.

[9] Measured in therms.

[10] ORA reviewed and accepted Southwest's forecasted number of customers in both Northern and Southern California.

different heating degree-day[11] data. ORA used 25 years of data, while Southwest used 10 years of data. Southwest argues that using 10 years of data is consistent with its forecast methodology for all GRCs during the past 20 years, whereas, ORA argues that the use of 25 years of data is more appropriate because it reflects a greater number of weather cycles, and is therefore a more accurate picture of weather-related customer usage. ORA contends that the historic use of 10-years of data is immaterial, and that other utilities including PG&E and Southern California Gas Company (SoCalGas) use at least 20 years of data in their respective GRC proceedings.

However, in this proceeding, the potential effect of revenue differences is minimized since Southwest and ORA agree that base revenues should be accumulated in a balancing account. If the revenue forecast is too high and revenues are under-collected the balancing account protects shareholders. If the revenue forecast is too low and revenues are over-collected, then the balancing account protects ratepayers.

Although Southwest and ORA agree on establishing a balancing account, revenue forecasts could have an effect on operating revenues if the implementation date for the balancing account differs from the date of this decision. Revenues occurring between the date of this decision and the date for implementing a balancing account could result in over or under-collections of revenue. Southwest advocates establishing the balancing account effective on the effective date of this decision, whereas, ORA recommends that the balancing

[11] A degree-day is unit of measure used to express the extent to which temperatures vary from a specific reference temperature during a given time period (month, season, year).

account not become effective until January 1, 2004. ORA argues that delaying the implementation date will mean the balancing account will begin on an appropriate annual cycle, and will allow time for Southwest to file appropriate tariffs, and the Energy Division to review the filings. ORA agrees with annual adjustments to the balancing account; however, such adjustments depend on the attrition mechanism discussed elsewhere in this decision.

Southwest contends ORA has not provided sufficient justification for delaying implementation of the balancing account, and any delay will place shareholders at risk for under-collections between the effective date of today's decision and January 1, 2004.[12] As an alternative, Southwest is willing to calculate monthly test year revenues and offset the balancing account for those months prior to the effective date of this decision.

4.1.1. Discounted Special Contracts[13]

ORA opposes including discounted special contracts in the balancing account as this removes an incentive for Southwest to minimize discounts. Southwest agrees that margin revenue derived from discounted special contracts should not be given balancing account protection, and therefore we will not include discounted special contract revenues in the revenue balancing account.

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[12] We note, however, that if actual sales exceed adopted sales for any period between the effective date of this decision and the implementation date of a balancing account, then the opposite effect would occur and there would be a revenue over-collection by Southwest.

[13] Discounted Special Contracts are listed in Southwest's CPUC Tariff, Sheet No. 5422-G.

4.1.2. Interstate Pipeline Demand Charges

Finally, although not a balancing account issue, ORA recommends removing interstate pipeline demand charges that are currently tracked in the Core Fixed Cost Adjustment Mechanism (CFCAM), and recording these costs in the Purchased Gas Account (PGA). ORA contends interstate demand charges are more properly connected to the procurement of gas. Southwest disagrees with ORA's proposal, and contends including interstate demand charges in the PGA would distort the monthly cost of gas by subjecting customers to monthly fluctuations in the average cost of interstate capacity. Furthermore, Southwest notes neither SoCalGas nor PG&E includes interstate demand charges in their respective PGA balancing accounts.

4.2. Discussion

The disparity in forecast models is primarily the result of the number of years of data (10 by Southwest, and 25 by ORA), used in the forecast models. Statistical measures that compare the two forecasts, such as R-squared values, were not provided by parties; therefore, we address the comparative forecasting information provided.

As a starting point, we reject Southwest's argument that because a particular time period has been used in the past, it necessarily justifies using the same period in this or any other proceeding. This position does not necessarily mean that ORA's 25-year forecast is preferable because it has more information and is similar to periods used in other states. Each forecasting technique should be judged on whether it applies to the current circumstances in which it is employed and whether the results produce more accurate forecasts. In making this determination, a review of ORA's exhibits 126 and 127 indicates that Southwest's forecasts are almost the same as ORA's, and in the later periods, Southwest's forecasts appear to more accurately predict actual gas sales volumes. Furthermore, as explained in Southwest's Exhibit 5 (Tab B), simulations based on 10-year and 25-year modeling showed that the 10-year model better predicted actual results for Southwest during the nine-year study period. On the basis of these indicators, we will adopt a 10-year period for forecasting sales.

4.2.1. Balancing Account

The issue of different sales projections will have a minimal effect on revenues, since we adopt a balancing account that will track differences in revenues due to forecasted sales and actual sales. Our adoption of the balancing account will be effective 30-days after the effective date of this decision, with offsets to the adopted revenue for those months already past as proposed by Southwest. We take this action in order to reduce the potential for over-collection, or under-collection of revenues during the rest of the test year. The additional 30-days provides time for Energy Division review of the balancing account and for the filing of tariffs. Consistent with our treatment of SoCalGas and PG&E we will not direct Southwest to include interstate pipeline demand charges, fixed storage charges and core margin revenue in the PGA balancing account, but will provide that these charges can continue to be included in the CFCAM. However, like SoCalGas and PG&E, we direct Southwest to develop discrete rate components for its interstate pipeline demand charges.

4.2.2. Gas Costs and Other Revenues

ORA estimated gas costs and other revenues using updated information. Although Southwest did not dispute ORA's estimates, recently filed gas costs[14] indicate Southwest's estimates are reasonable and should be adopted.

5. Expenses

5.1. Expense Forecasting

Southwest forecasted 2003 test year expenses utilizing recorded expenses for the 12-month period ending August 31, 2001, to establish a base year. Base year expenses were then increased to recognize a 3.25 percent general salary increase effective June 2001, and further augmented by labor and non-labor escalation factors to determine 2002 expenses. The 2002 expenses were then adjusted for within-grade step increases for non-exempt employees, additional incremental billing expense for new customers, a scheduled postage increase in the third-quarter of 2002, and an increase in California Alternative Rates (CARE).[15] Southwest then increased the adjusted 2002 expenses by labor and non-labor escalation factors, and made additional adjustments for new employees and increased safety advertising to arrive at expense estimates for 2003.

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[14] See Advice Letter 693, August 1, 2003.

[15] The CARE adjustment was withdrawn in accordance with the April 19, 2002, Joint Commissioner's Ruling in Rulemaking 01-08-027.

ORA rejected Southwest's forecasting methodology, and proposed that expense estimates be based on averages of normalized[16] prior years' recorded expenses. ORA explains that many recorded expense accounts demonstrate wide variations, and that Southwest did not provide justification for using 2001 recorded amounts as a basis for estimating. ORA estimated Administrative and General Expenses (A&G) using a five-year average of recorded expenses between 1997 and 2001; while, Operating and Maintenance Expenses and Customer Account Expenses generally utilize a three-year average. ORA has included many of the adjustments proposed by Southwest including billing expenses for new customers, increased postage expense, new employees, and increased safety advertising. ORA did not include adjustments to annualize labor or to recognize within-step increases for non-exempt employees.

The estimating methodologies used by both Southwest and ORA apply to Northern and Southern California operations, although certain adjustments, such as the district manager and customer representative proposed for Northern California, are specific to each division.

ORA applies the burden of proof standard to Southwest's estimating methodology and concludes that Southwest has failed. In particular, ORA argues that Southwest has not provided clear and convincing evidence that either its 2001 recorded expenses, or its estimates of 2003 test year expenses are reasonable. ORA contends that Southwest's showing estimating test year expenses based on the recorded expenses for the twelve months ending

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[16] Normalized expenses remove the effects of variances due to unusual fluctuations, or one-time events. In this case, ORA converted recorded expenses to constant 2001 dollars and generally used averages over different periods.

August 31, 2001, is not sufficient, as there is virtually no testimony explaining why recorded expenses are necessarily reasonable for estimating the test year. In response, Southwest argues that ORA failed to demonstrate that the methodology ORA employed is either superior or reasonable. Southwest contends that forecasting test year expenses based on a recorded year is the same methodology used in general rate cases since at least the mid-1980s, although it concedes that other methodologies may be more reliable.

5.1.1. Discussion

We previously addressed the use of recorded costs to establish a base year in A.91-11-024, a San Diego Gas and Electric Company (SDG&E) general rate case (GRC). In that proceeding we stated, "The purpose of a general rate case is to develop and adopt sound, informed estimates of the reasonable costs to be incurred in the test year. We know that our adopted levels of revenues and expenses may be at variance with actual experience. However, we must be sufficiently informed to know that adopting a given estimate makes sense."[17] In this same proceeding, we noted that "SDG&E simply states that '1988 base year recorded costs were adjusted as follows…' Although this type of explanation might help a reader to understand where the cost figures came from, it does not provide a justification. Why is it appropriate to use a 1988 base year recorded cost for this account? What changes are expected in staffing and operations? Why are the specified adjustments appropriate? How were they calculated? These types of questions should be easily answered by the initial showing."[18]

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[17] D.92-12-019, *mimeo.*, p. 17.

[18] *Id.*

In this proceeding we ask the same questions of Southwest. During cross-examination, Southwest's witness, when questioned about explanations of increases in the recorded base year from the previous year, stated "…we have no explanations as to increases from year to year." Later, he stated that Southwest assumed base year costs were reasonable and the witness believes they are reasonable.[19] This position does not meet Southwest's burden to demonstrate through clear and convincing evidence the justification for its estimates. Simply stated, there must be more.

Southwest argues that ORA has not presented evidence that Southwest's expense estimates are unreasonable,[20] and that ORA's reliance on the Roseville decision[21] is misplaced since Roseville used inflated, estimated budgets, which were unreasonable for estimating test year expenses. Thus, Southwest concludes that the basis for ORA's averaging technique used in this proceeding is not the basis for the averaging used in the Roseville case. Southwest contends that it has presented rebuttal testimony that demonstrates the reasonableness of actual incurred expense levels. (Exhibit 5, Tab K.) However, a review of that rebuttal testimony, and the cross-examination of the rebuttal witness, provide limited insight about increases, or decreases, in prior years' recorded expenses.

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[19] RT volume 6 at 473.

[20] Southwest argues that ORA has not stated that historical cost levels were excessive, that numbers of employees are excessive or redundant, or that salaries are excessive. We reject this argument since the burden to demonstrate reasonableness of estimates rests with Southwest.

[21] In D.96-12-074, Roseville Telephone Company's (Roseville) GRC, Roseville used a budgeting approach to its test year expense estimating methodology, while ORA used an average of recorded past years' expenses. The Commission adopted ORA's averaging methodology to estimate test year expenses. (70 CPUC 2d 88, pp.115-116.)

Southwest argues in rebuttal that ORA's estimates are unreasonable because certain of ORA's 2003 test year estimates are below recorded expenses in 2001 and prior years, and that ORA's methodologies were intended to produce a low revenue requirement in this proceeding.[22]

We note that Southwest is expected to justify its estimates for expense levels in its initial testimony and work papers, not through rebuttal testimony. Our adoption of test year 2003 expenses rejects Southwest's forecasting methodology based on increasing 2001 recorded expenses to create test year estimates. Although Southwest contends that the record is replete with evidence of steady upward trends in expenses, it is apparent that while upward trends may exist in some instances, substantial variations also exist. Examples of substantial variations are evident in ORA's Administrative and General (A&G) expenses (Table 6-2)[23] and for other expenses as further discussed. As shown in Table 6-2, after adjustments for inflation, year-to-year recorded expenses show increases exceeding 50% and decreases exceeding 21%. Such annual changes are less reflective of trends and more reflective of wide variations that are generally unexplained by any of the parties.

Conversely, we reject complete adoption of ORA's averaging of recorded amounts. ORA's methodology that forecasts future expenses by averages, whether over a 3-year or a 5-year period, does not answer the question of

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[22] Southwest points to the cross examination of the ORA project coordinator who stated that ORA's objectives are to determine rates that are low. However, ORA's policy is made clear by a complete reading of Pub. Util. Code § 309.5 that states that the goal of ORA "…shall be to obtain the lowest possible rate <u>for service consistent with reliable and safe service levels.</u>"

[23] *See* Exhibit 120, p. 6-5.

whether an estimate is reasonable, or whether the estimate reflects the factors affecting the expense. For example, apart from improvements in efficiency, customer related expenses would logically increase over time if the number of customers also increases, as is the case in this proceeding. Therefore, we will adopt expense estimates for each account using methodologies that fit the circumstances including averaging, trending, or other appropriate method, and adjusting for non-recurring expenses, or anticipated cost increases. We will also increase certain expense estimates, such as distribution costs, for estimated increases in customers. Many of our adopted increases in expenses will use the ratio between 2001 customers and 2003 estimated customers, as our expense estimates are based on recorded amounts through 2001. Expenses that are increased for customer growth will be based on the ratio between 2003 customers and 2001 customers, resulting in increases of 5.3% for Southern California, and 5.7% for Northern California.

5.2. Labor Loading (pensions, benefits, and payroll taxes)

Labor loading is a factor applied to labor estimates to calculate additional expenses due to pensions, benefits, and payroll taxes. Labor loading is defined as the ratio of the cost for all employer provided employee benefit plans and programs divided by total labor payroll excluding leaves (holidays, vacations, and sick leave). Specific elements we adopt to develop the labor loading factor are discussed in A&G expenses (Acct. 926), and in taxes (payroll taxes). Only two labor loading elements, pensions and benefits, and miscellaneous benefits were disputed by ORA. Since we are adopting ORA's estimates for pensions and benefits and miscellaneous benefits, the adopted labor loading factor is ORA's recommended factor 46.09%. Our adopted labor-loading factor of 46.09% is applied to the 2003 test year labor estimate for operating and maintenance, customer accounts, and administrative and general expenses.[24]

5.3. Four-Factor Cost Allocation

Total company costs are allocated to the Northern and Southern California divisions using a four-factor allocation methodology. The four factors are: (1) direct operating expense; (2) average direct plant in service; (3) direct labor; and (4) average number of customers.

Southwest using a regression calculates four-factor allocation percentages of 1.78% for Northern California, and 8.19% for Southern California. ORA using more recent recorded data, calculates four-factor allocation percentages of 1.53% for Northern California and 8.16% for Southern California. After reviewing Southwest's regression methodology, and considering ORA's more recent data, we will adopt ORA's allocation percentages.

5.4. Labor and Non-Labor Escalation

ORA estimated annual labor escalation using the Consumer Price Index for Urban Customers (CPI-U) forecast for 2003-2006, resulting in an estimated escalation factor of 2.6% rate. Southwest did not object to this escalation rate, and therefore we will adopt it for purposes of increasing labor to 2003 dollars.

Our labor forecasts also reject including any within grade increases, as we expect these amounts will be offset by attrition, and the replacement of existing workers at lower salaries. Furthermore, our adopted forecasting methods rely on recorded expenses, and therefore to the degree that within grade increases are included in these amounts, they are also included in our forecasts.

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[24] Labor loading factor is shown on ORA Opening Brief, Appendix C, Table 1,

Footnote continued on next page

We will also adopt ORA's forecasts of non-labor escalation of 1.00% for 2002, and 1.019% for 2003. ORA and Southwest both use the same index to develop the non-labor escalation factors, however ORA's estimates are based on later information.

5.5. Operating and Maintenance Expenses[25] (Southern and Northern California Divisions)

5.5.1. Gas Distribution Expenses (Southern California)

Southwest estimated gas distribution expenses using recorded 2001 expenses adjusted and escalated to 2003. ORA estimated distribution accounts using a three-year average of recorded expenses except for Accounts 871, 881, and 893. For Accounts 871 and 893, ORA reviewed and accepted Southwest's estimates. Account 881, Rents, is discussed below.

It is apparent from the recorded information that there have been substantial annual variances in the various gas distribution accounts. For example, between 2000 and 2001, Account 871, Distribution Load Dispatching Expense, declined by over 62%, and between 1998 and 2001, Account 874, Mains Expense declined by over 33%, in constant 2001 dollars.[26] Individual account changes are unexplained in the record, although Southwest generally attributes these increases to customer growth, salary and benefit increases, and maintenance of aging pipe.

