

NOV 04 2002

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI****Missouri Public
Service Commission**

In the matter of Laclede Gas Company's)
tariff to revise natural gas rate schedules.) Case No. GR-2002-356

AFFIDAVIT OF HONG HU**I. Winter 1st Block Residential Therms: Difference in Billing Determinants**

1. In Case No. GR-2002-356, as in other rate cases, differences in billing determinants have existed from the beginning. The Commission Staff and the Company each developed their own set of billing determinants. The difference between Staff's and Company's billing determinants was due to many factors, including their different positions on weather normalization. Due to resource limitations, Public Counsel, as well as other parties in this case, were not extensively involved in the litigation of the weather normalization issue and did not have their own set of billing determinants. Workpapers provided by the Staff and the Company to the Public Counsel on July 31, 2002 and July 25, 2002 showed that the Staff's calculation of residential winter 1st block therms was 215,599,611 and the Company's calculation of residential winter 1st block therms was 210,846,057.
2. On August 2, 2002, Laclede witness Michael T. Cline filed his rebuttal testimony. In his testimony, he presented a rate design proposal as an alternative to the Company's weather mitigation clause proposal for the residential class and the general service - commercial and industrial (C&I) class. Specifically, in Mr. Cline's rebuttal testimony, the Company proposed to shift all of the distribution revenues it presently recovers in the second rate block to the first rate block. In the same testimony, Mr. Cline presented "an example of how these blocked rates would work for the [Residential] Class based on existing rate levels." (Cline rebuttal, page

3, line 19) The example included a \$0.35589 proposed winter 1st block rate and a \$0.00 proposed winter 2nd block rate. On August 9, 2002, responding to Public Counsel's request, Mr. Cline provided a workpaper that shows a comparison of the percentages of the residential revenue weather variation under Laclede's current rate structure and the Company proposed rate structure. A copy of this workpaper is attached as Attachment A. The workpaper shows residential winter 1st block therms of 209,503,334 (residential air conditioning class included) corresponding to the \$0.35589 winter 1st block rate.

3. Public Counsel did not question the Company's change in billing determinants for residential winter 1st block from 210,846,057 to 209,503,334. My understanding was that at this stage of the proceeding billing determinants were tentative and the rates that were included in Mr. Cline's rebuttal testimony were only an example for purposes of illustration.
4. On August 29, 2002, Public Counsel signed the First Amended Partial Stipulation and Agreement, which included agreement to the establishment of the weather mitigation rate design. It was our understanding that we had agreed to the **conceptual methodology** to develop residential rates that was described in Mr. Cline's rebuttal testimony. However, we had not agreed to the specific rates included in Mr. Cline's "example", nor had we agreed to a target "level of weather mitigation protection". The premise of the stipulation and agreement is that the billing determinants would require further adjustments and that final rates would be determined based on a mutually agreed upon set of billing determinants. The actual level of weather mitigation would be a byproduct of the mutual agreement on a set of billing determinants. The First Amended Partial Stipulation and Agreement is silent with respect to the issue of residential billing determinants.

5. The billing determinants are dependent upon factors such as heating degree days for normal weather. The final rates are dependent upon both the approved revenue increase and the agreed upon billing determinants. The heating degree days for normal weather and the total revenue increase are stipulated in the Partial Stipulation and Agreement that was filed nine (9) days before the First Amended Partial Stipulation and Agreement. The Partial Stipulation and Agreement provided for a \$14 million increase in gross annual gas revenues and 4,718 heating degree days. Within the following nine (9) days, the parties were intensively involved in settlement discussions. To accommodate Laclede's wish of getting a settlement in a relatively short time frame so that rates could become effective on November 1, 2002, Public Counsel did not request that any discrepancy between the Staff and the Company with regard to billing determinants be resolved and final rates be specified before we signed the First Amended Partial Stipulation and Agreement. The stipulation and agreement specifically stated that "[i]mplementation of the weather mitigation rate design for C&I customers on the date recommended herein assumes availability of satisfactory billing determinant data." This statement indicated that parties were aware of potential issues with C&I data that may not be resolved in a short time. However, no party (including the Staff and the Company) had expressed any concern about the availability of mutually agreeable billing determinants for the residential class. Therefore, Public Counsel had no reason to doubt that the Staff and the Company would make their best effort to work out any differences, set up satisfactory billing determinants and determine the corresponding final rates.
6. On September 13, 2002, Mr. Cline emailed Public Counsel "a preliminary worksheet (Lotus and Excel versions) that derives the revenue increases and rate component increases by rate schedule pursuant to the S&A with

