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BEFORE THE ARIZONA CORPORATION COMMISSION

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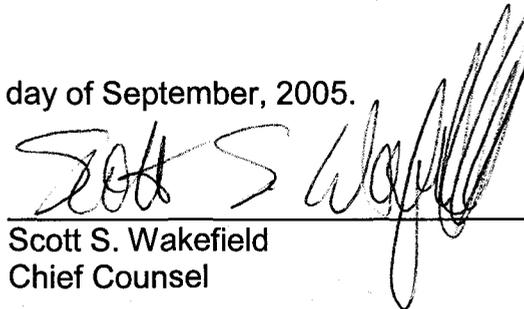
11 IN THE MATTER OF THE APPLICATION OF
12 SOUTHWEST GAS CORPORATION FOR
13 THE ESTABLISHMENT OF JUST AND
14 REASONABLE RATES AND CHARGES
15 DESIGNED TO REALIZE A REASONABLE
16 RATE OF RETURN ON THE FAIR VALUE
17 OF THE PROPERTIES OF SOUTHWEST
18 GAS CORPORATION DEVOTED TO ITS
19 OPERATIONS THROUGHOUT THE STATE
20 OF ARIZONA.

Docket No. G-01551A-04-0876

NOTICE OF FILING

21 The Residential Utility Consumer Office ("RUCO") hereby provides notice of filing the
22 Surrebuttal Testimony of Marylee Diaz Cortez, William A. Rigsby and Rodney L. Moore in the
23 above-referenced matter.

24 RESPECTFULLY SUBMITTED this 13th day of September, 2005.


Scott S. Wakefield
Chief Counsel

AN ORIGINAL AND THIRTEEN COPIES
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of September, 2005 with:

Docket Control
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SOUTHWEST GAS CORPORATION

DOCKET NO. G-01551A-04-0876

SURREBUTTAL TESTIMONY

OF

MARYLEE DIAZ CORTEZ

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

SEPTEMBER 13, 2005

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1 **INTRODUCTION**

2 Q. Please state your name for the record.

3 A. My name is Marylee Diaz Cortez.

4

5 Q. Have you previously filed testimony in this docket?

6 A. Yes. I filed direct testimony in this docket on November 18, 2004.

7

8 Q. What is the purpose of your surrebuttal testimony?

9 A. The purpose of my surrebuttal testimony is to respond to various
10 arguments and opinions SWG witnesses have set forth in their rebuttal
11 testimony, as well as identify certain revisions RUCO has made to its
12 direct filing.

13

14 Q. Please summarize the issues you will address in your surrebuttal
15 testimony.

16 A. My surrebuttal testimony will address the following:

17

18 * Revisions to RUCO direct filing

19 * Conservation Margin Tracker

20 * Rate Design

21 * Demand Side Management

22 * Pipe Replacement

23 * Compliance with Sarbanes Oxley Act

- 1 * Transmission Integrity Management Plan
- 2 * Management Incentive Plan

3

4 **RUCO REVISIONS**

5 Q. Have you made any revisions to your recommended adjustments as filed
6 in your direct testimony?

7 A. Yes. I have revised two of my recommended adjustments. These
8 revisions pertain to my Rate Base Adjustment # 4 - Miscellaneous
9 Intangible Plant and Rate Base Adjustment #6 - Working Capital.

10

11 Q. Please discuss your revisions to Rate Base Adjustment #4.

12 A. I have corrected a typographical error on Schedule MDC-2, line 19,
13 column (c). This correction has the effect of increasing the accumulated
14 depreciation portion of the adjustment by \$300,000. I have also made a
15 correction to Schedule RLM-2, page 2, column (J). RUCO's direct filing
16 reflected the adjustment in column (J) net of accumulated depreciation,
17 when in fact the adjustment should have been reflected at its gross value
18 since the accumulated depreciation portion of Rate Base Adjustment #4 is
19 already reflected in column (L).

20

21

22

1 Q. Please discuss your revisions to Rate Base Adjustment #6 - Working
2 Capital.

3 A. I have revised my calculation of SWG's income tax lag on Schedule MDC-
4 3, page 3 to reflect the recent change in the IRS requirements for
5 estimated tax payments.

6

7 Q. What effect do these revisions have on RUCO's recommended revenue
8 requirement?

9 A. RUCO's other revenue requirements witness Rodney Moore has also
10 made certain revisions to some of his adjustments. These revisions are
11 discussed in his surrebuttal testimony, as well as the overall cumulative
12 effect that RUCO's revisions have on revenue requirements.

13

14 **CONSERVATION MARGIN TRACKER**

15 Q. Have you reviewed the Company's rebuttal testimony regarding the CMT?

16 A. Yes. The Company continues to maintain that its proposed CMT is a vital
17 piece of its overall rate request, and rebuts the Staff and RUCO
18 recommendation to deny the CMT.

19

20 Q. What specific RUCO arguments does the Company rebut?

21 A. The Company provides rebuttal comments to the following RUCO
22 arguments:

- 1 1) The proposed CMT is biased since it would only be applicable to
2 residential ratepayers;
- 3 2) The proposed CMT will require ratepayers to pay for therms it does
4 not consume;
- 5 3) The Nevada Commission also rejected the margin decoupling
6 mechanism that was proposed in SWG's last rate case;
- 7 4) The issues of declining average usage, conservation, and fixed vs.
8 variable costs all can be addressed without resorting to extreme
9 measures such as the CMT.

10

11 Q. Please respond to SWG's rebuttal comments regarding RUCO's position
12 that the proposed CMT is biased because it would only apply to residential
13 customers.

14 A. The Company first argues that it is appropriate to apply the CMT to only
15 the residential class because it is the largest class and has experienced
16 the largest decline in average usage when compared to the other classes.

17

18 Q. Is this a valid reason for applying the proposed CMT solely to the
19 residential class?

20 A. No. It is biased to single out the residential class for this take or pay
21 mechanism simply because they are the largest class and the class that
22 has historically conserved the most. In effect, the CMT as proposed

1 would have residential ratepayers pay a penalty for conserving and hold
2 all other classes harmless.

3

4 Q. Please respond to SWG's rebuttal comments regarding RUCO's position
5 that the CMT will require residential customers to pay for therms they
6 haven't used.

7 A. The Company claims RUCO's position is incorrect because customers will
8 not be required to pay the *cost of gas* for the therms they don't use. This
9 is true - customers do not pay the actual cost of the gas commodity itself,
10 if not consumed; however the CMT does require to customers to pay the
11 margin commodity cost of each therm not used. Since SWG's total
12 commodity rate is approximately 50% margin and 50% gas cost - the CMT
13 will in fact require payment for therms not used.

14

15 Q. Have you reviewed SWG's rebuttal arguments to your observation that the
16 Nevada Commission rejected SWG's request for a CMT mechanism in
17 that jurisdiction?

18 A. Yes. The Company argues that while the Nevada Commission did in fact
19 reject a CMT mechanism in its recent rate case, the Nevada Commission
20 did acknowledge the issue of declining usage by authorizing a rate design
21 that allowed SWG to recover a significant portion of its fixed costs through
22 the first consumption block. The Company claims that RUCO however

1 has proposed a rate design that requires "a even greater amount of its
2 margin recovery in the volumetric portion of its rates."

3

4 Q. Is this true?

5 A. No. In fact, the opposite is true. RUCO's recommended rate design shifts
6 a significant amount of revenue recovery from the commodity charge to
7 the fixed monthly service charge for both the residential and commercial
8 classes. At page 33 of my direct testimony I discuss the modifications that
9 RUCO has made to SWG's existing rate design, one of which is to shift
10 revenue recovery from commodity rates to the fixed monthly service
11 charge. The chart below compares the percentage of fix cost recovery
12 under existing rates vs. under RUCO's proposed rates:

	<u>Existing Rates</u>	<u>RUCO Rates</u>
14 Residential Fixed	37.42%	41.16%
15 Commercial Fixed	24.65%	32.05%
16 Total Fixed	33.23%	38.17%

17

18 This shift in commodity revenue to fixed revenue lessens SWG's risk of
19 not recovering its revenue requirement when usage is declining.

20

21

22

1 Q. How does SWG respond to your direct testimony at page 31 where you
2 state that it is not necessary to resort to extreme and unprecedented
3 measures such as the CMT to answer the Company's revenue recovery
4 concerns?

5 A. The Company states at page 13 of Edward Giesecking's surrebuttal
6 testimony that there are other alternatives to the CMT that would address
7 SWG's fixed cost recovery concern. SWG suggests that the portion of
8 costs recovered through the monthly service charge could be increased
9 and a larger portion of the commodity charge could be assigned to the first
10 block.

11
12 Q. Do you agree that these are appropriate methods of addressing the
13 Company's fixed cost recovery concerns?

14 A. Yes, and interestingly enough, these are the exact two modifications that
15 RUCO has recommended in its proposed rates. As discussed earlier, I
16 have shifted revenue from the existing commodity rates to the fixed
17 monthly service charge and flattened the commodity rate to one block so
18 that all commodity revenue recovery will be realized in the first block.
19 Thus, RUCO's recommended rate design adheres to SWG's proposed
20 alternatives to the CMT.

21
22

1 Q. Why then does the Company continue to oppose your recommended rate
2 design?

3 A. I do not know, since RUCO's recommended rate design comports with the
4 alternatives suggested by SWG in its surrebuttal testimony.

5
6 Q. Do any of the Company's rebuttal comments change your position on the
7 proposed CMT as set forth in your direct testimony?

8 A. No. The Company has not presented any new arguments or evidence
9 that would cause RUCO to support such a mechanism.

10 **RATE DESIGN**

11 Q. Have you reviewed SWG's rebuttal testimony regarding rate design?

12 A. Yes. SWG witness Brooks Congdon provides the rebuttal testimony
13 regarding rate design.

14
15 Q. Are there any areas of agreement between the Company and RUCO
16 regarding rate design?

17 A. Yes. RUCO and the Company are in agreement regarding the following
18 aspects of SWG's proposed rate design:

- 19 * Implementation of a new multi-family rate schedule
- 20 * Modification of the low-income rate schedule to year-round
- 21 * Elimination of rate schedule G-15
- 22 * Modifications to sub-classes within General Service

23

1 Q. Please discuss the Company's rebuttal comments regarding RUCO's
2 proposed allocation of margin rates.

3 A. The Company claims that RUCO's proposed rate design shifts
4 approximately \$10 million of SWG's proposed margin from residential to
5 general service customers and that RUCO's imputed billing determinants
6 are improperly allocated.

7
8 Q. Please address these claims.

9 A. SWG's first claim has no relevance. SWG's proposed rates do not exist
10 and at this time are merely a request. Since neither residential or non-
11 residential customers are paying the proposed rates it would be
12 impossible to shift revenue that does not exist. What is relevant is that
13 RUCO's proposed rate design leaves intact the existing allocation of
14 revenue between residential and non-residential rate classes. Current
15 rates generate 67.16% of revenues from the residential class and RUCO's
16 proposed rates also generate 67.16% of revenues from the residential
17 class. The only shifting of revenue RUCO has proposed is from
18 commodity rates *within* each class to the fixed monthly charge, which was
19 done in response to SWG's concerns regarding fixed vs. variable costs.

20

21 The Company's second claim regarding RUCO's imputed billing
22 determinants is discussed in depth in the surrebuttal testimony of Rodney
23 Moore.

1 **DEMAND SIDE MANAGEMENT PROGRAMS**

2 Q. Have you reviewed the Company's rebuttal testimony regarding Demand
3 Side Management?

4 A. Yes. The Company states that it generally supports RUCO's
5 recommendations regarding DSM programs and funding. SWG agrees
6 with a collaborative process for the development, administration, and
7 performance assessment of the DSM programs.

8

9 Q. Does SWG have any negative reactions to RUCO's DSM
10 recommendations?

11 A. No, not per se. However, the Company's rebuttal does discuss an
12 "inherent financial disincentive" it has to aggressively promote energy
13 efficiency programs and argues that its proposed CMT mechanism would
14 mitigate this financial disincentive.

15

16 Q. Is it appropriate to allow SWG to implement a mechanism that would
17 require customers to pay the margin cost of terms they don't use so as to
18 incent SWG to promote energy efficiency?

19 A. No. The fact that the programs will be funded by ratepayers and approved
20 by the Commission should provide adequate incentive for SWG to
21 promote energy efficiency. Further, like any changes that occur in
22 revenues, expenses, investment levels, and cost of capital, changes in

1 customer usage can be addressed in a rate case that at the same time
2 considers all ratemaking elements.

3

4 **RATE BASE**

5 **Rate Base Adjustment # 2 - Pipe Replacement**

6 Q. Please discuss the Company's rebuttal comments concerning your pipe
7 replacement adjustment.

8 A. In the rebuttal testimony of Robert Mashas, the Company argues its
9 proposed change in the required percentage write offs of defective pipe
10 should be retroactively applied to all pipe replacements made subsequent
11 to the end of the test year (December 31, 2000) in the last case.

12

13 Q. What is the Company's rationale for arguing for retroactive application of
14 its proposed pipe replacement adjustment?

15 A. The Company argues that the Commission has the authority in a current
16 rate case to determine the ratemaking treatment of any asset that is put in
17 place during the period since the last rate case.

18

19 Q. Do you agree?

20 A. Yes. To the extent that a utility puts in place assets during the normal
21 course of business, the Commission would typically look at those assets in
22 the utility's next rate case and determine the appropriate ratemaking
23 treatment. However, the typical treatment of plant additions between rate

1 cases is not applicable to the pipe replacements at issue here. More than
2 ten years ago in Decision No. 58693 the Commission determined the
3 ratemaking treatment for the specific pipe replacements that are at issue
4 here. While the Company is free to request that the Commission modify
5 the requirements of Decision No. 58693 on a going forward basis (RUCO
6 supports this prospective modification), the application of such a
7 modification to a period prior to the Commission's adoption would result in
8 retroactive ratemaking.

9

10 **OPERATING INCOME**

11 **Operating Adjustment #8 - Compliance with Sarbanes Oxley Act**

12 Q. Please discuss the Company's rebuttal comments concerning your
13 Sarbanes Oxley adjustment.

14 A. SWG witness Randi Aldridge testifies that she agrees with RUCO's
15 Sarbanes Oxley adjustment. However, she does not agree with RUCO
16 that there is a double count in the Company's calculation of the Sarbanes
17 Oxley implementation costs.

18

19 Q. Does the Company explain why it believes it has not double counted some
20 of the test year Sarbanes Oxley costs?

21 A. No. The testimony of Ms. Aldridge merely declares there is no double
22 count.

23

1 Q. Does it continue to be your position that the Company has double counted
2 some of the test year Sarbanes Oxley costs?

3 A. Yes. Specifically, the Jefferson Wells invoices and the Ernst & Young
4 invoices identified in the rebuttal testimony of Randi Aldridge, Exhibit No.
5 RLA-2, page 2, lines 1 through 5 have been double counted in the
6 Company's rate application. These invoices are included once in the test
7 year recorded expenses in accounts 921 and 923. The same invoices are
8 reflected again as part of the Company's requested deferrals of Sarbanes
9 Oxley expenses.

10

11 **Operating Adjustment #12 - Transmission Integrity Management Program**

12 Q. What position does the Company take regarding your recommended
13 adjustment for the Transmission Integrity Management Program (TRIMP)?

14 A. Company witness Robert Mashas states in his rebuttal testimony that
15 RUCO's recommended TRIMP adjustment is reasonable and that SWG
16 accepts both the amount of the adjustment as well as the seven year
17 amortization proposed by RUCO.

18

19

20

21

22

23

1 **Operating Adjustment #20 - Management Incentive Plan**

2 Q. Please discuss the Company's rebuttal comments concerning your
3 recommended disallowance of 67% of the cost of SWG's Management
4 Incentive Plan (MIP).

5 A. The Company argues that each of the factors on which the MIP is based
6 are in the interest of both stockholders *and* ratepayers, and therefore
7 concludes that the cost of the MIP should be allocated 100% to
8 ratepayers.

9
10 Q. What arguments does the Company present in support of this conclusion?

11 A. First, SWG argues that an improved customer to employee ratio benefits
12 customers by increasing productivity, which in turn reduces costs.
13 Second, SWG argues that achievement of the ROE targets and the
14 success of the Company's management in controlling costs benefits
15 ratepayers through an improved capital structure and a lowering of its cost
16 of capital.

17
18 Q. Do you believe these arguments justify allocation of 100% of the MIP cost
19 to ratepayers?

20 A. No. First, any gains in productivity or cost containment measures go
21 straight to shareholders between rate cases. Further, I have yet to see a
22 SWG rate case filing asking for a rate *decrease* as a result of successful
23 productivity gains and cost containment efforts. Second, while an

1 improved capital structure is certainly desirable and could positively
2 impact the Company's cost of capital, historically this has not been the
3 result.

4
5 Q. Please explain.

6 A. SWG has repeatedly paid annual MIP rewards for ROE achievement yet
7 contrary to the Company's arguments in its rebuttal SWG's capital
8 structure has not improved. The chart below shows SWG's actual capital
9 structure for the last six years.

	<u>Equity</u>	<u>Pref. Stock</u>	<u>Debt</u>	
10				
11	1999	35.8%	4.3%	59.8%
12	2000	36.2%	4.1%	59.7%
13	2001	33.0%	3.5%	63.2%
14	2002	34.3%	3.5%	62.2%
15	2003	34.1%	5.4%	60.5%
16	2004	35.9%	5.0%	59.1%

17
18 At first blush SWG's rebuttal argument regarding the benefits that result
19 from the achievement of the MIP's ROE goals may appear beguiling,
20 however these arguments have no basis in reality. The MIP ROE rewards
21 have been paid and there has been no improvement in the capital
22 structure nor material change in the cost of debt since the Company's last
23 rate case.

1 As just discussed, the arguments presented in the Company's rebuttal
2 testimony do not support a conclusion that ratepayers should bear 100%
3 of the cost of the MIP. Rather, the Company's arguments further support
4 RUCO's position that costs should be shared 67%/33% between
5 shareholders and ratepayers.

