BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS
KRISTIN K. MAYES - CHAIRMAN
GARY PIERCE
PAUL NEWMAN
SANDRA D. KENNEDY
BOB STUMP

IN THE MATTER OF THE APPLICATION OF UNS GAS, INC. 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 UNS GAS, INC. DEVOTED TO ITS OPERATIONS THROUGHOUT THE STATE OF ARIZONA.

DOCKET NO. G-04204A-08-0571

UNS GAS, INC.

REBUTTAL TESTIMONY

July 8, 2009

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Rebuttal Testimony of

David G. Hutchens

on Behalf of

UNS Gas, Inc.

July 8, 2009

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I. INTRODUCTION.

Q. Please state your name and address.

A. My name is David G. Hutchens. My business address is One South Church Avenue, Tucson, Arizona 85701.

Q. Did you file Direct Testimony in this proceeding?

A. Yes, I did. In addition to my Direct Testimony, I will be adopting the Direct Testimony of Gary A. Smith in this case. Accordingly, my Rebuttal Testimony also addresses issues that arose in connection with Mr. Smith's Direct Testimony.

Q. What is the purpose of your Rebuttal Testimony in this proceeding?

A. My Rebuttal Testimony addresses several areas. First, I provide an overview of UNS Gas' response to the Direct Testimony of Arizona Corporation Commission ("Commission") Staff, the Residential Utility Consumer Office ("RUCO") and the Arizona Community Action Association ("ACAA"). In particular, I will address our substantial concerns with the inadequate revenue requirements proposed by Commission Staff and RUCO. Second, I respond to the Direct Testimony of Commission Staff witness Ms. Rita R. Beale concerning gas procurement practices. Third, I respond to the Direct Testimony of Cynthia Zwick concerning the previous use of pay day loan offices as an option for paying customer bills. Specifically, I provide information regarding the transition to the use of Walmart stores for customer payments. Fourth, I discuss the upcoming closure of three UNS Gas office lobbies for bill payments. Fifth, I discuss the Federal and State requirements for training of natural gas personnel, Pipeline Safety Manuals, Policies & Procedures, recordkeeping, and operations and maintenance for natural gas facilities. Finally, I request the Commission to grant the relief requested in Docket No. G-04204A-

08-0050 regarding current restrictions on the Company's use of certain third-party contractors. That relief will result in reduced expenses in the future.

II. REVENUE REQUIREMENT CONCERNS.

Q. What is UNS Gas' response to the revenue requirements proposed by Commission Staff and RUCO?

A. The revenue requirement proposals of Commission Staff and RUCO are significantly lower than the revenue requirement requested by UNS Gas. Upon review of Commission Staff's and RUCO's testimony, we conclude that this lower number is, in part, due to their deployment of calculations and methodologies that deviate from those recently approved and ordered by the Commission.

We have determined that if Commission Staff and RUCO had calculated UNS Gas' revenue requirement adhering to the methodologies approved by the Commission, their recommendations would be approximately $9 million and $5.4 million, respectively. The current recommendations of Commission Staff's and RUCO's consultants are not justified, are unreasonable and, if adopted by the Commission, will not allow UNS Gas an opportunity to earn a reasonable return on its investment.

Q. Please provide an example of how Commission Staff's and RUCO's recommendations differ from recent Commission decisions.

A. A good example is the "fair value" rate of return proposed by Commission Staff and RUCO. This issue has been thoroughly debated in a number of cases, and has resulted in at least two court appeals of Commission decisions. Rather than relitigate this issue, UNS Gas proposed a "fair value" rate of return calculation taken directly from a recent Commission decision based on Commission Staff's testimony in that proceeding.

In contrast to this, both Commission Staff and RUCO propose approaches that are inconsistent with recent Commission decisions on fair value. For example, Commission Staff witness Mr. Parcell's primary recommendation is to apply a zero percent (0%) return on the fair value increment – the same approach that the Commission rejected in the recent Southwest Gas rate order (Decision No. 70665). That approach resulted in a proposed return of only 6.03% here. Mr. Parcell's alternate recommendation, in which he applied a 1.25% return on the fair value increment, resulted in a return of only 6.37%.

RUCO's witness, Mr. Smith, declares (at RCS-2, Sch. A, page 2, col. A) that the fair value approach in one recent Commission decision is "way too high" for UNS Gas. Rather than looking to a recent Commission decision for guidance or providing any detailed analysis, Mr. Smith proposes a fair value return of 5.38% based on his own judgment, a value that is only 0.01% higher than the 5.37% return he obtained through a zero percent (0%) weighting of the Company's fair value rate base.

Neither Commission Staff nor RUCO provide any justification for their deviation from Commission-accepted methodologies for determining fair value. Accordingly, Commission Staff's and RUCO's fair value rate of return proposals should be rejected and UNS Gas' proposed rate of return of 6.8% should be adopted by the Commission.

Q. Please provide another example of how Commission Staff and RUCO have disregarded recent Commission rulings in their recommendations in this case.

A. Commission Staff's approach to customer annualization rejects the approach approved in Decision No. 70011 (November 27, 2007). This is especially odd because in that case Commission Staff argued strongly in favor of the traditional approach to customer annualization, and in Decision No 70011, the Commission agreed. Accordingly, UNS Gas employed the approach in its determination of its revenue requirement in this case.

However, Commission Staff now attacks the same traditional approach that it so strongly supported. The traditional approach has become no less traditional or appropriate in the short time since Decision 70011 was issued. Commission Staff's deviation from the traditional approach results in a significant increase in operating revenue of $1,499,373, which Commission Staff proposes to use to decrease our revenue requirement by the same amount. RUCO also ignored the customer annualization methodology used in Decision No. 70011 and simply rejected the Company's adjustment. Again, neither Commission Staff nor RUCO provide sufficient justification for their rejection of the Commission's approved approach for customer annualization. Consequently, their approaches should be rejected and UNS Gas' approach approved.

Q. Do you have another example of deviation by Commission Staff?

A. Yes, legal expense is another example. These costs are significant and ongoing, but they do vary from year to year with the ebb and flow of litigation and regulatory proceedings. Because of this variance, legal expenses often require normalization, as Commission Staff witness Dr. Fish acknowledges in his Direct Testimony at page 6, lines 6-7. In Decision No. 70011 (at page 20), the Commission approved UNS Gas' proposed legal expense after considering UNS Gas' historical costs for three years, and projected costs for one year. Unfortunately, Commission Staff and RUCO did not follow this approach in this case. Rather, they both propose significant reductions to legal expense based on a short-term, anomalous reduction in legal expense. Such anomalies are the very reason why legal expenses are normalized, as the Commission recognized in Decision No. 70011. Further, Commission Staff and RUCO fail to consider the legal costs associated with the recently filed El Paso Natural Gas Company rate case at FERC (Docket No. RP08-426), which is yet another rate case in a continuing series of such cases. This deviation resulted in a proposed reduction of that expense by $305,984 for Commission Staff and $217,674 for RUCO, which reduced our revenue requirement by the same amount. As is the case with the prior examples cited, Commission Staff and RUCO have offered no explanation for their rejection of the Commission's prior treatment of these costs.

Q. UNS Gas has proposed some methods different from those approved in Decision No. 70011, correct?

A. Yes, there are a limited number of issues where UNS Gas has proposed a treatment different than the Commission used in our last rate case. However, each instance was justified and supported by a rationale that meets the concerns previously raised by the Commission. For example, in Decision No. 70011 the Commission rejected UNS Gas' request for post-test year plant, noting that we made no attempt to segregate revenue-producing plant from non-revenue producing plant. In this case, we directly responded to this concern by limiting our request for post-test year plant to non-revenue producing plant. Thus, our proposal is different than the one rejected by the Commission in Decision No. 70011 and is consistent with its rationale for the treatment of post-test-year-plant. Moreover, UNS Gas' proposal for non-revenue producing post-test year plant is consistent with a number of Commission decisions that have included such plant in rate base, including Decision Nos. 65350, 66849, 67279, 68176 and 68864. Thus our request is firmly grounded in recent Commission decisions.

Another example is our proposal to delay the deduction of customer advances from rate base, until the related plant funded by the advance is in service. Once the related plant is in service, the net result to rate base is zero – the plant funded by advances is not included in rate base. In rejecting this proposal, the Commission expressed concern that the proposal was linked to our CWIP proposal in that case, and that the problem was essentially of our own making and would not have occurred if we had not requested CWIP. In this case, we showed how this problem persists, and how the timing difference between recognition of advances and recognition of the related plant-in-service reduces existing rate base, essentially wiping out existing shareholder investments. And while our proposal does differ from Decision No. 70011, it is grounded in traditional ratemaking principles.

Q. Do you believe Commission Staff's recommendations regarding Call Center expenses are fair?

A. No, I do not. Although Commission Staff does not appear to challenge that actual test year Call Center costs, it has recommended that the Call Center expense be reduced to the level in the prior rate case – a reduction of $484,798. Dr. Fish unsuccessfully attempts to justify (at page 27, lines 2-3) the reduction on the ground that the number of service orders for UNS Gas has decreased. Obviously, "service order" calls are not the only types of calls handled by the customer service representatives and are clearly inadequate as the only metric by which to judge the Call Center expense. In fact, call volume by UNS Gas customers for all types of calls has increased by over 150% since the prior rate case test year. Additionally, the duration of those calls has increased. Moreover, the last rate filing was for a 2005 test year and the level of expense in that test year was an annualized amount because the Call Center was only serving UNS Gas for part of the test year and was simply understated. Labor and other costs also have risen since the 2005 test year, something that Dr. Fish does not acknowledge. The test year costs for the Call Center are the actual allocated costs for UNS Gas during the test year.

Moreover, UNS Gas believes that the use of the Call Center, which is located in the State of Arizona, is the most efficient method for serving its 125,000 customers. UNS Gas does not believe a dedicated UNS Gas call center would result in lower costs. UNS Gas would need separate facilities, phone lines, computer systems, phone systems, call center employees and supervisors. The Company is performing in a more cost effective manner by partnering to share the significant fixed costs with two other utilities and should not be denied full recovery of the reasonable cost to serve the demands of its customers. It would be a disservice to UNS Gas' customers to have to reduce the call center activity because of the decrease in expenses recommended by Commission Staff and RUCO.

Q. Do you have other concerns with Commission Staff's and RUCO's recommendations?

A. Yes, I am concerned by Commission Staff's and RUCO's recommended return on equity ("ROE"). Mr. Grant will address these issues in detail, but Commission Staff's recommendation is unrealistic. Commission Staff proposes a ROE of 10%. This is the same ROE approved for Southwest Gas in Decision No. 70665 – a case for which the hearing was held in June 2008, well before the current financial crisis reached its peak. It is the same ROE approved in the last UNS Gas rate order – a case where the extraordinary growth facing UNS Gas was an issue. With all of the uncertainty in the utility, construction and housing industries – and the overall slumping economy – Commission Staff's recommendation fails to recognize these more risky factors.

Q. What is the overall result of Commission Staff's and RUCO's approach?

A. Under Commission Staff's and RUCO's proposals, UNS Gas will <u>never</u> earn its authorized return, nor will the Company have even an <u>opportunity</u> to earn a reasonable return on its investments. Mr. Grant explains the impact of Commission Staff's and RUCO's recommendations, if adopted, on UNS Gas's financial condition – in summary, it is not good as it virtually assures that UNS Gas will continue to earn less than its authorized return. Thus, UNS Gas will have to consider filing back-to-back rate cases in a desperate attempt to "keep up". Such a result does not benefit anyone, especially our customers. The public interest is not served if the utility, Commission Staff and RUCO are embroiled in seemingly never-ending regulatory proceedings.

III. GAS PROCUREMENT ISSUES.

Q. Please provide an overview of the Direct Testimony of Commission Staff Witness Ms. Beale.

A. Ms. Beale conducted a prudency review of the Company's gas procurement operations. Her review encompassed gas procurement activities for the period of January 2006 through June 2008. Ms. Beale also reviewed the UNS Gas decision to terminate its full requirements service arrangement with BP Energy, the Company's purchased gas adjustor ("PGA") bank balances, pipeline capacity planning, and purchasing strategies and policies.

Q. Please summarize Ms. Beale's findings.

A. Ms. Beale found the purchase prices for natural gas to be reasonable and the quantity of pipeline capacity purchased to be prudent. She deemed the decision to terminate the agreement with BP Energy to be rational and identified several benefits to UNS Gas customers. Ms. Beale was able to reconcile over $240 million of PGA costs over the review period to within $10,000. Finally, Ms. Beale found the Company's strategies and policies to be generally reasonable.

Q. Did Ms. Beale offer recommendations in her Direct Testimony?

A. Yes. Ms. Beale made ten recommendations with respect to UNS Gas' procurement practices in her Direct Testimony; I will respond to each of those recommendations.

Q. Please comment on Ms. Beale's first and second recommendations that UNS Gas seek potential counterparties to optimize excess pipeline capacity and its use of Asset Management Agreements.

A. UNS Gas agrees to continue to seek opportunities to extract value from excess pipeline capacity. UNS Gas began using Asset Management Agreements in March of 2009 for

Transwestern pipeline capacity. Instead of executing a long-term Asset Management Agreement, UNS Gas limited the terms of its Agreements to single months so that other counterparties could be approached regarding the optimization of capacity. The result of this limited term was that UNS Gas received another offer in May of 2009 through a new Asset Management Agreement that increased the profit sharing percentage for UNS Gas. To date, Asset Management Agreements have been executed with two different counterparties. In order to increase the potential number of bidders to provide Asset Management Agreements, UNS Gas is developing its own preferred Asset Management Agreement for use in a more expansive request-for-proposal ("RFP") format.

Q. Please comment on Ms. Beale's third recommendation for UNS Gas to include supplemental pipeline commodity imbalance information its monthly PGA report to the Commission.

A. We concur that including the *UNS Gas Core Market/System Supply Imbalance Report* (the "Imbalance Report") may be useful information in reconciling PGA costs reported in the monthly report which UNS Gas files with the Commission. UNS Gas agrees to provide the Imbalance Report as a supporting document to its monthly PGA filing.

Q. What is your response to Ms. Beale's fourth recommendation to conduct gas procurement training to Energy Settlements and Billing personnel?

A. The Energy Settlements personnel have been a part of the BP Energy full requirements process since UniSource Energy Corporation acquired Citizens Utilities Company's ("Citizens") Arizona gas and electric assets. The amount and scope of transactions employed by UNS Gas became more transparent as the responsibility for optimization of UNS Gas' load shifted from BP Energy to internal personnel. Additionally, the particular Energy Settlements employees assigned to UNS Gas have shifted during the past few years. We agree with the recommendation to conduct training for the Energy Settlements department employees on long-term hedging, day-ahead procurement, and pipeline capacity optimization.

Q. What is your response to Ms. Beale's fifth recommendation regarding the consideration of purchasing during traditional hurricane months?

A. We agree that UNS Gas should continue to evaluate gas purchasing opportunities during the traditional hurricane months. The Gas Price Stabilization Policy, while placing a hold on non-discretionary hedging during the months of August through October, does not prohibit discretionary hedging during those times. If it is determined that a hedge should be executed during those months, UNS Gas personnel may execute the hedge after receiving approval from the Risk Management Committee. This approval process is outlined in the Gas Price Stabilization Policy.

Q. What is your response to Ms. Beale's sixth recommendation that UNS Gas document instances when it deviates from its monthly forward hedge transaction plan?

A. We agree with the recommendation for UNS Gas to continue its policy of documenting occurrences of hedge plan deviations. The example given by Ms. Beale citing an instance of deviation from UNS Gas' forward monthly hedge plan was from an execution date of November of 2005. At that time, UNS Gas had already executed the non-discretionary hedges (under the legacy hedging policy from Citizens of three hedge events in January, March, and July) for 2005. The hedge instance in November of 2005 was a discretionary hedge meant only to hedge the balance of the winter season. The request for this discretionary hedge, and the Risk Management Committee approval, were documented as required.

Q. Please comment on Ms. Beale's seventh recommendation for the Gas Price Stabilization Policy to be updated with changes that occurred with the termination of the BP Energy agreement.

A. We concur that the Gas Price Stabilization Policy should be updated as changes resulting from the termination of the BP Energy agreement become evident. While UNS Gas made incremental changes to the Policy at the end of 2008, several operational changes have occurred with the distribution of duties that were still in flux at year-end. The policies are reviewed annually, however, and significant changes, such as the migration away from BP Energy, will produce effects that may require more frequent updates. Moving through the first full 12-month period post BP Energy termination, additional changes may be identified which require policy modifications.

Q. Please comment on Ms. Beale's eighth recommendation for the Gas Price Stabilization Policy to be updated at least annually.

A. We concur with this recommendation. Since adoption of the Gas Price Stabilization Policy, UNS Gas protocol has been to conduct a review of the policy at the end of each calendar year.

Q. Please comment on Ms. Beale's ninth recommendation that all individuals involved in gas procurement sign the Policy acknowledgement form.

A. We agree with the recommendation that all personnel involved in gas procurement sign an Acknowledgement Form. Personnel who will sign the Acknowledgement Form include those employees who perform tasks related to gas scheduling, transportation contracting, risk management and risk control.

Q. Please comment on Ms. Beale's tenth recommendation that there should be a single "owner" of the Gas Price Stabilization Policy.

A. We agree that a single person should be designated to modify the Gas Price Stabilization Policy. This ensures that proper control of updates and modifications is maintained.

IV. EXPLORING ALTERNATIVE PAYMENT METHODS.

Q. Has UNS Gas provided its customers with alternative ways in which to pay their bills, pursuant to Decision No. 70011?

A. Yes. In UNS Gas' last general rate case, concerns were raised about customers paying their gas bills at payday loan centers. As a result, UNS Gas reviewed other options by which its customers would be able to make cash payments. UNS Gas filed information related to "PayScan" with the Commission on February 22, 2008, and indicated that Circle K had been selected as the initial retailer to accept customer payments in Arizona. During the testing phase of the project, however, it was discovered that Circle K lacked the requisite software infrastructure to process payments. As a result, other retailer options were explored, and UNS Gas ultimately came to an agreement with Walmart.

Q. What is the current status of the UNS Gas' / Walmart payment arrangement?

A. This payment option became available to all UNS Gas, as well as Tucson Electric Power Company ("TEP") and UNS Electric, Inc. ("UNS Electric") customers in April of 2009; all Walmart sites in the state of Arizona will accept cash payments. The Company's web site has been updated to reflect this change and bill inserts were used to communicate the new payment option to customers.

UNS Gas has requested that check cashing and/or other outside payment center locations utilize signage, provided by UNS Gas, indicating that these locations will be independently charging to process payments, effective July 1, 2009. Also effective July 1, 2009, UNS Gas has discontinued its payment of the fees the Company was covering associated with payments made at check cashing centers and/or other outside payment locations. UNS Gas chose this cut-off date because it wanted to provide customers sufficient notice of the payment change and to have a trial period to make sure the Walmart arrangement worked as anticipated.

V. UPCOMING UNS GAS LOBBY CLOSURES.

Q. Could you please discuss certain upcoming operational changes regarding UNS Gas' office lobbies?

A. Yes. On October 1, 2009, UNS Gas will close its lobbies located in Nogales, Kingman and Lake Havasu. UNS Gas customers located in these areas will be notified of the lobby closures via bill inserts that will be included with customers' September bills. Additionally, signs will posted beginning September 1, 2009, at the Nogales, Kingman and Lake Havasu office lobbies, notifying customers of the October 1st closure.

UNS Gas will also notify Walmart stores of the lobby closures, and of the possibility that customer traffic at Walmart may increase as a result.

Q. How will UNS Gas customers be able to make payments after the lobby closures?

A. UNS Gas customers have multiple ways in which they can make payments, including via (i) US mail; (ii) the Company's drop boxes, located in certain grocery stores; (iii) the internet; (iv) SNAP (Sure No-hassle Automated Payment); (v) Walmart (cash and debit); (vi) a customer service representative; (vii) IVR (Interactive Voice Response); and (viii) independent payment processors (such as America's Cash Express and Western Union).

VI. REGULATORY OPERATIONAL MANDATES.

Q. Is UNS Gas inspected by both the Federal and State Pipeline Safety Inspectors?

A. No. The Commission receives an annual Federal Certification from the U. S. Department of Transportation Pipeline and Hazardous Materials Safety Administration ("PHMSA") to act on behalf of PHMSA in the enforcement of Federal Pipeline Safety Regulations. The Commission has received a certification to enforce these regulations on both interstate and intrastate pipeline operators within the State of Arizona. The Commission has legislative authority to enforce Federal Pipeline Safety Laws pursuant to A.R.S. § 40-441 and 40-442.

Q. How is UNS Gas impacted by these requirements?

A. A very stringent set of Federal and State Pipeline Safety regulations dictate how UNS Gas must operate its facilities. UNS Gas must have Operations and Maintenance Procedures, Emergency Manuals, Construction Standards, Materials Manuals and Procedures, Employee Training Standards and Operator Qualification Training Programs. UNS Gas must devote substantial resources to complying with these extensive requirements.

Q. Has UNS Gas ever been assessed a penalty for violation of the Pipeline Safety Regulations during an inspection by the Commission?

A. No, we take these requirements very seriously – compliance is a top priority. UNS Gas has never been penalized for violating the Pipeline Safety regulations.

Q. Is the cost incurred by UNS Gas (i) to train its employees, and (ii) to maintain existing operation and maintenance, emergency and recordkeeping, required by the Commission Pipeline Safety regulations?

A. Yes.

VII. <u>REQUEST FOR PROPOSED ORDER REGARDING THIRD PARTY CONTRACTORS.</u>

Q. Do have any further testimony or requests you would like considered by the Commission?

A. Yes. On January 25, 2008, UNS Gas filed a request in Docket No. G-04204A-08-0050 for the Commission to waive the following requirements placed on the Company by Decision No. 66028: (i) refrain from the use of contract personnel for the performance of operation and maintenance functions, such as leak surveys and valve maintenance; and (ii) independently inspect all new construction work performed by contractor personnel regarding the installation of new service lines and main extensions. In its Application, UNS Gas noted that other local distribution companies use contract personnel in Arizona and that the Company's predecessor, Citizens, benefited from that practice as well.

Regarding the independent inspection of work performed by contractor personnel, UNS Gas states that since the acquisition it has entered into a sole contractor partnership with Northern Pipeline ("NPL") to comply more efficiently with the requirement; prior to the acquisition, Citizens was utilizing four (4) different pipeline contractors. Moreover, from its inception after Decision No. 66028, UNS Gas' Pipeline Safety Inspection Audits for the past five (5) years have been excellent. We anticipate that the elimination of the independent inspection requirement will help reduce operating expenses in the future.

Commission Staff responded to UNS Gas' Application on February 14, 2008. In its report, Commission Staff recommended that the Application for the waiver be approved. Citing UNS Gas' safety record, the progress of the Company beyond the transitional period of operations following the acquisition, and its operating history, Commission Staff stated that it believes these requirements are no longer necessary. Commission

Pipeline Safety Staff has also reviewed, and supports, the Company's request for a waiver. However, the Commission has not yet taken action on those recommendations.

UNS Gas respectfully requests that the Commission approve a waiver of these requirements as part of its order in this case.

Q. Does this conclude your Rebuttal Testimony?

A. Yes, it does.

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Rebuttal Testimony of

Kentton C. Grant

on Behalf of

UNS Gas, Inc.

