**Exhibit No.:** 

Issue(s):

Program Funding/

Interest Adjustment/

Affordability Programs/

Gas Supply Incentive Plans

Witness/Type of Exhibit:

Meisenheimer/Direct

**Sponsoring Party**:

Public Counsel

Case No.:

GR-2007-0208

### **DIRECT TESTIMONY**

### **OF**

### BARBARA A. MEISENHEIMER

Submitted on Behalf of the Office of the Public Counsel

LACLEDE GAS COMPANY

CASE NO. GR-2007-0208

### BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's	)	
Tariff to Revise Natural Gas Rate	)	Case No. GR-2007-0208
Schedules.	)	

### AFFIDAVIT OF BARBARA A. MEISENHEIMER

STATE OF MISSOURI	)	
	)	SS
COUNTY OF COLE	)	

Barbara A. Meisenheimer, of lawful age and being first duly sworn, deposes and states:

- My name is Barbara A. Meisenheimer. I am Chief Utility Economist for the Office of the Public Counsel.
- Attached hereto and made a part hereof for all purposes is my direct testimony. 2.
- I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Subscribed and sworn to me this 4th day of May 2007.

KENDELLE R. STRATTON My Commission Expires February 4, 2011 Cole County Commission #07004782

My Commission expires February 4, 2011.

### DIRECT TESTIMONY OF BARBARA A. MEISENHEIMER

### LACLEDE GAS COMPANY (REVENUE REQUIREMENT) CASE NO. GR-2007-0208

1	I.	SUMMARY
2	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
3	A.	My direct testimony will review the actual expenditures for Laclede's existing low-income,
4		Energywise and energy efficiency programs and recommend an adjustment to account for
5		interest on the funding balance. It will also address changes that should be made to the low-
6		income programs. Finally, I will present Public Counsel's proposal to continue the existing
7		Gas Supply Incentive Plan (GSIP).
8	II.	INTRODUCTION
9	Q.	PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.
10	A.	Barbara A. Meisenheimer, Chief Utility Economist, Office of the Public Counsel, P. O.
11		2230, Jefferson City, Missouri 65102.
12	Q.	PLEASE SUMMARIZE YOUR EDUCATIONAL AND EMPLOYMENT BACKGROUND.
13	A.	I hold a Bachelor of Science degree in Mathematics from the University of Missouri-
14		Columbia (UMC) and have completed the comprehensive exams for a Ph.D. in Economics
15		from the same institution. My two fields of study are Quantitative Economics and Industrial
16		Organization. My outside field of study is Statistics.

A.

I have been with the Office of the Public Counsel (Public Counsel) since January 1996. In this capacity I have prepared written testimony and testified before the Missouri Public Service Commission. (PSC or Commission) regarding cost of service, rate design, universal service, incentive design, quality of service and numerous competitive issues. I have testified in the areas of telecommunications, natural gas, water and sewer and electric.

Over the past 12 years I have taught courses for the following institutions: University of Missouri-Columbia, William Woods University, and Lincoln University. I currently teach courses including undergraduate and graduate level managerial economics, graduate level healthcare economics, undergraduate statistics, and international comparative economic systems for William Woods University.

### III. PROGRAM FUNDING LEVELS VERSUS ACTUAL EXPENDITURES

Q. PLEASE DESCRIBE LACLEDE'S LOW-INCOME, ENERGYWISE AND EFFICIENCY PROGRAMS.

In addition to various community and government support programs and voluntary customer contributions targeted to assisting low-income customers, Laclede's currently tariffed low-income assistance programs include low-income weatherization, an experimental low-income bill credit and an experimental arrearage repayment incentive program. Of these programs, the low-income bill credit and arrearage repayment programs are relatively new programs established in the last Laclede rate case, Case No. GR-2005-0284.

Laclede's currently tariffed energy efficiency and Energywise programs include residential, commercial and rental property rebates for high efficiency gas appliances and HVAC units, the Energywise program that provides residential and commercial financing for high efficiency gas heating air conditioning and appliances, and a low-interest residential insulation financing program. Of these, the residential, commercial and rental rebate programs are relatively new programs established in the last Laclede rate case.

### Q. PLEASE COMPARE LACLEDE'S REBATE, ENERGYWISE AND ENERGY EFFICIENCY PROGRAM FUNDING LEVELS TO ACTUAL EXPENDITURES.

A. The following table illustrates the tariffed program funding levels and actual expenditures reported by the Company in response to Staff DR 0106.

11	<u>Program</u>	Two Year Funding Level	Expenditures Through Jan 07
12	Rebates Residential	\$ 300,000	\$ 153,750
13	Rebates Commercial	\$ 200,000	\$ 1,500
14	Rebates Rental	\$ 100,000	\$ 3,250
15 16	<u>Program</u>	Cap on Outstanding Loans	Loan Balance Through Jan 07
17	Insulation Financing	\$ 2,000,000	\$ 144,356
18	Energywise Financing	No Limit Stated <sup>1</sup>	\$ 787,389

<sup>&</sup>lt;sup>1</sup> Energywise was originally designed to charge market interest rates to credit worthy customers. In Case No. GR-2005-0284 supplemental funding of \$50,000 was added to support low-income apartment efficiency loans.

