MIDWEST LITIGATION SERVICES

ORIGINAL

PUBLIC SERVICE COMMISSION
STATE OF MISSOURI

IN THE MATTER OF:
USW LOCAL 11-6 AND LACLEDE GAS COMPANY

Case Nos. GC-2006-0313 and GC-2006-0390

DEPOSITION OF ROBERT LEONBERGER

JULY 6, 2006

Joint Exhibit No. 30
Case No(s) GC-2006-0390
Date 2-26-07 Rptr KF

STATE OF MISSOURI

PUBLIC SERVICE COMMISSION

In the Matter of:	)	
	)	
USW LOCAL 11-6,	)	
	)	
and	)	Case Nos. GC-2006-0313
	)	GC-2006-0390
LACLEDE GAS COMPANY.	)	

DEPOSITION OF ROBERT LEONBERGER,

a witness, produced, sworn and examined on the 6th day of July, 2006, between the hours of 8:00 a.m. and 6:00 p.m. of that day at the offices of the Missouri Public Service Commission, 200 Madison Street, in the City of Jefferson, County of Cole, State of Missouri, before

KELLENE K. FEDDERSEN, RPR, CSR, CCR
MIDWEST LITIGATION SERVICES
3432 West Truman Boulevard, Suite 207
Jefferson City, MO 65109
(573)636-7551

and Notary Public within and for the State of Missouri, commissioned in Cole County, Missouri, in the above-entitled cause, on the part of USW Local 11-6, pursuant to Notice.

A P P E A R A N C E S

FOR USW LOCAL 11-6:
JANINE M. MARTIN
Attorney at Law
HAMMOND, SHINNERS, TURCOTTE, LARREW AND YOUNG, P. C.
7730 Carondelet Avenue, Suite 200
St. Louis, MO 63105
(314)727-1015

FOR LACLEDE GAS COMPANY (VIA TELEPHONE):
RICK ZUCKER
Attorney at Law
Laclede Gas Company
720 Olive Street
St. Louis, MO 63101
(314)342-0532

FOR THE OFFICE OF THE PUBLIC COUNSEL:

MARC POSTON
Senior Public Counsel
P.O. Box 2230
200 Madison Street, Suite 650
Jefferson City, MO 65102-2230
(573)751-4857

FOR THE STAFF OF THE PUBLIC SERVICE COMMISSION:
ROBERT FRANSON
Senior Counsel
JENNIFER HEINTZ
Assistant General Counsel
P.O. Box 360
200 Madison Street
Jefferson City, MO 65102
(573)751-3234

SIGNATURE INSTRUCTIONS:
Presentment waived; signature requested.
EXHIBIT INSTRUCTIONS:
Attached to original.

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ROBERT LEONBERGER, being sworn, testified as follows:

DIRECT EXAMINATION BY MS. MARTIN:

Q. Would you state your name, please.

A. Robert Leonberger.

Q. And you are aware that you've been noticed for deposition in connection with two separate complaints filed by USW Local 11-6; is that correct?

A. Yes.

Q. And one of them is 2006-0313, which involves the Grunsky bag method, and the other is 2006-0390, which involves the automated meter reading program, correct?

A. Yes.

Q. Mr. Leonberger, who is your employer?

A. Missouri Public Service Commission.

Q. And how long have you been with that employer?

A. Got to calculate this. 25 years.

Q. What is your present position?

A. I'm the assistant manager of the gas safety engineering area.

Q. What are your duties in that position?

A. Overseeing the gas safety program of the Commission. We inspect all the gas utilities in the state, the -- all the regulated utilities and the

municipal utilities for gas safety.

Q. And have you had those same duties the entire time that you've been employed by the PSC?

A. I've had the supervisor's job since about 1991.

Q. Okay.

A. Before that, I was an inspector with the department.

Q. Were you always in gas safety?

A. Yes, I've always been in the gas safety area.

Q. Do you belong to any professional organizations whose focus are issues of gas distribution or safety?

A. I'm a member of the National Association of Corrosion Engineers.

Q. And what is that?

A. It's a -- NACE is the acronym. It's a national -- it's an international association of corrosion technicians and engineers that corrosion, one of the aspects is the corrosion of pipelines.

Q. Do you have annual meetings or --

A. There's annual meetings, but I haven't attended one of those for a while.

Q. Okay. Any other professional organizations

related to gas distribution or safety?

A. I was -- associations, the National Association of Pipeline Safety Representatives.

Q. National Association of?

A. Pipeline Safety Representatives. It's an organization of state pipeline safety managers like myself.

Q. Does that have a short thing?

A. NAPSR.

Q. NAPSR. Does that association hold any meetings?

A. Yes, there's regional meetings and national meetings.

Q. Do you attend those at all?

A. Yes.

Q. How often?

A. I attend basically all the regional meetings annually and all the national meetings annually.

Q. And what regional meeting is that? What region is covered by the region?

A. The NAPSR is broken up into regions the same as the Federal Pipeline Safety regions. They have different -- the Federal Pipeline Safety Organization has different regions, and Missouri's in the central region. 129 states in the central region. So we just mirror their

breakup of the states.

Q. And so the people you meet with are your counterparts in other states?

A. Yes, as well as the federal office of the Pipeline Safety people.

Q. Okay. And those people work for the Federal Government?

A. Right.

Q. Now, I wanted to ask you a couple of questions about gas incident reporting. The PSC, does the PSC receive reports of gas incidents from gas utilities in the state of Missouri?

A. Yes.

Q. And how does that -- what is the -- is there a regulation in the State Code of Regulations that requires that sort of reporting?

A. It requires a notification to the Staff of certain incidents.

Q. What are the incidents that need to be reported?

A. There's if it involves injury requiring hospitalization, if it involves a death, if it involves property damage more than $10,000.

Q. Greater than 10,000. So if there is a gas incident that does not cause any property damage, say for

example there's a gas leak and the utility finds it, fixes the problem, nobody's hurt, that's not something that would come to the attention of the PSC?

A. Often we have calls that we consider a courtesy call, if the media is involved or something like that, but it's not required that they call unless it meets one of those criteria. There's another criteria, if it doesn't meet any of those specific criteria I just gave you, that if it is significant, quote, in the eyes of the operator, that you call.

Q. Okay.

A. But a lot of times we'll get calls from different operators because there's media involved. They just want us to know about it.

Q. Okay.

A. That's not an incident report. It doesn't meet the definition of incident.

Q. When incident reports are filed on the ones -- on the incidents that meet the qualifications you've just described to me, are those maintained by the PSC?

A. An incident report will be something that -- a Staff incident report is a report that the Staff would file with the Commission. We would open a docket or open a case number, and we would do an investigation and

then we would write a formal case, or write a formal report.

Q. Okay.

A. And it would be filed here or filed with the Commission, yes.

Q. And so those files are open to the public; is that correct?

A. Yes.

MR. FRANSON: No.

THE WITNESS: The Staff incident reports would be.

MR. FRANSON: Hold on. The Staff incident report, but that's different than the entire file.

BY MS. MARTIN:

Q. Okay. So there may be certain parts of the file that are not available to the public?

A. Correct. The Staff incident report is available to the public ,and the filings would be -- filings, responses and things like that would be in that case file.

Q. If -- when the cause -- let me strike that.

When the PSC Staff is notified of a -- say a significant property damage over $10,000 as a result of a gas situation, does it make a difference in terms of the investigation whether the leak or the -- I'm sorry -- the

problem was on, say, a pipeline that's owned by the gas utility or on a furnace or a gas appliance that was in the customer's home?

A. The notification, we would want them to notify us -- notify us so we would have that knowledge, but the actual jurisdiction that we would have would be on piping that would be owned under the regulatory authority of the Commission or if equipment that the company had malfunctioned or if actions by one of the operating personnel caused that.

Q. Okay.

A. Even though it may not be on the specific pipeline owned by the company.

Q. Okay. Well, so if there's a problem on the customer side, say a pipe in their home that maybe led to their stove burst and there was an incident, would that be investigated?

A. Possibly, but if it was clear that we found that the fire department said it was clearly a failure of an inside pipe and it had nothing to do with the actions of the company or the failure of the company facilities, we may not do a formal investigation.

Q. Okay. Would you do an informal investigation?

A. We would find out what happened, yes.

Q. Would that be mostly just to verify that it wasn't the fault or on the utility property side?

A. Normally we would talk to the fire department, the police department, the investigators there, the fire marshals, to find out what happened. If it's clear, all their investigations say it was clearly this particular piece broke and there's no other indications of something, we may not do a formal investigation.

Q. So smaller incidents that happen that don't involve injury or death, and by that I mean smaller gas leaks that are found and captured by the gas company, regardless of whether it's on the customer side or the utility side property or equipment, those things are not officially reported to the PSC?

A. Only in maybe overall leaks repaired for that year, just a composite number of leaks repaired for the year, something like that, but individually, no.

Q. Okay. So do you get data on overall leaks per year from the utilities?

A. There's an annual report, has leaks repaired during the year.

Q. And when does the annual report get filed?

A. February. We get that in February, then we send it to -- we review it, then send it on to the Federal

Office of Pipeline Safety.

Q. And each separate gas utility files its own separate annual report?

A. Yes.

Q. What other sorts of statistics or information is contained in the annual report?

A. Miles of pipe, number of service lines, types of materials for each service line, lost and unaccounted-for gas.

Q. Is the report long?

A. It's two pages, three pages.

Q. When you get the report, does it indicate how the leaks were detected, or is it just an overall leaks per year, the number?

A. There's a breakdown of -- there's four or five different categories for the leak, what caused the leak.

Q. Do you know if the leaks that are reported are leaks of a certain magnitude? I know in the regulations they talk about a Class 1, Class 2, Class 3. Does the breakdown that you're talking about separate them out that way?

A. No.

Q. It's just all leaks?

A. Right.

Q. No matter how minor?

A. Right.

Q. Okay.

A. Well, I would say that there are a few above-ground small like fizz leaks on a meter set piping that would be considered a Class 4 leak that wouldn't be -- necessarily be required to be in that report.

Q. So Class 4 is the most minor?

A. Right.

Q. Do the regulations require, to your knowledge, the utilities, the gas utilities to perform gas safety inspections on the customer side at any particular times?

A. When the gas is physically turned on.

Q. And that's what we call turn-ons, right?

A. Right. When the gas is physically turned on, the company is required -- company or municipality is required to go inside and do an inspection.

Q. And with a home sale inspection situation, is that another time when a gas safety inspection is done?

A. It's not required then.

Q. It's not required?

A. Right.

Q. Do you know if most of the utilities do it here in Missouri?

A. I don't believe any of them do that, except Laclede.

Q. Laclede does them; is that right?

A. Right.

Q. Do the gas utilities provide any statistics to the PSC that discuss or address whether or not gas hazards are discovered or potential hazards are discovered during these gas safety inspections that are done at turn-on or home sale inspections?

A. No.

Q. Do the regulations address the issue of the changing out of gas meters by the gas utility?

A. Just the requirement to do changes, I mean, the change in the meter.

Q. That's discussed in the regulations?

A. It's discussed in the statute, not the regulation.

MR. FRANSON: I need to just put a continuing objection, and I should have done this a little earlier. Certainly I have no objection to Mr. Leonberger testifying about his knowledge of the regulations, but certainly the regulations and statutes covering these subjects do speak for themselves, and if he inadvertently leaves something out, that would be the final authority on the subject.

MS. MARTIN: Right. That's fine.

MR. FRANSON: So as long as we can agree I can have a continuing objection?

MS. MARTIN: Yes.

BY MS. MARTIN:

Q. That's right. And I should tell you, I am only wanting your knowledge. I'm not actually going to quote you for what comes in there. I'm just sort of leading us up to the Grunsky bag set of questions.

So the process or timing of meter change-outs is something that's addressed by the statute?

A. It's addressed by the statute, and in Laclede's case and a number of the other gas utilities it's addressed by a waiver to the statute, as far as how the meter is changed out.

Q. Okay. Why don't we -- in connection with that, let me just give you -- I guess we'll call it Exhibit 1, Union Exhibit 1.

(UNION EXHIBIT NO. 1 WAS MARKED FOR IDENTIFICATION BY THE REPORTER.)

