BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the matter of)			
USW Local 11-6,	Compleinent) GC-2006-0390			
and	Complainant))			
Laclede Gas Company,	Respondent))			
SURR	SURREBUTTAL TESTIMONY OF PAT WHITE				
STATE OF MISSOURI COUNTY OF ST. LOUIS)) ss)				
Pat White, of lawful age, on his oath states: that he has participated in the preparation of the following Direct Testimony in question and answer form, consisting of					
		Pat White			
Subscribed and sworn to before me this 16 day of November, 2006.					
My commission expires	Notary P Stat Coun My Commis	Hand M. Meutt Notary Bublic 1 M. MERRITT ublic - Notary Seal e of Missouri ty of St. Louis sion Exp. 04/07/2008			

SURREBUTTAL TESTIMONY

OF

PAT WHITE

SUBMITTED ON BEHALF OF USW 11-6

LACLEDE GAS COMPANY

CASE NO. GC-2006-0390

1	Q.	What is the purpose of your surrebuttal testimony?
2	A.	The purpose of my surrebuttal testimony is to respond to the assertions made in
3		Laclede Gas' rebuttal testimony and to point out Laclede's fundamental
4		misunderstanding of the Union's concerns and positions in this case.
5	Q.	What is your position on whether AMR modules can cause gas leaks?
6	A.	It has never been the Union's position that the AMR device itself causes gas
7		leaks. I agree with Dr. Patrick A. Seamands' statement that leaks on the meter
8		may occur from wear on the gaskets intended to keep gas inside the meter. What
9		Laclede refuses to acknowledge is that improper installation of the AMR device
10		can cause or accelerate wear on the gaskets, thus creating gas leaks.
11		In addition, other forms of improper installations can create leaks at or near the
12		meter, such as drilling through the meter or the rough handling of the meter that
13		pulls a union loose. Moreover, Manpower personnel hired by Cellnet to install
14		AMR devices put customers at risk because these individuals lack the knowledge,
15		skill, and equipment to recognize a hazardous or pre-hazardous condition that
16		preexists the installation of an AMR module. However, if Laclede employees

performed the installation, they would be able to promptly detect and repair these preexisting conditions.

Q. How can the improper installation of an AMR device cause a gas leak?

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- An AMR module is installed by attaching it to the drive axle. Dr. Seamands admits that it is possible to improperly align the module with the end of the drive axle. Dr. Seamands even admits that the improper alignment of the module on the drive axle can cause a clicking sound. It is the Union's position that the improper alignment of the module to the drive axle will cause the drive axle to turn in an erratic manner, thus creating the clicking sound described by Dr. Seamands. This erratic turning creates friction whereas the drive axle normally should be turning smoothly. An erratically turning drive axle eventually wears down the gasket on the axle, thereby creating a gas leak. This is reflected in Schedule 2 to Dr. Seamands' testimony, attached and incorporated here with numbered entries as Exhibit 1, and in the supplement Laclede subsequently provided to that Schedule, attached and incorporated here as Exhibit 2. These exhibits show a pattern of gas leaks found within a period of months after an AMR installation, especially the ones that the meter shop notes as "improper alignment of drive gear." See, e.g., Exhibit 1 Lines 7, 9, 15-17, 24, 30, 32, 37-38, 41, 48, 50, 53, 59-60, 64, 67-68, 71-73, 78-83, 85-87, 90, 95, 98-99, 104, 114, 116-21, 128-29, 135-36, and 138.
- Q. But what about Dr. Seamands' assertion that gasket leaks may also occur from the normal wear and usage of the meter?
- A. I do not disagree with this statement. In fact, it only supports the Union's position. Two types of gas leaks are implicated by Cellnet's installation of the

AMR modules: (1) gas leaks caused by the improper installation of the AMR device, our example described above, and (2) preexisting leaks resulting from the normal wear and tear on the gas meter.

If Laclede employees had performed the installation, the risks associated with both types of leaks would have been significantly reduced. As to the second type of leak, Laclede employees have significant gas experience, safety training, and equipment (leak detectors) unlike the Cellnet subcontractors. Therefore, if Laclede employees had installed the modules, they would have been able to detect and repair these preexisting leaks when installing the AMR device. Cellnet subcontractors, on the other hand, are unable to detect preexisting leaks (except with their noses, and their training and instruction on that issue is confusing and incomplete) and these leaks, which were contained in the index face before the AMR installation occurred, will go unrepaired until the next scheduled inspection or until Laclede is called out in response to a problem.

Additionally, Laclede employees would have been able to abate the risks associated with the first type of leak. The Cellnet installers are paid hourly, but receive significant wage bonuses for the amount of modules they install. It is not surprising that this incentive structure promotes sloppy work, as the installers rush to install as many modules as possible. Laclede employees do not share this incentive structure, and have considerable gas and safety training. Therefore, Laclede employees are significantly better equipped to avoid the risks of improper installation of the AMR device.

