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BEFORE THE ARIZONA CORPORATION C

COMMISSIONERS

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

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 CORPORATION COMMISSIONON.	DOCKET NO. G-04204A-06-0463
IN THE MATTER OF THE APPLICATION OF UNS GAS, INC. TO REVIEW AND REVISE ITS PURCHASED GAS ADJUSTOR.	DOCKET NO. G-04204A-06-0013
IN THE MATTER OF THE INQUIRY INTO THE PRUDENCE OF THE GAS PROCUREMENT PRACTICES OF UNS GAS, INC.	DOCKET NO. G-04204A-05-0831 **STAFF'S NOTICE OF FILING SURREBUTTAL TESTIMONY**

Staff of the Arizona Corporation Commission ("Staff") hereby files the Surrebuttal Testimony of Robert G. Gray (Utilities Division); Julie McNeely-Kirwan (Utilities Division); Ralph C. Smith (Consultant - Larkin & Associates, Inc.); David C. Parcell (Consultant – Technical Associates, Inc.); Steven W. Ruback (Consultant – The Columbia Group); and Jerry Mendl (Consultant – MSB Energy Associates, Inc.) in the above-referenced matter.

RESPECTFULLY SUBMITTED this 4th day of April 2007.

Maureen A. Scott

Maureen A. Scott, Senior Staff Counsel
Keith A. Layton, Attorney
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SURREBUTTAL

TESTIMONY

OF

ROBERT G. GRAY

JULIE MCNEELY-KIRWAN

RALPH C. SMITH

DAVID C. PARCELL

STEVEN W. RUBACK

JERRY E. MENDL

DOCKET NOS. G-04204A-06-0463

G-04204A-06-0013

&

G-04204A-05-0831

IN THE MATTER OF THE APPLICATION OF UNS GAS, INC. FOR JUST AND REASONABLE RATES AND CHARGES

APRIL 4, 2007

BEFORE THE ARIZONA CORPORATION COMMISSION

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

IN THE MATTER OF THE APPLICATION OF UNS GAS, INC. FOR JUST AND REASONABLE RATES AND CHARGES.	DOCKET NOS. G-04204A-06-0463, G-04204A-06-0013, G-04204A-06-0831

SURREBUTTAL

TESTIMONY

OF

ROBERT G. GRAY

PUBLIC UTILITIES ANALYST V

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

ARPIL 4, 2007

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UNS GAS INC.
DOCKET NOS. G-04204A-06-0463 ET AL

My surrebuttal testimony in this proceeding addresses issues related to UNS Gas Inc.' ("UNS") purchased gas adjustor ("PGA") mechanism. UNS' rebuttal testimony discusses several issues related to the PGA mechanism where UNS' recommendations differ from Staff's. My surrebuttal testimony provides Staff's response to these issues.

INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Robert G. Gray. I am a Public Utility Analyst V employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Are you the same Robert G. Gray that filed direct testimony in this case on behalf of Staff?

A. Yes.

Q. What is the purpose of your surrebuttal testimony?

A. This surrebuttal testimony will address portions of UNS Witness Dave Hutchens' rebuttal testimony related to UNS' PGA mechanism.

PURCHASED GAS ADJUSTOR

Q. What position has UNS taken on the PGA bandwidth in Mr. Hutchens' rebuttal testimony?

A. Mr. Hutchens indicates in his rebuttal testimony that UNS believes that removal of the PGA bandwidth is the best long-term solution, but that adoption of the Residential Utility Consumer Office's ("RUCO") proposal of a $0.20 per therm PGA bandwidth is a reasonable compromise in this case.

Q. Mr. Hutchens cites the Commission's action regarding Duncan Rural Services ("Duncan") in Decision Number 68599 (March 23, 2006) as support for UNS' goal of eliminating the PGA bandwidth. Do you agree?

A. No. While the Commission did substantially expand the PGA bandwidth for Duncan in Decision Number 68599, the Commission clearly indicated that such action was based upon the specific circumstances of the Duncan case. In that case the Commission was dealing with a very small natural gas cooperative (approximately 800 customers) with significant financial concerns. Staff does not believe that the Commission's treatment of Duncan is necessarily any indication of how the Commission should, or will, address UNS' PGA bandwidth.

Q. Do you agree with the UNS' proposal to set the PGA bandwidth at $0.20 per therm?

A. Staff continues to believe that its proposal in direct testimony to expand the PGA bandwidth from $0.10 per therm to $0.15 per therm reasonably balances ratepayer and UNS interests. To the extent the PGA bandwidth is expanded further over time, Staff prefers a more gradual approach, with the Commission, Staff, RUCO, and other parties assessing the impacts of a move to a $0.15 per therm PGA bandwidth before possibly considering a larger change in future proceedings.

As has been discussed in the past, the size of the PGA bandwidth reflects a balancing of multiple public policy goals, including timely recovery of gas costs by the utility, reduction of price volatility for ratepayers, and the Commission's interest in reviewing significant changes in rates before they are passed along to ratepayers. Depending on how these public policy goals are balanced, arguments can be made for either increasing, decreasing, or holding constant the PGA bandwidth. As discussed in my direct testimony, I believe an increase in the PGA bandwidth to $0.15 per therm should be adopted at this time.

Q. Have you reviewed the discussion of the interest rate(s) on the PGA bank balance in Mr. Hutchins' rebuttal testimony?

A. Yes.

Q. Are you changing your recommendation?

A. No. For the reasons discussed in my direct testimony, I believe the Commission should retain existing interest rate for the PGA bank balance, rather than adopting UNS' tiered interest rate proposal.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

BEFORE THE ARIZONA CORPORATION COMMISSION

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

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-06-0463
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SURREBUTTAL

TESTIMONY

OF

JULIE MCNEELY-KIRWAN

PUBLIC UTILITIES ANALYST II

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

APRIL 4, 2007

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EXECUTIVE SUMMARY

UNS GAS, INC.
DOCKET NOS. G-04204A-06-0463, G-04204A-06-0013
AND G-04204A-05-0831

This Surrebuttal Testimony addresses issues raised by UNS Gas, Inc., ("UNS GAS") in its Rebuttal Testimony, including the baseline study proposed by UNS Gas, the CARES program, cost-effectiveness tests, the Demand-Side Management ("DSM") Program Portfolio Plan, the DSM adjustor, the DSM adjustor reset filing deadline, reporting requirements and the adjustment to test year data relating to CARES.

INTRODUCTION

Q. Please state your name and business address.

A. My name is Julie McNeely-Kirwan. My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Have you previously filed testimony in this docket?

A. Yes. I filed Direct Testimony addressing UNS Gas, Inc.'s ("UNS Gas", "UNS" or "Company") low-income and demand-side management ("DSM") programs.

Q. What is the subject matter of this Surrebuttal Testimony?

A. This Surrebuttal Testimony will address the proposed baseline study, as well as low-income and DSM issues discussed in UNS Gas' Rebuttal Testimony.

BASELINE STUDY

Q. Should a baseline study be done to assist UNS Gas in monitoring the performance of its DSM programs, as proposed by UNS Gas witnesses James S. Pignatelli (p. 9) and Denise Smith (pp. 9-12)?

A. A baseline study would establish the level of natural gas demand and consumption, and the associated costs, that would occur in the absence of a DSM program. Establishing a baseline would provide UNS with valuable information for measuring and improving the cost-effectiveness of its DSM programs. Such a study can also assist UNS in identifying and designing new DSM measures or programs.

Q. Should the cost of the baseline study be recovered through the DSM adjustor, as proposed by Ms. Smith (p. 12)?

A. Yes. Because the purpose of the proposed baseline study is to aid UNS in monitoring the effectiveness of its DSM programs, the cost of the baseline study should be recovered through the DSM adjustor.

Q. Should the cost of the baseline study be included in the DSM adjustor immediately, as proposed by Ms. Smith (p. 12)?

A. No. UNS has not provided an estimate on the cost of such a study. If UNS at a future date provides the estimated cost of the baseline study, Staff will review the reasonableness of such estimate and make appropriate recommendations.

The proposal for the baseline study should be submitted in a separate docket for approval by the Commission.

THE CARES PROGRAM

Q. Do Staff's proposals regarding the CARES rate structure preserve the incentive to conserve?

A. Yes. In Ralph Smith's Surrebuttal Testimony, Staff proposes a rate of $0.3177 for distribution margin therms for all residential customers. Staff also proposes to retain the existing $7.00 monthly customer charge and $0.15 discount on the first 100 therms for CARES customers. (As is currently the case, the $0.15 discount would be in effect only from November through April.) Under Staff's proposals, CARES customers would pay $0.1677 for the first 100 therms and $0.3177 for all therms thereafter. The increased cost of therms over the 100-therm limit provides a price signal and incentive to CARES customers to conserve.

Q. UNS Gas witnesses James S. Pignatelli (p. 13) and D. Bentley Erdwurm (pp. 19-20) state that the UNS proposal does not eliminate incentive to conserve. Does Staff agree?

A. No. The proposed year-round $6.50 monthly discount and flat $0.1862 per-therm charge do not provide as much incentive to conserve as the existing CARES discount, which Staff recommends be retained. Aside from the flat per-therm charge, there is no incentive for CARES customers to conserve; the same discount and the same per-therm charge apply regardless of the number of therms used. Moreover, eliminating the volumetric discount and imposing a flat $0.1862 charge would increase the per-therm price by $0.0358 for usage under 100 therms, while *decreasing* the price for usage above 100 therms during the winter discount period. (The price for each therm over 100 therms used would decrease to $0.1862 from the existing $0.3004).

Although there is still a cost attached to each therm used, a rate that represents an increase for lower therm usage and a decrease for higher therm usage limits the incentive to conserve.

Q. Mr. Erdwurm asserts that the UNS Gas rate design will have a positive impact for all low-usage residential customers (pp. 19-20). Does Staff believe that low-usage CARES customer will experience a positive impact from the UNS rate design?

A. No. The primary reason for this is the increased monthly service charges proposed by UNS for all residential customers. Even with the CARES year-round discount of $6.50, the total annual increase would be $42, or 50 percent above the current annual total of $84. ((8 summer-rate months x $13.50) + (4 winter-rate months x $4.50) = $126.)

For CARES customers, while the "winter" rate is $2.50 per month less than CARES customers are currently paying, the "summer" rate is $6.50 per month more. Also, in terms of the total annual increase in the customer charge, the impact of the higher or "summer" rate is magnified by the fact that the higher rate is charged for eight months of the year, while the lower or "winter rate" is in place for only four months.

Q. What is the annual impact of the UNS Gas proposal on the average CARES customer?

A. For CARES customers in the test year, the total average annual usage was 490 therms. Under the existing structure, the total annual average cost of distribution margin therms and monthly customer charges would be $171.22. Under the UNS proposal, this cost would increase to $217.24 (+$46.02), while under the Staff proposal in Ralph Smith's Surrebuttal Testimony it would increase to $182.07 (+$10.85).

Q. Mr. Erdwurm states, "The objective of the Company's rate design proposal is to correct for the existing subsidy high usage customers in cold climates provide to their counterparts in warm climates. Eliminating this inequity should apply to both non-CARES and CARES customers." (pp. 19-20) Please comment.

A. UNS concerns regarding the cold climate/hot climate subsidy are addressed in Staff witness Ralph Smith's rate design proposal. Under Staff's proposed rate schedule, monthly customer charges have been increased for every rate class except CARES.

Staff does not agree with Mr. Erdwurm's statement that changes designed to eliminate the cold climate subsidy should apply to CARES customers, particularly if those changes include a large annual increase in the monthly customer charge. CARES customers are a protected and explicitly subsidized class of customers, and are the least able to absorb rate increases, regardless of whether they live in warm or cold climates. The value of extending anti-subsidy measures to the CARES rate class is outweighed by the importance of keeping gas rates affordable for low-income customers who otherwise may find themselves unable to pay for gas service. As UNS Exhibit DAS-1 notes, "Low-income persons must often make monthly decisions as to whether to pay rent or mortgage, pay utilities, or buy food." (Northern Arizona Council of Governments (NACOG) letter to Tucson Electric Power, 2/28/07)

ADJUSTMENT TO TEST YEAR DATA (CARES DISCOUNT)

Q. What is the current adjustment arising from UNS' proposal on CARES discounts?

A. On page 4 of UNS Schedule C-2, page 4, in the column for CARES expenses, there is an adjustment of $49,248 under Operating Expenses, Depreciation and Amortization.

The CARES discount proposed by UNS ($441,511) is included in the calculation of the $49,248 adjustment, along with amortized recovery of the balance in the CARES deferred account through the end of the test year. The $441,511 discount represents the total cost of the year-round $6.50 discount on the monthly service charge. (Please see UNS worksheet entitled "Change in Residential Customers by Rate – All Regions," from UNS Gas', Responses to Staff's Data Requests 5.1 and 5.2.)

Q. Is an adjustment to test year data required with respect to Staff's recommendation on CARES discounts?

A. Yes. Staff has not recommended adoption of UNS' proposed discount, above. Under Staff's proposal for the CARES class, the current monthly customer charge and per therm discount are retained, and the foregone revenue is spread through the base rates for all classes. Because the Staff-recommended CARES discount is already included in the rate design, the $441,511 CARES discount proposed by UNS should be removed from Operating Expenses. Staff witness Ralph C. Smith makes the necessary adjustment in his Surrebuttal Testimony, as Adjustment C-20.

Q. Should the Company be allowed to recover the amount accrued in the CARES deferred account?

A. The balance accrued through the test year should be recognized, as stated above. Any balance accrued in the deferred account from the end of the test year through conclusion of the current UNS Gas rate case should be considered for recovery during the next UNS Gas rate case.

COST-EFFECTIVENESS TESTS

Q. UNS witnesses James S. Pignatelli (p. 10) and Denise Smith (p. 3-5, p. 7) express concern regarding Staff's use of the Societal Cost Test to evaluate the cost-effectiveness of DSM programs. Does the Societal Cost Test include a consideration of economic concerns?

A. Yes. Like the Total Resource Cost Test, to evaluate cost-effectiveness, the Societal Cost Test takes into account avoided utility costs as a benefit, balancing this benefit against incremental utility costs (excluding incentives) and incremental participant costs. However, unlike the Total Resource Cost Test, the Societal Cost Test includes avoided environmental impacts as a benefit to be considered in evaluating the cost-effectiveness of a DSM program or portfolio.

Q. Do you disagree with UNS' internal use of other cost-effectiveness tests, in addition to the Societal Test (Smith, pp. 3-7)?

A. No. However, Commission Staff utilizes the Societal Cost Test to evaluate the cost-effectiveness of DSM programs and, to that end, requires information from UNS on the avoided environmental impacts of DSM programs. Even when the value of the impacts cannot be quantified, it can be used qualitatively in evaluating proposed programs, particularly programs where the cost-benefit ratio is close to 1. (Weatherization programs are an example of programs where the cost-benefit ratio can be close to 1.)

Q. Should economic concerns be taken into account when evaluating UNS Gas DSM programs? (Smith, p. 7)

A. Cost-effective DSM is less expensive than acquiring energy supplies, thus benefiting both the utility and ratepayers. Therefore, it is economical for a utility to pursue cost-effective DSM.

DSM PROGRAM PORTFOLIO PLAN

Q. Please comment on Ms. Smith's testimony regarding submission of program proposals and implementation of UNS' DSM programs (pp. 5, 10).

A. Ms. Smith states in her Rebuttal Testimony that UNS has agreed to file detailed program proposals as soon as possible, rather than waiting for the conclusion of the UNS Electric rate case. In fact, UNS docketed its Demand Side Management Program Portfolio Plan ("DSM Plan") on March 23, 2007, as a supplemental exhibit. The UNS DSM Plan has not yet been reviewed in any detail by Staff, but includes information on Low-Income Weatherization ("LIW"), Energy Smart Homes, Efficient Home Heating and the combined program for Commercial Cooking and Heating, Ventilating and Air Conditioning ("HVAC"). UNS states that its DSM Plan will also be filed as part of a separate application for approval. (Ms. Smith advises that, because the UNS Electric case is not concluded, the proposals will include assumptions about joint program implementation and administration with UNS Electric.)

DSM ADJUSTOR

Q. Ms. Smith states that UNS is close to implementing several programs and proposes that half the cost of the new DSM programs be included in the DSM adjustor as soon as the UNS Gas case concludes. This would be in addition to the amounts included for the LIW program and for the baseline study. Does Staff agree?

A. No. Although UNS has submitted its DSM Plan, rather than waiting for conclusion of the UNS Electric case, Staff remains concerned about funding programs either not in operation, or not sufficiently ramped up to require funding at the level of an ongoing program. Given the time required to conclude the UNS Gas case, and for review and possible approval, of the programs, the UNS DSM portfolio may not be fully functional for the entire six months prior to the reset. This could result in over-collection at the DSM adjustor level proposed by UNS.

Staff recommends that the LIW funding ($113,400) and one quarter of the proposed budget for the remaining DSM programs ($229,154 = one quarter of $916,616) be included in the DSM adjustor at the conclusion of the UNS Gas case. Divided by test year therms of 138,233,864, this results in a Staff recommended per-therm DSM adjustor charge of $0.0025. This, Staff believes, strikes a balance between the need to avoid over-collecting and the Company's need to recover costs on a timely basis.

DSM ADJUSTOR RESET FILING DEADLINE

Q. Ms. Smith states (p. 11) that UNS would not have the necessary data to file for the DSM adjustor reset by January 31 and proposes that the filing be done on April 1 of each year, moving the annual adjustment to May 15 or June 1. Does Staff agree with this proposal?

A. Yes. Given Ms. Smith's information, Staff recommends that the DSM adjustor reset filing be done on April 1 of each year, with the annual adjustment moved to June 1. Moving the annual adjustment to June 1, rather than May 15, allows time for the filing to be reviewed and processed, and for the Commission to deal with any issues that may arise.

DSM REPORTS

Q. Ms. Smith proposes to submit DSM reports on an annual basis, rather than a semi-annual basis (p. 10). Does Staff agree?

A. No. Staff recommends that UNS file DSM reports with the Commission on a semi-annual basis, including data on current program spending. Under its proposed DSM Plan, UNS would be implementing multiple, new demand-side management programs. Actual performance is difficult to predict and must be monitored closely, especially in the early phases of a new program. An example would be the need to track the impact of housing market conditions and evolving construction standards on the Residential New Construction/Energy Smart Homes program. Particularly in the early stages of a program, semi-annual reports provide an opportunity for problems to be identified and addressed in a timely fashion.

The semi-annual report should list the costs incurred for each DSM program during the reporting cycle, and include a bank balance for each program.

In its Direct Testimony, Staff recommended that the semi-annual reports should be filed within 60 days after the close of a reporting cycle (January-June and July-December). For simplicity and consistency, the semi-annual reports should be filed on March 1 and September 1 of each year. Filing of the July-December report by March 1 will give Staff time to review and evaluate the performance of UNS' DSM programs prior to the annual adjustor reset.

The question of moving to annual reports can be revisited at a future proceeding, once the UNS programs have been established and are meeting DSM goals in a cost-effective manner.

Q. On page 10 of her testimony, Ms. Smith states, "[S]ince gas consumption in the UNS Gas territory tends to be winter seasonal, a one-year reporting interval is far more meaningful in providing program results information than a six-month interval." Please comment.

A. The DSM programs proposed by UNS will require a variety of year-round activities that should be included in the semi-annual reports. For example, in addition to reporting on the costs and bank balances for each program, there should be reporting on activities such as the number of new, energy efficient homes built or the number of homes weatherized during the reporting cycle. For more information, please see page 25 of my Direct Testimony.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

BEFORE THE ARIZONA CORPORATION COMMISSION

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

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-06-0463
IN THE MATTER OF THE APPLICATION OF UNS GAS, INC. TO REVIEW AND REVISE ITS PURCHASE GAS ADJUSTOR.	)	DOCKET NO. G-04204A-06-0013
IN THE MATTER OF THE INQUIRY INTO THE PRUDENCE OF THE GAS PROCUREMENT PRACTICES OF UNS GAS, INC.	)	DOCKET NO. G-04204A-05-0831

SURREBUTTAL

TESTIMONY

OF

RALPH C. SMITH

ON BEHALF OF THE

UTILITIES DIVISION STAFF

ARIZONA CORPORATION COMMISSION

APRIL 4, 2007

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ATTACHMENTS

EXECUTIVE SUMMARY
UNS GAS, INC.
DOCKET NOS. G-04204A-06-0463, G-04204A-06-0013
AND G-04204A-05-0831

My surrebuttal testimony addresses the following issues:

- The Company's proposed revenue requirement
- Adjustments to test year data
- Rate base, including construction work in progress
- Test year revenues (including number of customers and usage) and expenses
- Staff's updated proposed rate design, based on changes to the base rate revenue requirement reflected in my surrebuttal testimony

My findings and recommendations for each of these areas are as follows:

- The Company's proposed revenue requirement on a base rate increase of $9.647 million is overstated. As described in my surrebuttal testimony, based on the information received and reviewed to date, I recommend that UNS Gas be authorized a base rate increase of $4.312 million. This represents a net decrease of $409 thousand from the $4.721 million base rate increase described in my direct testimony. Staff's surrebuttal recommendation for the amount of base rate revenue increase is based upon applying an appropriately adjusted weighted cost of capital to Staff's adjusted Fair Value Rate Base. The comparable base rate increase, applying Staff's recommended weighted cost of capital to adjusted Original Cost Rate Base, is $4.336 million.

- The following table shows Staff's recommended adjustments to UNS Gas' proposed original cost and fair value rate base that should be made, and identifies the changes from Staff's direct to Staff's surrebuttal position:

Summary of Staff Adjustments to Rate Base		**Staff Rebuttal**	**Staff Direct**		
Adj. No.	Description	Increase (Decrease)	Increase (Decrease)	Difference	Revised
B-1	Remove Construction Work in Progress	$ (7,189,231)	$ (7,189,231)	$ -	
B-2	Remove GIS Deferral	$ (897,068)	$ (897,068)	$ -	
B-3	Cash Working Capital - Lead/Lag Study	$ 776,874	$ 770,960	$ 5,914	Yes
B-4	Accumulated Deferred Income Taxes	$ 195,336	$ 195,336	$ -	
	Total of Staff Adjustments	**$ (7,114,089)**	**$ (7,120,003)**	$ 5,914	Yes
	UNS Proposed Rate Base (Original Cost)	$ 161,661,361	$ 161,661,361	$ -	
	Staff Proposed Rate Base (Original Cost)	**$ 154,547,272**	**$ 154,541,358**	$ 5,914	**Yes**

- The following table shows Staff's recommended adjustments to UNS Gas' proposed revenues, expenses and net operating income that should be made, and identifies the changes from Staff's direct to Staff's surrebuttal position:

Summary of Staff Adjustments to Net Operating Income

Adj. No.	Description	Staff Rebuttal Increase (Decrease)	Staff Direct Increase (Decrease)	Difference	Revised
C-1	Revenue Annualization	$ 62,896	$ 62,896	$ -	
C-2	Weather Normalization	$ 1,205	$ 1,205	$ -	
C-3	Adjustment to Bad Debt Expense	$ (776)	$ (776)	$ -	
C-4	Remove Depreciation & Property Taxes for CWIP	$ 222,981	$ 222,981	$ -	
C-5	Remove Amortization of Deferred GIS Cost	$ 183,606	$ 183,606	$ -	
C-6	Incentive Compensation and SERP	$ 164,204	$ 164,204	$ -	
C-7	Emergency Bill Assistance Expense	$ (13,263)	$ (13,263)	$ -	
C-8	Nonrecurring Severance Payment Expense	$ -	$ 32,167	$ (32,167)	Yes
C-9	Overtime Payroll Expense	$ 75,531	$ 75,531	$ -	
C-10	Payroll Tax Expense	$ 5,740	$ 8,201	$ (2,461)	Yes
C-11	Nonrecurring FERC Rate Case Legal Expense	$ 190,992	$ 190,992	$ -	
C-12	Property Tax Expense	$ 49,300	$ 49,300	$ -	
C-13	Worker's Compensation Expense	$ 21,020	$ 21,020	$ -	
C-14	Membership and Industry Association Dues	$ 16,498	$ 16,498	$ -	
C-15	Fleet Fuel Expense	$ 7,772	$ 32,199	$ (24,427)	Yes
C-16	Postage Expense	$ 15,979	$ 70,671	$ (54,692)	Yes
C-17	Interest Synchronization	$ 118,168	$ 118,085	$ 83	Yes
C-18	Corporate Cost Allocations	$ 7,838		$ 7,838	Added
C-19	Rate Case Expense	$ 70,612		$ 70,612	Added
C-20	CARES Related Amortization	$ 271,097		$ 271,097	Added
Total of Staff's Adjustments to Net Operating Income		**$ 1,471,399**	**$ 1,235,516**	$ 235,883	Yes
	Adjusted Net Operating Income per UNS Gas	$ 8,428,981	$ 8,428,981	$ -	
	Adjusted Net Operating Income per Staff	$ 9,900,380	$ 9,664,497	$ 235,883	Yes

- Based on a base rate revenue increase of $4.312 million, Staff proposes the revised rates shown on Attachment RCS-S1(R) to my surrebuttal testimony. The customer charge rates are the same as those contained in my supplemental testimony. The difference in the amount of base rate revenue increase has resulted in slightly lower volumetric charges than were proposed in my supplemental testimony.

- Staff's updated bill impact analysis relating to such rates is shown on Attachment RCS-S2(R) to my surrebuttal testimony.

I. INTRODUCTION

Q. Please state your name, position and business address.

A. Ralph C. Smith. I am a Senior Regulatory Consultant at Larkin & Associates, PLLC, 15728 Farmington Road, Livonia, Michigan 48154.

Q. Are you the same Ralph C. Smith who filed direct testimony in this case on behalf of the Arizona Corporation Commission ("ACC" or "Commission") Utilities Division Staff ("Staff")?

A. Yes, I am.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of my testimony is to respond to selected issues that were presented in the rebuttal testimony of UNS Gas, Inc. ("UNS GAS").

Q. What issues are addressed in your testimony?

A. My testimony addresses the company's proposed revenue requirement and rate design. I address Staff's adjustments to rate base and net operating income, and present a re-calculation of the revenue requirement and Staff's proposed rate design, based on information available at the time of the preparation of my surrebuttal testimony.

Q. Have you prepared any exhibits to be filed with your testimony?

A. Yes. Attachment RCS-2S contain the results of my analysis and presents Staff's updated revenue requirement.

Attachments RCS-S1(R) and RCS-S2(R) present Staff's updated rate design and bill impact analysis.

Q. How was your surrebuttal testimony on behalf of Staff impacted by outstanding discovery?

A. Staff had issued a set of discovery to UNS Gas (set 22) on March 22, 2007. The company's responses to that discovery could impact Staff's evaluation of some of the issues discussed in the UNS Gas rebuttal testimony. As of April 2, 2007, I have not yet received or had an opportunity to review UNS Gas' responses to those discovery requests. I received UNS Gas' initial partial responses to this set of Staff discovery on April 3, 2007. Staff will make the appropriate recommendations after it has had an opportunity to more thoroughly review UNS' responses.

II. REVENUE REQUIREMENT

Staff Recommendation

Q. What revenue increase does Staff recommend?

A. In Staff's Direct testimony, Staff recommended a revenue increase of $4.721 million. As a result of the adjustments discussed in my surrebuttal testimony, Staff recommends a revised revenue increase of $4.312 million, which is a reduction of $409,000. As shown on exhibit RCS-2S, schedule A, this is based on Staff's position that an adjusted weighted cost of capital should be applied to the FVRB. The comparable revenue increase that would be produced on the OCRB is $4.336 million.

Q. What revenue increase has been requested by UNS Gas?

A. UNS Gas is requesting a revenue increase of $9.647 million. In its rebuttal testimony, UNS Gas has agreed to a number of issues raised by Staff and RUCO. UNS Gas witness Dallas Dukes shows on his rebuttal exhibit DJD-1, page 3, that the company's proposed revenue requirement has been revised from the original request of $9.647 million downward to $9.487 million. However, the company continues to claim that its originally requested amount of $9.647 million is justified.

The Return Developed for Original Cost Rate Base Should Not Be Applied to Fair Value Rate Base Without Appropriate Adjustments

Q. How can UNS Gas still be claiming that it should receive the same amount of overall revenue increase that it originally requested, even after agreeing to some of the Staff and RUCO adjustments and showing a reduced revenue increase on rebuttal exhibit DJD-1?