6

7 Q. Does this conclude your surrebuttal testimony?

8 A. Yes.

9

10

11

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19

SOUTHWEST GAS CORPORATION
TEST YEAR ENDED AUGUST 31, 2004
RATE BASE ADJUSTMENT #5 - WORKING CAPITAL

DOCKET NO. G-0155A-04-0876
SCHEDULE MDC-3
PAGE 1 OF 5

SURREBUTTAL

<u>LINE</u> <u>NO.</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>REFERENCE</u>
1	MATERIALS & SUPPLIES PER SWG	\$9,222,489	SCH. B-5, PG. 3
2	MATERIALS & SUPPLIES PER RUCO	9,222,489	SCH. B-5, PG. 3
3	ADJUSTMENT	<u>0</u>	LINE 2 - LINE 1
4	PREPAYMENTS PER SWG	2,740,815	SCH. B-5, PG. 4
5	PREPAYMENTS PER RUCO	3,366,772	SCH. MDC-3, Pg 5
6	ADJUSTMENT	<u>625,957</u>	LINE 5 - LINE 4
7	CASH WORKING CAPITAL PER SWG	(11,082,156)	SCH. B-5, PG. 2
8	CASH WORKING CAPITAL PER RUCO	(13,632,469)	SCHEDULE MDC-3, Pg 2
9	ADJUSTMENT	<u>(2,550,313)</u>	LINE 8 - LINE 7
10	TOTAL ADJUSTMENT	<u>(\$1,924,355)</u>	SUM OF LINES 3, 6 & 9

SURREBUTTAL

LINE NO.	DESCRIPTION	(A) EXPENSE PER COMPANY	(B) RUCO ADJUSTMENTS	(C) RUCO ADJUSTED	(D) (LEAD)/LAG DAYS	(E) DOLLAR DAYS
1	COST OF GAS	\$298,559,015		298,559,015	43.78	13,070,913,677
2	LABOR COST	107,117,974	(4,234,725)	102,883,249	14.01	1,441,394,319
3	UNCOLLECTIBLE	1,498,151		1,498,151	120.00	179,778,120
4	OTHER O&M	45,068,143	(6,788,052)	38,280,091	31.05	1,188,451,696
5	INTEREST	40,521,530	(4,015,857)	36,505,673	87.34	3,188,405,450
6	TAXES OTHER THAN INCOME	33,455,124	(1,267,863)	32,187,261	206.50	6,646,669,500
7	INCOME TAXES	18,192,843	9,735,438	27,928,281	37.50	1,047,310,548
8	TOTAL OPERATING EXPENSES	544,412,780		537,841,721		26,762,923,310
9	EXPENSE LAG				49.76	
10	REVENUE LAG				40.62	
11	NET LAG					(9.14)
12	CASH WORKING CAPITAL					

(\$13,632,469)

SURREBUTTAL

<u>LINE NO.</u>	<u>MID-POINT OF SERVICE PERIOD</u>	<u>PAYMENT DATE</u>	<u>PERCENT PAYMENT</u>	<u>(LEAD)/LAG DAYS</u>	<u>DOLLAR DAYS</u>
1	7/1/2003	4/15/2003	25.00%	(77)	(19.25)
2	7/1/2003	6/15/2003	25.00%	(16)	(4.00)
3	7/1/2003	9/15/2003	25.00%	76	19.00
4	7/1/2003	12/15/2003	25.00%	167	41.75
5	7/1/2003	3/15/2004	0.00%	258	0.00
6	TOTALS		100.00%		37.50
7	INCOME TAX LAG			37.50	

SURREBUTTAL

Line No.	Month (a)	Cost (b)	Lag Days (c)	Dollar Days (d)
1	September 2003	\$2,065,502	27.14	56,065,384
2	October 2003	2,281,209	24.19	55,183,873
3	November 2003	2,122,438	14.51	30,806,560
4	December 2003	2,799,950	19.45	54,459,832
5	January 2004	1,619,271	76.74	124,263,026
6	February 2004	1,310,710	46.31	60,700,671
7	March 2004	2,873,308	32.15	92,368,700
8	April 2004	1,937,390	17.71	34,308,766
9	May 2004	1,865,981	24.72	46,127,781
10	June 2004	2,515,719	48.84	122,871,846
11	July 2004	3,728,708	22.06	82,248,601
12	August 2004	2,172,721	40.47	87,936,239
13	Total	<u>\$27,292,907</u>	<u>31.05</u>	<u>847,341,280</u>

SURREBUTTAL

LINE NO.	MONTH	(A) BALANCE	(B) DEBITS	(C) CREDITS	(D) ADJUSTED BALANCE
1	AUGUST	\$5,130,082			5,130,082
2	SEPTEMBER	4,798,680			4,798,680
3	OCTOBER	3,784,576	66,608	0	3,851,184
4	NOVEMBER	3,956,561	12,000	5,551	4,029,618
5	DECEMBER	5,938,689	119,223	6,551	6,124,419
6	JANUARY	5,258,062	697,011	16,486	6,124,317
7	FEBRUARY	4,984,761	958,218	74,570	6,734,664
8	MARCH	4,810,591	295,000	154,422	6,701,072
9	APRIL	4,204,986	408,228	179,005	6,324,690
10	MAY	4,296,987	153,500	213,024	6,357,167
11	JUNE	3,639,813	27,754	225,816	5,501,931
12	JULY	3,377,801	105,000	228,129	5,116,791
13	AUGUST	<u>7,698,845</u>	17,007	236,879	<u>9,217,963</u>
14	TOTAL	61,880,434			76,012,577
15	13 MONTH AVERAGE	\$4,760,033		57.58%	\$3,366,772

REFERENCES

COLUMN (A): SCH. B-5, PG. 4

COLUMN (B): SCH. B-5 W/P SHEET 30-59

COLUMN (C): COLUMN (B) PRIOR MOS. ACCRUALS / 12 MONTHS

COLUMN (D): PRIOR MONTH COLUMN (D) + CURRENT MONTH COLUMN (B) - CURRENT MONTH COLUMN (C) + CURRENT MONTH COLUMN (A) - PRIOR MONTH COLUMN (A)

SOUTHWEST GAS CORPORATION

DOCKET NO. G-01551A-04-0876

SURREBUTTAL TESTIMONY

OF

WILLIAM A. RIGSBY

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

SEPTEMBER 13, 2005

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5		

1 **INTRODUCTION**

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

3 A. My name is William A. Rigsby. I am a Public Utilities Analyst V employed
4 by the Residential Utility Consumer Office ("RUCO") located at 1110 W.
5 Washington, Suite 220, Phoenix, Arizona 85007.

6

7 Q. Have you filed any prior testimony in this case on behalf of RUCO?

8 A. Yes, on July 26, 2005, I filed direct testimony with the Arizona Corporation
9 Commission ("ACC" or "Commission"). My direct testimony addressed the
10 cost of capital issues that were raised in Southwest Gas Corporation's
11 ("SWG" or "Company") application requesting a permanent rate increase
12 ("Application") based on a test year ended August 31, 2004 ("Test Year")
13 and presented RUCO's recommended hypothetical capital structure in
14 addition to RUCO's recommended returns on long-term debt and equity.

15

16 Q. Please state the purpose of your testimony.

17 A. The purpose of my testimony is to respond to SWG's rebuttal testimony on
18 RUCO's recommended rate of return on invested capital (which includes
19 RUCO's recommended cost of debt, cost of preferred equity and cost of
20 common equity) for the Company's natural gas distribution operations in
21 Arizona.

22

23

1 Q. How is your surrebuttal testimony organized?

2 A. My surrebuttal testimony contains four parts: the introduction that I have
3 just presented; a summary of SWG's rebuttal testimony; a section on the
4 capital structure and cost of debt issues associated with the case; and a
5 section on the cost of equity capital issues associated with the case.

6

7 **SUMMARY OF SOUTHWEST GAS' REBUTTAL TESTIMONY**

8 Q. Have you reviewed the rebuttal testimony of Company witnesses
9 Theodore K. Wood and Frank J. Hanley?

10 A. Yes. I have reviewed the rebuttal testimony, on cost of capital issues, filed
11 by the aforementioned Company witnesses on August 23, 2005.

12

13 Q. Please summarize the testimony filed by Company witness Wood.

14 A. Mr. Wood's rebuttal testimony largely concentrates on the hypothetical
15 capital structures recommended by the Company, ACC Staff cost of
16 capital consultant Stephen G. Hill and myself. Mr. Wood also compares
17 and comments on the overall rate of return recommendations being made
18 by the Company, ACC Staff and RUCO. Mr. Wood also takes issue with
19 the cost of common equity being recommended by Mr. Hill and myself
20 stating that our respective recommended costs of common equity of 9.50
21 percent and 10.15 percent are too low.

22

23

1 Q. Please summarize the testimony filed by Company witness Hanley.

2 A. Mr. Hanley's rebuttal testimony focuses entirely on the cost of common
3 equity recommendations of ACC Staff and RUCO. Mr. Hanley is critical of
4 Mr. Hill and myself on our reliance on the discounted cash flow ("DCF")
5 model and the manner in which Mr. Hill and myself arrived at our DCF
6 growth estimates. This includes our reliance on the assumption that a
7 utility's market to book ratio will move in the direction of 1.0 if regulators
8 set a utility's rate of return at a level that is equal to the utility's cost of
9 capital and our reliance on the sustainable growth concept that is
10 expressed in the growth component of the DCF model. Mr. Hanley also
11 takes issue with the inputs used in Mr. Hill's and my capital asset pricing
12 model ("CAPM") analyses and the use of a geometric mean in the
13 calculation of the return on the market. Mr. Hanley is also critical of the
14 position that both ACC Staff and RUCO have taken in regard to the
15 Company-proposed conservation margin tracker ("CMT") mechanism.

16

17 **CAPITAL STRUCTURE AND WEIGHTED COST OF DEBT**

18 Q. Has RUCO made any changes to its recommended hypothetical capital
19 structure based on the rebuttal testimony of Mr. Wood or the direct
20 testimony of Mr. Hill?

21 A. No. RUCO has not made any changes to its recommended hypothetical
22 capital structure.

23

1 Q. Briefly summarize the positions of the parties in the case in regard to
2 capital structure.

3 A. Both RUCO and the Company are recommending identical hypothetical
4 capital structures comprised of 53 percent debt, 5 percent preferred equity
5 and 42 percent common equity. RUCO and the Company are also in
6 agreement on the costs of debt and preferred equity (i.e. 7.49 percent and
7 8.20 percent respectively).

8
9 ACC Staff consultant Hill is recommending a slightly different hypothetical
10 structure comprised of 55 percent debt, 5 percent preferred equity, and 40
11 percent common equity. Mr. Hill is in agreement with both RUCO and
12 SWG in regard to his recommended cost of preferred equity of 8.20
13 percent but is recommending a slightly higher (by 12 basis points)
14 weighted cost of debt of 7.61 percent.

15
16 Q. What is the reason for the difference in the 7.61 percent weighted cost of
17 debt being recommended by Mr. Hill and the 7.49 percent weighted cost
18 of debt that you and the Company are recommending?

19 A. Mr. Hill obtained his weighted cost of debt from information provided in
20 data request Staff-SH-12-2. His recommended 7.61 percent weighted
21 cost of debt was derived from the levels of SWG debt that existed on
22 March 31, 2005, and is comprised of \$679,050,093 in fixed rate debt with
23 an effective cost rate of 8.20 percent and a term facility of \$99,371,603

1 with an effective rate of 3.54 percent. Based on information contained in
2 data request Staff-SH-12-1, the Company's and my 7.49 percent weighted
3 cost of debt is based on levels of SWG debt that existed as late as
4 September 30, 2004 (one month after the Test Year), and was comprised
5 of \$679,050,093 in fixed rate debt with an effective cost rate of 8.20
6 percent and a term facility of \$99,365,265 with an effective rate of 2.63
7 percent.

8
9 Q. Why have you decided not to make any changes to your recommended
10 cost of debt?

11 A. My recommended 7.49 percent cost of debt is more representative of the
12 level of debt that was used to finance the Company's assets that were
13 booked at the end of the Test Year (i.e. August 31, 2004).

14
15 Q. What would the Company's weighted cost of capital be if your
16 recommended cost of debt and common equity were substituted into Mr.
17 Hill's recommended capital structure?

18 A. Substituting my recommended costs of debt and common equity into Mr.
19 Hill's recommended hypothetical capital structure would produce a
20 weighted cost of capital of 8.59 percent which is 5 basis points lower than
21 my recommended 8.64 percent cost of common equity, 81 basis points
22 lower than the 9.40 percent Company-proposed weighted cost of capital,

1 and 19 basis points higher than Mr. Hill's recommended 8.40 percent
2 weighted cost of capital.

3
4 Q. What would the Company's weighted cost of capital be if Mr. Hill's
5 recommended cost of debt and common equity were substituted into the
6 capital structure being recommended by you and the Company?

7 A. Substituting Mr. Hill's recommended costs of debt and common equity into
8 the hypothetical capital structure being recommended by both RUCO and
9 the Company would produce a weighted cost of capital of 8.43 percent
10 which is 21 basis points lower than my recommended 8.64 percent cost of
11 common equity, 97 basis points lower than the 9.40 percent Company-
12 proposed weighted cost of capital, and 3 basis points higher than Mr. Hill's
13 recommended 8.40 percent weighted cost of capital.

14
15 **COST OF EQUITY CAPITAL**

16 Q. Has RUCO made any changes to its recommended cost of common
17 equity based on the rebuttal testimony of Mr. Hanley or the direct
18 testimony of Mr. Hill?

19 A. No. RUCO is still recommending the same 10.15 percent cost of common
20 equity that I recommended in my direct testimony.

21
22 ...

1 Q. Briefly summarize the positions of the Company and ACC Staff in regard
2 to the cost of common equity.

3 A. The Company is still proposing an 11.95 percent cost of common equity
4 (contingent on the Commission's decision on the Company-proposed
5 CMT), that is 180 basis points higher than my recommended 10.15
6 percent cost of common equity. ACC Staff is recommending a 9.50
7 percent cost of common equity that is 240 basis points lower than the
8 11.95 percent cost of common equity proposed by the Company and 65
9 basis points lower than my 10.15 percent estimate.

10

11 Q. What cost of common equity would result if you relied solely on an
12 average of your DCF and CAPM results?

13 A. An average of my DCF and CAPM results (using both an arithmetic and a
14 geometric mean) results in a cost of common equity of 9.38 percent, which
15 is 12 basis points lower than Mr. Hill's 9.50 percent recommendation and
16 257 basis points lower than Mr. Hanley's 11.95 percent estimate
17 (contingent on the Commission's decision on the Company-proposed
18 CMT).

19

20

21 ...

22

1 Q. Please respond to Mr. Wood and Mr. Hanley's rebuttal positions that your
2 recommended cost of equity is too low.

3 A. Based on the information presented in both Mr. Hill's and my direct
4 testimony I would have to say that just the opposite is true. Mr. Hanley's
5 11.95 percent recommendation, which, as I described on pages 48
6 through 55 of my direct testimony, was derived from a series of upward
7 adjustments in virtually every step of his analysis, is unrealistically high for
8 a regulated utility such as SWG.

9

10 Q. Please address Mr. Hanley's criticism of your DCF analysis, which takes
11 into consideration the concept that a utility's market-to-book ratio will move
12 toward a value of 1.0 if regulators set a utility's rate of return at a level that
13 is equal to its cost of capital.

14 A. The lynchpin in Mr. Hanley's argument appears on page 7, line 16 of his
15 rebuttal testimony where he states the following: "In the competitive,
16 unregulated sector (and the natural gas industry is becoming increasingly
17 competitive), there is no evidence of any direct relationship between
18 market-to-book ratios and the rates of earnings on book common equity."
19 Although Mr. Hanley wants to believe that SWG belongs in the same
20 category as the unregulated competitive industries that Mr. Hanley refers
21 to, the plain simple fact is that the Company is not in the same league.
22 SWG is, for all practical purposes, a regulated utility that earns on the
23 value of its rate base. This is a fact that the investment community has

1 been aware of for many years and still accepts today. As I pointed out,
2 through a quote from The Value Line Investment Survey ("Value Line") on
3 page 41 of my direct testimony, the attraction of local distribution
4 companies ("LDC") such as SWG, are the dividends they pay out as
5 opposed to the capital appreciation of their stock. In this respect,
6 investors view utility stocks in much the same way that they view
7 corporate bonds.

8
9 Q. Why do you believe that SWG has little in common with firms that operate
10 in a competitive environment?

11 A. I believe that SWG and the other LDC's included in my sample have
12 operating characteristics that are actually closer to regulated water
13 companies (which Value Line's analysts have described as the last pure
14 monopolies). Both types of utilities have regulated rates and similar rate
15 designs composed of fixed monthly minimum charges and commodity
16 charges based on consumption. In addition, both types of utilities are
17 largely distribution companies that serve relatively stable customer bases.
18 In fact an argument could be made that LDC's bear less risk since their
19 cost of gas is recovered through adjustor mechanisms as opposed to the
20 majority of water providers that have no such mechanisms for their
21 sources of supply. Furthermore, both types of utilities face similar
22 conservation issues, which RUCO has addressed in this case through its
23 recommended rate design.

1 Q. Please explain why you believe that the market value of a utility's stock will
2 tend to move toward book value, or a market-to-book ratio of 1.0, if
3 regulators allow a rate of return that is equal to the cost of capital of firms
4 with similar risk.

5 A. A utility's market price should equal its book price over the long run if
6 regulators allow a rate of return that is equal to the utility's cost of capital.

7 *That is assuming that the utility's rate of return ("ROR") is comparable to*
8 *the rates of return of other firms in the same risk class.*¹ For example, if a
9 hypothetical utility's book price is \$20.00 per share and regulators adopt a
10 rate of return that is equal to the utility's cost of capital of 10.00%, the
11 utility will earn \$2.00 per share ("EPS"). With earnings of \$2.00 per share,
12 and a market required rate of return on equity of 10.00%, for firms in the
13 utility's risk class, the market price of the utility's stock will set at \$20.00
14 per share ($\$2.00 \text{ EPS} \div 10.00\% \text{ ROR} = \$20.00 \text{ per share price}$). If the
15 utility records earnings that are higher than the earnings of other firms with
16 similar risk, the market value of the utility's shares will increase
17 accordingly ($\$2.50 \text{ EPS} \div 10.00\% \text{ ROR} = \25.00 per share). On the other
18 hand, if the utility posts lower earnings, the stock's market price will fall
19 below book value ($\$1.50 \text{ EPS} \div 10.00\% \text{ ROR} = \15.00 per share).

20 Because of economic forces beyond the control of regulators, it is not
21 reasonable to assume that the utility will have earnings that match those
22 of firms of similar risk in every year of operation. In some years, earnings

¹ An in-depth discussion of why a market-to-book ratio of 1.0 is a desired long-term effect of regulation can be found in Roger A. Morin's text Regulatory Finance, Utilities' Cost of Capital.

1 may drop causing the market-to-book ratio to fall below 1.0, while in other
2 years the utility may have earnings that exceed those of other firms in its
3 risk classification. However, over the long run the utility's earnings should
4 average out to the earnings that are expected based on its level of risk.
5 These average earnings over time will result in a market-to-book ratio of
6 1.0. It has been suggested that regulators should set a utility's rate of
7 return at a level that is slightly higher than that of firms in the same risk
8 class of the hypothetical utility. In theory, this will send a message to
9 investors that average long-term earnings will not be less than what is
10 expected. A 1.0 ratio may never be achieved in practice and many
11 investors may not even care what the market-to-book ratio is as long as
12 they receive their required rate of return. As I noted earlier, in this respect,
13 a utility stock is similar to a corporate bond whose value fluctuates as
14 interest rates move above or below the stated yield on the bond. As long
15 as the bond provides the level of income (i.e. the stated interest payment
16 in the case of a bond or a dividend payment in the case of a utility stock)
17 that the investor expects, the price of the instrument at any given point in
18 time is immaterial (so long as the intent is to hold the bond until maturity or
19 the utility stock over a long-term period).

20
21
22 ...
23

1 Q. Does your recommended cost of equity take into consideration the
2 theoretical concepts that you have just described?

3 A. Yes. As I just explained, in theory, a market-to-book ratio of 1.0 would be
4 achieved if a utility's rate of return equaled the cost of capital that is close
5 to the returns of firms with similar risk. My CAPM analysis, which
6 determined an expected rate of return based on SWG's risk
7 characteristics, indicates that the rate of return for a firm with SWG's level
8 of risk should range from 8.82% (using a geometric mean) to 10.39%
9 (using an arithmetic mean). Thus, my recommended cost of equity of
10 10.15% (which is 124 basis points higher than the result of my DCF
11 analysis) is higher than the rate of return that would theoretically produce
12 a market price that is equal to book value. Despite Mr. Hanley's argument
13 to the contrary (on page 13 of his rebuttal testimony), it is only logical that
14 the expectation that a utility's market-to-book ratio will move toward 1.0
15 should be incorporated into the DCF model as Mr. Hill and myself have
16 done.

17
18 Q. Do you agree with Mr. Hanley's statement that your DCF results
19 understates the cost rate to SWG because it was derived from LDC's that
20 are not as risky as SWG?

21 A. No. A quick review of my direct testimony schedule WAR-7 will
22 demonstrate that my DCF sample was actually riskier than SWG in terms
23 of beta. My sample of LDC's had an average beta coefficient of 0.79 as

1 opposed to SWG's beta of 0.75. This being the case, an argument could
2 be made that my final estimate of 10.15 percent, which also takes into
3 consideration the company's higher level of debt, is probably a little on the
4 high side.

5
6 Q. Please respond to Mr. Hanley's position that both you and Mr. Hill place
7 undue emphasis on the sustainable growth estimate ($g = br + vs$)
8 component of the DCF model.

9 A. Once again, as evidenced on page 11 of his rebuttal testimony, Mr.
10 Hanley's argument hinges on his belief that SWG has more in common
11 with firms that operate in a competitive environment as opposed to being
12 the regulated utility that it is. In short, Mr. Hanley believes that the future
13 growth estimates of securities analysts should simply be plugged into
14 equity valuation models (such as the DCF and CAPM) as opposed to
15 conducting the type of critical analysis that Mr. Hill and I have performed
16 which takes both historical results and future estimates into consideration.

