ORIGINAL

0000036366

RECEIVED

BEFORE THE ARIZONA CORPORATION COMMISSION

2005 NOV -4 P 3: 21

AZ CORP COMMISSION
DOCUMENT CONTROL

COMMISSIONERS
JEFF HATCH-MILLER, Chairman
WILLIAM A. MUNDELL
MARC SPITZER
MIKE GLEASON
KRISTIN K. MAYES

IN THE MATTER OF THE APPLICATION OF SOUTHWEST GAS CORPORATION FOR THE ESTABLISHMENT OF JUST AND REASONABLE RATES AND CHARGES DESIGNED TO REALIZE A REASONABLE RATE OF RETURN ON THE FAIR VALUE OF THE PROPERTIES OF SOUTHWEST GAS CORPORATION DEVOTED TO ITS OPERATIONS THROUGHOUT THE STATE OF ARIZONA.	Docket No. G-01551A-04-0876 **STAFF'S INITIAL CLOSING BRIEF**

I. INTRODUCTION

Arizona Corporation Commission Staff ("Staff") hereby files its initial closing brief on Southwest Gas Corporation's ("Southwest" or "the Company") application to increase rates in Arizona.

The main issues in this case focus on two fundamental questions.

1. Has Southwest met its burden justifying the proposals and increases it asks for; and
2. Have the interests of Southwest and its shareholders been appropriately balanced with the concerns and impacts to ratepayers.

Most of the revenue requirements increase Southwest requests is justifiable. But on a few key matters such as costs for Sarbanes-Oxley and the Management Incentive Program, shareholders stand to benefit significantly. All of these expenses are not just for the benefit of customers. Southwest's request for full recovery of these expenses fails to recognize this. Shareholders and customers should share the burden for these costs, and the burden should be balanced between them.

The Transmission Integrity Management Program ("TRIMP") is another area where ratepayers and shareholders stand to benefit, so a sharing of these costs makes sense too. But because the bulk of these TRIMP costs are projected costs, Staff believes that a surcharge mechanism should be established. This mechanism would capture more actual costs rather than trying to incorporate mostly projected costs into base rates. Once a cost history was established, costs could then be normalized.

Staff and the Company also disagree on the appropriate cost of capital, capital structure and cost of equity for Southwest. Southwest fails to meet its burden that its cost of capital analysis is superior, based on the reliable evidence presented in this case. Staff's analysis balances Southwest's financial integrity with ratepayer interests to not pay for a higher return on utility plant than is actually funded with equity from the Company. Hence, this is why Staff's proposed 40-percent-equity ratio in the capital structure is more equitable than the Company's 42-percent-ratio proposal. Also, Staff's cost of equity analysis better adheres to the efficient markets hypothesis and actual market conditions than the Company's inflated recommendation.

Staff's analysis and recommendations include several items related to customer service and billing to make things a little easier and more understandable to Southwest's customers.

With limited exceptions, Staff agrees with Southwest's request to expand demand side management ("DSM") funding to about $ 4.335 million and to allow recovery through the existing DSM adjustor. Staff believes, however, that Southwest should provide more specific descriptions of the new programs for subsequent Commission approval. DSM furthers the goals of conservation and efficient use of natural gas and therefore, it should be expanded to additional customer classes besides residential.

Staff recommends several items with regard to Southwest's gas procurement practices. These recommendations will ensure that all avenues are explored to make sure that natural gas is purchased in the most cost-effective and prudent manner. This is especially important given the recent price spikes for this needed commodity. Staff also addresses Southwest's purchased gas adjustor and recommends changes to reflect the current realities of a rapidly rising price for natural gas.

Finally, Southwest has failed to meet its burden justifying its rate design and its proposed Conservation Margin Tracker ("CMT"). A rate design should balance revenue stability with other important factors like gradualism, affordability and conservation. While Staff's rate design appropriately balances these factors, Southwest's rate design gears too much in the direction of revenue stability. Southwest also proposes the CMT to address the issue that it has been unable to achieve its overall authorized rate of return for most of the last decade. But the CMT is a bad way to address this problem because:

1. It provides a disincentive to conserve.
2. Southwest has failed to show that declining per customer usage due to conservation is the sole or main reason it has not achieved its overall authorized rate of return.
3. The impacts to customer – especially residential customers – could be significant.

Thus, Staff recommends that the Commission adopt its recommendations to: reject the CMT; adopt Staff's rate design; approve Staff's recommendations on gas procurement, DSM and the PGA; adopt Staff's revenue requirements; and adopt cost of capital recommendations. Staff recommends an increase to the revenue requirement of approximately $51.625 million (15.99 percent) versus Southwest's request for about a $70.809 million increase (21.93 percent). Staff recommends an overall cost of capital of 8.40 percent versus Southwest's request for a 9.40 percent without the CMT and 9.29 percent with the CMT. Finally, Staff is recommending 6.63 percent rate of return on a fair value rate base of $1,171,566,722. Staff's recommendations are discussed more fully below.

II. CONSERVATION MARGIN TRACKER

Southwest proposes an experimental mechanism – the conservation margin tracker ("CMT") – to deal with the problem of declining per customer usage and lack of achieving its overall authorized rate of return. Staff does not deny that Southwest has not been able to earn its overall authorized rate of return ten out of the past eleven years. Staff also agrees that declining per customer usage due to increased efficiencies is a contributing factor. And Staff will acknowledge that the rising costs of natural gas will, in and of itself, give a signal to customers to conserve what they can. What Staff disagrees with is implementing a mechanism that provides *any* disincentive to conserve. Also, Staff is not convinced that declining per customer usage due to conservation and increased efficiencies is the sole or predominant reason Southwest has been unable to achieve its overall authorized rate of return.

The CMT is essentially another adjustor mechanism. This mechanism will be implemented on top of Southwest's Purchased Gas Adjustor ("PGA"). Unlike the PGA, which seeks to recover the actual cost of natural gas, the CMT would seek to compensate Southwest when it is unable to achieve its authorized margin per customer class.[1] (Margin is all those costs for providing gas absent the gas itself). Because all of the rate designs proposed here include some margin in the volumetric rates, this does leave Southwest with the possibility that it may continue to under-recover its authorized margin, if customers use less gas than is expected. But this does not justify the adoption of an experimental mechanism.

A. If there is some elasticity left in the use of natural gas, then the CMT will provide significant disincentive to conserve.

If Southwest does not achieve its authorized margin per customer class, then the CMT will track that shortfall so that a surcharge can be imposed on customers for each customer class the following year. Southwest admits that customers will be charged extra because they did not use enough natural gas the year before.[2] While rising gas costs are an incentive to conserve in itself, and the CMT will likely not completely neutralize this incentive, the CMT does offset the incentive customers have to conserve. The price signal to conserve natural gas is mitigated. As a matter of policy, Staff does not believe any mechanism should be put in place that could offset the willingness of customers to conserve a valuable and precious resource. For this reason alone, Staff opposes the CMT.

Central to this discussion is the concept of elasticity. Mr. Cattanach testified that it is his belief that natural gas is a "relatively inelastic" commodity.[3] Mr. Fetter also agreed that some uses of natural gas are less discretionary.[4] If this is the case, there is only so much continued conservation that can actually take place. The Residential Utility Consumer Office ("RUCO") witness, Marylee Diaz Cortez also testified that the elasticity of natural gas is less than it was in the past.[5] Meanwhile, Mr. Gieseking, as well as other Southwest witnesses, testified that a primary justification, if not *the*

[1] Tr. at 1152:16-20.
[2] Tr. at 378.
[3] Tr. at 166 – 170.
[4] Tr. at 137:10–23.
[5] Tr. at 973 – 975. Ms. Diaz Cortez also believes that the CMT would charge residential customers for gas they did not use, if Southwest fails to achieve its authorized margin for that customer class. Tr. at 980-81.

justification, for the CMT is driven by reduced consumption on a per-therm basis due to implementation of conservation programs.[6] Because margin costs are part of the volumetric rates, reduced consumption contributes to Southwest not achieving its overall authorized rate of return.

But if use of natural gas is inelastic, and if both high-use and low-use customers have limited discretion to conserve, then it follows that declining per customer usage will decelerate or slow down as the usage gets more inelastic. Residential customers will need *some* amount of natural gas for cooking, bathing, laundry and home heating even with more efficient appliances. This nondiscretionary amount may be different for each customer. But the point is that, if natural gas is inelastic, conservation will be limited; usage levels and demand for natural gas will stabilize. Following Southwest's premise that declining customer usage due to conservation is the main reason for its rate of return shortfall, if usage levels stabilize, then Southwest will have ample opportunity to achieve its overall authorized rate of return as well as authorized margin for each customer class. This is because rates are based from the average amount of natural gas consumed during the test-year. So, the CMT would become unnecessary, if demand for natural gas has become significantly more inelastic.