A. One of the primary reasons for this is a new position advocated by the company in its rebuttal testimony: that the weighted cost of capital that was developed to apply to the original cost rate base should now be applied to the higher fair value rate base. At page 28 of his rebuttal testimony, UNS Gas witness Kentton Grant recommends:

> "that the Commission apply the weighted cost of capital (or overall ROR) to the company's fair value rate base for purposes of setting rates in this proceeding. To the extent such a calculation would result in a higher rate increase than proposed by the company, UNS Gas would still be limited to the original rate relief sought in the company's rate application."

Q. Is this new UNS Gas position consistent with the company's original filing?

A. No, it is not. In UNS Gas' own original filing, the company adjusted the return that is to be applied to fair value rate base downward, consistent with long-standing Commission practice, such that the revenue requirement produced by both the original cost rate base and the fair value rate base would not result in an excessive return on equity to the utility. UNS Gas' new position on this issue is also inconsistent with the way the return was applied to the fair value rate base in the current rate case filing of its affiliate, UNS Electric, in docket No. E-04204A-06-0783.

Q. What is the basis for this new position by UNS Gas?

A. According to Mr. Grant's rebuttal testimony, at page 28, the basis for this new position by UNS Gas is his "non-legal understanding of that ruling [i.e., a recent Arizona Court of Appeals ruling involving Chaparral city water company], is that the Arizona Court of Appeals found that Staff's determination of operating income ignored fair value rate base, and that the Commission must use fair value rate base to set rates per the Arizona constitution."

Q. Does Staff agree with Mr. Grant's recommendation that, as a result of that ruling, the weighted cost of capital that was developed for use with an original cost rate base, should be applied without adjustment to the fair value rate base?

A. Absolutely not. Staff strongly disagrees with this recommendation by Mr. Grant for two reasons. First, the Court of Appeals, in the decision cited by Mr. Grant, specifically stated that the Commission was not bound to do what Mr. Grant is recommending. Page 9 of the Court of Appeals decision stated that: "Chaparral city ... asks that the Commission be directed to apply the 'authorized rate of return' to the fair value rate base rather than to the OCRB, as Chapparal City contends was done here." This is essentially the same recommendation being made by Mr. Grant in his rebuttal testimony in the current UNS Gas rate case. However, at page 13, paragraph 17, that Court of Appeals decision states as follows: "the Commission asserts that it was not bound to use the weighted average cost of capital as the rate of return to be applied to the FVRB. The Commission is correct."

Thus, the Court of Appeals clearly stated that the Commission is not bound to apply to the FVRB the same weighted average cost of capital that was developed for application to the OCRB.

Second, the methodology advocated by Mr. Grant (of applying the weighted cost of capital that was developed for use with an original cost rate base, without adjustment, to the FVRB) would tend to result in an unreasonable and excessive return on equity to the utility.

For these reasons, Staff strongly recommends that the methodology recommended by Mr. Grant be rejected.

Q. What other guidance was provided in that Court of Appeals decision?

A. At pages 13-14, paragraph 17, the Court of Appeals decision stated that: "... the Commission cannot ignore its constitutional obligation to base rates on a utility's fair value. The Commission cannot determine rates based on the original cost, or OCRB, and then engage in a superfluous mathematical exercise to identify the equivalent FVRB rate of return. Such a method is inconsistent with Arizona law." At page 13, the decision states: "if the Commission determines that the cost of capital analysis is not the appropriate methodology to determine the rate of return to be applied to the FVRB, the Commission has the discretion to determine the appropriate methodology."

Q. How has Staff addressed the ruling in the Court of Appeals decision for purposes of the current UNS Gas rate case?

A. In view of the Court of Appeals decision, Staff has appropriately adjusted the weighted cost of capital to the utility's fair value rate case. David Parcell's surrebuttal testimony describes Staff's position and response to the company's interpretation of the recent Chaparral decision. I would like to also point out, however, that the Chaparral decision is very recent and may still be the subject of further appeal. Further, Staff is still evaluating the decision.

On schedule D of Exhibit RCS-2S, I have derived the adjusted weighted cost of capital for application to the FVRB. On schedule A of that Exhibit I have applied Staff's adjustment to the weighted cost of capital as described by Mr. Parcell in his surrebuttal testimony. As shown on exhibit RCS-2S, Schedule A, the application of Staff's adjusted weighted cost of capital to the FVRB results in revenue increase of $4.312 million. In this instance, the application of the adjusted weighted cost of capital to the FVRB produces a slightly lower revenue requirement than does the application of the unadjusted rate of return to OCRB.

III. Rate base

Q. What rate base issues are you addressing in your surrebuttal?

A. I am addressing three rate base issues where there is a difference in the UNS Gas rebuttal position and the Staff recommendation:

- Exclusion of CWIP from rate base
- Exclusion of deferred GIS costs from rate base
- Cash working capital

With respect to the issue of exclusion of CWIP from rate base, I am also addressing the related proposal of UNS Gas for inclusion of post-test-year plant in rate base, and a new issue that was not raised by UNS Gas in its direct testimony, but which is being raised in its rebuttal testimony: the ratemaking treatment of customer advances.

Q. Have you prepared a schedule that updates Staff's proposed adjustments to rate base?

A. Yes. On Exhibit RCSs-2S, Schedule B, revised, Staff's adjustments to rate base have been updated for the impacts of issues described in my surrebuttal testimony. The Staff position on the exclusion of CWIP and deferred GIS costs from rate base has not changed as the result of UNS Gas' rebuttal testimony. As a result of changes to some of the adjustments to operating expenses, the working capital allowance amount has changed. The updated rate base reflects the change to the cash working capital allowance related to the expense changes.

B-1, Construction Work in Progress

Q. Please summarize UNS Gas' rebuttal concerning the company's proposal to include CWIP in rate base.

A. UNS Gas has proposed to include $7.189 million of construction work in progress ("CWIP") in rate base. UNS Gas witness Kentton Grant presents the following reasons for why the company believes CWIP should be included in rate base:

- While the rate base inclusion of CWIP is unusual in the sense that it has not been used for many years in Arizona, it is a tool available to the Commission for purposes of setting fair and reasonable rates.
- Two Arizona Supreme Court cases in the 1970s discussed the inclusion of CWIP in rate base and indicated that the Commission could consider it in determining rates.
- There are "extraordinary circumstances" in the current case justifying the inclusion of CWIP in rate base because Mr. Grant claims "it will be difficult, if not impossible, for the company to earn its authorized rate of return over the next several years."
- Inclusion of CWIP in rate base can be one means of addressing the "regulatory lag" issue for a utility with a large construction program.

- An extension of time between rate case filings could be beneficial to the company and its customers.

Basically, these are not new arguments for inclusion of CWIP in rate base, but rather are a restatement of the company's original request that CWIP be included in rate base in order to maintain the company's financial integrity, to mitigate regulatory lag, to fund its rapid growth and to extend the period between rate cases.

Q. Mr. Grant's rebuttal testimony cites two Arizona Supreme Court cases in the 1970s that discussed the inclusion of CWIP in rate base. Has he demonstrated that the facts and circumstances of UNS Gas in the current case are similar to the specifics addressed in those cases?

A. No.

Q. Please comment upon the use of financial projections by Mr. Grant as support for his arguments that CWIP should be included in rate base.

A. Mr. Grant appears to be relying on financial forecasts on pages 11-12 of his rebuttal. According to Mr. Grant, those forecasts show that the gap between the Company's embedded plant investment and incremental plant investment on a per-customer basis should narrow over time. Thus, the issue of regulatory lag should present less of a concern for the forecast period of 2007 through 2009 than it has for the historic period of august 2003 through December 2006. However, I would caution Against placing much reliance upon forecasts as the basis for ratemaking treatments, such as the CWIP issue in the current case. Forecasts are subject to change and can be inaccurate.

At pages 23-24 of his rebuttal testimony, Mr. Grant purports to recalculate his financial forecast and key financial indicators for UNS Gas based on inputting a $4.9 million reduction to the company's requested revenue increase. However, to merely input a revenue difference without also reflecting the impact of the specific adjustments which cause that difference (i.e., without also reflecting the reasons for the difference) is questionable and unlikely to produce reliable forecasts that are meaningful and relevant for ratemaking purposes. In states that utilize future test years, where projections are made beyond the historical period, adjustments are not just made to revenues but to all of the components of the ratemaking formula which impact the level of revenues. In jurisdictions that utilize future test years, when adjustments are made for disallowed expenses, the disallowed expenses are removed from the future test year. To the extent that Mr. Grant is attempting to use his revised financial forecasts as some kind of surrogate for a future test year, or as some kind of test of the reasonableness of the parties' differing recommendations, his comparisons do not appear to reflect the adjustments to rate base or expenses that contribute to Staff recommending a different level of revenue increase than has been requested by the company.

Q. **Please discuss the issue of Regulatory Lag as it relates to the CWIP issue and to Utility Ratemaking in Arizona.**

A. In Arizona, a historic test year with pro forma adjustments is used to establish utility rates. This approach has been employed for many years, and primarily without the inclusion of CWIP in utility rate base. The use of a test year, with appropriate adjustments, is intended to assure that the elements of the ratemaking formula are in balance. Regulatory lag refers to the difference in time between the test year and the rate effective date. My understanding is that it has always existed as an integral part of rate of return-based public utility regulation in Arizona, and for that matter virtually all states. It is not a new phenomenon which would require a change in basic regulatory policy. Moreover, there are other aspects of regulatory lag that benefit the company. These include expired amortizations and accumulated depreciation. The company continues to earn a return on and receives a recovery of assets that have already been recovered.

Q. Is inclusion of CWIP in rate base up to the discretion of the Commission?

A. Yes, it is. Staff's understanding is, in specific instances, the Commission has allowed a utility to include CWIP in rate base, but the Commission's general practice has been to not allow CWIP to be included in rate base.

Q. At page 26 of his rebuttal, Mr. Grant claims that your testimony does not describe what "burden of proof" UNS Gas would have to meet in order to have CWIP included in rate base. Please respond.

A. As I noted in my direct testimony, the burden of proof is on UNS Gas to prove its revenue requirement. Where the Commission has a very well-established policy, such as the exclusion of CWIP from rate base, UNS Gas must show convincingly that it is different in significantly important respects than the comparable circumstances in the other utility rate cases over the past decades where CWIP was excluded from rate base. In other words, UNS Gas must show how it is different from the normal circumstances of a regulated Arizona public utility where CWIP has been excluded from rate base. In the current case, UNS Gas has failed to do this.

In this case, UNS Gas, Staff and RUCO have all acknowledged that the Commission's policy and practice has been to exclude CWIP from rate base. My direct testimony presented a number of reasons why CWIP has been excluded from rate base, which apply to CWIP in general as well as to UNS Gas in the current case. Mr. Grant's rebuttal at page 26 does not refute these reasons. In fact, he indicates that two of the reasons are obvious: (1) that CWIP in rate base is not normally allowed by the Commission, and (2) that projects included in the test year CWIP balance were not in service as of the test year. He has also failed to demonstrate that post-test year revenue increases and expense reductions enabled by the CWIP have been properly identified and quantified by the company and used as an offset to the revenue requirement impact of including CWIP in rate base. The company's proposal fails the matching principle. Nor has Mr. Grant demonstrated that UNS Gas is in financial distress, that it cannot continue to attract capital at favorable terms if CWIP continues to be excluded from rate base, or that UNS Gas is different in terms of its customer growth and regulatory lag situation than the other major utilities in Arizona which do not have CWIP included in rate base.

Q. Based on your review of the reasons presented by UNS Gas in its direct and rebuttal testimony and other factors, should CWIP be included in rate base in the current case?

A. No. In general, Staff does not favor inclusion of CWIP in rate base unless the utility demonstrates compelling reasons to justify this exceptional ratemaking treatment. For the following reasons, Staff does not support UNS Gas' request for rate base inclusion of CWIP in the current case:

1) Inclusion of CWIP in rate base is an exception to the Commission's normal practice, and UNS Gas has not met its burden of proof showing why it requires such an exceptional ratemaking treatment. UNS Gas has not demonstrated that it is in financial distress, or that it would be unable to obtain financing at a reasonable cost if the normal practice of excluding CWIP from rate base is followed in the current case. Staff witness David Parcell addresses how Staff's recommendations should enable UNS Gas to continue to have access to financing at a reasonable cost. Mr. Parcell

addresses the determination of a fair rate of return that would allow UNS Gas to attract new capital on reasonable terms. In making his cost of capital recommendations, Mr. Parcell has been made aware of and has taken into consideration UNS Gas' proposal to include CWIP in rate base and Staff's recommendation that CWIP not be included in rate base in this case.

2) The CWIP was not in service at the end of the test year. As of December 31, 2005, the construction projects were not serving customers.

3) The company has not demonstrated that its December 31, 2005 CWIP balance was for non-revenue producing and non-expense reducing plant. Much of the construction appears to be for mains, services and meters related to serving customer growth, i.e., to be revenue producing. Test year revenues have been annualized to year-end customer levels. However, revenues have not been extended beyond the test year to correspond with customer growth. Hence, including the investment in rate base, without recognizing the incremental revenue it supports, would be imbalanced. Some of the facilities that are being constructed will be used subsequent to the 2005 test year to serve additional customers. It would not be appropriate to include the investment that will serve those new customers without also including the revenues that would be received from those customers. In other words, allowance of CWIP in rate base would result in a mismatch in the ratemaking process. Additionally, some of the plant being added, such as main replacements, could result in a reduction in maintenance expenditures which would not be reflected in the test period. The inclusion of CWIP in rate base, therefore, creates an imbalance in the relationships between rate base serving customers and the revenues being provided to the utility from customers who were taking service during the test year. Consequently, CWIP should not be allowed

in rate base unless there are very compelling circumstances which would warrant an exception to the general rule.

4) UNS Gas accrues a return, representing its financing costs during the construction period, called Allowance for Funds Used During Construction ("AFUDC"). This AFUDC return accounts for the utility's financing cost during the construction period.
5) Other large Arizona utilities are facing customer growth and similar "regulatory lag" issues to UNS Gas. Yet, to the best of my knowledge, none of the large Arizona utilities have CWIP in rate base. UNS Gas has failed to demonstrate that its circumstances are so different and unique that it requires a significantly different regulatory treatment for CWIP.

6) While the company has stated that inclusion of CWIP in rate base could result in deferring the filing of its next rate case, the company has made no specific enforceable commitments to a filing moratorium period.

In summary, in the current case, UNS Gas has not demonstrated convincingly that it requires an exception to the Commission's standard ratemaking treatment of excluding CWIP from rate base.

Q. If CWIP were to be included in rate base, as requested by the company, what is the UNS Gas rebuttal position concerning whether the accrual of AFUDC should cease?

A. This issue is addressed in Mr. Grant's rebuttal at page 14. Mr. Grant recognizes that "the accounting guidelines published by the FERC require utilities to subtract the amount of any CWIP allowed in rate base from the balance of future CWIP eligible for AFUDC accruals." However, he then attempts to carve out an exception for UNS Gas to this required accounting for AFUDC. He states that, because there is only a small amount of AFUDC on the test year balance of CWIP, it would be unfair to require UNS Gas to cease accruing AFUDC on $7.2 million of CWIP on an ongoing basis. He requests that, if the Commission grants the company's request to include CWIP in rate base, that language be included in the order that authorizes the company to continue accruing AFUDC on all eligible construction projects.

Q. **Does Staff agree with this proposal by Mr. Grant to continue accruing AFUDC even if CWIP were to be included in rate base?**

A. No. Mr. Grant's proposal to continue accruing AFUDC on CWIP should be rejected because it is contrary to the accepted accounting guidelines and would result in a double recovery of the financing cost of CWIP. The financing cost for CWIP can be addressed for ratemaking purposes in one of two ways: (1) through the inclusion of CWIP in rate base for a current cash return, or (2) through the accrual of AFUDC, which is added to the construction cost and is ultimately included in the cost of plant and depreciated. It would be improper to give UNS Gas both a cash return on CWIP through its inclusion in rate base and an AFUDC return. If CWIP were to be allowed in rate base, which the Staff is not recommending in this case, then AFUDC accruals on the amount of CWIP included in rate base must cease.

Q. **Does Staff agree with UNS Gas' alternative proposal to include post-test year plant additions in rate base, if the inclusion of CWIP in rate base is denied?**

A. No. Making the CWIP adjustment in a slightly different format, by adding post-test year plant into rate base, also suffers from the same flaws as the company's proposal to include CWIP in rate base. It is imbalanced because it fails to capture any post-test year revenue growth and maintenance decreases enabled by the new plant. Consequently, for similar reasons to the ones described above, Staff does not agree with UNS Gas' proposed alternative of including post-test year plant in rate base.

Q. At page 27 of his testimony, Mr. Grant recommends removing customer advances of approximately $4.158 million from rate base, if CWIP is excluded. Does Staff agree with this new UNS Gas proposal?

A. No. Customer advances should be reflected as a deduction from rate base. Customer advances represent non-investor supplied capital, and therefore should be reflected as a deduction to rate base. Mr. Grant has not cited any prior Arizona utility rate case in which CWIP was excluded from rate base and customer advances were not reflected as a reduction to rate base to recognize the non-investor provided cost-free capital. Nor is Staff aware of an instance for any major Arizona public utility where CWIP was excluded from rate base and customer advances were not reflected as a deduction to rate base. The Commission's rules (A.A.C. R14-2-103, appendix b, schedule B-1) require that customer advances be reflected as a deduction from rate base.

One additional reason why customer advances should be deducted from rate base is to prevent a double rate of return. In accruing AFUDC by applying the AFUDC rate to a CWIP balance, customer advances are typically not deducted from the construction cost base upon which AFUDC is computed. If the customer advances have not been specifically deducted in the AFUDC calculations (which would be contrary to the prescribed treatment for a utility following the AFUDC formula in the FERC uniform system of accounts), the non-investor provided cost-free capital in the form of customer advances needs to be reflected as a rate base deduction.

Consequently, the request by Mr. Grant to adjust the balance of customer advances, if CWIP is excluded from rate base, is contrary to precedent, would be improper for ratemaking purposes, and should be rejected.

B-2, Geographic Information System ("GIS") deferral

Q. Have you reviewed UNS Gas' rebuttal testimony concerning its request to include deferred GIS costs in rate base and to amortize such costs?

A. Yes. UNS Gas witness Dallas Dukes' rebuttal testimony, on pages 3-6, presents reasons why the company believes such deferred GIS costs should be included in rate base.

Q. At page 4, lines 17-18, Mr. Dukes states that: "the appropriate time to request an accounting order would have been in 2003, prior to beginning the project." Did UNS Gas request an accounting order at that time?

A. No. UNS Gas did not request an accounting order at that time or subsequently. UNS Gas is proposing that the Commission grant treatment as a "regulatory asset" of such costs in its current rate case. However, as explained in my direct testimony, Staff recommends that the company's requested "regulatory asset" treatment be rejected.

Q. Why does Staff disagree with UNS Gas concerning whether the GIS costs should be given "regulatory asset" treatment?

A. Because these expenditures are non-recurring expenses that were largely incurred prior to the test year, and because UNS Gas failed to request an accounting order at the appropriate time, Staff disagrees with the proposal by UNS Gas that the GIS costs be retroactively approved as a "regulatory asset" for inclusion in rate base and for the amortization of such an "asset" prospectively into customer rates.

Q. Mr. Dukes' rebuttal testimony refers to the GIS costs as an "investment." Do you agree with that characterization?

A. No. Under Generally Accepted Accounting Principles ("GAAP"), such costs were required to be expensed in the period incurred. The company had initially applied a capitalization treatment of such costs, but determined that that was an error and a violation of GAAP, and has recorded an entry on its books to expense such costs. For accounting purposes, the GIS costs are expenses, not an investment. The appropriate treatment for non-recurring expenses, especially ones relating to periods prior to the test year and for which deferral for accounting purposes was not pre-approved, is to exclude them from rates. Staff's proposed treatment does this.

Q. Is there an element of retroactive ratemaking in UNS Gas' request?

A. It appears so. The fact that the vast majority of the GIS expenses at issue here was incurred by UNS Gas prior to the 2005 test year, coupled with the fact that UNS Gas did not request and did not receive a timely accounting order from the Commission to defer such costs for consideration in a future rate case, does appear to contain elements of retroactive ratemaking. As I understand it, in the absence of a Commission accounting order authorizing such deferral, the prohibition Against retroactive ratemaking generally prevents utilities from deferring expenses incurred between rate cases for future recovery in rates.

Q. At page 6, item 5, of his rebuttal, Mr. Dukes' states: "if the company is not granted recovery of the investment, customers will reap the benefits of a system and the investors will have borne the cost without recovery." Please respond.

A. First, as noted above, the expenditures at issue are expenses under GAAP, not an investment. The company's own documents indicate that its initial attempt to account for this as an investment that would be capitalized was erroneous and did not comply with GAAP. Second, it is not uncommon or unusual for a utility's investors to be responsible for expenses which occur in between rate cases and to be responsible for expenses which are incurred outside of a test year. The flip-side to this is that, the utility's investors then also benefit from cost decreases and increased revenues that occur between rate cases. To the extent that the GIS system produces any cost savings that are not captured in the current test year, the utility's investors would benefit.

Q. At page 6 of his rebuttal testimony, Mr. Dukes claims that the GIS costs should receive regulatory asset treatment and prospective rate recovery "because of the GIS costs nexus to directly providing safe and reliable natural gas service to customers." Do these GIS costs require the special ratemaking treatment proposed by UNS Gas because they were incurred with some "nexus" to the provision of utility service?

A. No. The GIS costs that UNS Gas wants to include in rate base and amortize for prospective recovery are not really much different in substance than other expenses that UNS Gas recorded on its books prior to and during the test year. In any given year, UNS Gas has expenses that it records on its books that would also have a direct connection to providing safe and reliable natural gas service to customers. Examples of such costs would include costs for labor, outside services, depreciation, income taxes, other taxes, etc. Indeed, presumably the majority of UNS Gas' expenses in any particular year (other than disallowable items) have some type of "nexus" (direct or indirect) with the provision of utility service. However, without an accounting order pre-approving deferral treatment, it is inappropriate to defer such expenses into a future period. The mere connection between making expenditures that are recorded as expenses under GAAP in a particular year and the provision of utility service, does not in itself distinguish the GIS expenses from any other expenses which UNS Gas incurs which are related to the provision of safe and reliable utility service.

Q. Please summarize the reasons why the expenses related to the GIS should be excluded from rate base and why UNS Gas' request for prospective amortization into rates of such expenses should be denied.

A. UNS Gas' proposal to include $897,068 in rate base for a deferral of costs related to its GIS and its proposal to amortize such costs prospectively into rates should be denied for a number of reasons. The costs at issue were required to be expensed under GAAP.

Such expenses are of a one-time, non-recurring nature. Moreover, had it been expensed properly by UNS Gas in the appropriate periods when the expenditures were made, the vast majority of the GIS cost that UNS Gas deferred would have been expensed prior to the 2005 test year. UNS Gas did not request Commission pre-approval for recovery or cost deferral, and therefore could not defer the costs as a regulatory asset. Based on a review of the company's October 3, 2005 memo that was reproduced in attachment RCS-5 to my direct testimony, and the supporting documentation provided by UNS Gas, Staff concludes that the deferred GIS costs requested by UNS Gas are not an appropriate rate base item, do not qualify as a "regulatory asset," were not pre-approved for deferral by the Commission, are non-recurring costs that should have largely been expensed by the company in periods prior to the 2005 test year, and therefore are not appropriate to include in test year rate base. Accordingly, Staff adjustment B-2 has removed that amount of deferred costs from rate base, and Staff adjustment C-5 has removed the related company-proposed amortization.

B-3, Cash Working Capital

Q. Have the adjustments you have reflected in your surrebuttal testimony had an impact on the cash working capital allowance?

A. Yes. The cash working capital allowance has been updated for the impact of other adjustments. As shown on Exhibit RCS-2S, schedule B-3 revised, based on reflecting the impacts of Staff's adjustments, the revised working capital allowance for UNS Gas should be approximately negative $268,000.

IV. Adjustments to operating income

Q. Have you updated Staff's proposed adjustments to operating income?

A. Yes. Exhibit RCS-2S, Schedule C revised, page 1, summarizes Staff's recommended net operating income. Exhibit RCS-2S, Schedule C.1 revised, presents Staff's recommended adjustments to test year revenues and expenses on an Arizona jurisdictional basis. These schedules reflect the acceptance of some adjustments described in UNS Gas' rebuttal testimony and/or modification to some of Staff's adjustments.

C-1, Revenue Annualization

Q. Please discuss the UNS Gas' rebuttal testimony concerning revenue annualization.

A. Mr. Erdwurm, at pages 4-7, of his rebuttal testimony claims that the "traditional approach" for customer annualization, which he indicates was applied in a fairly similar manner by both Staff and RUCO, is inappropriate in this case. Staff disagrees with Mr. Erdwurm and believes that the traditional approach to customer revenue annualization is appropriate for use in the current UNS Gas rate case.

Q. Mr. Erdwurm's rebuttal exhibit 1 shows that different annualization results would occur if a test year ending in a different month is selected. Does that invalidate the traditional approach to customer annualization for ratemaking purposes in this case?

A. No. Depending on the ending month of the test year, there would be variations under the traditional approach, or under the UNS Gas approach. The company selects the test year, so it has substantial control over which month would be the final month of the test year. The current test year ends December 31, 2005. Applying a customer annualization approach in the well-accepted traditional manner as Staff has done in the current case is not invalidated because a test year ending December 31, 2005 is being used.

Q. Is it necessary for the number of customers to grow in stair-step fashion for the traditional approach to be valid for ratemaking purposes?

A. No, it is not. What is important is that the growth that occurred during the test year is matched with the other elements of the ratemaking formula, including year-end plant in service, etc. 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.

Q. At page 5, lines 12-13, of his rebuttal, Mr. Erdwurm suggests that the traditional method works well when "new customers to be added after the test year have similar consumption to the average customer in the class (homogeneous customers)." How are new customers to be added after the test year considered in the annualization adjustment?

A. New customers added after the test year are not considered in the annualization adjustment. The annualization adjustment only considers customers that have been added during the test year, and annualizes only for customers that were added during the test year. 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.

Q. At page 5, lines 22-26, of his rebuttal, Mr. Erdwurm asks the Commission to: "consider a hypothetical case where, a huge existing customer will plan to double its size, but at the same time a 'borderline' large customer is closing its doors. The impact of the huge customer's expansion may dwarf the loss of the entire borderline large customer. A huge positive customer annualization adjustment may be in order to recognize substantially higher revenue attributable to the huge customer's growth."

At page 6, lines 2-3, he concludes that: "the traditional approach is so easy; unfortunately it is sometimes overly simplistic and wrong." Has Mr. Erdwurm tied this hypothetical situation to the facts of the current UNS Gas rate case?

A. No.

Q. How does the hypothetical case of a huge customer discussed at page 5, lines 22-26, through page 6, line 3, of Mr. Erdwurm's rebuttal testimony apply to the specific customer annualization recommended by Staff in the current UNS Gas rate case?

A. Basically, it doesn't. Considering that the Staff's proposed revenue annualization is largely driven by small customers, including in particular residential and small commercial customer growth that occurred during the test year, Mr. Erdwurm's discussion of this hypothetical "huge customer" situation appears to totally miss the point of Staff's actual adjustment. Moreover, his hypothetical case provides no basis for an inference that the traditional method applied by Staff (and RUCO) in the current case to the UNS Gas specific customers, which are primarily residential and small commercial customers, is overly simplistic or wrong.

Q. At page 6, lines 23-27, Mr. Erdwurm states that:

"one cannot explain a negative adjustment – an adjustment that will increase customers' rates – on a growing system. Customers on a system with a positive growth trend in revenue, in customers, and in sales, should never pay more because of some negative customer adjustments calculated using a non-applicable traditional approach." Please respond.

A. First, this criticism appears to be misplaced in the context of the current rate case. Each party's (UNS Gas, Staff and RUCO's) revenue annualization adjustment reflects a net increase in test year revenues. Each parties' revenue annualization results in a net positive adjustment to test year revenues. So the issue of a negative revenue annualization adjustment, on an overall basis, is not an issue in the current case.