July 8, 2009

TABLE OF CONTENTS

I. INTRODUCTION.

Q. Please state your name and address.

A. My name is Kentton C. Grant. My business address is One South Church Avenue, Tucson, Arizona.

Q. Did you file Direct Testimony in this proceeding?

A. Yes.

Q. On whose behalf are you filing your Rebuttal Testimony in this proceeding?

A. My Testimony is filed on behalf of UNS Gas, Inc ("UNS Gas" or the "Company").

Q. What is the purpose of your Rebuttal Testimony in this proceeding?

A. The purpose of my Rebuttal Testimony is to rebut portions of the direct testimony of Mr. David C. Parcell and Mr. Robert G. Gray filed by the Arizona Corporation Commission Staff ("Staff"), as well as portions of the direct testimony of Mr. William A. Rigsby and Mr. Ralph C. Smith filed by the Residential Utility Consumers Office ("RUCO"). The subject matter addressed in my Rebuttal Testimony includes: (i) the cost of equity capital to UNS Gas, (ii) the ability of UNS Gas to earn its cost of equity capital, (iii) the determination of a fair rate of return ("ROR") on fair value rate base ("FVRB") and (iv) the appropriate rate of interest to apply to under- and over-recoveries of gas costs under the Company's purchased gas adjustor ("PGA") rate mechanism.

Q. Please summarize the essential points presented in your Rebuttal Testimony.

A. Certainly. With respect to the cost of equity capital, the 10.0% cost recommended by Mr. Parcell and the 8.61% cost recommended by Mr. Rigsby both fall well short of the actual cost of equity to UNS Gas. In making these recommendations, both witnesses have failed to properly take into account the substantial deterioration in capital market conditions and increase to the cost of capital that has occurred since September of 2008. As both witnesses acknowledge, the ability of a public utility to attract capital on reasonable terms is an important policy objective when setting rates. However, by recommending an authorized return on equity ("ROE") that is well below the Company's actual cost of equity, the end result of these recommendations would be to deny UNS Gas the ability to attract capital on reasonable terms.

Regarding the Company's ability to actually earn its cost of equity capital, neither Mr. Parcell nor Mr. Rigsby presented any analysis on this point even though both witnesses acknowledge the importance of the *Hope* and *Bluefield* decisions rendered by the United States Supreme Court. Despite this lack of analysis, both witnesses make summary statements suggesting that UNS Gas will be able to attract capital on reasonable terms if the rate recommendations of Staff and RUCO are adopted by the Commission. Such suggestions are clearly off the mark in this case.

Assuming Staff's recommended rate increase is adopted, UNS Gas estimates that it will be able to earn a ROE of only 6% to 7% in the first full year under new rates. Assuming RUCO's recommended rate increase is adopted, the Company estimates it would be able to earn a ROE of only 5% to 6%. These returns on equity capital are substantially below the 11.0% cost of equity presented in my Direct Testimony, and are also well below the unreasonably low cost estimates of 10.0% and 8.61% recommended by Mr. Parcell and Mr. Rigsby, respectively. Under these circumstances, it is difficult to see how the overall rate recommendations of Staff and RUCO can be characterized as being just and reasonable, or in the public interest.

With respect to the determination of a fair ROR on FVRB, Mr. Parcell, Mr. Smith and Mr. Rigsby all claim to provide recommendations that are consistent with the ruling in Decision No. 70441 by the Arizona Corporation Commission ("Commission") involving Chaparral City Water Company ("Chaparral"). While my non-legal understanding is that the Commission has some latitude in setting a fair ROR on FVRB, the methodologies proposed by Staff and RUCO in this case are clearly not the same as the methodology used by the Commission in Decision No. 70441, nor are they the same as was subsequently recommended by Staff in Docket No. W-02113A-07-0551. The returns on FVRB recommended by Mr. Parcell and Mr. Smith are well below the values that would be obtained using the approach adopted in Decision No. 70441. Although Mr. Parcell and Mr. Smith offer lengthy explanations supporting their ultimate recommendations, neither witness offered any substantive analysis showing why, in the case of UNS Gas, a different approach should be used. This lack of substantive analysis, including the impact of their recommendations on UNS Gas' financial situation, is why the Commission should find that Mr. Parcell's and Mr. Smith's recommendations on a ROR on FVRB is too low in light of the need for UNS Gas to maintain its financial integrity and have access to capital on reasonable terms.

Finally, with respect to the appropriate interest rate to be applied to under- and over-recoveries of gas costs under the PGA, I agree with Mr. Gray that it would be preferable to use a benchmark rate for which monthly averages are readily available. However, the simple fact of the matter is that UNS Gas cannot borrow at the interest rate currently used for the bank balance -- the three-month financial commercial paper rate published by the Federal Reserve. Under cost of service ratemaking principles, UNS Gas should be provided with an opportunity to recover its actual cost of borrowing when it is required to carry an under-recovered balance of purchased gas costs. This rate is currently equal to the London Interbank Offered Rate ("LIBOR") plus 1.0%. In my Rebuttal Testimony I offer a straightforward process for identifying the monthly average rate for three-month LIBOR rate, and provide an alternative recommendation that would simply add 1.0% to the financial commercial paper rate currently used to accrue carrying costs on the PGA balance.

II. COST OF COMMON EQUITY CAPITAL.

A. Rebuttal of Staff Witness David C. Parcell.

Q. Mr. Grant, please summarize your view of the cost of capital testimony filed by Staff Witness David Parcell.

A. Certainly. While Mr. Parcell has agreed with the Company's proposed capital structure and cost of debt, he has recommended a cost of equity of 10.0% for UNS Gas. This value is a full 1.0% below the cost proposed by UNS Gas and is well below the Company's cost of equity in the current economic environment. All three of his analyses, which rely on a Capital Asset Pricing Model (CAPM), a Discounted Cash Flow (DCF) model and a Comparable Earnings (CE) approach, contain significant flaws that serve to significantly understate the cost of equity capital to UNS Gas.

Q. What comments do you have with respect to Mr. Parcell's use of the CAPM?

A. While Mr. Parcell did not give much weight to his CAPM analysis in formulating his recommendation, his use of the CAPM is flawed since his market risk premium does not adequately reflect the cost of risk currently priced into debt and equity securities in the capital markets.

Q. Please elaborate on Mr. Parcell's calculation of the market risk premium.

A. Similar to the approach I took in my Direct Testimony, Mr. Parcell used historical returns on common stocks and U.S. Treasury Bonds to derive a long-term historical risk premium. This historical risk premium was then used as a proxy for the expected market risk premium currently required by investors to invest in a market portfolio of common stocks. During periods of relative calm in the capital markets, this approach to estimating the expected market risk premium is a reasonable approach. However, during periods of significant turbulence in the capital markets, when the willingness of investors to take on risk is seriously reduced, the use of an historical market risk premium as a proxy for the current expected risk premium is not appropriate.

Q. Please explain why the historical market risk premium is not applicable in today's capital markets.

A. Recent events in the capital markets should make this point readily apparent. As acknowledged by Mr. Parcell, the capital markets have been impacted by a financial crisis of extreme proportions. On page 14 of his Direct Testimony, lines 16-21, Mr. Parcell provides the following commentary on recent events:

> It is apparent that recent and current economic/financial circumstances are radically different from any that have prevailed since at least the 1930s. The recent deterioration in stock prices and the decline in U.S. Treasury bond yields and increase in corporate bond yields reflect the "flight to safety" that describes the extreme reluctance of investors to purchase common stocks and corporate bonds while moving investments into the very safe government bonds.

Based on this description, and the abundance of market evidence supporting it, it is readily apparent that investors have become much more risk averse as a result of the ongoing financial crisis. Since the failure of Lehman Brothers in September 2008, the returns demanded by investors on U.S. Treasury securities have plummeted while the returns required on investments in corporate bonds and stocks have increased significantly.

Because U.S. Treasury securities are perceived as having lower risk than corporate bonds and stocks, this increased spread between Treasury securities and corporate securities shows that investors are demanding a higher risk premium from corporate securities than in the past. In short, the cost of bearing risk has increased significantly. Consequently, the historic market risk premium does not reflect the current risk premium demanded by investors. This increased aversion to risk has affected the both the cost and availability of capital to corporations, including those in the gas utility industry.

Q. What specific evidence can you cite regarding the recent increase to the cost of capital for utilities?

A. Exhibit KCG-14 attached to this Rebuttal Testimony shows the additional return demanded by investors for an investment in public utility bonds relative to U.S. Treasury bonds. The Exhibit delineates that the average spread between the returns required on public utility bonds and U.S. Treasury bonds remained fairly stable until August of 2007, when it began rising in response to broader market concerns over mortgage-backed securities and the health of certain financial institutions. However, in September of 2008 this credit spread spiked significantly higher, indicating a strong shift away from corporate securities and into U.S. Treasury securities.

Further evidence regarding the recent increase in capital costs can be seen in Exhibit KCG-15, which shows recent required returns on both A-rated and Baa-rated public utility bonds where required interest rates on these securities also spiked in September of 2008. Since that time, required returns on A-rated public utility bonds have returned to levels that are comparable to pre-crisis conditions. However, reflecting the decrease in investor risk tolerance, the required returns on lower quality Baa-rated public utility bonds, have remained much higher than those observed during the pre-crisis era. UNS Gas is currently rated at Baa3 by Moody's, which is the lowest investment grade rating assigned by

Moody's.[1] It should therefore be readily apparent, based on the absolute level of bond yields, as well as the credit spread between higher quality and lower quality debt securities, that the cost of capital for utilities has increased, particularly for lower-rated utilities like UNS Gas.

Q. Are you saying that the cost of equity capital has increased for public utilities as a result of recent market developments?

A. Yes. An investment in the common stock of a utility is inherently more risky than an investment in the utility's bonds. As evidenced by the widening of credit spreads between public utility bonds and U.S. Treasury bonds, and between A-rated public utility bonds and lower quality Baa-rated public utility bonds, it is apparent that investors in public utility securities are demanding much higher returns for every increment of risk to which they are exposed. Additionally, this increase in investor risk aversion is at least partially responsible, if not entirely, for the large sell-off in public utility common stocks that has taken place since mid-2008. In light of this empirical market evidence, it is reasonable to conclude that the cost of equity capital for public utilities has also increased significantly.

Q. You mentioned the large sell-off in public utility common stocks. Can you provide more information on this recent event and its implications for the cost of equity for utilities?

A. Although utility stocks have fared better than most common stocks, the shares of most publicly-traded utilities have been hit hard since September of 2008. A simple comparison of the average stock price for the gas utility proxy group referenced in Mr. Parcell's Direct Testimony and my own Direct Testimony is very revealing. The stock prices for these ten companies are listed on Exhibit KCG-6 attached to my Direct Testimony and on Schedule 7, page 1, of Mr. Parcell's Direct Testimony. A simple average of the stock prices

[1] Moody's is the only rating agency that issues a credit rating for UNS Gas.

appearing in my Exhibit KCG-6, which is based on pricing data for the month of August 2008, is $35.50. By contrast, the simple average of the stock prices appearing in Mr. Parcell's schedule, which is based on pricing data from February through April 2009, is $31.63. This decline of 11% over a six month time period is quite substantial for an industry that is viewed as being relatively stable when compared with other industries. Although a portion of this stock price decline may be attributable to lower expectations for near-term earnings growth, a much larger factor is the "flight to safety" referenced by Mr. Parcell in his Direct Testimony. Because of this flight to safety and the increased reluctance of investors to expose themselves to risk, the availability of equity capital has decreased while the cost of this capital has increased for utilities and other corporations in general.

Q. Please summarize your concerns with Mr. Parcell's use of the CAPM.

A. In short, while Mr. Parcell used a risk-free rate that reflects the recent "flight to safety" in the capital markets, he failed to adjust his historical market risk premium to also reflect this flight to safety. By failing to adjust his market risk premium to reflect the substantial increase in the cost of bearing risk, he significantly underestimated the cost of equity for the companies included in his proxy groups. The range of 7.3% to 7.7% obtained from his CAPM analysis is so low that it does not even cover the cost of borrowing for most of the utilities used in his proxy groups. As may be seen on page 4 of Schedule 2 attached to Mr. Parcell's Direct Testimony, the required return on Baa-rated public utility bonds has ranged from a low of 7.74% to a high of 8.98% over the period October 2008 through April 2009. In order for Mr. Parcell's CAPM analysis to have any credibility at all, one would have to believe that investors would be willing to accept a negative risk premium to invest in the common stock of a Baa-rated public utility. Such a phenomenon is hard to imagine even during normal times, let alone during times of heightened investor risk aversion.

Q. Mr. Grant, does your CAPM analysis suffer from this same flaw?

A. No, it does not. Because my analysis relied on market data from August 2008, a period of relative stability that preceded the massive flight to quality and increase in required risk premiums, no additional adjustment to my historical-based market risk premium was required.

Q. In his Direct Testimony, Mr. Parcell was critical of your use of arithmetic mean returns in calculating an historical market risk premium. Are his concerns valid?

A. No. Because an arithmetic mean return reflects the mathematical average of historical returns realized over each discrete 12 month period, the use of a risk premium based on arithmetic mean returns is more appropriate when calculating a discount rate (*i.e.*, the cost of capital) that is used for discounting future annual cash flows (*i.e.*, dividends and capital gains). By contrast, the geometric mean return, which equals the compound average return earned over a multi-year period, is appropriate for reporting and comparing returns over historical time periods. Since the geometric mean is always less than the arithmetic mean for any series of data having non-constant annual rates of return, Mr. Parcell's application of the CAPM serves to inappropriately understate the cost of equity capital for the companies he examined.

The use of arithmetic mean returns versus geometric mean returns is specifically addressed by Morningstar, Inc., the publisher of historical financial return data cited in the direct testimony of Mr. Parcell as well as in my own direct testimony. On page 59 of the 2009 Yearbook (Valuation Edition) published by Morningstar, the following commentary is provided:

> The equity risk premium data presented in this book are arithmetic average risk premia as opposed to geometric average risk premia. The arithmetic average risk premium can be demonstrated to be most appropriate when discounting future cash flows. For use as the expected equity risk premium in either the CAPM or the

> building block approach, the arithmetic mean or the simple difference of the arithmetic means of stock market returns and riskless rates is the relevant number. This is because both the CAPM and the building block approach are additive models, in which the cost of capital is the sum of its parts. The geometric average is more appropriate for reporting past performance, since it represents the compound average return.

Q. Mr. Parcell also criticized your use of bond income returns instead of bond returns that also incorporate capital gains and losses. What is your response to that concern?

A. It is a widely accepted practice to use bond income returns instead of bond returns that incorporate capital gains and losses. As explained on page 58 of the 2009 Yearbook (Valuation Edition) published by Morningstar, it is more appropriate to use income returns on bonds when estimating the market risk premium:

> Another point to keep in mind when calculating the equity risk premium is that the income return on the appropriate-horizon Treasury security, rather than the total return, is used in the calculation...Price changes in bonds due to unanticipated changes in yields introduce price risk into the total return. Therefore, the total return on the bond series does not represent the riskless rate of return. The income return better represents the unbiased estimate of the purely riskless rate of return, since an investor can hold a bond to maturity and be entitled to the income return with no capital loss.

Q. In addition to criticizing your application of the CAPM, Mr. Parcell also found fault with the Bond Yield plus Risk Premium approach described in your Direct Testimony. Do you have any response to his critique?

A. Yes. On page 43 of his Direct Testimony, lines 16-17, Mr. Parcell states his belief that the "upper portion" of my equity risk premium range is not appropriate. He arrives at this conclusion, at least in part, by focusing his review on data from a shorter and more recent time period. However, as pointed out on page 22 of my Direct Testimony, the range of implied equity risk premiums has drifted lower since mid-2007 due in large part to rising bond yields and the regulatory lag inherent in the utility rate-setting process. By focusing on a shorter and more recent time period, Mr. Parcell has accentuated the impact of regulatory lag in a rising interest rate environment. By contrast, my analysis relied on data from a longer time period, and is therefore less affected by the recent run-up in bond yields and the downward bias in equity risk premiums associated with regulatory lag in a rising interest rate environment.

Q. **On page 44 of his Direct Testimony, Mr. Parcell suggests that a 4.0% equity risk premium would be more appropriate, resulting in a cost of equity of about 10.5%. Even if you accept his lower risk premium of 4.0%, do you agree that this would result in a cost of equity of 10.5%?**

A. No. As may be seen on page 43 of his Direct Testimony, Mr. Parcell based his 4.0% equity risk premium on the spread over yields on Baa-rated public utility bonds, whereas my analysis was based on the spread over the average yield on public utility bonds having ratings from Baa through Aa. Mr. Parcell's 10.5% cost of equity estimate was derived by adding his 4.0% equity risk premium to the 6.48% average yield on public utility bonds cited on page 23 of my Direct Testimony. To be consistent with his derivation of a 4.0% equity risk premium, Mr. Parcell should have added his 4.0% equity risk premium to the 6.98% yield on Baa-rated public utility bonds as of August 2008. Had he done so, he would have concluded that 11.0% is a more appropriate cost of equity estimate. Additionally, had Mr. Parcell added his 4.0% equity risk premium to the 8.03% yield on Baa-rated utility bonds as of April 2009, he would have obtained an even higher estimate of 12.0%. Page 4 of Schedule 2 attached to Mr. Parcell's Direct Testimony contains a summary of recent yields on Baa-rated public utility bonds.

Q. **What comments do you have regarding Mr. Parcell's application of the DCF model?**

A. Mr. Parcell used the constant growth version of the DCF model, which assumes that the dividends and earnings of a company grow at a constant rate on a per-share basis over an infinite time period. Therefore, the selection of an appropriate growth rate can have a huge impact on the validity of the results obtained. Unfortunately, based on a review of the growth rates selected by Mr. Parcell, it is apparent that many of the growth rates he used are unrealistically low, especially when adjusted for inflation. As a result, the cost of equity he determined from his DCF analysis, 9.5% to 10.5%, is much too low.

Q. What has the Commission said about the constant growth version of the DCF?

A. The Commission has often rejected use of the constant growth or single stage DCF when used in isolation. The Commission has recognized that investors do not expect a single, uniform growth rate, explaining that use of the multi-stage DCF "properly recognizes that investors expect both non-constant short-term growth as well as constant long term growth."[2] Thus, the Commission often considers both types of DCF, and averages the results of the two to produce an overall DCF estimate. Staff has proposed, and the Commission has approved, that approach to the DCF in many orders.[3]

Q. Please explain your concern over the growth rates selected by Mr. Parcell.

A. The growth rates used by Mr. Parcell in his DCF analysis can be found in the next to last column of data on page 4 of Schedule 7 attached to his Direct Testimony. These "average" growth rates reflect the numerical average of five growth rates, two of which are based on historical financial data and three of which are forward-looking estimates. If you look carefully at the "average" growth rates used by Mr. Parcell, two things stand out. First, the range of values selected is quite wide, especially for the group of gas distribution utilities labeled as the "Grant Comparable Company Group." Since all of these companies operate within the same heavily regulated industry, and face many of the same threats and opportunities as other firms in this industry, it is unrealistic to believe that investors would expect infinite growth rates ranging from a low of 3.3% to a high of 7.3%. While it is

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[2] Decision 66849 at 22.

[3] See e.g. No. 68176 at page 21 (stating Staff's approach) and 26 (agreeing with Staff); Decision No. 68858 at 25, 28; Decision No. 69164 at 23, 26; Decision No. 69440 at 18, 20; Decision No. 70209 at 27, 30.

possible to expect such a wide range of growth rates for period of three to five years, the timeframe typically covered by stock market analyst estimates, a spread that wide is simply unrealistic for the infinite time period assumed in Mr. Parcell's DCF model.

Second, as I mentioned earlier, some of the growth rates selected by Mr. Parcell are unrealistically low, especially when adjusted for inflation. In his electric utility proxy group, referred to as the "Parcell Proxy Group" in his Direct Testimony, three companies have "average" growth rates below four percent, ranging from 2.5% to 3.5%. In the proxy group consisting of gas utilities, referred to as the "Grant Comparable Company Group" in his Direct Testimony, three companies also have "average" growth rates below four percent, ranging from 3.3% to 3.9%. If the inflation rate of 2.0% discussed by Mr. Parcell on page 50 his Direct Testimony is subtracted from these nominal dollar growth rates, a real rate of earnings growth ranging from 0.5% to 1.9% is obtained for the six companies just described. It is simply unrealistic to believe that investors would expect such a low rate of earnings growth, particularly when real growth in the U.S. economy has averaged approximately 3.4% per year over long periods of time spanning numerous economic cycles and periods of both war and peace. Had Mr. Parcell used more realistic expected growth rates for these six companies, it is likely he would have obtained a cost of equity that is much closer to the results I obtained using a multi-stage version of the DCF model.

Q. What results might Mr. Parcell have obtained had he used more realistic growth rates for the companies he examined?

A. Had Mr. Parcell simply added an additional 1.5% to the growth rates for the six companies identified above, the average growth rate for the electric utility proxy group would have increased from 3.9% to approximately 4.5%, while the average growth rate for the gas utility proxy group would have increased from 5.0% to approximately 5.5%. When these still conservative growth rates are added to the adjusted average dividend yields listed on page 4 of Schedule 7 attached to Mr. Parcell's Direct Testimony, the resulting average cost of equity obtained ranges from 10.1% to 11.1% for the utility proxy groups he analyzed.

Q. Mr. Parcell also relied on a Comparable Earnings analysis to arrive at his recommended cost of equity. Has the Commission rejected this approach in the past?

A. Yes. The Commission rejected the comparable earnings approach in Decision No. 68302 (November 14, 2005), noting that it "has long been discredited for several reasons."[4]

Q. What other comments do you have regarding Mr. Parcell's Comparable Earnings approach?

A. My overall reaction is that Mr. Parcell's analysis should be afforded little, if any, weight. This approach is based on the faulty premise that investors use historical accounting returns on book equity in order to determine the required future returns on common stock investments. Additionally, his conclusions were influenced by an analysis of earned returns for electric utilities, an industry whose historical earnings have been significantly impacted by restructuring efforts and other factors that are not relevant to the gas distribution industry. Finally, assuming the Comparable Earnings approach has any merit at all, Mr. Parcell's extensive commentary on historical market-to-book ratios is inaccurate. The downward adjustment that Mr. Parcell makes to the historically observed returns on equity, due to the presence of market-to-book ratios that are apparently too high - in his opinion, is unwarranted and would be punitive to a company like UNS Gas that must compete for common equity in the capital markets.

[4] Decision No. 68302 at 37-38.

Q. What issues do you have with Mr. Parcell's interpretation of historical market-to-book ratios?

A. First, as stated on page 33 of his Direct Testimony (lines 14-16), Mr. Parcell indicates that in reviewing the realized returns on equity, he evaluated "the investor acceptance of these returns by reference to the resulting market-to-book ratios." Unfortunately, this evaluation of market-to-book ratios is based on an erroneous assumption that market-to-book ratios are somehow indicative of "investor acceptance" of realized returns on equity. The simple fact is that market-to-book ratios for publicly-traded companies are impacted by a wide variety of factors other than historical returns on equity. The numerator of this ratio, the market value of a company's common stock, is driven primarily by forward-looking information and shifting investor preferences, and not by historical or contemporaneous realized returns. Likewise, the denominator of this ratio, the book value of a company's shareholder interest, can be influenced by many factors including changes in accounting guidelines, write-offs of investments, the issuance of new common stock, etc.

The second major flaw in his interpretation of market-to-book ratios is revealed on page 37 of his Direct Testimony, lines 11-13, where Mr. Parcell concludes that "a market price of a utility's common stock that is 150% or more above the stock's book value is indicative of earnings that exceed the utility's reasonable cost of capital." In order for this conclusion to have any validity at all, one would have to believe that 90% of the companies in the gas utility proxy group referenced by Mr. Parcell were over-earning for the period 1992-2001, and that 80% of these same utilities were over-earning for the period 2002-2008. As may be seen on page 2 of Schedule 10 attached to Mr. Parcell's Direct Testimony, the average market-to-book ratio for the gas utility proxy group was 179% over the period 1991-2001 and 183% over the period 2002-2008.