Reconciliation of Differences.

[25] Adopted Expenses are shown in Appendix A.

[26] Exhibit 120, Table 9-2.

Although Southwest and ORA argue over their respective estimating methodologies applied to individual accounts, an analysis of the total gas distribution expenses shows that gas distribution expenses for operations and maintenance are consistently trending upward on an annual basis. It is not unexpected that the charges to individual accounts will vary from year to year since service personnel who operate and maintain different portions of the system, will charge accounts differently from year to year. Thus, it is important to view the distribution expenses as a whole.

We will not adopt Southwest's estimates using recorded 2001 expenses adjusted and escalated to test year 2003. The record does not show that the expenses incurred in 2001 are necessarily a correct estimate of costs in 2003; nor did Southwest provide a detailed showing regarding recorded expense variances. We also do not adopt ORA's estimating method that addresses each account separately and averages recorded expenses over different numbers of years. Although ORA's averaging methodology eliminates many of the variances for individual accounts, the overall result does not give sufficient weight to the upward trend of total distribution expenses. Instead, we will adopt an average of the total distribution expenses over the past three years, except for gas supply and rents expenses. Our adopted methodology recognizes that variances in expenses will occur, and averaging will help normalize these variances. Secondly, our adopted decision provides Southwest with an accelerated pipeline replacement program that we will expect will reduce future distribution expenses. As Southwest's testimony indicates, the PVC pipe replacement project will reduce the number and severity of pipe leaks that in turn should reduce maintenance costs. We fully expect that the replacement of

PVC pipe in Southern California will reduce future maintenance costs, and therefore, should be reflected in our adopted distribution expenses.

5.6. Account 813 Other Gas Supply Expenses (Southern and Northern California)

Other Gas Supply expenses for both Northern and Southern California were the same for ORA and Southwest except for labor loading. Therefore, we will adopt the labor amount increased by our adopted labor loading factor, plus materials and expenses, escalated to test year 2003 using the labor and non-labor factors.

5.7. Account 881 Rents (Southern and Northern California)

ORA points out that Rents expense declined significantly between 2000 and 2001 as a result of Southwest owning computers rather than leasing computers. ORA argues that given this change it is reasonable to use 2001 recorded rents expense for estimating 2003 Rents expense. Southwest has not provided any information to show that ORA's finding is incorrect. Given this information, we will adopt Southern and Northern California recorded 2001 rents expenses for the 2003 test year.

5.8. Gas Distribution Expenses except Gas Supply and Rents Expenses (Northern California)

ORA estimated Gas Distribution Expenses differently for the Northern California Division than comparable estimates for the Southern California Division. ORA explains that Southwest recently completed an extensive expansion project, initiated in the mid-1990s, to bring a gas distribution system to the City of Truckee and the Donner Lake basin. As a result, recorded gas distribution expenses were unusually high in 1996 and 1997. Total distribution expenses increased by over 140% between 1995 and 1996.[27] After 1998, recorded expenses show stability, and annual changes decreased. ORA explains that it would not be reasonable to include the non-recurring expense levels in estimates for the test year. Therefore, ORA generally used a three-year average of expenses between 1999 and 2001, for its test year estimates, except for five accounts (870,881,885,887 and 892). ORA made certain adjustments to these five accounts reflecting a new Truckee district manager (Accounts 870 and 885), and an expected decrease in maintenance of mains and services (Accounts 887 and 892) as a result of reducing the amount of PVC pipe subject to leaks and other problems.

Southwest does not dispute the unusual expenses during the mid-1990s, however Southwest argues that although expenses declined between 1998 and 1999, unexpected customer additions, and costs of an agreement between the City of Truckee and Southwest have caused additional increases in costs. Southwest explains these increases have resulted in overall distribution expenses of $1,594,000 for the twelve months ending June 2002.

After reviewing the significant variations in past distribution expenses, and the current stability in expense levels, and noting the recent expansion of the Northern California service territory, we will adopt Southwest's estimate based on 2001 recorded expenses. We will escalate this amount by our adopted labor loading factor and labor and non-labor escalation factors. Our adopted Northern California distribution expenses do not include Other Gas Supply or Rents

[27] Exhibit 121, Table 20-2.

expenses that are discussed above. Although we have not adopted ORA's estimate, we agree with ORA that future distribution expenses are likely to reflect lowered costs due to the installation on non-PVC pipe for distribution services.

ORA and Southwest agreed that Accounts 870 and 855 should include the costs for a new manager in Truckee. Therefore, we will also include these costs in our adopted expenses.

5.9. Customer Accounts Expenses – Accounts 901, 902, 903, and 905 (Southern California)

Consistent with its overall forecasting methodology, Southwest's test year customer accounts expenses are based on an annualized 2001 estimate, adjusted for in-grade salary increases, increased billing expense associated with customer growth, and an increase in postage rates.[28]

ORA forecasted test year expenses using a three-year average of past expenses (1999-2001) in constant 2001 dollars. These amounts were escalated to 2003 for projected inflation. ORA also included adjustments for an increase in postage rates, and increased costs as a result of growth in customers ORA did not include within-grade labor increases. ORA argues that within-grade increases are included in its estimating methodology since these increases are present in the recorded years used in ORA's averages. Furthermore, ORA contends there is no analysis that within-grade increases are not offset due to

[28] Increased administrative expenses for the CARE program were initially included in Southwest's estimates, however, consistent with the ruling of the assigned ALJ, Southwest removed expenses related to the California Alternative Rates for Energy Program (CARE), and the Low Income Energy Efficiency Program (LIEE). These expenses are addressed in Rulemaking 01-08-027.

turnover by higher paid employees leaving or retiring and being replaced by lower paid employees.

Apart from arguments over estimating methodology, Southwest notes that by averaging recorded expenses, ORA has excluded a new customer representative in the new Northern California Division for 2003, although ORA included the manager who will supervise this employee.

5.9.1. Discussion

We do not adopt Southwest's estimates using the recorded 2001 expenses, nor do we adopt ORA's estimating methodology for Customer Accounts expenses. Customer Accounts expenses including meter reading, customer accounts and customer records and collections expenses logically are related to the number of customers served. In order to recognize this relationship, we will estimate customer accounts expenses on a normalized cost per customer basis. ORA and Southwest do agree on including expected increases in postage costs in customer accounts expenses, and thus we have also included these costs.

As shown in Appendix A we will use a three-year historical average of costs per customer in constant 2001 dollars, and multiply this average by the number of estimated customers in 2003. This amount is further increased using adopted escalation factors. As demonstrated by the relatively equal cost per customer in 2001 dollars, this method addresses customer growth, and efficiencies, developed during the recorded years.

5.9.2. Customer Accounts Expenses, Excluding Account 902, Meter Reading, and Account 904, Uncollectibles (Northern California)

Our adopted customer accounts expense estimates for Northern California will be based on the recorded 2001 expenses to reflect the recent customer expansion, except for Accounts 902 and 904. ORA and Southwest agree that expected increases in postage costs should also be included in the estimates of customer accounts expenses, and thus we have also included these costs.

5.9.3. Account 902 - Meter Reading

ORA notes that meter reading labor costs have been trending downward during the past five-years as a result of the use of modern meter reading equipment. This improvement in productivity should be recognized in the adopted estimate for this account. Therefore, we will adopt an estimate based on the recorded amount for labor and non-labor in 2001.

ORA did not provide an explanation why the customer representative in Northern California was excluded for 2003, although ORA included the supervisor for the customer representative in its estimates. Therefore, we will include the costs of the customer service representative in our adopted customer accounts expenses.

5.9.4. Account 904 - Uncollectible Expense

Uncollectible expense represents the amount of billed revenue that cannot be collected from customers. Uncollectible expense is calculated by multiplying an uncollectible rate times the adopted net operating revenues, less revenues from special contracts. ORA reviewed Southwest's proposed uncollectibles rates of 0.1925% for Southern California, and 0.0797% for the Northern California, and found both rates reasonable, but stated that the rates were incorrectly applied to all revenues, including cost of gas revenues. Although, parties agree on the rate of 0.0797% for Northern California, a rate we adopt, ORA and Southwest disagree over the rate for Southern California.

Southwest argues that if an averaging methodology is adopted for other expenses, then a three-year average of the uncollectible rate should also be adopted for Southern California. Southwest calculates that a three-year average of the rates between 1999 and 2001 would result in an uncollectibles rate of 0.418%. In response to this proposal, ORA stated that if an average of past years' uncollectibles were adopted, the average should eliminate the rate in 2001 as abnormal,[29] and be based on an average of 1999 and 2000, resulting in a rate of 0.146%.

It appears from the recorded rates that the uncollectibles amount in 2001 is indeed unusual, and likely the result of the extremely high and unprecedented gas prices in 2000 and 2001. However, we will not completely dismiss the 2001 results, since gas prices could again increase resulting in increases in the uncollectibles rate. Therefore, we will adopt Southwest's initial request for an uncollectibles rate of 0.1925% for Southern California.

5.9.5. Customer Service and Information Expenses (Accounts 908 and 909)

Southwest's application included approximately $306,000 in expenses for Customer Service and Information expenses. Most of these expenses are for the Low Income Energy Efficiency (LIEE) program, and were removed by ORA as result of the April 19, 2002, Joint Assigned ALJ Ruling.[30] However, Southwest contends that ORA inadvertently removed $7,602 for accounts 908 through 910 in Southern California, and $40,749 from Accounts 908 through 910 in Northern California related to customer education and energy efficiency. During cross-examination the ORA witness stated ORA had no position on these expenses, and therefore we will include customer education and energy

[29] ORA points out this rate increased almost 1,900 % between 2000 and 2001.

[30] Southwest also agrees that these costs will be addressed in R.01-08-027.

efficiency expenses in the Customer Service and Information expenses for Northern and Southern California.

5.10. Sales Expenses (Accounts 912 and 913)

Southwest requests $3,016 (2001 dollars) in the Southern California Division, and $204 in the Northern California Division, for Accounts 912 and 913. The Joint Comparison exhibit, Exhibit 12, shows zero dollars for this expense, the amount we adopt for Sales Expenses.

5.11. Administrative and General Expenses – System Wide

Administrative and General (A&G) system wide expenses include expenses allocable from Southwest's total company operations to the Southern and Northern California Divisions. A&G expenses charged directly to specific A&G accounts in the Southern and Northern California Divisions are discussed following this section. Total A&G expenses are a summary of allocable and direct expense estimates for both divisions. A&G expenses include administrative salaries and expenses, outside services expenses, property insurance, injuries and damages, employee pensions and benefits, and miscellaneous general expenses and rents.

Consistent with its forecasting methodology, Southwest used 12-months recorded A&G expenses as of August 31, 2001, and escalated these amounts to the 2003 test year. Adjustments were made to the following expenses:
(a) Account 920, A&G salaries were annualized for a general salary increase of approximately 3.25%, effective June 2001; and $156,000[31] was included for a

[31] Total for Southern and Northern California, Joint Comparison Exhibit No. 12.

Management Incentive Plan (MIP); (b) Account 925 was increased for premiums paid for Directors and Officers (D&O) liability insurance.

ORA argues that recorded A&G expenses have varied significantly from year-to-year, and as a result test year forecasts should reflect an average of past years. ORA forecasted test year A&G expenses using a five-year average of recorded expenses. In addition, ORA excluded expenses for the MIP, and for D&O insurance. ORA also adjusted Account 926, Pensions and Benefits for an underfunding or diversion of Post Retirement Benefits Other Than Pensions (PBOPs). ORA contends it has included a portion of the general salary increase in its forecasting methodology by including 2001 salaries in its average forecasted salary amounts.

Southwest asserts that ORA's averaging technique does not include the general salary increase, and that ORA does not include expenses for employees added since Southwest's last GRC.

Our adopted forecasted expenses reflect methodologies appropriate for each of the various A&G accounts as discussed below.

5.11.1. Account 920 A&G Salaries

In constant 2001 dollars, recorded system-wide A&G salaries increased 0.6% between 1999 and 2000; and then increased over 13% between 2000 and 2001.[32] No party analyzed the reasons for these increases, although Southwest testified that increases in A&G expenses are a result of more employees, increased information technology needs, increased litigation that was not merger related, and greater regulatory and business requirements. However, this

[32] Exhibit 120, Table 6-2.

explanation is very general and certainly does not provide specific instances of cost increases, or reasons for the significant increase between 2000 and 2001. Southwest notes that ORA's recommended expense for A&G salaries is actually less than the recorded amount for 1997. Furthermore, ORA did not provide information indicating those areas in which Southwest can reduce A&G salary expenses. Therefore, we will not adopt ORA's estimate. After review of the recorded A&G salary amounts, and noting a general upward trend in Account 920 expenses, we will adopt the recorded amount for 2000, escalated by 0.6% the percentage increase between 1999 and 2000 as a reasonable estimate for the test year.

We have reviewed Southwest's proposed MIP, and the associated management performance criteria. Although certain of the criteria such as improving customer satisfaction may benefit customers, we conclude that the criterion to improve Southwest's return on equity is not in the interests of customers. Our assessment of the criteria leads us to conclude that the costs of the MIP should be allocated between shareholders and ratepayers. Therefore, we will adopt ORA's recommendation and allow 40% of the MIP in rates.

5.11.2. Account 921 – Office Supplies and Expenses

Office supplies and expenses result from general overhead expenses other than salaries. Unlike A&G salaries, recorded amounts in Account 921 have demonstrated both increases and decreases over the past few years. No party has provided an analysis explaining the reasons for these annual changes. We agree with ORA that an average of past years' expenses, adjusted for inflation, is a reasonable forecast of Account 921 expenses in the test year. Therefore, we will use a five-year average of recorded expenses escalated to the 2003 test year.

5.11.3. Account 922 – A&G Express Transferred to Capital

This account transfers a percentage of Accounts 920 and 921 to construction costs or non-utility accounts. Although ORA used a five-year average to forecast this account, we will adopt a percentage of our adopted amounts in accounts 920 and 921 for Account 922. We note that the percentages[33] during the last three recorded years (1999, 2000 and 2001)[34] have been almost the same (14.8%, 14,4% and 15.2%). Therefore, we will adopt an average of these three years, or 14.8%.

5.11.4. Account 923 – Outside Services

Outside Services expenses includes the fees and charges of professional consultants and others for general services not applicable to a particular operating function, or to other accounts. During the past five recorded years, annual changes in these accounts varied between minus 5% and plus 44%.[35] Southwest's forecast for Account 923 is $4,730,322 or $144,597 <u>less</u> than ORA's five-year average of $4,874,919 in 2001 dollars. The year-to-year fluctuations are significant, and a forecast of the test year expenses should normalize these fluctuations. Therefore, we adopt ORA's use of a five-year average for Account 923 escalated to 2003.

5.11.5. Account 924 Property Insurance

Account 924 includes the costs of insurance or accruals to protect the utility against losses and damages to owned or leased property used in its utility

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[33] Account 922 divided by the sum of Accounts 920 and 921.

[34] Exhibit 120, Table 6-2.

[35] *Id.*

operations. Recoveries from insurance companies or others for property damages, and dividends, are credited to this account. ORA used a five-year average to estimate Account 924, while Southwest used recorded expenses from August 31, 2001, resulting in an ORA estimate of $172,020 that <u>exceeds</u> Southwest's estimate of $151,733. Recorded property insurance expenses have declined significantly during two of the past five years, before increasing. We conclude that the most recent costs for property insurance best reflect the expected costs in the test year. Therefore, we will adopt an amount of $158,790, the amount recorded for the year 2001.

5.12. Account 925 Injuries and Damages, Liability Insurance and Workers' Compensation

Account 925 includes the cost of insurance and reserve accruals to protect the company against injuries and damages claims of employees or others. The reserve accruals pay expenses for claims not covered by insurance. Reimbursements from insurance companies, or others, for expenses previously charged and insurance dividends or refunds are credited to Account 925.

Southwest estimated Account 925 using recorded amounts for 12-months ending August 31, 2001. ORA based its estimate on a five-year average, after adjusting this account for Director's and Officer's (D&O) liability insurance premiums.[36] ORA argues that D&O insurance was used to fund Southwest merger activities, and thus should be charged to shareholders and not ratepayers. ORA explains that D&O insurance premiums were raised as a result of a failed merger with ONEOK, an energy company involved in gas production.