Second, Mr. Erdwurm's theory that a negative adjustment cannot be explained is incorrect. In both the UNS Gas filing and in Staff's annualization, a negative annualization adjustment (i.e., a pro forma revenue decrease) occurred for the rate group of large volume public authority customers. In UNS Gas' filing, the negative adjustment to revenue for this class was $17,185. In Staff's traditional revenue annualization calculation, the negative adjustment to revenue for this class was $13,212, for a difference of $3,973. Contrary to Mr. Erdwurm's theory that "one cannot explain a negative adjustment," there is a fairly simple explanation for this adjustment: the number of customers in the rate class decreased from 6 (during the period January through October

2005) to 5 (in November and December 2005). I should note that the impact of this negative adjustment for this rate class was largely offset by a positive adjustment for the large volume commercial customer class, where there was a change from 10 customers (during the period January through October 2005) to 11 (in November and December 2005). UNS Gas' annualization adjustment for that class added $11,351 in revenues and Staff's corresponding adjustment added $16,691, the net result for these two "large volume" classes between Staff and the UNS Gas revenue annualizations amounted to the Staff adjustments adding $1,367 more in net annualized revenue than the UNS Gas annualization adjustments for these rate classes. Moreover, a net difference in revenues of $1,367 between Staff and the company's proposed revenue annualizations for these two "large volume" rate classes certainly does not indicate any serious flaw or inaccuracy in Staff's use of the Commission's traditional annualization methodology in the current UNS Gas rate case.

Q. Are there any other considerations in determining an appropriate annualization method in a utility rate case?

A. Yes. The method should be straight-forward and transparent enough to enable the other parties to follow the calculations and results. This feature exists with respect to Staff's and RUCO's use of the traditional approach. In contrast, the calculations utilized by UNS Gas which applied percentage "growth factors" instead of customer bill counts, were difficult to follow in terms of verifying the percentages used, and appear to understate growth.

Q. Are you making any revisions to the Staff revenue annualization adjustment as the result of UNS Gas' rebuttal testimony?

A. No. Based on a reasonable review of the information presented in this case, the Commission's traditional annualization approach, which compares the customer counts in each month of the test year to the December 31, 2005 test year-end level of customers, and then multiplies the additional customers by the average revenue in each month (based on customer charges and average monthly usage volumes), is appropriate for use in the current UNS Gas rate case.

C-2, Weather Normalization

Q. Are differences between the Staff and UNS Gas related to the weather normalization adjustment dependent upon the revenue annualization?

A. Yes. Staff's weather normalization adjustment increases retail revenue by $1,962. Staff's adjustment varies from the weather normalization adjustment proposed by UNS Gas because the weighted average number of customers, in Staff's annualization, exceeded the corresponding level reflected in UNS Gas' corresponding annualization. Both the Staff and the UNS Gas weather normalization adjustments reflect an increase to revenue because the test year was warmer than normal.

Q. Are you making any revisions to the Staff weather normalization adjustment as the result of UNS Gas' rebuttal testimony?

A. No.

C-3, Bad Debt Expense

Q. Does Staff agree with the company's proposed amount of Bad Debt Expense?

A. No. However, the differences in bad debt expense between Staff and UNS Gas relate not to the calculation method, but rather are driven by the impact of the revenue adjustments. UNS Gas witness, Mr. Dukes, states at page 2 of his rebuttal that the differences in bad debt expense between UNS Gas and Staff result from the different customer annualization and weather normalization adjustments, and, other than that, UNS Gas and Staff are basically in agreement on the calculation. I agree with this assessment of the differences.

C-4, Remove Depreciation and Property Taxes for CWIP

Q. Has the UNS Gas rebuttal affected Staff adjustment C-4?

A. No. This adjustment removes the pro forma amounts calculated by UNS Gas for depreciation and property taxes related to the company's proposal to include CWIP in rate base. As explained above, Staff disagrees with that company proposal to include CWIP in rate base, and the company's alternative proposal to include post-test year plant in rate base.

C-5, Remove Amortization of Deferred GIS Cost

Q. Has the UNS Gas rebuttal affected Staff adjustment C-5.

A. No. This adjustment removes the company's proposed amortization of $299,023. As explained above in conjunction with Staff adjustment B-2, during 2003-2005, UNS undertook a project to locate and assign Global Positioning System ("GPS") information to its existing service lines in order to update the UNS Gas GIS. Part of the basis for this request by the company is that the project has a benefit to future periods. However, these expenses largely were incurred in prior periods and are nonrecurring. Without seeking

Commission pre-approval, UNS Gas is now requesting deferral treatment for costs that should have been expensed in periods prior to the test year.

As explained in my direct testimony, Staff agrees with the portion of UNS Gas' adjustment that removes the non-recurring GIS costs from test year O&M expense.

As explained above, in conjunction with adjustment B-2, and in my direct testimony, Staff disagrees, however, with the company's proposal to amortize such costs prospectively over a three-year period.

C-6, Incentive Compensation and Supplemental Executive Retirement Program

Q. Please respond to the company's rebuttal testimony concerning incentive compensation and SERP.

A. UNS Gas witness Dallas Dukes addresses these issues at pages 7-14 of his rebuttal testimony in terms of his rebuttal to Staff. He also presents fairly similar rebuttal testimony in response to RUCO's adjustments at pages 26-27 for incentive compensation and at pages 36 concerning SERP. Because Mr. Dukes' rebuttal on these issues is broken out by issue, I will respond to his rebuttal concerning the components of Staff adjustment C-6 by component.

Performance Enhancement Program ("PEP")

Q. Mr. Dukes asserts at page 7 of his rebuttal that the PEP program costs are a net savings to customers. Has he quantified the net savings to customers that were allegedly produced by PEP?

A. No.

Q. Mr. Dukes references benchmarking studies at page 9, line 3 of his rebuttal. Did he identify such studies by name or include them with his rebuttal testimony?

A. No. He did neither. Staff has requested such studies in discovery. However, responses to Staff set 22 have not been received as of the time of this writing.

Q. At pages 8-9 of his rebuttal, Mr. Dukes refers to the PEP compensation as being "at risk." Does this mean that, if goals specified in the plan are not achieved, the company then does not pay the compensation that is "at risk" under the PEP plan?

A. No. Even though the primary financial goal under the PEP was not met in 2005, incentive bonuses were paid. As explained in UNS Gas' supplemental response to STF 11.5(b):

"...the financial performance goal, which was a trigger under the PEP program for UNS electric, UNS Gas and Tucson Electric Power company ("TEP"), was not met. The financial performance goal was not met, in part, because of unplanned outages at the coal generating units which required TEP to purchase power on the open market. In discussions with the board of directors, the desire was to recognize employee achievements distinct from financial measures. The board deemed it appropriate to implement a special recognition award to employees for achievements in 2005. Normally, PEP is paid at 50% to 150% of target; the special recognition aware was paid at approximately 42% of the target for each of the operating companies."

These facts place into question how real the "at risk" feature of the PEP is in practice. Where retroactive changes can be and are made to alter the conditions under which incentive bonuses would be paid, this can result in incentive bonuses (or "at risk" compensation) being paid even when the specified goals per the terms of the PEP have not been met.

Q. Based on the information provided, do you see any meaningful distinction in the incentive compensation that was disallowed by the Commission in the recent southwest gas corporation rate case, and the incentive compensation that UNS Gas seeks to charge to rate payers in the current UNS Gas rate case?

A. No. As an illustrative example, in decision no. 68487, dated February 23, 2006, in a Southwest Gas Corporation ("SWG") rate case, the Commission adopted Staff's recommendation for an equal sharing of costs associated with that utility's management incentive plan compensation expense. In terms of whether the cost of the UNS Gas incentive compensation under the company's PEP plan should be similarly allocated between shareholders and ratepayers, I see no meaningful distinction in the UNS Gas situation that would require a different ratemaking treatment than the 50/50 sharing applied by the Commission in the SWG rate case.

Q. Please summarize why UNS Gas' Incentive Compensation Expense should be allocated 50/50 between shareholders and ratepayers.

A. UNS Gas' expense for incentive compensation should be allocated equally to shareholders and ratepayers because incentive compensation programs can provide benefits to both shareholders and ratepayers. The removal of 50% of the incentive compensation expense, in essence, provides an equal sharing of such cost, and therefore provides an appropriate balance between the benefits attained by both shareholders and ratepayers. Both shareholders and ratepayers stand to benefit from the achievement of performance goals. Moreover, there is no assurance that the award levels included in the company's proposed expense for the test year will be repeated in future years.

Tucson Electric Power company ("TEP") officer's long term incentive program

Q. Are you awaiting responses to discovery that was issued after receiving UNS Gas' rebuttal concerning the TEP officer's long term incentive program?

A. Yes. Until the responses to the discovery that was issued by Staff after UNS Gas' rebuttal are received and reviewed by Staff, the Staff recommendation concerning this compensation will remain unadjusted. After reviewing such responses, Staff will make appropriate recommendations at that time.

Unisource Energy Corporation Management and Directors Deferred Compensation Plan

Q. Are you awaiting responses to discovery that was issued after receiving UNS Gas' rebuttal concerning the Unisource Energy Corporation's Management and Directors Deferred Compensation Plan?

A. Until the responses to the discovery that was issued by Staff after UNS Gas' rebuttal are received and reviewed by Staff, the Staff recommendation concerning this compensation will remain unadjusted. After reviewing such responses, Staff will make appropriate recommendations at that time.

Supplemental Executive Retirement Plan ("SERP")

Q. Which UNS Gas rebuttal witness addresses Staff's proposed disallowance of SERP expense?

A. Mr. Dukes addresses the SERP at pages 12-14 of his rebuttal.

Q. At page 12, Mr. Dukes states that the amount identified for disallowance in the Staff adjustment "primarily represents benefit cost allocated to UNS Gas from TEP." Is that any reason for allowing SERP to be charged to ratepayers?

A. No. An expense that is otherwise disallowable should be disallowed whether it is incurred directly by the utility or is allocated to the utility from an affiliated company.

Q. At page 12, Mr. Dukes states that: "I recognize that Mr. Smith has at least partially relied upon [the] Commission's recent decision in the SWG rate case (Decision No. 68487) that disallowed the recovery of SERP expense." Has Mr. Dukes distinguished the TEP SERP from the Southwest Gas SERP sufficiently to require a different ratemaking treatment for UNS Gas than the one applied by the Commission for southwest gas in decision no. 68487?

A. I don't believe so. The factors cited by Mr. Dukes on pages 12-14 of his rebuttal testimony appear to be similar to the reasons that were presented by Southwest Gas in Docket No. G-0551A-04-0876, including that it is provided to officers, is to put the officers' retirement compensation on parity with other employees, and the reason for having the SERP is to provide additional retirement benefits to officers beyond the limits allowed in the IRS regulations for qualified retirement plans otherwise available to employees.

The SERP provides supplemental retirement benefits for select executives. Generally, SERPs are implemented for executives to provide retirement benefits that exceed amounts limited in qualified plans by Internal Revenue Service ("IRS") limitations. Companies usually maintain that providing such supplemental retirement benefits to executives is necessary in order to ensure attraction and retention of qualified employees. Typically, SERPs provide for retirement benefits in excess of the limits placed by IRS regulations on pension plan calculations for salaries in excess of specified amounts. IRS restrictions can also limit the company 401(k) contributions such that the company 401(k) contribution as a percent of salary may be smaller for a highly paid executive than for other employees.

Q. Is Staff's recommendation to remove the UNS Gas SERP expense consistent with your understanding of recent Commission decisions that reached similar conclusions regarding the appropriate ratemaking treatment of incentive compensation and SERP expense?

A. Yes. As an illustrative example, in decision no. 68487, February 23, 2006, in a Southwest Gas Corporation rate case, the Commission adopted Staff's recommendation for an equal sharing of costs associated with that utility's management incentive plan compensation expense, and adopted a recommendation by RUCO to remove SERP expense. In reaching its conclusion regarding SERP, the Commission stated on page 19 of decision no. 68487 that:

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

Q. As a result of the UNS Gas rebuttal and information you received subsequent to the preparation of your direct testimony, are you making any revision to Staff adjustment C-6?

A. No.

Q. Did Staff request additional information on UNS Gas' Incentive Compensation and SERP?

A. Yes. As noted above, Staff data request set 22 was issued after reviewing UNS Gas' rebuttal testimony. I received UNS Gas' initial partial responses to that discovery on April 3, 2007. After Staff has an opportunity to thoroughly review the responses, Staff will make appropriate recommendations.

C-7, Emergency Bill Assistance Expense

Q. Is there any dispute between UNS Gas and Staff concerning adjustment C-7?

A. No. UNS Gas has accepted this Staff adjustment, which increases test year expense to be included in the base rate revenue requirement determination by $21,600 to provide for an increase requested by the company for emergency bill assistance.

C-8, Nonrecurring Severance Payment Expense

Q. As a result of the UNS Gas rebuttal, are you removing Staff adjustment C-8?

A. Yes. Staff adjustment c-8 was for a $52,388 severance payment for an employee who was terminated in 2004. This item was effectively adjusted to zero in the UNS Gas filing, so Staff adjustment c-8 is unnecessary.

C-9, Overtime Payroll Expense

Q. Has UNS Gas agreed with Staff adjustment C-9?

A. Yes. Page 17, lines 3-6 of Mr. Dukes' rebuttal testimony indicates that he agrees with this Staff adjustment, which reduced the amount of pro forma expense in the company's payroll adjustment, because it is more reflective of the expected overtime levels that should be included in rates.

C-10, payroll tax expense

Q. Are you revising Staff adjustment c-10?

A. Yes. This adjustment, which reduces test year payroll tax expense, is being revised for the impact of Staff's other adjustments to payroll, specifically for the removal of Staff adjustment C-8, for severance expense. As shown on Schedule C-10 revised, pro forma payroll tax expense is reduced by $9,348. This compares with the reduction to payroll expense of $13,356 that was presented with Staff's direct filing.

C-11, Nonrecurring FERC Rate Case Legal Expense

Q. Please discuss the company's rebuttal testimony concerning Staff adjustment C-11, for non-recurring legal expense.

A. Staff adjustment C-11 removed the substantial legal expenses related to settlement discussions in an El Paso natural gas rate case at the Federal Energy Regulatory Commission ("FERC") that UNS Gas incurred during the test year. Although that case has been settled, there is apparently going to be some level of ongoing expenses. At page 17, lines 19-21, of his rebuttal testimony, Mr. Dukes states that: "the objective should be to set legal expenses at a just and reasonable level that is reflective of how much is likely to be incurred annually." I agree in principle with this objective. UNS Gas witness dukes at pages 17-18 of his rebuttal testimony, however, then attempts to use an average of 2004 and 2005. Since the level of activity and legal expense in the FERC El Paso case could be significantly lower going forward than it has been during the historical period, I am not convinced that the backward-looking 2004-2005 average proposed by Mr. Dukes would represent "a just and reasonable level that is reflective of how much is likely to be incurred annually." In data request set 22, Staff asked UNS Gas for additional information on this issue. After reviewing the company's responses to that discovery (which I received on April 3, 2007), Staff will make the appropriate recommendations.

C-12, Property Tax Expense

Q. What does the Company's rebuttal state with respect to Staff adjustment C-12 for property tax expense?

A. Exhibit DJD-1, page 3 of 3, which was attached to Mr. Dukes' rebuttal testimony states that: "Staff & RUCO adjusted [property taxes] to match their plant in service and also reached out an additional year to 2007 for assessment rate reductions. UNS Gas disagrees with these adjustments." That Exhibit references Ms. Kissinger as the UNS Gas rebuttal witness for this issue. However, Ms. Kissinger's rebuttal testimony does not appear to offer any response to Staff adjustment C-12.

Q. Why is Staff adjustment C-12 necessary?

A. This adjustment is necessary to reflect the known statutory assessment ratio of 24 percent applicable for 2007. The Arizona state legislature passed House Bill No. 2779 which set a new rate schedule for property tax assessments. The new assessment rate schedule provides for decreasing the 25 percent rate applicable in 2005 in 0.5 percent steps each year until a 20 percent rate is attained in 2015. The company's calculation used a 24.5 percent assessment rate and thus fails to recognize the impact of this known tax change prospectively.

Q. How did Staff determine its recommended assessment rate?

A. The current assessment rate in 2007 is 24 percent. Staff concluded that since the Commission approved rates are expected to become effective in mid-2007, and the company's anticipated rate case interval is three years, as evidenced by the company's proposed normalization period for rate case expense, the property tax rate that will be in effect for 2007 of 24 percent is appropriate.

In terms of determining the recommended assessment rate, I also considered how Staff's recommendation in the current UNS Gas rate case compares with Staff's similar determination in the recent southwest gas rate case. This comparison is summarized in the following table:

In the Southwest Gas case, it appears that the utility, Staff and RUCO all ultimately agreed on the appropriateness of using a 24.5 percent assessment rate effective for 2006 in conjunction with the test year in that case ending august 31, 2004. As explained in my direct testimony and above, the appropriateness of using the known 24 percent assessment rate in the current UNS Gas rate case is supported by the comparison in the above table.

C-13, Worker's Compensation Expense

Q. Has UNS Gas accepted Staff adjustment C-13?

A. Yes. UNS Gas has accepted this Staff adjustment, which reversed a UNS Gas' proposed adjustment to increase test year expense for using a cash basis, rather than an accrual accounting basis, for recognizing worker's compensation expenses for ratemaking purposes.

C-14, Membership and Industry Association Dues

Q. What does UNS Gas' rebuttal testimony state with respect to American Gas Association ("AGA") dues?

A. Page 35 of UNS Gas witness Dallas duke's testimony states that the company accepts RUCO witness Rodney Moore's adjustment to AGA dues. Mr. Moore's direct testimony addressed this at pages 26-29. He recommended disallowing 3.64 percent of AGA dues based on an AGA/NARUC oversight committee report which had apparently identified 1.54 percent for dues allocated to marketing and 2.10 percent for lobbying. Accordingly, Mr. Moore reduced AGA dues expense by $1,523.

Q. Does Staff agree with that adjustment?

A. Not entirely. Staff agrees that the marketing and lobbying-related portion of the AGA dues should definitely be removed from rates. I also recognize that in the southwest gas rate case, decision no. 68487, at page 14, after having removed the portion of the AGA dues directly attributable to marketing and lobbying, southwest gas was found to have demonstrated that the remainder of the AGA dues should be recoverable as legitimate test year expenses. However, I also note the clear directive from the Commission at page 14 of that order that: "in its next rate case filing the company should provide a clearer picture of AGA functions and how the AGA's activities provide specific benefits to the company and its Arizona ratepayers." While that directive applied to Southwest Gas, I believe it would have effectively put the other gas distribution utilities in the state who have AGA memberships on notice concerning the type of information the Commission would expect them to produce in a rate case in order to justify the inclusion of AGA dues in rates.

In the current rate case, UNS Gas has not produced such information. Staff asked UNS Gas discovery to try to obtain such information, and it was not provided by UNS Gas. As illustrative examples, the company's response to STF 5.62(c) stated: "the company did not receive any materials from the AGA specifying what percentage of their expenses is dedicated to lobbying or advocacy activities. UNS Gas has not excluded any portion of dues paid to the AGA during the test year." Similarly, the company's response to STF 5.62(b) stated: "UNS Gas does not maintain any descriptive material regarding the financial statements, annual budgets or activities of the AGA." Consequently, the company has not met its burden of proof for including AGA dues in rates, and Staff is asking the Commission to consider a larger disallowance of AGA dues in the current UNS Gas rate case than was proposed by RUCO witness Moore.

Specifically, Staff has proposed to reduce test year expense by $26,868, as shown on Schedule C-14 that was filed with my direct testimony. This adjustment removes 40 percent of UNS Gas' 2005 AGA dues for 2005, which were $41,854. Staff adjustment c-14 also removed other discretionary membership and industry association dues which are not needed for the safe and reliable provision of gas utility service.

Q. How did you determine the 40 percent disallowance for AGA dues?

A. As explained in my direct testimony, this was based upon a review of information in the two most recent National Association of Utility Regulatory Commissioners ("NARUC") sponsored audit reports of the expenditures of the American Gas Association. Copies of relevant pages from those audit reports are provided in attachment RCS-3 to my direct testimony.

I also included with my direct testimony, in attachment RCS-4, for the Commission's consideration, an excerpt from a Florida Public Service Commission Staff memorandum (dated 12/23/03) in a city gas company rate case addressing this issue, where 40% of that gas distribution utility's AGA dues amount was disallowed for ratemaking purposes.

C-15, Fleet Fuel Expense

Q. Have you revised Staff adjustment c-15?

A. Yes. This adjustment has been revised to reflect the amount shown in UNS Gas' rebuttal testimony.

C-16, Postage Expense

Q. Have you revised Staff adjustment C-16 for postage expense?

A. Yes. This adjustment was revised to use a starting point of $445,171 for the adjustment calculation. I have accepted that $445,171 is the appropriate starting point for the calculation, as discussed in Mr. Dukes' rebuttal testimony at pages 19-20. This produces an annualized postage expense of $476,960. An annualized postage expense of $476,960 properly recognizes the postage expense increase that occurred on January 8, 2006 and the customer growth that occurred during the 2005 test year.

Q. Are you aware of another postage rate increase?

A. Yes. Another postage rate increase has been approved by the U.S. Postal Service Board of Governors and is scheduled to take effect May 14, 2007. This increase would raise the cost of a first class letter from $0.39 to $0.41.

Q. If the postage rate increase to become effective May 14, 2007 were to be factored into the postage annualization, what would be the result?

A. If the postage rate increase to become effective May 14, 2007 were to be factored into Staff's calculation, the postage annualized postage expense would be $503,356 and the adjustment to the $529,380 amount in the UNS Gas filing would be a decrease of $26,024.

Q. Should the postage increase that is scheduled to become effective May 14, 2007 be reflected for ratemaking purposes?

A. This is a known change in the postage rate. In some respects, it is similar to a known change in a tax rate. As described in my direct testimony and above, Staff has reflected the known changes in the property tax assessment rate of 24 percent effective for 2007. Reflecting a known postage rate increase that becomes effective May 14, 2007 appears to be reasonably coordinated with the period covered by the known property tax assessment rate change used by Staff. Consequently, I have revised the Staff postage expense to $503,356 to incorporate the impact of this additional postage rate increase. This revised Staff adjustment on schedule C-16 reduces the UNS Gas proposed amount of $529,380 by $26,024.

Q. At page 20 of his rebuttal testimony, Mr. Dukes references what he calls a "known and measurable" amount of postage expense for 2006 and suggests that, because of that 2006 expense, the company's originally proposed postage request of $529,380 should be used. Does Staff agree with this analysis by Mr. Dukes?

A. No. The 2006 postage expense amount would reflect customer growth beyond the end of the test year, and the related revenues resulting from such customer growth beyond the end of the test year have not been reflected. As discussed in my direct testimony and above in conjunction with Staff adjustment C-1, customer growth has only been reflected through December 31, 2005, the end of the test year. Reflecting increased postage expense related to post-test year growth in the number of customers without reflecting the related additional revenues is inappropriate and should be rejected.

Q. Do you have any other observations on measures being implemented by the company that should mitigate increases in its postage expense prospectively?

A. Yes. The company has established an electronic billing option and expects an increasing number of customers to sign up for electronic billing. This should help mitigate increases in postage expense prospectively.

C-17, Interest Synchronization

Q. Was Staff's interest synchronization adjustment affected by other changes?

A. Yes. It was affected by the change in rate base. I have prepared a revised interest synchronization adjustment on schedule C-17 to reflect that change. This adjustment decreases income tax expense by the amount shown on schedule C-17 and increases the company's achieved operating income by a similar amount.

C-18, Corporate Cost Allocation

Q. Please explain the adjustment for Corporate Cost Allocation.

A. As described at page 24 of UNS Gas witness Dukes rebuttal testimony, RUCO discovered some additional non-recurring charges related to an attempted merger and has correctly proposed to remove such costs. UNS Gas agreed with that RUCO adjustment. Staff adjustment c-18 reflects Staff's agreement that such costs should be removed and reduces expense by $12,765 accordingly.

C-19, Rate Case Expense

Q. Please discuss the allowance for Rate Case Expense.

A. UNS Gas' original filing requested an amount of $600,000 for rate case expense normalized over a three year period, for an annual allowance of $200,000 per year. UNS Gas' rebuttal testimony requests that the annual allowance be increased to $300,000 per year. At page 34 of his rebuttal testimony, Mr. Dukes states that it is possible that the balance (of the company's rate case deferral account) may reach $900,000, which is $300,000 more than UNS Gas had originally budgeted. He attributes the high rate case cost to two factors: (1) that the organization is going through the first rate case for UNS Gas and is thus having to research and address all issues for the first time, and (2) the volume, complexity and magnitude of data requests from Staff, RUCO and other intervenors, which he states "was probably also as a result of this being the first rate case for UNS Gas." In his rebuttal testimony, Mr. Dukes requests that an amount of $300,000 per year be built into UNS Gas' base rates for rate case expense.

Q. Did RUCO address rate case expense?

A. Yes. In contrast with UNS Gas' position, RUCO witness Rodney Moore noted at pages 25-26 of his direct testimony that the annual allowance requested by UNS Gas for rate case expense of $200,000 per year was substantially higher than the amount allowed for southwest gas corporation and recommended an allowance of $83,667 per year, based on limiting the total amount to $251,000 over three years.

Q. Does the fact that this is the first rate case for UNS Gas justify a $900,000 rate case expense?

A. No. While the current case may be the first rate case for this utility operation under its current ownership, it isn't the first rate case for this utility. This gas utility had periodic, recurring rate cases under its prior ownership by citizens utilities. The transfer of ownership should not be an excuse for charging ratepayers for what appear to be excessive amounts of rate case cost.

Moreover, the current UNS Gas rate case is similar to and presents many of the same issues, such as a proposed revenue decoupling mechanism, revisions to the PGA Mechanism, etc., that were recently addressed by the Commission in Docket No. G-01551A-04-0876, a rate case involving the other large gas distribution utility in the state, Southwest Gas Corporation. Staff believes that the southwest gas case provides a reasonable benchmark for what a reasonable allowance for rate case cost should be in the current UNS Gas rate case.

Q. What does Staff recommend for the allowance for rate case expense for UNS Gas in this proceeding?

A. Staff recommends an annual allowance of $85,000 per year, based on a total of $255,000 normalized over three years. The total amount of rate case expense requested by UNS Gas which has now been increased to $900,000 and the annual allowance of $300,000 per year over a three-year period appears to be excessive and would represent an unreasonable burden on ratepayers. The amount of $900,000 requested by UNS Gas in its rebuttal is over 3.8 times as high as the amount of rate case expense allowed by the Commission in the southwest gas rate case, which was $235,000 in total, and which was normalized over a three-year period. Although southwest gas is a larger utility than UNS Gas, the current UNS Gas rate case has similarities to the southwest gas rate case in terms of both the scope of issues in the cases, and the majority of each application being sponsored by in-house or affiliated company Staff. Staff adjustment c-19 reduces the $200,000 annual amount that was requested in the company's original filing for rate case expense by $115,000 to provide for an annual allowance of $85,000 per year.

C-20, Cares Program Deferred Balance Amortization

Q. Please explain the adjustment for Cares Program Deferred Balance Amortization.

A. This adjustment is addressed by Staff witness Julie McNeely-Kirwan. As described in her testimony, Staff recommends that UNS Gas cease deferral of costs related to the Cares Program effective with the date for new rates established in this case. Staff has recognized Cares Program discounts in Staff's proposed rate design. Staff also recognizes that UNS Gas has accumulated some deferred costs related to the cares program. Adjustment C-20 reflects Ms. McNeely-Kirwan's recommendation concerning how those accumulated deferred cares costs should be treated for ratemaking purposes.

V. Changes to rules and regulations

Q. Are there any remaining disputed issues between UNS Gas and Staff concerning revisions to rules and regulations?

A. No.

VI. Rate design

Q. What aspect of rate design do you address in your surrebuttal testimony?

A. I address Mr. Erdwurm's rebuttal testimony concerning the company's proposed increases to customer charges. Staff witness Steven Ruback is also addressing the company's rebuttal concerning the customer charge component of rates, the recovery of the revenue requirement through a combination of fixed and variable charges, and the company's proposed TAM.

Q. At page 12 of his rebuttal testimony, Mr. Erdwurm states that "one cannot tell from the direct testimony whether any serious cost of service based consideration was given by Staff and intervenors to the Company's customer charge proposals." How was the cost of service considered in Staff's rate design proposals?

A. The cost of service was considered as one factor, among others, including gradualism, value of service, public acceptability and other non-cost of service criteria. Cost of service is an important rate design criteria, but not the sole criteria. Staff has recognized that the UNS Gas cost of service supports an increase in customer charges, and has proposed to mitigate the large increases in customer charges proposed by UNS Gas, based on other factors such as estimated bill impacts and similar charges authorized by the Commission for other regulated utilities.

