

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the matter of)
USW Local 11-6,) GC-2006-0390
Complainant)
and)
Laclede Gas Company,)
Respondent)

FILED

JAN 05 2007

Missouri Public
Service Commission

SURREBUTTAL TESTIMONY OF PAT WHITE

STATE OF MISSOURI)
COUNTY OF ST. LOUIS) ss

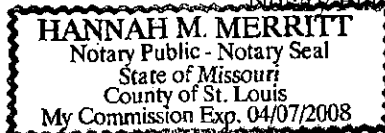
Pat White, of lawful age, on his oath states: that he has participated in the preparation of the following Direct Testimony in question and answer form, consisting of 10 pages of Surrebuttal Testimony to be presented in the above case, that the answers in the following Surrebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

Pat White
Pat White

Subscribed and sworn to before me this 16 day of November, 2006.

Hannah M. Merritt

Notary Public



My commission expires _____

USW Exhibit No. 6-NP
Case No(s). GC-2006-0390
Date 12/12/06 Rptr LV

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

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

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

4 A. An AMR module is installed by attaching it to the drive axle. Dr. Seamands
5 admits that it is possible to improperly align the module with the end of the drive
6 axle. Dr. Seamands even admits that the improper alignment of the module on the
7 drive axle can cause a clicking sound. It is the Union's position that the improper
8 alignment of the module to the drive axle will cause the drive axle to turn in an
9 erratic manner, thus creating the clicking sound described by Dr. Seamands. This
10 erratic turning creates friction whereas the drive axle normally should be turning
11 smoothly. An erratically turning drive axle eventually wears down the gasket on
12 the axle, thereby creating a gas leak. This is reflected in Schedule 2 to Dr.
13 Seamands' testimony, attached and incorporated here with numbered entries as
14 Exhibit 1, and in the supplement Laclede subsequently provided to that Schedule,
15 attached and incorporated here as Exhibit 2. These exhibits show a pattern of gas
16 leaks found within a period of months after an AMR installation, especially the
17 ones that the meter shop notes as "improper alignment of drive gear." See, e.g.,
18 Exhibit 1 Lines 7, 9, 15-17, 24, 30, 32, 37-38, 41, 48, 50, 53, 59-60, 64, 67-68,
19 71-73, 78-83, 85-87, 90, 95, 98-99, 104, 114, 116-21, 128-29, 135-36, and 138.

20 **Q. But what about Dr. Seamands' assertion that gasket leaks may also occur**
21 **from the normal wear and usage of the meter?**

22 A. I do not disagree with this statement. In fact, it only supports the Union's
23 position. Two types of gas leaks are implicated by Cellnet's installation of the

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

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

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

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

4 **A.** I do not agree with Dr. Seamands' statement for several reasons. First, Dr.
5 Seamands' statement directly contradicts Laclede's prior disciplinary practice and
6 leak training. According to the Laclede Service Department Manual, "[a]ny leak
7 found on a lock cock, service riser, regulator, meter, header, or any of Laclede's
8 facilities on the premises must be repaired." A copy of that policy, Section 19-10
9 of the Laclede Service Department Manual, is attached and incorporated here as
10 Exhibit 3.

11 Furthermore, Laclede has disciplined numerous employees for failing to detect
12 these so-called "tiny, slow leaks." For example, Laclede employees **
13 ** and ** ** were suspended in 2006 for failing to detect
14 minor leaks. Second, even if Dr. Seamands' statement is assumed to be true, it
15 does not account for "tiny, slow leaks" occurring inside a house. Small leaks
16 occurring in an enclosed space will not "dissipate in the atmosphere" like Dr.
17 Seamands asserts.

18 Finally, Dr. Seamands' testimony about the "tiny, small leaks" emerging from a
19 worn gasket refers to a wholly different situation than the leaks caused by a faulty
20 AMR installation. Dr. Seamands' testimony refers to the small leaks resulting
21 from the "normal wear and tear of the meters," or the leaks preexisting the AMR
22 installation, as described above. And even if a person agrees that these leaks are
23 harmless, in contravention of Laclede's training and disciplinary practices, it does

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

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

12 A. No. As to the clicking modules, Dr. Seamands testified that Laclede replaces the
13 meters where the clicking sound occurs for customer service reasons. However, I
14 do not find this explanation plausible. In my opinion, a clicking AMR module
15 may signify that the drive axle is turning in an erratic manner, resulting from the
16 improper installation of a meter arm. Therefore, it is likely that Laclede replaces
17 these meters because if they do not do so, a gasket leak may occur as described
18 above.

19 **Q. Do you agree with Dr. Seamands' opinion that erratically moving dial hands**
20 **have no effect on billing or gas leaks?**

21 A. I strongly disagree with his opinions that the erratic movement of the meter hands
22 and clicking of AMR modules is innocuous. First, Dr. Seamands argues that
23 erratic movement has nothing to do with the AMR device. However, any Laclede

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

5 Furthermore, Dr. Seamands described a precautionary measure to avoid the
6 effects of erratically spinning meter hands when a service technician "spots" the
7 meter. Spotting the meter is a way to check if gas is flowing through the meter
8 and if there are any leaks on the customer's side. The appliances are turned off,
9 and the Laclede employee watches the meter hands for a period of time. If the
10 hands move, it means that there is a leak because gas is flowing though the meter
11 despite the fact that no gas is being used. However, this test is no longer useful
12 when the meter dials spin erratically because it is impossible to accurately tell if
13 gas is flowing through the meter when the hands do not spin with relation to gas
14 flow.

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

20 Further, Dr. Seamands testified that Laclede instructs service technicians to watch
21 the upswing for several seconds. As above, this statement is incorrect. In reality,
22 they are instructed to watch for around five minutes. The fact that Laclede is

1 willing to take a significant amount of time to complete this test shows that
2 Laclede is more concerned about detecting leaks in this situation than it lets on.
3 And finally, as discussed above, erratic movement of the dials can cause gas
4 leaks. The spinning of the dial hands is caused by the drive axle. And as
5 discussed above, the drive axle will turn erratically when it and the AMR device
6 are not properly aligned, thereby causing gas leaks. Therefore, the erratic dial
7 movement and gas leaks are directly related.

8 **Q. What do you make of Dr. Seamands' suggestion that the length of time in**
9 **between the installation and leak reporting somehow weakens the Union's**
10 **case?**

11 A. Once again, Dr. Seamands' has misunderstood the Union's position. In many
12 cases where a leak is found on a meter equipped with an AMR device, the leak
13 occurs over a short period of time as a result of the friction caused by the erratic
14 spinning of the drive axle. Therefore, it is not surprising that many leaks do not
15 show up instantaneously after installation. This explanation is consistent with
16 numerous leaks reported by Union members and customers. For example, see
17 Exhibit 1 line 7, ** ** (leak found nearly four months after
18 installation); line 9, ** ** (over three months); line 16, **
19 ** (over four months); line 17, ** ** (over four months);
20 line 30, ** ** (six months); line 32, ** ** (three months);
21 line 37, ** ** (almost three months); line 38, **
22 ** (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 ** ** leak is also
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 Cellnet
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 ** **. And
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 **Q. Does this conclude your surrebuttal testimony?**

23 A. Yes.