17
18 Q. What is your response to Mr. Hanley's position that the yields on longer-
19 term instruments should be used as the risk free rate of return component
20 of the CAPM model as opposed to the average return on a 91-day
21 Treasury Bill that you used?

22 A. Even though an ongoing debate exists in the academic community over
23 what type of financial instrument best fits the definition of a risk free asset,

1 I believe that the consistent use of a normalized 91-day Treasury Bill ("T-
2 Bill") rate is the most theoretically sound instrument for use in the CAPM
3 model.

4
5 Q. In his rebuttal testimony, Mr. Hanley explains why he believes that the use
6 of longer-term instruments should be used in the CAPM model. Can you
7 explain why you believe the use of a 91-day T-Bill is more appropriate
8 than longer-term instruments?

9 A. Both Mr. Hill and myself believe that the use of the 91-day T-bill is justified
10 for two reasons. First, investors face no maturity risk with the purchase of
11 the 91-day T-Bill. As stated in my direct testimony, longer-term U.S.
12 Treasury instruments, such as the forecasted long-term yield used by Mr.
13 Hanley in his restatement, have higher yields due to maturity risk. These
14 higher yields compensate investors for forgone future investment
15 opportunities and for future unexpected changes in the rate of inflation.
16 Mr. Hanley fails to recognize the fact that individuals who invest in 91-day
17 T-bills do not face these risks. Unlike Mr. Hanley, I believe that a valid
18 argument can be made that when maturity risk is taken into consideration,
19 the yields on 91-day T-Bills emerge as a better proxy for the risk free rate
20 of return that is an integral component of the CAPM.

21 Second, I believe, as does Mr. Hill, that the use of longer-term treasury
22 instruments conflicts with the CAPM model's exclusive reliance on
23 systematic risk. Systematic risk (also referred to as market risk) is defined

1 as that part of a security's risk that is common to all securities of the same
2 general class. It is risk that cannot be eliminated by diversification (the
3 beta coefficient used in the CAPM is the measurement of systematic risk).
4 CAPM theory asserts that the degree of systematic risk that is inherent in
5 any stock, or investment portfolio, is captured by, and reflected in, the beta
6 coefficient. A contributor to overall systematic risk is the risk of
7 unexpected changes in the long-term inflation rate. Since the risk
8 associated with unexpected changes in the long-term inflation rate is
9 already included in the beta coefficient, the use of longer-term U.S.
10 Treasury instruments as a risk free asset accounts for this risk twice –
11 once with the beta and once with the long-term U.S. Treasury instrument
12 yield. In short, I believe that the use of longer-term U.S. Treasury
13 instruments in the CAPM model incorrectly double counts the long-term
14 inflation return requirements of investors and produces overstated results.

15
16 Q. Are there other comments you want to make regarding the proper risk-free
17 instrument that should be used in the CAPM?

18 A. Yes. At this particular point in time, Mr. Hanley's argument on this matter
19 may well be moot. As I discussed in my direct testimony, the yield curve
20 (exhibited in Attachment 1) that charts the yields of various U.S. Treasury
21 securities has been flattening out over the last twelve-month period. As
22 the Federal Reserve has been increasing the yields on short-term
23 instruments, such as the 91-day T-Bill that I used as the risk free rate of

1 return in my CAPM model, the yields on long-term instruments, such as
2 the 10-year instrument advocated by Mr. Hanley, have been falling. This
3 being the case, the 91-day T-bill rate used in my analyses may well be a
4 better predictor of what the risk free rate is and what an expected return
5 on common equity should be for SWG.

6
7 Q. Please explain why Mr. Hanley's criticism regarding the use of a geometric
8 mean in your CAPM analysis is unfounded.

9 A. As I stated in my direct testimony there is an on-going debate as to which
10 is the better average to rely on. The best argument in favor of the
11 geometric mean is that it provides a truer picture of the effects of
12 compounding on the value of an investment when return variability exists.
13 This is particularly relevant in the case of the return on the stock market,
14 which has had its share of ups and downs over the 1926 to 2004
15 observation period used in my CAPM analysis.

16
17 The following example may help to illustrate the differences between the
18 two averages. Suppose you invest \$100 and realize a 20.0 percent return
19 over the course of a year. So at the end of year 1, your original \$100
20 investment is now worth \$120. Now lets say that over the course of a
21 second year you are not as fortunate and the value of your investment
22 falls by 20.0 percent. As a result of this, the \$120 value of your original

1 \$100 investment falls to \$96. An arithmetic mean of the return on your
2 investment over the two-year period is zero percent calculated as follows:

3 (year 1 return + year 2 return) ÷ number of periods =

4 (20.0% + -20.0%) ÷ 2 =

5 (0.0%) ÷ 2 = 0.0%

6 The arithmetic mean calculated above would lead you to believe that you
7 didn't gain or lose anything over the two-year investment period, and that
8 your original \$100 investment is still worth \$100. But in reality, your
9 original \$100 investment is only worth \$96. A geometric mean on the
10 other hand calculates a compound return of negative 2.02 percent as
11 follows:

12 (year 2 value ÷ original value)^{1/number of periods} - 1 =

13 (\$96 ÷ \$100)^{1/2} - 1 =

14 (0.96)^{1/2} - 1 =

15 (0.9798) - 1 =

16 -0.0202 = -2.02%

17 So the geometric mean calculation illustrated above provides a truer
18 picture of what happened to your original \$100 over the two-year
19 investment period.

20 As can be seen in the preceding example, in a situation where return
21 variability exists, a geometric mean will always be lower than an arithmetic
22 mean, which probably explains why utility consultants typically put up a
23 strenuous argument against the use of a geometric mean. I have always

1 used both averages for comparative purposes in my CAPM analyses, but
2 have generally given the arithmetic average more weight in making a final
3 cost of common equity estimate in order to err on the side of caution when
4 making an estimate. In this case, my CAPM analysis using a geometric
5 mean yielded a result of 8.82 percent, which was closer to my DCF result
6 of 8.91 percent.

7

8 Q. Has any of Mr. Hanley's testimony on the ECAPM persuaded you to make
9 any adjustments to your recommended cost of common equity?

10 A. No.

11

12 Q. Does your silence on any of the positions advocated by Mr. Wood or Mr.
13 Hanley constitute your acceptance of them?

14 A. No, it does not.

15

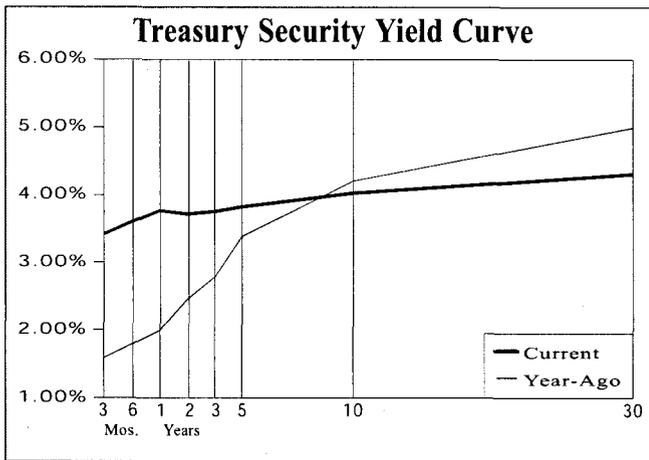
16 Q. Does this conclude your surrebuttal testimony on SWG?

17 A. Yes, it does.

ATTACHMENT 1

Selected Yields

	Recent (9/01/05)	3 Months Ago (6/02/05)	Year Ago (9/02/04)		Recent (9/01/05)	3 Months Ago (6/02/05)	Year Ago (9/02/04)
TAXABLE							
Market Rates				Mortgage-Backed Securities			
Discount Rate	4.50	4.00	2.50	GNMA 6.5%	5.00	4.79	4.43
Fed Funds (Target)	3.50	3.00	1.50	FHLMC 6.5% (Gold)	5.44	4.99	4.41
Prime Rate	6.50	6.00	4.50	FNMA 6.5%	4.97	4.76	4.39
30-day CP (A1/P1)	3.56	3.00	1.52	FNMA ARM	3.88	3.58	2.78
3-month LIBOR	3.86	3.35	1.81	Corporate Bonds			
Bank CDs				Financial (10-year) A	4.92	4.71	5.16
6-month	2.29	2.29	1.01	Industrial (25/30-year) A	5.20	5.19	5.78
1-year	2.91	2.80	1.47	Utility (25/30-year) A	5.15	5.10	5.78
5-year	3.88	3.81	3.55	Utility (25/30-year) Baa/BBB	5.54	5.44	6.22
U.S. Treasury Securities				Foreign Bonds (10-Year)			
3-month	3.42	2.97	1.59	Canada	3.74	3.82	4.64
6-month	3.60	3.13	1.79	Germany	3.07	3.22	4.07
1-year	3.77	3.25	1.99	Japan	1.33	1.22	1.50
5-year	3.83	3.66	3.39	United Kingdom	4.12	4.24	4.97
10-year	4.03	3.90	4.21	Preferred Stocks			
10-year (inflation-protected)	1.54	1.52	1.83	Utility A	7.02	6.93	6.71
30-year	4.31	4.24	5.00	Financial A	6.08	6.02	5.98
30-year Zero	4.30	4.25	5.16	Financial Adjustable A	5.53	5.42	5.39



TAX-EXEMPT

Bond Buyer Indexes							
20-Bond Index (GOs)	4.18	4.18	4.63				
25-Bond Index (Revs)	4.83	4.72	5.09				
General Obligation Bonds (GOs)							
1-year Aaa	2.79	2.70	1.48				
1-year A	2.91	2.87	1.63				
5-year Aaa	3.09	2.93	2.63				
5-year A	3.36	3.22	2.89				
10-year Aaa	3.49	3.40	3.50				
10-year A	3.81	3.74	3.84				
25/30-year Aaa	4.22	4.21	4.70				
25/30-year A	4.49	4.44	4.91				
Revenue Bonds (Revs) (25/30-Year)							
Education AA	4.29	4.18	4.91				
Electric AA	4.37	4.35	4.85				
Housing AA	4.46	4.40	4.97				
Hospital AA	4.44	4.40	5.20				
Toll Road Aaa	4.40	4.34	4.94				

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	8/31/05	8/17/05	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	1848	1325	523	1720	1678	1706
Borrowed Reserves	333	357	-24	335	216	188
Net Free/Borrowed Reserves	1515	968	547	1386	1463	1518

MONEY SUPPLY

(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Growth Rates Over the Last...		
	8/22/05	8/15/05	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1382.0	1355.4	26.6	1.6%	0.5%	1.1%
M2 (M1+savings+small time deposits)	6560.9	6536.6	24.3	4.8%	3.0%	3.8%
M3 (M2+large time deposits)	9898.3	9839.3	59.0	9.9%	7.4%	6.1%

SOUTHWEST GAS CORPORATION

DOCKET NO. G-01551A-04-0876

SURREBUTTAL TESTIMONY

OF

RODNEY L. MOORE

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

SEPTEMBER 13, 2005

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10	SURREBUTTAL SCHEDULES	ATTACHED

1 **INTRODUCTION**

2 Q. Please state your name for the record.

3 A. My name is Rodney Lane Moore.

4

5 Q. Have you previously filed testimony regarding this docket?

6 A. Yes, I have. I filed direct testimony in this docket on July 26, 2005.

7

8 Q. What is the purpose of your surrebuttal testimony?

9 A. My surrebuttal testimony will address the Company's rebuttal comments
10 pertaining to adjustments I sponsored in my direct testimony.

11

12 **SUMMARY OF ADJUSTMENTS**

13 Q. What areas will you address in your surrebuttal testimony?

14 A. My surrebuttal testimony will address the following RUCO proposed
15 adjustments:

16 1. Correction for computation error in calculating bill determinants for

17 RUCO rate design as shown on Schedule RLM-16, pages 1, 2 and

18 3;

19 2. Rate Base Adjustment No. 3 – Completed Construction Not
20 Classified;

21 3. Operating Income Adjustment No. 3 – Labor Annualization;

22 4. Operating Income Adjustment No. 7 – American Gas Association

23 Dues;

- 1 5. Operating Income Adjustment No. 10 – Injuries and Damages;
- 2 6. Operating Income Adjustment No. 14 – Miscellaneous;
- 3 7. Operating Income Adjustment No. 18 – Property Tax Expense;
- 4 8. Operating Income Adjustment No. 21 – Supplemental Employee
- 5 Retirement Plan;
- 6 9. Income Tax Calculation; and
- 7 10. Rate Design and Proof of Recommended Revenue.

8

9 To support the adjustments to my surrebuttal testimony, I revised Direct

10 Schedules RLM-16, RLM-17 and prepared eleven sets of Surrebuttal

11 Schedules numbered SUR-RLM-1, SUR-RLM-2, SUR-RLM-3, SUR-RLM-

12 5, SUR-RLM-6, SUR-RLM-7, SUR-RLM-8, SUR-RLM-10, SUR-RLM-11,

13 SUR-RLM-16 and SUR-RLM-17, which are filed concurrently in my

14 surrebuttal testimony.

15

16 **REVISED DIRECT TESTIMONY FOR SCHEDULE RLM-16**

17 Q. What is the computation error you are correcting in this revised filing of

18 Schedule RLM-16?

19 A. First, as shown on the attached revised Schedule RLM-16, columns (C)

20 and (D), I adjusted the bill determinants to reflect a more accurate

21 allocation between residential and general service customers.

22 ...

23 ...

1 This revision was the result of discussions with the Company and directly
2 correlates the bill frequency analysis ("BFA") of the existing test year
3 residential customer base at the present rate structure with the Company's
4 proposed rate structure.

5
6 Second, as shown on Schedule RLM-16, columns (E) and (F), RUCO
7 adjusted the basic monthly service charges and margin commodity rates
8 to produce RUCO's recommended revenue requirement through the
9 revised bill determinants.

10
11 **RUCO'S ADJUSTED TEST PERIOD BILLS AND VOLUMES**

12 Q. Did RUCO adjust the Company's bills and volumes as filed on Schedule
13 H-2, page 16?

14 A. Yes, as stated in my direct testimony, I had to make adjustments to the bill
15 determinants to correctly produce test-year revenues.

16
17 Q. Why does the Company disagree with your adjustment to the bills and
18 volumes as filed?

19 A. In Company witness Mr. Congdon's rebuttal testimony, starting on page
20 24, Mr. Congdon indicates SWG multiplied present rates and charges by
21 the recorded bills and volumes and was able to recalculate residential
22 test-year revenue to within 0.03 percent, as shown on Company Rebuttal
23 Exhibit ABC-4, sheet 3, line 1.

1 The bills and volumes used on the Company's Rebuttal Exhibit ABC-4,
2 sheet 3, line 1 are the same adjusted bills and volumes stated on
3 Company Schedule H-2, sheet 16, line 1.

4
5 RUCO was unable to duplicate the Company's calculations from the bills
6 and volumes recorded on Schedule H-2, sheet 16; therefore, RUCO
7 issued data request No. 9.01, followed by several telephone conversations
8 in an attempt to obtain the Company's breakdown of the calculation for
9 each customer class's revenue as stated in column (e) on Schedule H-2,
10 sheet 16.

11
12 The Company was unable to provide the calculations as to how they
13 reached the test-year revenue using the bill determinants filed on
14 Schedule H-2, sheet 16. Instead the Company's response to RUCO data
15 request No. 9.01 was to provide BFAs for each residential class of service,
16 which were significantly different than the determinants stated on
17 Schedule H-2, sheet 16 and also do not generate the residential test-year
18 margin revenue. To date the Company has been unable to provide a set
19 of test-year billing determinants that generate its test-year recorded
20 revenues.

21 ...
22 ...
23 ...

1 Q. Why are accurate test-year billing determinants so important?

2 A. Accurate test-year billing determinants are essential to the ratemaking
3 process. The test-year billing determinants serve as the starting point to
4 which proforma adjustments are made. The total revenue requirement is
5 then divided over the resulting adjusted billing determinants to determine
6 rates for each service element.

7

8 As a result even small inaccuracies in the test-year billing determinants
9 are magnified when utilized to generate an increased level of rates, and
10 can create significant under or over recoveries. An accurate starting point
11 upon which to build is therefore crucial in setting fair and reasonable rates.

12

13 Q. What adjustment did you make?

14 A. RUCO analyzed the BFAs and Schedule H-2, sheet 16 and determined a
15 set of determinants that accurately reflect the size of the test-year
16 customer base, its usage pattern and generate the test-year recorded
17 revenue. These revised determinants provided the basic starting point
18 from which proforma adjustments were added to create a normalized set
19 of test-year determinants to design a rate structure that will produce
20 RUCO's recommended revenue requirement.

21 ...

22 ...

23 ...

1 RUCO's revised direct testimony rate design, proof of recommended
2 revenue requirement and typical bill analysis are displayed on attached
3 Revised Schedules RLM-16 and RLM-17.

4
5 **RATE BASE**

6 **Rate Base Adjustment No. 3 – Completed Construction Not Classified**

7 Q. Please explain the Company's Rebuttal position on the proposed
8 adjustment for completed construction not classified ("CCNC").

9 A. The Company is requesting recovery of those dollars spent in certain non-
10 revenue producing work orders during the test period because those
11 dollars represent rate base that was serving customers during the test
12 year.

13
14 Q. Does RUCO agree with the Company's premise on the treatment of
15 CCNC?

16 A. Yes, RUCO agrees the proper treatment of CCNC is to include all work
17 orders where the plant was placed in-service during the test year.

18
19 Q. Why is RUCO then making an adjustment to the Company's CCNC as
20 proposed in SWG's Adjustment No. 20?

21 A. Through the discovery process, i.e. Staff Data Request JJD-8-9, the
22 Company was specifically requested to provide all appropriate
23 documentation that confirms when the CCNC plant was placed in service.

1 In response, the Company states: "Please see the attached reports which
2 confirm when the Direct portion of the Company's CCNC, in Adjustment
3 No. 20, was placed into service."

4
5 The Company's documentation provided in its response to Staff Data
6 Request JJD-8-9 showed a number of CCNC plant items that were placed
7 in service after the end of the test year. RUCO removed all costs
8 associated with work orders not placed in service during the test year.

9
10 Q. Have you revised your position on restating the CCNC pursuant to the
11 Company's rebuttal testimony?

12 A. No, the Company is inconsistent, by first indicating in its direct testimony
13 that it is appropriate to treat plant as CCNC only when it is confirmed the
14 work order was placed in service at the end of the test year or shortly
15 thereafter; then revising its position to recover expenditures for CCNC
16 work orders placed in service as late as mid-2005, almost a year beyond
17 the end of the test year.

18
19 Q. How should the Company treat plant placed in service subsequent to the
20 end of the test period?

21 A. The Company should have requested these expenditures be considered
22 as Post-Test-Year Plant. Since the Company only requested inclusion of
23 expenditures for work orders placed in service by the end of the test year,

1 RUCO did not perform an analysis as to the appropriateness of
2 considering these expenditures as post test-year plant additions.

3
4 However, as a general proposition RUCO does not agree with the
5 inclusion of post test-year plant in rate base. RUCO supports adherence
6 to the historical test-year principle and believes that the introduction of out
7 of test-year plant, with very few exceptions, can skew the ratemaking
8 model by creating mismatches among other ratemaking elements.

9
10 Q. Does the Company discuss other elements of RUCO's adjustment to
11 SWG's CCNC Adjustment No. 20?

12 A. Yes, the Company indicates that RUCO's companion adjustment to
13 remove retirement costs associated with the CCNC work orders is not
14 necessary for SWG's CCNC adjustment due to the negligible impact on
15 rate base.

16
17 Q. Do you agree with this assessment?