Q. At page 12 of his rebuttal testimony, Mr. Erdwurm states that the company has proposed to raise the residential customer charge to $17 per month, which is below the $26 that he claims is substantiated in the UNS cost of service study. At page 12 he also states that: "too often, innovative approaches are discarded by simply contending that they violate 'gradualism,' or that they will cause 'rate shock' or will not gain 'public acceptability.'" Please respond.

A. The UNS Gas proposals to drastically increase the customer charge component of rates should be rejected because it violates principles of gradualism and could cause "rate shock" and would therefore likely be unacceptable to the rate paying public. As I explained in my supplemental testimony, rate design is an art, not a strict mathematical exercise, and requires the application of informed judgment. The UNS Gas proposal to increase residential customer charges from the current $7.00 to $17.00 per month, an increase of 142 percent, does raise issues of rate shock. Accordingly, Staff recommends that a more gradual approach to raising the customer charge component of UNS Gas' base rates should be employed.

Q. At page 12 of his rebuttal, UNS Gas witness Pignatelli states: "I am not surprised that neither Staff nor RUCO fully endorse our proposed rate design. But I am surprised Staff and RUCO basically ignore the fact that under UNS Gas' current rate design, cold-weather customers – particularly high-use customers – subsidize warm-weather customers." Please respond.

A. First, it should be recognized that, for any conglomeration of customers with different usage characteristics into a rate class, the averaging process that is used to develop rates will affect some customers differently than others. This is an inherent characteristic of developing rates using averages. It does not, however, indicate that inappropriate subsidization has been or is occurring.

Second, contrary to such statements by Mr. Pignatelli, Staff has not ignored consideration of increasing the proportion of UNS Gas' base rate revenue requirement that is to be recovered through fixed charges. The Staff-proposed rates were developed specifically with one of the goals in mind of allowing UNS Gas to recover more of its revenue requirement through fixed charges. This is shown on attachment RCS-S1(R), schedule RD-4. For each rate class, with the exceptions of residential cares (R12) for which special low-income customer considerations apply, and for special gas lighting (p44) for which the cost is recovered 100 percent through customer charges, the proposed rates from customer charges represent a higher percentage of total base rate revenue for that rate class. Moreover, as shown on attachment RCS-S1(R), schedule RD-1, page 2, Staff has recommended increases in the fixed, customer charge portion of rates for all customer classes with the sole exception of the low-income cares rate.

Q. At page 12 of his rebuttal testimony, Mr. Pignatelli claims that "neither Staff's nor RUCO's proposals really get us significantly closer to sending accurate price signals." Please respond.

A. As shown on attachment RCS-S1(R), schedule RD-1, page 2, Staff has recommended increases in the customer charge portion of rates for all customer classes with the sole exception of the low-income cares rate. The UNS Gas proposals would, among other things, increase residential customer charges from the current $7.00 to $17.00 per month, for an increase of 142 percent. Considering the many factors that should be weighed in rate design, I believe that Staff's gradual approach of increasing customer charges is more appropriate than the UNS Gas proposals and, therefore, Staff's approach should be adopted in this case.

Q. Have you updated the Staff proposed rate design and bill analysis that was filed with your supplemental testimony to reflect the Staff's revised revenue requirement?

A. Yes. Attachment RCS-S1(R) to my surrebuttal testimony presents the Staff proposed rate design summary and proof of revenue (revised). Attachment RCS-S2(R) presents the bill impact analysis of Staff proposed rate design (revised).

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

Attachment RCS-2S
Staff Accounting Schedules (Revised)
Accompanying the Surrebuttal Testimony of Ralph C. Smith

Schedule	Description	Pages	Revised
	Revenue Requirement Summary Schedules		
A	Calculation of Revenue Deficiency (Sufficiency)	1	Yes
A-1	Gross Revenue Conversion Factor	1	Yes
B	Adjusted Rate Base	1	Yes
B.1	Summary of Adjustments to Rate Base	1	Yes
C	Adjusted Net Operating Income	1	Yes
C.1	Summary of Net Operating Income Adjustments	4	Yes
D	Capital Structure and Cost Rates	1	Yes
	Rate Base Adjustments		
B-1	Remove Construction Work in Progress	1	
B-2	Remove GIS Deferral	1	
B-3	Cash Working Capital - Lead/Lag Study	1	Yes
B-4	Accumulated Deferred Income Taxes	1	
	Net Operating Income Adjustments		
C-1	Revenue Annualization	1	
C-2	Weather Normalization	1	
C-3	Adjustment to Bad Debt Expense	1	
C-4	Remove Depreciation & Property Taxes for CWIP	1	
C-5	Remove Amortization of Deferred GIS Cost	1	
C-6	Incentive Compensation and SERP	1	
C-7	Emergency Bill Assistance Expense	1	
C-8	Nonrecurring Severance Payment Expense	1	Yes
C-9	Overtime Payroll Expense	2	
C-10	Payroll Tax Expense	1	Yes
C-11	Nonrecurring FERC Rate Case Legal Expense	1	
C-12	Property Tax Expense	1	
C-13	Worker's Compensation Expense	1	
C-14	Membership and Industry Association Dues	1	
C-15	Fleet Fuel Expense	1	Yes
C-16	Postage Expense	1	Yes
C-17	Interest Synchronization	1	Yes
C-18	Corporate Cost Allocations	1	Added
C-19	Rate Case Expense	1	Added
C-20	CARES Related Amortization	1	Added
	Total Pages	35	

UNS Gas Inc.
Computation of Increase in Gross Revenue Requirement

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule A
Page 1 of 1
Revised

Line No.	Description	Reference	UNS Proposed Original Cost (A)	UNS Proposed Fair Value (B)	Staff Proposed Original Cost (C)	Staff Proposed Fair Value (D)
1	Adjusted Rate Base	Sch. B	$ 161,661,361	$ 191,177,715	$ 154,547,272	$ 184,063,625
2	Rate of Return	Sch. D	8.80%	7.44%	8.12%	6.81%
3	Operating Income Required		$ 14,223,179	$ 14,223,179	$ 12,549,238	$ 12,534,733
4	Net Operating Income Available	Sch. C	$ 8,428,981	$ 8,428,981	$ 9,900,380	$ 9,900,380
5	Operating Income Excess/Deficiency		$ 5,794,198	$ 5,794,198	$ 2,648,858	$ 2,634,353
6	Gross Revenue Conversion Factor	Sch. A-1	1.6649	1.6649	1.636969	1.636969
7	Overall Revenue Requirement		$ 9,646,901	$ 9,646,901	$ 4,336,098	$ 4,312,354

Notes and Source

Cols. A & B taken from UNS Gas, Inc. filing, Schedule A-1

UNS Gas, Inc.
Computation of Gross Revenue Conversion Factor

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule A-1

Revised

Line No.	Description	Company Proposed (A)	Staff Proposed (B)
1	Gross Revenue	100.00%	100.00000%
2	Less: Uncollectible Revenue	0.51%	0.51052%
3	Taxable Income as a Percent	99.49%	99.48948%
4	Less: Federal and State Income Taxes	39.43%	38.40095%
5	Change in Net Operating Income	60.06%	61.08853%
6	Gross Revenue Conversion Factor	1.6649	1.636969

Notes and Source
Col.A: UNS Gas Inc. Filing, Schedule C-3
Col.B: Response to STF 5.76, item 6

Components of Revenue Requirement Increase

	Amount	Percent
Net Income	$ 2,648,859	61.09%
Federal and State Income Taxes	$ 1,665,103	38.40%
Uncollectibles	$ 22,137	0.51%
Total Revenue Increase	$ 4,336,099	100.00%

UNS Gas, Inc.
Original Cost and RCND Adjusted Rate Base

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule B
Page 1 of 2
Revised

Line No.	Description	Original Cost: As Adjusted by UNS (A)	Original Cost: Staff Adjustments (B)	Original Cost: As Adjusted by Staff (C)	RCND: As Adjusted by UNS (D)	RCND: Staff Adjustments (E)	RCND: As Adjusted by Staff (F)
1	Gross Utility Plant in Service	$ 279,169,694	$ (7,189,231)	$ 271,980,463	$ 374,243,421	$ (7,189,231)	$ 367,054,190
2	Less: Accumulated Depreciation	$ (72,006,708)	$ -	$ (72,006,708)	$ (97,114,865)	$ -	$ (97,114,865)
3	Net Utility Plant in Service	$ 207,162,986	$ (7,189,231)	$ 199,973,755	$ 277,128,556	$ (7,189,231)	$ 269,939,325
4	Southern Union Acquisition Premium	$ -	$ -	$ -	$ -	$ -	$ -
5	Less: Accum. Amort. - So. Union Acq. Premium	$ -	$ -	$ -	$ -	$ -	$ -
6	Net Southern Union Acquisition Premium	$ -		$ -	$ -	$ -	$ -
7	Citizens Acquisition Discount	$ (30,709,738)	$ -	$ (30,709,738)	$ (41,822,562)	$ -	$ (41,822,562)
8	Less: Accum. Amort. - Citizens Acq. Discount	$ (1,876,981)	$ -	$ (1,876,981)	$ (2,560,308)	$ -	$ (2,560,308)
9	Net Citizens Acquisition Discount	$ (28,832,757)	$ -	$ (28,832,757)	$ (39,262,254)	$ -	$ (39,262,254)
10	Total Net Utility Plant	$ 178,330,229	$ (7,189,231)	$ 171,140,998	$ 237,866,302	$ (7,189,231)	$ 230,677,071
11	Customer Advances for Construction	$ (7,283,595)	$ -	$ (7,283,595)	$ (7,786,962)	$ -	$ (7,786,962)
							$ -
12	Customer Deposits	$ (3,040,484)	$ -	$ (3,040,484)	$ (3,040,484)	$ -	$ (3,040,484)
							$ -
13	Accumulated Deferred Income Taxes	$ (6,484,809)	$ 195,336	$ (6,289,473)	$ (6,484,809)	$ 195,336	$ (6,289,473)
14	Total Deductions	$ (16,808,888)	$ 195,336	$ (16,613,552)	$ (17,312,255)	$ 195,336	$ (17,116,919)
15	Allowance for Working Capital	$ (1,045,146)	$ 776,874	$ (268,272)	$ (1,045,146)	$ 776,874	$ (268,272)
							$ -
16	Regulatory Assets	$ 1,204,887	$ (897,068)	$ 307,819	$ 1,204,887	$ (897,068)	$ 307,819
							$ -
17	Regulatory Liabilities	$ (19,721)	$ -	$ (19,721)	$ (19,721)	$ -	$ (19,721)
18	Total Rate Base	$ 161,661,361	$ (7,114,089)	$ 154,547,272	$ 220,694,067	$ (7,114,089)	$ 213,579,978

Notes and Source
Cols. A and D: UNS Gas Inc. filing, Schedule B

Fair Value Calculation (Per Company)

Original Cost	$ 161,661,361	
RCND	$ 220,694,067	
Total	$ 382,355,428	
Average (Fair Value)	$ 191,177,715	See Sch. A

Fair Value Calculation (Per Staff)

Original Cost	$ 154,547,272	
RCND	$ 213,579,978	
Total	$ 368,127,250	
Average (Fair Value)	$ 184,063,625	See Sch. A

UNS Gas, Inc.
Summary of Rate Base Adjustments

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule B
Page 2 of 2
Revised

Line No.	Description	Staff Adjustments	CWIP B-1	GIS Deferral B-2	Cash Working Capital B-3 Revised	ADIT B-4	B-5	B-6
1	Gross Utility Plant in Service	$ (7,189,231)	$ (7,189,231)					
2	Less: Accumulated Depreciation	$ -						
3	Net Utility Plant in Service	$ (7,189,231)	$ (7,189,231)	$ -	$ -	$ -	$ -	$ -
4	Southern Union Acquisition Premium	$ -						
5	Less: Accum. Amort. - So. Union Acq. Premium	$ -						
6	Net Southern Union Acquisition Premium	$ -						
7	Citizens Acquisition Discount	$ -						
8	Less: Accum. Amort. - Citizens Acq. Discount	$ -						
9	Net Citizens Acquisition Discount	$ -						
10	Total Net Utility Plant	$ (7,189,231)	$ (7,189,231)	$ -	$ -	$ -	$ -	$ -
11	Customer Advances for Construction	$ -						
12	Customer Deposits	$ -						
13	Accumulated Deferred Income Taxes	$ 195,336				$ 195,336		
14	Total Deductions	$ 195,336	$ -	$ -	$ -	$ 195,336	$ -	$ -
15	Allowance for Working Capital	$ 776,874			$ 776,874			
16	Regulatory Assets	$ (897,068)		$ (897,068)				
17	Regulatory Liabilities	$ -						
18	Total Rate Base	$ (7,114,089)	$ (7,189,231)	$ (897,068)	$ 776,874	$ 195,336	$ -	$ -

UNS Gas, Inc.
Adjusted Net Operating Income

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule C

Revised

Line No.	Description	As Adjusted by UNS	Staff Adjustments	As Adjusted by Staff
		(A)	(B)	(C)
	Operating Revenues			
1	Gas Retail Revenues	$ 45,689,225	$ 104,395	$ 45,793,620
2	Other Operating Revenues	$ 1,480,303	$ -	$ 1,480,303
3	Total Operating Revenues	$ 47,169,528	$ 104,395	$ 47,273,923
	Operating Expenses			
4	Purchased Gas	$ 355,528	$ -	$ 355,528
5	Other O&M Expenses	$ 24,459,035	$ (900,969)	$ 23,558,066
6	Depreciation & Amortization	$ 7,220,392	$ (936,800)	$ 6,283,592
7	Taxes Other Than Income Taxes	$ 4,730,094	$ (261,724)	$ 4,468,371
8	Income Taxes	$ 1,975,498	$ 732,488	$ 2,707,986
9	Total Operating Expenses	$ 38,740,547	$ (1,367,004)	$ 37,373,543
10	Net Operating Income	$ 8,428,981	$ 1,471,399	$ 9,900,380

Notes and Source
Col. A: UNS Gas Inc. filing, Schedule C-1
Col. B: Staff Schedule C.1

UNS Gas, Inc.
Summary of Net Operating Income Adjustments

Test Year Ended December 31,2005

Docket No. G-04204A-06-0463
Schedule C.1
Page 1 of 4
Revised

Line No.	Description	Stafff Adjustments	Revenue Annualization C-1	Weather Normalization C-2	Adjustment to Bad Debt Expense C-3	Remove Depreciation & Property Taxes for CWIP C-4	Remove Amortization of Deferred GIS Cost C-5
	Operating Revenues						
1	Gas Retail Revenues	$ 104,395	$ 102,433	$ 1,962			
2	Other Operating Revenues	$ -					
3	Total Operating Revenues	$ 104,395	$ 102,433	$ 1,962	$ -	$ -	$ -
	Operating Expenses						
4	Purchased Gas	$ -					
5	Other O&M Expenses	$ (900,969)			$ 1,263		
6	Depreciation & Amortization	$ (936,800)				$ (196,266)	$ (299,023)
7	Taxes Other Than Income Taxes	$ (261,724)				$ (166,884)	
9	PRE-TAX OPERATING EXPENSES	$ (2,099,492)	$ -	$ -	$ 1,263	$ (363,150)	$ (299,023)
10	PRE-TAX OPERATING INCOME	$ 2,203,887	$ 102,433	$ 1,962	$ (1,263)	$ 363,150	$ 299,023
11	Income Taxes	$ 732,488	$ 39,537	$ 757	$ (487)	$ 140,169	$ 115,417
11	TOTAL OPERATING EXPENSES	$ (1,367,004)	$ 39,537	$ 757	$ 776	$ (222,981)	$ (183,606)
12	OPERATING INCOME	$ 1,471,399	$ 62,896	$ 1,205	$ (776)	$ 222,981	$ 183,606

Notes and Source

Combined Effective Tax Rate* 38.598%

* Per Company response to STF 5.76, Part 6

UNS Gas, Inc.
Summary of Net Operating Income Adjustments

Test Year Ended December 31,2005

Line No.	Description	Incentive Compensation and SERP	Emergency Bill Assistance Expense	Nonrecurring Severance Payment Expense	Overtime Payroll Expense	Payroll Tax Expense	Nonrecurring FERC Rate Case Legal Expense
		C-6	C-7	C-8 Revised	C-9	C-10 Revised	C-11
	Operating Revenues						
1	Gas Retail Revenues						
2	Other Operating Revenues						
3	Total Operating Revenues	$ -	$ -	$ -	$ -	$ -	$ -
	Operating Expenses						
4	Purchased Gas						
5	Other O&M Expenses	$ (262,223)	$ 21,600	$ -	$ (123,010)		$ (311,051)
6	Depreciation & Amortization						
7	Taxes Other Than Income Taxes	$ (5,202)				$ (9,348)	
9	PRE-TAX OPERATING EXPENSES	$ (267,425)	$ 21,600	$ -	$ (123,010)	$ (9,348)	$ (311,051)
10	PRE-TAX OPERATING INCOME	$ 267,425	$ (21,600)	$ -	$ 123,010	$ 9,348	$ 311,051
11	Income Taxes	$ 103,221	$ (8,337)	$ -	$ 47,479	$ 3,608	$ 120,059
11	TOTAL OPERATING EXPENSES	$ (164,204)	$ 13,263	$ -	$ (75,531)	$ (5,740)	$ (190,992)
12	OPERATING INCOME	$ 164,204	$ (13,263)	$ -	$ 75,531	$ 5,740	$ 190,992

Notes and Source

Combined Effective Tax Rate* 38.598%

* Per Company response to STF 5.76, Part 6

UNS Gas, Inc.
Summary of Net Operating Income Adjustments

Test Year Ended December 31,2005

Line No.	Description	Property Tax Expense	Worker's Compensation Expense	Membership and Industry Association Dues	Fleet Fuel Expense	Postage Expense	Interest Synchronization
		C-12	C-13	C-14	C-15 Revised	C-16 Revised	C-17 Revised
	Operating Revenues						
1	Gas Retail Revenues						
2	Other Operating Revenues						
3	Total Operating Revenues	$ -	$ -	$ -	$ -	$ -	$ -
	Operating Expenses						
4	Purchased Gas						
5	Other O&M Expenses		$ (34,234)	$ (26,868)	$ (12,657)	$ (26,024)	
6	Depreciation & Amortization						
7	Taxes Other Than Income Taxes	$ (80,290)					
9	PRE-TAX OPERATING EXPENSES	$ (80,290)	$ (34,234)	$ (26,868)	$ (12,657)	$ (26,024)	$ -
10	PRE-TAX OPERATING INCOME	$ 80,290	$ 34,234	$ 26,868	$ 12,657	$ 26,024	$ -
11	Income Taxes	$ 30,990	$ 13,214	$ 10,370	$ 4,885	$ 10,045	$ (118,168)
11	TOTAL OPERATING EXPENSES	$ (49,300)	$ (21,020)	$ (16,498)	$ (7,772)	$ (15,979)	$ (118,168)
12	OPERATING INCOME	$ 49,300	$ 21,020	$ 16,498	$ 7,772	$ 15,979	$ 118,168

Notes and Source

Combined Effective Tax Rate* 38.598%

* Per Company response to STF 5.76, Part 6

UNS Gas, Inc.
Summary of Net Operating Income Adjustments

Test Year Ended December 31,2005

Line No.	Description	Corporate Cost Allocations C-18 Added	Rate Case Expense C-19 Added	CARES Amortization C-20 Added
	Operating Revenues			
1	Gas Retail Revenues			
2	Other Operating Revenues			
3	Total Operating Revenues	$ -	$ -	$ -
	Operating Expenses			
4	Purchased Gas			
5	Other O&M Expenses	$ (12,765)	$ (115,000)	
6	Depreciation & Amortization			$ (441,511)
7	Taxes Other Than Income Taxes			
9	PRE-TAX OPERATING EXPENSES	$ (12,765)	$ (115,000)	$ (441,511)
10	PRE-TAX OPERATING INCOME	$ 12,765	$ 115,000	$ 441,511
11	Income Taxes	$ 4,927	$ 44,388	$ 170,414
11	TOTAL OPERATING EXPENSES	$ (7,838)	$ (70,612)	$ (271,097)
12	OPERATING INCOME	$ 7,838	$ 70,612	$ 271,097

Notes and Source

Combined Effective Tax Rate* 38.598%

* Per Company response to STF 5.76, Part 6

UNS Gas, Inc.
Capital Structure & Cost Rates

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule D

Revised

Line No.	Capital Source	Capitalization Amount	Capitalization Percent	Cost Rate	Weighted Avg. Cost of Capital
	UNS - Proposed				
1	Short-Term Debt	n/a	n/a	n/a	n/a
2	Long-Term Debt	$ 98,859	50.00%	6.60%	3.30%
3	Common Stock Equity	$ 98,859	50.00%	11.00%	5.50%
4	Total Capital	$ 197,718	100.00%		8.80%
	ACC Staff - Proposed				
5	Short-Term Debt	n/a	n/a	n/a	n/a
6	Long-Term Debt	$ 98,859	55.33%	6.60%	3.65%
7	Common Stock Equity	$ 79,804	44.67%	10.00%	4.47%
8	Total Capital	$ 178,663	100.00%		8.12%
9	Difference				-0.68%
10	Weighted Cost of Debt				3.65%
	ACC Staff - Proposed Cost of Capital for Fair Value Rate Base				
11	Short-Term Debt	$ -	0.00%		0.00%
12	Long-Term Debt	$ 85,515,125	46.46%	6.60%	3.06%
13	Common Stock Equity	$ 69,032,147	37.50%	10.00%	3.75%
	Capital financing OCRB	$ 154,547,272			
14	Appreciation above OCRB not recognized on utility's books	$ 29,516,353	16.04%	0% [a]	0.00%
15	Total capital supporting FVRB	$ 184,063,625	100.00%		6.8100%

Notes and Source

Lines 1-4 taken from UNS Gas Inc. filing, Schedule D-1
Lines 5-8: Staff witness David Parcell
Lines 11-15, Col.A:

Fair Value Rate Base	$ 184,063,625	Schedule A
Original Cost Rate Base	$ 154,547,272	Schedule A
Difference	$ 29,516,353	

Difference is appreciation of Fair Value over Original Cost that is not recognized on the utility's books.

[a] The appreciation of Fair Value over Original Cost has not been recognized on the utility's books. Such off-book appreciation has not been financed by debt or equity capital recorded on the utility's books. The appreciation over Original Cost book value is therefore recognized for cost of capital purposes at zero cost.

UNS Gas, Inc.
Remove Construction Work in Progress

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule B-1

Line No.	Description	Amount	Reference
1	Remove Construction Work in Progress	$ (7,189,231)	A&B

Notes and Source

A: UNS Gas Filing, Schedule B-2, page 2, line 1
B: Testimony of Staff witness Ralph Smith

UNS Gas, Inc.
Remove GIS Deferral

Docket No. G-04204A-06-0463
Schedule B-2

Test Year Ended December 31, 2005

Line No.	Description	Amount	Reference
1	Remove GIS Deferral	$ (897,068)	A&B

Notes and Source
A: UNS Gas Filing, Schedule B-2, page 2, line 16
B: Testimony of Staff witness Ralph Smith

FERC Account 183

Docket No. G-04204A-06-0463
Schedule B-3
Page 1 of 1
Revised

UNS Gas, Inc.
Cash Working Capital - Lead/Lag Study
For the Test Year Ending 12/31/05

Line No.	Description (A)	FERC	Per UNS Gas Pro Forma Test Year Amount (A)		Staff Adjustments (B)	Staff Adjusted (C)	Expense Lag Days (D)	Net Lag Days (RevLag - Col. D) (E)	Lead/Lag Factor (Col. E/365) (F)	Cash Working Capital Required (Col. F X Col.C) (G)
	Operating Expenses:									
	Non-Cash Expenses -									
1	Bad Debts Expense	904	$ 722,634	1a	1,263	723,897				$ -
2	Depreciation	403/404	7,950,183	1.4a	(196,266)	7,753,917				-
3	Amortization	406	(729,791)	1.4b	(740,534)	(1,470,325)				-
4	Deferred Income Taxes		3,178,719			3,178,719				-
	Other Operating Expenses -									
5	Salaries and Wages (UNSG Direct Employees)	Multi	7,287,745	2a	(123,010)	7,164,735	24.50	14.45	0.0396	283,724
6	Incentive Pay (UNSG Direct Employees)	Multi	257,895	3a	(63,430)	194,466	267.00	(228.05)	(0.6248)	(121,502)
7	Purchased Gas	Calc	78,101,248	4a	148,392	78,249,640	30.97	7.98	0.0219	1,714,759
8	Office Supplies and Expenses	921	1,365,974	1.2a	(1,275)	1,364,699	20.72	18.23	0.0499	68,098
9	Injuries and Damages	925	574,128	1.2b	(34,234)	539,894	64.75	(25.80)	(0.0707)	(38,171)
10	Pensions and Benefits	926	2,452,071	1.2c	-	2,452,071	54.66	(15.71)	(0.0430)	(105,439)
11	Support Services - TEP (Direct Labor, Burdens, System Alloc.)	Note A.	4,570,692	6a	(198,794)	4,371,899	44.91	(5.96)	(0.0163)	(71,262)
12	Property Taxes	408	4,103,376	1.4c	(247,174)	3,856,202	213.00	(174.05)	(0.4768)	(1,838,637)
13	Payroll Taxes	408	537,877	1.4d	(14,550)	523,328	19.30	19.65	0.0538	28,155
14	Current Income Taxes		(1,203,222)		2,397,591	1,194,369	41.42	(2.47)	(0.0068)	(8,122)
15	Interest on Customer Deposits	431	170,459	1.4e	-	170,459	182.50	(143.55)	(0.3933)	(67,042)
16	Other Operations and Maintenance	Multi	7,501,807	X.	(481,490)	7,020,317	53.10	(14.15)	(0.0388)	(272,388)
17	Total Operating Expenses		116,841,795		446,491	117,288,286				
	Other Cash Working Capital Elements:									
18	Interest on Long-Term Debt		5,334,825		306,150	5,640,975	91.62	(52.67)	(0.1443)	(813,993)
19	Revenue Taxes and Assessments	Calc	$ 18,788,535	L.	(6,438,322)	12,350,213	76.25	(37.30)	(0.1022)	(1,262,192)
20	Total Cash Working Capital - Calculated									$ (2,504,012)
21	Total Cash Working Capital - Per UNS Gas Filing, Schedule B-5, page 3 of 3									(3,280,886)
22	Adjustment to Cash Working Capital									776,874

Notes and Source
UNS Gas filing, Schedule B-5, page 3 of 3
RUCO 1.10 2005 UNSG Lead-Lag Summary.xls
Revenue Lag, in days 38.95
Col.B: Staff workpapers for CWC calculation

	Per Company	
ProForma Operating Expenses - Excluding Income Taxes	$ 36,765,050	1.4f
Purchased Gas Lead/Lag Only	78,101,248	4a
ProForma Oper. Exp. To Tie Too - Excl Income Taxes	114,866,298	
Less: 1a, 1.4a, 1.4b, 2a, 3a, 4a, 1.2a, 1.2b, 1.2c, 6a, 1.4c, 1.4d, 1.4e	107,364,491	
Other O&M	$ 7,501,807	X.

Line 14, Col.C, Current income taxes:

Per UNS Gas	(1,203,222)	Col.A, line 14
Staff adjustments to net operating income statement	732,488	Schedule C
Income taxes for revenue increase	1,665,103	Schedule A-1
Total current income taxes for CWC calculation	1,194,369	

UNS Gas, Inc.
Accumulated Deferred Income Taxes

Test Year Ended December 31, 2005

Line No.	Description	Account	Amount (A)	Reference
	Adjustment to ADIT:			
1	For GIS deferral that UNS Gas added to rate base that Staff has removed	283	$ 346,250	Note A
2	SERP	190	$ (86,506)	Note B
3	Incentive Comp related ADIT	190	$ (64,408)	Note B
4	Total adjustment to ADIT		$ 195,336	

Notes and Source

A UNS Gas workpaper "H1 - GPS Reg Asset"

B Staff has removed SERP from operating expenses and allocated incentive comp expense 50/50 to shareholders and ratepayers. This adjustment coordinates the corresponding ADIT amounts with those recommendations.