Q. What conclusions, if any, can be drawn from Mr. Parcell's Comparable Earnings Approach?

A. Assuming this approach has any validity at all, the unadjusted returns on equity for the gas utility proxy group should be considered in lieu of the adjusted range derived by Mr. Parcell. As may be seen on page 35 of his Direct Testimony, the average unadjusted historic ROE for the gas utility proxy group (identified as the "Grant Group" in his testimony) is shown to be 11.8% to 11.9%. This is consistent with the average ROE of 11.5% to 12.2% referenced on page 5 of my Direct Testimony, which was derived from Value Line reports for the gas distribution industry for the period 2005-2007. Since UNS Gas must compete for capital with gas utilities earning 11.5% to 12.2%, Mr. Parcell's adjusted range of 9.5% to 10.5% would put UNS Gas at a competitive disadvantage in attracting new equity capital and would not provide the Company with an opportunity to earn a reasonable rate of return. Therefore, it must be rejected as a basis for setting the cost of equity in this proceeding.

Q. Based on your review of Mr. Parcell's Direct Testimony, what conclusions can be drawn regarding the cost of equity for UNS Gas?

A. When corrected for the flaws described above, I believe that Mr. Parcell's analysis fully supports the cost of equity of 11.0% proposed by UNS Gas. Assuming his CAPM analysis is afforded little or no weight, which appears to be consistent with Mr. Parcell's reasoning, any conclusions to be drawn from his testimony would be limited to the results obtained from his constant-growth DCF model, his Comparable Earnings approach and his commentary on the Bond Yield plus Risk Premium approach. The table below summarizes the conclusions reached by Mr. Parcell from each of these approaches, as well as the results I obtained by making relatively simple corrections to his analyses as described above:

	Parcell Testimony	As Corrected
Constant-Growth DCF	9.5-10.5%	10.1-11.1%
Comparable Earnings	9.5-10.5%	11.8-11.9%
Bond Yield + Risk Premium	10.5%	11.0-12.0%

Finally, I would note that the results summarized above reflect the cost of equity capital to a proxy group of gas distribution utilities, and are not specific to UNS Gas. As discussed on pages 24-25 of my Direct Testimony, an equity investment in UNS Gas is decidedly riskier than an investment in the proxy group of gas utility companies. As such, it is reasonable to conclude that the cost of equity for UNS Gas is near the high end of the range established for the proxy group of companies.

B. <u>Rebuttal of RUCO Witness William A. Rigsby.</u>

Q. Mr. Grant, please summarize your view of the cost of capital testimony filed by RUCO Witness William Rigsby.

A. Certainly. While Mr. Rigsby has agreed with the Company's proposed capital structure and cost of debt, he has recommended a cost of equity of only 8.61% for UNS Gas. This value is a full 2.39% below the 11.0% cost proposed by UNS Gas, and is well below the cost of equity determined for any U.S. investor-owned gas utility since at least 1990 and probably much longer. Although the results he obtained from his application of a constant-growth DCF model fully support the Company's request, Mr. Rigsby decided to average the results of his DCF and CAPM analyses in arriving at his recommended value of 8.61%. As I discuss below, Mr. Rigsby's CAPM analysis should be disregarded due his selection of an unreasonably low risk-free rate, his use of an unadjusted historical risk premium, and his derivation of a cost of equity that is actually lower than the cost of debt to UNS Gas and the prevailing cost of debt to utilities in the capital markets. If the 5.82% midpoint value of Mr. Rigsby's CAPM analysis is afforded the proper weight it deserves, this leaves the 11.4% point estimate obtained from Mr. Rigsby's DCF analysis as a more reasonable estimate of the cost of equity for UNS Gas.

Q. What are the main problems with Mr. Rigsby's use of the CAPM?

A. Mr. Rigsby's CAPM analysis suffers from the same flaws discussed previously in response to Staff witness David Parcell. Both witnesses used a risk-free rate that reflects the recent flight to quality in the capital markets. However, both witnesses also failed to adjust their historical market risk premiums to properly reflect this flight to quality. By failing to adjust the market risk premium to reflect the substantial increase in the cost of bearing risk, both Mr. Rigsby and Mr. Parcell significantly underestimated the cost of equity for the companies they examined. However, because of Mr. Rigsby's choice of an unrealistically low risk-free rate, the end result of these flaws is much more pronounced in Mr. Rigsby's testimony.

Q. Please discuss the risk-free rate selected by Mr. Rigsby.

A. As discussed on page 30 of his Direct Testimony, lines 6-9, Mr. Rigsby used an average of recent yields on a 5-year U.S. Treasury security to arrive at his risk-free rate of 1.87%. Due to the upward slope of the U.S. Treasury yield curve, Mr. Rigsby's use of a 5-year Treasury security instead of a longer-dated security served to reduce the risk-free rate to a much lower number than the 3.82% value selected by Mr. Parcell in his CAPM analysis and the 4.53% value used in my CAPM analysis, both of which were based on 20-year U.S. Treasury bond yields.

Q. What rationale did Mr. Rigsby offer for his selection of a 5-year U.S. Treasury security in arriving at a risk-free rate?

A. On page 30 of his Direct Testimony, lines 13-20, Mr. Rigsby offers the following explanation:

> While a shorter instrument, such as a 91-day T-bill, presents the lowest possible risk to an investor, a good argument can be made that the yield on an instrument that matches the investment period of the asset being analyzed in the CAPM model should be used as the risk-free rate of return. Since utilities in Arizona generally file for rates every three to five years, the yield on a 5-year U.S. Treasury instrument closely matches the investment period, or in the case of regulated utilities, the period that new rates will be in effect.

Q. Does this rationale hold any water?

A. No, it does not. Mr. Rigsby has confused the period that "new rates will be in effect" with the "investment period" for a common stock investment. As noted by Mr. Rigsby, a good argument can be made that an instrument that matches the investment period of the asset being analyzed should be used to derive the risk-free rate. In the case of a common stock which has no maturity date, and for which it is assumed that dividends are paid into perpetuity under the DCF model, the relevant "investment period" used by investors to value common stocks is a very long time period. Therefore, in the context of using the CAPM to estimate the cost of common equity capital, the relevant risk-free rate is the yield on long-term U.S. Treasury securities, and not the yield on intermediate-term securities as advocated by Mr. Rigsby.

Q. Please explain how Mr. Rigsby used the results of his CAPM analysis in arriving at his recommended 8.61% cost of equity.

A. As shown on page 32 of his Direct Testimony, Mr. Rigsby came up with a range of 5.26% to 6.39% for the cost of equity using the CAPM. The midpoint of this range, 5.82%, was then averaged with the 11.4% cost estimate he obtained from the DCF model in arriving at his recommended cost of equity of 8.61%.

Q. Mr. Grant, have you ever been involved in a utility rate case where a witness used a cost of equity estimate as low as 5.82% to arrive at a recommended return on equity?

A. No. I first began working on utility rate cases in the late 1980s. During that period, up until I left the Public Utility Commission of Texas in 1995, I cannot recall ever seeing an estimated cost of equity that low. Additionally, since resuming my direct involvement in utility rate cases in the middle part of this decade, I cannot recall seeing a cost of equity estimate that low. In short, I am shocked that Mr. Rigsby would offer testimony that gives any weight at all to such a low number.

Q. Is it possible that utility equity investors would expect a return that is lower than the prevailing cost of debt for a utility?

A. No. Common shareholders stand behind bondholders in terms of their claims on the cash flows and assets of a company. Consequently, the risk borne by a common shareholder is much higher than that of a bondholder, resulting in a higher cost of equity capital relative to the cost of debt. The difference between the required return on equity and the required return on debt is often referred to the equity risk premium. Although I have read research papers that have contemplated the possibility of a negative equity risk premium, for example during periods of hyper-inflation or other extraordinary circumstances, the presence of such a phenomenon under current capital market conditions is simply implausible.

Q. Do you have any other comments on Mr. Rigsby's cost of equity analysis?

A. No, I do not.

III. ABILITY OF UNS GAS TO EARN ITS COST OF CAPITAL.

A. Rebuttal of Staff Witness David C. Parcell.

Q. What does Mr. Parcell have to say about UNS Gas' ability to actually earn its cost of capital?

A. Mr. Parcell's Direct Testimony does not say much in this regard. However, he makes several references to the importance of allowing a utility to earn a reasonable ROR, and on page 40 of his Direct Testimony, lines 12-14, he states that his cost of capital recommendation "provides the company with a sufficient level of earnings to maintain its financial integrity."

Q. What is the basis for Mr. Parcell's conclusion that his recommendation will result in a sufficient level of earnings for UNS Gas?

A. Mr. Parcell makes reference to a pre-tax interest coverage ratio calculated on Schedule 14 attached to his Direct Testimony. As discussed by Mr. Parcell on page 40 of his Direct Testimony, lines 14-16, he believes the referenced coverage ratio is consistent with a credit rating of BBB or higher. However, if Mr. Parcell's statements are read carefully, it is apparent that he is not offering an opinion as to whether or not UNS Gas will actually be able to achieve the level of earnings and pre-tax interest coverage portrayed on Schedule 14. Instead, he refers to the coverage ratio on Schedule 14 as "the pre-tax coverage that would result if UNS Gas earned my cost of capital recommendation." Importantly, Mr. Parcell *assumes* that UNS Gas will be able earn the 10.0% cost of equity he recommends, but offers no evidence that the Company will actually be able to do so.

Q. Does Mr. Parcell express an opinion regarding the importance of allowing a utility to earn its cost of capital?

A. Yes, based on the numerous statements found throughout his Direct Testimony on this subject, it appears that he attaches great importance to this regulatory goal. For example, on page 5 of his Direct Testimony, lines 15-17, he states that "From an economic standpoint, a fair rate of return is normally interpreted to mean that an efficient and economically managed utility will be able to maintain its financial integrity, attract capital, and establish comparable returns for similar risk investments." Likewise, on pages 5-8 of his Direct Testimony, he devotes considerable attention to a discussion of the Hope and Bluefield decisions rendered by the U.S. Supreme Court, and makes a specific reference to the "end result" doctrine established by the Hope decision. As discussed by Mr. Parcell on page 7 of his Direct Testimony, lines 16-18, this "end result" doctrine maintains that "the methods utilized to develop a fair return are not important as long as the end result is reasonable." On this same page, lines 22-15, he goes on to state that "The opportunity cost principle provides that a utility and its investors should be afforded an opportunity (not a guarantee) to earn a return commensurate with returns they could expect to achieve on investments of similar risk." Finally, on page 47 of his Direct Testimony, in a discussion of the linkage between rate base and the cost of capital, Mr. Parcell states that "This link is important since financial theory indicates that investors should be provided an opportunity to earn a return on the capital they provided to the utility." Based on these statements from Mr. Parcell's Direct Testimony, as well as his conclusion that his cost of capital recommendation "provides the company with a sufficient level of earnings to maintain its financial integrity," it appears on the surface that Mr. Parcell believes that UNS Gas should be provided with an opportunity to actually earn its cost of capital.

Q. Did Mr. Parcell offer any analysis regarding the Company's ability to earn its cost of capital?

A. No. Despite the fact that Staff is recommending a rate increase that is less than 50% of what UNS Gas has requested, and despite evidence presented in my Direct Testimony that the Company requires all of the rate relief requested in order to earn its cost of capital, Mr. Parcell merely assumes the Company will be able to do so.

Q. Has the Company been able to earn its cost of capital since its last rate increase was implemented in December 2007?

A. No. Despite having higher than expected sales due to an unusually cold first quarter, the Company realized an earned ROE of only 9.2% in calendar year 2008, versus an authorized ROE of 10.0% in UNS Gas' last rate case. For the twelve months ending March 31, 2009, the Company's earned ROE dropped to 7.2% as a result of less favorable weather and the impact of the economic recession on customer demands. As reflected on page 27 of my Direct Testimony, at the time of our rate filing the Company anticipated earning a ROE of 7.3% for calendar year 2009. Based on actual results through the first quarter of 2009, as well as a reduced sales forecast, the Company now anticipates earning a ROE of 7.2% in calendar year 2009.

Q. In light of the weakness in sales, has the Company revised its forecast of earnings in 2010 and beyond?

A. Yes. The table below, which is an updated version of the forecast presented on page 27 of my Direct Testimony, shows the projected earnings and ROE for UNS Gas assuming the Company is granted its full rate request and is allowed to implement new rates in December 2009:

($ Thousands)	2008 Actual	2009	2010	2011
Gross Margin	$55,424	$55,532	$64,975	$66,099
Operating Expenses	(34,757)	(37,222)	(40,592)	(42,499)
Operating Income	$20,668	$18,310	$24,383	$23,600
Other Income – Net	150	142	186	418
Interest Expense	(6,640)	(6,391)	(6,332)	(6,556)
Pre-Tax Income	$14,178	$12,061	$18,237	$17,461
Income Tax Exp.	(5,640)	(4,790)	(7,225)	(6,917)
Net Income	$8,538	$7,270	$11,013	$10,544
Ending Common Equity	$96,684	$103,948	$114,961	$120,233
Return on Avg. Equity	9.2%	7.2%	10.1%	9.0%

As my be seen in the table above, UNS Gas now projects that it will earn a ROE of only 10.1% in 2010 even if its rate request is granted in full and is implemented prior to January 2010. Even though the Company has trimmed its forecast of operating expenses and capital expenditures, the reduced sales outlook coupled with the continued use of an historical test year for rate setting purposes will make it very difficult for the Company to earn its cost of capital even if UNS Gas is granted the full rate increase it has requested. Based on this forecast, it should be apparent that the Company requires all of its requested rate increase in order for it to have any opportunity of earnings its cost of capital.

Q. Will UNS Gas have an opportunity to earn its cost of capital if Staff's revenue requirement is adopted?

A. No. The Company estimates that it will be able to earn an ROE of only 6-7% if Staff's revenue requirement is adopted.

Q. **How did you arrive at an estimate of UNS Gas' earned ROE under Staff's revenue requirement?**

A. This calculation is very straightforward. Since Staff's recommended rate increase is $6.1 million lower than the Company's requested increase, this represents the approximate difference in pre-tax earnings available to UNS Gas in the first full year under new rates. Applying a 39% composite income tax rate to this value produces an after-tax earnings difference of $3.7 million. Subtracting this amount from the forecasted earnings and ending common equity balance in the table above results in forecasted earnings of $7.3 million and an earned ROE of 6.8%, a level comparable to the Company's current level of earnings and the proposed cost of debt in this proceeding.

Q. **When estimating the earned ROE resulting from Staff's revenue requirement, should the expenses and capital base of the Company also be adjusted in the forecast?**

A. No. In making their reductions to UNS Gas' revenue requirement, Staff assumes that certain expenses and investments are somehow not needed for the provision of retail gas service. However, these expenses and investments do not disappear simply because Staff assumes they are not needed. The other adjustments Staff made to UNS Gas' revenue requirement relating to test year revenues, the cost of equity capital, and the ROR on FVRB also have no bearing on what the Company will be required to spend on operating costs and capital projects in the years to come. In the context of the "end result" test referenced by Mr. Parcell, the adjustments made by Staff to test year expenses and rate base have no relevance except for their impact on future operating revenues. It should be clear that in applying such a results-based test, it is the practical effect of Staff's recommendation on UNS Gas that should be considered, as opposed to a backward-looking analysis that is based on historical data and assumed spending reductions.

Q. Does Mr. Parcell's pre-tax coverage ratio analysis constitute an "end results" test?

A. No. For example, if a utility regulator is too aggressive with expense and rate base adjustments, a utility could be forced into bankruptcy – yet Mr. Parcell's approach would lead one to conclude that the bankrupt utility is financially healthy on an adjusted basis. Indeed, if Mr. Parcell were to apply the same approach he does in his testimony in this case, it appears he would testify that the bankrupt utility was able to attract debt and equity capital at reasonable rates and that it would be able to earn returns consistent with companies of similar risk. A test that shows a bankrupt utility is financially sound is no test at all.

Q. Based on the financial impact of Staff's rate recommendations, do you believe that the adoption of Staff's revenue requirement will result in earnings that are sufficient to support UNS Gas' financial integrity?

A. No, I do not. If Staff's revenue requirement is adopted, it is obvious that UNS Gas will not be provided with a reasonable opportunity to either earn its cost of capital or attract new capital on reasonable terms.

B. <u>Rebuttal of RUCO Witness William A. Rigsby.</u>

Q. What does Mr. Rigsby have to say about UNS Gas' ability to actually earn its cost of capital?

A. Like Mr. Parcell, Mr. Rigsby's Direct Testimony does not say much in this regard, despite making several references to the importance of providing a utility with an opportunity to actually earn its cost of capital. The closest Mr. Rigsby comes to opining on the prospective earnings of UNS Gas is a statement he makes on page 49 of his Direct Testimony, lines 15-22:

> I believe that my recommended cost of equity will provide UNSG with a reasonable rate of return on the Company's invested capital...As I noted earlier, the Hope decision determined that a utility is entitled to earn a rate of return that is commensurate with the returns it would make on other investments with comparable risk. I believe that my DCF analysis has produced such a return.

Mr. Rigsby's statement on page 9 of his Direct Testimony, lines 3-7, also touches on his belief regarding the Company's ability to earn a reasonable ROR:

> The FVROR that RUCO is recommending meets the criteria established in the landmark Supreme Court cases of Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia (262 U.S. 679, 1923) and Federal Power Commission v. Hope Natural Gas Company (320 U.S. 391, 1944). Simply stated, these two cases affirmed that a public utility that is efficiently and economically managed is entitled to a return on investment that instills confidence in its financial soundness, allows the utility to attract capital, and also allows the utility to perform its duty to provide service to ratepayers.

Q. What financial analysis does Mr. Rigsby offer to support his conclusion that UNS Gas will be provided with a "reasonable rate of return"?

A. None whatsoever. Nowhere does Mr. Rigsby evaluate the Company's ability to actually earn its cost of capital under RUCO's rate recommendation. Instead, all he offers are blanket assurances that the ROR recommended by RUCO will meet the requirements of Hope and Bluefield, and that the Company will be provided with a reasonable ROR.

Q. Will UNS Gas have an opportunity to earn its cost of capital if RUCO's revenue requirement is adopted?

A. No. The Company estimates that it will be able to earn an ROE of only 5-6% if RUCO's revenue requirement is adopted. This ROE is so low that it even falls below the Company's 6.49% cost of debt that Mr. Rigsby recommends as reasonable.

Q. Based on the financial impact of RUCO's rate recommendations, do you believe that the adoption of RUCO's revenue requirement will result in earnings that are sufficient to support UNS Gas' financial integrity?

A. No, I do not. If RUCO's revenue requirement is adopted, it is obvious that UNS Gas will not be provided with an opportunity to either earn its cost of capital or attract new capital on reasonable terms.

IV. <u>RATE OF RETURN ON FAIR VALUE RATE BASE.</u>

A. <u>Rebuttal of Staff Witness David C. Parcell.</u>

Q. What does Mr. Parcell recommend regarding ROR on fair value?

A. Mr. Parcell's primary recommendation is that the Commission apply a 0% return on the portion of FVRB that exceeds the original cost rate base. Mr. Parcell refers to this portion of the FVRB as the "fair value increment." In other words, Mr. Parcell recommends no return at all on the fair value increment. Thus, the revenue requirement is entirely determined by the ROR on original cost. This approach is mathematically equivalent to the now-discredited "backing in" method formerly used by the Commission, where the revenue requirement was determined by applying the weighted average cost of capital to the original cost rate base, with a "fair value rate of return" being determined simply as a fall out number.

Q. Is Mr. Parcell's recommendation consistent with recent Commission decisions?

A. No. Mr. Parcell presented the same recommendation in the "Chaparral City" remand case.[5] The Commission did not adopt Mr. Parcell's recommendation in its remand order, Decision No. 70441. Mr. Parcell also repeated this recommendation in the recent

[5] Docket No. W-02113A-04-0616.

Southwest Gas rate case, and again the Commission did not adopt it in the Commission's rate order, Decision No. 70664. Thus, Mr. Parcell's recommendation has been rejected at least twice by the Commission. Indeed, even Staff seems to concede that this recommendation is inappropriate, as Staff's revenue requirement does not follow Mr. Parcell's primary recommendation.[6]

Q. What approach did Staff use in calculating its revenue requirement?

A Staff used an "alternative" recommendation proposed by Mr. Parcell. Mr. Parcell also presented this alternative recommendation to the Commission in the Chaparral City remand case. The Commission did not adopt his alternate recommendation in that case.[7]

The alternate recommendation being made by Mr. Parcell in this proceeding is also the same as the method he proposed in the recent Southwest Gas rate case. In that case, his proposal was adopted in a modified form by the Commission. However, in doing so the Commission noted that: (1) the Chaparral City remand order (Decision No. 70441) was not issued by the time of the hearing in the Southwest Gas case; (2) no party presented a method similar to the method approved in the Chaparral City case; and (3) the utility agreed to the basics of Mr. Parcell's approach, disputing only the method of determining the risk-free rate.[8] The Commission determined that for these three reasons the method approved in the Chaparral City remand order was not available in the Southwest Gas case.

These three reasons do not apply to this case: (1) the Chaparral City remand order is available for guidance; (2) we are presenting the method approved in that case; and (3) we do not concede the appropriateness of Parcell's alternative recommendation – indeed I strongly disagree with it. Thus, I believe that the Commission should follow the method

[6] See Direct Testimony of Dr. Thomas Fish, Schedule THF-A1, line 6 and footnote *.
[7] See Decision No. 70441 at 36-37.
[8] See Decision No. 70665 at 32-33.

recommended in the Chaparral City remand order, Decision No. 70441, or in the alternative, the method that was refined by the Commission Staff in Docket No. W-02113A-07-0551.

Q. What is your view of Mr. Parcell's alternative recommendation for calculating the ROR on FVRB?

A. First, as described above in Section III of my Rebuttal Testimony, it results in a revenue requirement that is simply too low to support UNS Gas' financial integrity. Second, it represents an unwarranted departure from the calculation methodology approved by the Commission in Decision No. 70441, as well as the modest refinement to that methodology recommended by Staff in Docket No. W-02113A-07-0551. Third, it is based on Mr. Parcell's belief that the fair value of utility property should be given little, if any, weight in setting retail rates. And finally, his choice of a 1.25% cost rate to apply to what he refers to as the "fair value increment" is arbitrary since it represents the midpoint of a fairly wide range of values (zero to 2.50%) and is unsupported by any analysis of the financial impact his recommendation would have on UNS Gas.

Q. What is the impact of Mr. Parcell's recommendation on UNS Gas' revenue requirement?

A. His decision to apply a 6.37% ROR to the Company's FVRB resulted in a substantial reduction to the overall revenue requirement. For example, had Mr. Parcell instead chosen the high end of his range, 2.50%, as the cost rate to apply to the "fair value increment" described in his testimony, he would have derived a ROR on FVRB of 6.70%:

	% of Capital Structure	Cost	Weighted Average Cost
Long-Term Debt	36.56%	6.49%	2.37%
Common Equity	36.55%	10.00%	3.66%
Fair Value Increment	26.89%	2.50%	0.67%
Total	100.00%		6.70%

Alternatively, had Mr. Parcell used the same calculation methodology adopted by the Commission in Decision No. 70441, where the ROR on FVRB was derived by adjusting the cost of equity downward by the expected rate of inflation, he would have obtained a 7.25% ROR on FVRB using his 10.0% cost of equity capital and the 2.0% inflation rate referenced on page 50 of his Direct Testimony:

	% of Capital Structure	Modified Cost *	Weighted Average Cost
Long-Term Debt	50.01%	6.49%	3.25%
Common Equity	49.99%	8.00%	4.00%
Total	100.00%		7.25%

* Note: Modified cost of equity = 10.0% - 2.0% = 8.0%.

Finally, had Mr. Parcell used the same methodology recommended by Staff in Docket No. W-02113A-07-0551, in which both the cost of debt and cost of equity are adjusted by one-half of the inflation rate, he would have also obtained a 7.25% ROR on FVRB:

	% of Capital Structure	Modified Cost *	Weighted Average Cost
Long-Term Debt	50.01%	5.49%	2.75%
Common Equity	49.99%	9.00%	4.50%
Total	100.00%		7.25%

* Note: Modified cost of debt = 6.49% - 1.0% = 5.49%.
Modified cost of equity = 10.0% - 1.0% = 9.00%.