1 Additional detail regarding the monthly number of rebates disbursed and the total monthly disbursements by type is provided in Schedule BAM 1 and Schedule BAM 2. 2 3 Q. PLEASE COMPARE LACLEDE'S LOW-INCOME BILL DISCOUNT AND ARREARAGE REPAYMENT 4 INCENTIVE PROGRAM FUNDING LEVELS TO ACTUAL EXPENDITURES. 5 The following table illustrates the tariffed program funding levels and actual expenditures A. 6 compiled from Company reports. 7 Low-income Program Two Year Funding Level Expenditures Through April 07 Bill Credit \$ 1,100,000 \$ 398,770 8 700,000 9 Arrearage Repayment \$ 155,835 Additional detail regarding the monthly number of low-income bill credit and 10 arrearage program participants and the total monthly disbursements is provided in Schedule 11 BAM 3 and Schedule BAM 4. 12 13 Q. DOES LACLEDE PROPOSE TO RECOVER THE COST OF THE LOW-INCOME, ENERGYWISE AND 14 EFFICIENCY PROGRAMS ON AN ONGOING BASIS? 15 A. Yes. Laclede proposes to explicitly include the current funding levels for the low-income weatherization, low-income bill credit, low-income arrearage repayment and efficiency 16 rebate programs in rates. These costs are booked in Account 908. Laclede also proposes to 17 recover interest associated with the Energywise and insulation financing programs as an 18

addition to rate base.

19

A.

Q. DO YOU BELIEVE THE LEVEL OF PROPOSED EFFICIENCY REBATE AND LOW-INCOME PROGRAM RECOVERY IS REASONABLE?

A. No. My investigation indicates that with the exception of the low-income weatherization program, the low-income programs and rebate programs have low subscribership and are not meeting the current funding levels.

### Q. DO YOU PROPOSE THAT PAST AND FUTURE UNSPENT FUNDS ACCRUE INTERST?

A. Yes. I believe it is fair to ratepayers and eliminates a disincentive for the Company to use the funds as intended.

### Q. HOW MUCH INTERST SHOULD BE PAID ON THE EXISTING UNSPENT FUNDS?

I used the same 9.25% annual interest rate that the Company used in calculating the interest on deposits to calculate the interest balance on a monthly basis for the unspent funds in the low-income and efficiency rebate programs. The calculations are provided in Schedule BAM 5 and Schedule BAM 6. As of the most recent reporting date the low-income program interest adjustment would be \$67,844 and the efficiency rebate interest adjustment would be \$21,892. I propose that these amounts be an offset to the revenue requirement in this case and that interest on future unspent balances be paid by the shareholders at the same rate.

A.

### IV. PROGRAM MODIFICATIONS

- Q. WHAT MEASURES DOES PUBLIC COUNSEL RECOMMEND TO ADDRESS THE LOW LEVELS OF SUBSCRIBERSHIP AND EXCESS FUNDING ASSOCIATED WITH LACLEDE'S PROGRAMS?
- A. My testimony addresses proposed modifications to the low-income programs. Public Counsel's witness Ryan Kind will address proposed changes to the Energywise and efficiency programs.
- Q. WHAT EXPERIENCE DO YOU HAVE RELATED TO THE DESIGN OF LOW-INCOME ASSISTANCE PROGRAMS?
  - In the area of telecommunications I served on the Federal/State Universal Service Joint Board Staff for a number of years. I reviewed information on the design and cost of state and federal low-income programs and participated in preparing recommendations for the FCC in implementing the Federal Lifeline and Link-Up programs. At the State level, I participated in industry workshops to develop the low-income and disabled components of the Missouri Universal Service Fund (MoUSF) and currently assist the Public Counsel in his duties as a member of the Missouri Universal Service Board.

On behalf of Public Counsel, I worked with the Department of the Census to develop data designed to identify low-income household telephone subscribership stratified by percentage of the federal poverty level in order to develop recommendations to better target low-income support.

11

12

13

14

15

16

17

18

19

A.

testimony on the design of experimental low-income programs for a number of companies in the State, including Laclede Gas, MGE, AmerenUE Gas, Aquila Gas and Empire Electric. The scope of this testimony addressed both low-income bill discounts and arrearage repayment incentives in addition to reviewing low income natural gas consumption patterns. Recently in the MGE rate case, I used Census data and Consumer Expenditure data compiled by EIA in the Department of Energy to evaluate low-income household characteristics and natural gas consumption compared to those of households at higher income levels. I have also participated in workshops and collaboratives to implement and evaluate low-income programs.

With respect to low-income programs for natural gas and electric utilities, I have filed

Q. PLEASE DISCUSS YOUR RECOMMENDATIONS TO ADDRESS THE LOW LEVELS OF SUBSCRIBERSHIP AND EXCESS FUNDING ASSOCIATED WITH THE LOW-INCOME BILL CREDIT AND ARREEARAGE REPAYMENT INCENTIVE PROGRAMS?

With respect to the low-income programs, I recommend (1) that the current and future balances of unspent funds be adjusted to recognize a reasonable interest adjustment; (2) that the low-income bill credit and arrearage repayment incentive programs be immediately modified and simplified in order to increase subscribership; (3) that absent modification to address low subscribership the funding levels for the low-income bill credit and arrearage repayment incentive programs should be significantly reduced; (4) that the Company

A.

undertake additional outreach activities and (5) that enhanced evaluation of the programs occur.