Line No.	Account and Description	Per Books (1)	UNS Gas Adjustment (2)	UNS Gas Adjusted	Staff Adjustment	
	Account 190					
5	SERP	$ 88,747	$ (2,241)	$ 86,506 a	$ (86,506)	B
6	Incentive Comp - PEP	$ 27,840		$ 27,840	$ (13,920)	(3)
7	Long Term Incentive Comp	$ 100,975		$ 100,975	$ (50,488)	(3)
8	Incentive Comp related ADIT	$ 128,815		$ 128,815	$ (64,408)	

(1) Response to Staf DR 5.36
(2) UNS Gas, ADIT workpapers
(2a) UNS Gas workpaper "Pro Forma ADIT - Account 190" "SERP 12 D"
('3) Staff adjustment reflects a 50/50 allocation of incentive compensation responsibility between ratepayers and shareholders

UNS Gas, Inc.
Adjustment to Annualize Gas Retail Revenue

Docket No. G-04204A-06-0463
Schedule C-1

Test Year Ended December 31, 2005

Line No.	Description	Amount	Reference
1	UNS Gas Adjustment to Annualize Gas Retail Revenue	$ 725,682	A
2	Staff Recommended Annualized Gas Retail Revenue	$ 828,115	B
3	Adjustment to Annualized Gas Retail Revenue	$ 102,433	L2 - L1

Notes and Source

A: UNS Gas Filing, Schedule C-2, page 1, line 1
B: Total annualization adjustments calculated for the rate classes shown Schedules C-1.1, C-1.2 and C-1.3

FERC 480

UNS Gas, Inc.
Adjustment to Weather Normalization

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule C-2

Line No.	Rate Class	UNS Gas Margin Weather Adjustment	Ratio of Weighted Average Annualized Customers	Staff Margin Weather Normalization	Adjustment to UNS Gas Proposed Weather Normalization
		(A)	(B)	(C)	(D)
1	Residential - 10	$ 369,269	1.004	$ 370,746	$ 1,477
2	Residential CARES - 12	$ 14,574	0.982	$ 14,312	$ (262)
3	Small Volume Commercial - 20	$ 95,408	1.009	$ 96,267	$ 859
4	Large Volume Commercial - 22	$ 67	1.000	$ 67	$ -
5	Irrigation - 60	$ 44	-	$ 44	$ -
6	Small Volume Public Authority - 40	$ 37,438	0.997	$ 37,326	$ (112)
7	Large Volume Public Authority - 42	$ 121	1.000	$ 121	$ -
8	Total	$ 516,921		$ 518,883	$ 1,962

Notes and Source

Col. A: UNS Gas proposed weather normalization adjustment
Col. B: Weighted average of Staff recommended annualized customers and UNS proposed annualized customers
Col. C: Col. A x Col. B
Col. D: Col. C - Col. A

FERC 480

UNS Gas, Inc.
Adjustment to Bad Debt Expense

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule C-3
Page 1 of 1

Line No.	Description		Amount	Reference
1	UNS Gas Adjustment to Bad Debt Expense	$	317,758	A
2	Recommended Staff Adjustment to Bad Debt Expense	$	319,021	
3	Adjustment to Bad Debt Expense	$	1,263	L2 - L1

Notes and Source

A: UNS Gas Filing, Schedule C-2, page 3, line 5

B: Per Company's workpapers showing calculation of Bad Debt Expense adjustment (except where noted)

Line No.		UNS Gas Bad Debt Adj.	Staff Bad Debt Adjustment	
4	Test Year Revenues	$ 136,799,000	$ 136,799,000	
5	Add: Late Fees and Miscellaneous Service Revenues	$ 1,446,000	$ 1,446,000	
6	Total	$ 138,245,000	$ 138,245,000	
	Rate Case Adjustments			
7	Customer Annualization	$ 1,680,578	$ 1,687,027	A
8	Weather Normalization	$ 1,826,135	$ 2,067,072	B
9	Reclass Related to Prior Periods (CARES Adjustment)	$ (203,181)	$ (203,181)	
10	Total Rate Case Adjustments	$ 3,303,532	$ 3,550,918	
11	Uncollectible Revenue Adjustment Base	$ 141,548,532	$ 141,795,918	L6 + L10
12	2 Year Average Retail Write Off Rate	0.51052%	0.51052%	
13	Pro Forma Bad Debt Expense	$ 722,634	$ 723,897	L11 x L12
14	Recorded Test Year Bad Debt Expense	$ 404,876	$ 404,876	
15	Staff Recommended Adjustment to Bad Debt Expense	$ 317,758	$ 319,021	L13 - L14
	Note A			
	Weather			
	Normalization			
16	Revenue	$ 516,921	$ 518,883	Sch. C-2
17	Gas Cost	$ 733,104	$ 735,952	Staff workpaper
18	PGA	$ 430,554	$ 432,192	Staff workpaper
19	Total	$ 1,680,579	$ 1,687,027	
	Note B			
	Customer			
	Annualization			
20	Revenue	$ 725,682	$ 828,115	Sch. C-1
21	Gas Cost	$ 712,128	$ 795,387	Staff workpaper
22	PGA Adjustor	$ 388,325	$ 443,570	Staff workpaper
23	Total	$ 1,826,135	$ 2,067,072	

FERC Account 904

UNS Gas, Inc.
Remove Depreciation & Property Taxes for CWIP

Test Year Ended December 31, 2005

Line No.	Description	Account	Amount	Reference
1	CWIP Related Depreciation Expense	403	$ (196,266)	A&B
2	CWIP Related Property Taxes	408	$ (166,884)	A&B
3	Total Adjustments		$ (363,150)	

Notes and Source
A: UNS Gas Filing, Schedule C-2, page 4, lines 6 and 7
B: Testimony of Staff witness Ralph Smith

UNS Gas, Inc.
Remove Amortization of Deferred GIS Cost

Test Year Ended December 31, 2005

Line No.	Description	Account	Amount	Reference
1	Remove Company-proposed Amortization of Deferred GIS Cost	407	$ (299,023)	A

Notes and Source
A: UNS Gas Filing, Schedule C-2, page 3, line 6
B: Amounts taken from UNS Gas Workpaper for GIS expenditures adjustment

	Per UNS Workpaper	2005 Cost		Pre-2005 Cost
FERC Account 874				
Materials & Supplies	$ (505)	$ -		$ (505)
Outside Services - Consultants	$ (746,792)	$ 133,238	*	$ (613,554)
Property Tax	$ (60)	$ -		$ (60)
Travel - Meals & Entertainment	$ (265)	$ 51		$ (214)
Pensions & Benefits Allocated	$ (6,994)	$ 688		$ (6,306)
Worker's Compensation	$ (14)	$ 2		$ (12)
Payroll Taxes - FICA	$ (2,312)	$ 198		$ (2,114)
Payroll Taxes - Unemployment	$ (366)	$ 50		$ (316)
Vacation & Sick Accrual	$ (563)	$ 563		$ 0
Wages - Regular	$ (32,074)	$ 3,452		$ (28,622)
Wages - Overtime	$ (2,138)	$ -		$ (2,138)
FERC 874 Total	$ (792,083)			$ (653,840)
FERC Account 920				
A&G Expense Transferred - UNSG	$ (22,922)	$ 400		$ (22,522)
A&G Expense Transferred - TEP	$ (25,362)	$ 3,108		$ (22,254)
FERC 920 Total	$ (48,284)			$ (44,775)
FERC 874 and 920 Total	$ (840,367)			$ (698,616)

* 2005 expenditures derived from Frontline Energy Services LLC invoices provided in response to RUCO 2.15

UNS Gas, Inc.
Incentive Compensation and SERP

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule C-6
Page 1 of 1
Revised

Line No.	Description	Amount	Reference
1	Staff Adjustment to UES's Performance Enhancement Program (PEP)	$ (63,430)	A
2	Staff Adjustment to UES's Other Incentive Comp and SERP	$ (198,794)	B
3	Total Adjustment to Incentive Compensation Expense	$ (262,223)	
4	Adjustment to Taxes Other Than Income	$ (5,202)	B

Notes and Source

A: Per Company's workpapers showing calculation of Incentive Compensation adjustment (except where noted)

FERC Acct	FERC Account Description	Company Amount	Disallowance Percentage	Staff Adjusted Amount
874	Distribution - Mains & Services Expense	$ 20,731	50%	10,366
878	Distribution - Meter Expense	$ 16,844	50%	8,422
887	Distribution - Maintenance of Mains	$ 12,957	50%	6,479
903	Customer Records/Collections Expense	$ 29,800	50%	14,900
920	Administrative & General Salaries	$ 46,527	50%	23,264
		$ 126,859		$ 63,430
408	Taxes Other Than Income Taxes	$ 10,403	50%	5,202

B: Per UNS Gas Inc.'s response to STF 5.72

FERC Acct	Description	Company Amount	Disallowance Percentage	Staff Adjusted Amount
923	Supplemental Executive Retirement Plan (SERP)	$ 93,075	100%	$ 93,075
923	Officer's Long Term Incentive Plan	$ 108,920	50%	$ 54,460
923	Officer Portion of Performance Enhancement Plan (PEP)	$ 52,860	50%	$ 26,430
923	Deferred Compensation Plan	$ 11,315	50%	$ 5,658
923	Omibus Plan	$ 38,342	50%	$ 19,171
	Total	$ 304,512		$ 198,794

UNS Gas, Inc.
Emergency Bill Assistance Expense

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule C-7

Line No.	Description	Account	Amount	Reference
1	Increase to Emergency Bill Assistance Expense		$ 21,600	A

Notes and Source

A Testimony of Staff witnesses Ralph C. Smith and Julie McNeely-Kirwan

UNS Gas, Inc.
Nonrecurring Severance Payment Expense

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule C-8

Revised

Line No.	Description	Amount	Account	Reference
1	Adjustment to Remove Severance Accrual Adjustment	$ -	857	A

Notes and Source

A: UNS Gas workpapers used to calculate its payroll adjustment

UNS Gas, Inc.
Overtime Payroll Expense

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule C-9

Line No.	Description	Amount	Reference
1	UNS Gas Proposed Overtime Expense	$ 1,070,133	A
2	Staff Recommended Overtime Expense	$ 947,123	B
3	Adjustment to Overtime Expense	$ (123,010)	L2 - L1

Notes and Source

A: UNS Gas workpaper used to calculate its payroll adjustment

B: Amounts taken from UNS Gas workpapers used to calculate its payroll adjustment

Line No.	Description	2004	2005	2 Year Average
4	Overtime Charged Directly to O&M - Classified	$ 450,802	$ 871,111	$ 660,957
5	Overtime Charged Directly to O&M - Unclassified	$ 330,584	$ 129,333	$ 229,959
6	Total Overtime Charged Directly to O&M	$ 781,386	$ 1,000,445	$ 890,915
7	Regular Annualized O&M Payroll	$ 5,472,931		
8	Adjusted 2005 Regular O&M Wages per Books	$ 5,148,145		
9	Increase to Regular O&M Payroll	1.06309		
10	Two Year Average Overtime Charged to O&M	$ 890,915		
11	Increase to Regular Payroll	1.06309		
12	Staff Recommended Increase to Overtime	$ 947,123		

UNS Gas, Inc.
Adjustment to Overtime Payroll Expense - Alternative Calculation

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule C-9

Line No.	Description	Amount	Reference
1	UNS Gas Proposed Total Overtime	$ 1,402,549	A
2	Staff Normalized Total Overtime	$ 1,220,536	B
3	Difference	$ (182,013)	L2 - L1
4	O&M Percentage	0.7630	C
5	Alternative Adjustment to Overtime Expense	$ (138,876)	

Notes and Source

A: UNS Gas workpaper used to calculate its payroll adjustment

B: Amounts taken from UNS Gas workpapers used to calculate its payroll adjustment

		2004	2005	2 Year Average
6	Overtime Charged Directly to O&M - Classified	$ 450,802	$ 871,111	$ 660,957
7	Overtime Charged Directly to O&M - Unclassified	$ 330,584	$ 129,333	$ 229,959
8	Overtime Charged to Non-O&M Accounts	$ 211,113	$ 303,260	$ 257,187
9	Total Overtime Charged Directly to O&M	$ 992,499	$ 1,303,705	$ 1,148,102
10	Regular Annualized O&M Payroll	$ 8,868,400		
11	Adjusted 2005 Regular O&M Wages per Books	$ 8,342,113		
12	Increase to Regular O&M Payroll	1.06309		
13	Two Year Average Overtime Charged to O&M	$ 1,148,102		
14	Increase to Regular Payroll	1.06309		
15	Staff Recommended Increase to Overtime	$ 1,220,536		

C:

16	Normalized Overtime Charged to O&M per Company	$ 1,070,133
17	Total Normalized Overtime per Company	$ 1,402,549
18	Percentage of Overtime Charged to O&M	0.7630

UNS Gas, Inc.
Payroll Tax Expense

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule C-10

Revised

Line No.	Description	Amount	Reference
1	Adjustment Related to Severance Related Payroll Tax	$ -	A
2	Adjustment to Reduce Overtime Related Payroll Tax	$ (9,348)	B
3	Total Adjustment to Payroll Tax	$ (9,348)	

Notes and Source

A:	**Severance Accrual Adjustment (Schedule C-8)**		
4	Severance Accrual Adjustment	$ 52,388	
5	OASDI Tax Rate	6.20%	
6	OASDI Payroll Tax Related to Severance Adjustment	$ 3,248	
7	Severance Accrual Adjustment	$ 52,388	
8	Medicare Tax Rate	1.45%	
9	Medicare Payroll Tax Related to Severance Adjustment	$ 760	
10	OASDI Payroll Tax Related to Severance Adjustment	$ 3,248	
11	Medicare Payroll Tax Related to Severance Adjustment	$ 760	
12	Total Severance Related Payroll Tax Adjustment	$ 4,008	L6 +L9
B:	**Overtime Adjustment (Schedule C-9)**		
13	Overtime Payroll Adjustment	$ 123,010	
14	Allocator of wages in excess of $94,200	0.00817 *	
15	Wages in excess of $94,200	$ 1,005	L13 x L14
16	Overtime Payroll Adjustment	$ 123,010	
17	Wages in excess of $94,200	$ 1,005	
18	OASDI Tax Base	$ 122,005	L16 - L17
19	OASDI Tax Rate	6.20%	
20	OASDI Payroll Tax Related to Overtime Adjustment	$ 7,564	
21	Overtime Payroll Adjustment	$ 123,010	
22	Medicare Tax Rate	1.45%	
23	Medicare Payroll Tax Related to Overtime Adjustment	$ 1,784	
24	Adjustment to Overtime Related Payroll Tax	$ 9,348	L20 + L23

* Allocator of wages in excess of $94,200 calculated as follows:

Amounts taken from UNS Gas Payroll Tax adjustment workpaper

25	UNS Gas Unclassified Payroll in excess of $94,200	$ 83,916	
26	Gross Annualized Payroll - per Company	$ 10,270,949	
27	Allocator of wages in excess of $94,200	0.00817	L25 / L26

FERC 408

UNS Gas, Inc.
Nonrecurring FERC Rate Case Legal Expense

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule C-11

Revised

Line No.	Description	Amount	Reference
1	Adjustment to FERC Rate Case Legal Expense	$ (311,051)	A

Notes and Source

A: Per UNS Gas Inc.'s response to STF 5.91

El Paso Gas Allocation/Rate Case settlement negotiations
through law firm of Fleischman & Walsh LLP

	Invoice Amount
May 2005	$ 87,269
August 2005	$ 28,463
September 2005	$ 56,612
October 2005	$ 32,331
November 2005	$ 28,712
December 2005	$ 39,129
December 2005	$ 38,535
	$ 311,051

FERC Account 923

UNS Gas, Inc.
Property Tax Expense

Test Year Ended December 31, 2005

Line No.	Description	Amount	Reference
1	UNS Gas Proposed Increase to Property Tax Expense	$ 1,591,370	A
2	Staff Proposed Increase to Property Tax Expense	$ 1,511,080	B
3	Adjustment to Property Tax Expense	$ (80,290)	L2 - L1

Notes and Source
A: *UNS Gas Filing, Schedule C-2, page 5, line 7*
B: Amounts taken from Company workpapers used to calculate its property tax expense adjustment

	Utility Plant in Service Taxes	Transmission	Distribution	General/ Intangible	Total
4	Total Net Plant in Service - Rate Base	$ 12,668,650	$ 148,702,079	$ 9,770,270	$ 171,140,999
5	Less: Licensed Transportation in Rate Base	$ -	$ -	$(3,224,086)	$ (3,224,086)
6	Less: Land Cost & Rights of Way in Rate Base	$ (69,665)	$ (200,495)	$ (144,835)	$ (414,995)
7	Less: Environmental Property in Rate Base	$ (553,351)	$ (2,868,087)	$ (345,452)	$ (3,766,890)
8	Plus: Land FCV Per Arizona Dept. of Revenue		$ 697,806		$ 697,806
9	Plus: Materials & Supplies in Rate Base		$ 2,039,798		$ 2,039,798
10	Plant in Service Full Cash Value	$ 12,045,634	$ 148,371,101	$ 6,055,897	$ 166,472,632
11	Assessment Ratio*	24.0%	24.0%	24.0%	24.0%
12	Taxable Value	$ 2,890,952	$ 35,609,064	$ 1,453,415	$ 39,953,431
13	Average Tax Rate	9.4747%	9.4747%	9.4747%	9.4747%
14	Property Tax	$ 273,909	$ 3,373,852	$ 137,707	$ 3,785,468
15	Environmental Property in Rate Base	$ 553,351	$ 2,868,087	$ 345,452	$ 3,766,890
16	Statutory Full Cash Value Adjustment	50%	50%	50%	50%
17	Environmental Full Cash Value	$ 276,676	$ 1,434,044	$ 172,726	$ 1,883,445
18	Assessment Ratio*	24.0%	24.0%	24.0%	24.0%
19	Taxable Value	$ 66,402	$ 344,171	$ 41,454	$ 452,027
20	Average Tax Rate	9.4747%	9.4747%	9.4747%	9.4747%
21	Property Tax	$ 6,291	$ 32,609	$ 3,928	$ 42,828
22	Total Property Taxes	$ 280,200	$ 3,406,461	$ 141,635	$ 3,828,296
23	Property Taxes on Leased Property	$ -	$ -	$ 25,629 a	$ 25,629
24	Total Property Tax Expense	$ 280,200	$ 3,406,461	$ 167,264	$ 3,853,925
25	Less: Recorded Property Taxes Excluding Call Center	$ (135,825)	$ (2,082,996)	$ (124,024)	$ (2,342,845)
26	Property Tax Expense Adjustment	$ 144,375	$ 1,323,465	$ 43,240	**$ 1,511,080**

a: Property Tax for Leases calculated as follows (amounts taken from Company workpaper)

	Cottonwood Lease	Primary Value	Secondary Value	Total
27	Full Cash Value	$ 795,459	$ 1,016,515	
28	Assessment Ratio*	24.0%	24.0%	
29	Taxable Value	$ 190,910	$ 243,964	
30	Tax Rate	8.7284%	1.8218%	
31	Property Tax	$ 16,663	$ 4,445	$ 21,108
	Nogales Lease			
32	Full Cash Value	$ 397,182		
33	Assessment Ratio*	24.0%		
34	Taxable Value	$ 95,324		
35	Tax Rate	11.8563%		
36	Property Tax	$ 11,302		
37	Percentage Allocated to UNS Gas	40%		
38	Property Taxes Allocated	$ 4,521		$ 4,521
39	Total Lease Taxes			$ 25,629

* 2007 Arizona Statutory Assessment Ratio 24.0%

FERC 408

UNS Gas, Inc.
Worker's Compensation Expense

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule C-13

Line No.	Description	Account	Amount	Reference
1	Adjustment to Worker's Compensation Expense	925	$ (34,234)	A&B

Notes and Source
A: UNS Gas Filing, Schedule C-2, page 2, line 5
B: Testimony of Staff witness Ralph Smith

FERC 925

UNS Gas, Inc.
Membership and Industry Association Dues

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule C-14

Line No.	Vendor	Amount	FERC Account
1	American Gas Association	$ 41,854	930
2	Less 40% Related to Lobbying & Advertising*	40%	
3	Adjusted American Gas Association	16,742	930
4	Arizona Utility Group	$ 500	930
5	Arizona Utility Investors Association	$ 2,500	930
6	Chino Valley Area Chamber of Commerce	$ 215	930
7	Coconino County Clerks of Superior Court	$ 18	921
8	Exchange Club	$ 375	921
9	Flagstaff Chamber of Commerce	$ 2,378	921
10	IBA Publishing Inc.	$ 325	930
11	Kingman Chamber of Commerce	$ 386	921
12	Kingman Rotary Club	$ 458	921
13	Mayer Area Chamber of Commerce	$ 72	930
14	Prescott Chamber of Commerce	$ 386	930
15	Prescott Valley Chamber of Commerce	$ 550	930
16	Seligman Chamber of Commerce	$ 40	930
17	Show Low Girls Soccer Booster Club	$ 25	930
18	Show Low Main Street	$ 375	930
19	U.S. Mexico Border Counties Coalition	$ 250	921
20	USDA Forest Service	$ 173	930
21	White Mountain Regional Development Corp.	$ 1,100	930
22	Total Membership and Industry Association Dues	$ 26,868	

Line No.		Total From Above	Adjustment
23	Total Amount Recorded in Account 921	$ 23,003	$ (23,003)
24	Total Amount Recorded in Account 930	$ 3,865	$ (3,865)
25	Total	$ 26,868	$ (26,868)

* Percentage derived from NARUC Audit Reports on AGA Expenditures for 1998 and 1999 issued January 2000 and June 2001, respectively

UNS Gas, Inc.
Fleet Fuel Expense

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule C-15

Revised

Line No.	Description	Amount	Reference
1	UNS Gas Adjustment to Fleet Fuel Expense	$ 73,726	A
2	Staff Recommended Pro Forma Adjustment to Fleet Fuel Expense	$ 61,069	B
3	Adjustment to Fleet Fuel Expense	$ (12,657)	L2 - L1

Notes and Source

A: UNS Gas Filing, Schedule C-2, page 3, line 9

B: Per Company's workpapers showing calculation of Fleet Fuel Expense adjustment (except where noted)

4	Average operational FTE count for 2005	123.58	
5	Average technical FTE count for 2005	24.83	
6	Average construction FTE's for 2005	148.42	L4 + L5
7	2005 miles driven	2,228,658	
8	2005 mileage per Average Construction FTE	15,016	L7 / L6
9	2 month Average Construction FTE's for 2006	158	
10	Assumed 2006 mileage with 1st quarter staffing levels	2,365,055	L8 x L9
11	2005 Actual miles/gallon	9.60	
12	Calculated gallons purchased	246,360	L10 / L11
13	Average cost of fuel for November 2006 through January 2007	$ 2.48	Note C
14	Cost of calculated gallons purchased	$ 610,973	L12 x L13
15	Dollars purchased through Pro-Cards during 2005	$ 37,491	
16	Pro forma fuel expenditures	$ 648,464	L14 + L15
17	Test year expenditures	$ 565,263	
18	Pro forma expenditure adjustment	$ 83,201	L16 - L17
19	Percentage transportation allocation to O&M	73.4%	
20	Staff recommended pro forma adjustment to Fleet Fuel Expense	$ 61,069	

C Average cost of fuel for November 2006 through January 2007 reflects UNS Gas' actual average fuel cost for that period per Duke's rebuttal testimony

UNS Gas, Inc.
Postage Expense

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule C-16
Page 1 of 1
Revised

Line No.	Description	Amount		Reference
1	UNS Gas Annualized Postage Expense	$ 529,380		A
2	Staff Annualized Postage Expense	$ 503,356		B
3	*Adjustment to Postage Expense*	$ (26,024)	a	L2 - L1

Notes and Source

A: UNS Gas workpaper used in calculating its Postage Expense adjustment

B: **Staff recommended Postage Expense Annualization**

Test Year Postage Expense	$ 445,171	
Postage increases effective 1/8/06 and 5/14/07 ($.04/$.37)	1.11	
Increased Postage Expense	493,298	
Ratio of Weighted Average Annualized Customers	1.02039	b
Annualized Postage Expense per Staff	$ 503,356	

a: Allocation of Staff adjustment to FERC accounts

FERC 903	$ (24,749)	95.1%
FERC 921	$ (1,275)	4.9%
	$ (26,024)	100.0%

b: TY average and year end customers derived from the following rate classes per UNS Gas response to STF 11.10:

	Average	Dec. 2005
Residential - 10	118,821	121,125
Residential CARES -12	5,264	5,556
Small Volume Commercial - 20	10,849	11,017
Large Volume Commercial -22	10	11
Small Volume Public Authority - 40	1,042	1,051
Large Volume Public Authority - 42	6	5
	135,992	138,765

Additional Postage Expense through Customer Annualization 1.02039

UNS Gas, Inc.
Interest Synchronization

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule C-17

Revised

Line No.	Description		Amount	Reference
1	Adjusted rate base	$	154,547,272	Schedule B
2	Weighted cost of debt		3.65%	Schedule D
3	Synchronized interest deduction	$	5,640,975	Line 1 x Line 2
4	Synchronized interest deduction per UNS Gas	$	5,334,825	Note A
5	Difference (decreased) increased interest deduction	$	306,150	Line 3 - Line 4
6	Combined federal and state income tax rates		38.598%	STF 5.76, item 6
7	Increase (decrease) to income tax expense	$	(118,168)	

Notes and Source

A RUCO 1.10 2005 UNSG Lead-Lag Summary.xls
Also, UNS Gas filing, Schedule B-5, page 3 of 3, line 18

UNS Gas, Inc.
Corporate Cost Allocations

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule C-18
Page 1 of 1
Added

Line No.	Description	Amount	Reference
1	Adjustment to Corporate Cost Allocations	$ (12,765)	A

A: Adjustment proposed by RUCO and agreed to by UNS Gas Inc. per rebuttal testimony of Company witness Dallas Dukes

UNS Gas, Inc.
Rate Case Expense

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule C-19
Page 1 of 1
Added

Line No.	Description	Amount	Reference
1	UNS Gas Rate Case Expense per Company Filing	$ 200,000	A
2	Staff Recommended Rate Case Expense	$ 85,000	B
3	Adjustment to Rate Case Expense	$ (115,000)	L2 - L1

Notes and Source

A: UNS Gas filing, Schedule C-2, page 2, line 5

B:	Staff Recommended Rate Case Expense	$ 255,000
	Normalized Over Three Years	3
	Staff Recommended Normalized Rate Case Expense	$ 85,000

UNS Gas, Inc.
CARES Related Amortization

Test Year Ended December 31, 2005

Docket No. G-04204A-06-0463
Schedule C-20
Page 1 of 1
Added

Line No.	Description	Amount	Reference
1	Adjustment to CARES Related Amortization	$ (441,511)	A

Notes and Source
A: Surrebuttal testimony of Staff witness Julie McNeely-Kirwan

Attachment RCS-S1(R)
To the Surrebuttal Testimony
Of Staff Witness Ralph C. Smith

Staff Proposed Rate Design Summary
And Proof of Revenue
(Revised)

Attachment RCS-S1R

Staff Revised Rate Design Schedules

Accompanying the Surrebuttal Testimony of Ralph C. Smith

Schedule	Description	Pages
RD-1	Staff Proof of Revenue at Present and Proposed Rates	2
RD-2	Calculation of CARES (Rate R12) Total Discount for the Winter Months	1
RD-3	Calculation of An Across the Board Increase	1
RD-4	Analysis of Revenues Generated by Fixed Charges	1
RD-5	Calculation of Distribution Rate	1
	Total Pages	6