If, however, Southwest's declining customer usage continues to occur, that indicates that *some* elasticity in demand for natural gas remains. Implementing the CMT in this circumstance would mean that customers would incur an additional charge if additional conservation and efficiencies lead to additional declining per customer usage. Southwest contends that its Exhibit A-49 shows that the CMT will encourage conservation, but Staff believes the exhibit does not reflect what will actually occur. An additional charge tacked on to customers bills for any conservation – no matter the magnitude – will discourage customers from conserving in the future.[7] Staff contends that the CMT would be a significant charge if this occurs to the degree Southwest expects. Hence, customers would receive a price signal against conversing natural gas, which Staff does not believe is the right message to send, given that natural gas should be treated as a precious and finite resource.

---

[6] Tr. at 378:1-25 and 417:1-25.

[7] Tr. at 1161:8-15 and 1166:10-13.

B. Southwest has not shown that conservation is the sole or predominant reason it has not been able to achieve its overall authorized rate of return.

Staff does not believe that the problem of declining customer usage due to conservation entirely explains why Southwest is not achieving its overall authorized rate of return.[8] RUCO appears to share this view.[9] In his direct testimony, Staff's witness on the CMT, William Musgrove, provides detailed testimony as to the technical deficiencies of Southwest's proposed CMT, as well as flaws in Southwest's justification for it.[10] What follows summarizes Staff's position on this topic.

Staff contends the origins of Southwest's rate of return deficiency are not as clear-cut as simply focusing on conservation as the culprit. Staff does not dispute that the declining per customer usage phenomenon is occurring and that conservation contributes to this phenomenon. But to say that the predominant origin of this is due to increased efficiencies, or that this is *the sole* reason Southwest has not achieved its overall authorized rate of return is a stretch, for several reasons.

First, Mr. Musgrove highlights the fact that, for residential customers, Southwest's achieved recovery on margin for residential customers is just over a quarter of its overall authorized rate of return.[11] But Southwest's witness Robert Mashas provided the results of an Incremental Cost Study analysis in his pre-filed testimony, suggesting to Staff that new customer additions were allowing Southwest to earn, incrementally, at least the overall authorized rate of return.[12] This is despite Southwest only achieving 2.29 percent return on margin from the entire residential customer class. Thus, it appears these new residential customers – supposedly living in more energy efficient homes – are providing Southwest with its authorized margin and are not causing the problem.[13]

Second, there is the question of whether economies of scale apply. In other words, fixed costs are not increasing at the same rate or percentage as the growth in revenues due to new customers. There is no dispute that Southwest has seen significant growth to its customer base in the last few

---

[8] See Surrebuttal Testimony of William A. Musgrove, Exhibit S-12, at 9:1-8.
[9] Tr. at 990:3-4 and 1018:2-20.
[10] See Direct Testimony of William A. Musgrove, Exhibit S-11, at 5 – 10.
[11] See Musgrove Surrebuttal Testimony at 4:16-18.
[12] See Direct Testimony of Robert A. Mashas, Exhibit A-32, at 26:7-14; Tr. at 651-54; Musgrove Surrebuttal Testimony at 4:18-20.
[13] Tr. at 1157:9-14.

years. Southwest's residential customer base has been growing seven percent annually.[14] Southwest has been getting an additional $8 million in customer service charges not anticipated or incorporated from the last rate case.[15] But while Mr. Gieseking did not seem to acknowledge economies of scale, Mr. Fetter acknowledged that economies of scale will apply to some degree.[16] Empirically, it makes sense that economies of scale apply and that not all of Southwest's fixed costs increase at the same rate as revenues and growth. Growth cannot be *all* bad and increasing total revenues has helped to offset Southwest's authorized margin deficiencies.

Finally, the synthesis of the evidence summarized above conflicts with Southwest's justification for the CMT. If economies of scale apply, then revenues outpace costs. Southwest has more revenues because of growth, even with more efficient homes and even with conservation. The evidence in this case is that new customers are not the reason Southwest is not achieving authorized rate of return. In fact, Southwest is earning its authorized rate of return from these new customers.[17] Thus, growth cannot be the culprit, and new energy-efficient homes cannot be the culprit either. No evidence here suggests that any conservation measures taken by existing or vintage customers is the sole or predominant reason Southwest's return on margin for the residential customer class is only 2.29 percent. Weather-normalization, also incorporated into the CMT, also cannot explain the lack of achieving overall authorized rate of return, because the impacts of weather are not substantial when measuring the impact of weather on declining per customer usage, thereby raising the need for any weather normalization adjustment.[18] In Staff's view, Southwest's culprit – declining usage because of conservation – does not mesh with the evidence it presents justifying the CMT.

Staff cannot provide the full explanation as to why Southwest has not achieved its overall authorized rate of return. Staff does not ignore that increased efficiencies may be a factor to that. But that cannot be the only factor or the predominant factor. So, the CMT is not a good solution to the rate of return deficiency because the problem has not, and may not be, clearly identified. And that is a

---

[14] Tr. at 389:9-11.
[15] Tr. at 1157:19-23.
[16] Compare Gieseking, Tr. at 390 – 391, to Fetter, Tr. at 132.
[17] Musgrove Surrebuttal Testimony at 4:15 – 5:4.
[18] Tr. at 154 – 156 and 642 – 650.

second reason why Staff cannot support Southwest's proposed CMT.

C. The CMT will likely be burdensome to customers, specifically residential customers.

The potential impact of the CMT on ratepayers cannot be ignored. Staff provided evidence that the impact of the CMT on residential customers could have been as much as $0.07 per therm if in place during 2004.[19] If declining customer usage continues as Southwest suspects, despite evidence that natural gas use is relatively inelastic, then residential customers could be looking at paying a substantial amount per therm if authorized margin is not met. For example if Southwest is unable to achieve authorized margin for the residential class, a customer used 347 therms annually, and the CMT mechanism rate was $0.07 per therm, that customer would pay $24.29 (347 x 0.07).[20] This amount would be paid regardless of whether or how much conservation contributed to the margin deficiency. This amount would also be paid on top of cost for natural gas flowing through Southwest's PGA and regardless of whether a colder than normal winter follows a milder winter. The impact on customers could then be very significant.[21] Gradualism, a main facet of designing just, reasonable, and fair rates, is sacrificed. Both Staff and RUCO believe gradualism should not be sacrificed to this type of adjustor mechanism that leaves customers, especially residential customers, at risk.[22]

D. Arizona Law does not require approval of the CMT and the facts in this case do not justify its adoption.

Finally, the CMT seeks to provide more of a guarantee to Southwest than traditional rate-setting methods to recover its authorized margin from residential customers. Risk is reduced with the CMT. The law only provides Southwest with an opportunity to recover, and does not mandate the adoption of this type of mechanism if that opportunity does not manifest. Basing a rate design via historical test year usage and standards is the appropriate manner to set rates in Arizona. So, the

---

[19] See Attached Exhibit 3 to Musgrove Direct Testimony.

[20] See Tr. at 1142:3-4 and 1146:3-4, which are the sources for the figures used in the example.

[21] Tr. at 1166:20 – 1167:1.

[22] Tr. at 978 – 980; 1184:9-18. See also Tr. at 1139:2 – 1140:9 where Mr. Musgrove disagrees that the CMT promotes the concept of gradualism in rates.

Commission does not – as a matter of law – have to adopt the CMT, even if natural gas use continues to decline. Staff further contends that, as an issue of fact for the reasons stated above, Southwest has not met its burden justifying adoption of such a drastic measure.

Therefore, the problem of not achieving rate of return should be addressed with more traditional rate design methods rather than a CMT[23]. Staff has striven to achieve a more cost-based rate design without ignoring other important policy considerations when designing rates. In other words, Staff understands the need for greater revenue stability for Southwest, but gradualism, affordability, conservation and other factors cannot be ignored. As will be discussed below, Staff believes its rate design is a better balancing of these interests than Southwest's proposed design. Increase contributions from developers could also be part of the solution.[24]

Finally, the Nevada Commission, while recognizing that Southwest has not achieved its overall authorized rate of return in that state, did not approve a similar mechanism that Southwest proposed.[25] Since Southwest contends that even with the CMT Southwest's overall authorized rate of return will not be achieved, then Southwest's rate of return deficiency does not address the problem even if conservation was the cause.[26] As stated above, Staff disagrees that conservation is the predominant cause. Finally, Staff endorses a hypothetical capital structure, recognizing Southwest's problem achieving its overall authorized rate of return. For all of these reasons and based on the wealth of evidence against its adoption, Staff urges the Commission not to approve Southwest's proposed CMT.

E. If adopted, the CMT should apply to all customer classes.

If the Commission does decide to adopt the CMT, Staff recommends that the CMT apply to all classes. Staff, in Mr. Musgrove's Direct Testimony, highlights why limiting the CMT to just residential classes would be unfair. Residential customers should not be the only class of customers bearing additional carrying costs, providing additional margin to Southwest, and losing the benefit of

[23] Musgrove Surrebuttal Testimony at 4:20 – 5:8.
[24] Tr. at 1159:7-14.
[25] See Public Utilities Commission of Nevada ("Nevada Commission") Order No. 04-3011, Exhibit S-22, at ¶ 285.
[26] Tr. at 596:5-7.