### Q. PLEASE DESCRIBE AND PROVIDE BACKGROUND INFORMATION ON THE LOW-INCOME BILL CREDIT PROGRAM.

The experimental low-income bill credit and arrearage repayment programs were established in Laclede's service area as the result of the Stipulation and Agreement in GR-2005-0284. The combined program funding is \$950,000 per year. Of this amount \$550,000 is allocated to winter bill credits, \$350,000 is allocated to arrearage repayment incentives and \$50,000 is allocated to administrative costs.

Under the bill credit program, participants with household incomes of up to 125% of the Federal Poverty Level (FPL) received average bill credits of \$60 per month for November through March. Participants with household incomes between 126% and 150% of the Federal Poverty Level received average bill credits of \$70 per month November through March. The monthly bill credits vary by winter month; higher in colder months and lower in warmer months. A participant can not couple the bill discount program with a level payment plan. Participation is targeted to include 20% of total participation from households up to 50% of FPL, 40% from households between 51% and 125% of FPL and 40% from households between 126% and 150% of FPL.

A.

### Q. WHAT ARE THE SPECIFIC OBSTICALS TO THE SUCCESS OF THIS PROGRAM?

A. The bill credits are not properly aligned with income levels and for the poorest participants do not sufficiently offset increases in natural gas prices. Additionally customers may not couple the bill discount program with a level pay program and additional outreach should occur.

### Q. WHAT TYPE OF ADDITIONAL OUTREACH DO YOU RECOMMEND?

A. Laclede should work with the community action agencies to identify all customers who have received LIHEAP grants in the past few years in an effort to inform those customers about the bill credit and arrearage repayment programs. Laclede should also advertise the programs through public service announcements.

### Q. HOW SHOULD THE PROGRAM BE REDESIGNED?

The discount structure should be modified and customers should have the option of coupling discounts with a level payment plan. The current discount levels do not provide sufficient support for the lowest income participants. Based on Company reported usage data, an assumption of a 4% affordable natural gas burden and current LIHEAP support levels, I have performed a study to determine appropriate income thresholds and annual bill discounts<sup>2</sup>. The study also assumes the availability of level pay. The analysis and study results are provided in Schedule BAM 7. Based on the information, I recommend that participants with income up to 50% of the Federal Poverty Level and on level pay receive a discount of \$80 per month, participants with income of 51%-100% of the Federal Poverty Level and on level pay receive a discount of \$50 per month and participants with

<sup>&</sup>lt;sup>2</sup> Roger Colton is a recognized national expert on low-income issues. He advocated a 4% natural gas burden in GR-201-292.

income of 101%-150% of the Federal Poverty Level and on level pay receive a discount of \$20 per month. For simplicity, I would recommend that customers that do not choose level pay receive 1/10<sup>th</sup> of the applicable annual discount in November, 1/10<sup>th</sup> in April and 1/5<sup>th</sup> each month December through March. Based on my experience with this and other low-income bill discount programs, to truly test the merits of a low-income bill discount program in terms of reduced uncollectibles, fewer late payments, fewer disconnects and long term participation, the discount levels must be sufficient to make gas service affordable to low-income consumers. Insufficient discounts are a recipe for failure and I strongly recommend rejecting proposals for smaller discounts especially for the lowest income level participants. I estimate that modifying the program in the way I propose and increasing participation to 1.5 times the historic average would produce an annual expenditure of \$817,405.

### Q. PLEASE DESCRIBE THE ARREEARAGE REPAYMENT INCENTIVE PROGRAM.

A. Arrearage repayment incentives are available to those with household incomes up to 185% of FPL. For households up to 125% of FPL at least a \$10 per month payment toward arrears is required and matched dollar for dollar. For households between 126% and 185% of FPL at least a \$15 per month payment toward arrears is required and matched dollar for dollar. For participants that successfully remain on the arrearage repayment program through the summer months an additional 15% of the arrearage balance is offset by program funds.

### Q. WHAT ARE THE SPECIFIC OBSTICALS TO THE SUCCESS OF THE ARREARAGE REPAYMENT INCENTIVE PROGRAM?

A. The program is overly complicated and does not offer a significant short term incentive for arrearage repayment. In my opinion, clearing up unpaid balances owed to the Company benefits both the

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |

15

16

17

18

19

participant and other ratepayers and should be accomplished as quickly as possible. I recommend that the Commission approve a time period during which customers at or below 185% of the poverty level can receive a dollar for dollar matching of all payments toward arrears in order to provide a significant short term incentive for arrearage repayment. One option would be to allocate a fixed level of funding for arrearage repayment offered on a first come, first served basis. I estimate that extending the current annual funding level of the bill discount and arrearage repayment programs for an additional year (until September 2008) together with the unspent funding and interest would allow sufficient monies to modify the bill credit proposal as described above, to retain a consultant for up to \$75,000 and to fund an approximate \$500,000 fixed level of funding for arrears repayment matching. An alternative to a fixed level of funding for arrears repayment matching would be to establish a fixed time window during which all qualified payments would be matched and the Company would be allowed to recover any shortfall in funding. I believe there are benefits to both options and Public Counsel would consider a time window proposal for arrears repayment matching.