PROOF OF REVENUE USING THE COMPANY'S BILLING UNITS STATED ON SCHEDULE H-2, PAGE 1 OF 2

Line No.	Class of Service	Adjusted Billed BD (from H-2, page 1)	Existing Rates	Current Revenues	Adjusted Booked Revenue	Difference	Staff Billing Unit Adjustments: Staff Adj. for Customer Annualizaton	Staff Billing Unit Adjustments: Staff Adj. for Weather Normalization	Adjusted Billing units	Current Revenues	Staff Adjusted Average No. of Customers
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
	Residential Service (R10)										
1	Customer Charge	1,447,632	$ 7.00	$10,133,424			5,883		1,453,515	10,174,605	121,126
2	Distribution Margin Therms	68,951,676	$0.3004	$20,713,083			129,654	4,916	69,086,246	20,753,508	
3	TOTAL R10			$30,846,507	$31,176,937	($330,430)				30,928,113	
	Residential Service Cares (R12)										
4	Customer Charge	67,920	$ 7.00	$475,440			(1,252)		66,668	466,676	5,556
5	Distribution Margin Therms	2,813,844	$0.3004	$845,279			(40,412)	(872)	2,772,560	832,877	
6	TOTAL R12			$1,320,719	$975,486	$345,233				1,299,553	
	Small Volume Commercial Service (C20)										
7	Customer Charge	131,028	$ 11.00	$1,441,308			1,178		132,206	1,454,266	11,017
8	Distribution Margin Therms	29,014,067	$0.2420	$7,021,404			139,670	3,550	29,157,287	7,056,063	
9	TOTAL R20			$8,462,712	$8,531,880	($69,168)				8,510,329	
	Large Volume Commercial Service (C22) and Commercial Transportatjion										
10	Customer Charge	204	$ 85.00	$17,340			4		208	17,680	17
11	Distribution Margin Therms	3,756,735	$0.1551	$582,670			32,215		3,788,950	587,666	
12	TOTAL R22			$600,010	$661,907	($61,897)				605,346	
	Small Volume Industrial Service (I-30)										
13	Customer Charge	156	$ 11.00	$1,716					156	1,716	13
14	Distribution Margin Therms	511,826	$0.2122	$108,609					511,826	108,609	
15	TOTAL I30			$110,325	$109,190	$1,136				110,325	
	Large Volume Industrial Service (I-32)										
16	Customer Charge	228	$ 85.00	$19,380					228	19,380	19
17	Distribution Margin Therms	21,610,146	$0.0864	$1,867,117					21,610,146	1,867,117	
18	TOTAL I32			$1,886,497	$1,971,743	($85,246)				1,886,497	
	Small Volume Public Authority (PA-40)										
19	Customer Charge	12,696	$ 11.00	$139,656			(32)		12,664	139,304	1,055
20	Distribution Margin Therms	5,828,186	$0.2354	$1,371,955			(19,344)	(476)	5,808,366	1,367,289	
21	TOTAL PA40			$1,511,611	$1,527,532	($15,921)				1,506,593	
	Large Volume Public Authority (PA-42)										
22	Customer Charge	108	$ 85.00	$9,180			(4)		104	8,840	9
23	Distribution Margin Therms	5,558,725	$0.1084	$602,566			(33,636)		5,525,089	598,920	
24	TOTAL PA42			$611,746	$637,909	($26,163)				607,760	
	Special Gas Light Service (PA-44)										
25	Customer Charge Lighting Group A	864	$ 13.57	$11,724					864	11,724	
26	Customer Charge Lighting Group B	3,756	$ 16.28	$61,148					3,756	61,148	
27	TOTAL PA44	101,855		$72,872	$73,078	($206)				72,872	
	Irrigation Service (IR-60)										
28	Customer Charge	72	$ 11.00	$792					72	792	6
29	Distribution Margin Therms	86,803	$0.2876	$24,965					86,803	24,965	
30	TOTAL IR60			$25,757	$23,562	$2,194				25,757	
31	**Total Gas Service Revenue at Present Rates**			$45,448,756	$45,689,224	($240,468)				45,553,146	
32	**Staff Adjusted Revenue at Rresent Rates**			Note A	Note A	Note A				45,793,618	
33	**Difference**								*Difference*	(240,472)	
										Note A	
34	Total Bills	1,660,047							1,665,824		
35	Total Monthly Customers	138,340 [B]							138,822 [B]		138,821 [B]
36	Total Distribution Therms	138,233,863							138,347,273		

Notes and Source
Col.A: UNS Gas filing, Schedule H-2, page 1 of 2, adjusted average number of customers (x 12) and adjusted therm sales
UNS Gas filing, Schedule H-2, page 1 of 2, adjusted average number of customers lists 3 customers for PA44; billing units for PA44 on lines 25&26 are from a workpaper
Col.B: UNS Gas filing, Schedule H-3, Present Rates
Col.C: Col.A x Col.B
Col.D: UNS Gas filing, Schedule H-2, page 2 of 2, Adjusted Net Revenues column
Total agrees with UNS Gas filing, Schedule H-1, Adjusted Present Net Revenue subtotal on line 8 of that schedule.
Col.E: Col.C - Col.D
Col.F: Staff workpapers
Col.G: Staff workpapers
Col.H: Col.A + Col.F + Col.G
Col.I: Col.H x Col.B
[A] The billing units from the Company's Schedule H-2, page 1 of 2 produce a net revenue of $45,488,756 which is 240,468 less than what the Company states in Schedule H-2, page 2 of 2.
[B] Includes 3 customers for PA44

UNS Gas Inc. Rate Case; Docket No. G-04204A-06-0463
Staff Proof of Revenue at Present and Proposed Rates

Attachment RCS-S1R
Schedule RD-1

Line	Class of Service	Adjusted Billing Units A	Existing Rates (B)		Current Revenues (C)	Staff Proposed New Rates (D)		Proposed Revenues (E)		Residential Cares (R-12) Winter Discount (F)
	Residential Service (R10)									
1	Customer Charge	1,453,515	7.00	$	10,174,605	8.50	$	12,354,878		
2	Distribution Margin Therms	69,086,246	0.3004	$	20,753,508	0.3177	$	21,945,351		
3	TOTAL R10			$	30,928,113		$	34,300,229		
	Residential Service Cares (R12)									
4	Customer Charge	66,668	7.00	$	466,676	7.00	$	466,676		
5	Distribution Margin Therms	2,772,560	0.3004	$	832,877	0.3177	$	880,707	$	(320,006)
6	TOTAL R12			$	1,299,553		$	1,347,383		
	Small Volume Commercial Service (C20)									
7	Customer Charge	132,206	11.00	$	1,454,266	13.50	$	1,784,781		
8	Distribution Margin Therms	29,157,287	0.2420	$	7,056,063	0.2625	$	7,653,436		
9	TOTAL C20			$	8,510,329		$	9,438,217		
	Large Volume Commercial Service (C22) and Commercial Transportation									
10	Customer Charge	208	85.00	$	17,680	100.00	$	20,800		
11	Distribution Margin Therms	3,788,950	0.1551	$	587,666	0.1717	$	650,547		
12	TOTAL C22			$	605,346		$	671,347		
	Small Volume Industrial Service (I-30)									
13	Customer Charge	156	11.00	$	1,716	13.50	$	2,106		
14	Distribution Margin Therms	511,826	0.2122	$	108,609	0.2349	$	120,248		
15	TOTAL I30			$	110,325		$	122,354		
	Large Volume Industrial Service (I-32) and Industrial Transportation									
16	Customer Charge	228	85.00	$	19,380	100.00	$	22,800		
17	Distribution Margin Therms	21,610,146	0.0864	$	1,867,117	0.0958	$	2,069,383		
18	TOTAL I32			$	1,886,497		$	2,092,183		
	Small Volume Public Authority (PA-40)									
19	Customer Charge	12,664	11.00	$	139,304	13.50	$	170,964		
20	Distribution Margin Therms	5,808,366	0.2354	$	1,367,289	0.2582	$	1,499,894		
21	TOTAL PA40			$	1,506,593		$	1,670,858		
	Large Volume Public Authority (PA-42) and Public Authority Transportation									
22	Customer Charge	104	85.00	$	8,840	100.00	$	10,400		
23	Distribution Margin Therms	5,525,089	0.1084	$	598,920	0.1201	$	663,624		
24	TOTAL PA42			$	607,760		$	674,024		
	Special Gas Light Service (PA-44)									
25	Customer Charge Lighting Group A	864	13.57	$	11,724	15.05	$	13,003		
26	Customer Charge Lighting Group B	3,756	16.28	$	61,148	18.06	$	67,815		
27	TOTAL PA44			$	72,872		$	80,817		
	Irrigation Service (IR-60)									
28	Customer Charge	72	11.00	$	792	13.50	$	972		
29	Distribution Margin Therms	86,803	0.2876	$	24,965	0.3179	$	27,593		
30	TOTAL IR60			$	25,757		$	28,565		
								Increase		
30	**Total Revenue Requirements**			$	**45,553,146**		$	4,552,826	$	**50,105,972**
31	**Staff revenues**			$	45,793,618		$	4,312,354	$	50,105,972
33	*Difference*			$	*(240,472)*		$	*240,472*		
					Note A					

Notes

[A] The (240,472) billing unit-related difference is incorporated into the development of Staff's Proposed Rates
Staff's proposed rates are designed to recover the adjusted revenue requirement using the adjusted billing determinants in column A.

Calculation of CARES (Rate R12) Total Discount for the Winter Months
Discount equals 15 cents off of the per therm rate, up to 100 therms

Attachment RCS-S1R
Schedule RD-2

Line	Month	Average monthly therms	Discount	Annualized Customers	R12 Therm-Based Revenue Discount
	Provided from STF 15.3				
		(A)	(B)	(C)	(D)
1	Nov	29	0.1500	5,556	$ 24,167
2	Dec	66	0.1500	5,556	$ 55,001
3	Jan	92	0.1500	5,556	$ 76,668
4	Feb	76	0.1500	5,556	$ 63,335
5	March	66	0.1500	5,556	$ 55,001
6	April	55	0.1500	5,556	$ 45,834
7					$ 320,006
8	Average Monthly therms	64			
9	Discount for first 100 therms	0.1500			
10	Average Monthly Savings per customer	9.60			
11	For Six Months	57.60			
12	Annual # of customers	66,668	Schedule RD-1, pages 1 and 2		
13	Monthly customers	5,556	Schedule RD-1, page 2		
14	Total Discount	$ 320,006			

UNS Gas Inc. Rate Case; Docket No. G-04204A-06-0463
Calculation of An Across the Board Increase

Line	Class	Current Net Revenue (A)	Staff Proposed Increase (B)	Difference in Billing units vs Adj. Revenue (C)	Adjusted Proposed Increase (D)	Proposed Net Revenue (E)	Across-The Board Increase (F)
1	Total	45,553,146	**4,312,354**	240,472	**4,552,826**	50,105,972	
2	Residential CARES (R12)	1,299,553			47,830		
3	Total without CARES	44,253,593			4,504,996		10.18%
4	Allocation of CARES (R12) Discount				320,006		0.72%
5	**Across the Board %**						**10.90%** (A)
6	Residential (R10)	30,928,113			3,372,115	34,300,229	10.90%
7	Residential Cares (R12)	1,299,553			47,830	1,347,383	3.68% (B)
8	Small Comm Serv (C-20)	8,510,329			927,888	9,438,217	10.90%
9	Large Comm Serv (C-22) and Comm Trans	605,346			66,001	671,347	10.90%
10	Sm. Industrial (I-30)	110,325			12,029	122,354	10.90%
11	Large Industrial (I-32) and Industial Trans	1,886,497			205,686	2,092,183	10.90%
12	Sm. Public Authority (PA-40)	1,506,593			164,265	1,670,858	10.90%
13	Lg. Public Authority (PA-42) and PA Trans	607,760			66,264	674,024	10.90%
14	Special Gas Light (PA-44)	72,872			7,945	80,817	10.90%
15	Irrigation (I-60)	25,757			2,808	28,565	10.90%
16	TOTAL	45,553,146			4,872,832	50,425,978	
17	CARES winter therm discount				$ 320,006	$ 320,006	
18	Total Revenue Increase				4,552,826	50,105,972	

Notes and Source

Net Revenue is the adjusted Net Revenue proposed by Staff
(A) Across the board for all classes except Cares class; including discount
(B) To ensure therm rate is same as Residential
See Schedule RD-2 for development of the CARES discount

UNS Gas Inc. Rate Case; Docket No. G-04204A-06-0463
Analysis of Revenues Generated by Fixed Charges

Attachment RCS-S1R
Schedule RD-4

Line	Description	Totals	Residential R10	Residential Cares R12	Small Comm Serv C20	Large Comm Serv & Comm Trans C22	Sm. Industrial I30	Large Industrial & Industrial Trans I32	Sm. Public Authority PA-40	Lg. Public Authority and Public Authority Trans PA-42	Special Gas Light PA-44 Group A	Special Gas Light PA-44 Group B	Irrigation IR-60
1	**# of Customers**		1,453,515	66,668	132,206	208	156	228	12,664	104	864	3,756	72
	CUSTOMER CHARGE												
	CURRENT												
2	Customer Charge		$ 7.00	$ 7.00	$ 11.00	$ 85.00	$ 11.00	$ 85.00	$ 11.00	$ 85.00	$ 13.57	$ 16.28	$ 11.00
	PROPOSED												
3	Customer Charge		$ 8.50	$ 7.00	$ 13.50	$ 100.00	$ 13.50	$ 100.00	$ 13.50	$ 100.00	$ 15.05	$ 18.06	$ 13.50
	% of Increase												
4	Customer Charge		21.43%	0.00%	22.73%	17.65%	22.73%	17.65%	22.73%	17.65%	10.90%	10.90%	22.73%
	REVENUES GENERATED BY CUSTOMER CHARGE												
5	Current Revenues from Customer Charge	$ 12,356,131	$ 10,174,605	$ 466,676	$ 1,454,266	$ 17,680	$ 1,716	$ 19,380	$ 139,304	$ 8,840	$ 11,724	$ 61,148	$ 792
6	Total Revenues	$ 45,553,146	$ 30,928,113	$ 1,299,553	$ 8,510,329	$ 605,346	$ 110,325	$ 1,886,497	$ 1,506,593	$ 607,760	$ 11,724	$ 61,148	$ 25,757
7	% of fixed charges	27%	33%	36%	17%	3%	2%	1%	9%	1%	100%	100%	3%
	PROPOSED CUSTOMER CHARGE												
8	Proposed Increase	$ 4,552,826	3,372,115	47,830	927,888	66,001	12,029	205,686	164,265	66,264	$ 1,278	$ 6,667	2,808
9	**Total Revenues (includes discount)**	$ 50,105,972	34,300,229	1,347,383	9,438,217	671,347	122,354	2,092,183	1,670,858	674,024	13,003	67,815	28,565
10	Proposed Revenues from Customer Charge	$ 14,915,194	$ 12,354,878	$ 466,676	$ 1,784,781	$ 20,800	$ 2,106	$ 22,800	$ 170,964	$ 10,400	$ 13,003	$ 67,815	$ 972
11	% of Fixed Charges	30%	36%	35%	19%	3%	2%	1%	10%	2%	100%	100%	3%
12	Increase in Revenues from Customer Charge	$ 2,559,063	$ 2,180,273	$ -	$ 330,515	$ 3,120	$ 390	$ 3,420	$ 31,660	$ 1,560	$ 1,278	$ 6,667	$ 180
13	Customer Charge Increases as Percent of Total Revenue Increases	56%	65%	0%	36%	5%	3%	2%	19%	2%	100%	100%	6%

Footnotes:
PA-44 Group A and B increase is based on their % of present revenue collected compared to the total

UNS Gas Inc. Rate Case; Docket No. G-04204A-06-0463
Calculation of Distribution Rate

Line	Class	Revenue Increase (A)	Current Revenues (B)	Proposed Revenues (C)	Proposed Cust. Charge Rev. (D)	Difference (E)	Distribution Therms (F)	Distribution Rate (G)
1	Total	$ 4,552,826	$ 45,553,146	$ 50,105,972			138,347,273	
2	Residential (R-10)	3,372,115	$ 30,928,113	$ 34,300,229	$ 12,354,878	$ 21,945,351	69,086,246	$ 0.3177
3	Residential Cares (R-12) (Note A)	47,830	$ 1,299,553	$ 1,347,383	$ 466,676	$ 880,707	2,772,560	$ 0.3177
4	Small Comm Serv (C-20)	927,888	$ 8,510,329	$ 9,438,217	$ 1,784,781	$ 7,653,436	29,157,287	$ 0.2625
5	Large Comm Serv (C-22) and Comm Trans	66,001	$ 605,346	$ 671,347	$ 20,800	$ 650,547	3,788,950	$ 0.1717
6	Sm. Industrial (I-30)	12,029	$ 110,325	$ 122,354	$ 2,106	$ 120,248	511,826	$ 0.2349
7	Large Industrial (I-32) and Trans	205,686	$ 1,886,497	$ 2,092,183	$ 22,800	$ 2,069,383	21,610,146	$ 0.0958
8	Sm. Public Authority (PA-40)	164,265	$ 1,506,593	$ 1,670,858	$ 170,964	$ 1,499,894	5,808,366	$ 0.2582
9	Lg. Public Authority (PA-42) and Trans	66,264	$ 607,760	$ 674,024	$ 10,400	$ 663,624	5,525,089	$ 0.1201
10	Special Gas Light (PA-44) (Note B)	7,945	$ 72,872	$ 80,817	$ 80,817			
11	Irrigation (I-60)	2,808	$ 25,757	$ 28,565	$ 972	$ 27,593	86,803	$ 0.3179
12	TOTALS	$ 4,872,832	$ 45,553,146	$ 50,425,978	$ 14,915,194	$ 35,510,784	138,347,273	
13	CARES winter discount	$ (320,006)		$ (320,006)				
14	TOTALS after reflecting CARES discount	$ 4,552,826	$ 45,553,146	$ 50,105,972				

Notes

Line	Note A: Calculation of Discount for	
	Residential Cares (R12)	$ 57.60
15	Total Annual Customers	66,668
16	Total Monthly Customers	5,556
17	Total Discount for Six months	$ 320,006

Note B: Rate PA-44 has Customer Charges Only

Col.D, Customer Charge Revenue amounts are from Schedule RD-1, page 2, Col.E; amounts on Schedule RD-4, line 10, may differ slightly for some rate classes due to rounding.

Attachment RCS-S2(R)
To the Surrebuttal Testimony
Of Staff Witness Ralph C. Smith

Bill Impact Analysis
Of Staff Proposed Rate Design
(Revised)

Note: When discussing rate design and representing impacts of various rate design characteristics, for the total bill impact comparisons, I have included the current base cost of gas and the current (February 2007) PGA rate. Both UNS Gas and Staff in the current proceeding are recommending that all gas costs be removed from base rates and addressed in the PGA prospectively. The total bill impact comparisons presented here are exclusive of the Staff's recommended revised DSM rate of $0.0025 per therm.

UNS Gas, Inc.
Typical Bill Comparison - Present And Proposed Rates
Test Year Ended December 31, 2005

Residential Service (R10)

Line	Rate Component	Present Rates	Staff Proposed	Notes
1	Customer Charge (Sum: Apr-Nov)	$7.00	$8.50	A & C
2	Distribution Margin Therms	$ 0.3004	$ 0.3177	A
3	Feb 2007 PGA Cost	$ 0.3844	$ 0.3844	B
4	Base gas cost	$ 0.4000	$ 0.4000	B
5	Gas Cost Subtotal	$ 0.7844	$ 0.7844	L3+L4

	Average	Present Rates					Proposed Rates					Total Bill		Base Rates Only	
	Therms Per Month	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Proposed Increase $	Proposed Increase %	Proposed Increase $	Proposed Increase %
6	5	$7.00	$ 1.50	$8.50	$ 3.92	$12.42	$8.50	$ 1.59	$10.09	$ 3.92	$14.01	$1.59	12.80%	$1.59	18.71%
7	10	$7.00	$ 3.00	$10.00	$ 7.84	$17.84	$8.50	$ 3.18	$11.68	$ 7.84	$19.52	$1.68	9.42%	$1.68	16.80%
8	20	$7.00	$ 6.01	$13.01	$ 15.69	$28.70	$8.50	$ 6.35	$14.85	$ 15.69	$30.54	$1.84	6.41%	$1.84	14.14%
9	35	$7.00	$ 10.51	$17.51	$ 27.45	$44.96	$8.50	$ 11.12	$19.62	$ 27.45	$47.07	$2.11	4.69%	$2.11	12.05%
10	50	$7.00	$ 15.02	$22.02	$ 39.22	$61.24	$8.50	$ 15.88	$24.38	$ 39.22	$63.60	$2.36	3.85%	$2.36	10.72%
11	75	$7.00	$ 22.53	$29.53	$ 58.83	$88.36	$8.50	$ 23.82	$32.32	$ 58.83	$91.15	$2.79	3.16%	$2.79	9.45%
12	100	$7.00	$ 30.04	$37.04	$ 78.44	$115.48	$8.50	$ 31.77	$40.27	$ 78.44	$118.71	$3.23	2.80%	$3.23	8.72%
13	250	$7.00	$ 75.10	$82.10	$ 196.10	$278.20	$8.50	$ 79.41	$87.91	$ 196.10	$284.01	$5.81	2.09%	$5.81	7.08%
14	500	$7.00	$ 150.20	$157.20	$ 392.20	$549.40	$8.50	$ 158.83	$167.33	$ 392.20	$559.53	$10.13	1.84%	$10.13	6.44%

	Rate Component	Present Rates	Staff Proposed	Notes
15	Customer Charge (Winter: Dec-Mar)	$7.00	$8.50	A & C
16	Distribution Margin Therms	$ 0.3004	$ 0.3177	A
17	Feb 2007 PGA Cost	$ 0.3844	$ 0.3844	B
18	Base gas cost	$ 0.4000	$ 0.4000	B
19	Gas Cost Subtotal	$ 0.7844	$ 0.7844	

	Average	Present Rates					Proposed Rates					Total Bill		Base Rates Only	
	Therms Per Month	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Proposed Increase $	Proposed Increase %	Proposed Increase $	Proposed Increase %
20	5	$7.00	$ 1.50	$8.50	$ 3.92	$12.42	$8.50	$ 1.59	$10.09	$ 3.92	$14.01	$1.59	12.80%	$1.59	18.71%
21	10	$7.00	$ 3.00	$10.00	$ 7.84	$17.84	$8.50	$ 3.18	$11.68	$ 7.84	$19.52	$1.68	9.42%	$1.68	16.80%
22	20	$7.00	$ 6.01	$13.01	$ 15.69	$28.70	$8.50	$ 6.35	$14.85	$ 15.69	$30.54	$1.84	6.41%	$1.84	14.14%
23	35	$7.00	$ 10.51	$17.51	$ 27.45	$44.96	$8.50	$ 11.12	$19.62	$ 27.45	$47.07	$2.11	4.69%	$2.11	12.05%
24	50	$7.00	$ 15.02	$22.02	$ 39.22	$61.24	$8.50	$ 15.88	$24.38	$ 39.22	$63.60	$2.36	3.85%	$2.36	10.72%
25	75	$7.00	$ 22.53	$29.53	$ 58.83	$88.36	$8.50	$ 23.82	$32.32	$ 58.83	$91.15	$2.79	3.16%	$2.79	9.45%
26	100	$7.00	$ 30.04	$37.04	$ 78.44	$115.48	$8.50	$ 31.77	$40.27	$ 78.44	$118.71	$3.23	2.80%	$3.23	8.72%
27	250	$7.00	$ 75.10	$82.10	$ 196.10	$278.20	$8.50	$ 79.41	$87.91	$ 196.10	$284.01	$5.81	2.09%	$5.81	7.08%
28	500	$7.00	$ 150.20	$157.20	$ 392.20	$549.40	$8.50	$ 158.83	$167.33	$ 392.20	$559.53	$10.13	1.84%	$10.13	6.44%

Typical Jan Usage

29	87	$7.00	$ 26.13	$33.13	$ 68.24	$101.37	$8.50	$ 27.64	$36.14	$ 68.24	$104.38	$3.01	2.97%	$3.01	9.09%

Notes

A Staff Proof of Revenue. See Attachment RCS-S1, Schedule RD-1

B Cost of Gas Inputs workpaper

C UNS Gas is proposing a different customer charge rate of $20 and $11 per month for summer and winter, respectively. Staff recommends the same customer charge rate for all months.

UNS Gas, Inc.
Typical Bill Comparison - Present And Proposed Rates
Test Year Ended December 31, 2005

Residential Service CARES (R12)

Line	Rate Component	Present Rates	Staff Proposed	Notes
1	Customer Charge (Sum: May-Oct)	$7.00	$7.00	A
2	Distribution Margin Therms	$ 0.3004	$ 0.3177	A
3	Feb 2007 PGA Cost	$ 0.3844	$ 0.3844	B
4	Base gas cost	$ 0.4000	$ 0.4000	B
5	Gas Cost Subtotal	$ 0.7844	$ 0.7844	L3+L4

		Present Rates					Proposed Rates					Total Bill		Base Rates Only	
Line	Average Therms Per Month	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Proposed Increase $	Proposed Increase %	Proposed Increase $	Proposed Increase %
6	5	$7.00	$ 1.50	$8.50	$ 3.92	$12.42	$7.00	$ 1.59	$8.59	$ 3.92	$12.51	$0.09	0.72%	$0.09	1.06%
7	10	$7.00	$ 3.00	$10.00	$ 7.84	$17.84	$7.00	$ 3.18	$10.18	$ 7.84	$18.02	$0.18	1.01%	$0.18	1.80%
8	20	$7.00	$ 6.01	$13.01	$ 15.69	$28.70	$7.00	$ 6.35	$13.35	$ 15.69	$29.04	$0.34	1.18%	$0.34	2.61%
9	35	$7.00	$ 10.51	$17.51	$ 27.45	$44.96	$7.00	$ 11.12	$18.12	$ 27.45	$45.57	$0.61	1.36%	$0.61	3.48%
10	50	$7.00	$ 15.02	$22.02	$ 39.22	$61.24	$7.00	$ 15.88	$22.88	$ 39.22	$62.10	$0.86	1.40%	$0.86	3.91%
11	75	$7.00	$ 22.53	$29.53	$ 58.83	$88.36	$7.00	$ 23.82	$30.82	$ 58.83	$89.65	$1.29	1.46%	$1.29	4.37%
12	100	$7.00	$ 30.04	$37.04	$ 78.44	$115.48	$7.00	$ 31.77	$38.77	$ 78.44	$117.21	$1.73	1.50%	$1.73	4.67%
13	250	$7.00	$ 75.10	$82.10	$ 196.10	$278.20	$7.00	$ 79.41	$86.41	$ 196.10	$282.51	$4.31	1.55%	$4.31	5.25%
14	500	$7.00	$ 150.20	$157.20	$ 392.20	$549.40	$7.00	$ 158.83	$165.83	$ 392.20	$558.03	$8.63	1.57%	$8.63	5.49%

Line	Rate Component	Present Rates	Staff Proposed	Notes
15	Customer Charge (Winter)	$7.00	$7.00	A & C
16	Distribution Margin Therms	$ 0.3004	$ 0.3177	A
16a	Margin Rate Discount (Nov-Apr <100 therms)	$ 0.1500	$ 0.1500	C
17	Feb 2007 PGA Cost	$ 0.3844	$ 0.3844	B
18	Base gas cost	$ 0.4000	$ 0.4000	B
19	Gas Cost Subtotal	$ 0.7844	$ 0.7844	

		Present Rates					Proposed Rates					Total Bill		Base Rates Only	
Line	Average Therms Per Month	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Proposed Increase $	Proposed Increase %	Proposed Increase $	Proposed Increase %
20	5	$7.00	$ 0.75	$7.75	$ 3.92	$11.67	$7.00	$ 0.84	$7.84	$ 3.92	$11.76	$0.09	0.77%	$0.09	1.16%
21	10	$7.00	$ 1.50	$8.50	$ 7.84	$16.34	$7.00	$ 1.68	$8.68	$ 7.84	$16.52	$0.18	1.10%	$0.18	2.12%
22	20	$7.00	$ 3.01	$10.01	$ 15.69	$25.70	$7.00	$ 3.35	$10.35	$ 15.69	$26.04	$0.34	1.32%	$0.34	3.40%
23	35	$7.00	$ 5.26	$12.26	$ 27.45	$39.71	$7.00	$ 5.87	$12.87	$ 27.45	$40.32	$0.61	1.54%	$0.61	4.98%
24	50	$7.00	$ 7.52	$14.52	$ 39.22	$53.74	$7.00	$ 8.38	$15.38	$ 39.22	$54.60	$0.86	1.60%	$0.86	5.92%
25	75	$7.00	$ 11.28	$18.28	$ 58.83	$77.11	$7.00	$ 12.57	$19.57	$ 58.83	$78.40	$1.29	1.67%	$1.29	7.06%
26	100	$7.00	$ 15.04	$22.04	$ 78.44	$100.48	$7.00	$ 16.77	$23.77	$ 78.44	$102.21	$1.73	1.72%	$1.73	7.85%
27	250	$7.00	$ 60.10	$67.10	$ 196.10	$263.20	$7.00	$ 64.42	$71.42	$ 196.10	$267.52	$4.32	1.64%	$4.32	6.44%
28	500	$7.00	$ 135.20	$142.20	$ 392.20	$534.40	$7.00	$ 143.83	$150.83	$ 392.20	$543.03	$8.63	1.61%	$8.63	6.07%
	Average														
29	64	$7.00	$ 9.63	$16.63	$ 50.20	$66.83	$7.00	$ 10.73	$17.73	$ 50.20	$67.93	$1.10	1.65%	$1.10	6.61%