Commission review without ample reason to do so.[27] Although residential customers are the majority of Southwest's customers and Southwest has not been able to achieve its authorized margin from residential customers, this alone does not justify limiting the CMT to residential customers. Other customer classes may have more ability to conserve and may have more incentive to conserve. Sufficient evidence was not presented indicating that the elasticity of natural gas use by other customer classes is significantly different than for residential customers. In light of the above, Staff opposes any limitation of the CMT solely to residential customers and believes Southwest has not met the burden to do so.

III. RATE DESIGN

Staff's rate design is a balancing of multiple factors – gradualism, affordability, conservation – with revenue stability. Southwest's concern to recover its rate of return authorized by the Commission is a legitimate one. Staff's rate design moves significantly toward cost-based rates and toward revenue stability. This is why Staff continues to support declining bloc rates, when inverted-bloc rates have been recommended for other utilities. But Staff believes other factors must be considered, beyond Southwest's proposal in this case.

A. Staff's Rate Design is a fair and reasonable balancing of the multiple rate-design factors.

Staff recommends retaining a declining bloc rate structure rather than the flat rate structure Southwest advocates. However, Staff recommends a smaller bloc differential as well as smaller first blocs in the summer and winter.

Southwest admits its rate design is for revenue stability.[28] However as Staff has clearly demonstrated, Southwest's approach front-loads costs in the basic service charge and first bloc.[29] Staff's rate design incorporates other factors, including gradualism and affordability for customers.[30] Though Southwest tries to argue that if it does not recover all of its fixed costs or margin in a basic

[27] See Musgrove Direct Testimony at 10 – 13.
[28] Tr. at 276:16 – 277:2.
[29] See Surrebuttal Testimony of Robert G. Gray, Exhibit S-16, at 9:11-21.
[30] Tr. at 278:8-23.

service charge it will be exposed to risk, but risk is inherent for all utilities with volumetric pricing.[31] And no party is recommending all margin be put into the basic service charge here, because that would be a radical proposal with huge adverse impacts to ratepayers. But under Southwest's rate design proposals, single family households would have either a 50 or 100 percent increase in their basic service charge.[32] All residential customers would see significant basic charge increases, from $8 to $12 with the CMT or $16 without the CMT.[33] By switching more of the fixed costs into a flat-rate monthly charge customers will have less of an incentive to conserve their usage and thus reduce their bills. Additionally, although Southwest claims a direct impact on its bottom line to increased conservation, there is a public interest in conservation of a precious and finite natural resource that must be acknowledged. Southwest's rate design, however, harms a customer's ability to conserve that limited resource. In fact, under Southwest's proposed rate design, a current customer maintaining a higher consumption level would be given a price break because her consumption would fall into the cheaper second-tier rate proposed by Southwest.[34]

Southwest's cost-shifting proposal further violates Staff's goals of gradualism and conservation by its dramatic proposals in the volumetric rates, for per therm recovery. For the first volumetric bloc of rates, Southwest is asking to almost double its per therm recovery from approximately 49 cents per therm to 84 cents per therm with the CMT. Without the CMT, Southwest asks for 66.5 cents per therm (but note that the basic rate charge requested by Southwest in this circumstance would be $16 instead of $12 with the CMT).[35] Meanwhile, the second bloc volumetric rate drops precipitously from 40 cents per therm to 25 cents per therm with the CMT and 15 cents without the CMT.[36] Southwest admits that its rate design is structured to put less of an impact on customers who use higher amounts of gas.[37] While conversely, Staff's proposed rate design lessens the impact on those customers who use less than the average amount of gas.[38] And while Southwest

[31] Tr. at 1201:16-25.
[32] Tr. at 283:10-17.
[33] Tr. at 284:5-14.
[34] Tr. at 205:16 – 206:3.
[35] Tr. at 285:15 – 286:17.
[36] Tr. at 286:19-23.
[37] Tr. at 290:18 – 291:6.
[38] Tr. at 291:7-23.

does not believe that lower usage customers have less discretion as to their gas usage, Southwest also admits it has never done any studies – demographic, elastic or otherwise - to substantiate its beliefs.[39] Southwest's proposed rate design is too drastic and adversely impacts conservation.

As to Staff's concern about affordability, it must be remembered that outside of the rate design question, Southwest is expecting its PGA to hit its ten cent cap coming this January 2006.[40] That means that a customer using 105 therms a month, will experience an increase of $10.50 on her bill, regardless of which rate design is accepted.[41] Additionally, Southwest is likely to ask the Commission to allow a surcharge to recover the $30 million PGA bank balance. That would equate to approximately 5.5 cents a therm, or more, on top of any rate design proposal.[42] Southwest contends that it will lose its high-use customers to electric-service providers, which will then increase costs to the other customers. Southwest then contends, apocalyptically, that additional customers then might leave Southwest and further drive up prices for those few who stay. Under Southwest's view, conservation will then actually cease since more people will be using electricity, which it contends is less-energy efficient in its use of natural gas. Even Southwest, however, acknowledges its argument is circular and what may start as a trend can certainly be reversed.[43] Ironically, Southwest claims it is not concerned about current gas customers but the new home market.[44] Yet, currently Southwest is servicing 900,000 customers in Arizona – a substantial and stable customer base.[45] Southwest has also been experiencing seven percent yearly growth.[46]

Rate design boils down to designing rates that balance the various factors in a way that impacts to customers are not too severe and which promotes important policy goals, all while allowing the Company an opportunity to achieve its authorized rate of return. Staff' rate design achieves this balancing to a greater degree than Southwest's proposal. Unfortunately, Southwest's proposal knocks this balance out of whack and too much toward its focused goal of revenue stability.

[39] Tr. at 291 – 293.
[40] Tr. at 297:14-21.
[41] Tr. at 298:15-19.
[42] Tr. at 299 – 301.
[43] Tr. at 323:16-324:1.
[44] Tr. at 324:7-10.
[45] Tr. at 1216:15-16.
[46] Tr. at 389:9-10.

This results in extreme changes to the rate design that hurts the goals of gradualism, conservation and affordability, especially to low-income and low-use customers. Staff urges the Commission to support Staff's rate design because it balances the interests the Commission is and has been concerned about.

B. Staff recommendations on specific tariffs are reasonable and should be adopted.

This subsection summarizes Staff's testimony and recommendations regarding specific tariffs. Staff recommends:

- Continuing to encompass both single and multi-family residential customers within the G-5 tariff as there are a relatively small number of multi-family customers within the customer class and there are no compelling reasons to split the existing customer class into subclasses. Staff recommends increasing the basic service charge on the G-5 tariff from $8.00 to $9.70 and reducing the first summer and winter blocs by five therms each from 20 to 15 and 40 to 35 respectively. Furthermore, Staff recommends increasing the per therm rate charge on the first and second blocks.
- Retaining the G-10 low income customer tariff. In addition, Staff recommends retaining the present $7.00 service charge for the G-10 customers and the current 20 percent discount on the first 150 therms in the high usage winter months – when it is most needed – rather than Southwest's proposed 15 percent year round discount. Staff proposes that Southwest retain the present $24 charge for the normal service establishment charge and $32 for expedited service establishment. Staff further recommends that within 90 days of the date of the final order in this proceeding that Southwest begin adding, for its Low Income Rate Assistance ("LIRA") report, a complete accounting for the LIRA bank balance for the most recent 12 month period. The accounting report should include individual listings of all inputs into the LIRA bank balance each month.
- Retaining the G-15 tariff for residential gas customers for air conditioning. Those customers have significantly different usage patterns from general residential customers. Staff recommends that the G-15 tariff continue to reflect the G-5 tariff in general, except in the second summer usage bloc, for which Staff recommends an increase in the per therm rate.
- Eliminating the G-16 special residential gas service for electric generation tariff. Applicable

customers are already taking service under the G-60 tariff which is more favorable to residential electric generators.

- Not creating a new subclass within the G-25 commercial customers at this time. Staff further recommends not changing the demand charge calculation formula from using the customer's coincident peak to the non-coincident peak in light of the potential that customers may have already structured their operations and consumption so as to reduce consumption on Southwest's peak month. Staff recommends increasing the basic service charge and the per therm rate for each subclass in the G-25 tariff.
- Shifting G-35 customers to the G-25 tariff, because the Department of Defense has no objection to this shift.[47]
- Making available the G-60 electric cogeneration tariff to all electric generation customers. Staff further recommends Southwest develop and propose provisions within the G-60 tariff providing protections for the system and other core customers from the potential impacts of 5 MW or larger customers.
- Increasing the per therm rates for the G-40 air conditioning gas service and G-45 street lighting gas service tariffs.
- Increasing the service charge and per therm rates for the G-20 master-metered mobile-home park service, G-55 gas service for compression on customer premises, and G-75 small essential agricultural user gas service tariffs.
- Retaining the off-peak basic service charge at zero and the on-peak basic service charge increase, as well as the per therm rate increase on the G-80 natural gas engine gas service tariff.
- Finally, eliminating tariff sheet fourteen because it duplicates information shown in other tariff pages, and placing the limited amount of non-duplicative information in footnotes on tariff sheet thirteen.