When applied to Staff's FVRB of $251.5 million, and adjusted by Staff's gross revenue conversion factor, these differences in the ROR on FVRB produce the following impact on UNS Gas' overall revenue requirement:

Difference between 6.70% and 6.37% ROR on FVRB
= $251.5 mil. x 0.33% x 1.6343
= <u>$1.36 mil.</u>

Difference between 7.25% and 6.37% ROR on FVRB
= $251.5 mil. x 0.88% x 1.6343
= <u>$3.62 mil.</u>

Q. Mr. Grant, in your Direct Testimony you proposed a 6.80% ROR on FVRB even though you demonstrated that UNS Gas could have supported a higher value of 7.30%. Is it your position that the ROR on FVRB in this proceeding should be limited to a maximum value of 6.80%?

A. No. This reduction was a voluntary measure. As described on page 30 of my Direct Testimony, the ROR of 6.80% was selected on the basis that this was the minimum value required to produce an overall revenue requirement that would allow UNS Gas an opportunity to earn its cost of capital and maintain its financial integrity. Due to the substantial cuts to the revenue requirement proposed by Staff and RUCO, and the possibility that those adjustments could be adopted by the Commission, the basis for limiting the proposed ROR on FVRB has dissipated. Therefore, the ROR on FVRB should be determined using the method approved in Decision No. 70441, or in the alternative, the method subsequently recommended by the Commission Staff in Docket No. W-02113A-07-0551.

Q. In light of the substantial revenue requirement adjustments recommended by Staff, what ROR would you recommend be applied to UNS Gas' FVRB?

A. I would recommend using a ROR that is consistent with the methodology used by the Commission in Docket No. 70441. As described in my Direct Testimony, this ROR would be equal to 7.30% if the Commission were to approve the Company's proposed cost of capital. Alternatively, as described above, this ROR would be equal to 7.25% if the Commission were to approve Staff's proposed cost of capital.

B. Rebuttal of RUCO Witness Ralph C. Smith.

Q. What is your general impression of Mr. Smith's testimony regarding the ROR on FVRB?

A. I found Mr. Smith's description of the various calculation methodologies and related impacts on UNS Gas' revenue requirement to be helpful. However, I was troubled by his lack of explanation regarding his choice of a 5.38% ROR on FVRB, a value that is only 0.01% higher than the methodology that gives zero weight to the Company's FVRB. As shown on page 1 of Schedule A attached to his testimony, this small increment of return would provides UNS Gas with only $38,000 of additional revenues, despite having a FVRB that is over $70 million higher than its original cost rate base ("OCRB").

Q. What explanation has Mr. Smith offered for his choice of a 5.38% ROR on FVRB?

A. The only explanation I could find is the "Evaluation" listed directly below the overall revenue requirement for each of the calculation methods listed on page 2 of Schedule A attached to his Direct Testimony. These evaluations range from "way too high" for the revenue requirement associated with Mr. Smith's "Calculation 1" methodology, to "too low" for the revenue requirement derived from Mr. Smiths "Calculation 3" and "Calculation 4" methodologies. As described in footnote [a] at the bottom of this same page, Mr. Smith also indicates that the recommended 5.38% ROR on FVRB was selected "based on informed judgment after reviewing OCRB and FVRB calculations." This opinion, rather than a detailed explanation of his analysis, is the only explanation Mr. Smith offered.

Q. In exercising his "informed judgment," did Mr. Smith consider the financial impact of his ROR recommendation on UNS Gas?

A. No, it does not appear that he did. Nowhere in his Direct Testimony, nor that of any other RUCO witness, could I find any analysis of how RUCO's revenue requirement would impact UNS Gas. Although RUCO witness William Rigsby does include a blanket statement in his Direct Testimony indicating that RUCO's recommended ROR on FVRB "meets the criteria" established in the *Hope* and *Bluefield* decisions (see page 9 of his Direct Testimony, lines 3-7), no substantive analysis was presented on this point by Mr. Rigsby or any other RUCO witness.

Q. In the executive summary attached to Mr. Smith's Direct Testimony he states that UNS Gas is effectively requesting a ROE of 12.58% on its OCRB. Is this true?

A. Yes and no. This statement is incorrect in the sense that UNS Gas developed its OCRB revenue requirement using the 11.0% cost of equity recommended in my Direct Testimony. However, this statement is also correct in a certain sense, since the Company's FVRB revenue requirement is higher than its OCRB revenue requirement. When this higher FVRB revenue requirement is expressed on an OCRB revenue requirement basis, the resulting return on equity is indeed higher.

Q. Does this mean that the Company is requesting "an excessive rate of return" as alleged by Mr. Smith in his executive summary?

A. No. This is simply the result of giving some weight to the Company's FVRB, which as discussed earlier is over $70 million higher than its OCRB.

Q. Will the Company have an opportunity to actually earn the 12.58% ROE that Mr. Smith has recommended?

A. No. As described earlier in my testimony, at best the Company can expect to earn a ROE of only 10.1%. This assumes that the Company's requested rate increase is granted in its entirety.

Q. Do you have any other comments regarding the ROR on FVRB that Mr. Smith is recommending?

A. My only remaining comment is that the ROR values obtained from each of his calculation methodologies are based, at least in part, on the unreasonably low cost of equity estimate recommended by RUCO witness William Rigsby. As such, all of the ROR values and associated revenue requirements "evaluated" by Mr. Smith are much too low, irrespective of which methodology is ultimately approved by the Commission.

V. <u>CARRYING COST ON PURCHASED GAS ADJUSTOR BALANCE.</u>

A. <u>Rebuttal of Staff Witness Robert G. Gray.</u>

Q. Mr. Grant, what comments do you have in response to the Direct Testimony filed by Staff witness Robert Gray?

A. My comments are focused only on the interest rate to be applied to balances of under- and over-recovered gas costs under the Company's PGA. Due in part to the lack of readily available published data showing the monthly average for 3-month LIBOR, Mr. Gray has expressed a preference for continued use of the rate on 3-month financial commercial paper published by the Federal Reserve. Although the Company's preference would be to use the 3-month LIBOR rate plus 1.0% to reflect the cost of short-term borrowing for UNS Gas, the Company would also be willing to use the financial commercial paper rate favored by Mr. Gray plus a 1.0% credit spread. Although 3-month LIBOR has typically been somewhat higher than the rate on 3-month financial commercial paper, this rate differential is typically not very large. Exhibit KCG-16 shows the recent rates for each of these interest rate series, along with the above-referenced cost of short-term borrowing to UNS Gas.

Q. In his Direct Testimony Mr. Gray commented that, contrary to a statement in your Direct Testimony, the Federal Reserve does not publish rates for 3-month LIBOR. Is Mr. Gray's comment correct?

A. Yes. Unfortunately, the statement on page 33 of my Direct Testimony, lines 17-18, should have referred to LIBOR rates published by the British Bankers Association ("BBA") and by the Wall Street Journal, and not the Federal Reserve. And since the BBA data is only published free of charge on a lagged historical basis, the Wall Street Journal would probably be the best source of timely data for 3-month LIBOR rates. If this benchmark rate is ultimately used in the calculation of the PGA interest rate, UNS Gas would be willing to compile the daily rates for 3-month LIBOR and submit them for review by Staff, along with a simple calculation of the monthly average rate and documentation showing that UNS Gas is still subject to a 1.0% credit spread on its revolving credit facility. As mentioned above, however, UNS Gas would also be willing to use the 3-month financial commercial paper rate currently being used, plus the 1.0% credit margin applicable to borrowings under the UNS Gas credit facility.

Q. Do you have any more comments on Mr. Gray's Direct Testimony?

A. My only remaining comment is that by requesting a change to the PGA interest rate, the Company is only trying to recover its reasonable costs. Such a minor change to the PGA interest rate should have no impact whatsoever on the gas procurement practices of UNS Gas.

Q. Mr. Grant, does this conclude your Rebuttal Testimony?

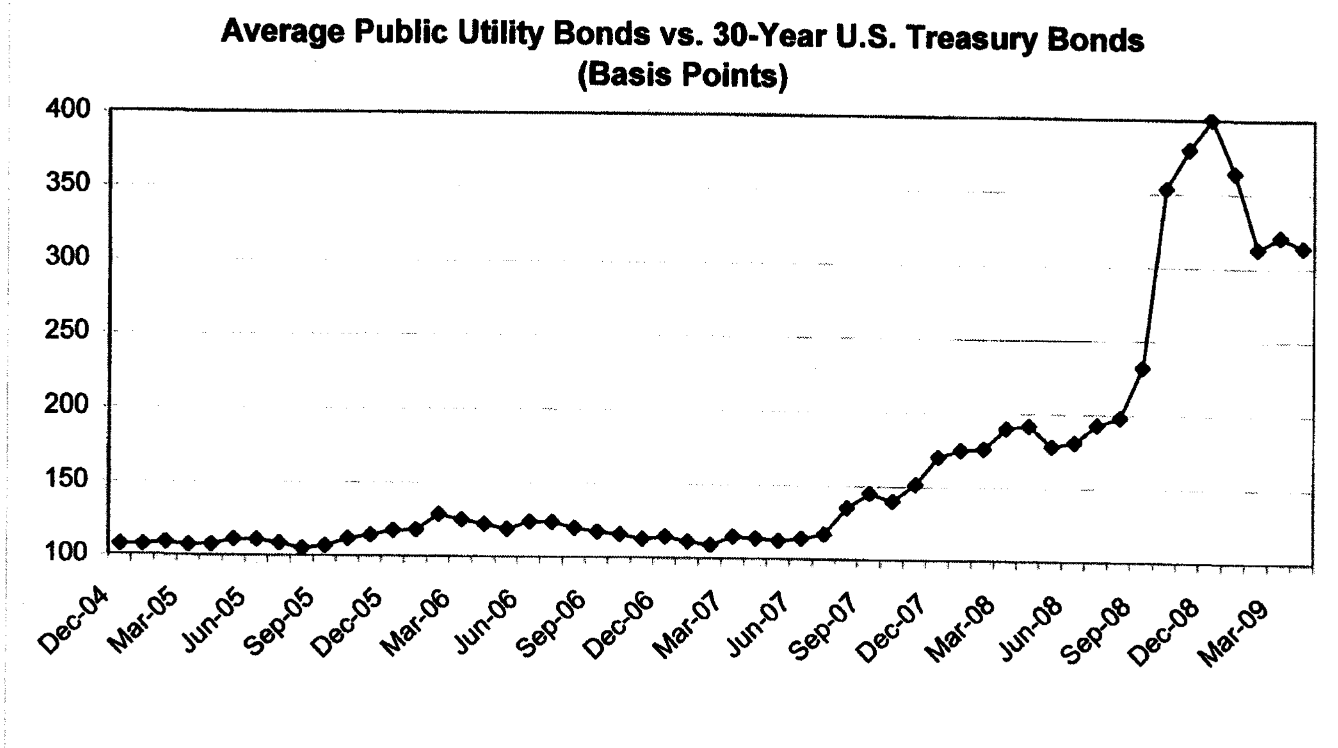
A. Yes, it does.

EXHIBIT

KCG-14

Exhibit KCG-14

UNS Gas, Inc.
Public Utility Bond Credit Spreads



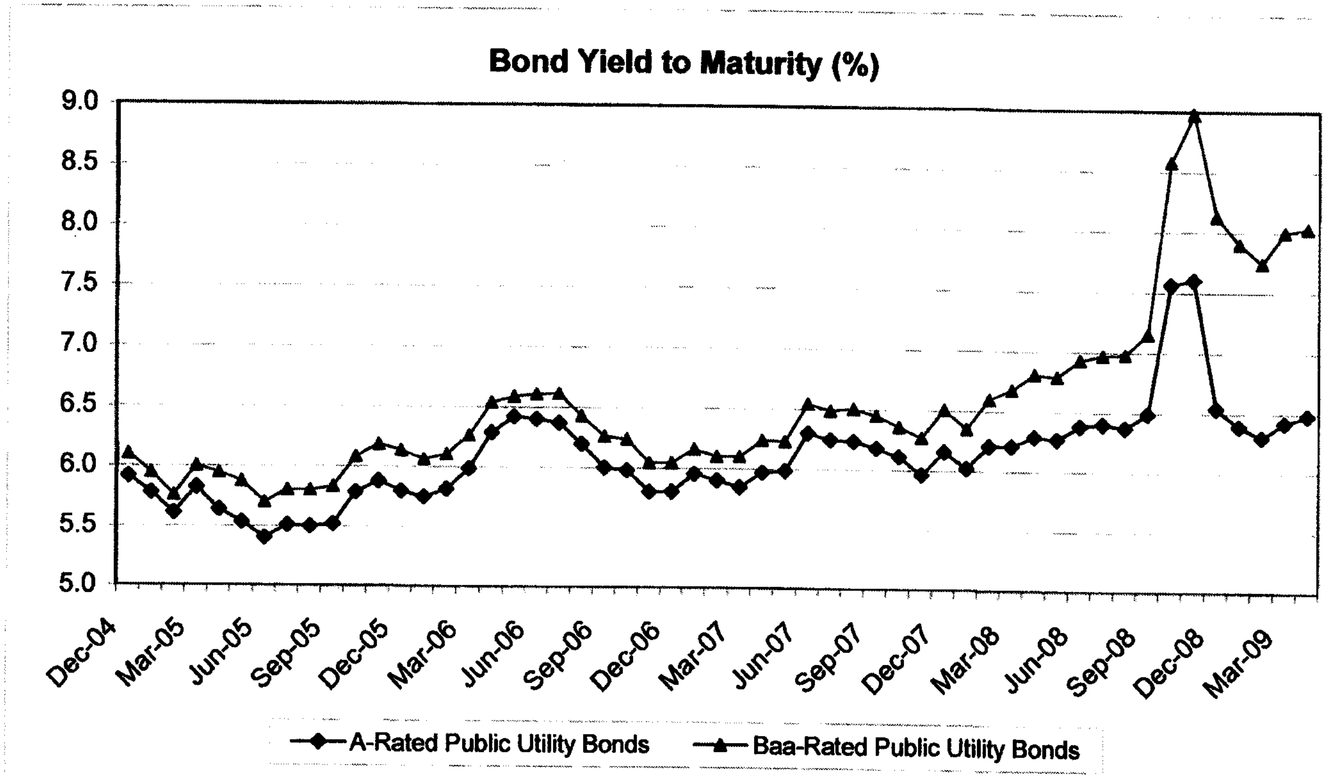
Sources: Public Utility bond yields are from Mergent Bond Record. 30-Yr. U.S. Treasury bond yields are from Mergent Bond Record (Dec 2004 - Jan 2006 data) and the Federal Reserve Board of Governors Web site (www.federalreserve.gov, Feb 2006 - Apr 2009 data).

EXHIBIT

KCG-15

Exhibit KCG-15

UNS Gas, Inc.
Public Utility Bond Yields for A-Rated and Baa-Rated Utilities



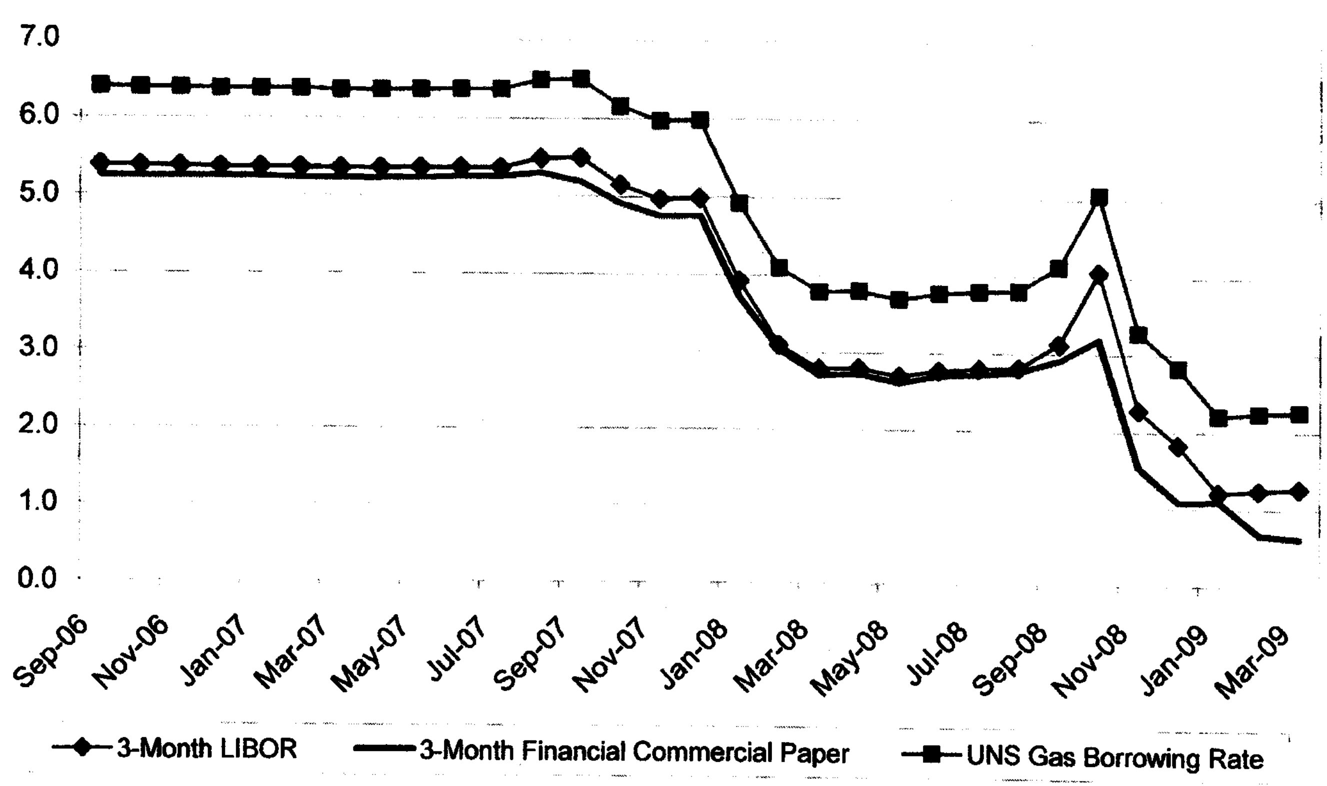
Source: Public Utility bond yields are from Mergent Bond Record

EXHIBIT

KCG-16

Exhibit KCG-16

UNS Gas, Inc.
Short-Term Interest Rates (%)



Source: Financial Commercial Paper rates are from the Federal Reserve Board of Governors Web site (www.federalreserve.gov). LIBOR rates are from the British Bankers' Association Web site (www.bba.org.uk).

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS
KRISTIN K. MAYES - CHAIRMAN
GARY PIERCE
PAUL NEWMAN
SANDRA D. KENNEDY
BOB STUMP

IN THE MATTER OF THE APPLICATION OF UNS GAS, INC. 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 UNS GAS, INC. DEVOTED TO ITS OPERATIONS THROUGHOUT THE STATE OF ARIZONA.	DOCKET NO. G-04204A-08-0571

Rebuttal Testimony of

Dallas J. Dukes

on Behalf of

UNS Gas, Inc.

July 8, 2009

TABLE OF CONTENTS

I. INTRODUCTION.

Q. Please state your name and address.

A. My name is Dallas Dukes. My business address is One South Church Avenue, Tucson, Arizona.

Q. Did you file Direct Testimony in this proceeding?

A. Yes

Q. On whose behalf are you filing your Rebuttal Testimony in this proceeding?

A. My Rebuttal Testimony is filed on behalf of UNS Gas, Inc.

Q. Which Commission Staff and/or Intervener testimony do you address in your Rebuttal Testimony?

A. I address certain adjustments that Staff Witness Dr. Thomas H. Fish ("Dr. Fish") recommends in his Direct Testimony. I also address several adjustments that Residential Utility Consumer Office ("RUCO") witness Mr. Ralph C. Smith ("Mr. Smith") proposes in his Direct Testimony. While I agree with some of their adjustments, a significant number of adjustments made by Staff and RUCO are inappropriate and other adjustments are not supported by the evidence in this case. In this testimony, I explain why the Commission should reject these Staff and RUCO adjustments as they would not result in just and reasonable rates. I further explain why UNS Gas' revenue requirements, expenses, and adjustments are reasonable based on the evidence presented in this matter.

Q. Have you revised any of the adjustments that you sponsored in your Direct Testimony?

A. Yes, I have. I have made the following changes to the following adjustments that originally appeared in my Direct Testimony:

Working Capital: This adjustment to rate base is revised from $97,967 to $2,183,948 to reflect the correct purchased gas payment lag for the primary purchased gas vendor of UNS Gas and to reflect other pro forma adjustments. As a result of Staff's analysis, it came to light that UNS Gas was paying its primary purchased gas vendor twice a month because of credit limitations as opposed to its previous practice of only once a month. The Company revised its lead lag study to reflect that fact. Because of this change in payment terms for such a material portion of the Company's operating cost, the Company is actually paying vendors in advance of receiving the funds from its customers. This results in a positive working capital adjustment as opposed to the essentially neutral balance originally filed by the Company.

Rate Case Expense: This adjustment to operating expenses is revised from $200,000 to $141,667. The revised adjustment now matches Staff's proposed adjustment.

Fleet Fuel Expense: This adjustment to operating expense is revised from $0.00 to $(51,258) to reflect a three year average for Fleet Fuel Expense. This adjustment is necessary to normalize the test year level of expense using fixed, known and measurable information. The test year reflected and average cost of about $3.35 per gallon and the three year average is $3.06 per gallon which is more representative of current prices being incurred by UNS Gas and the expected cost to be incurred over the life of the rates established in this case.

Income Taxes: This adjustment to operating expense is revised from $(824,391) to $(808,257) to reflect the other pro forma adjustments.

Other than those adjustments (and the flow through impacts of those revisions), I reiterate the adjustments in my Direct Testimony.

Attached to my Rebuttal Testimony is Exhibit DJD-1, which is a spreadsheet that sets forth a comparison of the positions of the parties on the Revenue Requirement and their related adjustments. The spreadsheet also identifies the Company's revised position on its proposed adjustments.

Q. How do those revisions affect the Revenue Requirement?

A. Given these revised adjustments, our revenue requirement could increase as much as $145,766 on an original cost basis above the amount requested in the Application. However, as indicated in Exhibit DJD-1, the Company is not requesting a revenue requirement higher than proposed in its Application.

II. <u>REBUTTAL TO RATE BASE ADJUSTMENTS.</u>

A. <u>Post Test Year Non Revenue Plant in Service.</u>

Q. Do any of the parties disagree with the Company's inclusion of Post Test Year Non Revenue Plant in Service within rate base?

A. Yes. Both Staff's witness, Dr. Fish, and RUCO's witness, Mr. Smith, objected to including Post Test Year Plant in rate base.

Q. What is the basis for Dr. Fish and Mr. Smith's removal of the Company's Post Test Year Non Revenue Plant in Service adjustment?

A. Both Dr. Fish and Mr. Smith assert that the investment in the Post Test Year Plant must have been made to improve the system, thus reducing operating expenses. Mr. Smith also argues that the plant will be used to serve additional customers. Mr. Smith further asserts that the inclusion of Construction Work in Progress ("CWIP") requires compelling reasons to stray from Commission's normal practice of excluding CWIP. However, UNS Gas has not proposed including CWIP, so Mr. Smith's comments on CWIP are not relevant.

Q. Do you agree with Dr. Fish or Mr. Smith's adjustments that remove the Company's Post Test Year Non Revenue Plant in Service from rate base?

A. No. UNS Gas is requesting the inclusion in rate base of investments made as of the end of the test year in transportation equipment, general plant, replacement of services, and replacement of mains and relocation of facilities as that plant is now in service. Further, the purpose of these investments is to serve existing customers and these investments are made regardless of any additional customers ever being added to the system. And previous Commission decisions have included non-revenue producing post-test year plant in rate base, including Decision Nos. 65350, 66849, 67279, 68176 and 68864.