BY MS. MARTIN:

Q. I've handed you what is Plaintiff or Union Exhibit No. 1, and it's a Report and Order in Case No. GO-95-320; is that correct?

A. Yes.

Q. Do you recall this case?

A. Yes.

Q. And do you recall whether or not this case involved issues dealing with the changing of meters?

You know, let me rephrase that. What I understand this case to be on -- just correct me if I'm wrong. I'm not actually going to ask you any questions about it. But very --

MR. FRANSON: I'm sorry. I can't -- I'm going to have to object. A question correct me if I'm wrong would suggest you're about to make a statement. I would ask that you ask the witness questions. I mean, if you want to interpret it and then ask him questions, that's fine, but just kind of leaving him hanging, correct you if he's wrong on a legal matter, I'm sorry, I'm going to have to object to that. More the form of the question than anything.

MS. MARTIN: Yeah. And that's fine. Let me finish my question, and we'll see if that fixes the problem

BY MS. MARTIN:

Q. In this case Laclede requested a variance from the method it was using to select meters to be changed; is that correct?

A. Yes.

Q. Okay. And at the time -- the time before this Case 95-320 was heard, was Laclede using the method that was set forth in the statute to change -- to select meters for change?

A. Yes.

Q. Okay. And in this case we're talking about here, 95-320, Laclede was requesting a variance that would allow it to use a statistical meter sampling method to select meters for replacement; is that correct?

A. Yes.

Q. Until recently, I think really until earlier this year, is this still the method that Laclede had been using, do you know?

A. They've been using it since '95, as far as I know.

Q. And still they're using this method?

A. Yes.

Q. Okay. That's actually all I had on that, so let's move on. Are you familiar with a process for changing gas meters that's referred to as the Grunsky bag method or Grunsky method?

A. I'm familiar with it, yes.

Q. And which terminology do you prefer for that, Grunsky bag or just Grunsky method?

A. Doesn't make any difference.

Q. Okay. I'm afraid I'll use it interchangeably. If I say Grunsky method, I mean the Grunsky bag method, and vice versa.

Other than Laclede, are there gas utilities in Missouri that you know of that are using the Grunsky bag method?

A. Yes.

Q. Is this process a process for -- can you describe to me how the Grunsky method works, if you know? I mean, what's done just --

A. It's a method to change the meter without having to turn the flow of gas off. Do you want specifically how the step through --

Q. No, you don't need to describe it that much. Prior to the implementation or the use of the Grunsky method, would the gas have to be turned off when a utility changed a gas meter?

A. There are other methods besides a Grunsky method that can be used, but prior to the use of the Grunsky method, the utilities I'm aware of were using the traditional change-out.

Q. So here in Missouri, you don't know of other utilities that were using another sort of method for changing the gas meter that allowed them to keep the gas on prior to the Grunsky?

A. MGE is using the Grunsky bag method, has for 10, 12 years.

Q. Okay. Does the -- do you know of any statute or regulation that requires a certain type of process for changing gas meters --

A. No.

Q. -- here in Missouri?

So when the utilities want to use, for example, the Grunsky method, do they need to come to the PSC to request approval?

A. No.

Q. Do they -- let's start with MGE. When they decided to start using the Grunsky method, did they come to the PSC and at least alert the PSC they were going to start using this or start using it in conjunction with other methods?

MR. FRANSON: I'm going to think about an objection. We have to be real careful talking about other utilities. Unless that information is public, Mr. Leonberger cannot answer that.

MS. MARTIN: Okay.

MR. FRANSON: So as long as it's public, I will have no objections to him answering the question, but I remind everyone here that it must be public information about other utilities or otherwise he cannot answer.

BY MS. MARTIN:

Q. Would you know if that's public information?

A. It wouldn't be public information because it wasn't part of a case.

Q. Okay. So let me ask it then in regard to Laclede, let me ask you this: When did you first find out that Laclede was going to be using the Grunsky method?

A. I'm not real sure.

Q. Okay. Did you have any -- did the PSC do any investigation or did they have any discussion -- let me ask it that way -- prior to the time the Union filed its complaint about Laclede's use of the Grunsky method?

A. We had discussions, yes.

Q. So you knew they were going to be using the Grunsky method before the Union filed its complaint?

A. Yes.

Q. Was any sort of investigation done of Laclede's decision to start using the Grunsky bag in some situations?

A. I was aware of the pilot programs they had done.

Q. I guess I'm just trying to avoid getting into the problem where I'm asking you about anything that's private or not public knowledge, but just tell me

if that's where I'm going.

At the time Laclede let you know they were going to start doing it, did the Commission perform any sort of studies or investigations on its own about whether or not the Grunsky method was a safe and effective method of changing meters?

A. A formal investigation?

Q. Yes.

A. No.

Q. Was there an informal investigation?

A. Like I said before, we were aware of the pilot programs they were doing, what they had done with those pilot programs.

Q. So you would say it's more a matter of Laclede letting you know what was going on, keeping you abreast of it?

A. Right.

Q. And let me just ask you this, too, because you use the word formal investigation, and I think I know what you mean, but is there a -- are there any, like, written provisions in the regulations or something that make a distinction between a formal investigation or informal investigation?

A. By formal or informal, I mean, we had discussions with them about what they were going to do.

We did not have a formal written-out memo-type investigation, no.

Q. So there wouldn't be any written records or memos that the PSC Staff had put together about the Grunsky method?

A. Correct.

Q. Do you know, do you guys maintain any statistics from either Laclede that are public or MGE that are public that describe or discuss the use of the Grunsky method in practice?

A. Do we require them to give it to us?

Q. I'm wondering if you maintain any records of those.

A. No.

Q. At the time Laclede discussed with the Staff its decision to start using Grunsky and that it was going to be performing this pilot project, did the Staff have any concerns about the safety of this method of meter change?

A. No.

Q. Does that remain true today after it's been used for a while?

A. My no answer is based upon the fact that we had known that for ten years or so that MGE had performed that and done thousands, maybe tens of thousands of these

and had not had a problem.

MR. FRANSON: Can we stop and go off the record?

(AN OFF-THE-RECORD DISCUSSION WAS HELD.)

BY MS. MARTIN:

Q. I think we were just at -- you guys knew that for the past ten years MGE had been doing it without a problem. I think that was our last answer. Do you know whether or not MGE and Laclede performed the Grunsky method in the same fashion?

MR. FRANSON: I think we're going down the same problem because you're asking other -- you're asking information about other companies that I -- I'm -- I guess I need to hear Mr. Leonberger say his knowledge of that subject would be public information. Otherwise, I'm going to have a problem with him answering the specifics about what he knows about MGE.

BY MS. MARTIN:

Q. All right.

A. My answer is going to be that, from my knowledge, they both use the process -- procedure spelled out in Grunsky's --

Q. Literature?

A. Literature, yes.

Q. Okay. So the way I understand it, when the

Grunsky method is used and these meters are changed without turning off the gas, the utility does not need to do a gas safety inspection on the customer side; is that correct?

A. The gas is not turned off, so it would not be required to be physically turned back on; therefore, an inside inspection would not be required.

Q. Okay. The other question I have about that, and I don't know if this is something you know about, but when you're using the Grunsky method in accordance with the Grunsky literature, is the gas regulator pressure pressure-checked after that meter change?

A. I'm not sure I understand.

Q. Yeah. Is there a gas regulator on the meters that are changed?

A. Not all of them.

Q. Okay. On the ones that do have a gas regulator, do you know if that pressure is normally checked after a meter change when the Grunsky method is not used?

A. I'm not aware.

Q. Okay. If the Grunsky method eliminates the need to turn on the gas, therefore, it eliminates the need for these customer-side gas safety inspections; is that

correct?

A. If the gas is not physically turned on, it would not be -- inspection would not be required.

Q. All right. Do you know if there's anything, any other sort of inspection on the customer side that replaces that that's performed by the utilities?

A. Replaces?

Q. The gas safety inspection that would be done at turn-on, if there's fewer turn-ons when this Grunsky method is being used. Are there other inspections, I guess is what I'm asking you, on the customer side other than at turn-on?

A. Laclede does the home sale inspection. That's not a regulated part of what we do --

Q. Right.

A. -- but Laclede does that home sale inspection.

Q. Yeah. And I think what I was just trying to get is an answer to that. I mean, do the regulations require any other sort of inspection on the customer side other than at turn-on? And I think --

A. No.

Q. -- you've answered that no.

Okay. And that's the only customer-side gas safety inspection that the regulations discuss; is

that correct?

A. State regulations, yes. The federal regulations don't require that.

Q. Okay. So that's only in the state, not the federal?

A. Correct.

Q. I'm going to give you the -- what will be Plaintiff's Exhibit or Union Exhibit 2.

(UNION EXHIBIT NO. 2 WAS MARKED FOR IDENTIFICATION BY THE REPORTER.)

MR. FRANSON: Actually, if you're going to give this to Rick, that will save me the trouble.

MR. ZUCKER: What's being handed out?

MR. FRANSON: Exhibit No. 2. It's the DR to Staff -- actually the DR is from Staff to -- I'm sorry -- from the Union to Staff.

MS. MARTIN: Do you not have a copy, Rick?

THE WITNESS: Our response.

MS. MARTIN: It's the response.

MR. ZUCKER: No, I do not have a copy.

MS. MARTIN: Well, you soon will, I guess.

THE WITNESS: Sorry, it's my fault.

MR. ZUCKER: It's okay.

BY MS. MARTIN:

Q. Okay. Do you recognize Exhibit 2 as the

PSC's responses to the Union's Data Request in Case 0313, which is the Grunsky bag case?

A. Yes.

Q. Okay. And are you the individual that provided the information in the responses?

A. Yes.

Q. And that's your signature at the bottom of page 2?

A. Yes.

Q. The response to Data Request 1 indicates that in January of 2006 the Staff inquired to Laclede about information that Laclede had about the Grunsky method. What precipitated that inquiry?

A. General information, just what they were -- what exactly they were doing.

Q. Well, was January '06 close to the time when you had first learned that they would be implementing the Grunsky method?

A. I think we -- I knew about it before then.

Q. And had any discussion been held before then with Laclede and Staff?

A. I don't know when, but I believe we -- we talked about they were going to do a pilot program, but I really had -- nothing formal, no.

Q. Are the documents that are attached to the

DRs, which I'll read your description of them, it's a brochure, an equipment catalog slash product list and a memorandum describing the Grunsky meter change method. You listed them in Data Request 4. Are those the only documents you received from Laclede in response to your inquiry to Laclede?

A. Yes.

Q. Did the Staff review any other documents that were evidently not provided by Laclede?

A. We looked at -- I think I said here somewhere that I looked on the Internet just to see what else was available for the Grunsky bag method.

Q. Which leads to my next question. Did any of the sites that you look at -- or looked at contain information other than the descriptive information that you list here, like patent dates and the description of the method?

A. No.

Q. The response also states that the Internet turned up -- this is the last sentence of your first response -- no information indicating problems with the method found. Do you see where I am?

A. Right.

Q. Okay. Was this because it was an absence of data on problems found or not found?

A. I just didn't find anything.

Q. Okay. Did you find any information discussing whether or not there were -- that stated there were no problems with the method?

A. Just the information about it was being used and successfully.

Q. So it was just general information that you found?

A. Right.

Q. In DR -- in Data Request 2 in your response, you have the word studies in a parenthetical. I want to make sure that doesn't mean -- does that mean that the Staff might have undertaken another sort of research that wouldn't be covered by the word studies?

A. The word studies is used in the Data Request, and so I used that just studies, meaning that we didn't have, as I said before, any formal -- we started a formal investigation of the Grunsky bag and had, you know, information written out about that, no.

Q. So it doesn't mean that there may be other written documents --

A. No.

Q. -- that Staff prepared that you wouldn't call a study?

A. No.

Q. Okay. In DR 3, you list conversations or the names of people with whom the Staff discussed the Grunsky bag method who worked for Laclede. Was it you who had the conversations with these individuals that are listed in DR 3?

A. Yes, we were -- yes, there was other -- we were talking about things, but I may have -- I put those names down as who I thought we talked to. I don't have detailed notes of who I talked to on that stuff. It's just by my recollection.