[47] Tr. at 1197:23 – 1198:2.

C. Staff recommends a four-hour service window and altering the bill format to include information on the Energy Share program, in addition to other items, as being in the public interest.

While customer-service and billing-related issues in this case are few, Staff believes its recommendations will improve the level of customer-service for Southwest's customers.

Staff recommends that Southwest adopt a four-hour service window within six months of the Commission order in this proceeding. Southwest's present practice requires customers to stay on premises all or most of the day for technicians to provide service. Staff believes this to be unreasonable. UNS Gas, Inc., a major gas provider in Arizona, has a four-hour service provision in its tariff.[48] Under Southwest's current practice, it does not notify the customer that a four-hour timeframe is available. Instead, only a customer who knows about the possibility of a four-hour timeframe will know to request it. Currently, only 10 to 12 percent of all orders actually have an appointment period.[49] Although Southwest argues that its customer service scores are excellent, it is still unreasonable to not implement a four-hour service window. Furthermore, since the customers do not know that a four-hour window is an option, they do not know that they could complain about the timeframe. In order for Southwest to accomplish a required four-hour window timeframe, it states it would have to have a more "sophisticated" system than it has now and that it would take more staff.[50] Southwest, however, has done no studies, nor did it provide any data to back up these assertions.[51] Additionally, Southwest's existing system has inherent inefficiencies embedded within its scheduling practices. Southwest's scheduling system cannot tell if two customers within the same neighborhood have appointments in the same day.[52] By requiring a four-hour window, Southwest has the possibility of streamlining its system, improving efficiencies and improving its customer to employee ratios.

Staff also recommends altering the bill format. Southwest bills should provide a place on the bill for customers to elect to make donations to the Energy Share program to begin with the implementation of the new rates from this rate proceeding. Although in pre-filed testimony Southwest opposed Staff's recommendation to add a place on a customer bill for donating money to the Energy

---

[48] See UNS Gas, Inc. Rules & Regulations Section 6, Service Lines and Establishments, Exhibit S-27.
[49] Tr. at 94:22-95:3.
[50] Tr. at 97 – 99.
[51] Tr. at 99.
[52] Tr. at 101:3.

Share program, it now appears that opposition has been dropped.[53] While the Company is certainly not enamored by the proposition, it does understand that it would give an easy opportunity for customers to help those less fortunate pay their gas bills.[54]

In addition, Staff recommends inclusion of explanations for two billing line items, "Base Tariff Rate" and "Rate Adjustment" on the back of the bill. Likewise, Staff recommends Southwest remove from the back of the bill, information relating to customer bill issues only relevant to California and Nevada customers from Arizona customer bills to make space for information better explaining the bill to Arizona customers. Staff advocates continuing the practice of retaining customer deposits 12 months rather than extending that period to 24 months. Staff further recommends keeping the interest rate paid on customer deposits at six percent. Finally, Staff further recommends that anytime Southwest initiates participation in a new natural gas docket at FERC which relates to its service in Arizona, Southwest be required to provide Staff with a copy of their initial filing in that docket.

Finally, with regards to the eligibility for the LIRA program, Staff recommends that eligibility be determined using the actual federal figures, which are updated yearly.[55] Some confusion had existed over what figures were to be used, but the language reflecting use of the federal figures incorporated into the LIRA tariff is now mutally understood. Staff believes the federal numbers are preferable to figures from the Maricopa Community Action Association ("MCAA") numbers, which are estimates not updated yearly.[56] Southwest agrees with this change.[57]

D. Staff supports a surcharge to for specific funding of the Gas Technology Institute since Staff is familiar with that entity.

Staff recommends Southwest participate in funding the Gas Technology Institute's ("GTI") research and development efforts in energy markets using a service surcharge taken as a percentage addition to all customers excluding G-30 and B-1 up to a $681,712 cap. Southwest has stated that it

---

[53] Tr. at 302 – 303.
[54] Tr. at 303:13-24.
[55] Tr. at 1271:2-6.
[56] Id.
[57] Tr. at 1280:5-10

would prefer not to just fund a single entity, but that the dollars be earmarked generically as natural gas-related research. Then the Company, with Commission oversight, would determine which organizations would receive funds annually.[58]

Although alternative organizations may exist that perform similar research and development functions as GTI, Staff specifically desires GTI because designating a specific target destination better ensures that the desired research will take place. Additionally, Staff's recommendation was focused on the funding model for the GTI utilization and operations technology development programs, anticipating GTI's minimum adequate funding levels. Staff has had successful experience with these GTI programs and GTI's contributions to the natural gas industry. Should Southwest devote funding to alternative research efforts, GTI's research funding will be inadequate.

Staff further recommends Southwest file its proposed list of GTI programs it desires to participate in with Docket Control each year 30 days prior to submission to GTI with a short description of each program. This would give Staff an opportunity to provide input on Southwest's choices. Finally, Staff recommends annually resetting Southwest's GTI surcharge beginning with the April billing cycle, based upon prior calendar year sales and prior year recoveries, and that the GTI surcharge be reflected in the Rate Adjustment column of its Statement of Rates, with a separate footnote identifying the current level of the GTI surcharge.

IV. PURCHASE GAS ADJUSTOR

The PGA, unlike the CMT, recovers actual costs for a rapidly-fluctuating cost of natural gas. It has been in existence for some time now. Staff recognizes the need to preserve this adjustor, but recommends several changes to it, including raising the PGA bank balance trigger and the interest rate on that balance. Also, setting the base cost of natural gas at zero and reflecting the entire cost of gas in the PGA will allow customers to better understand the changing costs of natural gas.

A. The base cost of gas should be set at zero and the entire natural gas cost reflected in Southwest's PG A.

In order to simplify the billing process and to reduce customer confusion amid an

[58] Tr. at 475 – 476.

environment of potentially significant gas price fluctuation, Staff recommends setting the base cost of gas to zero. The PGA would incorporate the full commodity cost of natural gas on a single line item making it clear to consumers the full and changing cost for natural gas. To avoid short term confusion from the change, Staff recommends Southwest develop customer education materials explaining the changes. Southwest agrees with this proposal.[59] Additionally Southwest has no objection to Staff's recommendation to keep the $0.10 per therm band for the first twelve months following the implementation of new rates, comparing the new monthly PGA rate to the sum of the current base cost of gas and the monthly PGA rate in prior months when the base cost of gas was not zero.[60] Placing the entire cost of natural gas in one location – the PGA – simplifies understanding of how the cost of natural gas and the usage of it can affect their monthly bills.

B. Staff's adjustments to the correct PGA are reasonable and reflect the current realities of rising natural gas prices.

Staff recommends retaining the present PGA mechanism and structure with alterations to its bank balance trigger and the interest rate applied to the bank balance. Due to the growth in consumption and increased price volatility, Staff recommends increasing the present $22.4 million bank balance trigger to $29.2 million which would improve flexibility in dealing with increases in price volatility and consumption.

Also, to remove uncertainty generated by non-publication of the interest rate figures presently used to set the bank balance's interest rate, Staff recommends shifting to the monthly one-year nominal Treasury constant maturities rate contained in the Federal Reserve's H.15 Statistical Release or its successor. Further, Staff recommends that if such interest rate information should not be available for a given month the rate for the prior month may be used. If the rate information remains unavailable on a recurring basis, then Southwest may file with the Commission to replace the rate with another interest rate similar in nature to the then applicable rate.

Staff further recommends a Southwest Officer certify, under oath by affidavit attached to each PGA report, that all information provided is true and accurate to the best of the Officer's information

---

[59] Tr. at 270:3-8.
[60] Tr. at 270:9-21.

and belief. This is a standard provision the Commission has adopted in prior cases regarding adjustor reports for electric and natural gas companies. Even though Southwest still does not agree that there is a need for Officer certification, Staff continues to support this position.[61]

Finally, in the PGA report where Southwest lists its purchases, Staff recommends that Southwest split the term purchases into groups showing fixed price contracts and other variable contracts (index contracts, for example). Likewise, Staff recommends that Southwest begin specifically identifying in its monthly PGA reports what the average and median usage levels are for its G-5 and G-10 schedules for the given month.