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[36] D&O insurance protects outside directors from liability in the event of a lawsuit regarding business decisions.

In its reply brief, ORA states that at a minimum D&O insurance benefits both shareholders and ratepayers, and there should be an equal sharing of costs.

Southwest contends D&O insurance is a necessary expense in order to attract quality executives and directors, and that D&O insurance protects against litigation and is thus a necessary business expense. Southwest believes that ORA disallowed all D&O insurance in its estimates, and not just a portion of D&O insurance.

It is uncertain from the information provided whether the increase in insurance premiums was a direct result of the failed ONEOK merger. However, D&O insurance protects directors and officers from activities that benefit both shareholders and customers. Therefore, will adopt an amount for D&O insurance that allocates the cost of D&O insurance equally between shareholders and customers.[37]

The recorded amounts in constant 2001 dollars during the past five years for Account 925 vary substantially, with increases exceeding 52%, and decreases of 3% on a year-to-year basis. This variability indicates that an average of past years is a reasonable method to forecast the test year expense. Therefore, we will adopt an average of the past five years recorded expenses, including a sharing of the costs for D&O insurance, for Account 925.

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[37] In D.00-02-04, *mimeo.*, p. 309 for PG&E, and D.96-01-011, 64 CPUC 2d 241,319 for Southern California Edison Company (Edison), we adopted a similar sharing of D&O insurance cost.

5.12.1. Account 926 – Pensions and Benefits Expenses

Pensions and benefits expenses include pensions, PBOPs, healthcare, relocation reimbursements, school tuition, leaves, and similar benefits. These benefits do not include legally mandated benefits such as unemployment insurance and workers' compensation, or executive and board of director's benefit and retirement plans. Pensions and benefits are a major component in determining a labor loading factor.[38]

Differences between estimates by Southwest and ORA reflect ORA's PBOPs disallowance for alleged over-collections, a reduction in Southwest's request to reflect regulatory accounting, and the use by ORA of more recent data. ORA also recommends against including expenses associated with company events, employee recognition, and a "wellness" program. ORA contends theses miscellaneous expenses are for social, cultural, and charitable activities and should not be paid by customers.

5.12.2. PBOPs

ORA recommends a one-time refund to ratepayers of $8,983,000 for PBOPs over-collections on a total company basis.[39] This proposal would allocate refunds of $137,440 to the Northern California Division, and $733,010 to the Southern California Division using the four-factor allocation method.[40] ORA contends that a refund of past over-collections is appropriate since ORA

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[38] *See* Attachment A.

[39] This proposal is separate from ORA's estimates of pension and benefits expenses for the test year.

[40] These documents were recalculated in an attachment to ORA's opening brief, as discussed later in this opinion.

concludes that Southwest diverted PBOPs' revenue requirements to non-PBOP uses, contrary to D.92-12-015. More specifically, Ordering Paragraph 3 of D.92-12-015 directs that:

> To the extent that PBOP trust assets cannot or are not used for PBOP obligations, then those assets shall be returned to ratepayers as allowable by law. Utility rates are hereafter made subject to refund, but only to the extent necessary to allow such a return to ratepayers of any PBOP assets that cannot be used for PBOP expenses or that have been used for other purposes. (46CPUC 2d 455.)

In response, Southwest contends it has never withdrawn any money from the PBOP trust account at any time since its inception, and that it has consistently funded PBOPs at a level equal to or greater than the actuarially determined funding amount. Southwest notes that ORA was unable to show any instance in which Southwest withdrew money from its PBOP trust account.

Responding to other allegations, Southwest argues it is not in violation of Ordering Paragraph 4 (D.92-12-015).[41] Southwest asserts that because there is no difference between regulatory accounting PBOP expense and financial accounting PBOP expense, it could not establish the regulatory asset required by Ordering Paragraph 4.

Southwest also disputes ORA's initial calculation of a refund, since the calculation includes recovery of PBOPs costs before California, Arizona, or Nevada authorized recovery of PBOPs costs. As a result, Southwest contends the

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[41] Ordering Paragraph 4 requires establishing a regulatory asset pursuant to FASB Statement No. 71. Southwest explains that it would create a regulatory asset any time it recovers an amount less in rates than it recognizes for financial accounting purposes, and the regulatory authority has stated the amount will be recovered in the future.

ORA witness agreed to a reduction in the refund amount attributed to California of $2,345,000,[42] and additional amounts attributed to Arizona and Nevada, that would reduce the refund amount by an additional $4,815,000, or a total of $7,160,000 on a total company basis. In response, ORA argues, that Southwest failed to provide any information for the record to confirm its statements regarding authorizations in other jurisdictions.

Finally, Southwest argues that even if ORA's recalculation is considered, the recalculation is in error since (1) it ignores current cash payments to retirees, and (2) understates PBOP funding for California operations. Southwest asserts that including these adjustments in ORA's recalculation reduces the refund to zero.

5.13. Discussion

We do not adopt ORA's recommended refund of PBOP over-collections. ORA does not dispute that Southwest pays its current PBOP obligations for current retirees on a cash basis, and not through the PBOP trust account. However, it appears that ORA's calculations do not include these annual PBOP expenses.[43] Thus, ORA's' recommended refund amount is overstated. Secondly, it is not possible to determine the dollar effect on ORA's alleged PBOPs over-collections due to the timing differences between jurisdictional authorization, and ORA's assumed dates used in its refund calculations. California did not authorize PBOP recovery until 1995, and other jurisdictions[44]

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[42] TR 787:6-11, 793:10-27, 794: 6-11.

[43] ORA's witness indicated he assumed these amounts were embedded in the revenue requirement (TR 791).

[44] Arizona and Nevada.

did not authorize collections of PBOPs revenue requirements until July 1996 and September 1997.[45] As result of these differences, ORA recognized that certain adjustments were necessary in order to recalculate its proposed refund to adjust for these changes. Although ORA insists that it made no "error" in its calculations, ORA revised its recommended refund calculations and appended the revision to its opening brief.[46] After consideration of these matters it is not possible to conclude that a PBOP refund is justified. Furthermore, even if a refund could be justified, the information is incomplete in determining the amount of the refund.

Ordering Paragraph 3 (D.92-12-015) states that "to the extent that PBOP trust assets <u>cannot or are not used</u> for PBOP obligations . . . . then those assets shall be returned to ratepayers as allowable by law . . . . " ORA did not find that existing PBOP assets cannot be used, and are not necessary for PBOP obligations in the future; or, that at a future date Southwest would not begin to withdraw amounts from its PBOP trust account. Therefore, there has been no violation of D.92-12-015, Ordering Paragraph 3.

Ordering Paragraph 4 (D.92-12-015) states that the utilities shall establish and maintain regulatory assets pursuant to FASB Statement No. 71. Although ORA argues Southwest failed to establish this regulatory asset, D.92-12-015

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[45] The amount at issue for Arizona and Nevada are uncertain as no party provided evidence that substantiated these dollars.

[46] ORA's opening brief includes a recalculation of its recommended refund amount (Appendix C, Table 2). Whether this table is correct is unknown as it was not included as errata to ORA's testimony, and has not been subject to cross-examination. Southwest in its reply brief strenuously objects to the introduction of Table 2 as new evidence. We agree with Southwest, and will not use the information in Appendix C, Table 2, in determining the reasonableness of the proposed PBOPs disallowance.

provides that utilities with California operations 10% or less of their total utility operations (based on a four-factor allocation) may choose to be exempted from the accrued PBOP requirement for regulatory accounting purposes only.[47] Based on the adopted four-factor allocation in this opinion, Southwest's California operations are 9.69%, and thus Southwest may be excluded from this requirement. Thus, we do not find that Southwest violated paragraph 4 of D.92-12-015.

Although we find that Southwest has not violated D.92-12-015, we are concerned that the PBOPs trust account will continue to increase without some certainty as to how Southwest plans to use the PBOPs trust account in the future. Therefore, we will require Southwest in its next GRC to provide the Commission with an actuarial analysis that explains when and how the PBOPs trust account will be used to fund retirees' PBOPs expenses.

5.13.1. Pensions and Benefits-Regulatory Adjustments

ORA takes exception to the accounting mechanisms used by Southwest in forecasting pensions. ORA contends Southwest's "Normal Cost" method for regulatory accounting exceeds the Internal Revenue Code and Employee Retirement Income Security Act (IRS/ERISA) maximum and minimum limits. Southwest argues that its accrual method of accounting, as opposed to the cash method recommended by ORA, results in a more gradual trend, and that the cash method recommended by ORA under IRA/ERISA guidelines may result in volatile pension funding requirements.

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[47] 46 CPUC 2nd, p. 506.

We have previously addressed this issue in D.88-03-072, Ordering Paragraph 2, where we rejected SAFS 87 for ratemaking or accounting purposes.[48] Furthermore, ORA points out that the Commission's ratemaking pension policy has been consistently applied for all other energy utilities, and we can find no reason to deviate from that policy. Therefore, we adopt ORA's recommended pension expense.

5.13.2. Miscellaneous Benefits

ORA concluded that certain miscellaneous benefits for a "wellness" program should be excluded from benefits expenses. ORA contends these benefits constitute expenses for employee social, cultural and charitable activities, and therefore should not be borne by ratepayers. In response, Southwest argues that these activities include costs for health forums, and seminars and as health related activities that improve the overall health of employees.

We are not opposed to activities that benefit the health and improve the morale of Southwest's employees. Southwest's wellness program may be useful in promoting better health and provide other benefits for its employees. However, Southwest's employees have generous benefits included in their employment contracts, and costs for these benefits have been included elsewhere in this decision. We are concerned with current economic circumstances and conclude that ratepayers should not have to pay for the wellness program. Southwest may, of course, continue this program using shareholder monies; however, that will be a decision of Southwest management.

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[48] 34 CPUC 2d, p. 557.

5.13.3. Account 930.1 – Safety Advertising

Southwest estimated Account 930.1, Safety Advertising, using the 12-months recorded amount as of August 31, 2001, while ORA used a five-year average. We note that between 1997 and 2000, expenses for this account were relatively unchanged; however, in 2001, expenses increased by approximately 13% in constant 2001 dollars. We believe that safety education is an important issue for customers, and therefore to reflect the greater spending in 2001, we will use a two-year average of 2000 and 2001 for safety advertising expense.

5.13.4. Account 930.2 – Miscellaneous, Deferred Compensation Directors

Account 930.2, Miscellaneous, Deferred Compensation Directors, includes the cost of labor and other expenses incurred by the general management of Southwest not provided for elsewhere. Apart from the difference in estimating methodology (Southwest used the 12-month recorded expense in August 2001, and ORA used a five-year average) ORA recommends disallowing the cost of interest on deferred compensation for directors, and payments for dues to the American Gas Association (AGA) and the Western Energy Institute (WEI). ORA contends that the interest on deferred directors compensation at 150% of Moody's Seasoned Corporate Bond Rate[49] appears excessive, and should not be borne by ratepayers. In response, Southwest contends there is no evidence or testimony that the proposed interest rate is excessive, or that the interest should be paid by shareholders. Southwest explains that this is a necessary business expense, and that the interest compensates directors for the later receipt of board or meeting fees.

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[49] Southwest stated that the recent rate paid on deferred compensation is about 11%.

In D.96-01-011[50] interest expenses on Edison's Director Deferred Compensation Plan were removed by Edison in response to arguments from the Federal Executive Agencies. This plan is similar to Southwest's plan, and we see no reason to change our position, and will not charge ratepayers for the interest on Southwest's Directors Deferred Compensation. We will also disallow payments to AGA and WEI as unnecessary and properly the responsibility of shareholders.

After increasing annually, recorded amounts in Account 930.2 have stabilized in 2000 and 2001. We will adopt a two-year average of these amounts after deduction for the interest on Director's Deferred Compensation.

5.13.5. 931 Rents Expense

Rents expenses include the rents and operating expenses for the property of others used in connection with the operations of Southwest. Rents expenses include both rents that escalate and those that are under fixed cost leases and thus do not escalate. In an effort to apply consistent forecasting methodology, ORA used a five-year average of recorded rents expenses in 2001 dollars escalated to the test year. Southwest's estimates are based on recorded 2001 expenses as of August 2001.

Our review of those rents subject to escalation indicates a wide variance between minus 21% and plus 43% during the past five-years. Therefore, we adopt a five-year average of rents expenses for those expenses subject to escalation. However, for rents that are subject to fixed cost leases, we will adopt the 2001 recorded amount.

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[50] D.96-01-011, 64 CPUC 2d 241,324.

5.13.6. Account 935- Maintenance of General Plant

Account 935, Maintenance of General Plant records costs assignable to customer accounts, sales and A&G expense functions incurred in the maintenance of general plant. The difference between Southwest and ORA estimates for this account are a result of their different forecasting methodologies. A review of the recorded amounts shows significant year-to-year changes that vary between minus 17% and plus 52% in constant 2001 dollars. Due to these substantial and unexplained variances, we adopt ORA's use of a five-year average to forecast Account 935 in the test year.

6. A&G Direct Expenses

In addition to system-wide A&G expenses allocated to the Northern and Southern California Divisions, each division incurs direct A&G expenses. Direct A&G expenses are discussed below.

6.1. Southern California Division

6.1.1. Account 923 - Outside Services

Southwest recorded no expenses for Account 923, Outside Services, in 1997,1998 or 1999, and only a moderate amount of $3,313 in 2000. A significant increase to $83,925 was recorded in 2001, an amount Southwest attributes to work done in the I.01-06-047 regarding gas procurement. Southwest does not believe this level of expense will continue, and therefore estimated test year expense at $3,449. ORA forecasted the test year using a five-year average of recorded amounts resulting in an estimate of $17,448. In order to recognize the potential for other outside services in the test year, we adopt ORA's estimate based on a five-year average.

6.1.2. Account 925- Injuries and Damages

The difference between Southwest and ORA for Account 925, Injuries and Damages, is due to different estimating methods.[51] The recorded annual expenses between 1997 and 2001 vary between minus 43% and plus 92%, and therefore we will adopt an average of the last five recorded years to forecast the test year Account 925 expense.

6.1.3. Account 928 – Regulatory Commission Expense

ORA reviewed and accepted Southwest's estimate of $21,990, for Regulatory Commission Expense, however, this estimate assumes the next GRC will be in 2008. Since we are adopting a schedule providing for a GRC in 2007, the adjusted and adopted Account 928 expense is $27,467.

6.1.4. Account 930.1 – Safety Education

Southwest proposes an increase of $100,000 to its California Divisions for safety related advertising in 2003. Account 930.1, Safety Education, for the Southern California Division is allocated 82.15% of this amount based on the four-factor allocation method.[52] ORA agrees with an increase in safety advertising expenses and recommends an amount of $112,218, compared to Southwest's request of $113,016. The difference between estimates is minimal and we support informing customers about gas safety; therefore, we will adopt Southwest's amount of $113,016.

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[51] Southwest used the August 2001, 12-month recorded amount, while ORA used a five-year average.

[52] The Four-Factor allocation method is discussed elsewhere in this decision.

6.1.5. Account 935 - Maintenance of General Plant

The recorded amounts for Account 935, Maintenance of General Plant, were similar for 1997 and 1998. A sharp increase was recorded in 1999 and 2000, and then a decline in 2001. The additional costs to maintain general plant reflect costs to serve additional customers. Therefore, we adopt Southwest's estimate of $223,113 for this account.

6.2. Northern California Division

6.2.1. Account 923 – Outside Services

After recording only $777 in 1997 for Account 923, Outside Services, Southwest's expenses jumped to over $164,000, and $155,000 in 1998 and 1999, respectively. Although there is no explanation in the record for these substantial increases, it appears that significant costs were incurred as a result of the new operations in Truckee and other areas in the Northern California Division. Consistent with our adopted methodology for the Southern California Division, we will adopt an amount based on ORA's use of a five-year average for this account.

6.2.2. Account 925 – Injuries and Damages

Variances in recorded Northern California Account 925, Injuries and Damages, expenses are substantial, exceeding variances in Southern California for this account. Although not explained by any party, it appears there was a refund, dividend, or other revenue in 1998 leading to a negative expense. Therefore, we will adopt an estimate based on ORA's five-year average.