Q. But it probably would have been you who had the conversations?

A. I have had the conversation, yes.

Q. And who is Mark Lauber?

A. Mark Lauber is a superintendent for Laclede. We work with him in the operations side.

Q. And what about Ben McReynolds?

A. I'm not sure of Ben's exact title.

Q. Did he have some responsibility for implementing the Grunsky bag method on Laclede's side?

A. We were talking to Laclede about a number of things at the time, and I put his name down because we talked about some things, and I'm not sure if Ben was -- there was other Laclede personnel. I believe Ben was there, but it may have been other subjects we were talking

about the same time that I talked with Ben. So if Ben says he wasn't there, he may not have been there. I may have confused him with another conversation we may have had.

Q. Okay. What were you told about the pilot program for the Grunsky bag by Laclede personnel?

A. That they were doing a pilot in the Mo Nat area and had done a pilot in the Laclede area before they started implementation.

Q. What is first area you said?

A. Missouri Natural.

Q. And were you given the details of the program?

A. My understanding, they had done approximately 100 meters in the Missouri Natural area where they had actually used the Grunsky bag and gone inside to see if there were any problems with the pilot lights still being lit.

Q. Were you told about the pilot program before the pilot program or after?

A. I think I was aware of it. We weren't really -- I wasn't tracking it for a specific event, but I think I was aware of it.

Q. Okay. Were you told that -- what the results of the pilot program were?

A. At this point, yes.

Q. When they were -- if you know, when they were checking in the houses during this pilot program after doing the Grunsky method meter change, do you know what was being checked?

A. My understanding was just to see if the pilot lights were still operational.

Q. And the pilot lights would be on gas appliances, gas furnaces --

A. Right.

Q. -- things like that?

So the only other utility in Missouri, gas utility that you know that uses this method is Missouri Gas Energy; is that correct?

A. Yes.

Q. If another --

A. That I'm aware of.

Q. I'm sorry. If another gas utility in Missouri wanted to use the method, would they have to come talk to the PSC first?

A. They wouldn't have to come talk to the PSC, no.

Q. Okay. So they could just start using it without letting the PSC know?

A. Yes.

Q. So it's possible somebody else might be using it and you just don't know yet?

A. Possibly.

Q. Missouri Gas Energy, you indicated, has been using it for about ten years?

A. Over ten years, I believe.

Q. I'm going to ask you a question about this, and just let me know if I'm crossing over into public or private --

MR. FRANSON: We'll let you know.

BY MS. MARTIN:

Q. -- information.

You state in here that MGE personnel indicated that they had had success using the method and had not identified any problems using the method. That's the last sentence of DR 3.

My question is, do you know, does that -- did that mean to you that they had been using -- what do you mean to say in that sentence, is what I'm trying to get at? Did you mean to say that they'd been using the method, they had not had problems with pilot lights going out or other sorts of gas leak issues when they were using this method?

A. Yeah, basically the method was successful and they were able to change the meter out without

problems like the pilot lights going out, things like that.

Q. They had not identified any problems using the method. Does that mean that they -- that you were not aware that -- that there were never situations where pilot lights were going out?

A. I basically asked them that question, if they know of any problems. The answer was no.

Q. In either the -- have you discussed or -- in the meetings that you go to for the NAPSR, regional or annual, has the Grunsky bag method been discussed?

A. I don't recall.

Q. Do you get literature from that organization?

A. We have just mailings when we're going to have meetings and things of that nature. We have phone calls on a continuous basis.

Q. Not like newsletters about the HUD issues and gas safety?

A. No.

Q. Okay. What about the other organization, NACE? I know you testified that you don't go to meetings, but do you get any sort of written newsletters or --

A. There's newsletters from that. That is a corrosion control organization.

Q. So Grunsky wouldn't be discussed in that?

A. Correct.

Q. Are there any -- do you know if there are limitations on time of year that the Grunsky method can be used successfully?

A. I would assume that -- my understanding would be the size of the load could possibly be a problem, but that could be -- the load could be at a time of year or it could be at a size of the facility. But I mean, if the meters change out fairly quickly, I'm not sure there's a problem in most residential applications.

Q. Does it make a difference whether or not the Grunsky's being used in the summer as opposed to the winter?

A. On a residential application, the load would be less -- possibly be less in the summertime, but the amount of time that the meter's out of service doesn't -- wouldn't necessarily make it a problem.

Q. And when you're talking about the load, is that the amount of gas that's being --

A. Yes.

Q. -- given to a house or business?

Okay. I'm going to ask you a couple of questions about AMR now, and I don't believe that we have our responses to our AMR discovery, so that should --

MR. FRANSON: Before we go on, have you sent any discovery requests to Staff in the AMR case?

MS. MARTIN: No.

MR. FRANSON: That's all I wanted to be sure.

MS. MARTIN: We don't have responses, but it wasn't to you-all that we served it.

MR. FRANSON: I was going to say, if you had, I wasn't aware of it.

MS. MARTIN: No, we haven't.

BY MS. MARTIN:

Q. When did you first -- when did the Staff first learn that Laclede wanted to implement a system-wide AMR, automated meter reading system on its gas meters?

A. I'm not really aware. I think over five years ago.

Q. When I ask you to provide me a day or a time frame, I'm not expecting you to be able to say January '01. Just an estimate's fine. And how did you become aware that Laclede wanted to implement the AMR on its gas meters?

A. Just discussions with us about that.

Q. Is the transfer of the meters to an AMR system something that Laclede needs to have approval from the PSC for?

A. The actual transfer of taking the index off, putting a new index on, no. I guess there are rate implications that sometimes they come in and talk to us about the rate implications that may -- not me particularly, but our rate staff of rate implications of a large project, but --

Q. So just to make sure I understand this, if Laclede just wanted to take the dial that was on their meters and change it to this AMR dial, this device to do the reading, that's not something they would need approval for, but there may be other implications of that they would need approval for?

A. Correct. Specifically their tariff, they were changing the way that AMR was going to be used to do certain things, and the tariff required them to do certain things, so the tariff was changed.

Q. Okay. And so I think one of the things we're all familiar with from one of the other issues that arose was the variance case where they needed to have a -- they wanted a change in how the meters were replaced or selected for replacement as a result of AMR?

A. Right.

Q. But that was a separate matter?

A. Right.

Q. Okay. Did you have any discussions with

anybody from Laclede about their implementation of AMR or their plan to implement AMR?

A. Over the years? yes.

Q. Yes, over the years. Let's just go back, though, to when you first learned about it. Do you recall having discussions with folks at Laclede about their plan to implement AMR?

A. Yes, we had discussions about it.

Q. Okay. Do you know who you discussed it with?

A. Various people. The person that was the head of that was Bo Matisziw, M-a-t-i-s-z-i-w. M-a-t-i-s-z-i-w.

Q. Were you provided any documents from Laclede about AMR?

A. I can't recall if we had documents or not.

Q. Well, did the PSC Staff do a formal investigation of the AMR project?

A. Did our Staff?

Q. Yeah.

A. No.

Q. So --

A. I know that our engineering analysis or our people had back, I think in the mid '80s had done a recommendation that Laclede actually go to AMR. So our

one area where Staff had made a recommendation in one of our audits that Laclede should consider using AMR, I think it was a 1985 case.

Q. And that's a case with a 1985 dash --

A. It's a management audit case.

Q. What's a management audit?

A. The PSC has a section that does management audits and looks at the efficiency of the operations. In this case they looked at using AMR as one of the aspects of that particular audit.

Q. So when a management audit is done and a gas utility or another utility, but we're talking about gas utilities, so --

A. Right. Not only gas utilities, I think, but in this case, that's the one they did on Laclede.

Q. Other than that, did the PSC Staff prepare any written documents discussing the benefits or costs of AMR?

A. No, my staff didn't.

Q. Do you know whether or not there was a test program with Laclede for the AMR implementation?

A. I think they had a pilot program, but I don't know when it exactly was.

Q. There are other gas utilities in Missouri that have AMR on their gas meters; is that correct?

A. Yes.

Q. Do you know which ones they are?

A. I know MGE has a form of AMR. It's not quite the same as what Laclede is using, and then AmerenUE has the -- basically used the same Celnet technology, I believe.

Q. And do either MGE or AmerenUE have to provide statistics or reports to the PSC about their automated meter reading programs?

A. To my group specifically about safety or --

Q. Well, safety effectiveness, how well it works, problems that are associated with it.

A. They may be required in a rate case or some other case, but I'm not aware. It's not given to me.

Q. They don't have to report anything to you about how well the system's working?

A. Correct. There may be other things in like a rate case that a management audit looks at or something like that, but I'm not aware of it. My staff does not have anything.

Q. Now, if a -- hypothetically, if a gas leak occurred at a Celnet, when the Celnet device was put in, it would be reported should it fall into the categories we talked about earlier where it caused property damage over a certain amount or loss of life or injury or something

like that; is that correct?

A. Well, if there's a gas leak, that should be reported to Laclede that there was a gas leak and they would respond to that leak. Now, reported, do you mean reported to the PSC?

Q. Yes.

A. Like I said, that criteria, it wouldn't necessarily be reported to the PSC.

Q. And that's what I was trying -- I mean, my question was just, you would hear about the results of it only if it fell within those, the loss of life, damage to property that we talked about earlier; is that correct?

A. Well, I become aware of some that there has been allegations that there has been some leaks on some, but we've looked into those addresses and those meters, yes.

Q. How would you hear about those?

A. Through complaints.

Q. From the public you mean?

A. Yes.

Q. Let me just -- before I ask you about that, when you get the other report, we had talked about annual report, and on there the annual amount of gas leaks is reported. It doesn't break it down by where it was?

A. No.

Q. So it just would say 100 gas leaks were found this year?

A. Corrosion leak, a leak due to material defect, leak due to outside force damage, those kind of categories.

Q. So there are categories. It's just you wouldn't say we had a leak at the meter?

A. Right.

Q. That would maybe fall within the equipment, the second one you mentioned?

A. It would depend on what the particular leak was.

Q. So what are the categories on that annual report for gas leak, if you know?

MR. FRANSON: Mr. Leonberger, if you're going to cite a specific regulation, please do that when you answer.

THE WITNESS: There's a specific form from the -- it's actually the Pipeline Hazard Materials Safety Administration of the Department of Transportation, the cause of the leaks. There are corrosion, natural forces, excavation, other outside force damage, material or wells, equipment, operations and other.

BY MS. MARTIN:

Q. Okay. And that's something we could find

in the public domain and looks like in the regulations that you've got?

A. Right. I mean, there's --

Q. It's one of the forms?

A. It's a form -- it's a federal form that's required to be turned in to the Federal Department of Transportation annually.

Q. Okay. And now, you also say that occasionally you get, I guess, calls from the public reporting problems directly to the PSC; is that correct?

A. Correct.

Q. Now, do you-all have a hotline for that?

A. We have a consumer services line.

Q. And the public takes advantage of this, I gather?

A. We have -- they have all sorts of complaints from all sorts of different utilities.

Q. When you receive a complaint from a gas utility customer -- we'll hear speak specifically about AMR since that's the subject of the complaint. Say somebody called in, said somebody came over and stuck this AMR device on my meter, now I have this nasty gas odor and I called the people and complained. Does the PSC do anything about that?

A. I'm not sure how I got this, but we've

looked at a couple of addresses where there's a -- supposedly a severe leak caused and we checked with Laclede about what they -- they wanted to test that meter.

Q. And is a formal investigation done at that time?

A. We just ask them if they tested that meter and what the specifically was the problem with that meter.

Q. You're talking about you asked Laclede?

A. Yes.

Q. Okay. So the consumer would call the PSC and then the PSC calls Laclede?

A. I don't know if it's a consumer or if it's someone else.

Q. Someone else?

A. Could be an employee or something. I'm not sure.

MR. ZUCKER: Excuse me a minute. This is Rick Zucker. We're talking hypothetically now, or are we talking about an actual complaint?

MS. MARTIN: Well, I was actually asking about a hypothetical, just generally what the PSC would do in that situation, and I think he's just mentioned a couple of addresses but we haven't specifically asked about those addresses.

MR. ZUCKER: He's mentioned a couple of

addresses?

MS. MARTIN: He just mentioned that he looked at a couple of addresses.

MR. FRANSON: Rick, he has not said it's 123 Laclede Building in St. Louis, Missouri or something like that. No, he has not named a specific address yet.