V. GAS PROCUREMENT PRACTICES

The Commission has specifically identified price stability as one of the goals of the gas procurement process for Arizona local distribution companies such as Southwest Gas. As having a mix of purchased gas coming from both the spot market and through long term fixed price contracts greatly improves price stabilization, Staff recommends that Southwest further explore procurement opportunities so that greater price stability to core customers can be achieved. Southwest has agreed to a number of Staff's requests including:

- conducting a fuel and procurement best practice review;
- separating the contract award group from the invoice approval authority within Southwest;
- reviewing Southwest's current portfolio evaluation software;
- eliminating the use of cell phones in term bidding and negotiating activities; and
- having a neutral party observe these activities.[62]

Additionally Southwest has agreed to review its definition of stock ownership rules for involved employees.[63] Staff believes that involved employees should not have "substantial" stock ownership and that the term "substantial" needs to be defined within 60 days of this case being

[61] Tr. at 454 – 455.
[62] Tr. at 433:19 – 434:3 and 471:8-16.
[63] Tr. at 434:4-11.

decided.[64]

Southwest also agrees with Staff witness Robert Gray's concern regarding El Paso, shortfall of service and other lateral issues.[65] Staff recommends that Southwest develops its distribution system to serve new customer demands, it should build any needed laterals and related infrastructure itself, rather than having El Paso build those laterals, unless significant costs or other reasons justifies otherwise. In light of El Paso's apparent desire to inhibit the development of competitive natural gas infrastructure in Arizona and the uncertainty whether the Federal Energy Regulatory Commission ("FERC")will address these matters, Staff also recommends Southwest pursue opportunities to acquire El Paso laterals to weaken El Paso's monopoly control over local natural gas infrastructure.

VI. DEMAND-SIDE MANAGEMENT

Staff supports, in general, the demand-side management ("DSM") programs proposed by Southwest. Staff, however, cannot support the continued inclusion of $50,000 in DSM programs that are connected to the Low-Income Energy Conservation ("LIEC") program. This program is not a form of energy conservation and as Southwest admitted, it is including it under the DSM program because it is following the lead of Arizona Public Service Company.[66]

Southwest is requesting to increase its DSM funding from $600,000 to $4.385 million. [67] Staff supports $4.335 million of this DSM funding (minus the $50,000 for LIEC described above). Southwest does not support Staff's request of having the semi-annual DSM Progress Reports certified by an Officer of the Company.[68] Although Southwest says it would support having someone lower in the chain of responsibility sign an affidavit as to the report's truthfulness, the purpose of this request is to ensure top executive accountability, given the level and purpose of the funding. Staff supports Commission approval a general funding level now. But Staff also recommends that within 120 days of the order's effective date, the Company submit detailed DSM program descriptions, including cost

[64] Tr. at 1108.
[65] Tr. at 455:14-456:17.
[66] Tr. at 192
[67] Tr. at 177:6-10.
[68] Tr. at 194:4-20.

effectiveness tests. The specific programs, including more refined funding requirements, would then need to be approved by the Commission.[69] Staff also supports continuing to use the existing DSM adjustor mechanism, which equates to an annual surcharge to Southwest customers.[70] But this DSM surcharge would be applied to all customer classes, including the commercial sector.[71]

And although Southwest is requesting the CMT be approved before increasing its DSM requirements, it admits that no quantification of any financial disincentives have been associated with any of the DSM programs.[72] In addition, Staff cannot support the Company's late-requested performance incentive related to the DSM programs This performance incentive was only requested by Southwest in its rebuttal case and only after the Southwest Energy Efficiency Project/Natural Resources Defense Counsel ("SWEEP/NRDC") proposed it in their direct testimony.[73] Southwest's incentive proposal fails to include any incentive-program details, including cost and program particulars. Finally, Staff recognizes that natural gas is a precious commodity and thus supports efforts to use this resource more efficiently. So, DSM programs should be expanded and augmented regardless of any performance incentives or approval of the CMT. As Southwest has stated, it will abide by any Commission DSM order in good faith, even without an incentive program or the CMT.[74]

VII. REVENUE REQUIREMENTS

As stated above, Staff is recommending about a 15.99 percent increase in Southwest's revenue requirements. This equates to a revenue increase of $51,625,135, with a fair value rate base of $1,171,566,722 and a fair value rate of return of 6.63 percent[75].

There are four revenue requirements areas – aside from the cost of capital – where Staff and Southwest disagree:

[69] Tr. at 177, 186-187.
[70] Tr. at 177-178.
[71] Tr. at 178, 182.
[72] Tr. at 178 – 179.
[73] Tr. at 191:22-25. See also Rebuttal Testimony of Vivian Scott, Exhibit A-14, at 6.
[74] Tr. at 191 – 192.
[75] See Surrebuttal Testimony of James J. Dorf, Exhibit S-4, at Schedule DRR-1.

1. Management Incentive Program ("MIP").

2. Transmission Integrity Management Program ("TRIMP").

3. Sarbanes-Oxley ("SOX").

4. Adjustment to deferred income taxes ("ADIT") based on changes made to federal Internal Revenue regulations, resulting in an increase to rate base of $21 million.

For the first three areas, Staff believes that all of these expenses benefit shareholders as well as ratepayers. Consequently, the expenses should be shared between shareholders and ratepayers. For TRIMP, Staff is recommending that a surcharge mechanism be established in this rate case. The costs for TRIMP are mostly projected costs not yet known and measurable, and the TRIMP program is less than two years old. The costs to implement SOX are also new and Southwest has not made the case that one-hundred percent of the costs it has incurred to date are going to be recurring. Finally, the fact that the new Internal Revenue regulations are not final, no tax payment was made by the end of the test year. With other changes coming with the passing of the 2005 Energy Policy Act ("EPA"), the recommended changes by Southwest to ADIT resulting in an increase of rate base of about $21 million, should not be allowed.

Finally, the area of Injuries and Damages, which had been an area of dispute between Southwest and Staff, has been resolved. Staff has recognized Southwest's increased premium costs and provision for self-insurance for liability claims. Southwest has agreed to use a ten-year amortization method for the self-insurance of liability claims. Hence, this issue is no longer an area of dispute between Staff and Southwest.

A. MIP is a cost that should be shared equally between ratepayers and shareholders, because all five performance goals benefit both groups equally.

MIP was also a hot topic of debate in Southwest's last rate case. There, the Commission agreed with Staff, and disallowed $727,545, because the Commission recognized that two of the five performance goals are oriented to benefit shareholders.[76] The MIP in this case is the same as in the last rate case. Staff, RUCO and Southwest are all requesting different treatment here than what the Commission authorized in the last rate case, although each party has its own recommendation.

[76] See Decision No. 64172 at 11:24-27, 12:4-8, 13:4-11.

Staff's argument for a 50/50 sharing between ratepayers and shareholders is that both ratepayers and shareholders benefit *equally* from all five performance targets in Southwest's MIP.[77] While Southwest achieving its return on equity benefits ratepayers as well as shareholders, for example, customer service satisfaction and improved customer-to-employee ratio benefits shareholders too. That is because all of the five factors in the MIP also allow shareholders a better chance for a better return on their investment. Staff points out that the five factors comprising the MIP awards were designed to align the interests of ratepayers and shareholders as a basis for calculating the compensation paid out.[78] Thus, Staff believes a 50/50 sharing between ratepayers and shareholders is appropriate, and that is why Staff is recommending a different treatment of this cost from what Staff advocated for in the last rate case.

B. The TRIMP program is a new program where most costs are not yet known and measurable and which benefits both ratepayers and shareholder, thus justifying Staff's proposal for a surcharge to handle TRIMP costs.

TRIMP is a federal program designed to better ensure the safety of natural gas pipelines in high consequence areas, or areas with high population densities. Staff recognizes the importance and necessity of these costs. But as Mr. Dorf for Staff describes in his testimony, much of the requirements under TRIMP commenced in 2004.[79] The program still has significant volatility and a long projection period for the first cycle of TRIMP costs, through 2012.[80] So, much of the costs associated with TRIMP are projected figures or estimates of the costs for TRIMP going-forward.[81] For the estimated TRIMP costs from 2004 through 2012 – a total of $29,340,750 – only $46,651 was incurred during the test-year and only $717,864 was claimed as cumulative TRIMP costs through May 2005.[82] Furthermore, Staff's Pipeline Safety Section testified that costs to implement integrity management programs have been widely-varied throughout the country.[83] So, most of the costs are not actually known and measurable. Staff therefore believes the best treatment of TRIMP costs at this

[77] Tr. at 1083:18-23.
[78] See Dorf Surrebuttal Testimony at 9:23-26.
[79] See Direct Testimony of James J. Dorf, Exhibit S-3 at 7:7-22.
[80] Tr. at 1082:9-12.
[81] Tr. at 631 – 632.
[82] See Dorf Direct Testimony at 8:19-25 and 9:4-6.
[83] Tr. at 1102:21 – 1103:12.

time, is to create a surcharge mechanism with the following characteristics:

- Annual adjustments at the end of the 12th and 24th month, and termination after the 36th month.
- A numerator including actual and projected recoverable TRIMP costs from 2004 through the 36-month period from when rates become effective, subtracting out previously recovered surcharge amounts.
- A denominator including therms projected to be sold over the remaining portion of the 36 months post-decision-period.
- Other details as described in Staff's testimony.[84]

Staff would, of course, monitor this surcharge mechanism if adopted. Once a cost history is established for TRIMP, a normalized cost can be determined in the future and possibly included in base rates. Staff believes Staff's proposed surcharge mechanism best balances the need to advance an important and federally-mandated program with the need to ensure that ratepayers are protected from paying any more than they should.[85]

Staff also believes sharing of TRIMP costs between ratepayers and shareholders is appropriate. The goal of TRIMP is to ensure the safety of infrastructure, such as gas pipelines. Better insurance of safety, improvement of the ability to site pipelines and reduced damages from unexpected interruptions of gas service are all reasons that balancing of TRIMP costs between shareholders and ratepayers, is reasonable.[86] While the Nevada Commission may have granted Southwest an ability to defer 100 percent of TRIMP costs, the Nevada Commission also stated that ratepayers and shareholders should share in these costs.[87] Staff believes this aspect of the Nevada order should be adopted. But since Staff is recommending a surcharge in lieu of deferral, the 50/50 sharing between ratepayer and shareholder should be approved and implemented here.