In the prior UNS Gas rate case, (Decision No. 70011 (November 27, 2007)), the Commission rejected UNS Gas' request for post-test year plant, noting that we made no attempt to segregate revenue-producing plant from non-revenue producing plant. In this case, we directly responded to this concern by limiting our request for post-test year plant to non-revenue producing plant. However, Staff and RUCO now both imply that because any investment in plant would result in reduced expenses, without citing any empirical evidence to support that assertion, any investment in plant simply cannot be considered "non-revenue producing." Under their analysis, non revenue producing Post Test Year

Plant would never be included in rate base, which is simply inconsistent with prior Commission decisions. Staff and RUCO provide no data or analysis to support their speculative allegations of reduced expenses.

Q. How did UNS Gas determine which plant was revenue-neutral?

A. The Plant accounting group and operational personnel of UNS Gas reviewed the projects and indentified investments that had been made in projects that would not produce additional revenue and that would have been invested in regardless of customer growth.

Q. What plant is included in the Company's proposed Post Test Year Plant?

A. For example, we included communication equipment, vehicles, tools, power equipment and natural gas detector equipment, which are all necessary to serve the existing customer base. We also include service and main replacements to ensure safe and reliable service to our existing customers.

Q. When did the Company make the investments in these projects?

A. The Company completed its investments in these projects before the end of the test year. The projects were simply not in service by the end of the test year – but they are, or will be, in service when rates resulting from this proceeding become effective.

B. <u>Customer Advances.</u>

Q. What is the basis for Dr. Fish and Mr. Smith's removal of the Company's Customer Advances adjustment?

A. Their primary arguments for exclusion of the Company's adjustment is that Customer Advances are non-investor supplied capital and that is the required treatment based on the sample schedule B-1, Commission rule A.A.C R 14-2-103.

Q. Do you agree with Mr. Smith's statement that customer advances are non-investor supplied capital?

A. Yes. That is exactly why they should be deducted from rate base at some point – so that the Company does not earn a return on investments it does not make. In other words, advances should neither increase nor decrease rate base – the net impact should be zero.

However, Staff and RUCO recognize the advances (the deduction from rate base) much earlier than the addition to plant in service (the addition to rate base). It is this mismatch that I disagree with. Under Staff's and RUCO's approach, because the advances are recognized too soon, and the result is that pre-existing rate base is reduced by the amount of the advance. Thus, Staff's and RUCO's rate bases doe not accurately reflect UNS Gas' level of investment.

Q. Can you provide an example?

A. Yes. Assume a utility has a rate base of $100,000,000 at a point in time ("Day One"). On Day Two, the utility receives an advance of $10,000,000 for new plant for a new development. One year later (i.e., on Day 367), the utility spends the full amount of the advance on the new plant. The new plant facilities are then placed into service following another year (i.e., on Day 732). The utility adds no other plant between Day One and Day 732. Under Staff's and RUCO's approaches, at Day One, the utility's rate base is $100,000,000. On Day Two, the utility's rate base drops to $90,000,000 – even though the utility's investment in rate base has not changed. Ten million dollars in existing rate base is just wiped out. This $10,000,000 reduction to pre-existing investment remains in place until the plant funded by the advances is placed into service on Day 732. At that point, the utility's rate base finally goes back to $100,000,000 – where it should have been all along.

Q. In your example, wouldn't the Company have the use of the $10,000,000 from Day 2 through Day 367 as non-investor capital?

A. Yes. And during that period it would be appropriate to recognize the portion to the advance not used as "zero" cost capital or even as a reduction in rate base to assure that the non investor supplied capital is being properly recognized. But the Company is requesting differing and fair treatment for the period between Day 367 and Day 732. A test year established in that period is where the mismatch takes place. The advance is already spent, so there is "NO" zero cost capital and the new facility is <u>not</u> in rate base. That is when the Utility is only getting rate base treatment for $90,000,000 when it should properly be getting rate base treatment for $100,000,000.

Q. Can't the Company avoid this problem by selecting a different test year?

A. No. In the simplified example above, the utility could avoid the problem only by selecting a test year ending after Day 732. But in reality, UNS Gas is constantly receiving advances, investing those advances in specific projects, and adding related plant. In other words, the receipt of advances is not a one-time event – it is a constant flow. Thus, there is no test year that UNS Gas could select that would avoid this problem.

Moreover, any suggestion that UNS Gas could avoid the problem by selecting its test year ignores the fact that Staff rejected UNS Gas' originally proposed test year and then allowed UNS Gas to use the current test year instead.

Q. Is there support in Commission decisions for the Company's approach?

A. Yes. In Decision No. 69914 (Sept. 27, 2008)(at page 29, lines 7-13), the Commission allowed Arizona-American Water Company similar treatment for contributions associated with hook-up fees pertaining to a specific surface water treatment plant.

C. **Cash Working Capital.**

Q. Did any of the parties propose changes to the Company's cash working capital calculation?

A. Yes. Dr. Fish reduced cash working capital based on his review of certain payment lags. He identified certain purchased gas payment lags for an individual vendor that were approximately half the payment cycle time of the other payments made by that vendor. Dr. Fish assumed these shorter payment lags were an anomaly and he adjusted the payment lags associated with those particular certain purchased gas payments to reflect a payment period of 35 days. Staff believed — incorrectly — that the 35 day pay period is more reflective of expected pay cycles based on historical payment patterns.

Q. Was Dr. Fish correct in his assumption?

A. No. The payment lag is actually much shorter then the 35 days used by Staff. In fact, the payments made to that vendor early in the test year were not reflective of payment terms later in the test year or of the current payment terms. The Company's payment terms were altered during the test year because of credit limitations. The vendor now requires the Company to make payments twice a month and those payment requirements continue today and for the foreseeable future. Therefore, Dr. Fish's adjustment to payment lags is factually incorrect and should not be adopted.

Q. Have you revised your Cash Working Capital adjustment?

A. Yes. In the Company's original filing, the new payment terms were only partially reflected in the Company's lead lag study. The changed payment schedule remains in place and is therefore a "known and measurable" change. Thus the Company is making an alternative adjustment in its rebuttal filing to fully reflect all purchased gas payments to that vendor with the proper payment lags.

D. Reconstruction Cost New Depreciated ("RCND").

Q. Do you have any comments on the RCND study discussions by Staff and RUCO?

A. Staff recommends the use of the Company's RCND study as submitted. Dr. Fish incorrectly implies in his Direct Testimony (at page 13, lines 1-11) that the Company took an extremely conservative approach in deriving its RCND study in the last rate case to keep the value of the RCND down. In fact, if the present RCND study was done in this case consistent with the prior case, the Company would have presented an RCND value of approximately $22.2 million greater than the one filed in my Direct Testimony. Therefore, the Company took a more conservative approach in this filing when compared to the previous filing.

RUCO did not object to the Company's RCND study, but did object to the Company's RCND value calculated for the adjustment "Post Test Year Non Revenue Plant in Service". The Company agrees with RUCO on that point and has revised its RCND calculation to reflect it.

III. REBUTTAL TO OPERATING INCOME ADJUSTMENTS.

A. Payroll and Payroll Tax Expense.

Q. Did Staff or RUCO object to the Company's payroll adjustments?

A. Staff did not object to the Company's payroll adjustments in their Direct Testimony. RUCO proposed the exclusion of a portion of the Company's payroll adjustment. Mr. Smith (at page 56) took exception to the Company increasing test year annualized payroll for the wage increase that will take effect January 2010.

Q. What are Mr. Smith's reasons for excluding the January 2010 increase from the adjustment?

A. Mr. Smith believes that the increase is too far from the end of the test year and not known at this time. He essentially is making the same argument that RUCO witnesses made in each of the last three Southwest Gas filings that were ultimately rejected by the Commission.

Q. Do you agree with Mr. Smith's rationale?

A. No. The rates in this case are not likely to go into effect until January of 2010 at the earliest and will be in effect for the 2010 calendar year. The increase is being applied to employee levels as of the end of test year and therefore is not creating any mismatch of revenue and expenses. At this time we know the increases attributable to the portion of the workforce that are classified and have contracts in place. As for the unclassified employees, the increase will be known prior to rates going into effect and support of the approved increase can be provided prior to the close of the record.

Q. Has such requested treatment been approved by this Commission?

A. Yes. For example, this treatment is consistent with the last UNS Electric rate case, Decision No. 70360 (May 27, 2008), and the most recent Southwest Gas Rate Case, Decision No. 70665 (December 24, 2008).

B. Incentive Compensation Expense.

1. Performance Enhancement Program ("PEP").

Q. Did Staff or RUCO reduce the pro forma PEP cost contained within the Company's requested revenue requirements?

A. Yes. Both Dr. Fish and Mr. Smith proposed that the pro forma level of PEP expense be reduced by half on the basis that the program benefits both shareholders and customers and thus should be shared equally.

The Company strongly disagrees with the "who benefits" analysis as a tool for what percentage of recovery to be afforded to the Company. That same type of analysis could be applied to any number of expense items. For example, payroll expense for operation personnel – the customers clearly benefit from employees operating and maintaining the system to provide safe reliable service – but the shareholders benefit as well as employees keep the system operational so the business can generate sales and make a profit for the owners. Should the payroll cost of operational employees be proportioned based on who benefits?

The decision to allow recovery should be based on whether the costs are prudently incurred, reasonable and if the costs are incurred to provide reliable service to customers. If those criteria are all met, then the cost should be fully recoverable, not partially. Neither Staff nor RUCO contend that the overall compensation, including the PEP is unreasonable or imprudent. To allow only partial recovery based on proportion of benefit only assures a much greater possibility that the income generated by the Company will not yield the return it is authorized to earn.

Q. Are Staff and RUCO's adjustments consistent with prior Commission orders?

A. Yes and no. The Commission's position on the recovery of incentive compensation program cost has varied, somewhat inconsistently, based on the nature of the incentive compensation. UNS Gas' incentive compensation is a cash-based incentive program available to all non-union employees. The Commission allowed full recovery of a similar program for Arizona Public Service Company ("APS") in Decision No. 69663 (June 28, 2007). However, I acknowledge that the Commission previously allowed only 50% recovery of the PEP in the last UNS Gas and UNS Electric rate cases, relying primarily on how it treated the Southwest Gas Management Incentive Program in the Southwest Gas rate cases. UNS Gas continues to believe that given the nature of its PEP, it should be allowed full recovery of the PEP expense.

Q. Does the Commission's position in the recent APS rate case support your position?

A. Yes. The Commission provided for full recovery of APS' Cash-based Incentive Compensation plan expenses in Decision No. 69663 (page 37) stating:

> APS' variable incentive program is an "at risk" pay program where a part of an employee's annual cash compensation is put at risk and expectations are established for the employee at the start of the year. If certain performance results are achieved, a predictable award will be earned based upon objective criteria. The actual amount of the award depends upon the achieved results. The intent of the plan is to: link pay with business performance and personal contributions to results; motivate participants to achieve higher levels of performance; communicate and focus on critical success measures; reinforce desired business behaviors, as well as results; and to reinforce an employee ownership culture. (APS Exhibit No. 51, Gordon Rebuttal, p. 8) Staff did not oppose inclusion of the TY variable incentive expense in cost of service, noting that although corporate earnings serve as a threshold or precondition to the payout, the TY level of expense is tied primarily to performance measures that directly benefit APS customers. (Staff Exhibit No. 43, Dittmer Direct, p. 110)

Q. Can you provide more detail as to why you disagree with Staff and RUCO?

A. Certainly. The evidence I discuss below shows that UNS Gas' total employee compensation including the PEP program is reasonable and to deny recovery is to ensure that UNS Gas will not have a reasonable opportunity to recover its operating cost. Again, neither Staff nor RUCO assert that the total employee compensation including PEP is unreasonable. In effect, UNS Gas is being penalized simply for its compensation structure.

I believe the PEP program costs are actually a net savings to customers. I also believe the program provides a valuable management tool to promote increased earnings, to promote additional cost savings, to motivate individual employees, to encourage groups of employees to work together to impact specific goals, and to aid in the retention of the higher-performing employees. All of these are ultimately benefits passed on to customers.

The goals or targets of the current PEP program are also heavily weighted toward providing benefits to customers. The program uses operational cost containment, customer service goals and financial performance measures in setting the PEP level. The benefits of the current program goals and objectives merit full recovery of the expense as it provides benefits to the customers and doesn't provide for unreasonable salary and wage expense.

No party disputes that the PEP program actually reduces the ultimate cost passed on to customers in the form of reduced payroll and benefits cost. It is counter-intuitive to penalize the Company for having an employee compensation program that reduces the ultimate costs passed on to the customers, that promotes increased safety, increased customer service, the reduction of operating costs and increases the financial soundness of the Company and does not result in unreasonable or imprudent employee compensation levels.

Similar to the APS Plan, the PEP rewards certain performance if the desired results, which are based on objective criteria, are achieved. The actual amount of the award depends upon the achieved results. The intent of the plan is to: link pay with business performance and personal contributions to results; motivate participants to achieve higher levels of performance; communicate and focus on critical success measures; reinforce desired business behaviors, as well as results; and to reinforce an employee ownership culture.

Q. Please further explain the PEP and some of the benefits to customers, the Company and to employees.

A. A more accurate description of that program would be "a portion of an individual's fair and reasonable compensation put "at risk" to encourage and enhance group and individual performance". The at-risk compensation portion is used on an individual basis to reward specific performance and provides management with an additional tool to encourage further cost savings, motivate individuals and to encourage employees to impact goals.

If the PEP program is eliminated, there would be considerable increased pressure on base compensation. Employee base compensation would eventually have to be increased toward market to allow the Company to compete in attracting and retaining a skilled workforce. It is not reasonable to assume that the Company would be able to continue to attract employees at compensation rates well below the market median, without the PEP. So, Staff's recommendation will drive base compensation upward so that little to no compensation is variable or at risk. If that result came to fruition, then UNS Gas employees would not be as incentivized to meet performance based criteria that directly benefit UNS Gas customers.

Q. Are there advantages to the PEP versus just paying base compensation?

A. From the Company's and the customers' perspectives, there are many advantages to using a program like PEP, rather than just paying median market wages as non-variable base compensation. The most direct savings result because PEP is not part of base compensation; therefore employee costs such as vacation pay, sick pay, long term disability, 401K matching, pension expense and other post-retirement benefits that are based on base pay are all reduced. The impact of reduced compounding wage increases that would be based on a higher base pay total is another benefit. Additionally, the benefits produced from the specific goals are tied to a portion of the employees' compensation, which allows management to have greater flexibility to distinguish and reward high-performers, to attract and retain more talented employees, and to mitigate the costs of training new employees by retaining key ones. Neither Staff nor RUCO dispute these facts and that the PEP brings added flexibility at reasonable cost.

From the employee perspective, the proper mix of base wages and incentive pay has benefits. Individual employees are rewarded for contributing to the overall success of the organization and are allowed to directly participate in corporate success with a clear line of sight to goals. Employees can be acknowledged and rewarded for making a difference by exhibiting extra effort, working more hours on the job (for professionals not eligible for overtime pay), or supporting the program goals. Also, payment to individual non-union employees is discretionary, so talented and high-contributing employees can earn more through the program, which can be a motivating factor and can also lead to higher retention rates for more talented employees. Rather than being an over-inflated program, the PEP provides direct benefit to UNS Gas customers economically. Neither Staff, nor RUCO for that matter, have presented any evidence to demonstrate that the compensation and benefit packages of the UNS Gas employees (including incentive compensation) are not prudent or reasonable.

Q. Mr. Smith also refers to the Commission's treatment of Southwest Gas' Management Incentive Program to support its position. Is UNS Gas's PEP the same as Southwest Gas' Management Incentive Program ("MIP")?

A. No. Southwest Gas' MIP program appears limited to management personnel. UNS Electric's PEP is for all non-union employees. Further, Southwest Gas' MIP appears specifically related to return on equity targets and customer to employee ratios. The Company's PEP is based on broader and more wide-ranging factors, of which financial performance is only a part of the consideration.

Q. You mention the PEP is for all non-unions employees. Why are union employees not eligible for PEP compensation?

A. The union employees wage rates are collectively bargained and up to this time the union members have not been receptive to putting any portion of an individual's pay at-risk and/or allowing equivalent grade employees to earn differing pay levels based on performance.

2. <u>Stock Based Compensation.</u>

Q. Did either Staff or RUCO reduce the stock based compensation cost contained within the test year?

A. Yes. RUCO excluded 100% of the compensation expense contained in the test year related to differing types of stock compensation. Staff did not expressly address this issue.

Q. What is Mr. Smith's basis for this exclusion?

A. Mr. Smith cites the recent APS and UNS Electric rate case decisions in which the Commission denied recovery of stock based compensation. In the APS decision, the Commission expressed a concern that the program could promote inappropriate short-term management decision making. However, I believe the exact opposite is true. Stock-based compensation or equity compensation is primarily awarded in the form of stock options, which vest over a period of years and whose ultimate value is based on the *future* strength and performance of the Company. As such, the stock based compensation strongly promotes long-term employee and director retention and long-term sustainable performance activities.

Q. Why do you believe full recovery of the stock based compensation is appropriate in this case?

A. Neither Staff nor RUCO has questioned that the program provides benefits to customers, its prudency, the reasonableness of the cost or that it was incurred to provide service to customers. This program, like PEP, is designed to put individual employee's compensation at risk. However, this program focuses on creating incentives for long term planning and the long term success of the Company. Clearly customers benefit from the long term planning and success of the Company. Indeed, the Commission itself recognizes the benefits of long term planning through its Integrated Resource Planning, Energy Efficiency Standards, Renewable Energy Standards and Renewable Transmission planning dockets – all are focused on the long term service provided to customers.

3. <u>Supplemental Executive Retirement Plan ("SERP").</u>

Q. Did Staff or RUCO take exception to the SERP expense contained within the test year?

A. Yes. Both parties removed 100% of the SERP expense allocated to UNS Gas, asserting that SERP expense is simply an excess benefit provided to select executives. The Company strongly opposes this representation as misleading and incorrect. This expense and program is not an "excess" benefit or cost. It is the cost required to keep retirement benefits equal as a percentage of compensation for eligible employees.

Q. Do you agree with their adjustments to remove 100% of the SERP expenses allocated to UNSG?

A. No, I do not. They both have relied upon recent Commission decisions that disallowed the recovery of SERP expenses. The SERP program is a portion of the compensation and benefits package made available to UniSource officers. The level of compensation, incentives and benefits are all determined by the Compensation Committee of the Board that is comprised of independent Board members.

The reason a program like SERP is necessary is because of funding deductibility limits defined within the Internal Revenue Code. And those funding limits are set based on tax revenue collection needs, not on the point at which it is no longer fair to provide retirement benefits. They are not a guideline for how much is fair and reasonable as part of an employee benefit program. The evaluation of that should be the reasonableness of the compensation and the executive benefit package itself. All UNS Gas is asking for here is to allow executives to have the same proportion or level of retirement benefits as for other Company employees

Q. Is SERP an excess benefit?

A. No. It simply keeps those individuals whose compensation level exceeds deductibility levels equal to those individuals whose compensation does not. The intention of the plan is to keep them equal.

Q. Do you have any additional comments on Staff's SERP adjustment?

A. Yes. Staff incorrectly pulled an amount from the lead lag study as the SERP expense and the amount they used is actually the test year PEP expense for UNS Gas.

C. Rate Case Expense.

Q. Did Staff or RUCO dispute the Company's pro forma rate case expense?

A. Dr. Fish (at page 29) proposes an adjustment to Rate Case Expense based on the Company's response to Staff Data Request 6.88. UNS Gas agrees with that adjustment and Exhibit DJD-1 reflects that change in the Company's Rate Case Expense pro forma adjustment.

RUCO reduced the Company's proposed rate case expense. Mr. Smith (at page 50-51) proposes an allowance of a normalized level of $100,000 on an annual basis in expense for rate case expense based on the $300,000 rate case expense recovery over three years provided in the last UNS Gas rate case.

Q Do you agree with RUCO's recommendation of a normalized annual allowance of $100,000?

A. No. To the date of this testimony UNS Gas has already incurred over $400,000 in external rate case cost through the use of substantial TEP employee time (which is allocated to UNS Gas) and outside counsel. The final cost will be in excess of UNS Gas' initial $500,000 estimate. These costs are the incremental real cost associated with filing a rate case by a utility that does not have its own regulatory counsel or rates group on hand and built into base rates.

Q. Do you have any other comments on this issue?

A. Yes. RUCO is recommending an annual allowance of $100,000 for rate case expense. Putting that amount in some context, it would not even cover the cost of UNS Gas (with almost 150,000 customers) employing one attorney on staff full time as regulatory counsel considering salary, benefits and overhead. It is just not a reasonable level of recovery. Also, if RUCO wants to establish a normalized level of rate case expense, it should be based on actual cost and the expected level to be incurred. RUCO's position, if adopted, would penalize UNS Gas for efficiently outsourcing its regulatory needs by disallowing prudently incurred costs. UNS Gas contends that its use of TEP employees and outside counsel is more cost effective than hiring more employees to staff an entirely separate regulatory division at UNS Gas. RUCO's position would have the effect of encouraging the Company to reevaluate this cost effective system in favor of more costly, but necessary, options, including the hiring of regulatory counsel and staffing a regulatory division.

Q. Are there other problems with RUCO's reduction?

A. Yes. If Staff's and RUCO's recommendations and the returns they will generate are adopted by the Commission, it is very likely that UNS Gas will need to quickly file another rate case. There is no basis for RUCO to assume a three year amortization period under such a scenario. Based upon the most recent evidence in which UNS Gas has filed serial rate cases, RUCO should be recommending an 18 month amortization period. If their $300,000 artificial limit is approved, then the annualized or normalized annual expense would be $200,000 to reflect the short period the rates in this case are likely to be in effect, and to give the Company a reasonable opportunity to recover some portion of its allowed rate case expense.

D. Membership Dues Expense - American Gas Association ("AGA").

Q. Did Staff or RUCO reduce the Company's pro forma membership dues expense?

A. Yes. Both Staff and RUCO proposed adjustments to AGA dues expense.

Q. Does the Company agree with their proposals?

A. No. First, Staff is recommending the same reduction (3.5%) of the AGA dues as the last rate case. However, UNS Gas already agreed to follow the approach from the last rate case, and therefore UNS reduced the AGA dues expense by 4.0% in its Application. Staff's adjustment is unnecessary and essentially double-counts the reduction.

Second, RUCO is recommending the normal and recurring core dues associated with the AGA be reduced well beyond the portion identified as lobbying expense by the AGA. This reduction is based on a 2001 NARUC study that is based on 1999 data. Not only is this analysis stale, but it is not relevant. The Company has provided substantial and compelling support of and for the many benefits provided by the membership and the expense sought for recovery is reasonable and should be recoverable.

E. Call Center Expense.

Q. Did either Staff or RUCO reduce the Company's Call Center expense?

A. Yes. Staff reduced the Call Center expense being allocated to UNS Gas from TEP. TEP's Call Center serves UNS Gas, UNS Electric and TEP. Dr. Fish asserts that the increase in the expense level being allocated to UNS Gas is not commensurate with an increased service level and therefore is inappropriate. Dr. Fish adjusted test year expense back to the level approved in the last rate case, which is based on a 2005 test year.

Q. What was the basis for Dr. Fish's assertion?

A. Dr. Fish argues that while the costs increased, the number of "service orders" did not substantially increase from 2005 to the test year.

Q. Do you agree with Dr. Fish's adjustment to reduce the test year expense for the Call Center?

A. No. Service orders are a poor measurement of Call Center use; in fact UNS Gas customers have substantially increased use of the Call Center. Moreover, assuming expense levels established using a 2005 test year are appropriate for rates going in to effect in 2010 without any adjustment for inflation, wage increases or equipment additions is unreasonable. The Call Center has seen the magnitude of call volume and call duration for UNS Gas grow by approximately 150% over the 2005 levels. Service orders are only a minor portion of the services provided by the Call Center to UNS Gas. UNS Gas is using more of the Call Center's capacity (as one of the three affiliates) then it was in 2005. In addition, the overall annual operating cost of the Call Center has increased 22% from 2005 to 2008. The overall capital investment in the facility, computers, and phones will continue to increase as the company ensures that customers have a mechanism to access the Company.