MS. MARTIN: Does that answer your question?

MR. ZUCKER: Sort of. Go ahead.

BY MS. MARTIN:

Q. Okay. So in any event, somebody called. We don't know if it's a consumer or an employee. They tell you there's a problem, and you-all will call Laclede to ask Laclede to give you information about it; is that correct?

A. Yes.

Q. And that would be the general process when a customer calls in with a leak or an employee or whoever's calling it in, that's the normal process you-all would follow?

A. It depends on what the allegation is.

Q. Okay. So for other sorts of allegations you would perhaps follow a different path?

A. Perhaps we would -- in the course if we're going to do an inves-- we do our annual inspections of

Laclede at different times. We would maybe incorporate looking at that in the course of our normal looking at records. So we wouldn't just ask them what it is, we may try to find it ourselves, or we may actually do a special inspection, go up there and say, we want to see the leak records for an area. So it depends on what the allegation is.

Q. Okay. Now, going more specifically to AMR, have you had occasion to call Laclede about complaints you've received on the consumer hotline about AMR installation?

A. I think it was the consumer hotline, but I can't remember what it was about, but we had a couple of addresses we wanted to check on.

Q. When you say couple, do you mean three?

A. Two.

Q. Two. And in those specific cases, what was the process that you followed?

A. We asked them to -- if they were aware that the meter was leaking, and they weren't aware that -- one of them they went out and found the meter and tested it.

Q. And when you say they, you mean Laclede?

A. Yes.

Q. And then Laclede called you back with the results of the test?

A. Yes.

Q. And can you tell me in each case what the results were?

A. One of them they couldn't find a leak. One of them they tested the meter to five pounds before it -- they found a very small leak. It's five -- you can normally operate at about a quarter pound, and they had to test it to five pounds before they found a small leak.

Q. So at normal operating pressure, there wasn't a leak?

A. Right.

Q. And those are the only calls that you're aware of from the public about AMR installation?

A. Yes. Well, I mean, we've had some other calls, people who said that they didn't want the -- they didn't want Celnet to -- no. There's been other calls.

Q. Well, let's stick -- I'm asking you about safety of the AMR installation, not people not wanting it, so --

A. No, not wanting -- they wanted Laclede to install them.

Q. Right. In terms of calls about problems caused by it being placed in there, you've not received calls other than the two you just talked about?

A. Specifically we've heard allegations from

the -- I believe in the letters from the representatives of the ex parte comments that there were leakage caused. We called and contacted Laclede once we saw those to say, in general, have you -- do you have any that you know of, these severe leaks they're talking about? And there was no -- they have no knowledge of those severe leaks, allegations there are leaks.

Q. Is AMR -- has AMR been addressed in any of the meetings that you've gone to, either regional or annual of the NAPSR?

A. Not that I'm aware of. We discuss the fact that a lot of people are going to AMR, going to using the method.

Q. Any discussions about how effective it's been at the NAPSR meetings?

A. Effective how?

Q. Well, in terms of streamlining the billing process.

A. Just the method of --

Q. Saving money, time?

A. Not having -- the AMR process of not having to go read individual meters and that kind of thing.

Q. Any discussion of safety problems connected with AMR installation at the NAPSR meetings?

A. No. There would be no regulatory

requirements addressing change out of meters, so it's not really a safety issue, as far as safety regulations requiring change out of meters.

Q. So has there been any -- I guess I want to make sure, has there been any anecdotal discussions with these other folks that you were at these NASR meetings with about experiences they've had with AMR installation in their states related to safety?

A. I haven't heard any problems, no.

Q. Just briefly going back to the pilot program, AMR program, do you know how extensive that was, Laclede's pilot program on AMR?

A. No.

Q. Do you know if it was?

A. I probably did at one time, but I don't remember.

Q. Okay. So you might have --

MR. ZUCKER: I'm sorry. Are you talking about the pilot program with AMR or the pilot program with the Grunsky method?

MS. MARTIN: AMR.

MR. ZUCKER: Did we establish a pilot program with AMR?

MS. MARTIN: He testified there was a --

THE WITNESS: I testified that I believe

there was some kind of pilot program. That was many years ago, so I --

MR. FRANSON: The answer to your question, Rick, is yes, we did establish that.

MR. ZUCKER: All right. Thank you.

BY MS. MARTIN:

Q. Well, do you recall whether or not you would have received any sort of written report of the success of the pilot program or the test program of AMR?

A. I don't believe I received -- that's not to say, again, that another section or another department may not have seen a report.

Q. You didn't get one?

A. No.

Q. And you didn't see one?

A. I may have -- in meetings we had I may have seen one, but I don't have one, no.

Q. But do you recall whether there was one that you did see?

A. No.

Q. At the time that AMR -- that Laclede began implementing AMR on a system-wide basis, did the Staff have any concerns about its safety?

A. Specifically installing AMR on a meter?

Q. Yeah.

A. No. We were aware of, again, that this had been done in other utilities and what had happened there, so we weren't concerned that another utility was going to install AMR using a similar method, no.

Q. Had you received reports from other utilities that they were experiencing any problems with AMR?

A. What kind of problems?

Q. Well, I guess I was going to have you tell me when you received reports and then ask you what sort of problems.

A. The only problems that I was aware of that was installation of the AMRs were installed to -- the index was installed too tightly and they were not functioning correctly. It wasn't any safety problems. It was more of a -- they had to go back out and reinstall the index.

Q. And --

A. That wasn't Laclede. That was with another utility.

Q. Is the index the thing that gives you the reading?

A. The index is the plastic little box that sits on the outside of the meter that has the dials.

Q. Okay. But you weren't receiving reports

from other utilities that there were leaks associated with the actual installation or other problems associated with the actual installation of the device?

A. I received no reports like that.

Q. No safety complaints; is that correct?

A. Correct.

Q. If a meter was damaged at the time of installation of AMR, would that be reported by the utility to the PSC?

A. Not necessarily.

Q. And under what circumstances would that be reported?

A. If it met one of the criteria of an accident or if they felt we were having all these discussions about AMR that they would want just to tell us about that, possibly.

Q. Okay. So the mandatory reporting would be if it fell within one of those incidents we talked about earlier?

A. Yes.

Q. Otherwise it would be a voluntary report by Laclede --

A. Right.

Q. -- because they think you should know; is that correct?

A. Yeah.

Q. Does the PSC -- does Laclede provide reports or other sorts of written documents to the PSC relating to complaints it might be receiving from its customers in regard to AMR installation?

A. Not that I'm aware of.

Q. So if a customer complains to Laclede, oh, I hate this, it's not working right, come out here and fix it, you're not going to get here at the PSC any sort of report of that?

A. Not unless we have a case going that's asking those specific questions.

Q. Okay. In the absence of that sort of thing, that kind of a complaint's not passed on to the PSC by Laclede?

A. Not to me, no.

Q. Okay. Does the PSC impose any training or qualification requirements on the individuals who install and service residential gas meters?

A. Say that again.

Q. Does the PSC impose any training or qualification requirements on individuals who install and service residential gas meters?

A. Yes, there's operator qualification requirements.

Q. Are those contained in the regulations?

A. Yes.

Q. Does the PSC -- I'm sorry. Other than what's in the regulations, are there any rules or otherwise from the PSC specifically discussing training and qualification for individuals who install and service residential gas meters?

A. There's the old operator requirements if you're working with gas, like changing out a meter, those kind of things, there's certain requirements, certain tasks you have to be trained to do.

Q. No, but is all of that contained in the regulations?

A. If you're asking if there's individual requirements for the meter change-out people, for people who do leak investigations, no. There's a generic basically operator qualification.

Q. Okay. So more what I was trying to get to is whether or not you've got those sort of qualification requirements in a place other than in the regulations or if they're all set forth in the --

A. The regulations set forth the operator is supposed to develop an operator qualification plan that would set out the specific covered actions that would have to be -- that would be covered by the rule and the

training that those individuals would have to have.

Q. Okay.

A. So the rule requires that the company make a plan and a program, and then that program becomes what they have to train people on. So the rule requires to make the plan, then the plan is a training method.

Q. Okay. And does the PSC review the plan that the company --

A. Yes.

Q. -- develops?

Can the company change the plan without PSC approval?

A. They have -- any change to the plan have to be given to us in a specified amount of time.

Q. And then the PSC reviews those changes?

A. Right.

Q. Does the PSC or has the PSC been monitoring the field installation of the AMR devices by Laclede?

A. Have we been, like, going out in the field and looking at them?

Q. Yes.

A. No.

Q. Do you receive any reports from Laclede updating the PSC as to the status of the implementation of AMR?

A. Over the course of time, we've had some reports of how far along they are, but I don't look at those on a regular basis. That's not to say that someone else in the Commission would not be getting those.

Q. But you're not. And those reports you just mentioned, are those generally we've now finished X amount in this amount of time in this area or is there more detail?

A. Basically how many they've gotten done and where they are.

Q. Do those reports indicate whether they've had any problems with the installation of any?

A. In general, I've asked that -- I've asked that general question about problems and there wasn't.

Q. But it's not contained in the report?

A. There's no report necessary. Just more of a phone call or discussions. There's no formal report.

Q. This isn't a written report?

A. No.

MR. FRANSON: When you're at a good stopping point, can we stop?

MS. MARTIN: We can stop right now.

(A BREAK WAS TAKEN.)

BY MS. MARTIN:

Q. After -- has the PSC at this time, after

some good part of the installation of AMR's been completed have any safety concerns about the AMR installation?

A. Do we have any concerns, specific concerns at this point?

Q. At this point.

A. No.

MR. FRANSON: Okay. I should have made this clear a long time ago. There is a distinction between the PSC and the PSC Staff. And when you say does the PSC have some concerns as an example, that would suggest maybe that the PSC has held some kind of hearings and made a determination. I think every question like that's going to be no. However, Mr. Leonberger represents the PSC Staff, and so when he's been saying the PSC, he's really meaning the PSC Staff; is that correct?

THE WITNESS: Yes. Sorry. I apologize.

MS. MARTIN: No. Because I think some of the questions will sometimes say PSC or PSC Staff, and then sometimes I've gotten sloppy and just said PSC. I always mean PSC Staff.

MR. FRANSON: I should have made that clear.

THE WITNESS: And many times, like I said before, as far as the AMR, AMR is basically a metering-type function, not necessarily a safety function,

so there may be other areas of the Staff, like the engineering analysis section that may be doing things that I'm not necessarily aware of. I'm not saying I'm speaking for the whole Staff in most cases that aren't involving safety.

BY MS. MARTIN:

Q. Now, is it your understanding that once an AMR device is on a gas meter, that Laclede no longer has to visit the customer home to obtain a meter reading?

A. Yes.

Q. That's the premise of AMR, correct?

A. Right.

Q. So Laclede no longer has to turn off gas service when a transfer of service is made; is that correct?

A. If they're doing a transfer they would not have to go there to read the meter, no.

Q. Because they could get their reading for the final bill and start -- when the new customer comes in, they can get the remote read?

A. There would be no requirement from the safety regulations for them to go physically to the site, no.

Q. Okay. And if they're not having to turn off the gas and then turn the gas back on, Laclede does

not have to do a gas safety inspection at the time a new customer gets their service; is that correct?

A. According to our regulations.

Q. According to your regulations. I just wanted to ask you one more question about Union Exhibit 1, which was the Report and Order in Case No. 95-320. You've got it in front of you. On page 6 of the Order, and the numbers are at the bottom left, pages 1 of 8, 2 of 8, 6 of 8. I'm at page 6 of 8. Actually, I think what I want is the very bottom. Do you recall that in this Order the Commission suggested a, what they were calling a recapturing the safety inspections that were lost by the change in method of meter replacement?

A. I'm aware of that, yes.

Q. Do you know whether or not Laclede has ever implemented a program to recapture those lost opportunities as the Commission calls it on page 6?

A. At the time, right about this time in 1997?

Q. I'm not sure when it was.

MR. FRANSON: What is the date on the Order?

THE WITNESS: Issue date of May 13 of 1997. The Staff had -- was talking to -- there was concern about the leaking of the copper service lines and replacement of

the copper service lines. I think at the time Laclede was replacing less than a thousand of those. So we had had a very big safety concern about leaking copper service lines because of some incidents we'd had.