the exception of the three new C&I General Service classes." A copy of the email message and part of the workpapers included is attached as Attachment B. In this set of workpapers, the residential winter 1st block therms that were utilized in developing final rates were 212,988,388, or 213,079,611 if the residential air conditioning class is included. This number was different from both the winter 1st block therms numbers that were previously provided to Public Counsel by the Company and the Staff. The Company did not provide any workpapers to Public Counsel that included an explanation about how these different billing determinants were developed. However, in the email message that was received on September 13, 2002, Public Counsel was assured by the Company's statement that these proposed residential rates were "based on billing determinants that have been agreed to by both the Company and the Staff." Public Counsel was not notified that any disagreements between the Staff and the Company existed or that the Company had unilaterally made any new adjustments until October 18, 2002, when the Staff advised us that there is a disagreement regarding the appropriate residential winter 1st block therms. According to Staff witness Dan Beck's November 1, 2002 verified statement, Staff first became aware of the Company's adjustment on October 16, 2002.

II. Residential Winter 1st Block Therms: Laclede's Adjustment

7. I have examined the spreadsheet that shows Laclede's summary of adjustments to billing determinants, which Laclede included as Attachment 1, page 3 of Laclede Gas Company's Response to Staff's Reply and Request for Hearing. Contrary to the Company's claim that it believed that Mr. Cline's "allocation of therms between the rate blocks" would be used to develop final rates (See: Laclede Gas Company's Response to Staff's Motion to Suspend Tariff, to Deny Laclede's Request for Expedited Treatment and Request for Expedited Treatment, filed on

Oct 25, 2002, page 3, paragraph 7), the spreadsheet appears to show that Laclede adopted the Staff's billing determinants (per Anne Rose 7/16/02) as its starting point and then made several subsequent adjustments to reach the Company's billing determinants that were used for its compliance filing. Among the adjustments, there was an adjustment of normal degree days from Staff's 4,753 to the stipulated 4,718 degree days. This adjustment resulted in a **reduction** of 4,200,000 therms to the Company's total therms. However, Laclede failed to disclose in this spreadsheet how it allocated the (4,200,000) therms to different customer classes. Discussions with the Staff revealed, as shown in Attachment A-1 to Staff witness Dan Beck's November 1, 2002 verified statement, that Laclede had allocated (2,520,000) therms to the residential winter 1st block, (336,000) therms to the residential winter 2nd block and (1,344,000) to the C&I winter 2nd block.

8. Public Counsel believes that it is entirely unreasonable for Laclede to allocate over 88% ($2,520,000 / (2,520,000 + 336,000)$) of the residential class's share of the adjustment to the winter 1st block. In the winter months, most residential customers' usage is over 65 therms. Because of this, any reduction in gas usage should generally be taken from the 2nd block. In fact, Laclede had allocated 100% of the C&I share of this adjustment to the winter 2nd block. In the workpaper that Laclede provided to Public Counsel previously on August 9, 2002, regarding the residential revenue variations under warmer weather, Laclede allocated approximately 94.5% of usage reduction related to the warmer weather to the winter 2nd block and only 5.5% of the usage reduction to the winter 1st block. (Please see Attachment A, the seventh column, titled "effect of - 20% warmer weather".) To allocate 88% of residential usage reduction to the winter 1st block is not consistent with (1) residential customers winter monthly gas consumption relative to the 65 therm blocking threshold, (2) Laclede's own allocation of weather related usage reduction for the C&I

class, or (3) the Company's allocation of weather related usage reduction for the residential class in its August 9, 2002 workpaper.