6.2.3. Account 928 – Regulatory Commission Expenses

ORA reviewed and accepted Southwest's estimate of $7,019, for Regulatory Commission Expense, however, this estimate assumes the next GRC will be in 2008. Since we are adopting a schedule providing for a GRC in 2007, the adjusted and adopted Account 928 is $5,264.

6.2.4. Account 930 – Miscellaneous General Expenses

We will estimate Northern California Account 930, Miscellaneous General Expenses, expenses in the same way as our adopted estimate for Southern California. Therefore, we adopt Southwest's estimate of $19,947 that also includes an allocated amount for increased safety advertising.

6.2.5. Account 935 – Maintenance of General Plant

Year-to-year recorded amounts in Account 935 have generally declined during the past five years. In order to recognize the generally declining trend, we will adopt an amount that averages the past two years, or $19,154.

7. Rate Base

7.1. Distribution Plant-Pipeline Replacement Project

Almost all of the differences[53] between Southwest, ORA, and San Bernardino with respect to gas distribution plant-in-service, are attributable to different recommendations regarding the rate at which polyvinyl chloride (PVC) mains and services should be replaced in the Southern and Northern California Divisions. All PVC services have all been replaced in Northern

[53] Comparison Exhibit 12 indicates that the polyvinyl chloride (PVC) pipe replacement project accounts for approximately 95% of the difference between Southwest and ORA for Southern California gas plant in service, and about 34% for Northern California gas plant in service. At present rates, the PVC pipe replacement project accounts for approximately 80% of the revenue requirement deficiency identified in the application.

California. Thus, the replacement program includes mains in Northern California, and PVC services and mains in Southern California.

Southwest, ORA, and San Bernardino agree that eventually all existing PVC pipe mains and services must be replaced. However, parties disagree over the period necessary for pipe replacement, and amounts proposed for test year 2003, and the attrition years. ORA proposes to replace the pipe uniformly over a 20-year period; the County recommends a 25-year replacement period, while Southwest proposes to replace PVC pipe on an accelerated basis during the test year, and attrition years, and then scale back replacement over an additional 15-years.[54]

7.2. Background

Southwest installed PVC pipe in the late-1950s, 1960s, and 1970s. Beginning in 1997, Southwest embarked on an accelerated PVC pipe replacement program for its PVC mains and services, using polyethylene (PE) pipe not subject to the problems encountered with PVC. Southwest conducted a Pipeline Integrity Assessment (PIA) to determine the factors that might cause mains and services to fail, and planned a process to address these factors. As a result of the PIA, Southwest spent $19.2 million on pipeline replacement between 1998 and 2001. Southwest estimates it will spend an additional $23.6 million in 2002 and 2003, and $36.6 million between 2004 and 2007.

ORA and San Bernardino contend there is little justification for the proposed increased rate of PVC pipe replacement. ORA and San Bernardino assert that a 1993-97 study of leak rates, measured in leaks-per-mile, indicate that

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54 Southwest's application proposed a 15-year replacement period, but modified its proposal later in the proceeding.

there is no upward trend in leak rates, and that a review by a Commission certified pipeline safety inspector confirms leaks are negligible. ORA adds that PG&E has a greater leak rate than Southwest, nevertheless, PG&E has operated under a 25-year pipeline replacement program, and that a PVC laboratory analysis confirms that piping materials have generally retained their design integrity.

San Bernardino argues that under Southwest's "scoring" system, that awards scores to particular pipelines using the PIA, a score of 77 constitutes a need for replacement in Northern California, while only a 65 is needed to justify replacement in Southern California. San Bernardino contends that applying a score of 77 to Southern California would result in reducing the amount of replacement piping to about 36% of the amount requested by Southwest.

Both ORA and San Bernardino contend that a longer replacement period will mitigate the rate impact of the PVC pipe replacement and allow for better coordination of joint trenching operations for main replacements. ORA and San Bernardino believe their recommendations will still provide sufficient revenues for Southwest to focus on the most problematic portions of its system. ORA, also recommends that Southwest be required to file an annual progress report on its PVC replacement operations.

Southwest argues that the positions of ORA and San Bernardino are quite limited in scope, and therefore their conclusions are faulty. Southwest states that many factors, other than leak rates, determine the need for PVC pipe replacement.[55] Southwest points to later information on leak rates between 1997 and 2001, and the types of leaks,[56] that support an aggressive replacement program. Finally, Southwest argues that its PVC pipe replacement program is not comparable to PG&E's program. Southwest states PG&E's program replaces steel and cast iron pipe, and not PVC pipe, and that steel and cast iron pipe tend to suffer from pinhole leaks, not the type of major breaks at joints found in PVC pipes.

7.3. Discussion

In other proceedings, we are often asked to encourage utilities to maintain, repair or replace existing plant. In the instant proceeding, it is not a matter of encouraging or directing Southwest to maintain its system, or whether the aging PVC pipe must be replaced. Parties agree that the PVC pipe, portions of which are over 40-years old, must eventually be replaced. The question before us is how quickly the PVC pipe should be replaced.

In weighing the testimony and evidence presented by parties, and potential safety concerns, we conclude that an accelerated replacement program for Southwest's PVC mains and services is reasonable. However, in order to mitigate the rate impact, we will spread the accelerated replacement program over an additional year. In its next GRC, we expect Southwest to justify the remainder of the PVC pipeline replacement program, and any proposed

[55] Southwest includes the types of leak, location, soil type, potential for external damage, installation, operating pressure, age of pipe, depth of cover, pipe size, and customer types served as other factors in assessing replacement need.

[56] Leaks are classified as Grades 1, 2, and 3. Grade 1 is the most serious leak, however Grade 3 leaks over time may become Grade 2 or Grade 1 leaks. (Exhibit 5, Tab H, p. 5.)

modifications. Otherwise, we expect that Southwest will proceed to replace PVC pipe at an equal rate for the next 15 years.

Although Southwest is under no regulatory requirement to replace its PVC pipe, it undertook a reasonable approach to potential problems and safety issues through initiating the PIA. The PIA is an example of the prudent analysis that we expect from utilities under our authority. As Southwest points out, although leak rates and leak types are one PIA factor, the PIA program considers many other factors in determining whether PVC mains and services should be replaced. Our consideration of leak rates, and safety is one of the factors motivating our decision. The most recent Southern California Division information on leak rates indicates an increase in leaks per mile, and more importantly, an increase in the most serious type of leaks (Type 1) for services in 2000 and 2001.[57] Southwest points out that there is no current industry standard, or regulatory federal or state standard for acceptable leak levels, and that ultimately there should be zero leaks. We agree that reducing leak rates to zero is a laudable goal, or alternatively, leak rates should be minimized. Thus, we acknowledge the importance of reducing leaks in PVC mains and services in order to avoid accidents and improve safety provided by an accelerated replacement program.

Our adoption of an accelerated replacement program also weighs other facts brought forth during testimony. First, Southwest notes that current leak rates decline in those areas where PVC pipe has been replaced; thus, we expect the replacement program will reduce maintenance expenses as it progresses.

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[57] Exhibit 5, Tab H, AMR 2).

Our adopted maintenance expenses reflect this expectation. Secondly, Southwest did not wait until this GRC to begin its program, or to delay major portions of work. Southwest has already embarked on its program and replaced substantial PVC pipeline footage. As shown in Table D below, Southwest's replacement footage increased for each successive year after 1998. In 2001 replacement footage exceeds proposed test year replacement footage by 16%, and estimated 2002 replacement footage exceeds Southwest's 2003 test year replacement footage by almost 100%.[58] We view this level of replacement activity as an indication that Southwest determined this is an important program, and has proactively taken action without encouragement from this Commission.

As shown in Appendix B, we have modified Southwest's requested replacement program, and adopted a level of replacement footage we believe adequate to meet the need for replacing PVC pipe mains and services consistent with our primary goal of maintaining safety. Our adopted pipeline replacement footage is based on an average of Southwest's proposed pipeline replacement footages for test year 2003, and attrition years 2004, 2005 and 2006. The adopted levels of replacement footage are approximately 15% less than the replacement footage requested by Southwest, but exceed the recommended replacement footages under ORA's and San Bernardino's proposals. Our lower levels of pipeline replacement reflect ORA's contention that Southwest should investigate joint trenching opportunities, and, the concerns of ORA and San Bernardino to decrease the rate shock for customers.

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[58] Southwest states that by July 2002, it already exceeded ORA's 2002 estimated pipeline replacement by $1.9 million. (Exh. 5, Tab. J, p. 3.)

7.4. Pipeline Replacement Program (Northern California)

Although the majority of the PVC pipeline replacement is in Southern California, differences also exist between ORA and Southwest over the replacement schedule for PVC mains in Northern California. Most of the services installed in Northern California are non-PVC pipe, and therefore do not require replacement. Southwest proposes a 15-year replacement schedule for PVC mains that would replace about 30,000 feet per year. ORA proposes a 20-year replacement schedule that would replace about 21,000 feet per year of mains.

In adopting a replacement program for Northern California, unlike Southern California, there is little information on leak rates. Since Northern California services have already been upgraded, it appears that the overall problem is less severe. However, we are concerned over the safety of Northern California mains, and therefore we will adopt a pipe replacement program that provides adequate replacement in consideration of these factors. Our adopted Southern California PVC replacement program is accelerated during the first four years, and then equally applied during the remaining 14-years. For Northern California, we will adopt a program to replace PVC mains at a rate of 25,000 feet per year for the test year, and the three attrition years. This rate exceeds ORA's recommended rate by approximately 19%, although it is less than Southwest's requested rate by 20%. We expect Southwest to replace the remaining PVC mains at an equal amount annually for the next 14-years beginning in 2007. In the next GRC, we expect that Southwest to replace the remaining PVC mains at an equal amount annually for the next 14-years beginning in 2007. In the next GRC, we expect that Southwest will provide further information on the leak rates experienced in Northern California mains, and make recommendations on further PVC replacement, including changes in the proposed rate, as necessary.

We also adopt a reporting requirement similar to PG&E's reporting requirement for its gas pipe replacement program. We direct Southwest to provide an annual progress report to the Commission regarding the pipeline replacement program as shown in Exhibit 103. The report should include, among other items, the footage of mains and services replaced, costs, and information on leak rates.

7.5. Working Capital

7.5.1. Materials and Supplies

Southwest calculated materials and supplies (M&S) utilizing a five-year average of 13-month inventory balances divided by gas plant in-service. This ratio is then multiplied times plant-in-service balances to estimate M&S. ORA used different estimating methods for M&S including a four-year average and an adjustment for reduced PVC pipeline replacement. Southwest disputes the M&S reduction in Southern California and contends that a reduced pipe replacement program will actually increase M&S balances as a result of increased need for repairs.

Our adopted pipe replacement program is close to the program requested by Southwest. Therefore, we will adopt Southwest's estimate of M&S for Southern California decreased by 15% consistent with our adopted pipeline replacement program. Southwest did not dispute ORA's M&S adjustment for Northern California; thus we will adopt ORA's Northern California M&S estimate.

7.5.2. Working Cash

Southwest and ORA developed working cash estimates using the lead-lag methodology in Commission General Order U-16. However, ORA estimated revenue lag at 40-days, while Southwest used 44-days. ORA argues that its 40-day estimate is reasonable since it is based on historic lead-lag days. ORA also asserts, that due to expiration of high gas cost contracts, it is expected that customers will pay their bills more quickly, thus reducing revenue lag. Southwest, however, points out that during an ORA on-site audit in March 2002, ORA was informed revenue lag had actually increased to 46.7 days. We note that although gas costs may have decreased, and higher priced gas contracts expired, given the current economic climate it is unlikely that customers will pay their bills any more quickly. Thus, we will use Southwest's 44-day revenue lag in our calculation of working cash that is also more reflective of current information.

Southwest and ORA also differ in estimates for income tax payments' lag days used in the working cash calculation. Southwest based its estimates on statutorily mandated filing dates. ORA based its income tax lag days on a proxy reflecting income tax payments for Edison and PG&E. ORA alleges that in Southwest's last GRC, Southwest made an incorrect assumption on the payment of income taxes, and therefore a proxy is appropriate. Southwest states it provided the actual timing of income tax payments to ORA in response to a data request, and in response to questions from the ALJ.[59]. Southwest's response states that actual federal income tax lag days were a *negative* 224 days for 2001,

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[59] TR 328-330.

while state income tax lag days were a positive 39 days. We will not adopt these actual income tax lag days as they are an apparent anomaly resulting from unusual gas prices. We will not adopt ORA's proxy based on the tax payments for other utilities, as there is not evidence that this proxy should apply to Southwest's tax payments. Instead, we will adopt Southwest's initial estimate of tax lag days based on the statutorily mandated tax payment filing dates.

7.6. General Plant

Southwest and ORA initially disagreed over two general plant issues, Miscellaneous Intangible Plant (Intangible Plant), and 2001 Construction Work in Progress (CWIP) balances; however they have agreed to defer the 2001 CWIP balances until the next GRC.

Regarding Intangible Plant, ORA made a 40% reduction to reflect questionable costs for a Southwest affiliate, Utility Partners (UP). ORA's analysis and recommended disallowance are included in its Audit Review, Exhibit 122. As discussed in Exhibit 122, UP[60] developed software for use by Southwest and other utilities. Although ORA initially found that Southwest violated affiliate transaction rules, ORA now acknowledges that an exemption for affiliate transaction rules applies to Southwest's relationship to UP. ORA explains that its 40% reduction reflects Southwest's equity share in UP, and is based on the reasonableness of UP project costs charged to Southwest already included in plant in service.[61]

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60 Although UP is the current affiliate name, it was previously Technology Management Associates, UPLC, and UPI.

61 ORA asserts that Exhibit 122, Table 32-1, demonstrate the cost overruns for UP projects.

Southwest in its rebuttal provides extensive insight into the relationship between Southwest and UP, UP's software projects, and how these projects are useful for improving Southwest operations.[62] Southwest states its investment in UP involved only shareholder earnings and no ratepayer funds. Southwest also explains that although it had a preferred customer agreement with UP that began in 1999, that agreement provided third-party oversight for costs charged from UP to Southwest. Finally, Southwest asserts that ORA's calculations are in error, as certain UP projects are amortized, or not included at their full value in rate base for the test year, and that deferred income taxes cause additional changes. Southwest calculates that including these adjustments results in a reduction in ORA's proposed disallowance from approximately $8.5 million to $3.3 million.

7.7. Discussion

We will not further address the $30 million in software projects currently in CWIP, except to remind Southwest of its commitment to demonstrate in its next GRC that these project costs are reasonable before any of these dollars may be included in plant-in-service. As stated previously, Southwest bears the burden of proof that such costs are reasonable, and not ORA. Southwest argues that it has not been required in prior proceedings before this Commission or in any other regulatory jurisdictions to provide independent proof.[63] Each proceeding before us has its own unique circumstances, with findings determined on the facts applicable to the specific proceeding; thus, we will not

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[62] *See* Exhibit 5, Tab K, pp. 30-56.

[63] *Id.*, p. 50.

excuse Southwest on the basis that a specific showing has not been previously required.

We will not adopt ORA's recommended disallowance regarding the remaining UP project costs. Southwest provided substantial information regarding the usefulness of each of these projects to the company's operations and as improvements to efficiencies. ORA concluded that the project costs were unreasonable because these costs exceeded budgeted amounts. However, many projects, especially those involving complex projects, such as information technology, may exceed their budgets. Thus, a final cost that exceeds a budget is not of itself a measure of unreasonableness. Furthermore, this measure of cost unreasonableness would have to be significantly reduced by the various credits for both fully and partially amortized projects, and deferred income taxes in weighing the value of a project against its cost.

7.8. Contract Escalation

Southwest agrees with ORA's allocation of capital expenditures to labor, non-labor and contactor services, but argues that the contractor services component should also be escalated by 1.75%, or 3% for the test year. We have reviewed Southwest's calculations and agree with a 3% increase in the contractor component.