So at that time, there was a specific program that was implemented to do inspections, but we had -- the Laclede was ramping -- we were having them or discussing with them doing more replacements of copper service lines and doing more leak surveys over copper service lines because that was a very big safety concern.

So at that point a lot of their resources were going to that particular issue, going from replacing less than a thousand to replacing thousands, about the '97, '98, '99 time frame.

BY MS. MARTIN:

Q. All right. So the Order we're talking about, the Commission's talking about again on page 6, that as a result of the change in the way meters are going to be selected for replacement, there's going to be an average of 20,000 fewer meter visits. Do you see where I'm looking at? It's the second full paragraph, second-to-last paragraph.

A. Yes.

Q. And in this Order, they're talking about finding a way to -- well, let me rephrase that.

The Commission suggested that the appropriate response would be to implement a program to recapture those lost opportunities, do you recall that? I think we just talked about that.

A. There's discussion about recapturing those opportunities elsewhere in Laclede's safety inspection program.

Q. Right. And so is your testimony that you believe that moving the safety, the lost opportunity to the corrosion inspection and inspection you just talked about would satisfy this? Is that --

MR. FRANSON: Objection, that calls for a legal conclusion. No. 1, you're assuming that the Commission ordered Laclede to do something.

MS. MARTIN: No. I don't mean to be suggesting I think it was an Order. I think I said suggestion.

MR. FRANSON: And, okay, moving on, then. Next part of the objection is, what would satisfy this would be if there was some problem with the -- with Laclede not complying with a Commission Order. That would be an entirely different proceeding. And I can tell you that since this isn't part of the order paragraph, there would be a big question at best whether this was an actual order of the Commission for Laclede to do something.

So I guess my main objection is to the way your question is phrased about would it satisfy this. So I'm asking -- you can probably get around my objection by just rephrasing the question.

MS. MARTIN: Yeah, let me do that.

BY MS. MARTIN:

Q. At the bottom of page 6 of the Commission's Order, the Commission -- I certainly don't mean to be suggesting that the Commission's ordering anything, but they're suggesting that Laclede's -- the appropriate response by Laclede to this variance it's granting in the way it's left in this replacement, would be to recapture the lost opportunities to observe and remedy potentially unsafe conditions in other aspects of its safety inspection program. Is that what you understood?

A. This said lost opportunity. It said recapture lost opportunities elsewhere in the safety inspection programs.

Q. Right. So what I'm asking -- what I was asking then was if you knew whether or not Laclede had implemented a program to recapture the lost opportunities that are discussed in this Order, and you then answered --

A. What I said was that right about that same time period, the corrosion of copper service lines and replacement of copper service lines became a large issue

because of incidents we'd had. So at that point there was a lot more activity that Laclede was going from replacing, like I said, less than 1,000 service lines to more and more and more, up to where in 2000 they started replacing 8,000 service lines a year.

So they had a -- there's a safety initiative that took a lot of man hours, a lot of work both doing the annual surveys over those and doing replacement. So I don't know if it specifically recaptured lost opportunities for inside work, but we believe because of the leaks in -- the number of leaks and the incidents we've had, that that particular effort was very important.

Q. I guess the question I'm asking is kind of simpler. Was that corrosion -- upping the corrosion inspection process and replacement process, was that in response to this suggestion?

A. No.

Q. It was separate from that?

A. Yes.

Q. Do you know whether or not Laclede has set up any other sort of inside inspection program on its own voluntarily to recapture the lost opportunity to inspect 20,000?

A. Not that I'm aware of.

MS. MARTIN: Okay. That was the only question I have, and I am finished.

MR. FRANSON: I think I'm going to be last, if I've got any questions for Mr. Leonberger.

MR. POSTON: May I ask a clarifying question? Bob's saying, no, I can't.

CROSS-EXAMINATION BY MR. POSTON:

Q. You had -- when you were talking about the Grunsky bags earlier, there had been questions about load differences?

A. Right.

Q. I just want to clarify. Were you saying that a greater load could cause the Grunsky method to be unsafe?

A. No, I didn't say that at all. I said that there may be some appli-- I'm just not aware of the specific, you know, where you -- at what time, what -- how big of BTU furnace or BTU appliance could be operating, but there's -- if you took a long time to do that method, I assume there could be some -- depends on the amount of gas and pressure in the tank. I'm not aware of the specific specifications on that, no.

MR. POSTON: That's all.

THE WITNESS: I'm just saying in general, that's my thought that I guess you'd want to look at those

things.

MS. MARTIN: I just want to follow up to that.

REDIRECT EXAMINATION BY MS. MARTIN:

Q. That sort of thing might be addressed in the literature you get?

A. Right.

Q. From the Grunsky company, correct?

A. And I was just more familiar with how it worked, not specifically all of the -- where the cutoffs were on certain -- when you should use them and not.

MR. FRANSON: Rick, I think I'm last.

MR. ZUCKER: Okay. Let me just ask a few. And I'm sorry if I repeat something that was already asked.

CROSS-EXAMINATION BY MR. ZUCKER:

Q. Mr. Leonberger, was it your testimony that based on MGE's long-time use of the Grunsky method, that you did not have concerns about Laclede using it?

A. I was aware that the Grunsky method had been around for 50 or so years and then MGE was using it, and I was aware that during our inspections that they were saying they had not had any problems with it. So when another utility started to use the same type of method, it didn't raise concerns, no.

Q. And if you had reason to believe that the Grunsky meter change method was unsafe, what would you do?

A. If we had knowledge of something, a particular method or particular material that wasn't -- that we believed wasn't working correctly or wasn't good, we would probably ask the company not to use that, and if we felt strongly that it was a bad method, we would probably go to the Commission and have them order them not to use it.

Q. With regard to AMR, do you have any idea of about how many AMR units Laclede has installed to date?

A. To date, no. I don't know. I mean, I know it's over -- I believe it's over 200,000, but that number's quite a few months ago. I really don't know the exact number to date, no.

Q. Okay.

A. I'm not getting -- I'm not getting a week by week or, you know, day by day update on the number that's being installed, no.

Q. And. Have you received -- since Laclede began installing AMR devices on meters last year, have you received any reports of incidents related to the installation of an AMR meter?

A. Incident like leaking gas causing a formal incident?

Q. Yes, sir.

A. No.

Q. And if you were concerned about the safety of AMR installation, what would you do?

A. As I stated before, when we find something that the Staff believes is an unsafe method or unsafe material, we would take measures to talk to the company about stopping to use that. If we believed the method or material was bad and they weren't voluntarily stopping to use it, then we would talk to the Commission about having an order to stop.

MR. ZUCKER: Thank you. That's all I have.

MR. FRANSON: A couple clarifying questions, Mr. Leonberger.

CROSS-EXAMINATION BY MR. FRANSON:

Q. Let's talk about pipes in an average household. Let's use a hypothetical residential customer of Laclede. It's a normal three-bedroom, two-bath home, we'll say 1,500 square feet, and it is set up, piped for natural gas. What facilities would ordinarily be used to provide service by Laclede to this customer, and where does Laclede ownership and responsibility for those facilities begin and end, and where would the customer ownership and responsibility begin and end?

A. In a typical residential service, there

would be a service line come up to the house. On the high pressure, there would be a regulator to reduce the pressure to about a quarter of a pound, and there would be a meter, and the regulatory responsibility or Laclede's property ends at the outlet of that meter.

On a low pressure, which would be -- the pressure in the main would be essentially the same pressure that the appliances would operate at, there would be a service line to the house. There would not be a regulator because the pressure in the main would be the same pressure the appliances operated at. There would be a meter and meter set piping going on, and the same thing, the Laclede property ends at the outlet of the meter.

Q. And that meter in most instances is outside the house?

A. I think Laclede's -- Mr. Zucker could say -- correct me if I'm wrong -- but I believe --

Q. Hold on. Let's not leave it to Mr. Zucker.

A. I believe there's about a 60/40 split between -- there's about 60 percent of their meters are outside and 40 percent are inside, is my recollection.

Q. Okay. What you just talked about would cover the outside meters; is that correct?

A. What's that?

Q. About where the responsibility ends,

Laclede's responsibility ends at that meter?

A. Inside or outside, the responsibility of Laclede would end at the outlet to the meter

Q. At the outlet to the meter?

A. Yes.

Q. Or at the meter itself?

A. The outlet of the meter.

Q. Which is connected to the meter itself?

A. Right. There's an inlet and outlet to the meter, where the gas comes in the meter and out of the meter.

Q. Tell me where more time, where does Laclede's --

A. The outlet of the meter.

Q. So once the gas goes out of the meter and on into the house, that's the customer's responsibility?

A. Right, past the outlet of the meter.

Q. Okay. Do you know of any regulations that require, other than when the interruption -- when gas flow is interrupted to a house, that requires Laclede to go in and do an inspection of the inside premises?

A. Specifically Laclede in Missouri or any other --

Q. Let's talk specifically about Laclede.

A. Unless the flow of gas is turned on,

there's not a requirement for them to go in and do an inside check.

Q. Any other LDCs that you are aware of?

A. No other LDCs that I know do a check on the inside piping unless they physically turn the gas on according to our rules.

Q. And LDC stand for local distribution company.

A. Which would be municipalities and investor-owned companies.

MR. FRANSON: The only other thing we need to talk about, we need to talk about off the record some of the things that we talked about may need to be deemed highly confidential. We can talk about that.

I don't believe I have any other questions for Mr. Leonberger. Does anybody else?

MS. MARTIN: I just had one.

FURTHER REDIRECT EXAMINATION BY MS. MARTIN:

Q. When you were talking -- the last question you asked about the LDCs, were you speaking specifically about Missouri or were you speaking --

A. What question was that?

Q. -- nationwide?

Whether or not the other LDCs had or performed any other inside inspection other than at

turn-on.

A. My understanding is that our rule requires the inspection at turn-on, that the federal rule doesn't require that, and my understanding most -- from what I've talked to my peers in other states, that they don't have a requirement even at turn-on to go inside and inspect the inside stuff.

Q. So weren't -- the answer wasn't limited to Missouri utilities?

A. Well, no. I asked that question because the idea that other utilities, other states that I know of don't have even the requirement to go inside when the gas is turned on, so I was just trying to figure out what he was asking, if he was asking empirically in Missouri or nationwide.

MR. FRANSON: Well, let's go back. I'll ask that question.

RECROSS-EXAMINATION BY MR. FRANSON:

Q. Generically in Missouri, unless the flow of gas is interrupted, does -- is there any requirement that you know of in Missouri that the gas utility go inside and perform an inspection inside the customer's home?

A. If the utility -- if the gas is physically turned on, they have to go in and do an inspection of the inside piping and appliances. On an inside meter set,

there is -- there is Laclede's service line piping that goes up to the meter set, there are requirements of corrosion control and leakage surveys that Laclede would be required to go inside not only with -- go inside and do a leak and inspection and do a corrosion inspection on the piping that goes -- on their piping that goes to the meter, but not fuel piping that goes past the meter. They would be required to go inside the house on those specific instances.

Q. But all of those specific instances is either where the gas is turned on anew, meaning after some time of interruption, or where the gas flow is interrupted?

A. No. The requirement for doing an inspection on customer-owned piping is only when the gas flow is turned on. There's a requirement to do periodic leakage surveys and corrosion inspection of company-owned piping, Laclede piping before the meters, not when it's turned on, but on a periodic basis, no matter if it's turned on or not.

MR. FRANSON: Okay. I don't have any further questions.

MS. MARTIN: No, I don't either.

MR. POSTON: No.

MR. FRANSON: Rick?

MR. ZUCKER: No more for me.

THE REPORTER: Read and sign?

MR. FRANSON: Yes. We will waive presentment, but not signature, yes.

THE REPORTER: Rick, this is the court reporter. Did you want a copy?

MR. ZUCKER: Please. Do you do e-tran?

THE REPORTER: Yes.

MR. ZUCKER: That will be fine.

THE REPORTER: Robert, did you want a copy?

MR. FRANSON: Yes, I do, but I want the mini.

THE REPORTER: Mark, did you want a copy?

MR. POSTON: Please.

(PRESENTMENT WAIVED; SIGNATURE REQUESTED.)