9. According to Laclede's workpaper that was included as Attachment A-1 to the Verified Statement of the Staff filed on November 1, 2002, Laclede's allocation of (2,520,000) therms to the residential winter 1st block is based on an analysis that aimed to correct the Staff's original residential November 1st block therms that corresponds to the 482 November normal degree days. Laclede had never expressed its disagreement to the Staff's method of converting normal degree days to the residential 1st block therms in its prefiled testimonies, nor had Laclede presented its analysis for a different level of residential November 1st block therms in any of its prefiled testimonies. In fact, in his surrebuttal testimony that was filed on August 23, 2002, three days after the Partial Stipulation and Agreement, Mr. Cline indicated that "the parties have agreed on what amount of heating degree days should be used for rate design purposes in this case" and that "the Company's (sic) is willing to use Staff's method for turning those degree days into billing determinants." (Cline surrebuttal, page 18, lines 15 through 19.) It was not until October 25, 2002, when the Company filed its Response to Staff's Motion to Suspend Tariff, to Deny Laclede's Request for Expedited Treatment and Request for Expedited Treatment, that Laclede expressed its disagreement with the Staff's November 1st block therms in relation with the 482 normal degree days in a formal filing to the Commission. Public Counsel believes that it is totally inappropriate for Laclede to propose adjustments that are inconsistent with its prefiled testimony and introduce this new issue after all the stipulation and agreements have been signed by the parties and approved by the Commission.
10. In addition, the Laclede analysis that purportedly supports this November adjustment is seriously flawed. Laclede's analysis arbitrarily selected two

historical data points out of many and interpolated a November result of 1st block therms that is beneficial to the Company. It also used two different numbers of customer count numbers in its calculations. This, again, generated a result that is more beneficial to the Company. Furthermore, Laclede did not apply this method of adjustment to the residential 1st block therm data for any months other than November, nor did it apply this method of adjustment to any billing determinants that were utilized in determining current revenues. Public Counsel can only conclude that this analysis was used by Laclede to generate a larger reduction to its residential winter 1st block therms so that the Company could reap the benefit of higher revenues brought about by a higher residential winter 1st block rate.

III. Level of Weather Mitigation Protection

11. In Laclede's October 25, 2002 filing, Laclede stated its belief that it is "entitled to pursue" and that it had "actually obtained" a "specific level of weather mitigation protection" in the Stipulation and Agreement that was approved by the Commission. In Laclede Gas Company's Response to Staff's Reply and Request for Hearing that was filed on October 30, 2002, Laclede claims that "[I]n both his rebuttal and surrebuttal testimony... Mr. Cline had repeatedly quantified the level of additional weather mitigation protection that would be achieved by his rate design." It further specified that this specific level of weather mitigation protection was 88% for the Residential Class, and that this level "would be reduced to 80% in the event Staff's therm allocation was used."
12. I would like to repeat that Public Counsel believes that when we signed the First Amended Partial Stipulation and Agreement on August 29, 2002, we had agreed to the **conceptual methodology** to develop residential rates that was described in Mr. Cline's rebuttal testimony, but not agreed to a

specific target "level of weather mitigation protection". The actual level of weather mitigation that results from the conceptual rate design methodology can only be determined after satisfactory billing determinants and final rates are available. The First Amended Partial Stipulation and Agreement did not specify a target "level of weather mitigation protection". In fact, such a target level cannot be specified before all of the rate calculation inputs are determined since it is only a product of all those inputs. It would not be right to arbitrarily alter billing determinants in order to obtain a certain desired "level of weather mitigation protection".

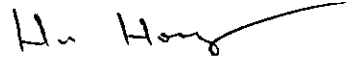
13. Public Counsel would also note that we fail to find the 88% level of weather mitigation protection that was referred to in the Company's October 25, 2002 filing in either Mr. Cline's rebuttal or surrebuttal testimonies. The only time that Mr. Cline quantifies the level of weather mitigation protection was on page 3 of his surrebuttal testimony, where he presented a table showing that the Company's rate design would "eliminate 85% of weather related losses." In the workpaper that Laclede provided to Public Counsel on August 9, 2002 (Attachment A), the percentage of weather loss recovered from the proposed rate design was shown to be 86.2%. Public Counsel believes all these different numbers are not specific levels of weather mitigation protection that Laclede was guaranteed by the parties' stipulation and agreements, rather, they are simply estimates that were indicative of the approximate level of weather mitigation that Laclede would achieve under the Laclede proposed rate design.
14. Public Counsel disagrees with the Company that the level of weather mitigation protection would be reduced to 80% if the Staff's billing determinants are used. I have reproduced Laclede's workpaper that is attached here as Attachment A, which shows the percentage of weather

loss recovered from the weather mitigation rate design. I have replicated the same analysis, using the Company and the Staff's final billing determinants. The results of my analysis are contained in Attachment C. This analysis shows that the Company's billing determinants for the compliance filing would generate 86.4% weather mitigation protection and that the Staff's final billing determinants would generate 86.6% of weather mitigation protection. Both are higher than the 85% contained in Mr. Cline's surrebuttal testimony and the Staff's billing determinants would actually give Laclede more protection, not less protection.