18 A. Yes and no. RUCO's methodology removes the entire retirement costs
19 from both the gross plant and the accumulated depreciation; therefore, the
20 impact on the rate base is zero. However, the Company fails to address
21 all aspects of this transaction by ignoring the effects on depreciation
22 expense if retired plant is not removed from rate base. Annual
23 depreciation expenses will remain artificially high if proper ratemaking

1 principles are not adhered to with the removal of all appropriate retirement
2 costs.

3
4 Ratepayers would be burdened with inflated depreciation expenses
5 generated from a gross plant in service level, which does not reflect the
6 removal of retired plant, which is no longer used and useful.

7
8 Q. In conclusion, what is RUCO's surrebuttal adjustment to SWG's CCNC
9 Adjustment No. 20?

10 A. As shown in my direct testimony on Schedule RLM-3, page 1, columns
11 (G), (H) and (I), RUCO concludes its original adjustment is fair, reasonable
12 and consistent with the fundamental criteria of CCNC.

13
14 Therefore, RUCO did not make any adjustment in its surrebuttal
15 testimony.

16

17 **OPERATING INCOME**

18 **Operating Income Adjustment No. 3 – Labor Annualization**

19 Q. Have you reviewed the Company's rebuttal testimony concerning your
20 adjustment to SWG's income adjustment No. 3 on Labor Annualization?

21 A. Yes, I have. The Company takes issue with: a) RUCO's disallowance of
22 the post test-year general wage increase and the within-grade movement
23 of its employees for 2005; b) RUCO's calculation of overtime wages; and

1 c) RUCO's disallowance of the payroll expense related to 37 SWG
2 employees performing sales, marketing and promotional activities.
3

4 Q. After analyzing the Company's rebuttal testimony, is RUCO still
5 disallowing the post test-year general wage increase and the within-grade
6 movement of its employees for 2005?

7 A. Yes. As stated in my direct testimony, RUCO considers the inclusion of
8 the post test-year general wage increase and the within-grade movement
9 of its employees for 2005 has the effect of double counting salary and
10 wage increases. The Company's annualization adjustment served to
11 create a matching between rate base, revenues and expenses to reflect
12 the levels that were in effect at August 31, 2004. Thus, if the post test-
13 year payroll increases are authorized the Company is creating biased
14 rates by being allowed to pick and chose which rate base, expense, and
15 revenue items it will reflect on an actual, projected or annualized basis.
16 The Company's logic that post-test wage increases should be allowed
17 because they are known and measurable could be extended to all other
18 operating income elements, since the Company has recorded data
19 through August 7, 2005; yet SWG did not request post test year treatment
20 of any other rate base, expense, and revenue items. For these reasons
21 RUCO continues to recommend the disallowance of the post test-year
22 wage increases.

23 ...

1 Q. After analyzing the Company's rebuttal testimony, is RUCO revising its
2 calculation of the percentage test-year overtime wages to test-year
3 payroll?

4 A. Yes, as shown on Schedule SUR-RLM-8, page 3, line 7, I have
5 recalculated the overtime percentage by removing the payroll expense
6 related to 37 SWG employees performing sales, marketing and
7 promotional activities from the test-year recorded regular pay. This
8 revision increases the overtime percentage from 8.53 percent to 8.84
9 percent for Arizona Direct Labor and from 0.43 percent to 0.44 percent for
10 System Allocable Labor.

11

12 Q. After analyzing the Company's rebuttal testimony, is RUCO still
13 eliminating the compensation of 37 SWG employees involved in marketing
14 and sales activities?

15 A. Yes. RUCO's adjustment is consistent with testimony filed in SWG's
16 recent rate cases and is based on a thorough analysis of the 37
17 employees responsibilities.

18 ...

19 ...

20 ...

21 ...

22 ...

23 ...

1 Q. What is your response to the Company's rebuttal testimony that RUCO
2 relied solely on the information provided in SWG's response to RUCO's
3 data request No. 2.08, i.e. employee compensation received under the
4 Sales Incentive Plan ("SIP")?

5 A. This claim is not true. RUCO examined this issue in several previous
6 SWG rate cases. In an effort to reduce costs and conserve manpower
7 RUCO relied on the Company's response to RUCO data requests
8 regarding the SIP that were received in two previous rate cases filed in
9 1996 and 2000.

10

11 Q. What specific positions did you recommend be excluded from rates?

12 A. These positions are as follows: Account Representative, Senior Account
13 Representative, Energy Utilization Engineer, Industrial Gas Engineer,
14 Sales Manager/Supervisor, Manager/Large Customer Sales, and
15 Supervisor/Large Customer Sales.

16

17 Q. Are you cognizant of the duties, responsibilities, and job descriptions for
18 these positions?

19 A. Yes. In reviewing the response to several data requests from previous
20 rate cases the Company has provided complete job descriptions for these
21 positions. The responsibilities of the above-identified positions include the
22 following:

23

...

1 Account Representative

- 2 • Advise customers on gas products and availability.
- 3 • Build and maintain relationships with manufacturers, distributors,
4 dealers, and builders.
- 5 • Monitor and analyze competitor marketing activities.
- 6 • Determine impact of competitive forces in the marketplace.
- 7 • Evaluate the effectiveness of promotion and advertising programs.
- 8 • Design and implement new marketing programs.

9

10 Senior Account Representative

- 11 • Implement promotional campaigns.
- 12 • Aid dealers and distributors in promotion and selling.
- 13 • Schedule advertisement campaigns and/or sales promotions.
- 14 • Evaluate market reactions to marketing policies and programs.
- 15 • Make presentations to trade allies or prospective customers.

16

17 Utilization Engineer

- 18 • Advise dealers and distributors of sales and advertising programs.
- 19 • Formulate and implement plans for trade association activities.
- 20 • Build and maintain relationships with manufacturers, distributors,
21 dealers and builders.
- 22 • Keep abreast of industry marketing strategies and tactics.

23 ...

1 Industrial Gas Engineer

- 2 • Initiate and develop market opportunities and develop plans to
3 remain competitive.
- 4 • Determine market and specific customer requirements and
5 appropriate corporate action.
- 6 • Identify opportunities to increase corporate margin for Major
7 Account customers.

8

9 Manager/Sales

- 10 • Recruit and hire marketing people.
- 11 • Establish marketing budgets and goals.
- 12 • Train and develop marketing personnel.
- 13 • Implement marketing promotion procedures and policies.
- 14 • Develop plans for future market positioning.

15

16 Supervisor/Sales

- 17 • Advise dealers and distributors of sales and advertising programs.
- 18 • Schedule the activities of marketing representatives.
- 19 • Design and implement new marketing programs.
- 20 • Prepare analyses of programs against market requirements and
21 competitor offerings.
- 22 • Build and maintain relationships with manufacturers, distributors,
23 dealers, and builders.

1 Supervisor/Large Customer Programs

- 2 • Communicate to management market opportunities and problem
3 areas.
- 4 • Initiate and develop market opportunities.
- 5 • Conduct market analysis research/evaluation and recommend
6 specific market activities based on analysis.
- 7 • Analyze market trends to determine profitable opportunities.
- 8 • Determine impact of competitive forces in the marketplace.
- 9

10 Q. Are the duties and responsibilities of these positions the type of activities
11 the Commission has excluded from rates in the past?

12 A. Yes. The Company has removed over \$0.5 million in marketing and
13 promotional costs in this rate application. In its testimony and in response
14 to data requests SWG acknowledges that marketing and promotional
15 activities traditionally have not been included as a component of rates.

16

17 Q. Has the Commission always been consistent in disallowing similar costs in
18 prior cases?

19 A. No. The Company refers to Decision No. 64172 for validation of its
20 position; however, in Decision No. 57075, dated August 31, 1990 the
21 Commission disallowed the following costs:

- 22 • Market retention efforts.
- 23 • Appliance conversion rebates.

- 1 • Advertising the natural gas advantage.
- 2 • Encouragement of gas replacements in targeted areas.
- 3 • Advocating gas usage in new commercial projects.
- 4 • Market research.

5

6 Q. What was the Commission's rationale in disallowing these costs?

7 A. The Commission stated the following in Decision No. 57075 at page 54-
8 55, regarding the rationale for its disallowances:

9 Applicant's sales program is, without question, almost
10 entirely motivated by the Company's perception of its
11 competitive position vis-à-vis electric utilities for new
12 and existing customers. This competition between
13 energy providers requires us to evaluate the
14 reasonableness and cost effectiveness of each
15 competitor's marketing and advertising efforts in order
16 to ensure that the ratepayers are not being forced to
17 fund both sides of an escalating competition, without
18 limitation and without realizing any discernible
19 benefits in return.

20 ...

21 ...

22 ...

23 ...

1 Q. What is your response to the Company witness Christina A. Palacios'
2 rebuttal testimony that indicates several of the marketing and sales
3 positions have regulatory responsibilities in addition to essential customer
4 services beneficial to ratepayers?

5 A. Although the duties, responsibilities and examples provided by Ms.
6 Palacios represent primarily a marketing and sales environment, there are
7 potential scenarios where ratepayers may benefit from these employees'
8 expertise independent of any marketing and sales objectives.

9
10 RUCO would be willing to explore revising its position if a fair and
11 reasonable quantification of the time/costs devoted solely to Customer
12 complaint resolution and Regulatory affairs could be substantiated by the
13 Company.

14

15 **Operating Income Adjustment No. 7 – American Gas Association Dues**

16 Q. After analyzing the Company's rebuttal testimony, is RUCO revising its
17 adjustment to SWG's income adjustment No. 7 to American Gas
18 Association Dues?

19 A. No, as explained in my direct testimony, RUCO considers the portion of
20 the American Gas Association ("AGA") Dues dedicated to public affairs
21 and communication to be the responsibilities of the shareholders.

22 Historically, RUCO has relied on the NARUC annual audit report for a
23 definitive explanation of expenditures and percentages of the AGA dues

1 devoted to each category during the audit year. However, since the
2 NARUC annual audit report is no longer available, RUCO reviewed the
3 Company's response to RUCO data request No.14.2 and specifically the
4 AGA/NARUC Oversight Committee Staff Agreement to determine the
5 AGA's public affairs and communication activities support shareholder
6 interest and encourage greater gas sales. Such activities are primarily for
7 the benefit of shareholders and should not be funded by ratepayers.

8
9 **Operating Income Adjustment No. 10 – Injuries and Damages Expenses**

10 Q. After analyzing the Company's rebuttal testimony, is RUCO revising its
11 adjustment to SWG's income adjustment No. 10 to Injuries and Damages
12 Expenses?

13 A. Yes, RUCO analyzed the Company's rebuttal testimony and determined
14 that a revision was necessary to its recommended 14-year liability for
15 claims between \$1 million and \$10 million.

16
17 Based on the scenario outlined in Incidents #1, #2 and #3 in Company
18 witness, Robert M. Johnson's surrebuttal testimony on page 3, RUCO
19 determined SWG's proforma liability for the 1993 self-insurance claims
20 would be reduced from \$18,800,000 to \$12,000,000.

21
22 This reduction is based on the proforma liability being assessed at
23 \$8,800,000 (\$1,000,000 from the retention and \$7,800,000 from the

1 supplemental retention) for the first incident and \$3,200,000 (\$1,000,000
2 from the retention and \$2,200,000 from the remaining supplemental
3 retention) for the second incident.

4
5 As shown on Schedule SUR-RLM-10, line 4, this adjustment reduces the
6 Company's 14-year liability for claims between \$1 million and \$10 million
7 proposed liability of \$36,247,300 to \$29,547,300.

8
9 **Operating Income Adjustment No. 14 – Miscellaneous Expenses**

10 Q. Has the Company accepted your adjustment to miscellaneous expenses?

11 A. No, the Company continues to maintain these items are appropriately
12 charged to ratepayers.

13
14 Q. Do you continue to support the disallowance of these test-year
15 miscellaneous expenses?

16 A. Yes. First, my adjustment is consistent with SWG's proposed adjustment
17 No. 3 for miscellaneous expenses. In this adjustment the Company
18 removed \$369,364 in miscellaneous expenditures related to meals, gifts,
19 special events, etc. as inappropriate for ratemaking purposes. My review
20 of test-year general ledger sheets merely identifies more of the same.
21 Thus, the Company opposition to my adjustment is contrary to its own
22 adjustment.

23 ...

1 Second, in response to RUCO data request No. 11.01, the Company
2 agreed with the removal of \$33,181 of the miscellaneous expenses
3 identified by RUCO.

4
5 Despite the Company's agreement with only some of the items identified
6 by RUCO, RUCO maintains certain categories of expenses should not be
7 the financial burden of the ratepayers. For example:

- 8 • Liquor, Coffee, Water, Ice, Sodas, Smoothies, Bagels, Donuts,
9 Subs, etc.
- 10 • Trophies, Flowers, Gift Certificates, Photographs, etc.
- 11 • Charitable/Community/Service Club Donations, Travel Reduction
12 Programs, etc.
- 13 • Shareholders Meetings, Recognition Events, Sports Events, Club
14 Memberships, Art Work, etc.
- 15 • Barbecues and Accessories, etc.

16
17 Q. After analyzing the Company's rebuttal testimony, is RUCO revising its
18 adjustment to SWG's income adjustment No. 14 to Miscellaneous
19 Expenses?

20 A. Yes, in an attempt to reduce the number of outstanding issues in the
21 instant rate case, and to avoid the tedious litigation of line-by-line
22 examination of the 40 pages of workpapers, which adequately
23 substantiate the adjustment, RUCO, without further analysis, will make a

1 unilateral reduction of 20% of the direct testimony adjustment from
2 \$346,299 to \$277,039.

3
4 As recorded in my workpapers, RUCO's still supports the position that
5 these test-year expenditures are extravagant, unnecessary for the
6 provisioning of gas service, and/or not the financial responsibility of the
7 ratepayers.

8
9 **Operating Income Adjustment No. 18 – Property Tax Expense**

10 Q. After analyzing the Company's rebuttal testimony, is RUCO revising its
11 adjustment to SWG's income adjustment No. 13 to Property Tax?

12 A. No, the Company agrees with RUCO's adjustment to property taxes.
13

14 **Operating Income Adjustment No. 21 – Supplemental Executive Retirement**
15 **Plan**

16 Q. After analyzing the Company's rebuttal testimony, is RUCO revising its
17 adjustment to SWG's income adjustment No. 14 to the Supplemental
18 Executive Retirement Plan ("SERP")?

19 A. No, RUCO's position is unchanged – the ratepayers should not be
20 responsible to pay the cost of supplemental benefits to a small select
21 group of high-ranking officers of the Company. However, RUCO did allow
22 the cost of Company's officers' Deferred Compensation Plan ("DCP") to
23 be included in test-year expenses.

1 The ratepayers are already burdened with the cost of adequately
2 compensating this small select group of high-ranking officers for their work
3 and who are provided with a wide array of benefits including a medical
4 plan, dental plan, life insurance, long term disability, paid absence time,
5 and a retirement plan. If the Company feels it is necessary to provide
6 additional perks to a select group of employees it should do so at its own
7 expense.

8
9 These 12 top officers of the Company represent only 0.70% of the Arizona
10 employee base of 1,712; yet, they receive \$1,849,069 or 3.85% of the
11 total Arizona employee benefits of \$48,004,348.

12
13 This demonstrates the excessiveness of the Company's SERP and
14 supports RUCO's recommendation to disallow the cost as a test-year
15 operating expense.

16
17 Moreover, a review of the 2004 Annual Meeting of Shareholders and
18 Proxy Statement as provided in the Company's response to RUCO's data
19 request No. 1.06.b illuminates the extent of compensation and benefits the
20 top officers of SWG receive.

21
22 It seems disingenuous to request that the ratepayers to be burdened with
23 the cost of this elite retirement plan for a select group of employees who

1 are already receiving lucrative salaries, bonuses, stock awards and
2 options, other unspecified compensation and an employment agreement.

3

4 **RATE DESIGN**

5 Q. Did you make any surrebuttal adjustment to your rate design?

6 A. Yes, as shown on Schedule SUR-RLM-16, RUCO's revised direct
7 testimony Schedule RLM-16 provides the correct bill determinants over
8 which the recommended surrebuttal required revenue will be recovered
9 through the adjusted basic service charges and commodity rates.

10

11 **PROOF OF RECOMMENDED REVENUE**

12 Q. Have you prepared a Schedule presenting proof of your surrebuttal
13 recommended revenue?

14 A. Yes, I have. Proof that my surrebuttal rate designs will produce the
15 recommended required revenue as illustrated, is presented on Schedule
16 SUR-RLM-16.

17

18 **TYPICAL BILL ANALYSIS**

19 Q. Have you prepared a Schedule representing the financial impact of your
20 recommended surrebuttal rate design on the typical residential customer?

21 A. Yes, I have. A typical bill analysis for a residential customer is presented
22 on Schedule SUR-RLM-17.

23 ...

1 **CONCLUSION**

2 Q. What changes did RUCO make to its direct filing due to revised
3 calculations recorded in the surrebuttal testimonies?

4 A. The effect of RUCO witnesses Rodney L. Moore, Marylee Diaz Cortez and
5 William A. Rigsby revised calculations of their direct testimonies are listed
6 below:

	<u>DIRECT TESTIMONY</u>	<u>SURREBUTTAL TESTIMONY</u>
9 • Percentage Increase In Average Typical Residential Customer's		
10 Monthly Statement	4.2%	6.8%
11		
12 • Recommended Revenue Requirement		
13	\$370,818,589	\$371,372,057
14		
15 • Recommended FVRB (Based on 50/50 Split Between OCRB & RCND)		
16	\$1,163,910,949	\$1,164,944,249
17		
18 • Recommended Required Operating Income		
19	\$79,378,637	\$79,478,947
20		
21 • Recommended Percentage Increase In Revenue Requirement		
22	14.85%	15.02%

23 ...