Q. You state that UNS Gas customer usage of the Call Center has increased. What data do you have to support this assertion?

A. From the last test year (2005) through 2008, call volume has increased steadily. In 2005, the Call Center received 352,330 calls for UNS Gas; in 2006, the Call Center received 483,026 calls; in 2007, the Call Center received 514,689 calls; and in 2008, the Call Center received 526,156 calls. This amounts to an increase of 150% from 2005 to 2008. In 2006, the Call Center spent approximately 16.5% of its time handling UNS Gas calls, while in the first half of 2009 that number had increased to almost 22%.

Q. If present service levels were handled independently by UNS Gas, would the cost be higher?

A. Absolutely. UNS Gas as an independent company would need a facility, phone lines, computer systems, phone systems, Call Center employees, supervisors, a manager and so forth. By joining with its affiliates TEP and UNS Electric, UNS Gas realizes economies of scale that it could not achieve as a stand-alone customer. It is more cost effective to share the significant fixed cost with two other utilities. UNS Gas should not be denied full recovery of the reasonable cost to serve the demands of its customers. Adoption of Staff's recommendation would encourage the Company to reevaluate this cost effective system against implementing a standalone Call Center for UNS Gas.

Q. Why invest in the Call Center?

A. The Call Center is the primary vehicle in which customers have human contact with the Company. The Company values our customers, and wants to ensure that customers have a way to get answers to questions they may have regarding their service. As a result, we continue to invest in the Call Center. In 2007, a new billing system was implemented. In 2009, we are making other technology improvements to ensure that customers obtain the information they desire. While the 2009 expenses are not included in this rate case, these investments can fortunately be shared by three affiliates serving over 600,000 customers as opposed to UNS Gas having to make these investments on its own. Furthermore, upon acquiring the gas assets from Citizen's in 2003, the access customers had in calling the Call Center was inadequate, as evidenced by many customers not even able to get into the system, let alone talk to a customer service representative. We will continue to invest in a reasonable level of technology in our Call Center to give our customers a reasonable customer service experience.

Q. How are Call Center costs allocated today?

A. Call Center costs are allocated based on the talk time that the Call Center experiences by customers of TEP, UNS Electric, and UNS Gas. However, in three districts (Kingman, Havasu, and Nogales) there is combined talk time for both UNSE and UNSG, and, as a result, the system cannot distinguish between talk time for a particular company, so in these three districts talk time is split by customer count.

Q. Why is Dr. Fish's adjustment incorrect?

A. Dr. Fish bases his adjustment on the declining service orders per month. As I noted above, service orders are only one small contributor to talk time. If customers only called for a hook up for new service, we would have a significantly smaller Call Center. Furthermore, in spite of declining service orders per month, inbound call volume, and the costs associated with that call volume, has continued to increase. Often, we have to explain the bills, make billing arrangements, discuss credit terms, discuss a disconnect or reconnect due to a past due bill, etc. Answering our customers' questions and providing them the information they desire takes time, and time on the telephone is an appropriate and more rationally related way to allocate costs than an allocation based solely on one aspect of customer service, the service order.

The specific talk time for UNS Gas customers has increased over time: in 2006, the average talk time was 16.6% of the total for the three affiliates; in 2007, 23.6%; in 2008, 20.4%.

Q. What other factors contributed to the increase?

A. The other contributing factor is that costs have increased in the Call Center over time. On average in 2005, total monthly Call Center costs before allocations were roughly $415,000. In the test year, July 2007 to June 2008, the monthly costs averaged about

$507,000, a 22% increase over more than three years. In that time, wages and on-going costs continue to increase, and we continue to offer new services to our customers that are included in these costs. For example, UNS Gas customers now have credit card processing and on-line bill presentment. These new services cost money that increase our costs but ultimately provide the customer with better options and a better service level experience. However, increasing talk time at UNS Gas, was the largest contributor to the allocated Call Center costs, not increased Call Center costs.

F. Bad Debt Expense.

Q. Did Staff or RUCO reduce the Company's pro forma bad debt expense?

A. Yes. Staff reduced the pro forma expense level based on Dr. Fish's assertion that the Company has recorded too much expense for bad debt the last three years based on his assertion that the Company is over reserved for bad debt.

Q. Do you agree with Dr. Fish's assertion that the Company is over reserved and his corresponding assertion that bad debt expense has been overstated?

A. No. Dr. Fish has performed some analysis of the change in the Allowance for Bad Debt ("allowance") account that has taken place from the years 2005 and 2006 in comparison to the current levels and asserts that it is over stated by approximately 100%. The allowance account is a contra asset account that reduces the Accounts Receivable ("A/R") account on the Company's balance sheet so that the net of the two reflects the reality that not all of those accounts will be fully collected. This account is reconciled on a quarterly basis by the accounting department of TEP and is audited annually by an independent accounting firm to insure that it is materially accurate. To say that it is overstated by that magnitude is to assert error on the part of the accounting professionals. This is something to which I take considerable exception and that is blatantly incorrect.

Q. Can you tell us how the Company evaluates the allowance account?

A. Yes. Primarily this is achieved by looking at the aged accounts receivable reports and the historical recovery levels of these aged assets. A hypothetical example would be that you have $10 million of A/R and $1 million of that is over 120 days unpaid – historically the Company only collects 10% of accounts that delinquent. In that example, you would have an allowance account balance of $900,000 until you actually wrote the accounts off and removed them from A/R. What Dr. Fish did not discover in his analysis was that the allowance account grew substantially in 2007 because of the conversion of the Customer Billing System. Upon this conversion the normal process and timing of A/R write offs was essentially put on hold.

Q. What was the impact of putting the normal A/R write off process on hold?

A. When you do that the A/R balance becomes overstated, you have not cleared accounts out that are just not collectible any more. Correspondingly, the allowance account grows so as to reflect the proper "net" A/R balance. This holding on write-off processing also impacted the historical net write-off information. So if you look at net write-offs historically there was also a significant decrease in 2007 and that information would skew any normalization if you used an average of net write-offs including that period.

Q. So what does this mean in relation to Dr. Fish's adjustment to bad debt expense?

A. It means that Dr. Fish was looking at only one side of the equation and came to an incorrect conclusion. Bad debt expense is the accrual based expense to match expected net write-offs with revenue as it is recorded. Now this is not a perfect process, it is done by continually looking at your historical levels of recovery and looking at the allowance account versus the aging of your A/R and monitoring other items like large customer bankruptcies. That is why for ratemaking purposes the preferred method is to take net write offs (or bad debt expense) as a percentage of retail revenue over a long period of time and use that normalized relationship to apply to pro forma retail revenue to calculate pro forma bad debt expense. That is why the Company's calculation of 4.87% of pro forma retail revenues is a proper reflection of expected bad debt levels based on the historical levels of bad debt expense and net write-off levels. The allowance account is at an appropriate level balance given the accounts in A/R and the company as expensed the proper level for the three year period in question. As such, the Company's adjustment should be accepted.

G. <u>Outside Legal Expense.</u>

Q. Did either Staff or RUCO reduce the Company's pro forma outside legal expense?

A. Yes. Both Staff and RUCO reduced UNS Gas's pro forma outside legal expense. Staff chose to eliminate the Company's adjustment entirely and did not give any substantive reason for the elimination. RUCO reduced the adjustment by about two-thirds with the primary reason being that the Company's normalization included cost associated with the Company's intervention, in support of its customers, in El Paso Natural Gas Company ("EPNG") rate case before FERC. Both Staff and RUCO fail to provide an allowance for normalized, on-going costs of legal services, based on either historical or projected costs.

Q. Do you agree with RUCO's significant reduction of the Company's normalized outside legal cost?

A. No. The basis for Mr. Smith's adjustment is to exclude the cost to monitor and participate in the EPNG rate case that was incurred in the years 2005-2007 in calculating his normalized outside legal cost. UNS Gas has been involved in monitoring all, and participating in many, of the interstate pipeline filings made by EPNG and Transwestern Pipeline ("TW") at FERC each and every year since UES has owned the Company. Since July 2007, there have been approximately thirty filings, in addition to general system-wide rate case filings, made by EPNG and TW at FERC. UNS Gas has intervened in and monitored these filings, and has participated in and litigated some of these cases because the filings could result in changes to the EPNG and TW pipeline tariffs, which in turn could affect the rates and terms and conditions under which UNS Gas receives services from those pipelines and ultimately affect the services and rates of UNS Gas' core customers. UNS Gas has no indication that this level of intervention on behalf of the customers of UNS Gas will be reduced. EPNG filed a Natural Gas System Wide Rate Case on June 27, 2008 (Docket No. RP08-426-000). This rate case is currently progressing toward litigation and is not likely to be resolved until first quarter 2010. If EPNG is not satisfied with the rate case order handed down by FERC, they could appeal it to the Court of Appeals. Additionally, TW will most likely file for a system-wide rate case in 2011. Both EPNG and TW file rate cases regularly and frequently; there is no basis to assume that UNS Gas will not incur legal costs in these cases, unless RUCO and Staff are suggesting that UNS Gas simply stop participating in FERC cases thereby ensuring that UNS Gas customers' interests will not be represented in those matters.

In the last UNS Gas rate case, , the Commission allowed the Company to recover outside legal expenses related to FERC rate cases (Decision No. 70011 at page 20). It should do so here, as well. If the Commission now eliminates the historical level of cost recovery of intervention in these cases from base rates – the unequivocal message to UNS Gas is that UNS Gas customers' interests should not be represented in FERC cases in the future.

H. <u>Fleet Fuel Expense.</u>

Q. Did Staff or RUCO reduce the Company's pro forma fleet fuel expense?

A. Yes. Both Staff and RUCO proposed to reduce the Company's pro forma expense to reflect the reduced cost of fuel currently being incurred by the Company.

Q. Do you agree with either Staff or RUCO's proposed adjustments to reduce fleet fuel expense?

A. No. I can agree that the test year level of expense may need to be adjusted given the extreme volatility of fuel expense, but I do not agree with the adjustments proposed by either.

Q. Please explain your concerns with Staff's proposed adjustment.

A. Staff has applied a forward looking estimate of the average cost of fuel per gallon from the Energy Information Administration ("EIA") of $1.96 per gallon. As of the time this testimony was prepared the average cost of gasoline published by the EIA for the West Coast (excluding California) was $2.82 per gallon. So clearly the price estimate in Dr. Fish's adjustment is not reflective of current known price levels.

Q. Please explain your concerns with RUCO's proposed adjustment.

A. Mr. Smith applied a couple techniques to normalize fuel expense. He used the last three years fuel consumption levels to calculate an average level of fuel purchased and then applied an estimated fuel cost of $2.28 per gallon derived from www.arizonagasprices.com. Although the Company does not concede that the Commission should grant any evidentiary weight to a website that chronicles fuel prices throughout the State of Arizona, especially where the Company has presented evidence of fuel costs it incurred in its particular service territory, as of the time this testimony was prepared the average cost of gasoline as published by www.arizonagasprices.com was $2.58 per gallon. Based upon Mr. Smith's reliance on this website, at a minimum, his adjustment must be increased significantly. This significant change in price in such a short period of time is further evidence of why the Commission should not afford any weight to a website that simply chronicles daily fuel prices. This method produces volatile and misleading data regarding fuel expense, especially when compared to UNS Gas' proposal, which averages fuel costs actually incurred in its service territory over a period of years.

Q. Are there other issues with Staff and RUCO's adjustments?

A. Yes. RUCO inadvertently had an additional amount in their schedules and actually reduced fuel cost by $471,000 in its revenue requirements. The amount they intended to reduce it by was $241,000. Also both Staff and RUCO relied upon data provided by the Company and labeled as fuel expense, but it was actually fuel cost. Fuel cost exceeds fuel expense because a portion of fuel cost is capitalized. The fuel cost data used by Staff and RUCO does not provide an accurate measure of fuel expense. The amounts spent to obtain fuel for UNS Gas, and the a per gallon data is correct, but the actual expense is only 73.4% of that cost, the other 26.6% of that cost went to capital projects. Fuel cost as identified goes into a transportation clearing account and then is charged out as vehicles are used along with other cost like insurance, and maintenance. 26.6% of those costs actually go to capital projects and thus the fuel expense is only 73.4%.

Q. What does the 73.4% mean to Staff and RUCO's adjustments?

A. It means that only 73.4% of Staff's and RUCO's reductions should actually be applied to revenue requirements if either were to be accepted.

Q. What is the Company's suggestion for adjusting test year fuel expense?

A. Fuel prices are highly volatile. The Company recommends using the three year average to normalize the cost based on recent actual cost incurred by UNS Gas. UNS Gas' primary service territories are not located in Arizona's major urban communities and as such UNS Gas' actual fuel cost tends to be higher than Tucson and Phoenix. The average price per gallon of fuel incurred by UNS Gas over the past three years in its service territory is $3.05 per gallon. This amount is known, measurable and provides compelling evidence of UNS

Gas' fuel expense, especially when compared to statewide internet cost projections or National or even Regional statistics regarding fuel prices as presented by Staff and RUCO. By applying the three year average cost to the three year average consumption the Company is suggesting a $51,258 reduction in test year fuel cost. If this three year average is not used, then the actual test year expenses should be used as reflected in UNS Gas' original Application. In no event should Staff's and RUCO's internet cost projections be used, as they are simply not known and measurable.

I. <u>Postage expense.</u>

Q. Do you agree with the postage expense adjustment proposed by Staff?

A. Yes. Staff proposes an adjustment based on the known and measurable increase in postage rates that has occurred. However, this adjustment would then need to be corrected to reflect the correct annualized number of customers, as discussed in Mr. Erdwurm's testimony.

Q. Does this conclude your Rebuttal Testimony?

A. Yes, it does.

EXHIBIT

DJD-1

UNS GAS, INC.
COMPARISON OF ADJUSTMENTS TO REVENUE REQUIREMENT
TEST YEAR ENDED JUNE 30, 2008

	UNSG	ACC	RUCO	UNSG		UNSG
	As Filed	As Filed	As Filed	Revised		
	11/7/08	6/8/09	6/8/09	7/8/09	Summary	Witness
Original Cost Rate Base - Unadjusted	$176,153,570	$176,153,570	$176,153,570	$176,153,570		Dukes
Rate Base Adjustments						
Acquisition Adjustment	32,852,425	32,852,425	32,852,425	32,852,425	No change	Dukes
Southern Union Acquisition Adjustment	(16,145,381)	(16,145,381)	(16,145,381)	(16,145,381)	No change	Dukes
Griffith Plant	(4,942,600)	(4,942,600)	(4,942,600)	(4,942,600)	No change	Dukes
Build-Out Plant	(7,896,628)	(7,896,628)	(7,896,628)	(7,896,628)	No change	Dukes
Golden Valley Plant	(4,393,096)	(4,393,096)	(4,393,096)	(4,393,096)	No change	Dukes
Post-Test Year Non-Revenue Plant in Service	1,527,588	-	-	1,527,588	Staff disallowed CWIP-Post Test Year Plant (THF-B-5, pg 14-16). RUCO disallowed CWIP-Post Test Year Plant (B-1, pg 13-18).	Dukes
Customer Advances Adjustment	589,152	-	-	589,152	Staff disallowed Customer Advances (THF-B6, pg 16-17). RUCO disallowed Customer Advances (B-2, pg 18-20).	Dukes
Accumulated Deferred Income Taxes	4,450,108	4,411,114	4,253,852	4,450,108	Changes are recalculations based on proposed pro forma adjustments. Staff disallowed SERP expense (THF-B9, pg 18-19). RUCO disallowed specific items (Div Equivalents, Restricted Stock, Stock Options, Vacation & Pension) from the ADIT Calculation (B-6, pg 23-24).	Kissinger
Working Capital	97,967	(1,530,037)	2,296	2,183,948	Staff adjusted cash working capital for a change in the purchased gas payment lag and for the impact of the other proposed adjustments to operating revenue and expense (THF-B7, B8 & B10, pg 17-18). RUCO disallowed the 13-month average adjustment of $92,671 for Prepaids (B-3, pg 20-21). UNSG adjusted cash working capital as a result of other pro forma adjustments/changes and to reflect the corrected purchased gas payment lag.	Dukes
Total Adjustments	6,139,535	2,355,797	3,730,868	8,225,516		
Pro Forma OCRB	182,293,105	178,509,367	179,884,439	184,379,086		
Proposed Rate of Return	8.75%	8.24%	7.55%	8.75%	Staff ROE 10%; RUCO ROE 8.61%, Company ROE 11%	Grant
Required Operating Income	$15,950,647	$14,709,172	$13,581,275	$16,133,170		

UNS GAS, INC.

COMPARISON OF ADJUSTMENTS TO REVENUE REQUIREMENT

TEST YEAR ENDED JUNE 30, 2008

	UNSG As Filed 11/7/08	ACC As Filed 6/8/09	RUCO As Filed 6/8/09	UNSG Revised 7/8/09	Summary	UNSG Witness
Original Operating Income - Unadjusted	$13,447,491	$13,447,491	$13,447,491	$13,447,491		*Dukes*
Operating Income Adjustments						
Operating Revenue Adjustments						
Griffith Plant Operations	(865,152)	(865,152)	(865,152)	(865,152)	No change	Dukes
Golden Valley Rev & Exp	(2,148,778)	(2,148,778)	(2,148,778)	(2,148,778)	No change	Dukes
Gas Cost Rev & Purchased Gas Cost	(90,472,202)	(90,472,202)	(90,472,202)	(90,472,202)	No change	Dukes
NSP Revenue & Gas Cost	(17,165,706)	(17,165,706)	(17,165,706)	(17,165,706)	No change	Dukes
Rate Case Revenue Annualization	1,448,476	1,797,514	1,448,476	1,448,476	Staff's adjustment differs because they assumed additional customers for the entire year based on 12/31/2007 customer levels increased by 1.25%.	Erdwurm
Customer Annualization	(516,003)	655,768	-	(516,003)	Staff adjusted revenue reflect additional customers based on 12/31/2007 customer levels increased by 1.25%. RUCO argues we are a growing system and that a negative annualization made no sense so they reversed our adjustment.	Erdwurm
Weather Normalization	(882,453)	(903,889)	(882,453)	(882,453)	Staff's adjustment reflects the additional assumed customers.	Erdwurm
DSM Revenue & Expense	(130,917)	(130,917)	(130,917)	(130,917)	No change	Dukes
Service Fees & Late Fees	239,235	239,235	239,235	239,235	No change	Dukes
Total Adjustments to Operating Revenues	(110,493,500)	(108,994,127)	(109,977,497)	(110,493,500)		
Operating Expense Adjustments						
Griffith Plant Operations	(160,390)	(160,390)	(160,390)	(160,390)	No change	Dukes
Golden Valley Rev & Exp	(1,763,947)	(1,763,947)	(1,763,947)	(1,763,947)	No change	Dukes
Gas Cost Rev & Purchased Gas Cost	(90,472,202)	(90,472,202)	(90,472,202)	(90,472,202)	No change	Dukes
NSP Revenue & Gas Cost	(16,696,668)	(16,696,668)	(16,696,668)	(16,696,668)	No change	Dukes
DSM Revenue & Expense	(130,917)	(130,917)	(130,917)	(130,917)	No change	Dukes
Payroll Expense	362,018	362,018	136,278	362,018	RUCO removed the 2010 pay increase, stating it is not known & measurable, but allows the 2009 increase (C-12, pg 55-56)	Dukes
Payroll Tax Expense	2,557	(9,182)	(22,325)	2,557	Staff adjusted payroll tax expense to reflect the proposed reduction for incentive compensation expense but used an overall rate of 10%, which is incorrect (THF-C16, pg 28). RUCO is removing the Payroll Tax associated with the 2010 pay increase disallowed. RUCO did not excluded the Capital portion in their Payroll Tax calculation. Should have been incrementally adjusted by $17,354 instead of $24,882. (C-12, pg 55-56)	Dukes
Pension and Benefits	77,544	77,544	77,544	77,544	No change	Dukes
Incentive Compensation (Staff & RUCO Adj)	30,930	(86,463)	(121,581)	30,930	Staff adjusted based on allowance of 50%, but appears to have incorrect expense amounts (THF-C14, pg 27-28). RUCO disallowed 50% of the Incentive Comp in the TY (TY total is $280,968/2 = $140,484 disallowed & $24,054/2 = 12,027 disallowed for taxes), RUCO's adjustment was not done incremental and is including the as filed adjustment as well (C-3, pg 29-35).	Dukes

UNS GAS, INC.
COMPARISON OF ADJUSTMENTS TO REVENUE REQUIREMENT
TEST YEAR ENDED JUNE 30, 2008

	UNSG As Filed 11/7/08	ACC As Filed 6/8/09	RUCO As Filed 6/8/09	UNSG Revised 7/8/09	Summary	UNSG Witness
Rate Case Expense (Staff & RUCO Adj; UNSG Adj.)	200,000	141,667	41,667	141,667	Staff adjusted test year rate case expense to reflect the correction of the error in the original pro forma as provided in response to Staff Data Request TF 6.68 (THF-C17, pg 29). RUCO allows only $300,000/3 for $100,000 per year and is removing the $58,333 prior year rate case expense still included in the TY. ($100,000 allowable - $58,333 included in test year = $41,667 adjustment) (C-9, pg 50-53). UNSG is adjusting expense in accordance with the corrected pro forma as presented in response to Staff Data Request TF 6.68.	Dukes
CARES Expense	(25,983)	(25,983)	(25,983)	(25,983)	No change	Dukes
CARES Regulatory Asset Amort.	164,197	164,197	164,197	164,197	No change	Dukes
Y2K Amortization	(76,753)	(76,753)	(76,753)	(76,753)	No change	Dukes
Miscellaneous Expenses (Staff Adj for AGA dues & postage expense; RUCO Adj for AGA dues)	(827,301)	(779,380)	(844,063)	(827,301)	Staff adjusted postage expense for the postage increase of $.02 effective in 5/11/09 using Staff's annualized customers in THF-C4 and the incremental postage cost based on the $.02 increase and UNSG actual customers per Schedule H2 (THF-C8, pg 25), but the final adjustment was incorrect do to an addition error. Staff adjusted AGA dues expense to reflect the same disallowance in the prior rate case (THF-C10, pg 25), but the AGA dues and the percentage disallowed are incorrect and UNSG already removed 4% of AGA dues in the original pro forma. RUCO disallowed 40% of the AGA dues in TY (C-6, pg 43-48).	Dukes
Normalize Outside Legal Expense	305,984	-	88,310	305,984	Staff disallowed the UNSG adjustment to normalize test year legal expense (THF-C11, pg 26) arguing that the adjustment was related to prior rate case expense, when the pro forma was to normalize the test year ignorring the large write-off related to prior rate case expense. RUCO disallowed a majority of El Paso legal costs in the normalization calculation (C-7, pg 48-49).	Dukes
Bad Debt Expense	63,211	(123,416)	63,211	63,211	Staff adjusted Bad Debt Expense (THF-C7, pg 23-24) to reflect the uncollectible rate used in the prior rate case, arguing that UNSG over-accrued the Allowance for Doubtful Accounts in the last three years and thus our three-year average overstates test year expense.	Dukes
Depr & Property Tax - CWIP-Post Test Year (RUCO Adj)	-	-	(95,042)	-	Staff did not adjust depreciation expense for the CWIP removed from rate base. RUCO adjuted Depr. & Property taxes for remove of the CWIP-Post TY for rate base above (C-2, pg 28-29).	Dukes
Stock-Based Compensation Exp (RUCO Adj)	-	-	(266,399)	-	RUCO disallowed 100% of the Stock Base Comp Expense in TY (C-4, pg 35-39).	Dukes
SERP (Staff & RUCO Adj)	-	(310,412)	(101,021)	-	Staff disallowed 100% of SERP expense (THF-C15, pg 28) but used the incorrect amount of SERP expense. RUCO disallowed 100% of SERP expense (C-5, pg 40-43).	Dukes
Fleet Fuel Expense (Staff & RUCO Adj; UNSG Adj.)	-	(294,599)	(471,826)	(51,258)	Staff adjusts Fleet Fuel Expense (THF-C8, pg 24) to reflect an average price per gallon of $1.96 for 2009. Staff's adjustment has an error in the result of the fuel cost of $1.96 per gallon multiplied by the total gallons used; the total Staff cost of $450,747 should be $437,027. In addition, Staff does not reflect the transportation allocation capitalization rate of 26.6% to Capital and 73.4% to O&M. RUCO normalizes Fleet Fuel Expense (C-8, pg 49-50). There is an error is RUCO's number: 1) the $471,826 includes $230,913 too much because the property tax adjustment is picked up twice; and 2) an adjustment needs to be made for the amount of fleet fuel that would be capitalized through the transportation allocation - 26.6% goes to Capital and 73.4% stays in O&M. UNSG is adjusting operating expense to reflect a 3-yr average fuel expense.	Dukes
Call Center (Staff Adj)	-	(484,798)	-	-	Staff is allowing allocation of call center cost based on our prior rate filing amount because request for service agreements have not increased substantially (THF-C12, pg 26-27).	Smith, Dukes

UNS GAS, INC.