IV. Public Counsel's Response to Laclede's Proposed Three Options for Resolving Matter

15. In Laclede Gas Company's Response to Staff's Motion to Suspend Tariff, to Deny Laclede's Request for Expedited Treatment and Request for Expedited Treatment that was filed on October 25, 2002, Laclede proposed three options that it believes could be used to resolve this matter. First, the Company proposed to split the difference between the Staff and the Company's residential winter 1st block therms. Second, the Company proposed that if the November average customer usage exceeds 54 therms, then it would treat any revenue realized from excess therms as gas cost revenues. Third, the Company is willing to accept the Commission's determination of this issue effective retroactive to November 1, 2002, provided that the Company's proposed tariff goes into effect on a timely basis.
16. Public Counsel contends that none of the three options proposed by the Company constitute a reasonable solution to the matter. I will respond to the first two options. The third option raises issues that will be dealt with by Public Counsel's attorney. The first option would result in the residential class paying approximately \$0.5 million per year more than it

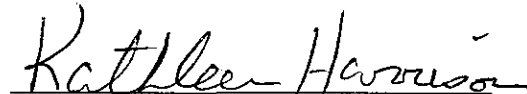
should. The second option requires the parties' continuing efforts to examine the November therms each year and to monitor the Company's compliance regarding treatment of excess therms if average usage is over 54 therms. Both the first and second options are departures from the conceptual rate design methodology that has been agreed upon by the parties and approved by the Commission. The Company has not presented persuasive arguments to support either of the first two options. Public Counsel believes the most simple and appropriate option for resolving this matter would be for the Company to withdraw the tariff sheets and re-file updated tariff sheets that are in compliance with the stipulations and agreements that are approved by the Commission.



Hong Hu

Subscribed and sworn to me this 4th day of November, 2002.

KATHLEEN HARRISON
Notary Public - State of Missouri
County of Cole
My Commission Expires Jan. 31, 2006


Kathleen Harrison, Notary Public

My commission expires January 31, 2006.

Hu, Hong

From: Michael T Cline [MCline@lacledegas.com]
Sent: Friday, August 09, 2002 5:51 PM
To: hhu@ded.state.mo.us
Subject: Laclede Weather Mitigation



resweathercorrection.X

LS

Attached is the calculation you requested regarding the percentage of the residential weather variation that is fixed by our rate design proposal.

(See attached file: resweathercorrection.XLS)

0-65
over 65

	proposed non-gas commodity charge- exist rd	normalized non-gas commodity revenues
heating&a/c		
209,503,334	\$0.17590	\$36,851,636
269,919,620	\$0.13970	\$37,707,771
479,422,954	\$0.15552	\$74,559,407
	\$0.03620	479,422,954
		0.15551906

proposed non-gas commodity charge- new rd	proposed non-gas commodity revenues	effect of warmer weather volumes
\$0.35589	\$74,559,407	-4,952,925.6 204,550,408
\$0.00000	\$0	-85,418,738 184,500,881
\$0.15552	\$74,559,407	-90,371,664 389,051,290
\$0.35589	loss due to weather	
	% of weather loss recovered from proposed rate design	

non-gas commodity revenues@ existing rate	non-gas commodity revenues@ proposed rate	difference
\$35,980,417	\$72,796,728	
\$25,774,773	\$0	
\$61,755,190	\$72,796,728	\$11,041,538
-\$12,804,217		
	86.2%	

Busch, James

From: Michael T Cline [MCline@lacledegas.com]
Sent: Friday, September 13, 2002 12:40 PM
To: dbeck01@mail.state.mo.us; aross02@mail.state.mo.us; hhu@ded.state.mo.us;
jbusch@ded.state.mo.us; jmallinckrodt@consultbai.com; MMD@drazen.com
Cc: Mike Pendergast; dmicheel@ded.state.mo.us
Subject: Laclede Rates



RATEALLOC02F4.123



RATEALLOC02F4.XLS

Attached is a preliminary worksheet (Lotus and Excel versions) that derives the revenue increases and rate component increases by rate schedule pursuant to the S&A with the exception of the three new C&I General Service classes. Such is based on billing determinants that have been agreed to by both the Company and the Staff. Rates for Residential General and LVTSS should be final. The Company may use some of the impacts and rates included in the worksheet at the presentation of the S&A to the Commission on Monday. Please call me at 314-342-0524 if you have any questions. In the meantime, I will continue to review the attached as well.