1 Q. Does this conclude your surrebuttal testimony?

2 A. Yes, it does.

Southwest Gas Corporation
Docket No. G-01551A-04-0876
Test Year Ended August 31, 2004

**SURREBUTTAL
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SUR-RLM-17	1	TYPICAL BILL ANALYSIS

CORRECTION TO DIRECT TESTIMONY FOR COMPUTATION ERRORS
 RATE DESIGN AND PROOF OF RECOMMENDED REVENUE

LINE NO.	(A) DESCRIPTION	(B) PROPOSED SCHEDULE NO.	(C) BILLING DETERMINANTS NUMBER OF BILLS	(D) SALES (THERMS)	(E) PROPOSED MARGIN RATES BASIC SERVICE CHARGE	(F) COMMODITY CHARGE	(G) BASIC SERVICE CHARGE	(H) MARGIN AT PROPOSED RATES COMMODITY CHARGE	(I) TOTAL MARGIN
G-5									
Single-Family Residential Gas Service									
1	Basic Service Charge per Month		8,870,882	281,997,418	\$ 10.09	0.494191	\$ 89,520,069	\$ 129,476,751	\$ 89,520,069
2	Commodity Charge All Therms								\$ 129,476,751
3	Total Single-Family Residential Gas Service		8,870,882	281,997,418			\$ 89,520,069	\$ 129,476,751	\$ 218,996,820
G-5									
Low Income Residential Gas Service									
4	Basic Service Charge per Month		320,907	9,417,993	10.09	0.494191	\$ 3,238,420	\$ 4,654,287	\$ 3,238,420
5	Commodity Charge All Therms								\$ 4,654,287
6	Total Low Income Residential Gas Service		320,907	9,417,993			\$ 3,238,420	\$ 4,654,287	\$ 7,892,707
G-6									
Multi-Family Residential Gas Service									
7	Basic Service Charge per Month		694,674	14,775,511	8.83	0.494191	\$ 6,133,989	\$ 7,301,924	\$ 6,133,989
8	Commodity Charge All Therms								\$ 7,301,924
9	Total Multi-Family Residential Gas Service		694,674	14,775,511			\$ 6,133,989	\$ 7,301,924	\$ 13,435,912
G-6									
Multi-Family Low Income Residential Gas Service									
10	Basic Service Charge per Month		51,446	1,195,957	8.83	0.494191	\$ 454,269	\$ 591,031.30	\$ 454,269.09
11	Commodity Charge All Therms								\$ 591,031.30
12	Total Multi-Family Low-Income Gas Service		51,446	1,195,957			\$ 454,269	\$ 591,031	\$ 1,045,300
13	Total Residential Gas Service		9,937,910	287,386,879			\$ 98,348,747	\$ 142,023,993	\$ 241,370,740
G-20									
Master Metered Mobile Home Park Gas Service									
30	Basic Service Charge per Month		2,265	2,394,942	138.62	0.306328	\$ 314,009	\$ 733,637	\$ 314,009
31	Commodity Charge per Therm								\$ 733,637
32	Total Master Metered Mobile Home Park Gas Service		2,265	2,394,942			\$ 314,009	\$ 733,637	\$ 1,047,646
G-25(S)									
General Gas Service - Small									
1	Basic Service Charge per Month		197,569	614	34.66	0.655694	\$ 6,846,834	\$ 403	\$ 6,846,834
2	Former Small Gas Service Customers		96	3,697,553	34.66	0.655694	3,323	2,424,463	3,323
3	Former Medium Gas Service Customers		144	3,698,167	34.66	0.655694	4,984	2,424,463	4,984
4	Former Essential Agriculture Customers								403
5	Commodity Charge per Therm								\$ 2,424,463
6	Transportation Customers								\$ 2,424,463
	Sales Customers								\$ 403
	Total Small General Gas Service		197,909	3,698,167			\$ 6,855,141	\$ 2,424,866	\$ 9,280,006

SURREBTULLAL
RATE DESIGN AND PROOF OF RECOMMENDED REVENUE

LINE NO.	(A) DESCRIPTION	(B) PROPOSED SCHEDULE NO. G-25(M)	(C) BILLING DETERMINANTS		(E) PRESENT MARGIN RATES BASIC SERVICE CHARGE	(F) COMMODITY CHARGE	(G) BASIC SERVICE CHARGE	(H) MARGIN AT PRESENT RATES COMMODITY CHARGE	(I) TOTAL MARGIN
			NUMBER OF BILLS	SALES (THERMS)					
General Gas Service - Medium									
7	Basic Service Charge per Month				\$				
8	Former Small Gas Service Customers		191,097		48.52				9,271,558
9	Former Medium Gas Service Customers		3,703		48.52				179,683
10	Former Large Gas Service Customers		12		48.52				581
11	Former Armed Forces Customers		24		48.52				1,163
11	Former Essential Agriculture Customers		515		48.52				25,004
12	Commodity Charge per Therm								
12	Transportation Customers			99,043		0.380539			37,690
13	Former Small Gas Service Customers			83,249		0.380539			31,679
14	Former Medium Gas Service Customers			39,993,988		0.380539			15,219,277
15	Former Large Gas Service Customers			1,704,269		0.380539			648,541
16	Former Armed Forces Customers			4,931		0.380539			1,877
17	Former Essential Agriculture Customers			3,757		0.380539			1,430
18	Commodity Charge per Therm			130,417		0.380539			49,629
19	Former Essential Agriculture Customers			42,019,665		0.380539			15,960,121
	Total Medium General Gas Service		195,352				\$ 9,477,960	\$ 15,960,121	\$ 25,438,081
General Gas Service - Large									
20	Basic Service Charge per Month				\$				
21	Former Small Gas Service Customers		4,370		207.93				908,591
22	Former Medium Gas Service Customers		79,287		207.93				16,486,314
23	Former Large Gas Service Customers		120		207.93				24,921
24	Former Armed Forces Customers		24		207.93				4,984
25	Commodity Charge per Therm								
24	Transportation Customers			79,960		0.260081			20,796
25	Former Small Gas Service Customers			2,633,367		0.260081			684,889
26	Former Medium Gas Service Customers			308,963		0.260081			80,356
27	Former Large Gas Service Customers			2,869,954		0.260081			746,421
28	Former Armed Forces Customers			131,577,776		0.260081			34,220,884
29	Former Essential Agriculture Customers			1,030,608		0.260081			268,042
30	Commodity Charge per Therm			164,814		0.260081			42,865
31	Former Essential Agriculture Customers			138,666,443		0.260081			36,064,253
	Total Large General Gas Service		83,800				\$ 17,424,811	\$ 36,064,253	\$ 53,489,064
General Gas Service - Transportation Eligible									
32	Basic Service Charge per Month				\$				
33	Former Medium Gas Service Customers		60		1,039.66				62,303
34	Former Essential Agriculture Customers		252		1,039.66				261,674
35	Former Large Gas Service Customers		1,678		1,039.66				1,744,496
36	Former Armed Forces Customers		60		1,039.66				62,303
37	Commodity Charge per Therm								
37	Transportation Customers			6,989,384		0.059464			4,987,437
38	Former Medium Gas Service Customers			4,330,261		0.087918			380,709
39	Former Essential Agriculture Customers			25,225,778		0.087918			2,217,805
40	Former Large Gas Service Customers			992,285		0.087918			87,240
41	Former Armed Forces Customers			4,945,957		0.087918			434,760
42	Former Essential Agriculture Customers			45,368,513		0.087918			3,988,806
43	Former Large Gas Service Customers			2,924,591		0.087918			257,125
44	Former Armed Forces Customers			83,767,466		0.087918			7,353,881
	Total Transportation Eligible General Gas Service		2,049				\$ 2,130,777	\$ 12,353,881	\$ 14,484,658
45	Total General Gas Service		479,010				\$ 35,888,718	\$ 66,833,120	\$ 102,721,838

**CORRECTION TO DIRECT TESTIMONY FOR COMPUTATION ERRORS
TYPICAL BILL ANALYSIS
SINGLE-FAMILY RESIDENTIAL GAS SERVICE**

COMPARISON OF PRESENT & PROPOSED RATE STRUCTURE						
LINE NO.	DESCRIPTION	CONSPITION (THERMS)	PRESENT SCHEDULES	PROPOSED SCHEDULES	DOLLAR INCREASE	PERCENT INCREASE
SUMMER						
			May-October Break - 20 Therms	May-October Break - 8 Therms		
Company						
1	25% Average Usage	3	\$ 11.19	\$ 19.74	\$ 8.55	76.43%
2	75% Average Usage	9	\$ 17.57	\$ 26.52	\$ 8.95	50.97%
3	Average Usage	12	\$ 20.76	\$ 28.66	\$ 7.90	38.06%
4	150% Average Usage	19	\$ 27.14	\$ 32.93	\$ 5.79	21.35%
5	200% Average Usage	25	\$ 33.10	\$ 37.20	\$ 4.10	12.40%
RUCO						
6	25% Average Usage	3	\$ 11.19	\$ 13.30	\$ 2.11	18.88%
7	75% Average Usage	9	\$ 17.57	\$ 19.72	\$ 2.16	12.27%
8	Average Usage	12	\$ 20.76	\$ 22.94	\$ 2.18	10.48%
9	150% Average Usage	19	\$ 27.14	\$ 29.36	\$ 2.22	8.18%
10	200% Average Usage	25	\$ 33.10	\$ 35.78	\$ 2.68	8.10%
SWING MONTHS						
			April & November Break - 40 Therms	April & November Break - 8 Therms		
Company						
11	25% Average Usage	11	\$ 19.59	\$ 19.74	\$ 0.16	0.79%
12	75% Average Usage	34	\$ 42.76	\$ 26.52	\$ (16.23)	-37.97%
13	Average Usage	45	\$ 53.90	\$ 28.66	\$ (25.23)	-46.82%
14	150% Average Usage	68	\$ 75.16	\$ 32.93	\$ (42.23)	-56.18%
15	200% Average Usage	91	\$ 96.42	\$ 37.20	\$ (59.22)	-61.42%
RUCO						
16	25% Average Usage	11	\$ 19.59	\$ 21.76	\$ 2.17	11.07%
17	75% Average Usage	34	\$ 42.76	\$ 45.08	\$ 2.32	5.43%
18	Average Usage	45	\$ 53.90	\$ 56.75	\$ 2.85	5.29%
19	150% Average Usage	68	\$ 75.16	\$ 80.07	\$ 4.91	6.54%
20	200% Average Usage	91	\$ 96.42	\$ 103.40	\$ 6.98	7.24%
WINTER						
			December-March Break - 40 Therms	December-March Break - 30 Therms		
Company						
21	25% Average Usage	11	\$ 19.59	\$ 29.59	\$ 10.01	51.09%
22	75% Average Usage	34	\$ 42.76	\$ 54.71	\$ 11.95	27.95%
23	Average Usage	45	\$ 53.90	\$ 62.47	\$ 8.58	15.91%
24	150% Average Usage	68	\$ 75.16	\$ 77.99	\$ 2.83	3.76%
25	200% Average Usage	91	\$ 96.42	\$ 93.51	\$ (2.92)	-3.03%
RUCO						
26	25% Average Usage	11	\$ 19.59	\$ 21.76	\$ 2.17	11.07%
27	75% Average Usage	34	\$ 42.76	\$ 45.08	\$ 2.32	5.43%
28	Average Usage	45	\$ 53.90	\$ 56.75	\$ 2.85	5.29%
29	150% Average Usage	68	\$ 75.16	\$ 80.07	\$ 4.91	6.54%
30	200% Average Usage	91	\$ 96.42	\$ 103.40	\$ 6.98	7.24%
PROPOSED AVERAGE RESIDENTIAL TOTAL ANNUAL GAS SERVICE COSTS						
31	Company		\$ 447.93	\$ 479.17	\$ 31.24	6.97%
32	RUCO		\$ 447.93	\$ 478.09	\$ 30.16	6.73%
PRO-RATED AVERAGE RESIDENTIAL MONTHLY GAS SERVICE COSTS (ANNUAL COSTS DIVIDED BY 12 MONTHS)						
33	Company		\$ 37.33	\$ 39.93	\$ 2.60	6.97%
34	RUCO		\$ 37.33	\$ 39.84	\$ 2.51	6.73%

RATE SCHEDULES	
PRESENT BASIC SERVICE	
\$ 8.00	
PRESENT COMMODITY RATE	
1.02198 0.9378	
BREAKPOINTS	
SUMMER (THERMS) (May - Oct) 20	
WINTER (THERMS) (May - Oct) 40	
PROPOSED RATE DESIGNS	
COMPANY	RUCO
BASIC SERVICE	
\$ 16.00	\$ 10.09
COMMODITY RATE *	
1.19890 0.68436	1.02879
BREAKPOINTS	
SUMMER (THERMS) (Apr - Nov) 8 N/A	
WINTER (THERMS) (Dec - Mar) 30 N/A	

* - The Commodity Rate Includes Gas Costs Of \$0.5346 Per Therm

**SURREBUTTAL
REVENUE REQUIREMENT**

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)	(E)	(F)
		COMPANY ORIGINAL COST	COMPANY RCND	COMPANY FAIR VALUE	RUCO ORIGINAL COST	RUCO RCND	RUCO FAIR VALUE
1	Adjusted Rate Base	\$ 925,212,447	\$ 1,417,642,156	\$ 1,171,427,301	\$ 919,607,846	\$ 1,410,280,651	\$ 1,164,944,249
2	Adjusted Operating Income (Loss)	\$ 44,233,345	\$ 44,233,345	\$ 44,233,345	\$ 50,211,496	\$ 50,211,496	\$ 50,211,496
3	Current Rate Of Return (Line 2 / Line 1)	4.78%	3.12%	3.78%	5.46%	3.56%	4.31%
4	Required Operating Income (Line 5 X Line 1)	\$ 86,957,942	\$ 86,957,942	\$ 86,957,942	\$ 79,478,947	\$ 79,478,947	\$ 79,478,947
5	Required Rate Of Return	9.40%	6.13%	7.42%	8.64%	5.64%	6.82%
6	Operating Income Deficiency (Line 4 - Line 2)			\$ 42,724,598	\$ 29,267,452	\$ 29,267,452	\$ 29,267,452
7	Gross Revenue Conversion Factor (Schedule RLM-1, Page 2)			1.6573		1.6573	1.6573
8	Increase In Gross Revenue Requirement (Line 7 X Line 6)			\$ 70,809,128		\$ 48,506,079	\$ 48,506,079
9	Adjusted Test Year Revenue			\$ 322,865,978		\$ 322,865,978	\$ 322,865,978
10	Proposed Annual Revenue Requirement (Line 8 + Line 9)			\$ 393,675,106		\$ 371,372,057	\$ 371,372,057
11	Required Percentage Increase In Revenue (Line 8 / Line 9)			21.93%		15.02%	15.02%
12	Rate Of Return On Common Equity			11.95%		10.15%	10.15%

References:
Columns (A) Thru (C): Company Schedule A-1, C-1 And D-1
Columns (D) Thru (F): Schedules SUR-RLM-2, SUR-RLM-5, SUR-RLM-6 And RLM-18

**SURREBUTTAL
RATE BASE - ORIGINAL COST**

LINE NO.	DESCRIPTION	(A) COMPANY FILED AS OCRB	(B) RUCO OCRB ADJUSTMENTS	REF.	(C) RUCO ADJUSTED AS OCRB
1	Gas Plant In Service	\$1,685,504,145	\$ (5,313,424)	(1)	\$ 1,680,190,721
	Less:				
2	Accumulated Depreciation And Amortization	593,542,006	(1,409,926)	(1)	592,132,080
3	Net Gas Plant In Service (Line 1 - Line 2)	<u>\$1,091,962,139</u>	<u>\$ (3,903,498)</u>		<u>\$ 1,088,058,641</u>
	Additions:				
4	Allowance For Working Capital (MDC-3, Page 1)	\$ 881,148	\$ (1,924,355)	(2)	\$ (1,043,207)
5	Total Additions (Line 4)	<u>\$ 881,148</u>	<u>\$ (1,924,355)</u>		<u>\$ (1,043,207)</u>
	Deductions:				
6	Customer Advances In Aid Of Construction	\$ (7,027,372)	\$ -		\$ (7,027,372)
7	Customer Deposits	(23,912,141)	-		(23,912,141)
8	Deferred Income Taxes	(136,691,328)	223,252	(3)	(136,468,076)
9	Total Deductions (Sum Of Lines 6, 7 & 8)	<u>\$ (167,630,841)</u>	<u>\$ 223,252</u>		<u>\$ (167,407,589)</u>
10	TOTAL ORIGINAL COST RATE BASE (Sum Of Lines 3, 5 & 9)	<u>\$ 925,212,447</u>	<u>\$ (5,604,601)</u>		<u>\$ 919,607,846</u>

References:

Column (A): Company Schedule B-1

Column (B):

(1) Schedule SUR-RLM-3

(2) Schedule MDC-3

(3) Schedule MDC-1

Column (C): Column (A) + Column (B)

**SURREBITTAL
 "DIRECT" TEST YEAR PLANT SCHEDULES
 YEAR ENDED AUGUST 31, 2004**

LINE NO.	ACCOUNT NAME	(A) DEP RATE	(B) COMPANY TEST YEAR AS FILED TOTAL PLANT VALUE	(C) ACCUMULATED DEPRECIATION	(D) ADJ. NO. 1 RUCO (R) (D)C ACC. DEP.	(E) PIPE SURVEY ADJ. NO. 2 SURVEY PR.	(F) PIPE SURVEY ACC. DEP.	(G) CONC. NET ADDITIONS	(H) RUCO ADJUSTMENT NO. 3 ACC. DEP. CONC. ADDITIONS	(I) ACC. DEP. CONC. RETIREMENTS	(J) MISC. INTANGIBLE NET PLANT	(K) RUCO ADJUSTMENT NO. 4 ACC. DEP. INTANG. ADDITIONS	(L) ACC. DEP. INTANG. RETIREMENTS	(M) TOTAL PLANT VALUE	(N) RUCO AS ADJUSTED ACCUMULATED DEPRECIATION	(O) NET PLANT VALUE
1	301.0 Intangible Plant															
2	302.0 Operation															
3	303.0 Franchises & Consents															
4	303.0 Miscellaneous Intangible															
5	303.0 Total Intangible Plant															
6	374.1 Distribution Plant															
7	374.1 Land & Land Rights															
8	375.0 Structures															
9	376.0 Mains															
10	378.0 Measuring & Regulating Station															
11	380.0 Services															
12	386.0 Industrial Measuring & Reg. Station															
13	387.0 Other Equipment															
14	387.0 Total Distribution Plant															
15	389.0 General Plant															
16	390.0 Land & Land Rights															
17	390.0 Structures															
18	390.2 Leasehold Improvs															
19	391.0 Office Furniture And Equipment															
20	392.1 Computer Equipment															
21	393.0 Transportation Equipment															
22	393.0 Tools, Shop And Garage Equip															
23	394.0 Laboratory Equipment															
24	395.0 Power Operation Equipment															
25	396.0 Other Equipment															
26	397.0 Telemeasuring Equipment															
27	397.0 Miscellaneous Equipment															
28	397.0 Total General Plant															
29	TOTAL DIRECT PLANT															
30	Adjusted Plant (See SUR-RLM-3, Page 2, Line 31)															
31	TOTAL PLANT															
32	Direct Plant As Per Company															
33	Company Plant As Per Company															
	Difference															

References:
 Columns (A) (B) (C) Company Worksheets B-2, Sheets 1 Through 8 And C-2, Adjustment 17, Sheets 1 Through 6
 Column (D) Company Response To RUCO Data Request 7.01(C)
 Columns (E) (F) See Testimony, MDC
 Columns (G) (H) (I) See Schedule RLM-4, Pages 1 & 2
 Column (J) (K) (L) See Testimony, MDC
 Column (M) Sum Of Cols (B) (E) (G) (I)
 Column (N) Sum Of Cols (C) (D) (F) (H) (K) - Minus Cols (J) (L)
 Column (O) Column (M) - Column (N)

SURRENTAL
***SYSTEM ALLOCABLE TEST YEAR PLANT SCHEDULES**
YEAR ENDED AUGUST 31, 2004

LINE NO.	ACCT NO.	ACCOUNT NAME	DEP RATE	(A) COMPANY TEST YEAR AS FILED		(B) ADJUSTMENT NO. 1		(C) ADJUSTMENT NO. 2		(D) ADJUSTMENT NO. 3		(E) ADJUSTMENT NO. 4		(F) MISCELLANEOUS NET PLANT VALUE	(G) ACCUMULATED DEPRECIATION	(H) NET PLANT VALUE	(I) RUCO AS ADJUSTED ACCUMULATED DEPRECIATION	(J) NET PLANT VALUE
				AD. NO. 1	AD. NO. 2	AD. NO. 3	AD. NO. 4	AD. NO. 1	AD. NO. 2	AD. NO. 3	AD. NO. 4							
1	301.0	Intangible Plant	0.00%															
2	302.0	Franchises & Consents	Amort															
3	303.0	Miscellaneous Intangible	Amort															
4		Total Intangible Plant																
5	374.1	Distribution Plant	N/A															
6	374.2	Land & Land Rights	N/A															
7	375.0	Rights Of Way	N/A															
8	376.0	Structures	N/A															
9	376.0	Mans	N/A															
10	378.0	Measuring & Regulating Station	N/A															
11	380.0	Services	N/A															
12	381.0	Reliars	N/A															
13	385.0	Industrial Measuring & Reg. Station	N/A															
14	387.0	Other Distribution Plant	N/A															
15	385.0	General Plant	0.00%															
16	390.1	Land & Land Rights	2.65%															
17	390.2	Structures	Amort															
18	391.0	Office Furniture And Equipment	3.85%															
19	391.1	Computer Equipment	30.01%															
20	392.1	Trans Equip - Light Vehicles	6.42%															
21	393.0	Trans Equip - Heavy Vehicles	6.42%															
22	394.0	Stores Equipment	4.45%															
23	395.0	Tools, Shop And Garage Equip	4.70%															
24	396.0	Laboratory Equipment	3.05%															
25	397.0	Communication Equipment	9.88%															
26	398.2	Relicensing Equipment	20.0%															
27	399.0	Intangible Plant	3.65%															
28		Total General Plant																
29		TOTAL ALLOCABLE PLANT																
30		Allocation Factor																
31		TOTAL ALLOCABLE PLANT																