Notes
A Staff Proof of Revenue. See Attachment RCS-S1, Schedule RD-1
B Cost of Gas Inputs workpaper
C Direct testimony of Staff witness Julie McNeely-Kirwan

Line 27, Distribution Margin

100	$ 0.1504	$ 15.04	$ 0.1677	$ 16.77
150	$ 0.3004	$ 45.06	$ 0.3177	$ 47.65
		$ 60.10		$ 64.42

Line 28, Distribution Margin

100	$ 0.1504	$ 15.04	$ 0.1677	$ 16.77
400	$ 0.3004	$ 120.16	$ 0.3177	$ 127.06
		$ 135.20		$ 143.83

UNS Gas, Inc.
Typical Bill Comparison - Present And Proposed Rates
Test Year Ended December 31, 2005

Small Commercial Service (C20)

Line	Rate Component	Present Rates	Staff Proposed	Notes
1	Customer Charge	$11.00	$13.50	A
2	Distribution Margin Therms	$ 0.2420	$ 0.2625	A
3	Feb 2007 PGA Cost	$ 0.3844	$ 0.3844	B
4	Base gas cost	$ 0.4000	$ 0.4000	B
5	Gas Cost Subtotal	$ 0.7844	$ 0.7844	L3+L4

		Present Rates					Proposed Rates					Total Bill		Base Rates Only	
Line	Average Therms Per Month	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Proposed Increase $	Proposed Increase %	Proposed Increase $	Proposed Increase %
6	50	$11.00	$ 12.10	$23.10	$ 39.22	$62.32	$13.50	$ 13.12	$26.62	$ 39.22	$65.84	$3.52	5.65%	$3.52	15.24%
7	100	$11.00	$ 24.20	$35.20	$ 78.44	$113.64	$13.50	$ 26.25	$39.75	$ 78.44	$118.19	$4.55	4.00%	$4.55	12.93%
8	500	$11.00	$ 121.00	$132.00	$ 392.20	$524.20	$13.50	$ 131.24	$144.74	$ 392.20	$536.94	$12.74	2.43%	$12.74	9.65%
9	1,000	$11.00	$ 242.00	$253.00	$ 784.40	$1,037.40	$13.50	$ 262.49	$275.99	$ 784.40	$1,060.39	$22.99	2.22%	$22.99	9.09%
10	1,500	$11.00	$ 363.00	$374.00	$ 1,176.60	$1,550.60	$13.50	$ 393.73	$407.23	$ 1,176.60	$1,583.83	$33.23	2.14%	$33.23	8.89%
11	2,500	$11.00	$ 605.00	$616.00	$ 1,961.00	$2,577.00	$13.50	$ 656.22	$669.72	$ 1,961.00	$2,630.72	$53.72	2.08%	$53.72	8.72%
12	5,000	$11.00	$1,210.00	$1,221.00	$ 3,922.00	$5,143.00	$13.50	$ 1,312.44	$1,325.94	$ 3,922.00	$5,247.94	$104.94	2.04%	$104.94	8.59%
13	7,500	$11.00	$1,815.00	$1,826.00	$ 5,883.00	$7,709.00	$13.50	$ 1,968.66	$1,982.16	$ 5,883.00	$7,865.16	$156.16	2.03%	$156.16	8.55%
14	10,000	$11.00	$2,420.00	$2,431.00	$ 7,844.00	$10,275.00	$13.50	$ 2,624.88	$2,638.38	$ 7,844.00	$10,482.38	$207.38	2.02%	$207.38	8.53%

Notes
A Staff Proof of Revenue. See Attachment RCS-S1, Schedule RD-1
B Cost of Gas Inputs workpaper

UNS Gas, Inc.
Typical Bill Comparison - Present And Proposed Rates
Test Year Ended December 31, 2005

Large Commercial Service (C22)

Line	Rate Component	Present Rates	Staff Proposed	Notes
1	Customer Charge	$85.00	$100.00	A
2	Distribution Margin Therms	$ 0.1551	$ 0.1717	A
3	Feb 2007 PGA Cost	$ 0.3844	$ 0.3844	B
4	Base gas cost	$ 0.4000	$ 0.4000	B
5	Gas Cost Subtotal	$ 0.7844	$ 0.7844	L3+L4

		Present Rates					Proposed Rates					Total Bill		Base Rates Only	
	Average Therms Per Month	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Proposed Increase $	Proposed Increase %	Proposed Increase $	Proposed Increase %
6	10,001	$85.00	$ 1,551.16	$1,636.16	$ 7,844.78	$9,480.94	$100.00	$ 1,717.13	$1,817.13	$ 7,844.78	$9,661.91	$180.97	1.91%	$180.97	11.06%
7	12,500	$85.00	$ 1,938.75	$2,023.75	$ 9,805.00	$11,828.75	$100.00	$ 2,146.20	$2,246.20	$ 9,805.00	$12,051.20	$222.45	1.88%	$222.45	10.99%
8	15,000	$85.00	$ 2,326.50	$2,411.50	$ 11,766.00	$14,177.50	$100.00	$ 2,575.44	$2,675.44	$ 11,766.00	$14,441.44	$263.94	1.86%	$263.94	10.95%
9	17,500	$85.00	$ 2,714.25	$2,799.25	$ 13,727.00	$16,526.25	$100.00	$ 3,004.68	$3,104.68	$ 13,727.00	$16,831.68	$305.43	1.85%	$305.43	10.91%
10	20,000	$85.00	$ 3,102.00	$3,187.00	$ 15,688.00	$18,875.00	$100.00	$ 3,433.92	$3,533.92	$ 15,688.00	$19,221.92	$346.92	1.84%	$346.92	10.89%
11	25,000	$85.00	$ 3,877.50	$3,962.50	$ 19,610.00	$23,572.50	$100.00	$ 4,292.40	$4,392.40	$ 19,610.00	$24,002.40	$429.90	1.82%	$429.90	10.85%
12	30,000	$85.00	$ 4,653.00	$4,738.00	$ 23,532.00	$28,270.00	$100.00	$ 5,150.88	$5,250.88	$ 23,532.00	$28,782.88	$512.88	1.81%	$512.88	10.82%
13	45,000	$85.00	$ 6,979.50	$7,064.50	$ 35,298.00	$42,362.50	$100.00	$ 7,726.32	$7,826.32	$ 35,298.00	$43,124.32	$761.82	1.80%	$761.82	10.78%
14	75,000	$85.00	$ 11,632.50	$11,717.50	$ 58,830.00	$70,547.50	$100.00	$ 12,877.20	$12,977.20	$ 58,830.00	$71,807.20	$1,259.70	1.79%	$1,259.70	10.75%

Notes
A Staff Proof of Revenue. See Attachment RCS-S1, Schedule RD-1
B Cost of Gas Inputs workpaper

UNS Gas, Inc.
Typical Bill Comparison - Present And Proposed Rates
Test Year Ended December 31, 2005

Small Volume Industrial Service (I-30)

Line	Rate Component	Present Rates	Staff Proposed	Notes
1	Customer Charge	$11.00	$13.50	A
2	Distribution Margin Therms	$ 0.2122	$ 0.2349	A
3	Feb 2007 PGA Cost	$ 0.3844	$ 0.3844	B
4	Base gas cost	$ 0.4000	$ 0.4000	B
5	Gas Cost Subtotal	$ 0.7844	$ 0.7844	L3+L4

		Present Rates					Proposed Rates					Total Bill		Base Rates Only	
Line	Average Therms Per Month	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Proposed Increase $	Proposed Increase %	Proposed Increase $	Proposed Increase %
6	50	$11.00	$ 10.61	$21.61	$ 39.22	$60.83	$13.50	$ 11.75	$25.25	$ 39.22	$64.47	$3.64	5.98%	$3.64	16.84%
7	100	$11.00	$ 21.22	$32.22	$ 78.44	$110.66	$13.50	$ 23.49	$36.99	$ 78.44	$115.43	$4.77	4.31%	$4.77	14.80%
8	500	$11.00	$ 106.10	$117.10	$ 392.20	$509.30	$13.50	$ 117.47	$130.97	$ 392.20	$523.17	$13.87	2.72%	$13.87	11.84%
9	1,000	$11.00	$ 212.20	$223.20	$ 784.40	$1,007.60	$13.50	$ 234.94	$248.44	$ 784.40	$1,032.84	$25.24	2.50%	$25.24	11.31%
10	1,500	$11.00	$ 318.30	$329.30	$ 1,176.60	$1,505.90	$13.50	$ 352.41	$365.91	$ 1,176.60	$1,542.51	$36.61	2.43%	$36.61	11.12%
11	2,500	$11.00	$ 530.50	$541.50	$ 1,961.00	$2,502.50	$13.50	$ 587.35	$600.85	$ 1,961.00	$2,561.85	$59.35	2.37%	$59.35	10.96%
12	5,000	$11.00	$1,061.00	$1,072.00	$ 3,922.00	$4,994.00	$13.50	$ 1,174.70	$1,188.20	$ 3,922.00	$5,110.20	$116.20	2.33%	$116.20	10.84%
13	7,500	$11.00	$1,591.50	$1,602.50	$ 5,883.00	$7,485.50	$13.50	$ 1,762.05	$1,775.55	$ 5,883.00	$7,658.55	$173.05	2.31%	$173.05	10.80%
14	10,000	$11.00	$2,122.00	$2,133.00	$ 7,844.00	$9,977.00	$13.50	$ 2,349.40	$2,362.90	$ 7,844.00	$10,206.90	$229.90	2.30%	$229.90	10.78%

Notes
A Staff Proof of Revenue. See Attachment RCS-S1, Schedule RD-1
B Cost of Gas Inputs workpaper

UNS Gas, Inc.
Typical Bill Comparison - Present And Proposed Rates
Test Year Ended December 31, 2005

Larve Volume Industrial Service (I-32)

Line	Rate Component	Present Rates	Staff Proposed	Notes
1	Customer Charge	$85.00	$100.00	A
2	Distribution Margin Therms	$ 0.0864	$ 0.0958	A
3	Feb 2007 PGA Cost	$ 0.3844	$ 0.3844	B
4	Base gas cost	$ 0.4000	$ 0.4000	B
5	Gas Cost Subtotal	$ 0.7844	$ 0.7844	L3+L4

		Present Rates					Proposed Rates					Total Bill		Base Rates Only	
	Average Therms Per Month	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Proposed Increase $	Proposed Increase %	Proposed Increase $	Proposed Increase %
6	10,001	$85.00	$ 864.09	$949.09	$ 7,844.78	$8,793.87	$100.00	$ 957.69	$1,057.69	$ 7,844.78	$8,902.47	$108.60	1.23%	$108.60	11.44%
7	15,000	$85.00	$ 1,296.00	$1,381.00	$ 11,766.00	$13,147.00	$100.00	$ 1,436.40	$1,536.40	$ 11,766.00	$13,302.40	$155.40	1.18%	$155.40	11.25%
8	20,000	$85.00	$ 1,728.00	$1,813.00	$ 15,688.00	$17,501.00	$100.00	$ 1,915.20	$2,015.20	$ 15,688.00	$17,703.20	$202.20	1.16%	$202.20	11.15%
9	30,000	$85.00	$ 2,592.00	$2,677.00	$ 23,532.00	$26,209.00	$100.00	$ 2,872.79	$2,972.79	$ 23,532.00	$26,504.79	$295.79	1.13%	$295.79	11.05%
10	50,000	$85.00	$ 4,320.00	$4,405.00	$ 39,220.00	$43,625.00	$100.00	$ 4,787.99	$4,887.99	$ 39,220.00	$44,107.99	$482.99	1.11%	$482.99	10.96%
11	75,000	$85.00	$ 6,480.00	$6,565.00	$ 58,830.00	$65,395.00	$100.00	$ 7,181.98	$7,281.98	$ 58,830.00	$66,111.98	$716.98	1.10%	$716.98	10.92%
12	100,000	$85.00	$ 8,640.00	$8,725.00	$ 78,440.00	$87,165.00	$100.00	$ 9,575.98	$9,675.98	$ 78,440.00	$88,115.98	$950.98	1.09%	$950.98	10.90%
13	125,000	$85.00	$ 10,800.00	$10,885.00	$ 98,050.00	$108,935.00	$100.00	$ 11,969.97	$12,069.97	$ 98,050.00	$110,119.97	$1,184.97	1.09%	$1,184.97	10.89%
14	150,000	$85.00	$ 12,960.00	$13,045.00	$ 117,660.00	$130,705.00	$100.00	$ 14,363.97	$14,463.97	$ 117,660.00	$132,123.97	$1,418.97	1.09%	$1,418.97	10.88%

Notes
A Staff Proof of Revenue. See Attachment RCS-S1, Schedule RD-1
B Cost of Gas Inputs workpaper

UNS Gas, Inc.
Typical Bill Comparison - Present And Proposed Rates
Test Year Ended December 31, 2005

Small Volume Public Authority (PA-40)

Line	Rate Component	Present Rates	Staff Proposed	Notes
1	Customer Charge	$11.00	$13.50	A
2	Distribution Margin Therms	$ 0.2354	$ 0.2582	A
3	Feb 2007 PGA Cost	$ 0.3844	$ 0.3844	B
4	Base gas cost	$ 0.4000	$ 0.4000	B
5	Gas Cost Subtotal	$ 0.7844	$ 0.7844	L3+L4

	Average	Present Rates					Proposed Rates					Total Bill		Base Rates Only	
	Therms Per Month	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Proposed Increase $	Proposed Increase %	Proposed Increase $	Proposed Increase %
6	50	$11.00	$ 11.77	$22.77	$ 39.22	$61.99	$13.50	$ 12.91	$26.41	$ 39.22	$65.63	$3.64	5.87%	$3.64	15.99%
7	100	$11.00	$ 23.54	$34.54	$ 78.44	$112.98	$13.50	$ 25.82	$39.32	$ 78.44	$117.76	$4.78	4.23%	$4.78	13.84%
8	500	$11.00	$ 117.70	$128.70	$ 392.20	$520.90	$13.50	$ 129.12	$142.62	$ 392.20	$534.82	$13.92	2.67%	$13.92	10.82%
9	1,000	$11.00	$ 235.40	$246.40	$ 784.40	$1,030.80	$13.50	$ 258.23	$271.73	$ 784.40	$1,056.13	$25.33	2.46%	$25.33	10.28%
10	1,500	$11.00	$ 353.10	$364.10	$ 1,176.60	$1,540.70	$13.50	$ 387.35	$400.85	$ 1,176.60	$1,577.45	$36.75	2.39%	$36.75	10.09%
11	2,500	$11.00	$ 588.50	$599.50	$ 1,961.00	$2,560.50	$13.50	$ 645.58	$659.08	$ 1,961.00	$2,620.08	$59.58	2.33%	$59.58	9.94%
12	5,000	$11.00	$1,177.00	$1,188.00	$ 3,922.00	$5,110.00	$13.50	$ 1,291.15	$1,304.65	$ 3,922.00	$5,226.65	$116.65	2.28%	$116.65	9.82%
13	7,500	$11.00	$1,765.50	$1,776.50	$ 5,883.00	$7,659.50	$13.50	$ 1,936.73	$1,950.23	$ 5,883.00	$7,833.23	$173.73	2.27%	$173.73	9.78%
14	10,000	$11.00	$2,354.00	$2,365.00	$ 7,844.00	$10,209.00	$13.50	$ 2,582.30	$2,595.80	$ 7,844.00	$10,439.80	$230.80	2.26%	$230.80	9.76%

Notes
A Staff Proof of Revenue. See Attachment RCS-S1, Schedule RD-1
B Cost of Gas Inputs workpaper

UNS Gas, Inc.
Typical Bill Comparison - Present And Proposed Rates
Test Year Ended December 31, 2005

Large Volume Public Authority (PA-42)

Line	Rate Component	Present Rates	Staff Proposed	Notes
1	Customer Charge	$85.00	$100.00	A
2	Distribution Margin Therms	$ 0.1084	$ 0.1201	A
3	Feb 2007 PGA Cost	$ 0.3844	$ 0.3844	B
4	Base gas cost	$ 0.4000	$ 0.4000	B
5	Gas Cost Subtotal	$ 0.7844	$ 0.7844	L3+L4

		Present Rates					Proposed Rates					Total Bill		Base Rates Only	
Line	Average Therms Per Month	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Proposed Increase $	Proposed Increase %	Proposed Increase $	Proposed Increase %
6	10,001	$85.00	$ 1,084.11	$1,169.11	$ 7,844.78	$9,013.89	$100.00	$ 1,201.23	$1,301.23	$ 7,844.78	$9,146.01	$132.12	1.47%	$132.12	11.30%
7	15,000	$85.00	$ 1,626.00	$1,711.00	$ 11,766.00	$13,477.00	$100.00	$ 1,801.67	$1,901.67	$ 11,766.00	$13,667.67	$190.67	1.41%	$190.67	11.14%
8	20,000	$85.00	$ 2,168.00	$2,253.00	$ 15,688.00	$17,941.00	$100.00	$ 2,402.22	$2,502.22	$ 15,688.00	$18,190.22	$249.22	1.39%	$249.22	11.06%
9	30,000	$85.00	$ 3,252.00	$3,337.00	$ 23,532.00	$26,869.00	$100.00	$ 3,603.33	$3,703.33	$ 23,532.00	$27,235.33	$366.33	1.36%	$366.33	10.98%
10	50,000	$85.00	$ 5,420.00	$5,505.00	$ 39,220.00	$44,725.00	$100.00	$ 6,005.55	$6,105.55	$ 39,220.00	$45,325.55	$600.55	1.34%	$600.55	10.91%
11	75,000	$85.00	$ 8,130.00	$8,215.00	$ 58,830.00	$67,045.00	$100.00	$ 9,008.33	$9,108.33	$ 58,830.00	$67,938.33	$893.33	1.33%	$893.33	10.87%
12	100,000	$85.00	$ 10,840.00	$10,925.00	$ 78,440.00	$89,365.00	$100.00	$ 12,011.10	$12,111.10	$ 78,440.00	$90,551.10	$1,186.10	1.33%	$1,186.10	10.86%
13	125,000	$85.00	$ 13,550.00	$13,635.00	$ 98,050.00	$111,685.00	$100.00	$ 15,013.88	$15,113.88	$ 98,050.00	$113,163.88	$1,478.88	1.32%	$1,478.88	10.85%
14	150,000	$85.00	$ 16,260.00	$16,345.00	$ 117,660.00	$134,005.00	$100.00	$ 18,016.65	$18,116.65	$ 117,660.00	$135,776.65	$1,771.65	1.32%	$1,771.65	10.84%

Notes
A Staff Proof of Revenue. See Attachment RCS-S1, Schedule RD-1
B Cost of Gas Inputs workpaper

UNS Gas, Inc.
Typical Bill Comparison - Present And Proposed Rates
Test Year Ended December 31, 2005

Special Gas Light Service (PA-44)

Line	**Rate Component**	Present Rates	Staff Proposed	Increase $	Note
1	Customer Charge Lighting Group A	$13.57	$15.05	$1.48	A
2	Customer Charge Lighting Group B	$16.28	$18.06	$1.78	A

	Annual Bill Impact	Present	Proposed	Increase $	Increase %
3	Customer Charge Lighting Group A	$162.84	$180.59	$17.75	10.90%
4	Customer Charge Lighting Group B	$195.36	$216.66	$21.30	10.90%

Notes

A Staff Proof of Revenue. See Attachment RCS-S1, Schedule RD-1

UNS Gas, Inc.
Typical Bill Comparison - Present And Proposed Rates
Test Year Ended December 31, 2005

Irrigation Service (IR-60)

Line	Rate Component	Present Rates	Staff Proposed	Notes
1	Customer Charge (Sum: Apr-Nov)	$11.00	$13.50	A
2	Distribution Margin Therms	$ 0.2876	$0.3179	A
3	Feb 2007 PGA Cost	$ 0.3844	$ 0.3844	B
4	Base gas cost	$ 0.4000	$ 0.4000	B
5	Gas Cost Subtotal	$ 0.7844	$ 0.7844	L3+L4

		Present Rates					Proposed Rates					Total Bill		Base Rates Only	
	Average Therms Per Month	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Customer Charge	Distribution Margin	Base Rates	Gas Cost	Total Bill	Proposed Increase $	Proposed Increase %	Proposed Increase $	Proposed Increase %
6	50	$11.00	$ 14.38	$25.38	$ 39.22	$64.60	$13.50	$ 15.90	$29.40	$ 39.22	$68.62	$4.02	6.22%	$4.02	15.84%
7	100	$11.00	$ 28.76	$39.76	$ 78.44	$118.20	$13.50	$ 31.79	$45.29	$ 78.44	$123.73	$5.53	4.68%	$5.53	13.91%
8	500	$11.00	$ 143.80	$154.80	$ 392.20	$547.00	$13.50	$ 158.95	$172.45	$ 392.20	$564.65	$17.65	3.23%	$17.65	11.40%
9	1,000	$11.00	$ 287.60	$298.60	$ 784.40	$1,083.00	$13.50	$ 317.90	$331.40	$ 784.40	$1,115.80	$32.80	3.03%	$32.80	10.98%
10	1,500	$11.00	$ 431.40	$442.40	$ 1,176.60	$1,619.00	$13.50	$ 476.85	$490.35	$ 1,176.60	$1,666.95	$47.95	2.96%	$47.95	10.84%
11	2,500	$11.00	$ 719.00	$730.00	$ 1,961.00	$2,691.00	$13.50	$ 794.75	$808.25	$ 1,961.00	$2,769.25	$78.25	2.91%	$78.25	10.72%
12	5,000	$11.00	$1,438.00	$1,449.00	$ 3,922.00	$5,371.00	$13.50	$ 1,589.50	$1,603.00	$ 3,922.00	$5,525.00	$154.00	2.87%	$154.00	10.63%
13	7,500	$11.00	$2,157.00	$2,168.00	$ 5,883.00	$8,051.00	$13.50	$ 2,384.25	$2,397.75	$ 5,883.00	$8,280.75	$229.75	2.85%	$229.75	10.60%
14	10,000	$11.00	$2,876.00	$2,887.00	$ 7,844.00	$10,731.00	$13.50	$ 3,179.00	$3,192.50	$ 7,844.00	$11,036.50	$305.50	2.85%	$305.50	10.58%

Notes
A Staff Proof of Revenue. See Attachment RCS-S1, Schedule RD-1
B Cost of Gas Inputs workpaper

BEFORE THE ARIZONA CORPORATION COMMISSION

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

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-06-0463
IN THE MATTER OF THE APPLICATION OF UNS GAS, INC. TO REVIEW AND REVISE ITS PURCHASE GAS ADJUSTOR.	DOCKET NO. G-04204A-06-0013
IN THE MATTER OF THE INQUIRY INTO THE PRUDENCE OF THE GAS PROCUREMENT PRACTICES OF UNS GAS, INC.	DOCKET NO. G-04204A-05-0831

SURREBUTTAL

TESTIMONY

OF

DAVID C. PARCELL

ON BEHALF OF THE

UTILITIES DIVISION STAFF

ARIZONA CORPORATION COMMISSION

APRIL 4, 2007

TABLE OF CONTENTS

INTRODUCTION

Q. Please state your name and address.

A. My name is David C. Parcell. I am Executive Vice President and Senior Economist of Technical Associates, Inc. My business address is 1051 East Cary Street, Suite 601, Richmond, VA 23219.

Q. Are you the same David C. Parcell who filed Direct Testimony on behalf of the Commission Staff in this proceeding?

A. Yes, I am.

Q. What is the purpose of your current testimony?

A. My current testimony is Surrebuttal Testimony in response to the Rebuttal Testimony of UNS Gas witness Kentton C. Grant. I also respond to UNS Gas' proposal to apply the Company's cost of capital to a fair value rate base.

Q. What aspects of Mr. Grant's Rebuttal Testimony do you respond to in this Surrebuttal Testimony?

A. My Surrebuttal Testimony responds to the following general areas of Mr. Grant's Rebuttal Testimony:

Cost of Common Equity;
Capital Structure; and,
Financial Integrity/Capital Attraction of UNS Gas.

COST OF COMMON EQUITY

Q. What are the primary differences in your cost of equity recommendations and the cost of equity recommendations of Mr. Grant?

A. The primary difference in our respective cost of equity recommendations revolves around our Capital Asset Pricing Model ("CAPM") analyses. As I indicated in my Direct Testimony (Page 37, lines 18-20) and as Mr. Grant acknowledges in his Rebuttal Testimony (Page 17, Lines 12-14), our respective Discounted Cash Flow ("DCF") results are very similar, as follows:

Parcell	9.25% -- 10.50%
Grant	9.10% -- 10.50%

This indicates that Mr. Grant and I agree with regard to our DCF results. However, it appears that Mr. Grant does not give any weight to his DCF results, as his recommended 11.0 percent cost of equity for UNS Gas exceeds the median of his DCF results (9.9 percent) and appears to rely exclusively on the median of his CAPM analysis (11.0 percent). This exclusive reliance on his CAPM results in an excessive cost of equity recommendation by Mr. Grant.

Q. Aside from your concerns with Mr. Grant's exclusive reliance on the CAPM methodology, do you have any comments about Mr. Grant's CAPM methodology and his comments on your CAPM methodology in his Rebuttal Testimony?

A. Yes, I do. As I indicated in my Direct Testimony (Page 37, Lines 28-31 and Page 38, Lines 1-4) and as Mr. Grant acknowledges in his Rebuttal Testimony (Page 17, Lines 23-25), the primary differences in our respective CAPM methodologies are 1) his use of a risk free rate (5.3 percent) which is outdated and exceeds the current level of U.S.

Treasury bond yields; and 2) his use of an equity risk premium (7.1 percent) that relies exclusively on the arithmetic means of common stock returns and bond returns over the period 1926-2005.

Q. Mr. Grant claims, on pages 18-19, that it is appropriate to use only arithmetic returns, and ignore geometric (compound) returns in deriving the risk premium component of the CAPM. Do you have any comments on this claim?

A. Yes, I do. What is important is not what Mr. Grant and I believe, but what investors rely upon in making investment decisions. It is apparent that investors have access to both types of returns, and correspondingly use both types of returns, when they make investment decisions.

In fact, it is noteworthy that mutual fund investors regularly receive reports on their own funds, as well as prospective funds they are considering investing in, that show only geometric returns (see for example, Schedule 1 which shows historic performance information for one of the nation's largest mutual funds). Based on this, I find it difficult to accept Mr. Grant's position that only arithmetic returns are considered by investors and, thus, only arithmetic returns are appropriate in a CAPM context.

Q. Does Mr. Grant use Value Line information in his cost of capital analyses?

A. Yes, he does.

Q. Do the Value Line reports cited in his testimony show historic growth rates for the gas utilities?

A. Yes, they do.

Q. Do these Value Line reports show historic returns on an arithmetic basis?

A. No, they do not.

Q. Do the Value Line reports show historic returns on a geometric, or compound growth rate basis?

A. Yes, they do. See Schedule 2, which describes Value Line's method of calculating growth rates. As a result, any investor reviewing Value Line, as Mr. Grant does, would be using geometric growth rates, not arithmetic growth rates.

Q. Is it your position that only geometric growth rates be used?

A. No. I believe that both arithmetic and geometric growth rates should be used. This is the case since investors have access to both and presumably use both.

Q. But does not Mr. Grant cite (pages 18-19) his perception that financial literature requires that arithmetic returns be used for this purpose?

A. He does state this is his testimony. However, the cost of capital determination is not an academic exercise made in some laboratory or university classroom. The true cost of equity is made in the "laboratory" of the financial markets, based on the ongoing inter-play of countless investors, each with their own agendas and beliefs. This is verified by the fact that each time a share of stock is purchased by one investor, it is simultaneously being sold by another investor, indicating that their respective views at that time differ.

Again, investors have access to both arithmetic and geometric growth rates. In all likelihood, there is more geometric growth readily available to investors (e.g., mutual fund reports and Value Line) than arithmetic growth.