COMPARISON OF ADJUSTMENTS TO REVENUE REQUIREMENT

TEST YEAR ENDED JUNE 30, 2008

	UNSG As Filed 11/7/08	ACC As Filed 6/8/09	RUCO As Filed 6/8/09	UNSG Revised 7/8/09	Summary	UNSG Witness
Synchronized Interest (Staff Adj)	-	54,906	-	-	Staff adjusted synchronized interest related to interest on debt as a separate expense instead of including it in the income tax adjustment.	Dukes
Depr. & Amort. Exp. Annualization	(227,976)	(227,976)	(227,976)	(227,976)	No change	Kissinger
Property Tax	1,354,074	1,354,074	1,123,161	1,354,074	RUCO adjusted the Property tax rate from 8.1359 to 7.6127 to reflect a different assesment rate period (C-11, pg 54-55).	Kissinger
Income Taxes	(824,391)	397,788	161,937	(808,257)	Changes are recalculations based on other pro forma adjustments.	Kissinger
Total Adjustments to Operating Expense	(108,646,013)	(109,090,892)	(109,620,788)	(108,739,470)		
Total Net Adjustments	(1,847,487)	96,765	(356,709)	(1,754,030)		
Adjusted Operating Income	$11,600,004	$13,544,256	$13,090,781	$11,693,460		
Operating Income Deficiency	$4,350,643	$1,164,915	$490,494	$4,439,710		
Fair Value Addition (Pre-Tax)	$1,442,389	$912,685	$23,382	$1,353,322		Grant
Fair Value Operating Income Deficiency	$5,793,032	$2,077,600	$513,876	$5,793,032		
Gross Revenue Conversion Factor	1.6366	1.6343	1.6366	1.6366		Kissinger
Increase in Gross Revenue Requirement	$9,480,876	$3,395,423	$841,000	$9,480,876		

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS
KRISTIN K. MAYES - CHAIRMAN
GARY PIERCE
PAUL NEWMAN
SANDRA D. KENNEDY
BOB STUMP

IN THE MATTER OF THE APPLICATION OF UNS GAS, INC. 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 UNS GAS, INC. DEVOTED TO ITS OPERATIONS THROUGHOUT THE STATE OF ARIZONA.	DOCKET NO. G-04204A-08-0571

Rebuttal Testimony of

Karen G. Kissinger

on Behalf of

UNS Gas, Inc.

July 8, 2009

TABLE OF CONTENTS

I. INTRODUCTION.

Q. Please state your name and address.

A. My name is Karen G. Kissinger. My business address is 4350 East Irvington Road, Tucson, Arizona.

Q. On whose behalf are you filing your Rebuttal Testimony in this proceeding?

A. My Testimony is filed on behalf of UNS Gas, Inc. ("UNS Gas").

Q. What is the purpose of your Rebuttal Testimony in this proceeding?

A. The purpose of my Rebuttal Testimony is to: (i) address the adjustments to Accumulated Deferred Income Taxes ("ADIT") proposed by Staff witness Dr. Thomas Fish and RUCO witness Mr. Ralph C. Smith.

Q. Did you file Direct Testimony in this proceeding?

A. Yes.

II. STAFF'S PROPOSED ADIT ADJUSTMENT.

Q. What issue do you wish to address with respect to the ADIT adjustment of Dr. Thomas Fish?

A. In his Direct Testimony, Dr. Fish has proposed to disallow the costs of the Company's Supplemental Executive Retirement Plan ("SERP"). In a related adjustment, Dr. Fish proposes to remove from rate base an ADIT adjustment related to the SERP.

Q. Why do you believe the ADIT adjustment is inappropriate?

A. The amount that Dr. Fish has identified as ADIT related to SERP ($38,994) he believes to be included in rate base. But this amount is not actually in UNS Gas' proposed rate base, and therefore it is not necessary to remove it. The amount that Dr. Fish identified is deferred income tax expense and is included in Income Tax Expense on Schedule C-1. The ADIT related to SERP was not included in rate base in the Company's Application, and no rate base adjustment is required if the recovery of SERP expense is disallowed.

Q. Does this conclude your comments regarding the Direct Testimony of Dr. Fish?

A. Yes, it does.

III. RUCO'S PROPOSED ADIT ADJUSTMENT.

Q. What issue do you wish to address with respect to the ADIT adjustment of Mr. Ralph C. Smith?

A. Mr. Smith has proposed to reduce rate base by the amount of ADIT related to Compensation & Benefits timing differences ($423,669).

Q. Why is there ADIT associated with the Company's compensation & benefits expense?

A. For ratemaking accounting purposes, the cost of vacation, pension benefits, and stock-based compensation are recognized as expense on an accrual basis. That is, the expense is reflected in the income statement as the employees perform services and earn the future benefit. For income tax purposes, vacation expense is not deductible until the vacation pay is paid to the employee and pension expense is only deductible when contributions within the IRS limitations are made to the pension trust. Stock based compensation is deductible when the payment is actually made to employees. This difference in timing of recognition causes deferred income assets to be recorded on the balance sheet for the amount of income taxes paid by the Company related to these items.

Q. Why should the deferred income tax assets be included in rate base?

A. The deferred income tax assets reflect an investment made by the Company on the ratepayer's behalf. Pension, vacation expense and stock based compensation are calculated on an accrual basis and are a component of operating expense reflected in rates. However, because these benefits are not tax deductible in the same period that the benefit is recognized, the Company is required to pay income taxes currently. The company is entitled to earn a return on the capital used to pay these income taxes on the ratepayer's behalf.

Q. Has the inclusion of ADIT related to non-rate base items been allowed in previous rate cases decided by the Commission?

A. Yes. The ADIT related to vacation and pension expense were included in rate base in the Company's Application in its last rate case, Docket No. G-04204A-06-0463. Staff and RUCO did not object, and these items of ADIT were included in the final rate base numbers accepted by the Commission. These same items have also been accepted by the Commission in rate cases presented by UNS Gas affiliates, Tucson Electric Power Company and UNS Electric, Inc. RUCO's proposed adjustment is another example of RUCO challenging accepted Commission-approved methods.

Q. How was the ADIT related to stock based compensation treated in previous rate cases?

A. The ADIT related to stock based compensation was not allowed by the Commission as a component of rate base in the last case. However, this adjustment occurred because the recovery of the underlying expense was disallowed in calculating cost of service, and in those circumstances the adjustment to ADIT is appropriate.

Q. Does this conclude your Rebuttal Testimony?

A. Yes, it does.

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS
KRISTIN K. MAYES - CHAIRMAN
GARY PIERCE
PAUL NEWMAN
SANDRA D. KENNEDY
BOB STUMP

IN THE MATTER OF THE APPLICATION OF UNS GAS, INC. 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 UNS GAS, INC. DEVOTED TO ITS OPERATIONS THROUGHOUT THE STATE OF ARIZONA.	)	DOCKET NO. G-04204A-08-0571

Rebuttal Testimony of

D. Bentley Erdwurm

on Behalf of

UNS Gas, Inc.

July 8, 2009

TABLE OF CONTENTS

I. INTRODUCTION.

Q. Please state your name and address.

A. My name is D. Bentley Erdwurm. My business address is One South Church Avenue, Tucson, Arizona 85701.

Q. Did you file Direct Testimony in this proceeding?

A. Yes.

Q. On whose behalf are you filing your Rebuttal Testimony in this proceeding?

A. My Rebuttal Testimony is filed on behalf of UNS Gas, Inc. ("UNS Gas").

Q. What is the purpose of your Rebuttal Testimony in this proceeding?

A. The purpose of my Rebuttal Testimony is to address Arizona Corporation Commission ("Commission") Staff's and the Residential Utility Consumer Office's ("RUCO") Direct Testimony on (i) the customer annualization adjustment, and (ii) UNS Gas' proposal for phased-in residential customer charge increases over a two-year period after rate implementation.

II. CUSTOMER ANNUALIZATION ADJUSTMENT.

Q. Please address the issue of the customer annualization adjustment.

A. UNS Gas proposed a customer annualization adjustment that follows the methodology approved in UNS Gas' last general rate case, Docket No. 04204A-06-0463, Decision No. 70011 (the "2006 Rate Case"). In both the 2006 Rate Case and this current, pending rate case, I refer to the methodology approved in Decision No. 70011 as "traditional."

Decision No. 70011 (at page 18-19) unambiguously expressed a preference for, and adopted, the traditional method of customer annualization adjustments.

In this proceeding, UNS Gas follows the approved "traditional" customer annualization methodology, while Staff and RUCO have deviated from this approved methodology.

Q. Please briefly describe the traditional customer annualization methodology.

A. Under this traditional approach, the monthly customer count for each of the first eleven months of the test-year is brought equal to the customer count in the twelfth and final month of the test-year (i.e., test-year-end). Assuming that the customer count grows by a positive amount each month, there will be a positive customer annualization adjustment for each month, and therefore a positive overall customer annualization adjustment. Customer counts for the first eleven months of the test-year would need to be adjusted upward (a positive adjustment) to bring them to the test-year-end level.

The purpose of the customer annualization adjustment is to recognize growth over the test-year. The customer count in the last (12th) month of the test-year is never adjusted because the last month is test-year-end. The count in the next-to-last (11th) month is adjusted for one month of growth, because the eleventh month is just one month removed from test-year-end. As one steps back in time toward the beginning of the test-year, the monthly counts are adjusted for progressively more months of growth. In this simple example, the monthly adjusted customer count (i.e., the actual customers plus the adjustment for each month) over the test-year is constant and unchanging.

UNS Gas' residential and commercial customer counts exhibit some seasonal variation. Customer counts dip in the summer, when some customers disconnect service with the intention of reconnecting in the late fall and winter. Test-year customer counts in the

2006 Rate Case exhibited seasonal variation similar to the variation in the current case. In the 2006 Rate Case, the Commission stated that there was a lack of significant seasonality, and no reason to deviate from the traditional method.[1] The Commission's stated position in favor of the traditional method motivated UNS Gas' use of this method.

Q. Are you concerned that Staff and RUCO witnesses have abandoned the use of the traditional customer annualization methodology?

A. Yes. Both Staff and RUCO witnesses strongly supported the traditional approach in the 2006 Rate Case. Staff's witness Mr. Ralph Smith (now RUCO's witness) testified that the "traditional method of customer annualization has been effective in appropriately coordinating the revenue element of the ratemaking formula with the other components, such as rate base."[2] Likewise, RUCO's witness, Ms. Marylee Diaz-Cortez, stated that UNS Gas does not experience "extreme seasonality" and that there is no "reason to depart from the "traditional" or Commission-accepted methodology of revenue annualization."[3]

Q. Please compare the impact of applying the traditional approach in this case, as compared to the 2006 Rate Case.

A. In the 2006 Rate Case, the traditional approach resulted in a less favorable result for UNS Gas (i.e., lower final rate levels), and the traditional approach was wholeheartedly supported by Staff and RUCO. By contrast, in this current case, the traditional approach results in a more favorable outcome for UNS Gas (i.e., higher final rate levels), however, Staff and RUCO now appear to have soured on the traditional approach.

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[1] Decision No. 70011 at page 19.
[2] Surrebuttal Testimony of Ralph C. Smith, Docket No. G-04204A-06-0463, page 21, lines 16-18.
[3] Surrebuttal Testimony of Marylee Diaz-Cortez, Docket No. G-04204A-06-0463, page 12, lines 20-23.

Q. What non-traditional methods did RUCO and Staff use?

A RUCO witness Mr. Smith proposes no customer annualization adjustment. RUCO's position is a rejection of the traditional approach, because under the traditional approach an adjustment should be made. Staff witness Dr. Thomas Fish proposes a very non-standard approach that is theoretically flawed and has an unwarranted positive bias that is detrimental to UNS Gas.

Q. How is Dr. Fish's customer annualization method flawed?

A. Dr. Fish's approach fails to meet the most basic goals of the customer annualization adjustment. Specifically it:

- adjusts customer counts to levels exceeding not only test-year-end, but all months of the test-year – and even months beyond the test-year (see Exhibit DBE-3 for customer counts);
- applies a future test-year approach to the customer annualization adjustment without applying future test-year methods to all other aspects of the ratemaking process – and thus violates the "matching principle";
- uses a significantly overstated and unsupportable customer count growth rate;
- fails to adjust customer count to test-year-end levels; and
- is not known and measurable because it uses customer levels that still have not been attained and will not be attained until some unknowable date in the future.

The impacts of these individual flaws compound to create a customer annualization adjustment far out of sync with the reality of UNS Gas' operations. From the perspective of accepted regulatory practice in Arizona, the matching principle is violated when a future test-year is used for customer annualization and then a historic test-year adjusted to test-year-end levels is used for other ratemaking purposes – which is exactly what Dr. Fish has done.

Q. How does Dr. Fish's approach violate the matching principle?

A. Customer annualization adjustments should restate customer counts to create a match in billing determinants, revenues and expenses. In the current case, Dr. Fish discards this matching principle by adjusting to a customer level that exceeds every monthly customer count – *whether before, during, or after the test-year* up to the date of filing this Rebuttal Testimony (July 8, 2009). Dr Fish's inflated customer count has not yet been achieved by July 8, 2009 and will not be achieved until some indeterminate time in the future. It cannot be described as "known and measurable" and it is inconsistent with the matching principle as well as Staff's testimony in the 2006 Rate Case. Dr. Fish's overstatement of the customer annualization adjustment is unjustified and contrary to accepted ratemaking practice in Arizona.

Q. What views has Staff expressed about matching in the past?

A. Staff often contends that matching is a core principle of ratemaking. For example, in the 2006 Rate Case, Staff's witness Mr. Smith stated that "It is very important to be consistent with a test period approach to ensure there is a consistent matching between investment, revenues and costs."[4] By using customer counts that will not be achieved until far after the test-year, Dr. Fish inflates revenue and disrupts matching. As Mr. Smith passionately argued at the Open Meeting for the 2006 Rate Case, "in the context of that historic test-year everything is in balance when revenues are annualized to the end of the test-year, and expenses are annualized to the end of the test-year and rate base is annualized to the end of the test-year."[5]

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[4] Direct Testimony of Ralph C. Smith, Docket G-04204A-06-0463, page 5 lines 8-10.
[5] Open Meeting Transcript, November 8, 2007, page 112 lines 14-18.

Q. Has Staff expressed a specific view about considering new customers added after the test-year in the customer annualization adjustment?

A. Yes. In the 2006 Rate Case, Mr. Smith testified for Staff that "customers added after the test-year are not considered in the annualization adjustment."[6] Mr. Smith elaborated that "Customers that are added after the end of the test-year are typically not considered in an annualization adjustment, unless it is a major customer addition and the other elements of the ratemaking formula (rate base, depreciation, etc) have been appropriately synchronized."[7] There has been no "major customer addition" and Dr. Fish did not adjust the other elements of the ratemaking formula. Dr. Fish's use of customer counts far outside of the test-year – counts that still have not been actually reached – is impossible to square with Staff's customer annualization testimony in the 2006 Rate Case.

Q. Please illustrate how Dr. Fish has adjusted customer counts to overstated levels.

A. First, with respect to his adjustment to the regular residential rate, R-10, shown on Schedule THF-C-4 (page 1 of 8) of Dr. Fish's Direct Testimony, the R-10 customer count over the test-year (July 2007-June 2008) shows a minimum monthly count of 124,320 customers in August 2007, a maximum count of 126,799 customers in February 2008, and a test-year-end count of 124,957 in June 2008. Dr. Fish adjusts to a residential R-10 customer count of 128,112. This exceeds the maximum test-year residential R-10 monthly count by over 1%. As discussed below, more than a year after the close of the test-year, UNS Gas has not reached this inflated customer count and may not reach it for some significant time to come. Dr. Fish's residential customer count exceeds all pre-test-year counts as well as all counts occurring through July 8, 2009. While the 128,112 customer count may occur at some unknown future date, the Commission sets rates based on historic, not future, test-years and has repeatedly used the methodology followed by

[6] Surrebuttal Testimony of Ralph C. Smith, Docket No. G-04204A-06-0463, page 21, lines 25-26.
[7] Id. page 22, lines 2-5.

UNS Gas in this case. Dr. Fish's flawed annualization adjustment for R-10 makes up 70% of his total customer annualization adjustment.

Second, regarding Dr. Fish's adjustment to the small volume commercial rate, C-20, shown on Schedule THF-C-4 (page 2 of 8) of Dr. Fish's Direct Testimony, the C-20 customer count over the test-year (July 2007-June 2008) shows a minimum monthly count of 11,227 small commercial customers in August 2007, a maximum count of 11,614 customers in February 2008, and a test-year-end count of 11,384 in June 2008. Dr. Fish adjusts to a small commercial customer count of 11,702, which slightly exceeds even the maximum test-year count. The 11,702 customer count to which Dr. Fish adjusts is a level that exceeds all pre-test-year counts as well as all counts occurring through the date that this testimony is filed. Dr. Fish's flawed annualization adjustment for small volume commercial C-20 makes up 22% of his total customer annualization adjustment. Therefore, the flawed R-10 and C-20 customer annualization adjustments together make up 92% of Dr. Fish's customer annualization adjustment.

Q. How did Dr. Fish manage to overstate customer counts so significantly?

A. Dr. Fish did not follow the traditional customer annualization methodology used in the 2006 Rate Case. Dr. Fish inappropriately applied a potential estimated 2.5% growth rate referenced in UNS Gas witness David Hutchens' Direct Testimony to December 2007 class customer counts in a misguided attempt to create "normalized" future test-year-end values. Dr. Fish should never have pressed forward with his methodology, since he should have known the customer level to which he was adjusting had never occurred, nor would it occur, even over a period one year <u>after</u> the end of the test-year. The methodology also was simply unreasonable given the retraction in the economy almost immediately after the test-year and continuing to date. Even proponents of future test-years might disagree with Dr. Fish's approach – effectively selecting adjustment targets more than one year after test-year-end.

Even if Dr. Fish's methodology were appropriate, Dr. Fish should have used an estimate of customer growth more suited to the typical, accepted methodology of customer annualization. For example, R-10 customer growth over the test-year showed an annualized growth rate of just 0.45%, less than one-fifth of Dr. Fish's 2.5% rate.

RUCO witness Mr. Smith's pre-filed Direct Testimony, at page 26, provides a measure of the post-test-year retraction in the economy of the service territory. Mr. Smith shows 12-month average residential customers growing by only 254 customers between June 2008 and March 2009, an annualized growth rate of just 0.26%, and just one-tenth of Dr. Fish's 2.5% rate. Likewise, statistical regression analysis shows no significant positive growth trend during or after the test-year.

Dr. Fish has compounded his error by applying the overstated growth rate inappropriately in his customer annualization calculation. Specifically, he has applied the growth rate to December 2007 customer counts. The December 2007 customer counts are close to the maximum counts experienced over the test-year. Dr. Fish ensures that his customer annualization adjustments will be inflated by the use of this methodology. He effectively treats all months of the test-year as if they are mid-winter, high customer count months. If past trends continue, the customer count will decline slightly in the summer. Dr. Fish ignores this fact, and inappropriately augments his annualization adjustment with a component attributable to seasonal variation, and not to a longer term growth trend.

Q. Is UNS Gas opposed to a future test-year approach?

A. No; UNS Gas would welcome a future test-year approach. However, it should not be done piecemeal as Dr. Fish proposes. Rather, it would entail a series of adjustments to normalize revenue and cost to some future period. The Commission would need to consider adjustments heretofore off-limits, including inflation adjustments and price elasticity adjustments. Additionally, future test-years would need to be used in a consistent manner, not simply for only certain adjustments. Moreover, as I have explained, even under a future test-year approach, Dr. Fish's adjustment would be extreme and likely not adopted because it is so far outside the test-year, because it is not certain when his proposed customer level will be reached, and because the "matching principle" has been violated by failing to coordinate the revenue element of the ratemaking formula with expenses, rate base, and other components affecting rates.

Q. Please discuss RUCO witness Mr. Smith's position on the customer annualization adjustment.

A. Mr. Smith takes issue with UNS Gas proposing a negative customer annualization adjustment for a system for which customer counts are not decreasing. Although at first glance, Mr. Smith's position may seem to have some appeal, it appears to be a more "heads I win, tails you lose" approach, particularly when compared with RUCO's position in the 2006 Rate Case. In 2006, RUCO's witness Ms. Diaz Cortez argued that the monthly customer counts did not show the type of seasonal variation to justify a deviation from the traditional approach. Mr. Ralph Smith, testifying for Staff in the 2006 Rate Case, argued that the traditional method has been effective in coordinating the revenue element of the ratemaking formula with other components such as rate base (the "matching principle"). In the last case, the traditional approach led to a less advantageous result for UNS Gas. Now that the traditional approach works to UNS Gas' benefit, Mr. Smith argues against "rote" application of the procedure.

UNS Gas strongly believes that equity dictates that the traditional approach – as the "accepted" approach - should apply in this case since it applied in the 2006 Rate Case which was adjudicated very recently.

Q. Explain why the consistency in customer annualization adjustment methodology is preferable to switching back and forth between various approaches.

A. One of the best arguments for consistency is that it promotes and supports the image of basic fairness in the treatment of various parties to the case. Moving back and forth between methodologies – looking for an end result of the lowest possible rates – does not result in just and reasonable rates, is inequitable and is not in the public interest.

Q. How does Dr. Fish attempt to justify deviating from the traditional approach?

A. Dr. Fish points to seasonal changes in UNS Gas' number of customers. UNS Gas experiences a slight drop in the number of customers in the summer, and Dr. Fish argues that this seasonality renders the traditional approach inappropriate for use in this case. However, UNS Gas' seasonality is essentially unchanged from the 2006 Rate Case, when the Commission noted a "lack of any significant demonstrated seasonality."[8] Moreover, the alleged seasonality problem raised by Dr. Fish typically occurs whenever an Arizona gas utility uses a test-year that ends in the summer.

Q. Are there other issues related to the customer annualization?

A. Yes. Staff's flawed customer annualization adjustment resulted in related flawed adjustments - fruits of the poisonous tree - to weather normalization and to rate case revenue annualization. Moreover, the flaws in Dr. Fish's rate case revenue annualization are compounded; the revenue annualization does not fully adjust test-year revenue for the rate change that occurred within the test-year. It appears that Dr. Fish's adjustment is

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[8] Decision No. 70011 at page 19, line 5.

improperly limited to his overstated customer growth estimate. A rate case annualization adjustment should apply to all test-year sales – not just growth – billed prior to the "within-the-test-year" rate change. Therefore, Staff's adjustments to weather normalization and to rate case revenue annualization do not conform to accepted methodologies and should not be adopted.