(See attached file: RATEALLOC02F4.123)(See attached file:
RATEALLOC02F4.XLS)

Attachment B
Page 2 of 2

Laclede Workpaper 9/8/02 to OPC

	heating&a/c	proposed non-gas commodity charge- exist rd	normalized non-gas commodity revenues	proposed non-gas commodity charge- new rd	proposed non-gas commodity revenues	effect of -20% warmer weather	volumes	non-gas commodity revenues@ existing rate	non-gas commodity revenues@ proposed rate	difference
0-65	209,503,334	\$0.17590	\$36,851,636	\$0.35589	\$74,559,407	-4,952,925.6	204,550,408	\$35,980,417	\$72,796,728	
over 65	269,919,620	\$0.13970	\$37,707,771	\$0.00000	\$0	-85,418,738	184,500,881	\$25,774,773	\$0	
	479,422,954	\$0.15552	\$74,559,407	\$0.15552	\$74,559,407	-90,371,664	389,051,290	\$61,755,190	\$72,796,728	\$11,041,538
		\$0.03620	479,422,954	\$0.35589	loss due to weather			-\$12,804,217		
			0.15551906		% of weather loss recovered from proposed rate design			86.2%		

Laclede 10/22/02 Compliance Filing

	heating&a/c	proposed non-gas commodity charge- exist rd	normalized non-gas commodity revenues	proposed non-gas commodity charge- new rd	proposed non-gas commodity revenues	effect of -20% warmer weather	volumes	non-gas commodity revenues@ existing rate	non-gas commodity revenues@ proposed rate	difference
0-65	213,079,611	\$0.17590	\$37,480,704	\$0.35038	\$74,658,271	-4,952,925.6	208,126,685	\$36,609,484	\$72,922,878	
over 65	266,124,318	\$0.13970	\$37,177,567	\$0.00000	\$0	-85,418,738	180,705,580	\$25,244,569	\$0	
	479,203,929	\$0.15580	\$74,658,271	\$0.15580	\$74,658,271	-90,371,664	388,832,265	\$61,854,053	\$72,922,878	\$11,068,824
		\$0.03620	479,203,929	\$0.35038	loss due to weather			-\$12,804,217		
			0.15579645		% of weather loss recovered from proposed rate design			86.4%		

Staff's workpaper 10/20/02 to OPC

	heating&a/c	proposed non-gas commodity charge- exist rd	normalized non-gas commodity revenues	proposed non-gas commodity charge- new rd	proposed non-gas commodity revenues	effect of -20% warmer weather	volumes	non-gas commodity revenues@ existing rate	non-gas commodity revenues@ proposed rate	difference
0-65	215,754,690	\$0.17590	\$37,951,250	\$0.34657	\$74,773,577	-4,952,925.6	210,801,764	\$37,080,030	\$73,057,054	
over 65	263,581,438	\$0.13970	\$36,822,327	\$0.00000	\$0	-85,418,738	178,162,700	\$24,889,329	\$0	
	479,336,128	\$0.15599	\$74,773,577	\$0.15599	\$74,773,577	-90,371,664	388,964,464	\$61,969,359	\$73,057,054	\$11,087,694
		\$0.03620	479,336,128	\$0.34657	loss due to weather			-\$12,804,217		
			0.155994035		% of weather loss recovered from proposed rate design			86.6%		

Note: The first block of calculations is a replicate of the Laclede workpaper to Public Counsel on 9/8/02. The second and the third blocks of calculations are replicates of the same workpaper, modified for the 1st block therms and 2nd block therms (the cells that are shaded) using the Laclede compliance filing billing determinants on 10/22/02 and the Staff's billing determinants on 10/20/02. Formats are modified for easy reading.