Q. Mr. Grant also takes issue with your comparable earnings analysis. Do you have any response to his assertions?

A. Yes, I do. Mr. Grant apparently believes that, if natural gas distribution utilities, such as UNS Gas, have and are earning returns on equity of over 10 percent and simultaneously are enjoying a market-to-book ratio of about 180 percent, then the earned levels represent the cost of capital for the gas utilities. I disagree with this position. Investors know that the vast majority of utilities are regulated based upon the book value of their assets (i.e., rate base) and their liabilities (i.e., capitalization). It is logical and intuitive that investors would only pay a stock price that substantially exceeds book value for a utility if there is an expectation that the company is earning a return that exceeds its cost of capital. Mr. Grant ignores this in his Rebuttal Testimony.

Q. Mr. Grant also asserts, on pages 19-20, that you did not take into account any "Company-specific risk factors" in your cost of equity recommendation. Do you have any response to this assertion?

A. Yes, I do. The primary "Company-specific risk factor" that Mr. Grant cites is the "size" of UNS Gas. Mr. Grant apparently believes that UniSource Energy's decision to maintain UNS Gas as a separate subsidiary, in contrast to merging it into Tucson Electric Power and/or UniSource Energy, should have the effect of raising its cost of equity. I disagree with this assertion. UNS Gas does not raise equity capital in the marketplace; rather it is raised by UniSource Energy based on the combined financial strength of all of its operations. If UNS Gas and every other subsidiary of UniSource Energy received a higher cost of equity due to their respective "small" sizes, each subsidiary, as well as UniSource Energy as a whole, would earn an excessive return.

Q. Mr. Grant also claims, on page 20, lines 2-7, and again on page 21, lines 19-27, that your cite of a 2003 Standard and Poor's report that is no longer relevant. Do you have any response to this assertion?

A. Yes, I do. The source of the 2003 Standard & Poor's ("S&P") report is UNS Gas' response to STF 7.2. Since there have been no subsequent descriptions of the Company, it is evident from the S&P reports supplied by the Company in its DR response that S&P does not perceive that UNS Gas' financial status has changed since the cited report was prepared. The absence of any modification of these quotes by S&P is indicative that this agency's position of the Company has not changed since the cited report.

CAPITAL STRUCTURE

Q. What are Mr. Grant's comments on your capital structure recommendation?

A. Mr. Grant objects to my capital structure recommendation, on Page 20, Lines 9-13, by noting that I use the actual capital structure of UNS Gas rather than the hypothetical capital structure proposed by the Company. However, as was the case in his Direct Testimony, he has offered no compelling reasons – indeed no reasons at all – why the Commission should ignore the Company's actual capital structure and utilize a hypothetical capital structure that contains more equity than UNS Gas, Tucson Electric Power, or UniSource Energy.

FINANCIAL INTEGRITY/CAPITAL ATTRACTION

Q. Mr. Grant claims, on page 21, lines 1-15, that UNS Gas would not likely earn the return you recommend as a result of recommendations of other Staff witnesses. Do you have any response to this?

A. Yes, I do. The respective recommendations of other Staff witnesses in this proceeding reflect their own recommendations based upon their own analyses of UNS Gas' application and their own implementation of proper rate-making standards. To the extent that the Commission adopts any or all Staff recommendations, this is reflective of regulatory acceptance of the positions taken by Staff. Any corresponding reduction in the Company's potential earned rate of return would thus be appropriate from a regulatory and rate-making standpoint.

UNS GAS PROPOSAL TO APPLY COST OF CAPITAL TO FAIR VALUE RATE BASE

Q. What is your understanding of UNS Gas' proposal to apply the Company's cost of capital to a fair value rate base?

A. According to the Rebuttal Testimonies of James S. Pignatelli (page 2, lines 18-20) and Kentton C. Grant (page 28, lines 1-20), UNS Gas is proposing that the total cost of capital for the Company be applied to the "fair value" of the Company's rate base. This request is apparently being made in response to a recent Arizona Court of Appeals decision regarding Chaparral City Water Company. According to UNS Gas witnesses' interpretation of this decision, the Commission "must use fair value rate base to set rates per the Arizona Constitution."

Q. Have you reviewed this decision and do you have any comments on your understanding of its implications for this case?

A. Yes, I do. As was the case for Mr. Grant's testimony, my "non-legal understanding" of this decision is that the Commission must consider the fair value of a utility's assets in setting rates. However, I do not agree with Mr. Grant that this implies that the Company's cost of capital must be applied to the fair value of the rate base.

My "non-legal understanding" of the Court decision indicates that the Court agreed with the Commission that "the cost of capital analysis 'is geared to concepts of original cost measures of rate base, not fair value measures of rate base' and thus was appropriately applied here to the OCRB." The decision went on to state "If the Commission determines that the cost of capital analysis is not the appropriate methodology to determine the rate of return to be applied to the FVRB, the Commission has the discretion to determine the appropriate methodology."

Q. Do you have any observations based upon your own experience in cost of capital determination, as to whether the cost of capital is consistent with a fair value rate base?

A. Yes, I do. It is my personal experience, based upon over 35 years of providing cost of capital testimony, that the entire concept of cost of capital is designed to apply to an original cost rate base. This is the case since the cost of capital is derived from the liabilities/owners' equity side of a utility's balance sheet using the book values of the capital structure components. The cost of capital, once determined, is then applied to (i.e., multiplied by) the rate base, which is derived from the asset side of the balance sheet. From a financial, as well as regulatory, perspective, the rationale for this relationship is that the rate base is financed by the capitalization. Under this relationship, a provision is provided for investors (both lenders and owners) to receive a return on their invested capital. Such a relationship is meaningful as long as the cost of capital is applied to the original cost (i.e., book value) rate base, because there is a matching of rate base and capitalization.

When the concept of fair value rate base is incorporated, however, this link between rate base and capital structure is broken. The "excess" of fair value rate base over original cost rate base is not financed with investor-supplied funds and, indeed, the excess is not financed at all. As a result, the cost of capital cannot be applied to the fair value rate base since there is no financial link between the two concepts.

Q. Why is it important that there be a link between the concepts of rate base and cost of capital?

A. This link is important since financial theory, as well as regulatory precedent, indicates that investors should be provided an opportunity to earn a return on the capital they provided to the utility. Since the capital finances the rate base (in an original cost world) the link between cost of capital and rate base satisfies this financial and regulatory objective.

Q. Based on your experience as a cost of capital witness over the past 35 years, do you have a proposed solution for the Commission to account for the use of a fair value rate base in setting rates for UNS Gas?

A. Yes, I do. Since the differential between fair value rate base and original cost rate base is not financed with investor-supplied funds, it is logical and appropriate to assume that this excess has no cost. As a result, the cost of capital, through the capital structure, can be modified to account for a level of cost-free capital in an equal dollar amount to the excess of fair value rate base over the original cost rate base. Such a procedure would still provide for a return being earned on all investor-supplied funds and thus be consistent with financial and regulatory standards.

Q. Has the Staff made such a proposal in this proceeding?

A. Yes, it has. Staff witness Ralph Smith has re-cast my cost of capital calculation in a fashion that incorporates my surrebuttal position. As this indicates, the "fair value cost of capital" for UNS Gas is 6.81 percent.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes, it does.

Vanguard 500 Index Fund Investor Shares (VFINX)

Performance

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so that investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited.

Average Annual Returns—Updated Monthly as of 02/28/2007

Important fund performance information

Display data in bar chart

	1 Year	3 Year	5 Year	10 Year	Since Inception 08/31/1976
500 Index Fund Inv	11.80%	8.95%	6.69%	7.55%	12.14%
S&P 500 Index*	11.97%	9.10%	6.82%	7.63%	—

After-Tax Returns—Updated Quarterly as of 12/31/2006

Learn more about after-tax returns

	1 Year	3 Year	5 Year	10 Year	Since Inception 08/31/1976
500 Index Fund Inv					
Returns Before Taxes	15.64%	10.30%	6.07%	8.34%	12.23%
Returns After Taxes on Distributions	15.34%	10.00%	5.72%	7.85%	—
Returns After Taxes on Distributions and Sale of Fund Shares	10.53%	8.83%	5.11%	7.12%	—
Average Large Blend Fund					
Returns Before Taxes	14.15%	10.05%	5.92%	7.79%	—
Returns After Taxes on Distributions	—	—	—	—	—
Returns After Taxes on Distributions and Sale of Fund Shares	—	—	—	—	—

Recent Investment Returns

	Year-to-Date as of 03/19/2007	Year-to-Date as of 02/28/2007	Previous Month—February	Three-Month Total as of 02/28/2007
500 Index Fund Inv	−0.76%	−0.51%	−1.97%	0.88%
S&P 500 Index*	—	−0.47%	−1.96%	0.92%

See cumulative, yearly, and quarterly historical returns

Important Fee Information

Account Maintenance Fee

Each Vanguard index fund (except the REIT Index Fund) charges a maintenance fee if the balance is below $ 10,000. The fee of $10 is deducted annually, or $2.50 per quarter for funds that distribute dividends more than once a year. If your distribution is less than the fee, a fraction of a share may be redeemed to make up the difference. Note that this fee applies to each fund account. For example, if you have an account with two index funds, each with less than $10,000, you will be charged a total of $20 a year. Similarly, if you have the same index fund in two different accounts (e.g., individual account, joint account, traditional IRA, Roth IRA, or any two accounts under different registrations or account numbers), each with less than $10,000, you will be charged a total of $20 a year.

More fee details

Growth of $10,000

Compare the growth of a hypothetical $10,000 investment in this fund with the growth of the same amount in up to 2 other Vanguard® funds and a benchmark. To get an accurate comparison, choose a time range that covers the number of years all funds have been in existence. Move your mouse over the graph to see the changes in returns.

Figures include reinvestment of dividends and capital gains but don't reflect the effect of any sales charges or redemption fees, which would lower these figures. The initial investment used in the graph may be higher or lower than the initial minimum amount required to invest in each fund. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index. Past performance cannot be used to predict future returns. The investment return and principal value of an investment will fluctuate, so an investor's shares, when sold, may be worth more or less than their original cost. **Click a fund name to view standardized performance.**

Before making an investment decision, it's important to check the fund's prospectus for factors such as investment objectives, costs and expenses, liquidity, fluctuation of principal or return, and tax features. Use our Fund Compare tool for more information about Vanguard funds.

*A widely used barometer of U.S. stock market performance; as a market-weighted index of leading companies in leading industries, it is dominated by large-capitalization companies.

Glossary

average annual total return

Provides the average return of the fund over a specific period of time. For example, if a fund's net asset value (NAV) started at $10 and after 3 years it rose to $15, the fund's average annual return would be about 14.47%. This number shows how much the fund averaged each year during the 3-year period to get to its $15 NAV.

Average annual returns are always calculated as of the end of each month.

Print OK

index, and the risk-free rate of return of a three-month Treasury Bill. For example, if a stock has a beta of 1.5, it would be expected to gain 15% when the index gains 10%. If however, the stock actually gains 20%, this excess return represents the stock's alpha. Value Line expresses alpha as an annualized figure.

American Depository Receipts (ADRs) - Since most other nations do not allow stock certificates to leave the country, a foreign company will arrange for a trustee (typically a large bank) to issue ADRs (sometimes called American Depository Shares, or ADSs) representing the actual, or underlying, shares. Each ADR is equivalent to a specified number of shares (the ratio is shown in a footnote on the Value Line page).

American Stock Exchange Composite - A market-capitalization weighted index of the prices of the stocks traded on the American Stock Exchange.

Annual Change D-J Industrials - The annual change from year end to year end in the Dow Jones Industrial Average, expressed as a percentage.

Annual Change in Net Asset Value (Investment Companies) - The change in percentage terms of the net asset value per share at the end of any given year from what it was at the end of the preceding year, adjusted for any capital gains distributions made during the year.

Annual Rates of Change (Per Share) - Compounded annual rates of change of pershare sales, cash flow, earnings, dividends, and book value (or other industry-specific per-share figures) over the past ten years and five years and estimated over the coming three to five years. All forecasted rates of change are computed from the average figure for the past three-year period to an average for a future three-year period. If data for a three-year base period are not available, a two- or one-year base may be used.

Arbitrage - The simultaneous purchase of an asset in one market and sale of the same asset, or assets equivalent to the asset purchased, in another market. Often referred to as "classical arbitrage," this type of transaction should result in a risk-free profit. Risk Arbitrage refers to transactions in stocks involved in takeover activity.

Arbitrageur - A person or organization that engages in arbitrage activity.

BEFORE THE ARIZONA CORPORATION COMMISSION

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

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-06-0463
IN THE MATTER OF THE APPLICATION OF UNS GAS, INC. TO REVIEW AND REVISE ITS PURCHASE GAS ADJUSTOR.	DOCKET NO. G-04204A-06-0013
IN THE MATTER OF THE INQUIRY INTO THE PRUDENCE OF THE GAS PROCUREMENT PRACTICES OF UNS GAS, INC.	DOCKET NO. G-04204A-05-0831

SURREBUTTAL

TESTIMONY

OF

STEVEN W. RUBACK

ON BEHALF OF THE

UTILITIES DIVISION STAFF

ARIZONA CORPORATION COMMISSION

APRIL 4, 2007

Q. Please state your name.

A. My name is Steven W. Ruback.

Q. Have you filed direct testimony in this case?

A. Yes, I have.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of D. B. Erdwurm regarding the UNS proposed Throughput Adjustment Mechanism ("TAM") and customer charges.

Q. Mr. Erdwurm on page 15, lines 17 to 27, argues that the "company has a strong incentive to control costs with or without the TAM". Would you please respond?

A. Mr. D. B. Erdwurm supports his argument by noting that the TAM will not recover costs not already included in rates. Mr. Erdwurm treats the issue as either black or white. My point is that any incentives for the Company to control costs will be seriously diluted as a result of the TAM. The TAM recovers the difference in costs that is attributable to deviations from the billing units used to set rates attributable to weather considerations, general economic conditions in the service area and conservation. UNS' proposal would water down the incentive to control costs because any under-recovery will be offset by the operation of the TAM.

Q. Mr. Erdwurm on page 15, lines 25 to 27 argues that the TAM true-up does not provide a guarantee that the company will earn its authorized rate of return". Would you please respond?

A. A true-up reallocates the risk of under recovery of costs from UNS to customers. The effect of any rate design true-up is to provide dollar for dollar cost recovery. The risk of under recovery of costs is eliminated because any recovery shortfall attributable to weather variations is recovered on a dollar for dollar basis via the TAM true-up. Once again, this is not a black or white issue. If the TAM does not provide a guaranteed rate of return, the TAM certainly and substantially reduces the risk of under recovery of costs and, therefore, reallocates the regulatory risk from an opportunity to earn an authorized rate of return to a situation where recovery of the authorized rate of return is practically assured.

Q. Mr. Erdwurm on page 16 lines 9 to 26 argues that the TAM decision in the Southwest Gas Corporation rate case in decision No. 68487 was not denied by the Commission. Would you please respond?

A. This criticism is much to do about nothing. The fact is that Southwest Gas Corporation proposed a revenue decoupling mechanism in its last rate case which was not approved. Instead, the Commission suggested discussions among the stakeholders, but that is all. There was no commitment on behalf of the Commission that a revenue decoupling mechanism would be approved even if the stakeholders held different views. The issue was tabled for future consideration. The revenue decoupling mechanism is not part of Southwest Gas Corporation's approved tariff. I would also point out that the Commission specifically encourages discussions with respect to conservation to the benefit of all stakeholders.

Q. Mr. Erdwurm on page 17, lines 1 to 22, argues that the American Gas Association supports revenue decoupling mechanisms. Are you surprised?

A. No, I am not surprised by AGA's position. The statement made to the Senate Energy and Natural Resources Committee was motivated solely by self interest. The AGA Executive Summary, provided as Exhibit DBE-2, notes that "The American Gas Association represents 200 local energy companies that deliver natural gas to more than 64 million homes, businesses and industries throughout the United States." The AGA is an industry group of local gas distribution utilities. It would be a mistake to assume that the AGA's interests are aligned with those of the Commission and other stakeholders.

Q. Mr. Erdwurm on page 17 line 24 to page 18 line 20, argues that the National Defense Counsel and the American Council for An Energy-Efficient Economy support decoupling. Would you please respond?

A. After reading Exhibit DBE-3 it appears that the National Defense Counsel and the American Council for An Energy-Efficient Economy are primarily interested in conservation and energy efficiency. As noted earlier, UNS' proposal extends to weather and general economic conditions. It should be noted that the Commission had access to the Joint Statement in the Southwest Gas Rate Case as Exhibit No. SMF-2, and still concluded that approval of the decoupling mechanism was not in the public's interest.

Q. Mr. Erdwurm on page 18, line 22, refers to a more recent NARUC resolution supporting decoupling tariffs. Please comment.

A. The November 16, 2005 NARUC Resolution provided as Exhibit DBE-4 is limited to conservation and energy efficiency. UNS' proposal goes much farther by including weather variations and general economic conditions in its proposed revenue decoupling mechanism. The Resolution resolves that NARUC encourages rate design reviews that "will encourage energy conservation and energy efficiency" and should not, in my judgment be interpreted as support for revenue decoupling proposals such as proposed by UNS.

Q. Mr. Erdwurm on page 19, lines 12 to line 15, notes that ten states have adopted decoupling mechanisms. Please comment.

A. An alternative interpretation is that 40 states have not adopted decoupling mechanisms. The regulatory support offered by Mr. Erdwurm shows that states approving revenue decoupling mechanisms are in the minority.

Q. On page 19, lines 1-10, Mr. Erdwurm characterizes the early 1990s economic recession in Maine and how it impacted the TAM-like Electric Revenue Adjustment Mechanism ("ERAM") as something that could not happen with the TAM.

A. The fact that apparently escapes Mr. Erdwurm is that the ERAM, like the TAM, had no adjustments for changes in regional activity. The adoption of the ERAM coincided with a recession that resulted in lower sales levels and substantial revenue deferrals that reached $52 million at the end of 1992. The ERAM was viewed by many as a mechanism that shielded Central Maine Power ("CMP") from the economic impact of the recession rather than furthering the intended energy conservation incentives. CMP's ERAM was terminated on November 30, 1993.

Q. On page 9, line 9 to page 10, line 23, of Mr. Erdwurm's rebuttal testimony, he argues that natural gas distribution system costs are fixed costs largely supported by volumetric rates. Is this a new argument?

A. No. This is not a new argument. The Company's direct testimony includes the same arguments advanced to support higher customer charges.

Q. Even though it may not be a new argument, would you please respond?

A. I do not disagree that natural gas distribution system costs are fixed costs largely supported by volumetric rates. Mr. Erdwurm fails to understand that, according to rate design practice, fixed costs do not have to be recovered with fixed charges. The only jurisdiction that I am familiar with that allows all fixed costs to be recovered from fixed charges is Georgia. Atlanta Gas Light Company has such a Straight-Fixed-Variable rate design, but the Georgia Legislature stripped the Commission of rate design authority and mandated the Straight-Fixed-Variable rate design.

Natural gas distribution systems have long been recognized as fixed costs systems, and Commissions throughout the Country have designed rates which recover some amount of customer costs in a fixed customer charge and the remainder of the revenue requirement from demand charges and volumetric rates. This rate design has been used for all natural gas distribution systems with the exception of Atlanta Gas. This rate design is not limited to natural gas distribution utilities. Electric utilities also routinely recover fixed costs from volumetric charges. The problem that Mr. Erdwurm identifies is an old issue. I disagree that the Company's proposal does not violate long-standing regulatory principles. In my opinion, UNS' customer charge proposals are not consistent with industry rate design standards.

Q. Is cost of service the sole criterion for class revenue requirements and rate design?

A. I take umbrage with his comment that Staff did not consider cost of service principles in arriving at its recommendation. Mr. Erdwurm apparently does not understand that rates are not set by cost of service alone. Cost of service is an important rate design criterion, but not the sole criterion. The results of an allocated cost of service study are the starting point for rate design. Regulators have traditionally used gradualism, value of service, public acceptability and other non-cost of service criteria. Moreover, regulators have not assigned specific weightings to any one criterion, recognizing that rate design is an art, not a strict mathematical exercise without the application of informed judgment.

Q. On page 12, line 18, of Mr. Erdwurm's rebuttal testimony, he argues that telephone, cable television and internet service have moved away from volumetric rates. Is this relevant?

A. No. There are important distinctions to be made. First, the telephone industry is highly competitive and rates should reflect competitive considerations, not cost of service considerations. Internet service is also competitive, and price must be competitive with other service suppliers regardless of cost. Cable television tends to have a monopoly in a specific geographic area, but cable television is not an essential utility service.

Q. Does that conclude your surrebuttal testimony?

A. Yes.

BEFORE THE ARIZONA CORPORATION COMMISSION

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

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-06-0463
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SURREBUTTAL

TESTIMONY

OF

JERRY E. MENDL

ON BEHALF OF THE

UTILITIES DIVISION STAFF

ARIZONA CORPORATION COMMISSION

APRIL 4, 2007

Q. Please state your name and business address.

A. My name is Jerry E. Mendl. I am the President of MSB Energy Associates, Inc. ("MSB"). My business address is MSB Energy Associates, Inc., 7507 Hubbard Avenue, Middleton, Wisconsin 53562.

Q. Are you the same Jerry E. Mendl that filed Direct Testimony in this case?

A. Yes.

Q. What is the purpose of your Surrebuttal Testimony?

A. The purpose of my testimony is to provide a response to the Rebuttal Testimony filed by UNS Gas, Inc. ("UNS Gas"), and specifically Mr. James Pignatelli and Mr. David Hutchens. I disagree with their request that the Commission approve UNS Gas' Price Stabilization Policy.

Q. In his Rebuttal Testimony, Mr. Hutchens said that your concern that UNS Gas' price Stabilization Policy would allow the Company to use "options and collars which could add to the cost without commensurate benefit to the ratepayers" is unfounded. What is your reaction?

A. The fact that UNS Gas has never used call options and collars does not obviate the fact that the Stabilization Policy for which UNS Gas sought approval explicitly allows the Company to use them. If the Commission were to approve the Stabilization Policy, and the Company elected to use a hedging mechanism that added to the cost without commensurate benefit to the ratepayers, the Company would nonetheless be acting in accordance with the Commission-approved policy. Even if it could be shown that the Company's use of the costly hedging mechanism was imprudent, it would dramatically change the burden of proof, and insulate the Company, because its use was consistent with an approved policy. The Commission should not approve a Stabilization Policy that provides the Company with the flexibility to take imprudent actions while limiting the ability of the Commission and interveners to hold the Company accountable.

Q. **Mr. Hutchens offered that the Company would remove from its Stabilization Policy options that could incur substantial costs/premiums. Is that a solution to your concerns about approving the Stabilization Policy?**

A. No. My concern is maintaining accountability while maintaining flexibility to respond to volatile and changing markets. Removing call options and collars that add to the cost without commensurate benefit to the ratepayers from the Stabilization Policy would be good. However, as I indicated in my Direct Testimony, there may be circumstances under which collars and call options may provide benefit to ratepayers commensurate with the cost. Removing these categorically would not be reasonable.

Mr. Hutchens indicated that the Company includes these secondary hedging mechanisms in its Stabilization Policy to maintain flexibility. I do not take issue with the Company maintaining flexibility. Maintaining flexibility is another way of saying that the Company retains the prerogative to take appropriate action. When the Company retains flexibility and management prerogative, it must be held accountable for its exercise of that prerogative. The Company's initial request for approval of the Stabilization Policy retains the Company's management prerogative but reduces its accountability. Thus I did not recommend that the Commission approve the Stabilization Policy.

Mr, Hutchens' offer to limit the Company's prerogative by removing call options and collars from hedging mechanisms allowable under the Stabilization Policy would clearly avoid circumstances where those mechanisms increase the cost without commensurate ratepayer benefits. However, the categorical exclusion of call options and collars also eliminates strategies that may in some circumstances be appropriate. Approval of a Stabilization Policy that categorically excludes hedging mechanisms (including those that could be potentially useful under some circumstances) does not hold the Company accountable for pursuing those mechanisms when they are in the ratepayers' interests. Thus I cannot support Mr. Hutchens' proposal to approve the Stabilization Policy as modified to exclude call options and collars.

Q. What is the solution to your concern about approving the Stabilization Policy?

A. My solution is to not approve the Stabilization Policy, either including or excluding the call option and collar hedging mechanisms, because doing so decreases the accountability of UNS Gas for its actions.

There is no disagreement that gas markets and prices have been volatile, and that they are likely to continue to be volatile. The Stabilization Policy is a reasonable internal mechanism for UNS Gas to employ to monitor and control the impacts of gas price volatility as long as it is continuously updated and adjusted for changing market conditions. It would not be reasonable for UNS Gas to combat the impacts of a dynamic market using a static approach.

The disagreement arises when UNS Gas seeks Commission approval of the Stabilization Policy. Commission approval fixes the Stabilization Policy until the Commission approves a revised policy. The Company intends to annually update the Stabilization Policy, meaning that a Commission approval would be static for at least a year, much longer than appropriate in the dynamic market. In a volatile market, the utility must be held accountable for reacting as quickly as possible to changing conditions. Approval of the Stabilization Policy as UNS Gas proposed actually creates a harmful safe harbor in which UNS Gas is less likely to react quickly to changing market conditions because it faces greater risk in deviating from a Commission-approved policy, even if deviating would better serve ratepayer interests.

Q. Mr. Hutchens testifies that your concern that the approval of the Stabilization Policy would put the Company on autopilot is inconsistent with the Company's behavior and the policy itself. Do you agree?

A. No. My point is that if the Commission approves the Stabilization Policy, actions consistent with the approved policy will be given a presumption of prudence. That is clearly the Company's intention in pursuing the approval of the Stabilization Policy, confirmed in Mr. Hutchens' testimony that "it would not be acceptable for the Company to implement a procurement policy that could later be second-guessed." (Rebuttal page 11, lines 23-25)

Once approved, the policy has a presumption of prudence. The Company perceives more risk by deviating from the approved policy than by staying with the policy longer than it should in light of changed conditions. Approving the proposed Stabilization Policy does not protect the ratepayers, and in fact harms them if the Company reacts more slowly to changing market conditions. However, approving the proposed Stabilization Policy would insulate UNS Gas from cost recovery risks associated with gas procurement.

Q. Is your concern inconsistent with the Company's behavior and the policy itself as Mr. Hutchens alleges?

A. No. The annual reviews and updates about which Mr. Hutchens testified are too infrequent in volatile markets. Mr. Hutchens indicates, as does the Stabilization Policy

(Risk Management Committee meets quarterly), that reviews occur more frequently. However, the Company reviews do not change the Commission-approved policy - that takes a Commission action. Until the approved policy is changed, the Company has strong incentive to act in accordance with the Commission-approved policy. Thus, Company reviews, even if they take place quarterly or more frequently, do not equate to changes in Company actions or to changes in the Commission-approved policy.

Mr. Hutchens does not take his argument for a Commission approval of the Stabilization Policy far enough. Namely, if there was a Commission-approved policy, how would the Commission approval process be updated frequently enough to respond to the volatile natural gas markets and other changing conditions?

Q. Are you suggesting that the Commission should engage in these quarterly or more frequent stabilization policy reviews and updates?

A. No. I think that would be burdensome and procedurally unworkable. Since each updated approval would constitute a new presumption of prudence that could affect the future rights of the interveners, these updating processes should involve interveners and a record, and as a result would be cumbersome. My recommendation is that the Commission not approve the Stabilization Policy.

If the Commission chooses to approve a Stabilization Policy, my recommendation is that it should condition the approval to be valid only as long as the conditions underlying the policy do not change. That provides guidance to UNS Gas, but recognizes that conditions may change and holds UNS Gas accountable for responding promptly to those changes.

Q. Do you agree with Mr. Hutchens' Rebuttal Testimony on page 11, line 23, that "it would not be acceptable for the Company to implement a procurement policy that could later be second-guessed?"

A. No. From the Commission and ratepayer perspectives, it is appropriate that UNS Gas be held accountable for its gas purchases. It is not appropriate for UNS Gas to create a procurement policy that precludes interveners and the Commission from questioning whether UNS Gas was reasonably procuring gas in light of changing conditions.

Q. Does the new UNS Gas, Inc. Price Stabilization Policy effective January 1, 2007, attached to Mr. Hutchens' Rebuttal Testimony as Exhibit DGH-4, reflect his offer to remove from its Stabilization Policy options that could incur substantial costs/premiums?

A. No. The new Price Stabilization Policy is the same as the Price Stabilization Policy UNS Gas adopted effective January 1, 2005 and 2006, in that all three policies include the use of call options and collars as secondary methods to achieve price stabilization.

Q. Does this conclude your testimony?

A. Yes it does.