---

[84] Dorf Direct Testimony at 11:18-12:9. An example of the surcharge mechanism is provided in Mr. Dorf's Direct Testimony at 13:14 – 14:5.
[85] Id at 12:11-16.
[86] Tr. at 1082.
[87] See Dorf Direct Testimony at 10:17-11:10. See also Nevada Commission Order No. 04-9012 at ¶¶ 36, 37.

C. SOX legislation is recently-enacted and is to protect and benefit shareholders, even though ratepayers also receive benefits, thus justifying Staff's recommendations regarding SOX costs.

SOX costs are costs associated with implementing the tougher accounting standards and tougher internal controls, specifically under Section 404 of SOX.[88] But it is also recently passed legislation.[89] As Staff points out in its testimony, there are multiple articles and publications suggesting that SOX costs will likely go down in the coming years.[90] Thus, Staff believes 75 percent of Southwest's costs for SOX will be recurring, but 25 percent of those costs will likely be non-recurring and should not be included in rates.

Furthermore, SOX was implemented because of recent accounting scandals which resulted in shareholders losing millions of dollars.[91] Staff is recommending a sharing of SOX costs because it recognizes the benefits of internal controls preventing inappropriate costs from being included in the cost of service. Thus, a portion of SOX costs benefits ratepayers. But the main purpose of SOX was to protect shareholders from management impropriety.[92] So, Staff believes a 50/50 sharing between shareholders and ratepayers of SOX costs is appropriate.

D. Southwest's ADIT proposal does not include all of the regulatory changes, is the result of temporary regulations, and is the result of Southwest's discretionary decision to switch accounting methods in 2002, and thus should not be accepted.

Southwest also proposes an adjustment in accumulated deferred income taxes resulting in an increase to rate base of over $21 million. Southwest justifies this by stating that this is also a legislatively-enacted change like the changes to property tax expense that Staff proposed and Southwest accepted. But the two are not synonymous. The property tax adjustments made by Staff are known and measurable changes due to recently enacted state legislation reducing the property tax rate and excluding contributions in aid of construction from the definition of plant.[93] Property tax is an expense item. Staff agreed to use an assessment rate of 24.5 percent for determining property tax

---

[88] Dorf Direct Testimony at 15:9-13.
[89] Sarbanes-Oxley Act of 2002 § 404, 15 U.S.C.A. § 7262 (West. 2005).
[90] Dorf Surrebuttal Testimony at 6:17-25.
[91] Tr. at 560 – 561.
[92] See Dorf Surrebuttal Testimony at 6:25 – 7:4.
[93] See Direct Testimony of Dennis R. Rogers, Exhibit S-5, at 5:15-23.

expense.[94] By contrast, the deferred tax item deals with a method of accounting of capitalizing costs known as the simplified service cost method ("SSCM"). Southwest voluntarily changed from its historical method to the SSCM in 2002.[95] During the mid-year 2005, the United States Treasury Department ("Treasury") adjusted the rules so that the SSCM method was no longer allowed.[96] In other words, in 2005 Southwest will have to change back from the SSCM to its historical method used before 2002. Also, although enacted rules, these are temporary rules. More importantly, while this change was enacted by Treasury, the 2005 EPA also will likely increase the amount of deferred taxes and cause a decrease in the rate base.[97] In other words, the act casts doubt as to whether the entirety of the changes to Southwest's ADIT is really known and measurable. Thus, Staff does not support adjusting ADIT due to one change while ignoring other changes.

Finally, Southwest's proposed adjustment is due to a change in accounting instead of an increase in actual costs. ADIT may have decreased, but Southwest made no tax payment as a result of the adjustment in accounting methods. Changing accounting methods to SSCM was something Southwest did voluntarily. Staff does not believe ratepayers should bear the $21 million increase to rate base because of a voluntary change in accounting methods that occurred three-years ago that now has to be changed back, especially if Southwest made no tax payment as a result of the change in accounting methods.[98] For all of these reasons, Staff does not believe an approximate increase of $21 million to rate base by lowering ADIT by the same amount should be made here.

In summary, with many of the revenue requirement issues between Staff and Southwest – MIP, TRIMP and SOX – Staff is not disputing the reasonableness of the costs incurred. Staff, however, does believe that is not the only question to ask. The other question to ask is whether *all* of the costs are for the benefit of ratepayers. Clearly, MIP, TRIMP and SOX, include benefits specifically for shareholders. This is why a sharing between ratepayers and shareholders is appropriate. Furthermore, the evidence indicates that TRIMP costs are mostly projected costs at

[94] See Surrebuttal Testimony of Dennis R. Rogers, Exhibit S-6, at 2:20.
[95] Tr. at 499:3 – 500:19.
[96] Tr. at 500:20 – 501:1.
[97] Tr. at 497:2-7.
[98] Tr. at 1084:10-12.

present, and SOX costs are likely to be reduced over time. So, Staff's revenue requirements recommendations on these issues balance the relevant factors to get to a reasonable result. With regards to ADIT, since *all* of the federal changes are not known and measurable, and since, unlike property tax expense, this is a rate base issue where no tax payment was actually made, Staff does not believe an adjustment to ADIT that Southwest is recommending is appropriate.

VIII. COST OF CAPITAL

Staff concludes that an overall cost of capital ("COC") of 8.40 percent is reasonable. This is based on a hypothetical capital structure of 40 percent equity and a cost of equity ("COE") figure of 9.50 percent. Staff's analysis for COE looks at current market conditions to derive a COE, versus an over-reliance on historical accounting returns on equity that depends too much on projected numbers, eliminates data asymmetrically, or relies too heavily on certain methodologies. Southwest's original recommendation was for an overall COC of 9.40 percent without the CMT and 9.29 percent with a CMT. This was modified at the evidentiary hearing. Southwest requests a hypothetical capital structure of 42 percent equity and a COE of 11.95 percent without the CMT and 11.70 percent with the CMT. Staff supports using a hypothetical capital structure of 40 percent equity and a COE figure of 9.50 percent.[99] The evidence presented in this case supports Staff's COC recommendations.

A. Staff's recommended hypothetical capital structure should be adopted.

In order to support Southwest's financial integrity, Staff recommends a hypothetical capital structure of 40 percent equity, 5 percent preferred stock and 55 percent debt to determine overall COC. This capital structure contains more common equity and less debt than Southwest management actually used to finance its utility plant. In fact, Southwest's actual equity ratio has fluctuated between 33 and 37 percent for the past 10 years.[100] Staff's recommendation is consistent with past Commission orders for Southwest. Staff sees no compelling reason to adopt a higher equity ratio of 42 percent. To do so would mean ratepayers would pay even more in rates for equity the Company does not have. Furthermore, Staff believes that fifteen-plus years is long enough for ratepayers to

---

[99] Tr. at 870 – 872.
[100] Tr. at 874:2-4.

subsidize Southwest under a hypothetical capital structure and the time has come to require Southwest to devise a plan to achieve an actual capital structure ratio of at least 40 percent equity.

1. Because Southwest has had a hypothetical capital structure in place for fifteen years, Staff's request for Southwest to provide a recapitalization plan is reasonable.

Since 1990, this is the fifth rate proceeding before the Commission in which Southwest has asked for, and will likely receive, the benefits of a hypothetical capital structure.[101] Using such a capital structure involves balancing between the manner in which Southwest chooses to capitalize and the need to ensure Southwest's financial integrity, with how ratepayers can share in the savings the Company realizes using debt rather than equity.[102] While financial integrity is an important goal that benefits shareholders and can benefit ratepayers in the long run, the fact remains that ratepayers pay more when a hypothetical capital structure is used with a higher equity ratio. Ratepayers, in essence, provide financial assistance to Southwest by paying an equity return on a portion of rate base actually financed with debt.[103] And Southwest ratepayers have been doing this for over fifteen years. Southwest contends that Staff's recommendation for Southwest to provide a recapitalization plan is punitive, but all that Staff's recommendation does is provide notice that the actual capital structure may be recommended and adopted in a future rate case if Southwest does not achieve 40 percent equity.[104] Furthermore, capital structure is a management decision and is not merely a product of operating conditions or the market.[105] So, Staff believes that the time has come for Southwest to finally seek and achieve a 40 percent equity ratio in its capital structure, the equity ratio upon which its rates in Arizona have been set for well over a decade. Thus, Staff's request for a recapitalization plan is justified by the evidence presented in this case.