References:
 Columns (A) (B) (C) Company Worksheets B-2, Sheets 1 Through 8 And C-2, Adjustment 17, Sheets 1 Through 6
 Column (D) Company Response to RUCO Data Request 7.01(C)
 Column (E) (F) See Testimony, MCC
 Column (G) (H) (I) See Schedule RLM-4, Pages 1 & 2
 Column (J) (K) (L) See Testimony, MCC
 Column (M) Sum Of Cols (B) (E) (G) (I)
 Column (N) Sum Of Cols (C) (D) (F) (H) (K) - Minus Cols (J) (L)
 Column (O) Column (M) - Column (N)

SURREBUTTAL
RATE BASE - RECONSTRUCTED COST NEW DEPRECIATED

LINE NO.	DESCRIPTION	(A) COMPANY FILED AS RCND	(B) RUCO RCND ADJUSTMENTS	(C) RUCO ADJUSTED AS RCND
1	Gas Plant In Service	\$ 2,441,205,028	\$ (7,695,714)	\$ 2,433,509,314
	Less:			
2	Accumulated Depreciation And Amortization	856,813,179	(2,035,312)	854,777,867
3	Net Gas Plant In Service (Line 1 - Line 2)	<u>\$ 1,584,391,849</u>	<u>\$ (5,660,401)</u>	<u>\$ 1,578,731,448</u>
	Additions:			
4	Allowance For Working Capital	\$ 881,148	\$ (1,924,355)	\$ (1,043,207)
5	Total Additions (Line 4)	<u>\$ 881,148</u>	<u>\$ (1,924,355)</u>	<u>\$ (1,043,207)</u>
	Deductions:			
6	Customer Advances In Aid Of Construction	\$ (7,027,372)	\$ -	\$ (7,027,372)
7	Customer Deposits	(23,912,141)	-	(23,912,141)
8	Deferred Income Taxes	(136,691,328)	223,252	(136,468,076)
9	Total Deductions (Sum Lines 6, 7 & 8)	<u>\$ (167,630,841)</u>	<u>\$ 223,252</u>	<u>\$ (167,407,589)</u>
10	TOTAL RCND RATE BASE	<u>\$ 1,417,642,156</u>	<u>\$ (7,361,505)</u>	<u>\$ 1,410,280,651</u>

References:

- Column (A): Company Schedule B-1
- Column (B): Column (C) - Column (A)
- Column (C): OCRB (SUR-RLM-2, Column (C)) X Same Ratio As The Company's RCND Is To Its OCRB (144.84%)

**SURREBUTTAL
OPERATING INCOME**

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJUSTMENTS	(C) RUCO TEST YEAR AS ADJUSTED	(D) RUCO PROPOSED CHANGES	(E) RUCO AS RECOMMENDED
1	Revenues	\$ 322,865,978	\$ -	\$ 322,865,978	\$ 48,506,079	\$ 371,372,057
2	Gas Cost	-	-	-	-	-
3	TOTAL MARGIN	<u>\$ 322,865,978</u>	<u>\$ -</u>	<u>\$ 322,865,978</u>	<u>\$ 48,506,079</u>	<u>\$ 371,372,057</u>
	EXPENSES:					
4	Other Gas Supply	\$ 740,391	\$ (21,030)	\$ 719,361	\$ -	\$ 719,361
5	Distribution	78,580,466	(4,743,687)	73,836,779	-	73,836,779
6	Customer Accounts	34,003,279	(1,498,542)	32,504,737	-	32,504,737
7	Customer Information	548,496	(16,817)	531,679	-	531,679
8	Sales	-	-	-	-	-
	Administration & General					
9	Direct	6,993,300	(83,716)	6,909,584	-	6,909,584
10	System Allocable	45,487,895	(3,601,085)	41,886,810	-	41,886,810
	Depreciation & Amortization					
11	Direct	67,338,861	(109,637)	67,229,224	-	67,229,224
12	System Allocable	7,062,583	(123,789)	6,938,794	-	6,938,794
13	Regulatory Amortizations	1,548,204	(1,044,968)	503,236	-	503,236
14	Other Taxes	33,455,124	(1,267,863)	32,187,261	-	32,187,261
15	Interest On Cust. Deposits	717,364	-	717,364	-	717,364
16	Income Taxes	2,156,664	6,532,990	8,689,654	19,238,627	27,928,281
17	TOTAL EXPENSES	<u>\$ 278,632,626</u>	<u>\$ (5,978,145)</u>	<u>\$ 272,654,482</u>	<u>\$ 19,238,627</u>	<u>\$ 291,893,110</u>
18	NET INCOME (LOSS)	<u>\$ 44,233,351</u>		<u>\$ 50,211,496</u>		<u>\$ 79,478,947</u>

References:

- Column (A): Company Schedule C-1
- Column (B): Testimony, SUR-RLM And Schedule SUR-RLM-7
- Column (C): Column (A) + Column (B)
- Column (D): Testimony, SUR-RLM And Schedule SUR-RLM-1, Pages 1 & 2
- Column (E): Column (C) + Column (D)

SURREBUTTAL
SUMMARY OF OPERATING INCOME ADJUSTMENTS
TEST YEAR AS FILED AND ADJUSTED

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) LEFT BLANK	(C) ADJ #3	(D) LEFT BLANK	(E) ADJ #7	(F) ADJ #8	(G) ADJ #10	(H) ADJ #12	(I) ADJ #14
1	Revenues	\$322,865,978	-	-	-	-	-	-	-	-
2	Gas Cost	-	-	-	-	-	-	-	-	-
3	TOTAL MARGIN	<u>\$322,865,978</u>	<u>\$-</u>	<u>\$-</u>	<u>\$-</u>	<u>\$-</u>	<u>\$-</u>	<u>\$-</u>	<u>\$-</u>	<u>\$-</u>
EXPENSES:										
4	Other Gas Supply	\$ 740,391	-	\$ (11,215)	-	\$ -	-	\$ -	-	\$ -
5	Distribution	78,580,466	-	(2,369,054)	-	-	-	-	(1,488,287)	(150,532)
6	Customer Accounts	34,003,279	-	(1,109,601)	-	-	-	-	-	(8,572)
7	Customer Information	548,496	-	(12,878)	-	-	-	-	-	-
8	Sales	-	-	-	-	-	-	-	-	-
9	Administration & General	6,993,300	-	(31,713)	-	-	-	-	-	-
10	Direct System Allocable	45,487,895	-	(700,264)	-	(75,385)	240,016	-	-	(117,935)
Depreciation & Amortization										
11	Direct	67,338,861	-	-	-	-	-	-	-	-
12	System Allocable	7,062,583	-	-	-	-	(12,932)	-	-	-
13	Regulatory Amortizations	1,548,204	-	-	-	-	-	-	(1,044,968)	-
14	Other Taxes	33,455,124	-	-	-	-	-	-	-	-
15	Interest On Cust. Deposits	717,364	-	-	-	-	-	-	-	-
16	Income Taxes	2,156,664	-	-	-	-	-	-	-	-
17	TOTAL EXPENSES	<u>\$278,632,627</u>	<u>\$-</u>	<u>\$ (4,234,725)</u>	<u>\$-</u>	<u>\$ (75,385)</u>	<u>\$ 227,084</u>	<u>\$-</u>	<u>\$ (2,533,255)</u>	<u>\$ (277,039)</u>
18	NET INCOME (LOSS)	<u>\$ 44,233,351</u>	<u>\$-</u>	<u>\$-</u>	<u>\$-</u>	<u>\$-</u>	<u>\$-</u>	<u>\$-</u>	<u>\$-</u>	<u>\$-</u>

- Adjustment No.:
- 1 - Left Blank
 - 3 - Labor And Labor Loading Annualization
 - 4 - Left Blank
 - 7 - American Gas Association ("AGA") Dues
 - 8 - Sarbanas-Oxley Section 404 Compliance
 - 10 - Injuries And Damages
 - 12 - Transmission Integrity Management Program
 - 14 - Miscellaneous Adjustments
- References:
- Testimony, SUR-RLM And Schedule SUR-RLM-8, Pages 1 To 7
 - Testimony, SUR-RLM And Schedule RLM-9, Page 1
 - Testimony, MDC And Schedule MDC-4
 - Testimony, SUR-RLM And Schedule SUR-RLM-10, Page 1
 - Testimony, MDC And Schedule MDC-5
 - Testimony, SUR-RLM And Schedule SUR-RLM-11, Page 1

SURREBUTTAL
SUMMARY OF OPERATING INCOME ADJUSTMENTS - CONT'D
TEST YEAR AS FILED AND ADJUSTED

LINE NO.	DESCRIPTION	(J) ADJ #17	(K) ADJ #18	(L) ADJ #20	(M) ADJ #21	(N) LEFT BLANK	(O) LEFT BLANK	(P) LEFT BLANK	(Q) INCOME TAX	(R) RUCO AS ADJTD
1	Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 322,865,978
2	Gas Cost	-	-	-	-	-	-	-	-	-
3	TOTAL MARGIN	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 322,865,978
EXPENSES:										
4	Other Gas Supply	\$ -	\$ -	\$ -	\$ (9,815)	\$ -	\$ -	\$ -	\$ -	\$ 719,361
5	Distribution	-	-	-	(735,813)	-	-	-	-	73,836,779
6	Customer Accounts	-	-	-	(380,369)	-	-	-	-	32,504,737
7	Customer Information	-	-	-	(3,939)	-	-	-	-	531,679
8	Sales	-	-	-	-	-	-	-	-	-
Administration & General										
9	Direct	-	-	-	(52,003)	-	-	-	-	6,909,584
10	System Allocable	-	-	(2,563,384)	(384,133)	-	-	-	-	41,886,810
Depreciation & Amortization										
11	Direct	(109,637)	-	-	-	-	-	-	-	67,229,224
12	System Allocable	(110,857)	-	-	-	-	-	-	-	6,938,794
13	Regulatory Amortizations	-	-	-	-	-	-	-	-	503,236
14	Other Taxes	-	(1,267,863)	-	-	-	-	-	-	32,187,261
15	Interest On Cust. Deposits	-	-	-	-	-	-	-	-	717,364
16	Income Taxes	-	-	-	-	-	-	-	6,532,990	8,689,654
17	TOTAL EXPENSES	\$ (220,495)	\$ (1,267,863)	\$ (2,563,384)	\$ (1,566,073)	\$ -	\$ -	\$ -	\$ 6,532,990	\$ 272,654,482
18	NET INCOME (LOSS)									\$ 50,211,496

Adjustment No.:

- 17 - Depreciation/Amortization Expense
- 18 - Property Tax Expense
- 20 - RUCO Adjustment To Management Incentive Plan
- 21 - RUCO Adjustment To SERP
- 22 - Left Blank
- 23 - Left Blank
- 24 - Left Blank
- 25 - RUCO Adjustment To Income Tax

References:

- Testimony, SUR-RLM, Schedule SUR-RLM-12, Pages 1 & 2 and Schedule MDC-6
- Testimony, SUR-RLM And Schedule SUR-RLM-13, Page 1
- Testimony, MDC
- Testimony, SUR-RLM And Schedule SUR-RLM-14, Page 1
- Testimony, SUR-RLM And Schedule SUR-RLM-15, Page 1

SURREBUTTAL
EXPLANATION OF SWG OPERATING INCOME ADJUSTMENT NO. 3
LABOR AND LABOR LOADING ADJUSTMENT

LINE NO.	ARIZONA ACCOUNT NUMBERS	(A)	(B)	(C)
		RUCO AS ADJUSTED		
		LABOR (See SUR-RLM-8, Pg 2, C (I))	LOADING (See SUR-RLM-8, Pg 2, C (J))	TOTAL (Sum Of Columns (A) And (B))
OPERATIONS				
1	813	\$ 455,832	\$ 216,139	\$ 671,971
2	851	-	-	-
3	870	4,516,420	2,471,039	6,987,459
4	871	353,388	168,757	522,145
5	874	3,217,553	1,766,426	4,983,979
6	875	1,209,398	663,124	1,872,523
7	878	3,566,758	1,959,621	5,526,379
8	879	4,213,776	2,317,540	6,531,316
9	880	3,877,730	2,123,083	6,000,813
10	901	2,198,381	1,209,529	3,407,910
11	902	3,157,967	1,733,369	4,891,336
12	903	11,034,154	5,837,771	16,871,925
13	905	229,577	125,905	355,482
14	908	169,525	93,067	262,592
15	909	-	-	-
16	910	483	254	737
17	920	29,532,070	14,035,006	43,567,076
18	922	-	-	-
19	930	29,401	13,956	43,357
20	SUBTOTAL	\$ 67,762,413	\$ 34,734,587	\$ 102,497,000
MAINTENANCE				
21	885	\$ 1,465,754	\$ 802,645	\$ 2,268,399
22	886	8,440	4,600	13,040
23	887	4,619,107	2,534,716	7,153,823
24	889	688,285	377,723	1,066,008
25	892	3,272,194	1,797,488	5,069,682
26	893	693,998	380,139	1,074,137
27	894	92,633	50,672	143,305
28	CORPORATE DIRECT 935	418,703	229,599	648,302
	SYSTEM ALLOCABLE 935	181,976	86,926	268,902
29	SUBTOTAL	\$ 11,259,114	\$ 6,177,582	\$ 17,705,598
30	TOTALS	\$ 79,021,527	\$ 40,912,169	\$ 120,202,598
FUNCTIONALIZATION				
		COMPANY AS FILED (WP, ADJ. 3, Pg 11 Thru 24)	RUCO AS ADJUSTED (From Col. (C), Lines 1 To 29)	ADJUSTMENT (Col. (B) - (A)) (See SUR-RLM-7, Pg 1, C (C))
31	OTHER GAS SUPPLY (813)	\$ 683,186	\$ 671,971	\$ (11,215)
32	DISTRIBUTION (870-880 & 885-894)	51,582,063	49,213,009	(2,369,054)
33	CUST. ACC'TS (901, 902, 903 & 905)	26,636,254	25,526,653	(1,109,601)
34	CUST. SER. & INFO (908, 909, & 910)	276,206	263,328	(12,878)
35	SALES			
	ADMINISTRATION & GENERAL			
36	CORPORATE DIRECT (935)	680,015	648,302	(31,713)
37	SYS. ALLOC. (920, 922, 930 & 935)	44,579,599	43,879,335	(700,264)
38	TOTAL	\$ 124,437,323	\$ 120,202,598	\$ (4,234,725)
39	RUCO ADJUSTMENT TO LABOR AND LABOR LOADING (See SUR-RLM-7, Page 1, Col (C), Line17)			\$ (4,234,725)

References:

Columns (A) (B) (C): Calculated From The Following 6 Pages Of Schedule SUR-RLM-8

SURREBUTTAL
EXPLANATION OF SWG OPERATING INCOME ADJUSTMENT NO. 3 - CONT'D
ANNUALIZED LABOR AND LOADING PER RUCO ADJUSTMENTS

LINE NO.	ACCT NO.	(A) ARIZONA		(B) ARIZONA		(C) CORPORATE DIRECT		(D) CORPORATE DIRECT		(E) TOTAL DIRECT		(F) TOTAL DIRECT		(G) SYSTEM ALLOCATED		(H) SYSTEM ALLOCATED		(I) TOTAL ANNUALIZATION		(J) TOTAL ANNUALIZATION	
		LABOR SUR-8, P5, (C)	LOADING SUR-8, P6, (C)	LABOR SUR-8, P5, (F)	LOADING SUR-8, P6, (F)	LABOR SUR-8, P5, (F)	LOADING SUR-8, P6, (F)	LABOR SUR-8, P5, (F)	LOADING SUR-8, P6, (F)	LABOR SUR-8, P5, (F)	LOADING SUR-8, P6, (F)	LABOR SUR-8, P5, (I)	LOADING SUR-8, P6, (I)	LABOR SUR-8, P5, (I)	LOADING SUR-8, P6, (I)	LABOR SUR-8, P5, (I)	LOADING SUR-8, P6, (I)	LABOR SUR-8, P5, (I)	LOADING SUR-8, P6, (I)		LABOR SUR-8, P5, (I)
OPERATIONS																					
1	813	\$ -	\$ -	\$ 455,832	\$ 216,139	\$ 455,832	\$ 216,139	\$ -	\$ -	\$ 455,832	\$ 216,139	\$ -	\$ -	\$ -	\$ -	\$ 455,832	\$ 216,139	\$ -	\$ -	\$ 455,832	\$ 216,139
2	851	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	870	4,216,473	2,311,393	299,947	159,646	299,947	159,646	299,947	159,646	4,516,420	2,471,039	4,516,420	2,471,039	4,516,420	2,471,039	4,516,420	2,471,039	4,516,420	2,471,039	4,516,420	2,471,039
4	871	11,556	6,273	341,832	162,484	341,832	162,484	341,832	162,484	353,388	168,757	353,388	168,757	353,388	168,757	353,388	168,757	353,388	168,757	353,388	168,757
5	874	3,217,553	1,766,426	-	-	-	-	-	-	3,217,553	1,766,426	3,217,553	1,766,426	-	-	3,217,553	1,766,426	-	-	3,217,553	1,766,426
6	875	1,209,398	663,124	-	-	-	-	-	-	1,209,398	663,124	1,209,398	663,124	-	-	1,209,398	663,124	-	-	1,209,398	663,124
7	878	3,566,758	1,959,621	-	-	-	-	-	-	3,566,758	1,959,621	3,566,758	1,959,621	-	-	3,566,758	1,959,621	-	-	3,566,758	1,959,621
8	879	4,213,776	2,317,540	-	-	-	-	-	-	4,213,776	2,317,540	4,213,776	2,317,540	-	-	4,213,776	2,317,540	-	-	4,213,776	2,317,540
9	880	3,849,883	2,110,325	27,647	12,758	27,647	12,758	27,647	12,758	3,877,530	2,130,083	3,877,530	2,130,083	-	-	3,877,530	2,130,083	-	-	3,877,530	2,130,083
10	901	2,198,381	1,209,529	-	-	-	-	-	-	2,198,381	1,209,529	2,198,381	1,209,529	-	-	2,198,381	1,209,529	-	-	2,198,381	1,209,529
11	902	3,157,967	1,733,369	-	-	-	-	-	-	3,157,967	1,733,369	3,157,967	1,733,369	-	-	3,157,967	1,733,369	-	-	3,157,967	1,733,369
12	903	8,146,838	4,468,440	1,335,013	631,290	1,335,013	631,290	1,335,013	631,290	9,481,851	5,099,731	9,481,851	5,099,731	1,552,303	738,040	11,034,154	5,837,771	1,552,303	738,040	11,034,154	5,837,771
13	905	229,577	125,905	-	-	-	-	-	-	229,577	125,905	229,577	125,905	-	-	229,577	125,905	-	-	229,577	125,905
14	908	169,525	93,067	-	-	-	-	-	-	169,525	93,067	169,525	93,067	-	-	169,525	93,067	-	-	169,525	93,067
15	909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	910	483	254	-	-	-	-	-	-	483	254	483	254	-	-	483	254	-	-	483	254
17	920	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	922	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	SUBTOT	\$ 34,188,169	\$ 18,765,267	\$ 2,460,470	\$ 1,182,317	\$ 2,460,470	\$ 1,182,317	\$ 2,460,470	\$ 1,182,317	\$ 36,648,639	\$ 19,947,584	\$ 36,648,639	\$ 19,947,584	\$ 31,113,774	\$ 14,787,003	\$ 67,762,413	\$ 34,734,587	\$ 31,113,774	\$ 14,787,003	\$ 67,762,413	\$ 34,734,587
MAINTENANCE																					
21	885	\$ 1,364,407	\$ 748,934	\$ 101,347	\$ 53,711	\$ 101,347	\$ 53,711	\$ 101,347	\$ 53,711	\$ 1,465,754	\$ 802,645	\$ 1,465,754	\$ 802,645	\$ -	\$ -	\$ 1,465,754	\$ 802,645	\$ -	\$ -	\$ 1,465,754	\$ 802,645
22	886	8,440	4,600	-	-	-	-	-	-	8,440	4,600	8,440	4,600	-	-	8,440	4,600	-	-	8,440	4,600
23	887	4,619,107	2,534,716	-	-	-	-	-	-	4,619,107	2,534,716	4,619,107	2,534,716	-	-	4,619,107	2,534,716	-	-	4,619,107	2,534,716
24	889	688,285	377,723	-	-	-	-	-	-	688,285	377,723	688,285	377,723	-	-	688,285	377,723	-	-	688,285	377,723
25	892	3,272,194	1,797,488	-	-	-	-	-	-	3,272,194	1,797,488	3,272,194	1,797,488	-	-	3,272,194	1,797,488	-	-	3,272,194	1,797,488
26	893	693,998	380,139	-	-	-	-	-	-	693,998	380,139	693,998	380,139	-	-	693,998	380,139	-	-	693,998	380,139
27	894	92,633	50,672	-	-	-	-	-	-	92,633	50,672	92,633	50,672	-	-	92,633	50,672	-	-	92,633	50,672
28	935	418,703	229,599	-	-	-	-	-	-	418,703	229,599	418,703	229,599	-	-	418,703	229,599	-	-	418,703	229,599
29	SUBTOT	\$ 11,157,768	\$ 6,123,871	\$ 101,347	\$ 53,711	\$ 101,347	\$ 53,711	\$ 101,347	\$ 53,711	\$ 11,259,114	\$ 6,177,582	\$ 11,259,114	\$ 6,177,582	\$ 181,976	\$ 86,926	\$ 11,441,091	\$ 6,264,507	\$ 181,976	\$ 86,926	\$ 11,441,091	\$ 6,264,507
30	O & M	\$ 45,345,937	\$ 24,889,138	\$ 2,561,817	\$ 1,236,028	\$ 2,561,817	\$ 1,236,028	\$ 2,561,817	\$ 1,236,028	\$ 47,907,753	\$ 26,125,166	\$ 47,907,753	\$ 26,125,166	\$ 31,295,750	\$ 14,873,929	\$ 79,203,503	\$ 40,999,095	\$ 31,295,750	\$ 14,873,929	\$ 79,203,503	\$ 40,999,095