Q. What is your opinion of Dr. Seamands' testimony that the "tiny, slow leaks" escaping from a worn gasket or seal are not dangerous because they will dissipate in the atmosphere?

- A. I do not agree with Dr. Seamands' statement for several reasons. First, Dr. Seamands' statement directly contradicts Laclede's prior disciplinary practice and leak training. According to the Laclede Service Department Manual, "[a]ny leak found on a lock cock, service riser, regulator, meter, header, or any of Laclede's facilities on the premises must be repaired." A copy of that policy, Section 19-10 of the Laclede Service Department Manual, is attached and incorporated here as Exhibit 3.
 - Furthermore, Laclede has disciplined numerous employees for failing to detect these so-called "tiny, slow leaks." For example, Laclede employees **

 ** and ** ** were suspended in 2006 for failing to detect
 - minor leaks. Second, even if Dr. Seamands' statement is assumed to be true, it does not account for "tiny, slow leaks" occurring inside a house. Small leaks occurring in an enclosed space will not "dissipate in the atmosphere" like Dr. Seamands asserts.
 - Finally, Dr. Seamands' testimony about the "tiny, small leaks" emerging from a worn gasket refers to a wholly different situation than the leaks caused by a faulty AMR installation. Dr. Seamands' testimony refers to the small leaks resulting from the "normal wear and tear of the meters," or the leaks preexisting the AMR installation, as described above. And even if a person agrees that these leaks are harmless, in contravention of Laclede's training and disciplinary practices, it does

not follow that the leaks caused by a faulty AMR installation are also harmless. Unlike the "normal wear and tear" leaks described by Dr. Seamands, the leaks caused by a faulty AMR installation result from the improper alignment of an AMR module to the drive axle. As stated above, this causes the drive axle to turn erratically, creating friction which eventually wears down the gasket. The result is that the leaks caused by a faulty AMR installation occur sooner and may involve considerably more abrasion than leaks caused by the normal wear and tear of the meter. Therefore, Dr. Seamands' testimony refers to a different situation than the leaks caused by an improperly installed AMR device.

Q. Do you agree with Dr. Seamands' opinion regarding the clicking AMR modules?

- A. No. As to the clicking modules, Dr. Seamands testified that Laclede replaces the meters where the clicking sound occurs for customer service reasons. However, I do not find this explanation plausible. In my opinion, a clicking AMR module may signify that the drive axle is turning in an erratic manner, resulting from the improper installation of a meter arm. Therefore, it is likely that Laclede replaces these meters because if they do not do so, a gasket leak may occur as described above.
- Q. Do you agree with Dr. Seamands' opinion that erratically moving dial hands have no effect on billing or gas leaks?
- A. I strongly disagree with his opinions that the erratic movement of the meter hands and clicking of AMR modules is innocuous. First, Dr. Seamands argues that erratic movement has nothing to do with the AMR device. However, any Laclede

employee in the field knows that this is simply not the case. Before meters were installed with AMR modules, the dial hands generally moved smoothly and did not skip and jump, at least on the upswing. Even the previous trace devices did not cause erratic hand movement.

Furthermore, Dr. Seamands described a precautionary measure to avoid the effects of erratically spinning meter hands when a service technician "spots" the meter. Spotting the meter is a way to check if gas is flowing through the meter and if there are any leaks on the customer's side. The appliances are turned off, and the Laclede employee watches the meter hands for a period of time. If the hands move, it means that there is a leak because gas is flowing though the meter despite the fact that no gas is being used. However, this test is no longer useful

flow.

According to Dr. Seamands, the problem of erratic movement can be overcome if the service technician watches the half-foot and two-foot meter hands until both are on the upswing. Supposedly, the hands do not turn erratically when on the upswing. However, as a service technician, I can tell you this is simply not the case because the dials turn erratically on AMR meters even on the upswing.

when the meter dials spin erratically because it is impossible to accurately tell if

gas is flowing through the meter when the hands do not spin with relation to gas

Further, Dr. Seamands testified that Laclede instructs service technicians to watch the upswing for several seconds. As above, this statement is incorrect. In reality, they are instructed to watch for around five minutes. The fact that Laclede is willing to take a significant amount of time to complete this test shows that Laclede is more concerned about detecting leaks in this situation than it lets on.

And finally, as discussed above, erratic movement of the dials can cause gas leaks. The spinning of the dial hands is caused by the drive axle. And as discussed above, the drive axle will turn erratically when it and the AMR device are not properly aligned, thereby causing gas leaks. Therefore, the erratic dial movement and gas leaks are directly related.