---

[101] Tr. at 797:2-5.

[102] Tr. at 799:17-25. See also Decision No. 57745 at 45:6-17.

[103] Tr. at 874:8-11.

[104] See Direct Testimony of Stephen G. Hill, Exhibit S-1, at 26:10-13. Staff also recommended that it reserve the right to advocate for a reconfiguration of embedded debt costs, depending on how Southwest management chooses to capitalize its operations.

[105] Tr. at 875:2.

2. Staff's recommendation for 40 percent equity in Southwest's hypothetical capital structure accurately represents the average total capital structure for proxy distribution companies with a balancing of ratepayer interests.

Staff disagrees with Southwest's recommendation for 42 percent equity in the hypothetical capital structure. Southwest argues that 42 percent equity ratio adjusts properly for the amount of its investment risk.[106] But while Southwest argues that a capital structure excluding short-term debt should be the basis for comparison, Staff believes it is unreasonable to exclude short-term debt from the capital structure comparison. Short-term debt is still investor-supplied capital that the market is aware of.[107] Bond-rating agencies, when determining overall investment risk include consideration of short-term debt and the Company reports short-term debt in its published financial records.[108] So, Staff believes total capital structure – including short-term debt – is the appropriate basis for comparison to a proxy group of local gas distribution companies (" LDCs").[109]

Finally, the Nevada Commission, in its most recent order establishing Southwest's rates in that state, approved a 40 percent hypothetical capital structure, despite the same arguments presented here that Southwest proffered in that jurisdiction.[110] Clearly, the evidence supports a hypothetical capital structure of 40 percent as the best balancing of Company and ratepayer concerns.

B. Staff's COE recommendation is the optimum estimate that allows Southwest a reasonable return on its rate base.

The cost of common equity ("COE") must always be estimated. Estimating COE is a technical and involved process where multiple methodologies are used and multiple calculations are employed per each method. Staff's COE recommendation is the superior analysis because it best uses the various methods that should be employed and best incorporates all of the publicly available data. Staff's analysis is a rigorous, theoretically sound analysis similar to what has been consistently approved in other Commission orders. Specifically:

- Staff's analysis properly emphasizes the discounted cash flow ("DCF") method, but does not

---

[106] Tr. at 812:14-21.
[107] Tr. at 907:12 – 908:15.
[108] Tr. at 907:23 – 908:7.
[109] Tr. at 898:12-14.
[110] See Nevada Commission Order No. 04-3011 at ¶ 31.

rely solely on that method.

- Staff's analysis uses the capital asset pricing model ("CAPM"), but does not put too much dependence on multiple methods using beta as a measure of risk.
- Staff properly takes into account the current economic climate in its COE recommendation.
- Staff also takes into account Southwest's riskier financial position in recommending a final COE number at the high end of Staff's calculated range.

Staff's COE recommendation is based on sound economic principles, will produce a return commensurate with returns on investment for other LDCs allows the Company to continue to attract capital, adjusts for Southwest's relative risk, and supports the Company's financial integrity.

1. Primary reliance on the DCF model to estimate COE is appropriate and reasonable in this case.

One of the chief criticisms of Staff's COE recommendation is that the DCF model figures too prominently into Staff's analysis. But Staff's reliance on the DCF model is not misplaced, as Southwest suggests. Stephen G. Hill, Staff's Consultant on COC issues in this case, advocates the use of the DCF model as the primary estimator of COC, based on his extensive experience and expertise on COC and his reliance of many learned treatises on the subject. Even Mr. Hanley, Southwest's COC witness and critic of the DCF model in this proceeding, admitted it was "conceptually sound."[111] The Commission, like many other state utility commissions, has accepted the DCF model as a key component to any COE recommendation. In Southwest's most recent rate order, the Nevada Commission endorsed the DCF model as a reliable method to calculate cost of equity.[112] The evidence clearly justifies that primary reliance on the DCF model to determine COE is appropriate.

The problem with inaccurate DCF estimates is not so much with the DCF model itself, but with what variables are plugged the analysis to derive an equity cost estimate. Mr. Hill's analysis conforms to the efficient markets hypothesis to use all the publicly available data. Mr. Hill explains in detail that both intrinsic and external growth factor into his DCF analysis.[113] Historical and projected

[111] Tr. at 730:15.
[112] See Nevada Commission Order No. 04-3011 at ¶ 80.
[113] See Hill Direct Testimony at 28 – 29, 32 - 33, and Appendix B.

growth rates were calculated as part of the DCF analysis. These figures were checked and compared favorably with publicly-available data.[114] Staff's DCF analysis – deriving a 9.20 percent result – is comprehensive, thorough and balanced. Furthermore, Mr. Hill points out the fallacy in over-relying on past or projected returns on equity, since they are accounting figures that do not accurately portray current market conditions.[115] This is because the cost of equity capital is a market-based analysis that depends on the opportunity COC. In other words, COE is the market return investors can make on a similar-risk-investment opportunity; it is not the accounting profit that appears on a Company's income statement. In addition, the DCF was only one part of Staff's overall COE recommendation.

2. Staff's COE estimation properly incorporates additional COE methodologies.

Staff gave appropriate weight to the CAPM in its COE analysis, as well as to two other methodologies. Mr. Hill does not over-depend on those methods relying on beta, which has been criticized as being an unreliable measure of investment risk.[116] In fact, Mr. Hill's DCF model criticized by Southwest produces a more favorable COE figure than the other models Mr. Hill employed.[117] Factoring in the economic climate, such as expectation of higher short-term interest rates in the near term, Staff recommends a COE range between 9.00 percent and 9.50 percent.[118] Furthermore, Staff's ultimate COE recommendation of 9.50 percent at the high end of Staff's range, factors in Southwest's leveraged capital structure and riskier financial position.[119]

3. Southwest's COE estimation has many weaknesses.

Southwest's COE witness, Frank Hanley, goes to great lengths to explain how, using his expert judgment and analysis, a COE recommendation of 11.95 percent, without the CMT, is appropriate. Staff finds many flaws with Mr. Hanley's recommendation, including the following:

- For his DCF analysis of his proxy group of eleven LDCs, Mr. Hanley excludes eight of eleven indicated DCF Return Rates, because it was his opinion that the lower cost rates, anything

---

[114] Hill Direct Testimony at 34.
[115] Tr. at 898:16 – 899:6, 909:5 – 911:1.
[116] Tr. at 877:9-25.
[117] Hill Direct Testimony at 37.
[118] Id.
[119] Id. at 40.

below 9.90 percent, was not indicative of what was being approved in other jurisdictions.[120] But a recent Arkansas Public Service Commission order for the gas utility Centerpoint Energy Arkla, Docket No. 04-121-U and admitted as Exhibit S-20 in this case, approved a COE of 9.45 percent. Mr Hanley's DCF analysis also ignores that the risk for an LDC like Southwest is similar to water, gas, and electric distribution companies, as indicated in Mr. Hanley's attached exhibits to his direct testimony.[121] While Southwest's own risk may be at the higher end of this sub-section, the overall risk of these companies is low compared to the other sub-sections within the Utility and Power Industry Sector.[122] Furthermore, Staff points to a West Virginia decision awarding 7.0 percent COE for a water distribution Company.[123] Thus, other similar-risk firms have received equity returns much lower than Mr. Hanley's arbitrary cut-off of 9.90 percent.

- Accordingly, using Mr. Hanley's own exhibits, the average for all of his DCF estimates for the 11 proxy LDCs is 9.21 percent. This is a more balanced figure than the 10.36 percent number he reports.[124] Staff contends excluding all indicated DCF returns below 9.90 percent cuts off too much of the bell-curve and skews the DCF results upward to a into a level of un-reality and fantasy.
- Including all of the indicated DCF returns from Mr. Hanley's schedules would also fit into the efficient markets hypothesis. This further supports the use of a 9.21 percent, derived from Mr. Hanley's attached schedules. That percent is very close to Mr. Hill's 9.20 percent DCF result.[125]
- Looking at Exhibit FJH-7 from his direct testimony, Mr. Hanley calculates a 7.10 percent growth rate for Southwest, which is an average of Value Line projected growth and Thomson first-call projected five-year growth rate.[126] But the Value Line earnings growth rate of 10.50

---

[120] Tr. at 697. See also Direct Testimony of Frank J. Hanley, Exhibit A-35, at Schedule FJH-7, Sheet 1, FN 6.
[121] See Hanley Direct Testimony, at Schedule FJH-2, Sheets 11-13.
[122] See also Tr. at 754 – 757.
[123] See Hill Direct Testimony at 4.
[124] Tr. at 876:18 – 877:8.
[125] See Hill Direct Testimony at 37.
[126] See also Hanley Direct Testimony, at Schedule FJH-10, Sheet 1.

percent is the highest of *five* Value Line projected growth rates, all of which Value Line publishes and makes available to investors.[127] Despite Mr. Hanley's use of only one of the five growth rates, the efficient markets hypothesis would support using all five growth rates for Southwest. Furthermore, Mr. Hill points out that earnings growth rates alone are not superior to quantitative analysis of underlying growth rate fundamentals.[128] Thus, the 7.10 percent DCF growth rate for Southwest, from Exhibit FJH-7, should also be called into question.