SURREBUTTAL
EXPLANATION OF SWG OPERATING INCOME ADJUSTMENT NO. 3 - CONT'D
ANNUALIZED LABOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
		ARIZONA DIRECT	CORPORATE DIRECT	SYSTEM ALLOCABLE	TOTAL
1	ANNUALIZED SALARY (WP C-2, ADJ. 3, SH 3)	\$ 61,779,296	\$ 2,843,265	\$ 36,475,304	
	LESS:				
2	SALES/MARK'G DISALLOW (SUR-RLM-8, Pg 7)	(2,125,266)	-	(767,168)	
3	SUBTOTAL (Line 1 + Line 2)	<u>\$ 59,654,030</u>	<u>\$ 2,843,265</u>	<u>\$ 35,708,136</u>	
	PLUS:				
4	2005 WAGES INCREASE % (Testimony, RLM)	0.00%	0.00%	0.00%	
5	2005 WAGE INCREASE (Line 3 X Line 4)	\$ -	\$ -	\$ -	
6	SUBTOTAL (Line 3 + Line 5)	<u>\$ 59,654,030</u>	<u>\$ 2,843,265</u>	<u>\$ 35,708,136</u>	
7	OVERTIME % (See Line 24)	8.84%	2.77%	0.44%	
8	OVERTIME (Line 6 X Line 7)	\$ 5,270,795	\$ 78,790	\$ 157,459	
9	TOTAL ANNUALIZED PAYROLL (Line 1 + Line 8)	<u>\$ 64,924,825</u>	<u>\$ 2,922,055</u>	<u>\$ 36,632,763</u>	
	LESS:				
10	PERCENT INDIRECT TIME (WP C-2, ADJ. 3, SH 4)	13.53%	12.33%	12.33%	
11	INDIRECT TIME (Line 9 X Line 10)	\$ 8,787,421	\$ 360,238	\$ 4,516,177	
12	NET ANNUALIZED LABOR (Line 9 + Line 11)	<u>\$ 56,137,403</u>	<u>\$ 2,561,817</u>	<u>\$ 32,116,586</u>	
13	O & M RATIO (WP C-2, ADJ. 3, SH 2)	81.02%	100.00%	96.51%	
14	O & M SUBTOTAL (Line 12 X Line 13)	<u>\$ 45,480,959</u>	<u>\$ 2,561,817</u>	<u>\$ 30,996,513</u>	
15	ALLOCATION FACTOR (WP C-2, ADJ. 3, SH 15)	100.00%	100.00%	57.58%	
16	O & M SUBTOTAL ALLOCABLE (Line 14 X Line 15)	<u>\$ 45,480,959</u>	<u>\$ 2,561,817</u>	<u>\$ 17,847,792</u>	
17	NET OF PAIUTE (SEE NOTE A)	\$ -	\$ -	\$ (704,227)	
18	O & M TOTAL ALLOCABLE (Line 16 + Line 17)	<u>\$ 45,480,959</u>	<u>\$ 2,561,817</u>	<u>\$ 17,143,565</u>	
19	COMPANY AS FILED (WP C-2, ADJ. 3, SH 15 & 20)	\$ 48,681,264	\$ 2,620,441	\$ 17,553,678	
20	RUCO ADJUSTMENT (Line 18 - Line 19)	<u>\$ (3,200,305)</u>	<u>\$ (58,624)</u>	<u>\$ (410,113)</u>	<u>\$ (3,669,043)</u>
21	ANNUALIZED EMPLOYEES (WP C-2, ADJ. 3, SH 3)	1,171	39	502	<u>1,712</u>
	REVISED OVERTIME CALCULATION				
22	TEST-YEAR RECORDED OVERTIME	\$ 5,308,604	\$ 56,936	\$ 159,104	
23	REGULAR PAY MINUS SALES DISALLOWANCE	60,081,948	2,054,630	36,081,280	
24	OVERTIME PERCENTAGE	8.84%	2.77%	0.44%	

NOTE (A)

25	PAIUTE ADJUSTMENT				
26	RUCO ADJUSTED 920		\$ 29,532,070		
27	RUCO ADJUSTED 930		29,401		
28	RUCO ADJUSTED 935		181,976		
29	SUBTOTAL (Sum Of Lines 23, 24 & 25)		<u>\$ 29,743,447</u>		
30	PAIUTE ALLOCATION FACTOR (WP C-2, ADJ. 3, SH 19)		-4.29%		
31	NET SYSTEM ALLOCATON - PAIUTE (Line 26 X Line 28)		<u>\$ (1,275,994)</u>		
32	O & M RATIO (WP C-2, ADJ. 3, SH 20)		95.85%		
33	O & M SUBTOTAL (Line 28 X Line 29)		<u>\$ (1,223,040)</u>		
34	ALLOCATION FACTOR (WP C-2, ADJ. 3, SH 20)		57.58%		
35	SYSTEM ALLOCATION - PAIUTE (Line 30 X Line 31)		<u>\$ (704,227)</u>		

SURREBUTTAL
EXPLANATION OF SWG OPERATING INCOME ADJUSTMENT NO. 3 - CONT'D
ANUALIZED FICA, MEDICARE, FUTA, AND SUTA

LINE NO.	DESCRIPTION	(A) ARIZONA DIRECT	(B) CORPORATE DIRECT	(C) SYSTEM ALLOCABLE	(D) TOTAL
ANNUALIZED FICA					
1	RUCO ANNUALIZED LABOR (SUR-8, PG. 3, L 9)	\$ 64,924,825	\$ 2,922,055	\$ 36,632,763	
2	SALARIES NOT SUBJECT TO FICA (RUCO DR 2.08)	693,076	233,025	2,989,398	
4	LABOR SUBJECT TO FICA (Line 1 - Line 2)	\$ 64,231,749	\$ 2,689,030	\$ 33,643,365	
5	FICA RATE	6.20%	6.20%	6.20%	
6	TOTAL ANNUALIZED FICA (Line 4 X Line 5)	<u>\$ 3,982,368</u>	<u>\$ 166,720</u>	<u>\$ 2,085,889</u>	
ANNUALIZED MEDICARE					
7	ANNUALIZED LABOR (Line 1)	\$ 64,924,825	\$ 2,922,055	\$ 36,632,763	
8	MEDICARE RATE	1.45%	1.45%	1.45%	
9	TOTAL ANNUALIZED MEDICARE (Line 7 X Line 8)	<u>\$ 941,410</u>	<u>\$ 42,370</u>	<u>\$ 531,175</u>	
10	TOTAL FICA AND MEDICARE (Line 6 + Line 9)	<u>\$ 4,923,778</u>	<u>\$ 209,090</u>	<u>\$ 2,617,064</u>	<u>\$ 7,749,932</u>
FUTA					
11	TAX BASE FACTOR	\$ 7,000	\$ 7,000	\$ 7,000	
12	NUMBER OF EMPLOYEES (WP, ADJ. 3, SH 4)	1171	39	502	
13	TAX BASE (Line 11 X Line 12)	\$ 8,197,000	\$ 273,000	\$ 3,514,000	
14	FUTA RATE	0.80%	0.80%	0.80%	
15	TOTAL FUTA (Line 13 X Line 14)	<u>\$ 65,576</u>	<u>\$ 2,184</u>	<u>\$ 28,112</u>	<u>\$ 95,872</u>
SUTA					
16	TAX BASE FACTOR	\$ 7,000	\$ 22,000	\$ 22,000	
17	NUMBER OF EMPLOYEES (WP, ADJ. 3, SH 4)	1171	39	502	
18	TAX BASE (Line 16 X Line 17)	\$ 8,197,000	\$ 858,000	\$ 11,044,000	
19	SUTA RATE	0.06%	0.30%	0.30%	
20	TOTAL SUTA (Line 18 X Line 19)	<u>\$ 4,918</u>	<u>\$ 2,574</u>	<u>\$ 33,132</u>	<u>\$ 40,624</u>
NET OF PAIUTE (SEE NOTE A)				\$ (606,430)	
21	TOTAL LABOR LOADING (Sum Of Lines 11, 16 & 21)	<u>\$ 4,994,273</u>	<u>\$ 213,848</u>	<u>\$ 2,071,878</u>	<u>\$ 7,886,428</u>
22	COMPANY AS FILED (WP C-2, ADJ. 3, SH 5)	<u>\$ 5,329,017</u>	<u>\$ 218,963</u>	<u>\$ 2,742,440</u>	<u>\$ 8,290,420</u>
23	DIFFERENCE (Line 21 - Line 22)	\$ (334,744)	\$ (5,115)	\$ (670,562)	\$ (1,010,422)
LESS:					
24	PERCENT INDIRECT TIME (WP C-2, ADJ. 3, SH 4)	13.53%	12.33%	12.33%	12.73%
25	INDIRECT TIME (Line 23 X Line 24)	\$ (45,307)	\$ (631)	\$ (82,669)	\$ (128,606)
26	NET ANNUALIZED LABOR LOADING (L 23 - L 25)	<u>\$ (289,438)</u>	<u>\$ (4,485)</u>	<u>\$ (587,893)</u>	<u>\$ (881,816)</u>
27	O & M RATIO (WP C-2, ADJ. 3, SH 2)	81.02%	100.00%	96.51%	91.44%
28	O & M SUBTOTAL (Line 26 X Line 27)	<u>\$ (234,494)</u>	<u>\$ (4,485)</u>	<u>\$ (567,391)</u>	<u>\$ (806,369)</u>
29	ALLOCATION FACTOR (WP C-2, ADJ. 3, SH 15)	100.00%	100.00%	57.58%	70.15%
30	RUCO ADJUSTMENT (Line 28 X Line 29)	<u>\$ (234,494)</u>	<u>\$ (4,485)</u>	<u>\$ (326,703)</u>	<u>\$ (565,682)</u>
NOTE (A)					
PAIUTE ADJUSTMENT					
31	RUCO ADJUSTED 920		\$ 14,035,006		
32	RUCO ADJUSTED 930		13,956		
33	RUCO ADJUSTED 935		86,926		
34	SUBTOTAL (Sum Of Lines 23, 24 & 25)		<u>\$ 14,135,888</u>		
35	PAIUTE ALLOCATION FACTOR (WP C-2, ADJ. 3, SH 19)		-4.29%		
36	NET SYSTEM ALLOCATON - PAIUTE (Line 34 X Line 35)		<u>\$ (606,430)</u>		

**SURREBUTTAL
EXPLANATION OF SWG OPERATING INCOME ADJUSTMENT NO. 3 - CONT'D
ANUALIZED LABOR**

LINE NO.	ACCOUNT CODE	(A) ARIZONA DIRECT		(B) ARIZONA DIRECT		(C) RUCO		(D) COMPANY		(E) CORPORATE DIRECT		(F) RUCO		(G) COMPANY		(H) SYSTEM ALLOCATED		(I) RUCO AS ADJUSTED Col. (G) - (H)	
		COMPANY AS FILED Co. WP, Adj. 3	ADJUSTMENT Pro Rated Pg 3	RUCO AS ADJUSTED Col. (A) - (B)	ADJUSTMENT Pro Rated Pg 3	COMPANY AS FILED Co. WP, Adj. 3	ADJUSTMENT Pro Rated Pg 3	RUCO AS ADJUSTED Col. (D) - (E)	ADJUSTMENT Pro Rated Pg 3	COMPANY AS FILED Co. WP, Adj. 3	ADJUSTMENT Pro Rated Pg 3	RUCO AS ADJUSTED Col. (D) - (E)	ADJUSTMENT Pro Rated Pg 3	COMPANY AS FILED Co. WP, Adj. 3	ADJUSTMENT Pro Rated Pg 3	RUCO AS ADJUSTED Col. (G) - (H)			
OPERATIONS																			
1	813	\$ -	\$ -	\$ -	\$ (10,431)	\$ 455,832	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2	851	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	870	4,514,052	(297,579)	4,216,473	(6,864)	299,947	306,811	(6,864)	306,811	299,947	299,947	-	-	-	-	-	-	-	
4	871	12,372	(816)	11,556	(7,822)	341,832	349,654	(7,822)	349,654	341,832	341,832	-	-	-	-	-	-	-	
5	874	3,444,633	(227,080)	3,217,553	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6	875	1,294,752	(85,354)	1,209,398	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7	878	3,818,483	(251,725)	3,566,758	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
8	879	4,511,165	(297,389)	4,213,776	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
9	880	4,121,590	(271,707)	3,849,883	(637)	27,847	28,484	(637)	28,484	27,847	27,847	-	-	-	-	-	-	-	
10	901	2,353,532	(155,151)	2,198,381	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11	902	3,380,842	(222,875)	3,157,967	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	903	8,721,804	(574,966)	8,146,838	(30,550)	1,335,013	1,365,563	(30,550)	1,365,563	1,335,013	1,335,013	-	-	-	-	-	-	1,552,303	
13	905	245,780	(16,203)	229,577	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
14	908	181,489	(11,964)	169,525	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
15	909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
16	910	517	(34)	483	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
17	920	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
18	922	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
19	930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
20	SUBTOTAL	\$36,601,011	(2,412,842)	\$34,188,169	\$ (56,305)	\$ 2,460,470	\$ 2,516,775	\$ (56,305)	\$ 2,516,775	\$ 2,460,470	\$ 2,460,470	\$ (385)	\$ 29,786	\$ (407,728)	\$ 29,786	\$ (385)	\$ 29,401	\$31,113,774	
MAINTENANCE																			
21	885	\$ 1,460,701	(96,294)	\$ 1,364,407	\$ (2,319)	\$ 101,347	\$ 103,666	\$ (2,319)	\$ 103,666	\$ 101,347	\$ 101,347	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
22	886	9,036	(596)	8,440	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
23	887	4,945,102	(325,995)	4,619,107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
24	889	736,861	(48,576)	688,285	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
25	892	3,503,130	(230,936)	3,272,194	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
26	893	742,977	(48,979)	693,998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
27	894	99,171	(6,538)	92,633	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
28	935	448,253	(29,550)	418,703	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
29	SUBTOTAL	\$11,945,231	(787,463)	\$11,157,768	\$ (2,319)	\$ 101,347	\$ 103,666	\$ (2,319)	\$ 103,666	\$ 101,347	\$ 101,347	\$ (2,385)	\$ 184,361	\$ (2,385)	\$ 184,361	\$ (2,385)	\$ 181,976	\$ 181,976	
30	TOTALS	\$48,546,242	(3,200,305)	\$45,345,937	\$ (58,624)	\$ 2,561,817	\$ 2,620,441	\$ (58,624)	\$ 2,620,441	\$ 2,561,817	\$ 2,561,817	\$ (410,113)	\$ 31,705,863	\$ (410,113)	\$ 31,705,863	\$ (410,113)	\$ 31,295,750	\$ 31,295,750	

SURREBUTTAL
EXPLANATION OF SWG OPERATING INCOME ADJUSTMENT NO. 3 - CONT'D
ANNUALIZED LABOR LOADING

LINE NO.	ACCOUNT CODE	(A) ARIZONA DIRECT		(B) ARIZONA DIRECT		(C) RUCO		(D) COMPANY		(E) CORPORATE DIRECT		(F) RUCO		(G) COMPANY		(H) SYSTEM ALLOCATED		(I) RUCO		
		AS FILED	ADJUSTMENT	RUCO	AS ADJUSTED	AS FILED	AS ADJUSTED	AS FILED	AS ADJUSTED	AS FILED	AS ADJUSTED	AS FILED	AS ADJUSTED	AS FILED	AS ADJUSTED	AS FILED	AS ADJUSTED		AS FILED	AS ADJUSTED
		Co. WP, Adj. 3	Pro Rated Pg 4	Col. (A) - (B)	Col. (D) - (E)	Co. WP, Adj. 3	Pro Rated Pg 4	Col. (D) - (E)	Co. WP, Adj. 3	Pro Rated Pg 4	Col. (D) - (E)	Co. WP, Adj. 3	Pro Rated Pg 4	Col. (G) - (H)	Co. WP, Adj. 3	Pro Rated Pg 4	Col. (G) - (H)			
	OPERATIONS																			
1	813	\$ -	\$ -	\$ -	\$ -	\$ 216,923	\$ (784)	\$ 216,139	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2	851	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	870	2,333,170	(21,777)	2,311,393	160,225	160,225	(579)	159,646	163,074	(590)	162,484	-	-	-	-	-	-	-	-	
4	871	6,332	(59)	6,273	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5	874	1,783,068	(16,642)	1,766,426	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6	875	669,372	(6,248)	663,124	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7	878	1,978,084	(18,463)	1,959,621	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
8	879	2,339,375	(21,835)	2,317,540	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
9	880	2,130,208	(19,883)	2,110,325	12,804	12,804	(46)	12,758	-	-	-	-	-	-	-	-	-	-	-	
10	901	1,220,925	(11,396)	1,209,529	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11	902	1,749,700	(16,331)	1,733,369	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	903	4,510,540	(42,100)	4,468,440	633,581	633,581	(2,291)	631,290	-	-	-	-	-	-	-	-	-	-	738,040	
13	905	127,091	(1,186)	125,905	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
14	908	93,944	(877)	93,067	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
15	909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
16	910	256	(2)	254	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
17	920	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
18	922	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
19	930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
20	SUBTOTAL	\$18,942,065	\$ (176,798)	\$18,765,267	\$ 1,186,607	\$ 1,186,607	\$ (4,290)	\$ 1,182,317	\$ 14,263	\$ (307)	\$ 14,570	\$ 15,111,797	\$ (324,794)	\$ 13,956	\$ 15,111,797	\$ (307)	\$ 14,804,000	\$ 14,787,003	\$ 14,035,006	
	MAINTENANCE																			
21	885	\$ 755,990	\$ (7,056)	\$ 748,934	\$ 53,906	\$ 53,906	\$ (195)	\$ 53,711	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
22	886	4,643	(43)	4,600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	887	2,558,597	(23,881)	2,534,716	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	889	381,282	(3,559)	377,723	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	892	1,814,423	(16,935)	1,797,488	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	893	383,721	(3,582)	380,139	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	894	51,149	(477)	50,672	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	935	231,762	(2,163)	229,599	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	SUBTOTAL	\$ 6,181,567	\$ (57,696)	\$ 6,123,871	\$ 53,906	\$ 53,906	\$ (195)	\$ 53,711	\$ 88,835	\$ (1,909)	\$ 86,926	\$ 88,835	\$ (1,909)	\$ 86,926	\$ 88,835	\$ (1,909)	\$ 86,926	\$ 86,926	\$ 86,926	
30	TOTALS	\$25,123,632	\$ (234,494)	\$24,889,138	\$ 1,240,513	\$ 1,240,513	\$ (4,485)	\$ 1,236,028	\$ 15,200,632	\$ (326,703)	\$ 14,873,929	\$ 15,200,632	\$ (326,703)	\$ 14,873,929	\$ 15,200,632	\$ (326,703)	\$ 14,873,929	\$ 14,873,929	\$ 14,873,929	