Q. YOU HAVE RECOMMENDED THAT AN INDEPENDENT CONSULTANT BE RETAINED TO MAKE
ADDITIONAL RECOMMENDATIONS REGARDING THE LOW-INCOME PROGRAM DESIGN AND
TO EVALUATE THE SUCCESS OF THE MODIFIED LOW-INCOME PROGRAMS. IN ADDITION TO
MAKING RECOMMENDATIONS ON THE DESIGN OF THE LOW INCOME PROGRAM AND
EVALUATION CUSTOMER SUCCESS IN THE PROGRAMS, ARE THERE OTHER ISSUES THE
CONSULTANT SHOULD ADDRESS?

1	A.	Yes. As part of the process, Public Counsel recommends that the independent consultan
2		evaluate the processes by which the program is delivered and make recommendations for
3		eliminating obstacles in delivery of the programs.
4	Q.	IF THE LOW-INCOME BILL CREDIT AND ARREARAGE REPAYMENT INCENTIVE PROGRAMS
5		ARE NOT MODIFIED IN THE MANNER YOU RECOMMEND, SHOULD THE FUNDING LEVELS BE
6		REDUCED?
7	A.	Yes. If the programs are not modified in a way that significantly increases subscribership and results
8		in a meaningful benefit to participants as well as other ratepayers, then the programs should be phased
9		out and no new money should be collected from rates.
10	Q.	IF THE LOW-INCOME BILL CREDIT AND ARREARAGE REPAYMENT INCENTIVE PROGRAMS
11		ARE MODIFIED AND CONTINUED IN THE MANNER YOU RECOMMEND, WHAT ONGOING
12		REVIEW OF THE PROGRAMS DO YOU RECOMMEND?
13	A.	If the modified programs continue, I would recommend that a review of the program occur and the
14		consultant's recommendations considered prior to September 2008. If the programs appear
15		successful continuing them would be reasonable. However, if the programs are unsuccessful, the
16		\$900,000 annual funding collected through rates should be redirected toward conservation and
17		efficiency programs as determined by the collaborative addressed in the direct testimony of Mr. Kind.
18		
1.0		

Cas	e No. GR	2-2007-0208
1	VI.	GAS SUPPLY INCENTIVE PLAN (GSIP)
2	Q.	ARE YOU GENERALLY FAMILIAR WITH THE FIELDS OF ECONOMICS THAT ADDRESS THE
3		APPRPORIATE DESIGN OF INCENTIVE PLANS?
4	A.	Yes, I am. The focus of my graduate work was the study of Quantitative Economics and
5		Industrial Organization. These fields address the appropriate design of incentive plans
6		through the application of "game theory." Game theory is a hybrid of mathematics and
7		statistics that allows economists to model strategic interaction.
8	Q.	WHAT ADDITIONAL EXPERIENCE DO YOU HAVE THAT IS RELEVANT TO THE ISSUE OF
9		NATURAL GAS INCENTIVE PLAN DESIGN?
10	A.	Specifically, I have testified regarding the design of gas supply incentive plans in GT-99-303, GO-
11		2000-395, GT-2001-329, GR-2002-356 and participated in negotiations in GR-2005-0284
12		Additionally, I participated as a member of the Missouri Public Service Commission's Natural Gas
13		Commodity Price Task Force and served on the subcommittee that addressed gas supply incentive
14		design. In this capacity, my primary contribution to the taskforce effort was to develop the original
15		list and discussion of principles underlying a properly designed incentive plan that formed the basis
16		for the Taskforce's final recommendation to the Commission.
17		

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

A.

Q. PLEASE DESCRIBE AND PROVIDE BACKGROUND INFORMATION ON LACLEDE'S CURRENT GAS SUPPLY PLAN.

The current GSIP originated with a Public Counsel proposal in Case GR-2002-356 to take a more holistic approach to incentive design. Prior to GR-2002-356, Laclede had a patchwork of incentive components that did not reasonably align the interest of the Company with that of its customers. The plan established a benchmark cost of gas based on actual market performance and created a band about the benchmark consisting of a price ceiling and price floor. To receive incentive compensation, Laclede's actual average cost of gas had to be less than the market based benchmark and fall within the band defined by the ceiling and floor. I was the Public Counsel witness that explained the theoretical basis of the plan. As I described in testimony in that case, requiring Laclede to beat the market based benchmark increased the likelihood that customers were receiving some benefit from the GSIP. In addition, the band's ceiling was to act as a safeguard to ensure that Laclede was not compensated at a time when customers were paying an extremely high price for natural gas. Similarly, the band's floor was established in an effort to recognize that customers would likely be unwilling to pay for further reductions in the price of natural gas when the price was already very low. The Parties agreed to the GSIP as a component of a Stipulation and agreement in Case No. GR-2002-356. The GSIP was revisited in Laclede's following rate case, Case No. GR-2005-0284. The Parties again agreed to continue the GSIP as a

component of a Stipulation and Agreement in Case No. GR-2005-0284. The band cap and floor was raised by agreement of the parties.