- Mr. Hanley's Comparable Earnings Method ("CEM") analyses, specifically the "conservative conclusions," are based on using 5-Year Projected Rates of Return between 9.90 percent and 20.00 percent. The 9.90 percent has already been discussed above as also being the minimum authorized return on equity per Mr. Hanley's incomplete analysis. But the maximum authorized return on common equity for utilities, based on Mr. Hanley's own exhibits, was 12.3 percent.[129] If Mr. Hanley used the minimum authorized equity return for utilities as the lower boundary and as a "reality check," then it is only reasonable to use the highest utility return awarded as the upper boundary. The result of averaging those projections between 9.90 percent and 12.3 percent results is 10.85 percent. Staff contends that this average would be the more accurate reflection, if the CEM were to be used at all. But Mr. Hanley's CEM analysis is based on accounting returns and is not a market-based equity cost estimate, further casting doubt on the CEM's reliability to determine an appropriate COE.
- A big problem with the CEM is that it essentially tries to compare unregulated companies in wholly different industries with a regulated LDC, Southwest, who has a captive customer base within its service territory. While some measures of risk may share some similarities, comparing unregulated companies to regulated utilities is comparing apples to oranges at best, and may actually be comparing two entirely different food groups. Combine this with the fact that beta is incorporated into Mr. Hanley's CEM analysis, and the CEM is redundant on top of

---

[127] See Hanley Direct Testimony, at Schedule FJH-10, Sheet 2.
[128] See Surrebuttal Testimony of Stephen G. Hill, Exhibit S-2, at 19; Tr. at 875:20 – 876:4.
[129] See Hanley Direct Testimony, at Schedule FJH-15 and Rebuttal Testimony of Frank J. Hanley, Exhibit A-36, at Schedule FJH-24.

other models using beta, such as CAPM.[130] Staff contends the CEM is more unreliable and that the CAPM is preferred. The Commission has also acknowledged the use of the CAPM model towards determining a reasonable COE. Even so, Southwest's CAPM analysis also has flaws that bias the COE number upward.

- Much of Mr. Hanley's CAPM analysis as well as his risk premium analysis, were based on projected blue chip forecasts. These forecasts were higher than the actual yields for both treasury and corporate bonds.[131] So, both the risk free rates and the market-risk premiums in Mr. Hanley's model are artificially high because using actual figures would have lowered both variables.[132] While Mr. Hanley's modifications to his CAPM analysis – lowering the result by 50 basis points – at the evidentiary hearing are more reflective of actual events, they are still projected numbers that are not as reliable to what actually has occurred.[133] In other words, Mr. Hanley's numbers came down because current projections are 50 basis points lower than the original projections. But current bond yields are over 100 basis points below these current projections[134]. Staff contends that actual numbers (i.e. the current bond yields), in Exhibit S-21 for example, should have been used to determine risk free rates and market-risk premiums.

The point of highlighting the above is to show that Southwest's original recommendation of 11.95 percent is too high and is not supportable when all of the evidence is considered. The fact that Southwest has been unable to achieve its rate of return does not justify inflating the COE figure beyond what is appropriate and reasonable. Throwing money at the problem by allowing an equity return that exceeds the Company's costs is not appropriate. Staff's analysis represents a more reasonable balancing of the more reliable methodologies to determine COE without over-emphasizing particular theories, concepts or variables.[135]

Staff's recommendation is not close-minded to the realities faced by Southwest in the past few

---

[130] Tr. at 769-73.
[131] Compare Hanley Direct Testimony, at Schedule FJH-13, Sheets 3-4, FN 2, and at Schedule FJH-11, Sheet 6, FN 2, to the Federal Reserve H.15 Statistical Release, September 19, 2005, Exhibit S-21.
[132] Tr. at 761-67.
[133] Tr. at 878:14-16.
[134] Tr. at 878:23 – 879:3.
[135] Mr. Hill provides further testimony critiquing Southwest's COE determination, such as a reliance on the ECAPM method, which is detailed in his Direct Testimony at 40 – 58.

years. Staff's COE recognizes increased risk Southwest incurs due to its leveraged positions, and encourages the Company to improve its capital structure to achieve lower debt costs and improved financial health. Staff's recommendation for a 40 percent equity ratio and a hypothetical capital structure recognizes declining per customer usage, like the Nevada Commission did when it approved the same capital structure. Other facets of Staff's recommendations in this case seek to provide Southwest with improved revenue stability and a greater opportunity to achieve its rate of return. But Southwest's COC recommendations would disturb the delicate balance between ratepayer and shareholder interests far out of whack. A 42 percent hypothetical capital structure and an 11.70 percent to an 11.95 percent COE – even Southwest's modified COE recommendation of about 11.20 percent to 11.45 percent – does not appropriately balance ratepayer and shareholder interests. The reliable evidence is presented by Staff and supports Staff's recommendations.

VIIII. CONCLUSION

This case boils down to burden and balance. Southwest failed to meet its burden for the CMT, and it should be rejected. Staff's rate design balances all the important factors that justify its rate design over Southwest's. Staff believes increased funding for DSM programs further advances efficient use of natural gas and conservation. While most of Southwest's requested increase is justified by the record in this case, Staff believes that TRIMP, MIP and SOX are costs for which shareholders should bear partial burden. Staff recommends a hypothetical capital structure that balances ratepayer and shareholder interests. Finally, Staff's COE recommendations is a balanced recommendation using methods the Commission has relied on for years while Southwest's analysis does not consider all the relevant data. Staff requests this Commission approve and adopt Staff's recommendations:

- To reject the CMT because it is a disincentive to conserve, has the potential to greatly impact customers and because conservation has not been shown to be the predominant reason as to why Southwest cannot achieve its overall authorized rate of return.
- To adopt its rate design that balances revenue stability with gradualism, affordability and conservation.

- To adopt Staff's recommendations on DSM, gas procurement, the LIRA program and other customer-service and billing issues discussed above.
- To only partially accept TRIMP, MIP and SOX costs.
- To set up a surcharge mechanisms for TRIMP costs, because most of those costs are projected numbers.
- To approve a hypothetical capital structure of 40 percent equity, 5 percent preferred stock and 55 percent debt.
- To approve a COE of 9.50 percent for an overall COC of 8.40 percent.

RESPECTFULLY SUMITTED this 4th of November, 2005.

Jason D. Gellman
Diane M. Targovnik
Attorneys, Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007
(602) 542-3402

The original and thirteen (13) copies of the foregoing were filed this 4th day of November, 2005, with:

Docket Control
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

COPIES of the foregoing were mailed this 4th of November, 2005 to:

Andrew W. Bettwy
Karen S. Haller
Southwest Gas Corporation
5241 Spring Mountain Road
Las Vegas, Nevada 89102

Michael W. Patten, Esq.
ROSHKA, DeWULF & PATTEN
One Arizona Center
400 East Van Buren Street
Suite 800
Phoenix, Arizona 85004

Raymond S. Heyman, Esq.
TUCSON ELECTRIC POWER COMPANY
One South Church Street
Suite 200
Tucson, Arizona 85702

Thomas L. Mumaw
Karilee S. Ramaley
Pinnacle West Capital Corporation, MS 8695
Phoenix, Arizona 85004
Attorneys for APS

Cynthia Zwick
Executive Director
Arizona Community Action Association
2700 3rd Street, Suite 3040
Phoenix, AZ 85004

Peter Q. Nyce, Jr.
General Attorney
Regulatory Law Office
Department of the Army
901 North Stuart Street
Arlington, VA 22203-1837

Dan Neidlinger
Neidlinger & Associates
3020 North 17th Drive
Phoenix, AZ 85015

David L. Diebel
City Attorney's Office
Civil Division
City Gall Tower, 7th Floor West
255 W. Alameda Street
Tucson, Arizona 85701

Scott S. Wakefield
RUCO
1110 West Washington Street
Suite 220
Phoenix, Arizona 85007

Walter W. Meek
AUIA
2100 N. Central Avenue
Suite 210
Phoenix, Arizona 85004

Tim Hogan
Arizona Center for Law in the Public Interest
202 East McDowell, Suite 153
Phoenix, Arizona 85004

Tom Campbell
Lewis and Roca LLP
40 North Central Avenue
Phoenix, Arizona 85004

Dwight D. Nodes
Assistant Chief Administrative Law Judge
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Ernest G. Johnson, Director
Utilities Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Christopher Kempley, Chief Counsel
Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Deborah Amaral

Deborah Amaral, Secretary to
Jason D. Gellman