7.9. Truckee Operations Center

ORA excluded the building and furniture costs of the Truckee Operations Center from its estimates of plant arguing that Southwest had failed to provide a definite plan to construct the operations center, obtaining a building permit, or selection of an architect. Initially, Southwest included the operations center in its 2002 plant in service, although it now expects to finish construction by the end of 2003. Southwest contends it has committed to build the operations center, and through its witness provided an update of the status of design and permit process.

As a result of the Truckee expansion project, and the need to have an operations center in the Truckee area, it is not a matter of whether Southwest will have an operations center, but a question of when. We have already included, with ORA's agreement, expenses for a new Truckee district manger, who will eventually require an office. Our review of the record indicates that although design and construction of the operations center has been delayed in the past, it appears that construction is likely during 2003. Therefore, although we will not include the costs for the Truckee Operations Center in the test year estimates, we will include these costs in plant for attrition year 2004.

8. Depreciation and Depreciation Reserve

Differences between ORA and Southwest for depreciation and depreciation reserve are based on differences in plant-in-service estimates. Therefore, our adopted depreciation and depreciation reserve amounts reflect adopted plant-in-service amounts.

9. Taxes

ORA and Southwest agree that the effective federal income tax rate should be 35%, and should reflect any tax effects of the Job Creation and Worker Assistance Act of 2002 (JCWA of 2002).[64] Our adopted taxes include the effects of the 2002 JCWA, and a tax rate of 35%.

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[64] Southwest states that the JCWA will reduce the tax base on which income taxes are calculated.

10. Cost of Capital

ORA and Southwest disagree over two cost-of-capital issues. First, ORA recommends a lower return on common equity (ROE) based on different factors used in ORA's modeling methodology. Second, ORA recommends that the test year cost of capital structure be based on Southwest's actual capital structure, rather than the hypothetical capital structure recommended by Southwest. As a result of these differences, Southwest recommends a rate of return of 9.57%, while ORA recommends a rate of return of 8.83%.

10.1. Return on Equity (ROE) and Capital Structure

Southwest's recommended ROE is 11.60%, while ORA recommends 10.61%. Southwest and ORA both rely on the Discounted Cash Flow (DCF) model and Capital Asset Pricing Model (CAPM) to develop estimates for ROE. However, Southwest relies on two variants of the DCF model, the Constant Growth model and the Three-Stage DCF model, while ORA relies only on the Three-Stage model.

Southwest argues that ORA's proposed ROE ignores the Bluefield and Hope legal standards[65] by not providing Southwest a reasonable opportunity to earn a fair rate of return. Southwest contends the "proxy group" of alternative investments used by ORA is not comparable to Southwest's financial condition. First, Southwest points out ORA's proxy group consists of utilities with an average bond rating of "A", while Southwest's bond rating is significantly lower. Second, the average capital structures of the proxy group have an equity

[65] Bluefield Water Works and Improvement Co. v. Pub. Service Commission of Virginia 22 US 679 (1923); Fed. Power Commission v. Hope Natural Gas Co. 320 US 591 (1944).

component of 52%, while ORA's recommended equity component for Southwest is 36%. As a result, Southwest argues its investment risk is greater than the expected risk for ORA's proxy group, and the ROE should be increased to recognize this additional risk.

ORA maintains that its recommended ROE, based on the Three-Stage DCF model, is both reasonable and meets the Bluefield and Hope legal standards. ORA asserts that Southwest's current capital structure is a result of management imprudence in capital structure policy, and that growth in Southwest's Arizona and Nevada jurisdictions drive the additional debt in the capital structure. ORA asserts Southwest's recommendation for a higher ROE is a result of using different estimates of the risk-free rate of interest and the market-risk premium in the CAPM, and an additional difference results from Southwest's upward adjustment of its model to reflect greater financial and business risks. Further, ORA argues its use of only the Three-stage DCF model more appropriately reflects the current economy.

10.2. Discussion

The rate of return or cost of capital is derived from the capital structure and the formula that weights each cost component (debt, preferred stock, and common equity), and its associated cost factor. Therefore, in determining an appropriate cost of capital, the ROE and capital structure are related and must be addressed together.

In our recent decision, D.02-11-027,[66] on cost of capital for PG&E, Edison, SDG&E and Sierra Pacific Power Company (Sierra), we addressed the standards

[66] Adopted November 7, 2002.

employed to develop a reasonable return on equity, and optimum capital structure. D.02-11-027 also addresses the legal standards established by the Bluefield and Hope cases[67] to set ROE. As we stated, "We attempt to set the ROE at a level of return commensurate with market returns on investments having corresponding risks, and adequate to enable a utility to attract investors to finance the replacement and expansion of a utility's facilities to fulfill its public utility service obligation. To accomplish this objective we have consistently evaluated analytical financial models and risk factors prior to exercising informed judgment to arrive at a fair ROE."[68] We employ this same process in setting Southwest's ROE, and determining the appropriate capital structure in the instant proceeding.

We are not convinced that Southwest's current capital structure, and low common equity (CE) percentage, are a result of management imprudence. As Southwest points out, the CE percentages for three of the four energy utilities[69] addressed in A.02-05-022 are actually less than the CE percentage for Southwest. Second, Southwest provided a number of steps its has taken to improve its capital structure, and ratings, over the past several years while funding expansive growth. Although these steps have helped, Southwest's financial rating continues to be low, and as acknowledged by ORA, Southwest's bond rating is one degree above "junk bond" status.[70] Beyond its allegations that Southwest's current capital structure, and weaker financial position is a result of

[67] *Id.*, p. 11.

[68] *Id.*, pp. 16-17

[69] Exhibit 5, Tab E, p. 5.

[70] RT volume 8 at 826.

management imprudence, ORA has not provided additional information indicating other steps that Southwest should have taken, or should take in the future, to alleviate its capital structure problem, or its poor financial rating. Although we encourage Southwest to increase the CE portion of its capital structure, we cannot find that the current capital structure is a result of management imprudence.

In D.02-11-027 we adopted hypothetical capital structures very different from the existing capital structures for PG&E, Edison, SDG&E and Sierra, and we stated that the capital structure is designed to attract capital, improve credit ratings to investment grade, and maintain an investment grade setting.[71] We believe these same purposes apply to Southwest's capital structure. Therefore, we will adopt a hypothetical capital structure for Southwest to reflect its current financial, business, and regulatory risks and as a means to return Southwest's credit ratings to investment grade.

Our adopted ROE considers the analyses of both ORA and Southwest, and the analyses of other factors discussed in D.02-11-027. As we stated in D.02-11-027, "We must set the ROE at the lowest level that meets the test of reasonableness,"[72] and, "In the final analysis, it is the application of informed judgment, not the precision of financial models, which is the key to selecting a specific ROE estimate."[73] As ORA points out, the ROE should reflect the elimination of risk associated with Southwest's loss of revenues, protected via the balancing account provision recommended by ORA and Southwest. In

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[71] D.02-11-027, p. 11.

[72] *Id.*, p. 19.

[73] *Id.*

addition, we have reduced other risks that affect Southwest's opportunity to earn its adopted ROE. These reductions in risks include an attrition year mechanism that protects against increased costs due to inflation, a phase-in of the increase in the adopted revenue requirement over four years, instead of the five years requested by Southwest, and an accelerated PVC pipeline replacement program. The adopted accelerated pipeline replacement program, a major cost issue in this proceeding, ensures that pipeline costs in the attrition years are adequately funded, and will not adversely impact the ROE. In consideration of other risks, we recognize that Southwest is a multi-jurisdictional utility, similar to Sierra, and that its major operations are in Arizona and Nevada, and not California. Thus, the impact of growth, and financing that growth in other states prevails in the total company capital structure. In consideration of these factors, we conclude that a ROE of 10.9%, combined with the following capital structure meets our standards for establishing a fair and reasonable ROE, and cost of capital.

Adopted Cost of Capital

	Capital Ration	Cost Factor	Weighted Cost
Long-Term Debt	53.00%	7.75%	4.11%
Preferred Stock	5.00%	9.51%	0.48
Common Stock	42.00%	10.90%	4.58
	Total 100.00%		9.17%

11. Automatic Trigger Mechanism

Southwest and ORA agree on an automatic trigger mechanism (ATM),[74] and the use of AA utility bonds yields in establishing the ATM benchmark bond,

[74] The ATM adjusts the rate of return upward and downward as a result of changes in utility bond rates. The adjustment in rate of return occurs when the average benchmark

Footnote continued on next page

as a replacement to annual cost of capital filings. However parties disagree over how the ATM is applied to the capital structure. Southwest proposes that the ATM use the adopted capital structure, while ORA recommends use of the actual capital structure.

We have previously discussed our reasons for adopting a hypothetical capital structure, and the related ROE. The ATM provides protection for ratepayers when debt costs decline, and protection for shareholders when debt costs increase. Consistent with our adopted ATMs in other proceedings, we will adopt an ATM that applies to the adopted capital structure.

12. Attrition

Both Southwest and ORA propose attrition year adjustments that increase revenues for expected inflation, and the pipeline replacement project.[75] ORA proposed that the attrition index be offset by an estimated 1% productivity factor. ORA also initially proposed a 1% "kicker" for Southern California to provide revenue for additional pipeline replacement. However, ORA now proposes an additional revenue requirement to fund increased pipeline replacement in attrition year adjustments depending on the adopted pipeline

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yield changes by more than 100 basis points. Parties propose that the interest rate measurement period is the six-month period of April to September of the same year, and when the ATM adjustment is triggered, the current authorized return on equity should be adjusted by 50% of the change in interest rates, and the debt and preferred stock costs be recalculated to reflect the actual September month-end embedded costs in that year.

Southwest and ORA also agree that the "off-ramp," a provision that would nullify employing the ATM, occurs when the basis point change is equal or exceeds 260 basis points, and that a formal cost-of-capital case should occur every five years, regardless of whether or not an ATM off-ramp is reached.

[75] *See* Reply Brief, Attachment C.

replacement in the test year. In its reply brief, Southwest agreed to ORA's attrition proposal subject to modifying ORA's proposed kicker increase, providing an index adjustment based on constant dollar historical average of non-pipeline replacement-related capital expenditures, and implementing attrition year increases plus rate relief in 2004 and 2005 in Northern California.

We will adopt ORA's proposed attrition year methodology, modified by Southwest's changes except for the kicker. However, there is no need to adopt an attrition mechanism for pipeline replacement, since our adopted pipeline replacement revenue requirements are based on equal amounts of pipeline replacement for test year 2003, and attrition years 2004, 2005, and 2006. Our adopted attrition mechanism balances increases in costs, with expected efficiencies in productivity, a mechanism that is equitable for both Southwest and its customers.

Southwest has committed itself to an accelerated pipeline replacement program that requires substantial revenue requirements from Southwest's customers. We remind Southwest that it is obligated to continue its pipeline replacement program at the levels adopted in this opinion. Because of the importance we place on the promises of Southwest, and the costs of this program adopted in the revenue requirement, if the annual reports addressing the pipeline replacement program show that the pipeline replacement program is delayed or reduced for any reason, attrition year adjustments will be reduced by 50% in the year following the delayed or reduced pipeline program.

13. Gas Procurement Costs

As a result of San Bernardino's protest of the Application, this proceeding addressed Southwest's gas procurement practices between June 2001 and May 2002. ORA stated it did not expect to address this matter and therefore did not provide testimony, although it essentially supports the position of San Bernardino. ORA recommends that we take official notice of Southwest's testimony in I.01-06-047, particularly with regard to the tradeoff between cost minimization and price certainty. In our review and analysis of this issue we have considered the testimony of all parties in I.01-06-047, and our findings in that proceeding. As ORA's position on this issue is essentially the same as San Bernardino, we discuss the San Bernardino position only.

San Bernardino contends that Southwest's gas procurement practices were imprudent during the June 2001 to May 2002 period, resulting in unreasonable gas prices. San Bernardino recommends disallowances due to unreasonable fixed-price gas supply contracts ($10.74 million) and due to excessive prices paid for gas supplies during the month of October 2001 ($1.43 million).
San Bernardino argues that Southwest unreasonably purchased over 80% of its gas supplies through fixed-price contracts and thus limited its ability to use storage or to purchase gas at more favorable prices during the winter of 2001-2002. San Bernardino applies our recent decision, D.02-08-064 to Southwest's actions, and contends that Southwest's gas purchases were unreasonable, since these purchases did not follow a balanced, diversified approach to core gas procurement. San Bernardino asserts Southwest should have filled its storage with lower priced gas during the spring and summer of 2001.

San Bernardino applies a three-pronged reasonableness test[76] to Southwest's fixed-price contracts. First, San Bernardino asks whether

[76] D.02-08-064, pp. 23-24.

Southwest's goals were reasonable. San Bernardino concludes that Southwest's focus on stabilizing prices, without retaining flexibility to purchase spot gas, was not a reasonable management strategy. San Bernardino further argues that Southwest's mangers should have been extremely cautious about gas purchase strategies formulated during a time of dysfunctional gas prices Second, San Bernardino contends Southwest's gas costs during the winter of 2001-2002 substantially exceeded market prices, and as a result, a portion of core gas purchase costs had to be deferred. San Bernardino contends this outcome demonstrates that price stability was achieved, but Southwest failed to meet the goal of cost minimization. Third, San Bernardino questions whether Southwest's actions exhibited the steps of a prudent manger. San Bernardino compares the gas prices paid by SDG&E and SoCalGas to Southwest's prices and concludes that the comparison shows SDG&E and SoCalGas retained the flexibility to buy at lower market prices and Southwest did not.

San Bernardino also argues that Southwest purchased more than 50% of its core gas annual requirements, despite Southwest's assertion to the contrary. San Bernardino contends the relevant gas purchase period for winter 2001-2002 is April 2001 to March 2002, and not November 2001 through October 2002 as asserted by Southwest. Thus, San Bernardino argues that for the relevant period, Southwest purchased 63% of its forecasted core supplies for winter 2001-2002. San Bernardino also alleges that Southwest's fixed price contract negotiated in August 2001 was particularly unreasonable given declining gas prices at that time.

San Bernardino recommends that the Commission disallow 50% of all above-market costs for two 10,000 Dth[77]/day contracts, and 100% of the August 2001 contract, or a total disallowance of $10.744 million.

Southwest asserts that its fixed price contracts were reasonable and prudent. Southwest argues that against the backdrop of high gas prices during winter 2000-2001, Southwest negotiated its first contract March 8, 2001, when gas forward-market gas prices were $7.75/Dth. Furthermore, Southwest states that in spring 2001 there was little certainty that gas prices would decline. Southwest notes that two months later in May 2001, forward-market gas prices had increased to $8.68/Dth. Southwest contends this demonstrates both the uncertainty of future gas prices, and the circumstances in existence when Southwest was planning and negotiating winter gas contracts. Southwest explains, that its gas purchase strategy was to maintain flexibility in gas purchases, and that it retained flexibility to purchase 100% of its gas requirements at spot market prices prior to October 31, 2002, and 20% of gas requirements during winter 2001-2002. Southwest adds that during the I.01-06-047 proceeding, San Bernardino did not express interest in comparisons of gas costs between SDG&E, SoCalGas and Southwest, despite evidence that Southwest's costs were lower than those of the other two utilities. Southwest maintains it is unfair to criticize its gas procurement contracts based on the ultimate results of gas prices, rather than the reality that faced buyers of gas during Spring 2001.

[77] Decatherms or 10 therms.

Southwest also provided an explanation of an apparent gas purchase that occurred in October 2001. Southwest states that this particular purchase, from Reliant Energy, was a result of a gas tolerance imbalance that actually occurred in February and March 2001. The imbalance gas was sold in March 2001, and then under the agreement, repurchased in October 2001. Since the sales price in March exceeded the repurchase price in October 2001, the net result was a slight gain that was credited to the benefit of ratepayers. Despite Southwest's explanation, San Bernardino contends the agreement with Reliant Energy could have been resulted in a less costly transaction, and therefore San Bernardino recommends a disallowance of approximately $1.435 million.

13.1. Discussion

This is the second time in two years we have been asked to evaluate and address Southwest's gas procurement practices. In D.02-08-064 we determined that Southwest failed to use its gas storage or to secure contracts for winter delivery of gas at rates equivalent to the cost of gas that could have been stored during summer 2000. D.02-08-064, also found that these decisions constituted an imprudent managerial action, and as a result, Southwest's Purchased Gas Account was reduced by $2,691,675 to reflect our disallowance of unreasonable gas procurement costs.