### Q. DO YOU BELIEVE THE GSIP SHOULD CONTINUE?

A. Yes. I believe the GSIP preformed as it should over the past few years. During the year with moderate gas costs, Laclede achieved a lower gas price than the benchmark and the price was above the floor so Laclede was allowed to retain over 3 million dollars of savings. In one year, Laclede did not achieve a price lower than the market based benchmark and therefore was not compensated under the program. The past two years, Laclede beat the market based benchmark but gas prices were exceptionally high. In those instances, the ceiling ensured that Laclede received no compensation when customers were subject to exceptionally high natural gas prices. I believe the current GSIP should continue.

### Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

# Arrears Repayment Incentive Expenditures by Month

3,590.00 \$ 155,835.00	3,590.00	8	4,968.00	5	\$ 9,100.00	<u></u>	\$ 781.00 \$	8	\$ 4,547.00	00 \$	132,849.00	69		Grand Total
\$ 645.00	150.00	<del>69</del>	75.00	\$	\$ 320.00	€A	59	8	\$ 60.00	8	40.00	\$	200703	
\$ 645.00	130.00	69	135.00	<del>5</del> 9	\$ 320.00	60	<del>59</del> '	8	\$ 30.00	8	30.(	8	200702	
\$ 650.00	90.00	69	180.00	<del>-</del>	\$ 170.00	<u>~</u>	\$ 10.00	8	\$ 90.	<u>ಕ</u>	110.0	₩	200701	
\$ 7,930.00	90.00	€9	120.00	5	\$ 290.00	<u>~</u>	\$ 45.00	8	\$ 1,276.00	8	6,109.00	\$	200612	
\$ 8,680.00	130.00	₩	165.00	69	\$ 415.00	<del>-</del>	\$ 55.00	8	\$ 1,366.00	<u>8</u>	6,549.00	S	200611	
\$ 2,405.00	320.00	₩	345.00	<del>-</del>	\$ 810.00	<u>~</u>	\$ 20.00	8	\$ 150.00	<u>ਠ</u>	760.00	\$	200610	
\$ 3,835.00	560.00	<del>69</del>	675.00	₩	\$ 1,395.00	<del>-</del>	\$ 20.00	8	\$ 255.	8	930.00	\$	200609	
\$ 3,595.00	410.00	↔	645.00	₩,	\$ 1,065.00	<u>~</u>	\$ 20.00	8	\$ 285.00	8	1,170.00	₩ ₩	200608	
\$ 3,100.00	250.00	₩.	515.00	8	\$ 655.00	<u>~</u>	\$ 20.00	8	\$ 240.	8	1,420.00	7	200607	
\$ 23,990.00	400.00	<b>⇔</b>	1,048.00	€9	\$ 980.00	69	\$ ·	8	\$ 405.00	8	21,157.00	₩	200606	
\$ 98,150.00	540.00	69	885.00	69	<b>\$</b> 1,215.00	<u>~</u>	\$ 591.00	8	\$ 345.00	8	94,574.00	\$	200605	
\$ 1,710.00	380.00	69	180.00	55	\$ 1,105.00	<u></u>		8	\$ 45.00			8	200604	
\$ 500.00	140.00	69	,	69	\$ 360.00	<del>69</del>						<u> </u>	200603	
\$	•	S			-	<u></u>				_		2	200602	
Office Local	COMBO-50	Ω	COMBO-150	_	COMBO-125		ARREARS-50		ARREARS-185		ARREARS-125	≥	15	MONIN
Gand Total	OW-INC-	Ľ	LOW-INC-		LOW-INC-		LOW-INC-	١.	LOW-INC-	_	LOW-INC-		H	Y ON
											AN TYPE	P	ırs Credits	Sum of Arrears Credits PLAN TYPE

# Count of Arrearage Repayment Incentive Credits by Month

No. of Arrears Credits PLAN TYPE	PLAN TYPE									
HTNOM	LOW-INC- ARREARS-125	LOW-INC- ARREARS-185	LOW-INC- ARREARS-50	LOW-INC-BILL- ASST-125	LOW-INC-BILL- ASST-150	LOW-INC-BILL- ASST-50	LOW-INC- COMBO-125	LOW-INC- COMBO-150	LOW-INC- COMBO-50	Grand Total
200602				14		5	327		191	537
200603				36	20	15 .	576	4	316	1107
200604	375	51		37	21	15	573	143	315	1530
200605	949	51	6	37	21	15	562	142	313	2096
200606	983	51	6	37	21	14	566	145	321	2144
200607	983	51	6	37	21	14	565	142	321	2140
200608	976	51	6	37	21	14	565	142	319	2131
200609	971	51	6	37	21	14	564	142	319	2125
200610	968	51	6	37	21	14	563	142	317	2119
200611	675	38	4	33	20	14	330	101	170	1385
200612	481	38	4	216	40	21	391	81	215	1487
200701	479	37	4	223	42	22	377	76	205	1465
200702	488	37	4	215	42	22	401	75	203	1487
200703	483	37	4	210	42	21	407	73	202	1479
Grand Total	8811	544	56	1206	353	220	6767	1548	3727	23232