SURREBUTTAL
EXPLANATION OF SWG OPERATING INCOME ADJUSTMENT NO. 3 - CONT'D
REMOVING SALARIES OF SALES AND MARKETING EMPLOYEES

LINE NO.	ACCOUNT CODE	(A) DIRECT EMP'S SALARIES IN SALES/MRKT'G	(B) SYSTEM ALLOCABLE EMP'S SALARIES IN SALES/MRKT'G	(C) NO. OF EMPLOYEES
INFORMATION FROM COMPANY RESPONSE TO RUCO DATA REQUEST NUMBER 2.08.b				
1		\$ (76,567)		1
2		(75,965)		2
3		(71,972)		3
4		(69,784)		4
5		(85,440)		5
6		(76,898)		6
7		(76,026)		7
8		(67,153)		8
9		(71,879)		9
10		(83,776)		10
11		(93,764)		11
12		(100,608)		12
13			\$ (84,367)	13
14			(99,256)	14
15			(89,679)	15
16			(78,026)	16
17			(85,794)	17
18			(72,339)	18
19			(91,792)	19
20			(91,424)	20
21			(87,373)	21
22			(99,226)	22
23		(58,385)		23
24		(62,896)		24
25		(70,924)		25
26		(72,660)		26
27		(76,949)		27
28		(67,338)		28
29		(67,842)		29
30		(73,103)		30
31		(67,348)		31
32		(70,584)		32
33		(82,998)		33
34		(86,966)		34
35		(93,299)		35
36		(103,221)		36
37		(120,921)		37
42	TOTALS	\$ (2,125,266)	\$ (879,276)	
43	ALLOCATION FACTOR	100.00%	87.25%	
44	ALLOCABLE TOTAL (See SUR-RLM-8, Page 3, Line 2)	\$ (2,125,266)	\$ (767,168)	\$ (2,892,434)

SURREBUTTAL
EXPLANATION OF SWG OPERATING INCOME ADJUSTMENT NO. 10
INJURIES AND DAMAGES - SELF INSURED RETENTION NORMALIZATION

LINE NO	DESCRIPTION	REFERENCE	(A) 14 YEAR TOTAL	(B) TOTAL AZ ACCRUAL
1	Claims Paid			
2	< \$1,000,000	Response To RUCO DR 14	\$ 8,557,891	
3	At \$1,000,000	Response To RUCO DR 14	10,000,000	
4	> \$1,000,000 < \$10,000,000	Response To Rebuttal Testimony - Johnson	29,547,300	
5	Total Claims Paid	(less claims over \$10 M) (Sum Of Lines 2, 3 & 4)	<u>\$ 48,105,191</u>	
6	14 Year Average	Line 5 / 14 Years		\$ 3,436,085
	Less:			
7	FERC Allocation Factor	Co. Sch. C-1, Sh 18		4.29%
8	FERC Allocation	Line 6 X Line 7		(147,408)
9	Net System Allocable	Sum Of Lines 6 & 8		<u>\$ 3,288,677</u>
10	Arizona 4-Factor	Co. Sch. C-1, Sh 19		57.58%
11	Net Arizona Allocated	Line 9 X Line 10		<u>\$ 1,893,620</u>
12	Company Injuries And Damages Expenses As Filed	Sch. C-2, Adj. No. 10, Column (f), Line 8		\$ 2,161,296
13	Difference	Line 11 - Line 12		<u>\$ (267,676)</u>
14	RUCO ADJUSTMENT TO INJURIES AND DAMAGES EXPENSE (See SUR-RLM-7, Page 1, Column (G))			<u>\$ (267,676)</u>

SURREBUTTAL
EXPLANATION OF SWG OPERATING INCOME ADJUSTMENT NO. 14
MISCELLANEOUS ADJUSTMENTS

LINE NO	DESCRIPTION	(A)	(B)	(C)	(D)
		ALLOCABLE TOTAL	ALLOCN FACTOR	ARIZONA TOTAL	RUCO AS ADJUSTED
Arizona Direct Accounts					
1	870 - Operation Supervision And Engineering	\$ (25,337)	100.00%	\$ (25,337)	
2	875 - Measuring And Regulating Expenses - General	N/A	100.00%	-	
3	880 - Other Expenses	(162,828)	100.00%	(162,828)	
4	Sub Total Distribution	<u>\$ (188,165)</u>			<u>\$ (188,165)</u>
5	RUCO GOODWILL REDUCTION		20.00%	\$ (37,633)	
6	REVISED SURREBUTTAL ADJUSTMENT				<u>\$ (150,532)</u>
7	902 - Meter Reading	\$ (10,715)	100.00%	\$ (10,715)	
8	903 - Customer Records And Collection Expenses	N/A	100.00%	-	
9	Sub Total Customer Accounts	<u>\$ (10,715)</u>			<u>\$ (10,715)</u>
10	RUCO GOODWILL REDUCTION (20% Of Line 9)		20.00%	\$ (2,143)	
11	REVISED SURREBUTTAL ADJUSTMENT (Line 9 - Line 10)				<u>\$ (8,572)</u>
12	908 - Customer Assistance Expenses	N/A	100.00%	\$ -	
13	910 - Miscellaneous Customer Service And Information Expenses	N/A	100.00%	-	
14	Sub Total Customer Service And Information Expenses	<u>\$ -</u>			<u>\$ -</u>
15	Sub Total Arizona Direct Accounts	<u>\$ (198,880)</u>			<u>\$ (159,104)</u>
System Allocable Accounts To Arizona					
16	903 - Customer Records And Collection Expenses	N/A	55.40%	\$ -	
17	Sub Total Customer Accounts	<u>\$ -</u>			<u>\$ -</u>
18	921 - Office Supplies And Expenses	\$ (170,593)	57.58%	\$ (98,227)	
19	923 - Outside Services Employed	(27,768)	57.58%	(15,989)	
20	930 - Miscellaneous General Expenses	(57,664)	57.58%	(33,203)	
21	Sub Total Administrative And General Expenses	<u>\$ (256,025)</u>			<u>\$ (147,419)</u>
22	Sub Total System Allocable Accounts To Arizona	<u>\$ (256,025)</u>			<u>\$ (147,419)</u>
23	RUCO GOODWILL REDUCTION (20% Of Line 22)		20.00%	\$ (29,484)	
24	REVISED SURREBUTTAL ADJUSTMENT (Line 22 - Line 23)				<u>(117,935)</u>
25	RUCO ADJUSTMENT TO MISCELLANEOUS ADJUSTMENTS (L 6 + L 24) (See SUR-RLM-7, Page 1, Column (I))				<u>\$ (277,039)</u>

References:

Column (A): See Testimony, SUR-RLM
And Workpapers RLM-11WP(870) Pages 1 To 4, RLM-11WP(880) Pages 1 To 18, RLM-11WP(902) Pages 1 To 3,
RLM-11WP(921) Pages 1 To 13, RLM-11WP(923) Page 1, RLM-11WP(930) Page 1
Column (B): Company Schedule C-2, Adjustment No. 14
Column (C): Column (A) X Column (B)
Column (D): Sums Of Column (C)

SURREBUTTAL
RATE DESIGN AND PROOF OF RECOMMENDED REVENUE

LINE NO.	(A) DESCRIPTION	(B) PROPOSED SCHEDULE NO.	(C) BILLING DETERMINANTS NUMBER OF BILLS	(D) SALES (THERMS)	(E) PROPOSED MARGIN RATES		(F) COMMODITY CHARGE		(G) MARGIN AT PROPOSED RATES		(I) TOTAL MARGIN
					BASIC SERVICE CHARGE	COMMODITY CHARGE	BASIC SERVICE CHARGE	COMMODITY CHARGE			
G-5											
Single-Family Residential Gas Service											
1	Basic Service Charge per Month		8,870,882	261,997,418	10.11	\$	0.494952	\$	89,657,934	\$	89,657,934
2	Commodity Charge All Therms								129,676,151		129,676,151
3	Total Single-Family Residential Gas Service		8,870,882	261,997,418				\$	89,657,934	\$	219,334,085
G-5											
Low Income Residential Gas Service											
4	Basic Service Charge per Month		320,907	9,417,993	10.11	\$	0.494952	\$	3,243,407	\$	3,243,407
5	Commodity Charge All Therms						0.494952		4,661,455		4,661,455
6	Total Low Income Residential Gas Service		320,907	9,417,993				\$	3,243,407	\$	7,904,862
G-6											
Multi-Family Residential Gas Service											
7	Basic Service Charge per Month		694,674	14,775,511	8.84	\$	0.494952	\$	6,143,435	\$	6,143,435
8	Commodity Charge All Therms						0.494952		7,313,169		7,313,169
9	Total Multi-Family Residential Gas Service		694,674	14,775,511				\$	6,143,435	\$	13,456,604
G-6											
Multi-Family Low Income Residential Gas Service											
10	Basic Service Charge per Month		51,446	1,195,957	8.84	\$	0.494952	\$	454,969	\$	454,969
11	Commodity Charge All Therms						0.494952		591,941.51		591,941.51
12	Total Multi-Family Low-Income Gas Service		51,446	1,195,957				\$	454,969	\$	1,046,910
13	Total Residential Gas Service		9,937,910	287,385,879				\$	99,499,745	\$	241,742,462
G-20											
Master Metered Mobile Home Park Gas Service											
30	Basic Service Charge per Month		2,265	2,394,942	136.84	\$	0.306845	\$	314,502	\$	314,502
31	Commodity Charge per Therm								734,875		734,875
32	Total Master Metered Mobile Home Park Gas Service		2,265	2,394,942				\$	314,502	\$	1,049,377
G-25(S)											
General Gas Service - Small											
1	Basic Service Charge per Month		197,569	3,697,553	34.71	\$	0.656800	\$	6,857,576	\$	6,857,576
2	Former Small Gas Service Customers		96	3,696,167	34.71	\$	0.656800	\$	3,328	\$	3,328
3	Former Medium Gas Service Customers		144		34.71	\$		\$	4,992	\$	4,992
4	Former Essential Agriculture Customers										
5	Commodity Charge per Therm								403		403
6	Transportation Customers								2,428,553		2,428,553
6	Sales Customers								2,428,553		2,428,553
6	Total Small General Gas Service		197,809	3,696,167				\$	6,865,896	\$	9,294,952

**SURREBUTTAL
RATE DESIGN AND PROOF OF RECOMMENDED REVENUE**

LINE NO.	(A) DESCRIPTION	(B) PROPOSED SCHEDULE NO.	(C) BILLING DETERMINANTS		(E) PRESENT SERVICE CHARGE	(F) COMMODITY CHARGE	(G) BASIC SERVICE CHARGE	(H) MARGIN AT PRESENT RATES COMMODITY CHARGE	(I) TOTAL MARGIN
			(D) SALES (THERMS)	(C) NUMBER OF BILLS					
General Gas Service - Medium									
7	Former Small Gas Service Customers		191,087		\$		\$	\$	9,286,104
8	Former Medium Gas Service Customers		3,703		48.59		179,965		179,965
9	Former Large Gas Service Customers		12		48.59		582		582
10	Former Armed Forces Customers		24		48.59		1,165		1,165
11	Former Essential Agriculture Customers		515		48.59		25,044		25,044
Commodity Charge per Therm									
12	Former Small Gas Service Customers		99,043			0.381181	37,753		37,753
13	Former Medium Gas Service Customers		83,249			0.381181	31,733		31,733
Sales Customers									
14	Former Small Gas Service Customers		39,983,968			0.381181	15,244,951		15,244,951
15	Former Medium Gas Service Customers		1,704,269			0.381181	649,635		649,635
16	Former Large Gas Service Customers		4,831			0.381181	1,860		1,860
17	Former Armed Forces Customers		3,757			0.381181	1,432		1,432
18	Former Essential Agriculture Customers		130,417			0.381181	49,713		49,713
19	Total Medium General Gas Service		195,352		42,019,665		9,492,860		16,017,095
General Gas Service - Large									
G-25(L)									
Basic Service Charge per Month									
20	Former Small Gas Service Customers		4,370		208.26		910,017		910,017
21	Former Medium Gas Service Customers		79,287		208.26		16,512,179		16,512,179
22	Former Large Gas Service Customers		120		208.26		24,960		24,960
23	Former Armed Forces Customers		24		208.26		4,982		4,982
Commodity Charge per Therm									
24	Former Small Gas Service Customers		79,960			0.260520	20,831		20,831
25	Former Medium Gas Service Customers		2,633,367			0.260520	686,044		686,044
26	Former Large Gas Service Customers		308,963			0.260520	80,491		80,491
Sales Customers									
27	Former Small Gas Service Customers		2,869,954			0.260520	747,680		747,680
28	Former Medium Gas Service Customers		131,577,776			0.260520	34,278,813		34,278,813
29	Former Large Gas Service Customers		1,030,608			0.260520	268,494		268,494
30	Former Armed Forces Customers		164,814			0.260520	42,837		42,837
31	Total Large General Gas Service		83,900		136,685,443		17,452,149		36,123,091
General Gas Service - Transportation Eligible									
G-25(TE)									
Basic Service Charge per Month									
32	Former Medium Gas Service Customers		60		1,041.29		62,401		62,401
33	Former Essential Agriculture Customers		262		1,041.29		282,065		282,065
34	Former Large Gas Service Customers		1,978		1,041.29		1,747,233		1,747,233
35	Former Armed Forces Customers		60		1,041.29		62,401		62,401
Demand Charge Per Month									
36	Former Medium Gas Service Customers		6,989,384			0.059666	4,995,850		4,995,850
Transportation Customers									
37	Former Medium Gas Service Customers		4,330,261			0.088067	381,351		381,351
38	Former Essential Agriculture Customers		25,225,778			0.088067	2,221,546		2,221,546
39	Former Large Gas Service Customers		992,285			0.088067	87,387		87,387
40	Former Medium Gas Service Customers		4,945,057			0.088067	435,494		435,494
41	Former Essential Agriculture Customers		45,389,513			0.088067	3,995,534		3,995,534
42	Former Large Gas Service Customers		2,924,591			0.088067	257,559		257,559
43	Former Armed Forces Customers		53,787,486			0.088067	4,695,850		4,695,850
44	Total Transportation Eligible General Gas Service		2,049		12,374,721		2,134,120		14,508,841
45	Total General Gas Service		479,010		268,170,761		35,945,024		102,890,887

**SURREBUTTAL
TYPICAL BILL ANALYSIS
SINGLE-FAMILY RESIDENTIAL GAS SERVICE**

COMPARISON OF PRESENT & PROPOSED RATE STRUCTURE

LINE NO.	DESCRIPTION	CONSPITION (THERMS)	PRESENT SCHEDULES	PROPOSED SCHEDULES	DOLLAR INCREASE	PERCENT INCREASE
SUMMER						
			May-October Break - 20 Therms	May-October Break - 8 Therms		
Company						
1	25% Average Usage	3	\$ 11.19	\$ 19.74	\$ 8.55	76.43%
2	75% Average Usage	9	\$ 17.57	\$ 26.52	\$ 8.95	50.97%
3	Average Usage	12	\$ 20.76	\$ 28.66	\$ 7.90	38.06%
4	150% Average Usage	19	\$ 27.14	\$ 32.93	\$ 5.79	21.35%
5	200% Average Usage	25	\$ 33.10	\$ 37.20	\$ 4.10	12.40%
RUCO						
6	25% Average Usage	3	\$ 11.19	\$ 13.32	\$ 2.13	19.04%
7	75% Average Usage	9	\$ 17.57	\$ 19.75	\$ 2.18	12.40%
8	Average Usage	12	\$ 20.76	\$ 22.96	\$ 2.20	10.60%
9	150% Average Usage	19	\$ 27.14	\$ 29.39	\$ 2.25	8.29%
10	200% Average Usage	25	\$ 33.10	\$ 35.81	\$ 2.71	8.20%
SWING MONTHS						
			April & November Break - 40 Therms	April & November Break - 8 Therms		
Company						
11	25% Average Usage	11	\$ 19.59	\$ 19.74	\$ 0.16	0.79%
12	75% Average Usage	34	\$ 42.76	\$ 26.52	\$ (16.23)	-37.97%
13	Average Usage	45	\$ 53.90	\$ 28.66	\$ (25.23)	-46.82%
14	150% Average Usage	68	\$ 75.16	\$ 32.93	\$ (42.23)	-56.18%
15	200% Average Usage	91	\$ 96.42	\$ 37.20	\$ (59.22)	-61.42%
RUCO						
16	25% Average Usage	11	\$ 19.59	\$ 21.78	\$ 2.19	11.20%
17	75% Average Usage	34	\$ 42.76	\$ 45.12	\$ 2.36	5.53%
18	Average Usage	45	\$ 53.90	\$ 56.80	\$ 2.90	5.38%
19	150% Average Usage	68	\$ 75.16	\$ 80.14	\$ 4.98	6.63%
20	200% Average Usage	91	\$ 96.42	\$ 103.48	\$ 7.06	7.32%
WINTER						
			December-March Break - 40 Therms	December-March Break - 30 Therms		
Company						
21	25% Average Usage	11	\$ 19.59	\$ 29.59	\$ 10.01	51.09%
22	75% Average Usage	34	\$ 42.76	\$ 54.71	\$ 11.95	27.95%
23	Average Usage	45	\$ 53.90	\$ 62.47	\$ 8.58	15.91%
24	150% Average Usage	68	\$ 75.16	\$ 77.99	\$ 2.83	3.76%
25	200% Average Usage	91	\$ 96.42	\$ 93.51	\$ (2.92)	-3.03%
RUCO						
26	25% Average Usage	11	\$ 19.59	\$ 21.78	\$ 2.19	11.20%
27	75% Average Usage	34	\$ 42.76	\$ 45.12	\$ 2.36	5.53%
28	Average Usage	45	\$ 53.90	\$ 56.80	\$ 2.90	5.38%
29	150% Average Usage	68	\$ 75.16	\$ 80.14	\$ 4.98	6.63%
30	200% Average Usage	91	\$ 96.42	\$ 103.48	\$ 7.06	7.32%
PROPOSED AVERAGE RESIDENTIAL TOTAL ANNUAL GAS SERVICE COSTS						
31	Company		\$ 447.93	\$ 479.17	\$ 31.24	6.97%
32	RUCO		\$ 447.93	\$ 478.54	\$ 30.61	6.83%
PRO-RATED AVERAGE RESIDENTIAL MONTHLY GAS SERVICE COSTS (ANNUAL COSTS DIVIDED BY 12 MONTHS)						
33	Company		\$ 37.33	\$ 39.93	\$ 2.60	6.97%
34	RUCO		\$ 37.33	\$ 39.88	\$ 2.55	6.83%

RATE SCHEDULES	
PRESENT BASIC SERVICE	
\$ 8.00	
PRESENT COMMODITY RATE	
1.02198 0.9378	
BREAKPOINTS	
SUMMER (THERMS) (May - Oct) 20	
WINTER (THERMS) (May - Oct) 40	
PROPOSED RATE DESIGNS	
COMPANY	RUCO
BASIC SERVICE	
\$ 16.00	\$ 10.11
COMMODITY RATE *	
1.19890 0.68436	1.02955
BREAKPOINTS	
SUMMER (THERMS) (Apr - Nov) 8 N/A	
WINTER (THERMS) (Dec - Mar) 30 N/A	

* - The Commodity Rate Includes Gas Costs Of \$0.5346 Per Therm