III. CUSTOMER COUNTS SINCE THE END OF THE TEST YEAR.

Q. Do you have more recent data concerning customer counts?

A. Yes. Exhibit DBE-3 shows customer count data through May 2009. After the test-year (i.e., after June 2008), UNS Gas has experienced minimal to negative growth. Current (May 2009) residential (R-10) and small commercial (C-20) customer counts are below end of the test-year levels. Exhibit DBE-3 demonstrates that the customer counts used by Dr. Fish in his customer annualization adjustment are so significantly overstated that, even eleven months after the end of the test-year, UNS Gas' actual customer counts still fall well short of Dr. Fish's results. Additionally, Exhibit DBE-3 demonstrates that customer growth has slowed substantially in the test-year and in more recent months. As shown on pages 2 and 5 of Exhibit DBE-3, year-over-year customer growth is *negative* for eight out of eleven post test-year months. Thus, even if Dr. Fish's method is used, his growth factor is clearly excessive.

IV. PHASED-IN RESIDENTIAL CUSTOMER CHARGE INCREASES.

Q. Please summarize why UNS Gas is proposing to phase-in the residential customer charge increases over a two-year period.

A. My Direct Testimony focused on the need to recover more fixed costs through the fixed customer charge component. I proposed a phased-in increase for the (non-CARES) residential customer charge, initially to $10.00 per month when new rates become effective subsequent to the conclusion of this rate case, followed by an increase to $12.00 per month one year after the initial rate implementation, followed by an increase to $14.00 per month two years after the initial rate implementation. UNS Gas' proposed residential customer charge increases are motivated by the Company's desire to (i) reduce its recovery of fixed costs through variable volumetric energy charges, and (ii) reduce the subsidization of customers in the warmer regions of UNS Gas' service territory by customers in cooler regions. Fixed costs are now collected disproportionately through variable energy (per therm) charges. UNS Gas' opportunity to recover fixed costs is jeopardized by the weather fluctuations and potentially by socially desirable energy efficiency and conservation. A more accurate alignment of revenue recovery and cost incursion helps align the goals of conservation with the Company's ability to earn a fair return on invested capital.

Q. Does Mr. Radigan acknowledge that the phased-in customer charge proposal is a movement in the direction of cost-based rates?

A. Yes. However, Mr. Radigan has concerns about the adverse impact on smaller residential customers. Customer charge increases result in larger percentage increases for smaller customers.

Q. Do you think that the potential for adverse impacts or "rate shock" is significant?

A. No; too much emphasis is placed on the percentage increase in the customer charge component. When presented in percentage terms, the increase in customer charges approximates 65% and appears high, but when viewed in absolute terms, the increase in the charge over three years, from $8.50 to $14.00 per month, totals $5.50 per month, the price of a typical fast food meal. Moreover, varying portions of the increase will be offset by lower non-fuel energy prices (per therm) – thus mitigating the customer charge increase. Again, for the sake of clarity, under the Company's proposal the customer charge will only increase $1.50 per month in the first year, $2.00 per month in the second year and finally $2.00 per month in the third year.

UNS Gas' request is reasonable. The proposed increases are modest when considered in absolute dollar amounts. Further, any impact on our customers is ameliorated by the use of a phase-in structure. These increases do not result in "rate shock" and any "rate shock" reference is a distortion of the Company's proposal.

Q. Staff witness Dr. Fish states that the phased-in customer charge proposal is too complicated. Do you agree?

A. No, I do not. No rate design component is simpler than the customer charge. There is no basis for the idea that our customers are unable to understand a customer charge increase. Moreover, the Commission has ordered phased-in customer charges in other dockets.

Q. Dr. Fish states that even if the subsidy between warmer and cooler areas is eliminated, a new subsidy could arise.

A. Dr. Fish does not identify the nature of this potential subsidy. Our proposal is to reduce the current subsidy, not eliminate it, and certainly not to create a new, different subsidy.

Q. Dr. Fish supports his arguments with his "Customer Class Risk" analysis. What is your opinion of this study?

A. Dr. Fish uses his statistical analysis – based on coefficients of variation – to argue that the risk to the Company from sales variations is of no consequence. Dr. Fish may be surprised to learn how leveraged UNS Gas's earnings are to volumetric (therm) sales, and how a seemingly small reduction in volumetric sales can greatly reduce UNS Gas' earnings. For example, a reduction in therms sold of just 3% can lead to a pre-tax earnings reduction of over $1,000,000 per year. Dr. Fish's analysis contains no usable sensitivity analysis, and as presented, only serves to obscure the degree of financial risk this Company faces.

V. <u>EXEMPTION OF CARES CUSTOMERS FROM DSM SURCHARGE.</u>

Q. Please discuss the exemption of UNS Gas' CARES customers from the Demand-Side Management (DSM) surcharge.

A. On March 24, 2009, UNS Gas filed an application for Commission approval to reset the Company's DSM adjustor rate, in accordance with Decision No. 70011. On June 5, 2009, the Commission issued Decision No. 71105 approving a $0.0050 per therm increase in the adjustor rate, increasing the surcharge from $0.0026 per therm (approved May 27, 2008 in Decision No. 70011) to $0.0076 per therm. To protect UNS Gas' CARES customers from an increase in their bills, the Commission ordered that customers enrolled in CARES should not be charged the entire DSM rate. Decision No. 71105 advised UNS Gas to track surcharges that otherwise would have been collected from customers in CARES, absent the CARES exemption. Decision No. 71105 precluded an immediate increase in the DSM surcharge (from the $0.0076 per therm level) to account for the recovery shortfall associated with the exemption of the CARES program's therms. The order advised that unrecovered surcharges would be dealt with in the current pending rate case. UNS Gas plans to include the unrecovered surcharges in its DSM filing to be made on or before April 1, 2010, in accordance with the current approved practice for DSM recoveries. In the 2010 DSM filing, the proposed DSM adjustor rate will reflect the exemption of the CARES program customers from the DSM surcharge.

The bill impacts of exempting CARES customers from the DSM surcharge are shown on Exhibit DBE-4. This exhibit shows that CARES customers using over 10 therms per month save at least 0.4% on monthly bills, assuming the Company-proposed rate levels.

Over 78% of bills have monthly usage greater than or equal to 10 therms. Exempting CARES customers from the DSM surcharge results in cost recovery being shifted away from CARES customers and onto other retail customers. The impact of this shift in cost recovery on an average non-CARES residential customer will be less than $1.00 per year.

Q. Does this conclude your Rebuttal Testimony?

A. Yes, it does.

EXHIBIT

DBE-3

UNS Gas, Inc.
Test-Year Ending June 30, 2008

Rate R-10 Customer Count
Customer Count Growth Measures (August 2003-May 2009)

Month	Monthly Customer Count	12 Month Moving Average	% Monthly Change in Moving Average	Monthly Change On Annualized Basis	Year-Over-Year Change
August-03	112,280	-----	-----	-----	-----
September-03	112,347	-----	-----	-----	-----
October-03	113,807	-----	-----	-----	-----
November-03	114,975	-----	-----	-----	-----
December-03	114,402	-----	-----	-----	-----
January-04	115,000	-----	-----	-----	-----
February-04	114,331	-----	-----	-----	-----
March-04	115,254	-----	-----	-----	-----
April-04	115,491	-----	-----	-----	-----
May-04	115,241	-----	-----	-----	-----
June-04	115,969	-----	-----	-----	-----
July-04	115,533	114,553	-----	-----	-----
August-04	116,003	114,863	0.3%	3.3%	3.3%
September-04	115,949	115,163	0.3%	3.2%	3.2%
October-04	115,763	115,326	0.1%	1.7%	1.7%
November-04	116,776	115,476	0.1%	1.6%	1.6%
December-04	117,256	115,714	0.2%	2.5%	2.5%
January-05	117,850	115,951	0.2%	2.5%	2.5%
February-05	117,950	116,253	0.3%	3.2%	3.2%
March-05	118,857	116,553	0.3%	3.1%	3.1%
April-05	118,520	116,806	0.2%	2.6%	2.6%
May-05	118,414	117,070	0.2%	2.8%	2.8%
June-05	118,917	117,316	0.2%	2.5%	2.5%
July-05	118,669	117,577	0.2%	2.7%	2.7%
August-05	119,326	117,854	0.2%	2.9%	2.9%
September-05	119,352	118,138	0.2%	2.9%	2.9%
October-05	120,088	118,498	0.3%	3.7%	3.7%
November-05	120,644	118,820	0.3%	3.3%	3.3%
December-05	121,483	119,173	0.3%	3.6%	3.6%
January-06	122,261	119,540	0.3%	3.8%	3.7%
February-06	122,562	119,924	0.3%	3.9%	3.9%
March-06	122,791	120,252	0.3%	3.3%	3.3%
April-06	122,689	120,600	0.3%	3.5%	3.5%
May-06	122,317	120,925	0.3%	3.3%	3.3%
June-06	122,404	121,216	0.2%	2.9%	2.9%
July-06	122,520	121,536	0.3%	3.2%	3.2%
August-06	123,022	121,844	0.3%	3.1%	3.1%
September-06	123,526	122,192	0.3%	3.5%	3.5%
October-06	124,204	122,535	0.3%	3.4%	3.4%
November-06	124,828	122,884	0.3%	3.5%	3.5%
December-06	125,383	123,209	0.3%	3.2%	3.2%
January-07	125,429	123,473	0.2%	2.6%	2.6%
February-07	125,495	123,717	0.2%	2.4%	2.4%
March-07	125,310	123,927	0.2%	2.1%	2.1%
April-07	125,010	124,121	0.2%	1.9%	1.9%
May-07	125,035	124,347	0.2%	2.2%	2.2%
June-07	124,841	124,550	0.2%	2.0%	2.0%

Rate R-10 Customer Count
Customer Count Growth Measures (August 2003-May 2009)

Month	Monthly Customer Count	12 Month Moving Average	% Monthly Change in Moving Average	Monthly Change On Annualized Basis	Year-Over-Year Change	
July-07	**124,445**	**124,711**	**0.1%**	**1.6%**	**1.6%**	**Test Year Month 1**
August-07	**124,320**	**124,819**	**0.1%**	**1.0%**	**1.1%**	**Test Year Month 2**
September-07	**124,871**	**124,931**	**0.1%**	**1.1%**	**1.1%**	**Test Year Month 3**
October-07	**125,497**	**125,039**	**0.1%**	**1.0%**	**1.0%**	**Test Year Month 4**
November-07	**125,973**	**125,134**	**0.1%**	**0.9%**	**0.9%**	**Test Year Month 5**
December-07	**126,530**	**125,230**	**0.1%**	**0.9%**	**0.9%**	**Test Year Month 6**
January-08	**126,782**	**125,342**	**0.1%**	**1.1%**	**1.1%**	**Test Year Month 7**
February-08	**126,799**	**125,451**	**0.1%**	**1.0%**	**1.0%**	**Test Year Month 8**
March-08	**126,239**	**125,529**	**0.1%**	**0.7%**	**0.7%**	**Test Year Month 9**
April-08	**125,566**	**125,575**	**0.0%**	**0.4%**	**0.4%**	**Test Year Month 10**
May-08	**125,216**	**125,590**	**0.0%**	**0.1%**	**0.1%**	**Test Year Month 11**
June-08	**124,957**	**125,600**	**0.0%**	**0.1%**	**0.1%**	**Test Year Month 12**
July-08	124,790	125,628	0.0%	0.3%	0.3%	
August-08	124,856	125,673	0.0%	0.4%	0.4%	
September-08	124,712	125,660	0.0%	-0.1%	-0.1%	Year-over-year contraction.
October-08	123,985	125,534	-0.1%	-1.2%	-1.2%	Year-over-year contraction.
November-08	126,380	125,568	0.0%	0.3%	0.3%	
December-08	125,522	125,484	-0.1%	-0.8%	-0.8%	Year-over-year contraction.
January-09	125,136	125,347	-0.1%	-1.3%	-1.3%	Year-over-year contraction.
February-09	126,134	125,291	0.0%	-0.5%	-0.5%	Year-over-year contraction.
March-09	125,128	125,199	-0.1%	-0.9%	-0.9%	Year-over-year contraction.
April-09	124,681	125,125	-0.1%	-0.7%	-0.7%	Year-over-year contraction.
May-09	124,293	125,048	-0.1%	-0.7%	-0.7%	Year-over-year contraction.

In months following the test year, there were year-over-year contractions in 8 out of 11 months --
NOT SIGNS OF A RAPIDLY GROWING SYSTEM.

UNS Gas, Inc.
Test-Year Ending June 30, 2008

Rate R-10 Customer Count
Customer Count Growth Measures

Month	Aug-03 through Jun-04	Jul-04 through Jun-05	Jul-05 through Jun-06	Jul-06 through Jun-07	Test Year Jul-07 through Jun-08	Jul-08 through May-09	Month
Jul		115,533	118,669	122,520	**124,445**	124,790	Jul
Aug	112,280	116,003	119,326	123,022	124,320	124,856	Aug
Sep	112,347	115,949	119,352	123,526	124,871	124,712	Sep
Oct	113,807	115,763	120,088	124,204	125,497	123,985	Oct
Nov	114,975	116,776	120,644	124,828	125,973	126,380	Nov
Dec	114,402	117,256	121,483	125,383	126,530	125,522	Dec
Jan	115,000	117,850	122,261	125,429	126,782	125,136	Jan
Feb	114,331	117,950	122,562	125,495	126,799	126,134	Feb
Mar	115,254	118,857	122,791	125,310	126,239	125,128	Mar
Apr	115,491	118,520	122,689	125,010	125,566	124,681	Apr
May	115,241	118,414	122,317	125,035	125,216	124,293	May
Jun	115,969	118,917	122,404	**124,841**	**124,957**		Jun

Dr. Fish adjusts to: **128,112 R-10 Customers - A level never reached.**

Annualized Test-Year Growth (1st measure): 0.45% (Based on Jul07 (beginning) and Jun08 (end))
(124957/124445)^(12/11)-1

Annualized Test-Year Growth (2nd measure): 0.09% (Based on Jun07 (beginning) and Jun08 (end))
(124957/124841)-1

Rate R-20 Customer Count
Customer Count Growth Measures (August 2003-May 2009)

Month	Monthly Customer Count	12 Month Moving Average	% Monthly Change in Moving Average	Monthly Change On Annualized Basis	Year-Over-Year Change
August-03	10,219	-----	-----	-----	-----
September-03	10,198	-----	-----	-----	-----
October-03	10,208	-----	-----	-----	-----
November-03	10,404	-----	-----	-----	-----
December-03	10,511	-----	-----	-----	-----
January-04	10,699	-----	-----	-----	-----
February-04	10,687	-----	-----	-----	-----
March-04	10,747	-----	-----	-----	-----
April-04	10,788	-----	-----	-----	-----
May-04	10,680	-----	-----	-----	-----
June-04	10,647	-----	-----	-----	-----
July-04	10,532	10,527	-----	-----	-----
August-04	10,471	10,548	0.2%	2.4%	2.5%
September-04	10,449	10,569	0.2%	2.4%	2.5%
October-04	10,464	10,590	0.2%	2.4%	2.5%
November-04	10,711	10,616	0.2%	2.9%	3.0%
December-04	10,866	10,645	0.3%	3.4%	3.4%
January-05	10,901	10,662	0.2%	1.9%	1.9%
February-05	10,915	10,681	0.2%	2.2%	2.1%
March-05	10,998	10,702	0.2%	2.4%	2.3%
April-05	10,984	10,718	0.2%	1.8%	1.8%
May-05	10,926	10,739	0.2%	2.3%	2.3%
June-05	10,840	10,755	0.1%	1.8%	1.8%
July-05	10,796	10,777	0.2%	2.5%	2.5%
August-05	10,754	10,800	0.2%	2.7%	2.7%
September-05	10,724	10,823	0.2%	2.6%	2.6%
October-05	10,752	10,847	0.2%	2.7%	2.8%
November-05	10,845	10,858	0.1%	1.2%	1.3%
December-05	11,041	10,873	0.1%	1.6%	1.6%
January-06	11,159	10,895	0.2%	2.4%	2.4%
February-06	11,193	10,918	0.2%	2.6%	2.5%
March-06	11,201	10,935	0.2%	1.9%	1.8%
April-06	11,163	10,950	0.1%	1.6%	1.6%
May-06	11,068	10,961	0.1%	1.3%	1.3%
June-06	11,015	10,976	0.1%	1.6%	1.6%
July-06	11,000	10,993	0.2%	1.9%	1.9%
August-06	10,987	11,012	0.2%	2.1%	2.2%
September-06	11,035	11,038	0.2%	2.9%	2.9%
October-06	11,159	11,072	0.3%	3.8%	3.8%
November-06	11,288	11,109	0.3%	4.1%	4.1%
December-06	11,435	11,142	0.3%	3.6%	3.6%
January-07	11,477	11,168	0.2%	2.9%	2.8%
February-07	11,479	11,192	0.2%	2.6%	2.6%
March-07	11,444	11,213	0.2%	2.2%	2.2%
April-07	11,385	11,231	0.2%	2.0%	2.0%
May-07	11,337	11,253	0.2%	2.4%	2.4%
June-07	11,302	11,277	0.2%	2.6%	2.6%

Rate R-20 Customer Count
Customer Count Growth Measures (August 2003-May 2009)

Month	Monthly Customer Count	12 Month Moving Average	% Monthly Change in Moving Average	Monthly Change On Annualized Basis	Year-Over-Year Change	
July-07	11,267	**11,300**	**0.2%**	**2.4%**	**2.4%**	**Test Year Month 1**
August-07	11,227	**11,320**	**0.2%**	**2.1%**	**2.2%**	**Test Year Month 2**
September-07	11,232	**11,336**	**0.1%**	**1.8%**	**1.8%**	**Test Year Month 3**
October-07	11,306	**11,348**	**0.1%**	**1.3%**	**1.3%**	**Test Year Month 4**
November-07	11,404	**11,358**	**0.1%**	**1.0%**	**1.0%**	**Test Year Month 5**
December-07	11,558	**11,368**	**0.1%**	**1.1%**	**1.1%**	**Test Year Month 6**
January-08	11,606	**11,379**	**0.1%**	**1.1%**	**1.1%**	**Test Year Month 7**
February-08	11,614	**11,390**	**0.1%**	**1.2%**	**1.2%**	**Test Year Month 8**
March-08	11,570	**11,401**	**0.1%**	**1.1%**	**1.1%**	**Test Year Month 9**
April-08	11,482	**11,409**	**0.1%**	**0.9%**	**0.9%**	**Test Year Month 10**
May-08	11,420	**11,416**	**0.1%**	**0.7%**	**0.7%**	**Test Year Month 11**
June-08	11,384	**11,423**	**0.1%**	**0.7%**	**0.7%**	**Test Year Month 12**
July-08	11,327	11,428	0.0%	0.5%	0.5%	
August-08	11,284	11,432	0.0%	0.5%	0.5%	
September-08	11,211	11,431	0.0%	-0.2%	-0.2%	Year-over-year contraction.
October-08	11,299	11,430	0.0%	-0.1%	-0.1%	Year-over-year contraction.
November-08	11,422	11,431	0.0%	0.2%	0.2%	
December-08	11,505	11,427	0.0%	-0.5%	-0.5%	Year-over-year contraction.
January-09	11,501	11,418	-0.1%	-0.9%	-0.9%	Year-over-year contraction.
February-09	11,536	11,412	-0.1%	-0.7%	-0.7%	Year-over-year contraction.
March-09	11,477	11,404	-0.1%	-0.8%	-0.8%	Year-over-year contraction.
April-09	11,416	11,399	0.0%	-0.6%	-0.6%	Year-over-year contraction.
May-09	11,354	11,393	0.0%	-0.6%	-0.6%	Year-over-year contraction.

In months following the test year, there were year-over-year contractions in 8 out of 11 months --
NOT SIGNS OF A RAPIDLY GROWING SYSTEM.

Rate R-20 Customer Count
Customer Count Growth Measures

Month	Aug-03 through Jun-04	Jul-04 through Jun-05	Jul-05 through Jun-06	Jul-06 through Jun-07	**Test Year** Jul-07 through Jun-08	Jul-08 through May-09	Month
Jul		10,532	10,796	11,000	**11,267**	11,327	Jul
Aug	10,219	10,471	10,754	10,987	11,227	11,284	Aug
Sep	10,198	10,449	10,724	11,035	11,232	11,211	Sep
Oct	10,208	10,464	10,752	11,159	11,306	11,299	Oct
Nov	10,404	10,711	10,845	11,288	11,404	11,422	Nov
Dec	10,511	10,866	11,041	11,435	11,558	11,505	Dec
Jan	10,699	10,901	11,159	11,477	11,606	11,501	Jan
Feb	10,687	10,915	11,193	11,479	11,614	11,536	Feb
Mar	10,747	10,998	11,201	11,444	11,570	11,477	Mar
Apr	10,788	10,984	11,163	11,385	11,482	11,416	Apr
May	10,680	10,926	11,068	11,337	11,420	11,354	May
Jun	10,647	10,840	11,015	**11,302**	**11,384**		Jun

Dr. Fish adjusts to:	**11,702**	**R-20 Customers - A level never reached.**
Annualized Test-Year Growth (1st measure)	1.13%	(Based on Jul07 (beginning) and Jun08 (end)) (11384/11267)^(12/11)-1
Annualized Test-Year Growth (2nd measure)	0.73%	(Based on Jun07 (beginning) and Jun08 (end)) (11384/11302)-1

EXHIBIT

DBE-4

IMPACT OF EXEMPTING CARES FROM DSM SURCHARGE (WINTER MONTH)

ASSUMES UNS GAS PROPOSED RATES

Therms	% Bills with Lower Usage	MONTHLY BILL WITH DSM	MONTHLY BILL NO DSM	SAVINGS	PERCENT SAVINGS
0	0.0%	*$7.00*	*$7.00*	*$0.00*	*0.0%*
5	10.9%	*$11.93*	*$11.89*	*$0.04*	*0.3%*
10	21.9%	*$16.86*	*$16.79*	*$0.08*	*0.5%*
20	41.2%	*$26.73*	*$26.58*	*$0.15*	*0.6%*
30	53.1%	*$36.59*	*$36.36*	*$0.23*	*0.6%*
40	60.6%	*$46.46*	*$46.15*	*$0.30*	*0.7%*
50	66.4%	*$56.32*	*$55.94*	*$0.38*	*0.7%*
60	71.4%	*$66.18*	*$65.73*	*$0.46*	*0.7%*
70	75.9%	*$76.05*	*$75.52*	*$0.53*	*0.7%*
80	79.9%	*$85.91*	*$85.30*	*$0.61*	*0.7%*
90	83.4%	*$95.78*	*$95.09*	*$0.68*	*0.7%*
100	86.4%	*$105.64*	*$104.88*	*$0.76*	*0.7%*
110	88.9%	*$117.00*	*$116.17*	*$0.84*	*0.7%*
120	90.9%	*$128.37*	*$127.46*	*$0.91*	*0.7%*
130	92.7%	*$139.73*	*$138.74*	*$0.99*	*0.7%*
140	94.0%	*$151.10*	*$150.03*	*$1.06*	*0.7%*
150	95.2%	*$162.46*	*$161.32*	*$1.14*	*0.7%*
160	96.1%	*$173.82*	*$172.61*	*$1.22*	*0.7%*
170	96.8%	*$185.19*	*$183.90*	*$1.29*	*0.7%*
180	97.4%	*$196.55*	*$195.18*	*$1.37*	*0.7%*
190	97.8%	*$207.92*	*$206.47*	*$1.44*	*0.7%*
200	98.2%	*$219.28*	*$217.76*	*$1.52*	*0.7%*
300	99.6%	*$332.92*	*$330.64*	*$2.28*	*0.7%*
400	99.9%	*$446.56*	*$443.52*	*$3.04*	*0.7%*
500	99.9%	*$560.20*	*$556.40*	*$3.80*	*0.7%*
1,000	100.0%	*$1,128.40*	*$1,120.80*	*$7.60*	*0.7%*
2,500	100.0%	*$2,833.00*	*$2,814.00*	*$19.00*	*0.7%*
3,500	100.0%	*$3,969.40*	*$3,942.80*	*$26.60*	*0.7%*