Direct Testimony
Barbara Meisenheimer
GR-2007-0208

## Low-income Bill Credit Expenditures by Month

outi of bill Credits FLAN LIFE	PLAN LIFE			1				ļ			1		l	
MONTH	LOW-INC- ARREARS-125	LOW-INC- ARREARS-185	LOW-INC- ARREARS-50	, TO	W-INC-BILL- ASST-125	LOW-INC-BILL- ASST-150	LOW-INC-BILL- LOW-INC-BILL- ASST-125 ASST-150 ASST-50	α μ	LOW-INC- COMBO-125	LOW-INC- COMBO-150	0	LOW-INC- COMBO-50	ନ୍ତ	Grand Total
200602				\$	460.00		\$ 220.00	S	7,040.00		*	5,180.00	↔	12,900.00
200603				69	1,640.00	\$ 560.00	\$ 360.00	₩	36,280.00	\$ 3,150.00	69	18,220.00	₩,	60,210.00
200604	\$ 120.00	\$ 110.00		↔	1,120.00	\$ 770.00	\$ 440.00	છ	18,760.00	\$ 5,230.00	₩	10,920.00	છ	37,470.00
200605	\$ 160.00	•	-	₩,	400.00	\$ 120.00	\$ 80.00	₩	6,600.00	\$ 1,360.00	S	3,560.00	<del>⇔</del>	12,280.00
200606		<del>ده</del>	-	S	,	<del>57</del>		↔	•	•	₩	•	₩,	•
200607		·	<del>\$</del>	65	1	<b>69</b>	<del>\$</del> 5	<del>⇔</del>		•	69	•	<b>⇔</b>	1
200608	\$ 150.00	•	·	₩,	2,770.00	\$ 1,950.00	\$ 1,200.00	₩,	63,530.00	\$ 16,350.00	<del>69</del>	35,410.00	<b>↔</b>	121,360.00
200609		<del>د</del>	-	₩,	•	<del>69</del>		₩	1	,	٠	•	છ	,
200610		<del>ده</del>		69		<del>59</del>	<del>ن</del>	₩	ı	•	<b>⇔</b>	•	•	,
200611	-	·	<b>∽</b>	69	540.00	\$ 160.00	\$ 240.00	₩,	7,440.00	\$ 1,640.00	↔	3,660.00	₩	13,680.00
200612	-	<del>\$</del>	•	69	960.00	\$ 390.00	\$ 420.00	Ś	7,920.00	\$ 2,500.00	₩,	5,340.00	<b>⇔</b>	17,530.00
200701	-			69	15,500.00	\$ 3,090.00	\$ 1,500.00	69	17,620.00	\$ 4,290.00	₩	8,700.00	₩	50,700.00
200702	\$ 1,060.00	•	,	Ś	7,920.00	\$ 1,300.00	\$ 960.00	₩	16,720.00	\$ 3,200.00	₩,	7,280.00	₩,	38,440.00
200703	\$ 3,140.00	<del>.</del>	<del>\$</del>	S	4,680.00	\$ 1,070.00	\$ 560.00	\$	16,800.00	\$ 3,030.00	\$	4,920.00	₩,	34,200.00
Grand Total	\$ 4,630.00 \$	\$ 110.00	\$	S	35,990.00	\$ 9,410.00	\$ 5,980.00	÷	198,710.00 \$		\$	40,750.00 \$ 103,190.00 \$ 398,770.00	₩.	398,770.00

Direct Testimony
Barbara Meisenheimer
GR-2007-0208

## Count of Low-income Bill Credits by Month

No. of Bill Credits	PLAN TYPE		i E							
MONTH	LOW-INC- ARREARS-125	LOW-INC- ARREARS-185	LOW-INC- ARREARS-50	LOW-INC-BILL- ASST-125	LOW-INC-BILL- ASST-150	LOW-INC-BILL- ASST-50	LOW-INC- COMBO-125	LOW-INC- COMBO-150	LOW-INC- COMBO-50	Grand Total
200602				14		5	327		191	537
200603				36	20	15	576	1 <b>4</b>	316	1107
200604	375	51		37	21	15	573	143	315	1530
200605	949	51	6	37	21	15	562	142	313	2096
200606	983	51	6	37	21	14	566	145	321	2144
200607	983	51	6	37	21	14	565	142	321	2140
200608	976	51	6	37	21	14	565	142	319	2131
200609	971	51	6	37	21	14	564	142	319	2125
200610	968	51	6	37	21	14	563	142	317	2119
200611	675	38 8	4	33	20	14	330	101	170	1385
200612	481	3 <b>8</b>	4	216	40	21	391	81	215	1487
200701	479	37	4	223	42	22	377	76	205	1465
200702	488	37	4	215	42	22	401	75	203	1487
200703	483	37	4	210	42	21	407	73	202	1479
Grand Total	8811	544	56	1206	353	220	6767	1548	3727	23232