As stated in D.02-08-064, our standard for prudent managerial action in a reasonableness review is:

> "Utilities are held to a standard of reasonableness based upon the facts that are known or should be known at the time. While this reasonableness standard can be clarified through the adoption of guidelines, the utilities should be aware that guidelines are only advisory in nature and do not relieve the utility of its burden to show that its actions were reasonable in light of circumstances existent at the time. Whatever guidelines are in place, the utility

> always will be required to demonstrate that its actions are reasonable through clear and convincing evidence."[78]

As we stated in D.02-08-064, "the reasonableness of a particular management action depends on what the utility knew or should have known at the time that the managerial decision was made, not how the decision holds up in light of future developments."[79]

We apply this reasonableness standard to Southwest's gas procurement decisions for its winter 2001-2002 gas purchases.

In addition to our reasonableness standard, we have previously stated our expectations, and goals to help guide utilities on gas procurement. As cited by San Bernardino, we encourage utilities to purchase diversified portfolios of gas supplies, with the goal of mitigation of price risks, reliability of core supplies, and low prices.[80] In D.89-04-080 we provided further guidance to utilities stating "Although we seek to promote flexibility in procurement practices, we do not intend that utilities should eliminate firm supplies - which may contribute to price stability- from core portfolios…"[81] We have not directed utilities to purchase specific amounts of gas requirements through fixed-price contracts, or at spot market prices, but rather we have emphasized flexibility, and the need for utility management to balance the sometimes-competing goals of cost minimization and price stability, while maintaining supply security. These same principles we apply in addressing Southwest's gas procurement policies.

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[78] D.88-03-036 (27 CPUC2d p.527).

[79] P. 5.

[80] *See* D.89-04-080, p. 6, D.93-06-092, p.36, D.94-03-076, p. 8.

[81] 31 CPUC 2d, pp. 536-7.

In the instant proceeding, Southwest's gas procurement policies are a reversal of those we found deficient in D.02-08-064. In D.02-08-064, we determined Southwest failed to store low priced gas, and to use gas futures contracts to stabilize prices during the months of greatest gas demand. I.01-06-047 examined Southwest's storage practices, indicators of future prices, and Southwest's reaction to, then current, unprecedented gas prices. We found that Southwest should have secured contracts for future delivery of at least 50% of its gas requirements and reduced its exposure to potentially increasing prices. We also criticized Southwest for its exclusive reliance on providing low-cost gas to the detriment of price stability. Finally, we compared Southwest to similar gas utilities that stored gas and found Southwest's actions unreasonable.

Here, San Bernardino concludes Southwest procured an excessive amount of gas at fixed prices, thus foreclosing the flexibility to purchase gas at spot or market prices. At the time of delivery, these spot prices were less than Southwest's contract prices. San Bernardino does not dispute the need for fixed price contracts, but argues that the volume of fixed-price gas should not have exceeded approximately 50% of total annual requirements.

In applying our standard of reasonableness to purchases for winter 2001-2002, we address the central issue of whether Southwest's gas procurement was reasonable. We look first to the information available to Southwest at the time of making its gas procurement decisions. Southwest's testimony indicates that it faced a number of concerns as it purchased gas for winter 2001-2002. Most importantly, during winter 2000-2001, gas prices substantially exceeded any previous gas price. In spring 2001, when Southwest began negotiating fixed-price contracts, substantial uncertainty existed regarding future gas prices. It was unclear at that time why gas prices had increased to unprecedented levels.

Furthermore, gas futures prices did not indicate declining gas prices, instead between April and May 2001, futures prices actually increased. In order to avoid a repeat of the price and delivery problems that occurred in winter 2000-2001, Southwest focused its future contracts on the winter months, the time of greatest demand. Concerned over its experience in winter 2000-2001, when most of its gas was purchased at volatile, high, spot prices and not through fixed-cost contracts, it is difficult to fault Southwest for desiring price stability through fixed-price contacts, particularly for the winter months.

In addition, Southwest explains that it was quite concerned over the potential for gas disruptions in winter 2001-2002, and that its fixed-price contracts were intended to avoid gas supply problems. As Southwest points out, it minimized the risk that future prices might decline by negotiating fixed-price contracts for one-year, rather than for multiple years. By not signing long-term contracts, Southwest provided itself flexibility in the event that gas costs might decline. With hindsight, and eventual declining gas prices, Southwest may have reduced its procured gas costs during winter 2001-2002, but this is speculative, and does not determine the reasonableness of Southwest's management policies. Given the knowledge and information available to Southwest at the time of its gas procurement decisions, Southwest's actions appear reasonable.

Although gas prices declined during summer 2001, Southwest points out that substantial price decreases did not occur until August 2001. Southwest explains that early in August 2001, it found an opportunity for additional gas at a price of $4.33/Dth. In July the gas border index was $4.71/Dth, and given this information, Southwest signed an additional fixed-price contract. Although San Bernardino argues that it was clear in August 2001 that prices were declining, the principle price decline occurred in July 2001, and it is not apparent from San Bernardino Exhibits 200 and 203 that future prices would continue to decline further. A review of Exhibit 203 shows that between July 2, 2001, and August 6, 2001, gas futures prices appear to level out, indicating that gas prices might again increase in the following months. On August 7, 2001, when Southwest signed its last winter contract, gas futures prices appear comparable to the contract price. Therefore, we do not find Southwest's actions on this contract unreasonable.

In response to San Bernardino that the volume of fixed-price contracts was excessive, Southwest asserts that the amount of fixed-price contract gas was about 50% of its annual requirement for its planning year that commenced November 1, 2000 and ended October 31, 2001. Southwest asserts that the calculation of an 80% figure by San Bernardino is in error as it is based on two planning years and not one. A revised calculation by Southwest that includes the summer months, as well as winter months, indicates Southwest purchased approximately 50.2% of its forecasted 2001-2002 annual gas requirements using fixed price contracts, although San Bernardino disputes this calculation and argues a more appropriate number is 63%. As winter 2001-2002 was warmer than normal,[82] a factor Southwest could not foresee when it negotiated its fixed-price contracts, Southwest asserts it's proposed fixed price annual volume was close to the 50% recommended by San Bernardino, and thus at the time of negotiating fixed price contracts, it maintained adequate flexibility to purchase gas at spot prices. Although San Bernardino argues differently, the calculation of the fixed price volume, based on Southwest's planning cycle and its purchase of

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[82] Southwest states that the American Gas Association found that winter 2001-2002 was 37% warmer than normal and 47% warmer than winter 2000-2001.

gas at spot prices during summer 2001, indicates that the percentage of gas under fixed-prices is not the 80% amount calculated by San Bernardino, but is closer to 50%. Given Southwest's extreme concern over events during the past winter, a warmer than normal winter 2001-2002 and uncertainties regarding future gas prices, it is understandable that its fixed price contract volumes for winter 2001-2002 might exceed 50%. Although we have addressed this issue raised by San Bernardino, we point out that our guidelines for gas procurement do not specify the amounts or percentages of gas purchases at spot or market prices, or through fixed-price contracts. Instead, we emphasize the need for maintaining flexibility in order to provide gas to customers at reasonable prices consistent with a secure supply.

In summary, we have applied the three steps articulated by the Commission in D.02-08-064,[83] and advocated by San Bernardino, to determine the reasonableness of Southwest's decisions. However, we have reached a conclusion different from that of San Bernardino. First, we examined the goals that Southwest hoped to achieve and whether the goals were reasonable. Unlike its reliance on spot prices for gas articulated in I.01-06-047, Southwest states it desired price stability, and certainty of supply for Winter 2000-2001, while procuring gas at prices that given available information appeared reasonable. As discussed, these goals were reasonable and intended to balance out the conflicting goals of price stability and low-cost gas.

Second, we compare the actual outcome with the goal. Here, we find Southwest achieved price stability and certainty of supply, although the actual

[83] P. 23.

costs exceeded market or spot costs at the time of delivery. However, we cannot merely compare the actual costs to costs at time-of-delivery, since at the time of the decisions, future costs were very uncertain. Even at the beginning of August, when Southwest negotiated its last fixed-price contract for winter 2001-2002, there still existed uncertainty regarding the actual causes of the dysfunctional energy market in 2000-2001, and uncertainty regarding prices in winter 2001-2002. We also observe that Southwest intended it would not become reliant on fixed prices beyond winter 2001-2002, as the contract terms are only for one year. If actual gas costs in winter 2001-2002 had increased again to levels experienced in winter 2000-2001, Southwest's fixed-price contracts would have been quite reasonable by comparison.

Third, we consider whether a reasonable and prudent utility would have taken other steps to achieving these goals. Here, the record does not include the actions taken by comparable utilities, such as SoCalGas and SDG&E, regarding the goals of price stability, supply and low-cost gas. San Bernardino provides that the core costs of gas for SDG&E and SoCalGas were less than those for Southwest and concludes that SoCalGas and SDG&E thus retained flexibility to take advantage of declining market prices. However, this is not a totally valid comparison as it does not consider the other goals of stability and supply, and relies instead on the outcome of price comparisons. In D.02-08-064 we faulted Southwest for extreme reliance on spot market gas, and its imprudence in not fixing the cost for future gas deliveries. In the instant proceeding, we find that given the information available and known by Southwest, its decision to negotiate fixed price contracts was not unreasonable, and exhibited the steps a prudent manger might take in light of the recent past.

14. Rate Design

ORA stated it reviewed and accepted Southwest's cost of service study. ORA does not oppose Southwest's proposed increases in the primary, and secondary service charges for residential customers from $4.25 to $5.00, and from $5.00 to $6.00, respectively, and increases in the noncore monthly charge from $75 to $100, all of which we adopt. We also adopt ORA's proposed increase in the monthly charge for the Core Industrial rate schedule from $75 to $100, and a small increase of $1 for the basic monthly charge for Core General. As ORA points out, these changes will assist in moving customers to appropriate rate schedules with minimum effects.

We will also increase the baseline allowance to the maximum allowable, and increase the difference between Tier I and Tier II rates to reflect the increase in the basic service charge on the baseline portion of the rate, as proposed by ORA.

Southwest and ORA disagree over the appropriate rate designs for the GS-40 and GS-55 Schedules in Southern California, and Schedule GN-40 in Northern California. ORA argues that its proposal to retain schedule GS-55, rather than combining it with the GS-40 schedule achieves rate stability and customer certainty, and that consolidation of customer classes and full cost of service pricing be addressed in the next GRC.

Southwest contends that the GS-55 schedule and GS-40 schedule should be combined into a single schedule to reflect actual cost-of-service considerations, and to minimize customer impacts. Southwest modified its initial proposal during the proceeding, and now recommends that the GS-55 and GS-40 schedules be continued, but that the rate structure for both schedules would be gradually converged. Under this proposal, at the end of the rate case cycle, in the last attrition year, rates for the GS-40 schedule, and rates for the GS-55 schedule would be essentially the same.

We are concerned over sudden rate changes, and believe that an adopted rate design should minimize adverse customer impacts. However, the rate design should also reflect cost-of-service considerations and treat customers using equal amounts of gas under similar schedules the same. We note that ORA recommends addressing this issue in the next GRC, however, we will begin consolidation of these schedules now. Therefore, we will adopt Southwest's proposal for the GS-40 and GS-55 schedules that will gradually change rates beginning in the test year, and annually for each attrition year. Our adoption of Southwest's proposal means we will apply the same methodology to the GN-40 schedule for Northern California.

14.1. Implementing the Rate Increase and Amortizing the RRSMA

Southwest's application proposes a phase-in of the revenue requirement over a five-year period. However, Southwest's phase-in proposal is dependent on the Commission's approval of the level of revenues recommended in Southwest's Application.

Our adopted revenue requirement is less than that requested by Southwest; however we are reducing the amount of time until Southwest files its next GRC, from the five years proposed by Southwest to four years (test year 2003, and attrition years 2004, 2005, and 2006). We are also adopting a revenue balancing account, and attrition year increases that provide additional revenues in the years after the test year. These are ratemaking mechanisms that reduce risks to Southwest, and provide a dependable revenue stream.

We are also very aware of the effects of large rate increases on Southwest's customers. In the PPHs many customers voiced their concerns and limited ability to pay increasing gas bills, a concern also shared by Southwest, ORA and San Bernardino. Certainly, we must mitigate rate shock for customers, many of whom are on fixed incomes, and must make decisions and planning choices regarding their gas bills. Therefore, we will adopt a phase-in of the revenue requirement on an equal annual basis over the test year, and the three attrition years. We will phase-in 80% of the revenue requirement increase in 2003; 10% of the increase in 2004; 5% of the increase in 2005; and 5% of the increase in 2006.

In addition, we must address the RRSMA, established in May 2003. In Southwest's motion to establish this account, Southwest offered that the RRSMA could be amortized at the time of a final decision in its Application. In determining the amortization period for the RRSMA, we acknowledge that the purpose of this account was to track margin revenue shortfalls due to any delay in the requested rate relief in this proceeding. Therefore, we will authorize Southwest to amortize the amounts in the RRSMA during the remainder of 2003 and 2004, as these are revenues that would have been available to Southwest during test year 2003. Southwest will be directed to file an advice letter with the Commission detailing the amounts that should be amortized in the RRSMA within 30 days of the effective date of this decision and included in rates for the remainder of 2003 and 2004.

15. Comments on Proposed Decision

The proposed decision of the Administrative Law Judge was mailed to the parties in accordance with Pub. Util. Code § 311(d) and Rule 77.1 of the Rules of Practice and Procedure. Comments were received on ______________________, and reply comments were received on ________________________.

16. Assignment of Proceeding

Michael R. Peevey is the Assigned Commissioner and Bruce DeBerry is the assigned Administrative Law Judge in this proceeding.

Findings of Fact

1. Southwest requests increases in revenue requirements for test year 2003 of approximately $4.4 million for Northern California, and $5.7 million for Southern California.

2. Southwest proposes to phase-in the revenue requirement increases over a five-year period to minimize the impact of its rate increase.

3. The Commission authorized Southwest to establish the RRSMA to track the differences between adopted rates and current rates on May 8, 2003.

4. As in any GRC, our primary task in this GRC is to forecast Southwest's reasonable revenue requirements for test year 2003, *i.e.*, the amounts of revenues needed by Southwest to provide adequate public utility service and earn a reasonable rate of return for 2003 under conditions of prudent management.

5. Among other statements, customers participating in the PPHs expressed problems in paying monthly gas bills and explained that retired persons on fixed incomes cannot afford increases in rates.

6. ORA reviewed and accepted Southwest's forecasted number of customers in both Northern and Southern California.

7. The Revenue Balancing Account protects customers if base revenues exceed adopted estimates, and protects stockholders, if base revenues are less than adopted revenues.

8.Base revenues occurring between the date of this decision and the date for implementing a balancing account could result in an over-collection or under-collection.

9. Southwest and ORA agree that a balancing account for base revenues should be adopted, although Southwest and ORA disagree on an implementation date.

10. ORA and Southwest agree that margin revenues from Discounted Special Contracts should not be included in a revenue balancing account.

11. Although Southwest states it used 10-years of recorded data in the last proceeding to forecast future gas sales, this argument by itself does not justify using the same period in this proceeding.

12. Forecasting methodologies should be judged on the current circumstances and whether the method is appropriate to the recorded information.

13. A comparison of Southwest's and ORA's gas sales forecasts shows that in the most recent years, Southwest's forecasts more accurately predict actual sales.

14. A comparison of Southwest's 10-year modeling with ORA's 25-year modeling methods, shows that the 10-year model more accurately predicts actual results during a 9-year study period.

15. A 30-day period after the effective date of this decision will provide time for the Energy Division to review the revenue balancing account and filed tariffs.

16. Southwest should record interstate pipeline demand charges, fixed storage charges and core margin revenue in the PGA balancing account; a policy currently followed by PG&E and SoCalGas.

17. Southwest's expense estimates for the 2003 test year, are generally based on recorded expenses through August 2001, adjusted for new employees, and escalation factors.