CERTIFICATE OF REPORTER

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

I, KELLENE K. FEDDERSEN, RPR, CSR, CCR, and Notary Public within and for the State of Missouri, do hereby certify that the witness whose testimony appears in the foregoing deposition was duly sworn by me; that the testimony of said witness was taken by me to the best of my ability and thereafter reduced to typewriting under my direction; that I am neither counsel for, related to, nor employed by any of the parties to the action to which this deposition was taken, and further that I am not a relative or employee of any attorney or counsel employed by the parties thereto, nor financially or otherwise interested in the outcome of the action.

KELLENE K. FEDDERSEN, RPR, CSR, CCR
Notary Public, State of Missouri
(Commissioned in Cole County)
My commission expires 3/28/09.

KELLENE FEDDERSEN
Notary Public - Notary Seal
State of Missouri
Cole County
Commission # 05523964
My Commission Expires March 28, 2009

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BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

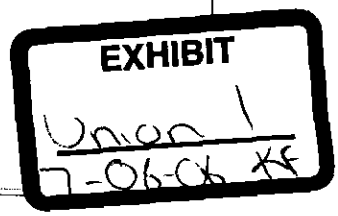
In the Matter of the Application of Laclede Gas)

Company for a Variance From the Provisions of) **Case No. GO-95-320**

4 CSR 240-10.030(19).)

)

REPORT AND ORDER



Issue Date: May 13, 1997

Effective Date: May 31, 1997

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Laclede Gas)

Company for a Variance From the Provisions of) **Case No. GO-95-320**

4 CSR 240-10.030(19).)

)

APPEARANCES

Michael C. Pendergast, Assistant General Counsel, and **Thomas M. Byrne**, Associate Counsel, Laclede Gas Company, 720 Olive Street, St. Louis, Missouri 63101, for Laclede Gas Company.

William M. Franz, Franz & Franz, 720 Olive Street, Suite 2100, St. Louis, Missouri 63101, for Gas Workers Local Union 5-6 of the Oil, Chemical & Atomic Workers International, AFL-CIO.

Lewis R. Mills, Jr., Deputy Public Counsel, and **Douglas E. Micheel**, Deputy Public Counsel, and **Michael F. Dandino**, Senior Public Counsel, Office of the Public Counsel, Post Office Box 7800, Jefferson City, Missouri 65102, for the Office of the Public Counsel and the public.

Cherlyn D. McGowan, Assistant General Counsel, and **John M. Himmelberg, Jr.**, Assistant General Counsel, Missouri Public Service Commission, Post Office Box 360, Jefferson City, Missouri 65102, for the staff of the Missouri Public Service Commission.

ADMINISTRATIVE

LAW JUDGE: Thomas H. Luckenbill, Deputy Chief.

REPORT AND ORDER

Procedural History

On April 18, 1995, Laclede Gas Company (Laclede) filed an application for a variance from 4 CSR 240-10.030(19) of the Commission=s rules. This rule is designed to ensure the accuracy of gas meters. Laclede sought this variance so that it could implement a statistical sampling methodology with respect to the testing of gas meters.

On May 3, 1995, Gas Workers Local Union 5-6 of the Oil, Chemical & Atomic Workers International, AFL-CIO (Gas Workers) filed a verified application to intervene. On May 22, 1995, the Commission granted the Gas Workers= application to intervene.

On May 16, 1995, the Staff of the Missouri Public Service Commission (Staff) filed a memorandum recommending approval of Laclede=s request for a variance from the metering rule so that the statistical sampling methodology could be implemented.

On June 20, 1995, the parties participated in a prehearing conference which was held at the Commission=s offices. On June 28, 1995, the parties filed a unanimous Stipulation And Agreement. The parties agreed that Laclede=s application for variance should be granted subject to certain conditions. The parties agreed that the

application should be granted on an interim basis, commencing with the effective date of the Commission order approving the Stipulation And Agreement and extending through the end of calendar year 1996, and that such agreement would be reflected by an interim tariff sheet which was attached to the Stipulation And Agreement. Furthermore, the parties reserved the right under the agreement to recommend that an evidentiary hearing be held prior to a Commission determination as to a permanent waiver and related tariff sheet.

On June 12, 1995, the Commission issued an order approving the Stipulation And Agreement, and directed Laclede to file tariff sheets implementing the variance on an interim basis. On July 26, 1995, Laclede filed interim tariff sheets in accordance with the Stipulation And Agreement, which the Commission approved on July 27, 1995.

On May 30, 1996, Laclede filed results of the meter sample testing program. On October 3, 1996, Laclede filed permanent tariff sheets to implement the statistical meter testing methodology in lieu of the methodology required by 4 CSR 240-10.030(19).

On October 31, 1996, the Gas Workers responded to Laclede=s request for a permanent variance and related tariff sheets. The Gas Workers allege that Laclede=s proposal could result in meters with an accuracy rate of only 90 percent being left in service for as long as thirty years, whereas under the Commission rule such meters could not be left in service without testing for more than ten years. The Gas Workers allege that allowance of the variance could reduce health and safety standards for customers and the general public while providing cost savings that are not commensurate with that risk. Furthermore, the Gas Workers state that Laclede employees make safety inspections of all gas appliances at a customer=s premises in conjunction with the removal of meters. Since the gas is turned off at the time of meter removal, the employees relight and perform safety inspections on all the customer=s gas appliances. The Gas Workers argue that gas leaks and other hazards are discovered on a regular basis as a result of these safety inspections and are immediately remedied. They conclude that the large reduction in the number of meters to be tested results in an unacceptable decrease in the health and safety of customers and the general public.

Laclede filed a reply to the Gas Workers= response, contending that it takes very seriously its responsibility to protect the health and safety of its customers, employees and the general public. Laclede further states that neither the Commission nor Laclede has ever found the inspection of each customer=s premises every ten years to be either necessary, appropriate or cost-effective to protect public safety and health. It argues that the Commission=s safety regulations rely on systematic, targeted inspections rather than on incidental inspections that are simply the by-product of a rule designed to ensure meter accuracy. Laclede further notes that its workers who are freed by the meter sampling program from the duties associated with meter removal and testing are, and will be, available to perform additional service and safety-related work for customers. According

to Laclede, this will afford the workers a greater opportunity to inspect customer premises than was provided by the preexisting meter replacement requirement. Laclede maintains that permitting it to continue the meter sampling program will have absolutely no adverse impact on public health and safety, but instead will promote these objectives by enabling workers to do other customer premises work.

The Staff filed a memorandum to the official case file on November 25, 1996, recommending that the Commission grant Laclede a permanent variance from 4 CSR 240-10.030(19). The Staff points out that Laclede=s interim meter testing program for calendar year 1995 has identified two meter types where the accuracy rates were below 89 percent, and that as a result of this identification, Laclede is required to remove these meters within five years rather than remaining on the ten-year changeout schedule required under the Commission rule.

On December 23, 1996, the Commission suspended the tariff sheets which would have granted the variance on a permanent basis, and ordered Laclede to file a tariff sheet showing an extension of the interim variance until September 1, 1997. The Commission further stated that an evidentiary hearing was needed to allow the Commission an opportunity to consider whether implementation of a statistical meter testing methodology rather than strict compliance with 4 CSR 240-10.030(19) is appropriate.

Laclede, the Gas Workers and Staff filed testimony relating to this matter. On March 13, 1997, the Commission conducted an evidentiary hearing. The parties waived the filing of briefs, and made opening and closing statements in lieu of briefs. The Office of the Public Counsel did not participate in this case and asked to be excused after opening statements.

Findings of Fact

The Missouri Public Service Commission, having considered all of the competent and substantial evidence upon the whole record, makes the following findings of fact.

The Gas Workers argue that the safety of customer facilities may be impaired if Laclede discontinues the practice of physically removing and testing each meter on a 120-month schedule. However, no party has presented evidence that the mere act of removing and testing the meter under 4 CSR 240-10.030(19) has any direct safety benefit. It is the *incidental* safety benefits that are in question. The evidence shows that when Laclede removes a meter at a residential structure, its employee turns off the gas. After the meter is replaced, the gas is turned back on. When Laclede turns the gas supply back on, the employee inspects customer piping and appliances pursuant to 4 CSR 240-40.030(12)(S)1. (Ex. 12). It is these incidental safety-related inspections that follow a gas turn-on after a meter changeout that the Gas Workers wish to preserve.

It is first important to recognize that these safety-related

inspections are not required by 4 CSR 240-10.030(19) [@Section 19"], which is the subject of this proceeding and from which Laclede seeks a permanent variance. Section 19 falls within Chapter 10 of the Commission=s rules which are applicable to all utilities and which deal with Astandards of quality,@ not safety. For example, Section 10.030(18), which immediately precedes Section 19, deals with mechanical defects in gas service meters. In contrast, the rule which requires Laclede=s employees to inspect a customer=s gas appliances and piping after a gas turn-on is found in Chapter 40 of the Commission=s rules. ***See*** 4 CSR 240-40.030(12)(S)1. This chapter applies only to gas utilities, and contains Subchapter 40.030 which deals exclusively with ASafety Standards -- Transportation of Gas by Pipeline.@ These safety rules will be unaffected by any variance granted in this case.

The evidence shows that Staff witness Robert R. Leonberger contacted personnel from regulatory utility commissions in the six states surrounding Missouri. Leonberger found that local gas distribution companies (LDCs) in Illinois, Indiana, Iowa, Kansas and Oklahoma use statistical sampling meter accuracy programs, such as used here by Laclede. Personnel from Nebraska said that there was no statewide or commission requirement to remove natural gas meters, and that the gas LDCs change out and test meters according to their own procedures. Leonberger further testified that the Commission=s Management Services Department recommended that Laclede consider implementation of a statistical sample testing program in Case No. GO-85-63. (Ex. 11, p. 4).

The Commission finds that the application for variance should be approved because the evidence shows that Laclede=s statistical sampling methodology is a more effective way to ensure meter accuracy than a strict application of Section 19. Moreover, requiring strict compliance with Section 19 does not ensure effective safety inspections. The evidence shows that a majority of the time associated with the meter changeouts is not spent on inspections. (Ex. 4, pp. 13-14). At the same time the Commission finds that the piping and appliance inspections conducted by Laclede when it turns on the gas supply to a residence provide important opportunities to observe and correct unsafe conditions. The Commission finds that from 1990 through 1994 an average of 58,500 meter changes occurred under the existing Section 19 procedure. Since the interim variance was granted, an average of 37,000 meter visits have occurred under the statistical sampling method. This decrease in meter changes will apparently result in the $2.7 million savings cited by Laclede (or, $1.8 million cited by the Gas Workers). The Commission finds that this decline of 20,000 visits will eliminate 20,000 opportunities to observe and remedy potentially unsafe conditions.

While it will grant the variance request, the Commission finds that the appropriate response by Laclede to this decision would be the implementation by the company of a program which recaptures those Alost@ opportunities elsewhere in Laclede=s safety inspection program.

The program should be set up so that the labor hours involved approximate the hours saved by implementation of the statistical meter sampling methodology. If Laclede desires Commission review of the program, Laclede should file a motion to establish a docket regarding the program, along with the proposed program. In developing the program, Laclede should bear in mind the need to inspect older homes on a regular basis whose occupants are more likely to benefit from piping and appliance inspections as compared to the occupants of newer homes. (Ex. 9, p. 6).

This program should reflect the spirit of the first sentence in the objective section of Laclede=s *Turn-On Information* pamphlet which states:

> AA Turn-On order presents one of the best opportunities to make a good impression on customers and to fulfill Laclede=s primary objective **B** customer safety and satisfaction.@

(Ex. 12, Section 10-1).

The Commission is confident that Laclede will work with interested parties to develop an effective program consistent with this statement.

Conclusions of Law

The Missouri Public Service Commission has arrived at the following conclusions of law.

Laclede Gas Company is a gas corporation and a public utility under Section 386.020(18) and 386.020(42), respectively. Laclede Gas Company is subject to the Commission=s jurisdiction under Chapters 386 and 392.

Under 4 CSR 240-10.030(19) the Commission has authority to waive strict compliance by this order. The Commission finds that good cause exists to grant the waiver of the strict application of Section 19.

IT IS THEREFORE ORDERED:

1. That the application for a variance from 4 CSR 240-10.030(19) filed by Laclede Gas Company on April 18, 1995 is approved.