# Interest Calculation - Low-Income Bill Credit and Arrearage Repayment Incentive Programs

Apr-07 May-07 Jun-07 Jul-07 Aug-07 Sep-07	Mar-07	Feb-07	Jan-07	Dec-06	Nov-06	Oct-06	Sep-06	Aug-06	Jul-06	Jun-06	May-06	Apr-06	Mar-06	Feb-06	Jan-06	Dec-05	Nov-05	Oct-05	Year/Month*
	\$ 34,200	\$ 38,440	\$ 50,700	\$ 17,530	\$ 13,680	<b>⇔</b>	<del>59</del> ₁	\$121,360	<del>59</del> '		\$ 12,280	\$ 37,470	\$ 60,210	\$ 12,900					Bill Credit
	\$ 645	\$ 645	\$ 650	\$ 7,930	\$ 8,680	\$ 2,405	\$ 3,835	\$ 3,595	\$ 3,100	\$ 23,990	\$ 98,150	\$ 1,710	\$ 500	<del>59</del> -					Arrears Credit
	\$ 3	<del>\$</del>	\$	\$ 2	\$ 2	↔	છ	\$ 12	↔	\$ 2	\$ 11	<b>⇔</b> 3	\$ 6	\$ 1	↔	છ	<del>\$9</del>	<del>\$</del>	Total Expenditures
	34,845 554,605	39,085	51,350	25,460	22,360	2,405	3,835	4,955	3,100	3,990	110,430	9,180	60,710	2,900	•	•	•	•	Total enditures
<del>&amp; &amp; &amp; &amp; &amp; &amp; &amp;</del>	\$1,3	<del>⇔</del>	<del>⇔</del>	<del>\$</del>	↔	<del>⇔</del>	<del>69</del>	<del>69</del>	<del>69</del>	<del>69</del>	<del>69</del>	<del>69</del>	<del>6/3</del>	<del>⇔</del>	<del>⇔</del>	<del>69</del>	<del>69</del>	<b>↔</b>	<u>Fu</u>
75,000 75,000 75,000 75,000 75,000 75,000 75,000	\$ 75,000 \$1,350,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	Funding
	\$ 40,155 \$ 795,395	\$ 35,915		\$ 49,540	\$ 52,640	\$ 72,595	\$ 71,165	\$ (49,955)	\$ 71,900		_	\$ 35,820	\$ 14,290	\$ 62,100	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	Difference
	↔	↔	<del>\$</del>	<del>69</del>	₩	↔	<del>69</del>	↔	<del>(∕)</del>	<del>69</del>	₩	↔	↔	↔	↔	<del>69</del>	<del>69</del>	↔	<u></u> B
	856,636	810,235	768,397	739,050	684,236	626,765	549,931	475,103	521,042	445,706	391,677	423,840	385,052	367,926	303,487	226,739	150,578	75,000	Beginning Balance
	8	↔	<del>⇔</del>	↔	<del>69</del>	<del>\$</del>	↔	<del>\$</del>	<del>⇔</del>	↔	S	<del>69</del>	↔	↔	↔	<del>69</del>	<del>69</del>	<del>59</del>	Int
	6,603	6,246	5,923	5,697	5,274	4,831	4,239	3,662	4,016	3,436	3,019	3,267	2,968	2,836	2,339	1,748	1,161	578	Interest**
	<b>€</b> 9	<del>69</del>	\$ 7	<del>\$</del>	\$ 6	\$	\$	· \$	\$	<del>\$</del>	_		<del>⊗</del>		<del>دی</del>	\$ 2		<del>69</del>	En Ba
	863,239	816,481	774,320	744,747	689,510	31,596	554,170	78,766	525,058	449,142	94,696	427,107	388,020	370,762	305,826	228,487	151,739	75,578	Ending Balance

<sup>\*</sup>New rates went into effect Oct 1, 2005.

\*\*Annual interest 9.25% as used by the Company for Customer Deposits calculation.

## Interest Calculation - Efficiency Rebate Programs

Feb-07 Mar-07 Apr-07 May-07 Jun-07 Jul-07 Aug-07 Sep-07	Year/Month* Oct-05 Nov-05 Dec-05 Jan-06 Feb-06 Mar-06 Apr-06 Jun-06 Jun-07	
	Res Res  Res  10,250 14,250 16,750 16,750 16,750 17,000 17,000 17,000 18,750 17,000 18,750 17,000 18,750 17,000 18,750	
	<del>8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5</del>	
	Rebates Disbursed s Com R  750 \$ - \$ 250 \$ - \$	
	<del>11.</del> 80 <del>20.00                                </del>	
	Rental Restal  8 250 8 250 8 500 8 500 8 - 9 1,500 8 - 9 250	
	T	
	Total Expenditures  \$	
\$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000	Funding \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000 \$ 25,000	
	Difference \$25,000 \$25,000 \$25,000 \$25,000 \$25,000 \$25,000 \$25,000 \$24,250 \$14,500 \$9,500 \$14,750 \$16,500 \$7,750 \$5,000 \$7,750 \$5,750 \$5,750 \$3,500 \$3,500	
	\$25,000 \$ 50,193 \$ 75,580 \$ 101,162 \$ 126,942 \$ 152,921 \$ 178,349 \$ 194,224 \$ 205,221 \$ 221,553 \$ 239,761 \$ 249,359 \$ 256,281 \$ 246,257 \$ 255,905 \$ 261,378	
	<del>6</del> 644446666666666666666666666666666666	
	Interest**  \$ 193 \$ 387 \$ 583 \$ 780 \$ 979 \$ 1,179 \$ 1,375 \$ 1,375 \$ 1,497 \$ 1,582 \$ 1,582 \$ 1,582 \$ 1,582 \$ 1,582 \$ 1,976 \$ 1,976 \$ 1,976 \$ 1,973 \$ 21,898	
	Ending Balance  \$ 25,193 \$ 50,580 \$ 76,162 \$ 101,942 \$ 127,921 \$ 154,099 \$ 179,724 \$ 195,721 \$ 206,803 \$ 223,261 \$ 241,609 \$ 251,281 \$ 258,257 \$ 248,155 \$ 257,878 \$ 263,392	

<sup>\*</sup>New rates went into effect Oct 1, 2005.