18. Many recorded distribution, customer, and A&G expenses, even after adjustments for inflation, demonstrate wide unexplained annual variations between 1997 and 2001.

19. Normalized expenses remove the effects of variances due to unusual variations, or one-time events.

20. Recorded costs, by themselves, do not justify future expense estimates. In addition, Southwest must demonstrate why recorded costs are appropriate for particular account estimates, what changes in staffing and operations might affect the recorded costs, and whether specific adjustments are appropriate.

21. Southwest provided limited information to explain increases, or decreases, in prior years' recorded expenses, and did not adequately support its expense estimates.

22. Appropriate expense estimating methods include averaging, trending, and adjustments for non-recurring expenses.

23. Certain operating expenses may increase as a result of the additions of new customers.

24. Recorded Southern and Northern California distribution expenses in various accounts demonstrate substantial annual account variances that are generally unexplained.

25. Total Southern California distribution expenses, adjusted for inflation, increase dramatically in 1996 and 1997, and then become level in 1999 and 2000.

26. Averaging of recorded amounts will normalize variances that occur from year to year.

27. An estimating methodology based on an analysis of each distribution account using averages over different numbers of years, may not provide a reasonable estimate of total distribution expenses. Instead, distribution expenses should be considered as a whole, and variances that occur from year-to-year can be normalized by averaging total distribution expenses over a given number of years.

28. A three-year average of total distribution expenses, except for gas supply and rents expenses, increased for labor and non-labor escalation, is a reasonable estimate of distribution expenses for Southern California.

29. Southwest's Northern California division began expanding during the mid-1990s, and distribution expenses were unusually high in 1996, 1997, and 1998. Thus, using the most recent total distribution expenses, except for gas supply and rents expenses, increased for labor and non-labor escalation, is a reasonable estimate for Northern California.

30. An accelerated PVC pipeline replacement program in Southern California should reduce maintenance costs, since the new pipe is less subject to leaks.

31. The recorded 2001 expense for Account 881, Rents, is a reasonable estimate for the 2003 Rents expense, as this estimate reflects Southwest's ownership of computers, and declining leasing of computers.

32. Estimates of Customer Accounts expenses in Southern California should reflect customer growth, since the functions causing changes in Customer Accounts expenses are related to the number of customers served.

33. A reasonable estimate for Southern California Customer Account expenses, except for Account 904, Uncollectibles, is a three-year average of past costs per customer in 2001 dollars times the number of customers in the test year, escalated for labor and non-labor factors escalated to the test year.

34. Estimates of Customer Accounts expenses in Northern California, except for Account 902 Meter Reading, and Account 904, Uncollectibles, should reflect customer growth, since the functions causing the changes in Customer Accounts expenses are related to the number of customers served.

35. A reasonable estimate for Northern California Customer Accounts expenses, except for Accounts 902 and 904, is the recorded 2001 customer

accounts expense escalated for labor loading and labor and non-labor factors to the test year.

36. Meter reading costs in Northern California have declined annually as a result of using modern meter-reading equipment that reduces labor costs. A reasonable estimate of Account 902, Meter Reading, is the 2001 recorded amount for labor and non-labor expenses escalated to the test year.

37. Customer Accounts expenses for Northern and Southern California should include expected increases in postage costs.

38. A reasonable estimate of the Uncollectibles rates for Account 904 is Southwest's initial request for a rate of 0.1925% in Southern California, and 0.0797% in Northern California.

39. System-wide A&G expenses have varied significantly during the past several years.

40. The recorded amount for Account 920, A&G Salaries, increased by about 13% between 2000 and 2001, an increase that is generally unexplained.

41. A reasonable estimate for Account 920 is to increase the recorded amount by 0.6%, the recorded increase in Account 920 between 1999 and 2000, and further escalate this amount to test year 2003 using the labor escalation factor.

42. The MIP benefits both shareholders and customers; and MIP costs should be allocated to customers and shareholders. In recognition of the management performance criteria that determine the MIP, a reasonable allocation of MIP costs is 40% to customers, and 60% to shareholders.

43. Due to variances in recorded expenses, a reasonable estimate for Account 921, Office Supplies and Expenses is a five-year average escalated to test year 2003 using the non-labor factor.

44. Account 923 Outside Services fluctuated significantly during prior years, and therefore a reasonable estimate for this expense is to use a five-year average escalated to 2003.

45. Recorded expenses for Account 924 Property Insurance declined during two of the past five years, and then increased in the last two years; therefore, a reasonable estimate for Account 924 is the amount recorded in 2001.

46. D&O insurance benefits both customers and shareholders; and therefore, the costs for D&O insurance should be allocated equally between customers and shareholders.

47. During the past five years, Account 925 varied significantly from year to year. A reasonable estimate for Account 925 is an average of the past five-years recorded expenses.

48. No party disputed that Southwest currently funds PBOPs obligations on a cash basis, and not through a trust account. In order to correctly calculate PBOPs obligations, the cash payments need to be included in the PBOP calculations.

49. Southwest testified that Nevada and Arizona did not authorize recovery of Southwest's PBOP costs until July 1996 and September 1997 respectively, and California did not authorize recovery of PBOPs costs until January 1995. Thus ORA's calculations that include PBOP amounts in rates prior to these dates would overstate PBOP recoveries.

50. Southwest's current PBOP trust account was established to pay future retirees. There is no indication in the record, by any party, that Southwest withdrew any monies from its PBOP trust account at any time in the past.

51. There is no reason to deviate from the Commission policy that rejects application of SAFS 87 to pension policy, and therefore Southwest's estimates of

pensions using a normal cost method for regulatory accounting should be rejected.

52. Southwest's employees receive generous benefits that are included in the labor loading factor, increase all labor costs, and are adopted in this opinion. Although there may be additional health benefits accruing to employees as a result of the Wellness Program, including Wellness Program benefit costs in rates as an additional employee benefit is not reasonable, particularly given the current economic circumstances faced by customers.

53. Safety is an important issue for customers, and is enhanced by safety advertising. It is reasonable to increase Account 930.1 – Safety Advertising, by using an average of expenses in 2000 and 2001 for Southern and Northern California.

54. Southwest's DCP is similar to Edison's DCP. Interest expenses on Edison's DCP were not included in rates in D.96-01-011, and there is no compelling reason to include Southwest's DCP interest costs in rates.

55. A two-year average of past expenses for Account 930.2, excluding interest costs on the DCP, is a reasonable estimate for test year 2003 for Southern and Northern California.

56. Account 931, Rents Expenses, varied significantly during the past several years. A reasonable estimate of Account 931 for test year 2003 is an average of the past five-years' recorded amounts.

57. Due to significantly and unexplained variances in recorded amounts for Account 935, Maintenance of General Plant, it is reasonable to adopt a five-year average of past amounts for test year 2003 for Southern California.

58. In order to normalize differences in recorded expenses, it is reasonable to use a five-year average of past expenses for the Southern California direct expenses in Account 923 and 925.

59. Between 1998 and 1999, Account 935, Maintenance of General Plant, a direct expense in Southern California, measured in constant 2001 dollars, increased by over 90%, and then declined by 12.5% in 2001. A reasonable estimate of the Account 935 expenses is the amount recorded in 2001.

60. Due to unusual increases for Account 923, Outside Services, in 1998 and 1999 that appear to be due to the Northern California expansion and variances in recorded amounts, it is reasonable to use a five-year average of amounts from 1997 to 2001 to estimate test year 2003 for Northern California.

61. Recorded amounts in Account 925, Injuries and Damages in Northern California, declined significantly after 1997, including a negative expense in 1998, and no expense in 1999. A reasonable estimate for account 925 is a five-year average of the expenses between 1997 and 2001.

62. Recorded direct expense amounts in Account 935, Maintenance of General Plant, have declined during the past five years in Northern California, and therefore a reasonable estimate for Account 935 is an average of the past two years.

63. The PVC pipeline replacement program is intended to replace pipe installed in the late – 1950s, 1960s, and 1970s. All parties agree that existing PVC pipe must eventually be replaced for all of Southwest’s mains and services.

64. Southwest conducted a PIA to determine the replacement factors that might cause PVC mains and services to fail. Replacement factors include types and numbers of leaks, soil type, pipeline location, installation, potential for

external damage, installation, operating pressure, age of pipe, depth of cover, pipe size, and customer types served.

65. The most recent information on leaks indicates that the most serious types of pipe leaks (type 1) are increasing for services in Southern California.

66. There is no current industry, state or federal standard for acceptable leak leaks.

67. Leaks and leak rates should be reduced to avoid accidents and improve safety.

68. Southwest replaced more PVC pipeline footage in 2001, than it forecasts replacing in 2003, or in attrition years 2004, 2005, and 2006.

69. The adopted PVC pipeline replacement program is similar to the program requested by Southwest; and considers safety, leak rates, and previous PVC pipeline replacements.

70. The adopted PVC pipeline replacement program is less than requested by Southwest, however this program will allow Southwest more time to investigate possible joint trenching opportunities with other agencies and thus help mitigate costs.

71. Given the current economic climate, and an increase in revenue lag observed in March 2002, it is unlikely that customers will pay their bills more quickly than customers paid bills in the past. Thus the lag in revenue payments is unlikely to decrease from 2001.

72. The statutory income tax filing dates best reflect the timing of income tax payments, and therefore is the most reasonable indicator of income tax lag days.

73. Southwest provided substantial information regarding the usefulness of UP project costs to the company's operations and as improvements to efficiencies.

74. A recorded project cost that exceeds budgeted cost is not by itself a measure of unreasonable cost.

75. As a result of the Truckee expansion project, Southwest will need an operations center in the Truckee area. Construction of the Truckee operations center is likely during 2003.

76. The cost of capital reflects a relationship between ROE and the capital structure.

77. The December 2001, CE percentages for three of four energy utilities addressed in A.02-05-022 are less than the December 2001 CE percentage for Southwest.

78. Southwest has taken a number of steps to improve its capital structure, and ratings over the past several years while funding expansive growth. Although these steps have helped, Southwest's financial rating continues to be low, and its bond rating is one degree above "junk status."

79. D.02-11-027 adopted hypothetical capital structures very different from the existing capital structures for PG&E, Edison, SDG&E and Sierra, and stated that the capital structure is designed to attract capital, improve credit ratings to investment grade, and maintain an investment grade setting.

80. The revenue balancing account recommended by Southwest and ORA protects Southwest against the risk due to a loss of revenues, and thus removes a risk affecting the adopted ROE.

81. The attrition year mechanism protects against increased costs due to inflation, and the adopted PVC pipeline replacement program adequately funds pipeline replacement in the attrition years. The attrition year mechanism and the adopted pipeline replacement program reduce risks due to inadequate revenue requirements in the attrition years, and thus reduce risks to the ROE.

82. A ROE of 10.9%, combined with the adopted capital structure, meets our standards for establishing a fair and reasonable ROE and cost of capital.

83. The adopted attrition year proposal provides limited attrition year increases, and minimizes rate increases to customers.

84. Utilities, including Southwest, should purchase diversified portfolios of gas supplies, with the goal of mitigating price risks, and achieving reliability of core supplies and low prices.

85. Utilities, including Southwest, are not directed to purchase specific amounts of gas requirements through fixed-price contracts, or at spot markets, but should maintain flexibility to balance the sometimes-competing goals of price stability and cost minimization, while maintaining supply security.

86. D.02-08-064 criticized Southwest for providing low-cost gas in winter 2000-2001 to the detriment of price stability.

87. During winter 2000-2001, gas prices substantially exceeded any previous gas price.

88. In Spring 2001 there existed substantial uncertainty regarding future gas prices, and it was unclear at that time why gas prices had increased to unprecedented levels in winter 2000-2001.

89. Gas futures prices in Spring 2001 did not presage that gas prices were declining; instead, between April 2001 and May 2001 gas futures prices increased.

90. Southwest focused its fixed-price contracts on winter 2001-2002, the time of greatest gas system demand.

91. Southwest minimized the risk that future gas prices beyond winter 2001-2002 might decline, by negotiating gas contracts for one-year rather than for multiple years.

92. Between July 2, 2001, and August 6, 2001, gas futures prices appear to level out. On August 7, 2001, when Southwest signed its last fixed-price contract, gas futures prices are comparable to the contract price.

93. Southwest's gas planning year commences November 1, and concludes October 31 of the following year. Applying this gas purchase cycle to Southwest fixed-price contracts shows that Southwest purchased approximately 50% of its forecasted 2001-2002 annual gas requirement using fixed-price contracts.

94. Winter 2001-2002 was warmer than a normal winter, and therefore winter 2001-2002 gas requirements were less than originally forecast.

95. Southwest's fixed-price contracts achieved price stability and certainty of supply, although actual fixed-price costs exceeded costs on the spot market.

96. At the beginning of August 2001 when Southwest completed its last fixed-price contract for winter 2001-2002, the actual causes of the dysfunctional energy market in 2000-2001 were still uncertain.

97. Southwest's decision to negotiate fixed-price contracts for winter 2001-2002 was not unreasonable given the information available at the time the fixed-price contracts were negotiated.

98. Increasing the monthly charge for the Core Industrial rate schedule and the Core General rate schedule will assist in moving customers to appropriate rate schedules with minimum effects.

99. The adopted rate design should minimize adverse customer impacts, reflect cost-of-service considerations, and treat customers using equal amounts of gas under similar schedules the same.

Conclusions of Law

1. The legal obligation of the Commission in a GRC is to establish just and reasonable rates to enable the utility to provide adequate service for the

convenience of the public, ratepayers and employees, while earning a fair return on the property it employs in providing service.

2. Southwest bears the burden of proof to demonstrate by clear and convincing evidence that it is entitled to its requested rate increase. Such evidence must be clear, explicit and unequivocal; so clear as to leave no substantial doubt or sufficiently strong to demand the unhesitating assent of every reasonable mind.

3. Although a counterpoint may be raised by another party, Southwest bears the burden of proof, and must first justify the reasonableness of its position.

4. Southwest's direct showing must provide the clear and convincing evidence. Without establishing that basis, Southwest will not have met its burden of proof.

5. Southwest has not met its burden of proof to demonstrate the reasonableness of its expense estimating methodology.

6. Southwest did not violate Ordering Paragraphs 3 or 4 in D.92-12-015.

7. A sharing of D&O insurance costs between ratepayers and shareholders is an appropriate allocation that recognizes the benefits of D&O insurance accruing to shareholders and ratepayers.

8. The adopted ATM is a reasonable mechanism to replace annual cost of capital filings by Southwest.

9. Adopting a hypothetical capital structure is a reasonable approach to improving credit ratings to investment grade, maintaining an investment grade setting, and attracting capital.

10. The adopted capital structure and ROE of 10.9% meet the <u>Hope</u> and <u>Bluefield</u> legal standards to provide Southwest an opportunity to earn a fair and

reasonable rate of return commensurate with that of other investments having corresponding risks.

11. In procuring gas for winter 2000-2001, Southwest reasonably balanced price stability, and certainty of supply; and, based on available information, exhibited the steps a prudent manger would take in achieving the sometimes competing goals of price stability and low-cost gas.

12. In order to give effect to the foregoing findings of fact and conclusions of law, the revenue requirement components and total revenue requirements set forth in the appendices should be adopted.

O R D E R

IT IS ORDERED that:

1. Southwest Gas Corporation (Southwest) shall file, within 10 days of the effective date of this decision, revised tariff schedules for gas rates as set forth in Appendices C and D of this order. The revised tariff schedules shall reflect a four-year phase-in of the additional revenue requirement adopted in this order. The phase-in of the additional revenue requirement shall be according to the following schedule: 80% in 2003; 10% in 2004; 5% in 2005, and 5% in 2006. In addition, Southwest is authorized to amortize the current balance in the Revenue Recovery Shortfall Memorandum Account (RRSMA) in rates for 2003 and 2004.

2. Southwest's revised tariff schedules shall become effective thirty days after the effective date of this decision, and shall comply with General Order 96-A.

3. Southwest shall close the RRSMA effective with the date of this order.

4. Southwest is authorized to establish a revenue balancing account to track the differences between actual sales and sales adopted in this order. The revenue balancing account shall become effective no earlier than 30 days after the effective date of this order.