2. That Laclede Gas Company shall file appropriate changes to its tariff to reflect the implementation of a permanent variance and termination of the interim variance from 4 CSR 240-10.030(19) no later than May 14, 1997.

3. That the Commission=s Staff shall file a memorandum to the official case file no later than May 23, 1997 regarding whether the tariff sheets comply with this Report And Order.

4. That this Report And Order shall become effective on May 31, 1997.

BY THE COMMISSION

Cecil I. Wright

Executive Secretary

(S E A L)

Zobrist, Chm., Crumpton and Drainer, CC., concur and certify compliance with the provisions of Section 536.080, RSMo 1994.

Dated at Jefferson City, Missouri, on this 13th day of May, 1997.

GC-2006-0313

Complainant USW Local 11-6 Data Requests to PSC

Requested From: Tim Schwarz, Esq.

Date Requested: June 6, 2006

Data Request 1: Identify all documents that any member of Staff has reviewed pertaining to the use, reliability, efficiency and/or safety of the Grunsky bag for gas utility work, and for each, indicate where the document was obtained and when it was reviewed.

RESPONSE: Sometime in January 2006, the Staff inquired about available information that Laclede personnel knew about concerning changing meters with the Grunsky bag method. On February 1, 2006, Laclede personnel e-mailed the Staff information from the Charles Grunsky Company (a brochure, an equipment catalog/product list, and a memorandum describing the Grunsky Meter Change Method). This information was reviewed sometime after it was received.

The internet was also searched for information about the Grunsky meter change method. Some websites were found with limited information (patent dates, description of the method, etc.), but website addresses were not noted. No information indicating problems with the method were found.

Data Request 2: Identify all studies that any member of Staff has conducted or participated in pertaining to the use, reliability, efficiency and/or safety of the Grunsky bag for gas meter change-outs or other gas utility work, indicating the date of the study and the person(s) who participated.

RESPONSE: No "studies" have been conducted or participated in by Staff.

Data Request 3: Identify all persons outside of the PSC with whom any member of Staff has consulted with about or discussed the use, reliability, efficiency and/or safety of the Grunsky bag for gas meter change-outs or other gas utility work, and for each person identified, describe the information provided by said person.

RESPONSE: The Staff discussed the Grunsky bag meter change-out method with Laclede personnel. The conversations included Mark Lauber, Ben McReynolds, other Laclede personnel.

EXHIBIT
Union 2
7-26-06 KF

The information provided was as follows: a basic description of the procedure for using the Grunsky bag method; a description of the pilot program conducted to evaluate the Grunsky meter change-out procedure (in the Missouri Natural Division, they changed out 100 meters using the method and went into each of the residences to check pilot light operation and had 100% success. The Company conducted a similar pilot project in Laclede area with 50 meter change-outs and went inside on each one to check pilot lights and had 100% success); the Company began using the procedure in 2005 and at the time of the conversation with Staff, the Company had done about 500 meter change-outs using the procedure (about 300 in Missouri Natural Division and about 200 in Laclede).

The Staff discussed use of the Grunsky bag meter change-out method with Jim Gorman at Missouri Gas Energy. MGE had been using the Grunsky bag method to change-out meters for approximately 10 years. It was estimated that MGE had successfully changed out over 100,000 meters using the Grunsky bag method. MGE personnel indicated that they had had success using the method and had not identified any problems using the method.

Data Request 4: Please produce for inspection by USW Local 11-6 all documents identified in response to, or responsive to, each of the above data requests.

RESPONSE: The information identified above in Data Request 1 from the Charles Grunsky Company (a brochure, an equipment catalog/product list, and a memorandum describing the Grunsky Meter Change Method) is attached.

Requested by: Sherrie A. Schroder
Attorney for Complainant
USW Local 11-6

Phone: (314) 727-1015
Fax: (314) 727-6804

The information provided to Complainant USW Local 11-6 in response to the above data requests 1-4 is accurate and complete, and contains no material misrepresentations or omissions based upon present facts known to the undersigned. The undersigned agrees to immediately inform Complainant USW Local 11-6, by notice to its attorney Sherrie A. Schroder, if any matters are discovered which would materially affect the accuracy or completeness of the information provided in response to this data request.

Date: 6/20/2006

Signed By: Robert Bromberger

Title: Utility Regulatory Engineering Supervisor - Energy Department

COMPANY Inc.

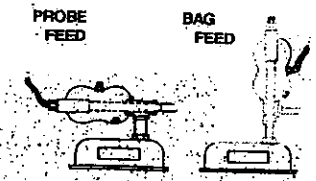
Change Its Gas Meters?

Grunsky "Quick-Change" Method

1. Service person changes meter. Average time: six minutes

- NO INTERRUPTION OF SERVICE
- NO customer contact
- NO call-backs
- NO missed appointments
- NO pilot re-lighting
- NO liability
- NO troubleshooting
- NO unnecessary travel time between jobs

ESTIMATED COST SAVINGS: 80%



5-Minute Change Procedure

1. Service person carries hot-change equipment and replacement meter to location. This requires only one trip.
2. Using a wrench, back out plug at meter outlet tee to finger- tight and loosen meter nuts.
3. Snap mouth of bag over end of tee.
4. Turn on auxiliary gas valve.
5. Purge air from bag with purge valve at bag.
6. Remove the plug with fingers by manipulation through rubber bag. Plug drops into bag. At this stage, auxiliary gas is mingling with meter gas.
7. Twist probe into house line through tee. This places house load entirely on auxiliary supply.
8. Shut off service cock and quickly make meter change.
9. Open service cock and open bag valve to purge new meter.
10. Remove probe from house line so meter gas can flow to appliances.
11. Manipulate plug through bag and screw into tee.
12. Shut off auxiliary gas valve and remove bag.
13. Dope remaining threads on plug and tighten with wrench.
14. Make soapsuds test and return equipment to truck.

VIDEOS AVAILABLE!

[redacted]

Are You Ready for a Change?

Charles Grunsky Company
The Original "Quick-Change" Method
Since 1968

CHARLES GRUNSKY

How Does Your Company

Old Method

1. Schedule appointment with customer.

   On average, it takes a clerk three hours to make 27 phone appointments. Postcard systems take staff time, too, and require follow-up.

   "No shows" mean non-productive field time and more call-backs.
2. Interrupt customer service.
3. Re-light pilots.
4. Troubleshoot any resulting problems with customer appliances.
5. Travel to next job.

The company's Schuylkill Division conducted a pilot program to evaluate three areas:

- load capacity of the equipment
- cost to retrofit existing outdoor sets
- actual field changing of meters using the Grunsky method.

Compare the Difference:

Other Companies

- **Custom Connectors**

Other companies require that you purchase their own connectors. Moving parts mean risk of failure and service-interruption.

- **High up-front costs**

You pay $5 or more per meter just for custom connectors. In short, you make a sizable investment... with an uncertain return.

- **Risk**

Has the product met the test of time?

Grunsky Company

- **No Custom Connector**

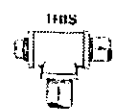
The Grunsky Method snaps on to a standard "Tee" connector.

- **No up-front costs**

Buy our system only when you're ready to use it — not 10 years before! When the meter's due for change, our system cuts meter-change time by half.

- **No Risk**

We have a 32-year track record. Our method is used by 62 companies worldwide. We remain family owned and operated!



Fits to a Tee

The Grunsky "bag" method requires only a "Tee" connection to the house line.

This permits Grunsky's simplified device to supply house load during the few moments necessary to change meters.

Many gas utilities have already adopted the outlet tee as standard. Among other benefits, it allows service and repair to parts "upstream" from the "Tee."

For companies that have not yet upgraded to the "Tee" standard, the "Tee" costs only pennies more than an "Elbow." The savings offered by the Grunsky method, together with other "Tee" benefits, more than justify this minimal cost difference.

Equipment

- Weight: less than 23 lbs., including high-pressure cylinder (1/6 cu. ft [CC rating 1800 lbs.);
- Contains enough natural gas to make 25-30 meter changes.
- Empty cylinder can be removed and replacement cylinder connected in one minute.
- Probes and bags available in tee sizes ranging from 3/4-inch to 2-inch.

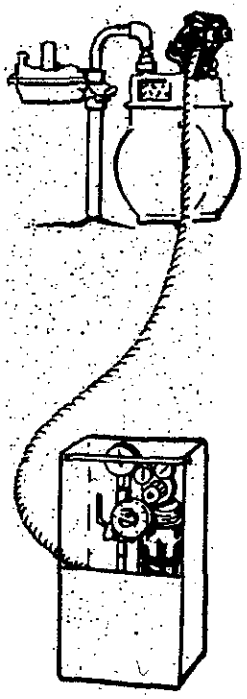
Customer List:

Grunsky Company's longtime customers include

- Pacific Gas and Electric Co.,
- Southwest Gas Corp.
- Reliant Energy - ARKLA
- San Diego Gas and Electric Co.
- Washington Gas
- Memphis Light Gas and Water

CHARLES GRUNSKY COMPANY, Inc.

2804 Newlands Avenue • Belmont, Ca., 94002



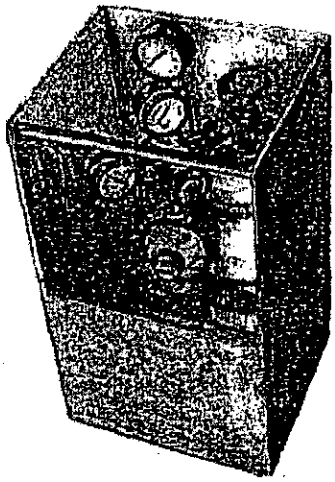
Gas Meter Quick-Change Equipment

(650) 593-9302

TELEPHONE / FAX

CHARLES GRUNSKY COMPANY, Inc.
2804 Newlands Avenue • Belmont, Ca., 94002

CARRIER I

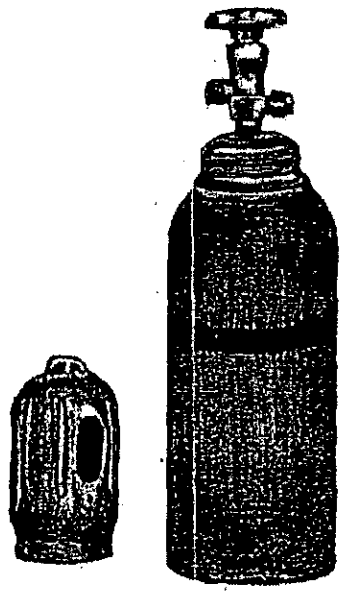


This lightweight delivery system includes: Aluminum carrier box, H.P. regulator, L.P. regulator and all necessary piping and gauges.

Cylinder, hoses and assemblies sold separately.

CYLINDER

Model 20 cu ft.
1800# ICC Rating
2015 psi Working Pressure
3360 psi Blow-off Safety Valve



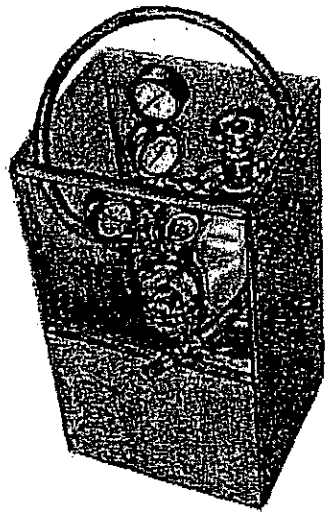
Includes: Valve, neck ring and protective cap.

TELEPHONE / FAX
(650) 593-9302

CHARLES GRUNSKY COMPANY, Inc.
2804 Newlands Avenue • Belmont, Ca., 94002

CARRIER II

Same as Carrier I with addition of Quick Coupler bypass. Hooks up to risers with ball check valves to bypass cylinder gas.



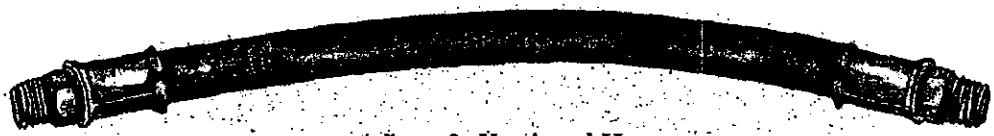
Cylinder sold separately.