<sup>\*\*</sup> Annual interest 9.25% as used by the Company for Customer Deposits calculation.

### Low-income Bill Credit Analysis

### Line

 Poverty Level by Household Size(2007)

			Household Size			
Poverty Level Range	1	2	3	4	5	6
25%	\$2,553	\$3,423	\$4,293	\$5,163	\$6,033	\$6,903
50%	\$5,105	\$6,845	\$8,585	\$10,325	\$12,065	\$13,805
75%	\$7,658	\$10,268	\$12,878	\$15,488	\$18,098	\$20,708
100%	\$10,210	\$13,690	\$17,170	\$20,650	\$24,130	\$27,610
125%	\$12,763	\$17,113	\$21,463	\$25,813	\$30,163	\$34,513
150%	\$15,315	\$20,535	\$25,755	\$30,975	\$36,195	\$41,415

SOURCE:Federal Poverty Level Federal Register Notice

Natural Gas Burden at 4% Based On Poverty Level by Household Size (2007)

Poverty Level Range			Household Size		**	
	1	2	3	4	5	6
25%	\$102	\$137	\$172	\$207	\$241	\$276
50%	\$204	\$274	\$343	\$413	\$483	\$552
75%	\$306	\$411	\$515	\$620	\$724	\$828
100%	\$408	\$548	\$687	\$826	\$965	\$1,104
125%	\$511	\$685	\$859	\$1,033	\$1,207	\$1,381
150%	\$613	\$821	\$1,030	\$1,239	\$1,448	\$1,657

Source: Concept of 4% Natural Gas Burden Attributable To Roger Colton. See Direct Testimony GR-2001-292

Average Annual Residential Use (1)	884
Average Annual Residential Expenditures (2	\$ 1,184.81
Average Winter Residential Use (1)	748.8
Average Annual Residential Expenditures (2)	\$ 947.98

- (1) Therms From Mike Cline
- (2) Expenditures calculated on Sheet "POV LIHEAP Tables Bill Calc"

Estimated Average Annual Bill Based On Household Size (2007)\*\*

Poverty Level Range			Household Size		I		
	i	2		3	4	5	6
25%	\$1,066	\$1,066	\$	1,184.81	\$1,185	\$1,303	\$1,303
50%	\$1,066	\$1,066	\$	1,184.81	\$1,185	\$1,303	\$1,303
75%	\$1,066	\$1,066	\$	1,184.81	\$1,185	\$1,303	\$1,303
100%	\$1,066	\$1,066	\$	1,184.81	\$1,185	\$1,303	\$1,303
125%	\$1,066	\$1,066	\$	1,184.81	\$1,185	\$1,303	\$1,303
150%	\$1,066	\$1,066	\$	1,184.81	\$1,185	\$1,303	\$1,303

<sup>\*\*</sup>Assumed 10% variation in household use based on family size

Shortfall or Excess of an Affordable Bill Absent Support

Poverty Level Range			Household Size			
	1	2	3	4	5	
25%	(\$964)	(\$929)	(\$1,013)	(\$978)	(\$1,062)	(\$1,027
50%	(\$862)	(\$793)	(\$841)	(\$772)	(\$821)	(\$751)
75%	(\$760)	(\$656)	(\$670)	(\$565)	(\$579)	(\$475)
100%	(\$658)	(\$519)	(\$498)	(\$359)	(\$338)	(\$199)
125%	(\$556)	(\$382)	(\$326)	(\$152)	(\$97)	\$77
150%	(\$454)	(\$245)	(\$155)	\$54	\$145	\$353

Poverty Level	Annual Shortfall	Monthly Shortfall	Group Average	Monthly Discount	Annual Discount
25%	\$996.00	\$83.00			\$960.00
50%	\$807.00	\$67.25	\$75.13	\$80.00	\$960.00
75%	\$618.00	\$51.50			\$600.00
100%	\$428.00	\$35.67	\$43.58	\$50.00	\$600.00
125%	\$239.00	\$19.92			\$240.00
150%	\$50.00	\$4.17	\$12.04	\$20.00	\$240.00

<sup>\*</sup>Average Shortfall or Excess for Income Range (See Row 54-59)

Monthly Customer Level Pay

Poverty Level Range			Household Size			
	1	2	3	4	5	6
25%	\$9	\$9	\$19	\$19	\$29	\$29
50%	\$9	\$9	\$19	\$19	\$29	\$29
75%	\$39	\$39	\$49	\$49	\$59	\$59
100%	\$39	\$39	\$49	\$49	\$59	\$59
125%	\$69	\$69	\$79	\$79	\$89	\$89
150%	\$69	\$69	\$79	\$79	\$89	\$89

Poverty Level Range	Participants*	Discount	Discount Cost
50%	423	\$960.00	\$405,977
100%	427	\$600.00	\$256,275
150%	646	\$240.00	\$155,153
*Estimated from current	\$817.405		