5. Southwest may continue to include pipeline demand charges, fixed storage charges and core margin revenue in the Core Fixed Cost Adjustment Mechanism.

6. Southwest is directed to develop discrete rate components for its interstate pipeline demand charges in its next General Rate Case (GRC).

7. In its next GRC, Southwest shall provide the Commission with an actuarial analysis that clearly explains, when and how Southwest will use its Postretirement Benefits Other than Pensions (PBOPs) trust account to fund retiree's PBOPs.

8. In its next GRC, Southwest must justify the reasonableness of the $30 million in software projects currently included in Construction Work in Progress balances before any of these amounts may be included in plant-in-service for rate recovery.

9. Southwest shall file with the Commission (the Director of Energy Division) annual reports addressing Southwest's pipeline replacement program beginning November 1, 2004, with subsequent reports on November 1, 2005, and November 1, 2006. The reports shall be in the same form as those filed by Pacific Gas and Electric Company, and included as Exhibit 103 in this proceeding.

10. Southwest is authorized to file advice letters and supporting workpapers requesting attrition year adjustments to rates for 2004, 2005, and 2006. The attrition year adjustments shall be calculated consistent with the Office of Ratepayer Advocates modified attrition year proposal, and may include an index adjustment based on a seven-year constant dollar historical average of non-pipeline replacement-related capital expenditures. Southwest is authorized to include revenue requirements for attrition in addition to revenue requirements that are phased-in during the four-year phase-in period.

11. Southwest is authorized to include the revenue requirements for its Truckee Operational Center in its Northern California attrition request beginning 2004. The revenue requirement for the Truckee Operations Center shall include supporting workpapers.

12. Application 02-02-012 is closed.

This order is effective today.

Dated _____________________, at San Francisco, California.

APPENDIX A

Appendix A

Adopted System Allocable Administrative and General Expenses (2001$) (1)

	Acct 920	
	2000 Recorded	Escalated by 0.6%
Labor	23,866,381	24,009,579
Labor Loading	9,674,344	11,066,015
M&E	(1,898,377)	(1,898,377)
Total	31,642,348	33,177,217
	Acct 921	
Labor	0	
Labor Loading	0	
M&E	6,359,153	
	Acct 922	
Labor	0	
Labor Loading	0	
M&E	(5,851,383)	
	Acct 923	
Labor	0	
Labor Loading	0	
M&E	4,874,919	
	Acct 924	
Labor	0	
Labor Loading	0	
M&E	158,790	
	Acct 925 (2)	
Labor	0	
Labor Loading	0	
M&E	1,995,258	
	Acct 926 (3)	
Labor	0	
Labor Loading	0	
M&E	(112,861)	
	Acct 930.1	
Labor	64,983	

Labor Loading		29,950
M&E		10,038
Total		104,970
	Acct 930.2	
Labor		0
Labor Loading		0
M&E		2,185,959
	Acct 931 (esc.)	
Labor		0
Labor Loading		0
M&E		2,674,962
	Acct 931 (fixed)	
Labor		0
Labor Loading		0
M&E		2,104,032
	Acct 935	
Labor		198,774
Labor Loading		91615
M&E		1,009,043
Total		1,299,432

Notes: (1) The numbers are from 08-26-2002 correction of ORA's calculations for A&G Workpapers forwarded to SWG.

(2) The calculations made by ORA are modified to remove only 50% of the insurance premiums.

(3) ORA's Report on the Results of Operations for the Southern and Northern California Divisions of SWG GRC Volume I page 6-3.

Southwest Gas Corporation
Southern California
Adopted Operating Expenses (2001$)

Other Gas Supply Expense

	Labor	57,165
	Labor Loading	26,347
	M&E	6,514
	Total	90,026

Distribution (1)

		1999	2000	2001	3-Yr Average
	Labor	4,392,645	4,294,025	4,368,238	
	Labor Loading	2,015,940	1,955,690	2,014,486	
	Materials and Expenses	2,469,894	2,973,242	2,923,708	
Rents	Labor	0	0	0	
	Labor Loading	0	0	0	
	Materials and Expenses	274,415	298,339	179,264	
Distribution Excluding Rents	Labor	4,392,645	4,294,025	4,368,238	4,351,636
	Labor Loading	2,015,940	1,955,690	2,014,486	
	Materials and Expenses	2,195,479	2,674,903	2,744,444	2,538,275
Distribution Including Rents	Labor				4,351,636
	Labor Loading				2,005,669
	Materials and Expenses				2,717,539
Total Distribution					9,074,844

Customer Accounts (2)

	Account Number	1999 (a)	2000 (b)	2001 (c)	3-yr avg (d)	(d)*#customers (e)	w/labor loading	Total
Supervision	**901**							
Labor		306,187	338,874	342,161				
Labor Loading		140,894	154,197	157,414				
Materials & Expenses		28,570	39,473	78,974				
Normalization factor for labor		1.063	1.028	1				
Normalization factor for materials		1.036	1.00	1				
# Customers		100,963	103,467	104,573				
Labor(2001$)		325,462	348,362	342,161				
Material (2001$)		29,598	39,473	78,974				
$/customer (Labor)		3.22	3.37	3.27	3.29	362,057	528,930	581,421
$/customer(material)		0.29	0.38	0.76	0.48	52,491		
Meter Reading Expense	**902**							
Labor		459,544	480,153	517,306				
Labor Loading		211,662	218,782	238,471				
Materials & Expenses		92,470	71,391	86,561				
Normalization factor for labor		1.063	1.028	1				
Normalization factor for materials		1.036	1.00	1				
# Customers		100,963	103,467	104,573				

Labor(2001$)		488,473	493,597	517,306				
Material (2001$)		95,799	71,391	86,561				
$ / customer (Labor)		4.84	4.77	4.95	4.85	534,344	780,623	871,174
$ / customer(material)		0.95	0.69	0.83	0.82	90,550		
Customer Records & Collections Expense	**903**							
Labor		1,474,725	1,523,058	1,611,626				
Labor Loading		675,881	694,786	746,736				
Materials & Expenses		1,015,819	1,134,690	1,261,072				
Normalization factor for labor		1.063	1.028	1				
Normalization factor for materials		1.036	1.00	1				
# Customers		100,963	103,467	104,573				
Labor(2001$)		1,567,561	1,565,703	1,611,626				
Material (2001$)		1,052,389	1,134,690	1,261,072				
$ / customer (Labor)		15.53	15.13	15.41	15.36	1,691,260	2,470,761	3,698,713
$ / customer(material)		10.42	10.97	12.06	11.15	1,227,951		
Postage increase								30,670
Total								3,729,383
Uncollectibles	**904**							
Net Operating Revenue		39,376,901						
Revenues from Special Contracts		456,975						
Uncollectibles Rate		0.1925%						
Total		74,921						
Misc. Customer Accts. Expense	**905**							
labor		53,703	53,106	64,493				

Labor Loading	24,740	23,986	29,739				
Materials & Expenses	38,014	35,664	34,204				
Normalization factor for labor	1.063	1.028	1				
Normalization factor for materials	1.036	1	1				
# Customers	100,963	103,467	104,573				
Labor(2001$)	57,083	54,593	64,493				
Material (2001$)	39,382	35,664	34,204				
$/customer (Labor)	0.57	0.53	0.62	0.57	62,766	91,695	130,676
$/customer(material)	0.39	0.34	0.33	0.35	38,981		

CS&I

Labor	6,007
Labor Loading	2768.63
Materials & Expenses	-1,055
Total	7,721

A&G (Direct)

Account no.	
923	17,448
925	130,578
928	27,467
926	8,457
930	113,016
935	223,113

Notes:

(1) Recorded distribution expenses, including rents, are from ORA's Report on the Results of Operations for the Southern and Northern California Divisions of SWG GRC (Volume I, Table 9-2, page 9-9).

(2) The recorded expenses for 1999 and 2000 are from SWG's Results of Operation Volume II-A Chapter 12 Sheet 3 of 3. The recorded expenses for the year 2001 are from ORA's Report on the Results of Operation Volume I Chapter 10. The number of 2003 customers is forecasted as 110,132 by SWG.

Southwest Gas Corporation
Northern California
Adopted Operating Expenses (2001$)

Other Gas Supply Expense

Labor	10,244
Labor Loading	4,721
M&E	1,173
Total	16,138

Distribution

Distribution Excluding Rents

Labor	606,427
Labor Loading	279,502
M&E	562,918
Total	1,448,847

Rents

Labor	0
Labor Loading	0
M&E	229,507
Total	229,507

Customer Accounts (Direct)

Labor	261,860
Labor Loading	120,691
M&E	208,453
Total	591,004

CS&I

Labor	10,809
Labor Loading	4981.87
M&E	25,644
Total	41,435

A&G (Direct)

923	76,275
925	22,304
926	0
928	5,264
930	19,747
935	19,154

(END OF APPENDIX A)

APPENDIX B
Pipeline Replacement Expenses
Southern California

Year	PVC Footage Replaced (000s of feet)	PVC Footage Remaining[84] as of 12/31/02 (000s of feet)
1997	-	5,191.4
1998	113.8	5,077.6
1999	184.8	4,892.8
2000	236.3	4,656.5
2001	430.2	4,226.3
2002	727.2	3,499[85]
	Estimated by Southwest Gas	**Adopted**
2003	379.4	319.0
2004	367.5	319.0
2005	367.5	319.0
2006	162.2	319.0
2007	158	158

Annual Expenses (2003-2006)					
Description	Footage	Cost/Foot	Direct Cost	Overheads 12.48%	$ Before Esc.
Mains	218,000	$24.69	$5,382,791	$671,772	6,054,563
Services	101,000	$23.26	$2,348,947	$293,149	2,642,095
Year 2007					
Mains	38,000	$24.69	$938,285	$117,098	1,055,383
Services	120,000	$23.26	$2,790,828	$348,295	3,139,123

Northern California

Annual Expenses (2003-2007)					
Description	Footage	Cost/Foot	Direct Cost	Overheads 12.48%	$ Before Esc.
Mains	25,000	$24.69	$ 617,293	$77,038	694,331

(END OF APPENDIX B)

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84 Exhibit 5 Tab J RAM-2 Sheet 1 of 2.

85 Estimated by Southwest Gas.

Appendix C

SOUTHWEST GAS CORPORATION
SOUTHERN CALIFORNIA
SUMMARY OF THE OVERALL RESULTS OF OPERATIONS
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2003

Line No.	Description	Test Year (at present rates)	Deficiency (at present rates)	Test Year (at proposed rates)	Line No.
	(a)	(c)	(d)	(e)	
1	Operating Revenue	$ 82,660,122	$ 3,487,898	$ 86,148,020	1
2	Gas Cost	43,283,221	(284,553)	42,998,668	2
3	Operating Margin	$ 39,376,901	$ 3,772,451	$ 43,149,352	3
		39,376,901	3,772,451	43,149,352	
	Operating Expenses				
4	Other Gas Supply	$ 90,026	$	$ 90,026	4
5	Distribution	9,074,844		9,074,844	5
6	Customer Accounts	5,395,410	7,262	5,402,672	6
7	Customer Service & Information	7,721		7,721	7
8	Sales	0		0	8
	Administrative and General				
9	Southern California Division	1,042,913		1,042,913	9
10	System Allocable	3,995,989		3,995,989	10
	Depreciation and Amortization				
11	Southern California Division	9,169,770		9,169,770	11
12	System Allocable	1,412,154		1,412,154	12
13	Taxes Other Than Income	1,021,776	50,088	1,071,864	13
	Escalation				
14	Labor	696,362		696,362	14
15	Other	109,746		109,746	15
	Income Taxes				
16	State	233,588	328,415	562,003	16
17	Federal	773,338	1,185,340	1,958,679	17
18	Total Operating Expenses	$ 33,023,637	$ 1,571,105	$ 34,594,742	18
19	Net Operating Income	$ 6,353,264	$ 2,201,346	$ 8,554,610	19
20	IDRB Adjustor Net of Tax	968,175		968,175	20
21	Net Operating Income with IDRB Adjustor	$ 7,321,439	$ 2,201,346	9,522,785	21
	Rate Base				
	Gas Plant in Service				
22	Southern California Division	$ 195,332,187	$ 0	$ 195,332,187	22
23	System Allocable	10,602,386	0	10,602,386	23
24	Total Gross Plant	$ 205,934,573	$ 0	$ 205,934,573	24
	Accumulated Provision for Depreciation and Amortization				
25	Southern California Division	$ 89,185,820	$ 0	$ 89,185,820	25
26	System Allocable	6,234,108	0	6,234,108	26
27	Total Accumulated Provision for Depreciation and Amortization	$ 95,419,928	$ 0	$ 95,419,928	27

Appendix C

28	Net Plant in Service	$	110,514,645	$	0	$	110,514,645	28
	Other Rate Base Items							
29	Working Capital (add)	$	3,444,098	$	0	$	3,444,098	29
30	Customer Advances (deduct)		653,826		0		653,826	30
31	Deferred Taxes (deduct)		9,457,747		0		9,457,747	31
32	Total Other Rate Base Items	$	(6,667,475)	$	0	$	(6,667,475)	32
33	Total Rate Base	$	103,847,170	$	0	$	103,847,170	33
34	Rate of Return		7.05%				9.17%	34

(End of Appendix C)

Appendix D

SOUTHWEST GAS CORPORATION
NORTHERN CALIFORNIA
SUMMARY OF THE OVERALL RESULTS OF OPERATIONS
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2003

Line No.	Description	Test Year (at present rates)	Deficiency (at present rates)	Test Year (at proposed rates)	Line No.
	(a)	(c)	(d)	(e)	
1	Operating Revenue	$ 21,030,293	$ 3,269,370	$ 24,299,663	1
2	Gas Cost	12,299,073	(535,381)	11,763,692	2
3	Operating Margin	$ 8,731,220	$ 3,804,751	$ 12,535,971	3
		8,731,220	3,804,751	12,535,971	
	Operating Expenses				
4	Other Gas Supply	$ 16,139	$	$ 16,139	4
5	Distribution	1,678,353		1,678,353	5
6	Customer Accounts	592,473	2,598	595,071	6
7	Customer Service & Information	41,435		41,435	7
8	Sales	0		0	8
	Administrative and General				
9	Northern California Division	280,974	51,840	332,815	9
10	System Allocable	664,403		664,403	10
	Depreciation and Amortization				
11	Northern California Division	2,687,130		2,687,130	11
12	System Allocable	207,635		207,635	12
13	Taxes Other Than Income	514,241		514,241	13
	Escalation [1]			0	
14	Labor	97,018		97,018	14
15	Other	25,984		25,984	15
	Income Taxes			0	
16	State	(13,680)	331,528	317,848	16
17	Federal	(15,130)	1,196,575	1,181,445	17
18	Total Operating Expenses	$ 6,776,975	$ 1,582,540	$ 8,359,516	18
19	Net Operating Income	$ 1,954,245	$ 2,216,928	$ 4,171,173	19
	Rate Base				
	Gas Plant in Service				
20	Northern California Division	$ 68,815,799	$ 0	$ 68,815,799	20
21	System Allocable	1,987,947	0	1,987,947	21
22	Total Gross Plant	$ 70,803,746	$ 0	$ 70,803,746	22
	Accumulated Provision for Depreciation and Amortization				
23	Northern California Division	$ 17,889,666	$ 0	$ 17,889,666	23
24	System Allocable	1,168,895	0	1,168,895	24
25	Total Accumulated Provision for Depreciation and Amortization	$ 19,058,561	$ 0	$ 19,058,561	25
26	Net Plant in Service	$ 51,745,185	$ 0	$ 51,745,185	26

Appendix D

	Other Rate Base Items				
27	Working Capital (add)	$ 395,392	$ 0	$ 395,392	27
28	Customer Advances (deduct)	155,425	0	155,425	28
29	Deferred Taxes (deduct)	6,497,984	0	6,497,984	29
30	Total Other Rate Base Items	$ (6,258,017)	$ 0	$ (6,258,017)	30
31	Total Rate Base	$ 45,487,168	$ 0	$ 45,487,168	31
32	Rate of Return	4.30%		9.17%	32

(END OF APPENDIX D)