What do you make of Dr. Seamands' suggestion that the length of time in

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- Q. What do you make of Dr. Seamands' suggestion that the length of time in between the installation and leak reporting somehow weakens the Union's case?
- Once again, Dr. Seamands' has misunderstood the Union's position. In many A. cases where a leak is found on a meter equipped with an AMR device, the leak occurs over a short period of time as a result of the friction caused by the erratic spinning of the drive axle. Therefore, it is not surprising that many leaks do not show up instantaneously after installation. This explanation is consistent with numerous leaks reported by Union members and customers. For example, see ** (leak found nearly four months after Exhibit 1 line 7, ** ** (over three months); line 16, ** installation); line 9, ** ** (over four months); line 17, ** ** (over four months); line 30, ** ** (six months); line 32, ** ** (three months); ** (almost three months); line 38, ** line 37, ** ** (nearly three months). Therefore, Dr. Seamands' assertion that the

1		remoteness of the installation and leak detection undermines the Union's position
2		is erroneous.
3		Additionally, Laclede's characterization of the **
4		wrong: just because a leak was not found in November does not mean that one
5		cannot develop months later after the gasket has been worn down continually for
6		two additional months at an accelerated rate due to an improperly installed AMR
7		device.
8	Q.	How do you explain that the leak rate is higher for meters without an AMR
9		device installed than those meters with the device?
10	A.	First, Dr. Seamand's testimony does not distinguish between centerbox leaks
11		caused by the drive axle (which are referred to by service personnel as "leaks on
12		the faceplate") and other types of meter leaks. If the AMR meters leak
13		proportionately more on the centerbox, it supports the Union's argument that the
14		improper alignment of an AMR device with the drive axle causes erratic spinning
15		which causes more leaks around the centerbox.
16		Second, it is highly likely that leaks on outside AMR meters are underreported. It
17		is easier for customers to smell inside leaks than outside ones.
18		Third, the fact that the erratic spinning of AMR devices caused by improper
19		installation causes leaks over time means that an increasing percentage of AMR
20		meters will likely leak in the near future as the gaskets begin to wear away.
21		Finally, based on my experience working in the service department, it seems
22		highly questionable that non-AMR meters have been found to leak more often
23		than meters equipped with an AMR device.

1	Q.	How do you feel about Dr. Seamands' opinion that there is no link between
2		meter replacement and overbilling?
3	A.	I disagree with it. Certain types of gas leaks will register gas usage that is not
4		authorized by the customer.
5		In addition, Dr. Seamands ignores the double-billing situation that occurs when a
6		half-foot AMR device is installed on a quarter-foot hand meter and the Cellner
7		installer fails to properly program the meter. These situations are not represented
8		on Schedule 2, which deals with leak investigations.
9	Q.	What is your opinion of Dr. Seamands' characterization of the gas leak
10		caused by corrosion encountered at ** **?
11	A.	I believe that it is a self-serving explanation, based solely upon speculation. Dr
12		Seamands testified that the hole in the back of the meter was caused because the
13		Union installer left the meter in contact with a stone wall. However, there is no
14		evidence that Dr. Seamands is doing anything but speculating about the placement
15		of the prior meter. Meters are generally installed at precisely the same location
16		because the header, the piping on which the meter is mounted, is fixed in location
17		Therefore, the more likely scenario is that rock and mortar may have dropped
18		from the ceiling or wall and made contact with the meter, causing the corrosion
19		But regardless of how the hole was caused, a Laclede installer would have noticed
20		the corrosion while installing the device.
21	Q.	Do you agree with Dr. Seamands' assertion that Laclede employees could not
22		have adequately performed the AMR installations in addition to their other
23		duties and responsibilities?

1	A.	No. First, it would have taken significantly less time to train Laclede meter
2		readers how to install AMR devices because they already know how to read a
3		meter. Prior testimony in this case reflects that a substantial portion of the Cellnet
4		installers' training was dedicated to teaching them how to read gas meters. See
5		the depositions of Frank Meuting at p. 32-37 and Debra Redepenning p. 86-88.
6		Second, prior to and during the time of the AMR installation, Laclede has been
7		laying off or failing to replace retiring employees in large numbers.
8	Q.	Finally, do you agree with Dr. Seamands' assertion that there is no safety
9		benefit from having Laclede employees install the AMR devices?
10	A.	No. If Laclede employees had performed the installation, they would have been
11		able to detect those drive axle and centerbox leaks that were present before the
12		AMR installation as well as other leaks, such as the one at **
13		because Laclede employees understand the workings of gas meters, they would
14		have been better able to line up the module on the drive gear and ensure that the
15		proper module was being installed.
16		While Dr. Seamands believes that preexisting centerbox leaks are not dangerous, I
17		strongly disagree with this assertion. As stated above, it is refuted by Laclede's
18		safety and disciplinary practices. Additionally, the extensive leak encountered by
19		** and others could have been avoided if a Laclede employee had
20		inspected the piping visually or with a leak detection device upon installing the
21		AMR device.
22	Ο.	Does this conclude your surrebuttal testimony?

Yes.