QUICK COUPLER

1/8" Ball Check Valve Probe

1/4" Ball Check Valve Nipple

1/4" Ball Check Valve Coupler



1/4" x 3 ft. Versicord Hose

TELEPHONE / FAX
(650) 593-9302

CHARLES GRUNSKY COMPANY, Inc.
2804 Newlands Avenue • Belmont, Ca., 94002

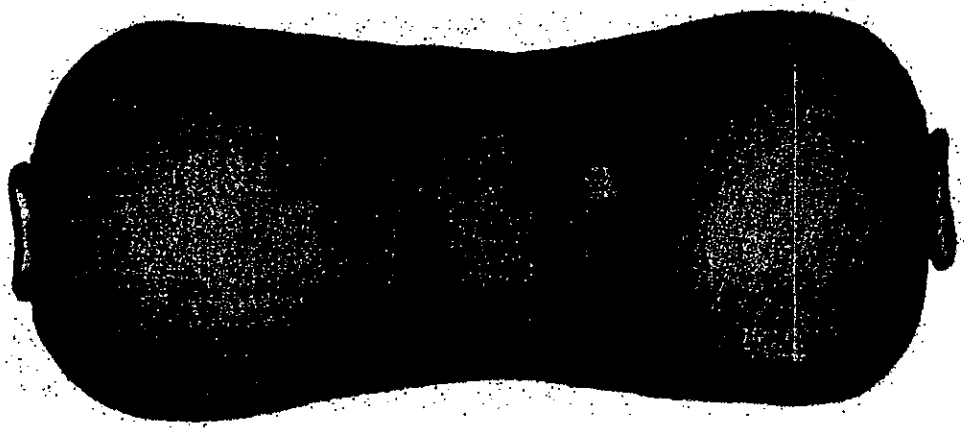
PROBE & BAG ASSEMBLY

Size of Meter Tee	Code No.
3/4"	PB-750
1"	PB-1000
1-1/4"	PB-1250
1-1/2"	PB-1500
2"	PB-2000

Assemblies consist of a neoprene dipped latex rubber bag, a pliable neoprene probe and a 3 piece aluminum purge valve set.

GAS RISER BAG
(B-xx1500)

For easy replacement of riser union-style gas stop.
18" bag rolled at both ends.



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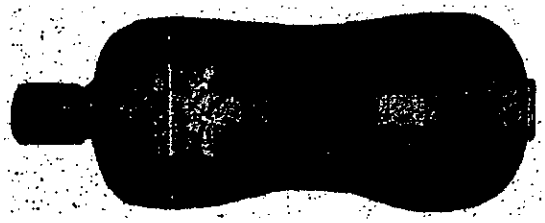
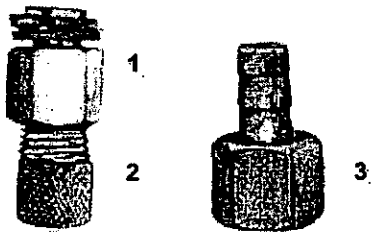
BAG

Size of Meter Tee	Code No.
3/4"	B-750
	B-1000
1-1/4"	B-1250
1-1/2"	B-1500
2"	B-2000



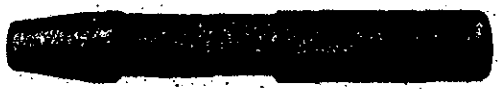
Made of gas resistant natural rubber dipped in neoprene

PURGE VALVE SET
(Code No. PBP)



Set of aluminum probe and bag fittings.
Selective purge-type valve. 3 piece set

PROBE



Size of Meter Tee	Code No.
3/4"	P-750
	P-1000
1-1/4"	P-1250
1-1/2"	P-1500
2"	P-2000

Pliable neoprene molded probe.

TELEPHONE / FAX
(650) 593-9302

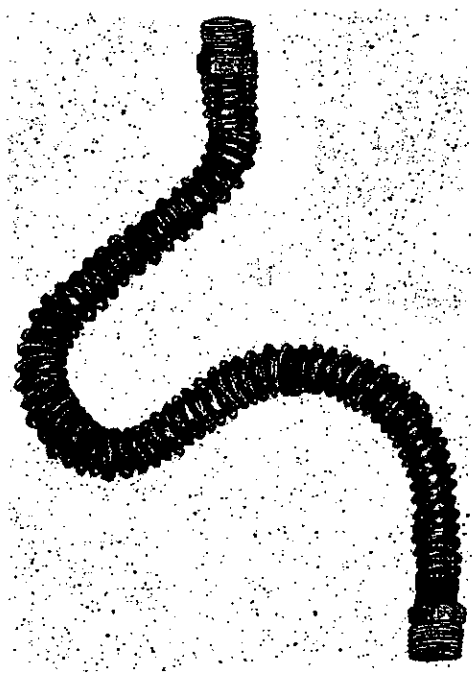
CHARLES GRUNSKY COMPANY, Inc.
2804 Newlands Avenue • Belmont, Ca., 94002

BALL VALVE

1/2" Brass shut-off valve.

Included in carriers. Also sold separately.

FLEX HOSE



1/2" I.D. Plastic, with full spring and brass fittings.

Available in two sizes:
5 ft. lengths
7.5 ft. lengths

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CHARLES GRUNSKY COMPANY, Inc.
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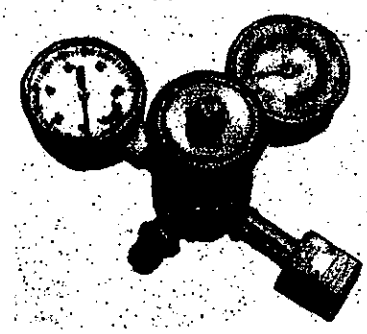
Replacement Parts

HIGH PRESSURE REGULATOR
(SERIES 600)

Maximum Inlet Pressure 3000 psi.
Internal Outlet Pressure preset to 50 psi.
Replaceable brass gauges
& tailpiece available.
0-100 psi gauge
0-4000 psi gauge

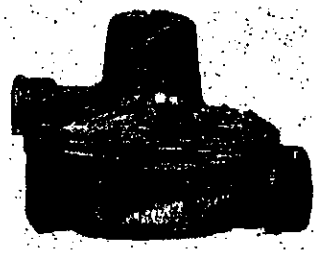


WATER COLUMN GAUGE

0-15" of Water Column
2-1/2" Dia.
1/4" NPT.
Bottom Connect

LOW PRESSURE REGULATOR
(FISHER L.P.)

Maximum Inlet Pressure 250 psi
Maximum Reduced Pressure 5 psi
Orifice Size — .075"
Inlet Connection — 1/4" NPT
Outlet Connection — 3/8" NPT



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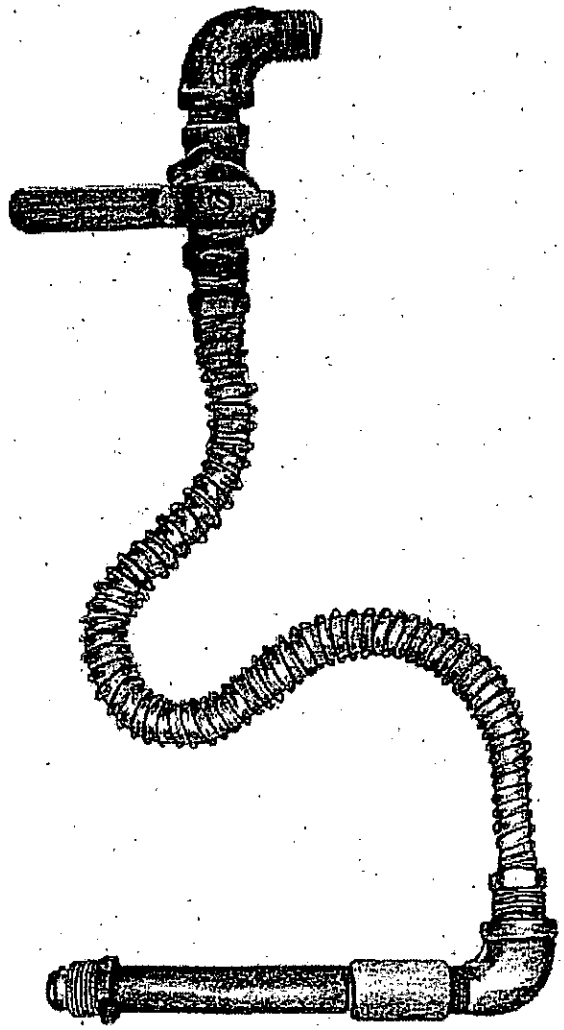
Specialty Items

MANIFOLD CHANGER
(MC-100)



HOSE:
15 ft. Length
5/8" I.D. Plastic
S.S. Spring wrapped.

FITTINGS:
3/4" x 1/2" Bushing on swivel, ball valve and elbows.

May be purchased separately.

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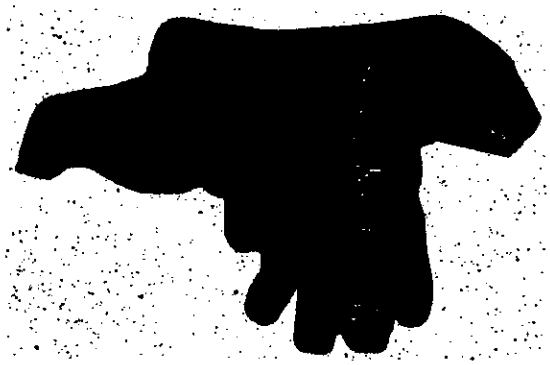
Specialty Items

GRAB BAG

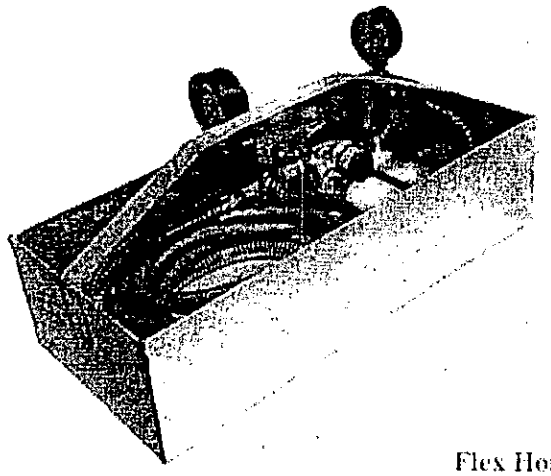
For service or change-out of regulators on multi-meter manifolds.

Rubber, molded-hand bag. Zippered full length with velcro tie straps.



Training video available

TOTE TRAY



For use in areas where 250 psi is the maximum pressure available.

May be used with propane tank or off CNG truck tanks.

Comes with regulator, gauges, shut-off valve and a 10 ft. 300# pressure hose.

Flex Hose, Probe & Bag assembly sold separately

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(650) 593-9302

CHARLES GRUNSKY COMPANY, Inc.
2804 Newlands Avenue • Belmont, Ca., 94002
Telephone: (650) 593-9302 • Fax: (650) 593-9302

Product Order Information

CODE	TEE	DESCRIPTION
PB-750	3/4	Probe & Bag Assembly
PB-1000	1	Probe & Bag Assembly
PB-1250	1-1/4	Probe & Bag Assembly
PB-1500	1-1/2	Probe & Bag Assembly
PB-2000	2	Probe & Bag Assembly

CODE	TEE	PROBE REPLACEMENTS
P-750	3/4	Probe Only
P-1000	1	Probe Only
P-1250	1-1/4	Probe Only
P-1500	1-1/2	Probe Only
P-2000	2	Probe Only

CODE	TEE	BAG REPLACEMENTS
B-750	3/4	Bag Only
B-1000	1	Bag Only
B-1250	1-1/4	Bag Only
B-1500	1-1/2	Bag Only
B-2000	2	Bag Only

PBP — Set of Probe & Bag Fittings (Purge Valve Set)

GRAB BAG — For Manifold Regulator repair

B-xx1500 — Bag 18" rolled ends: Service cock repair

MC-100 — 5/8" I.D. plastic hose with spring, 3/4" x 1/2" bushing on swivel, and ball valve.
FITTINGS: (less probe and bag)
HOSE: (15 ft. length)

CALL FOR CURRENT PRICES

CHARLES GRUNSKY COMPANY, Inc.

2804 Newlands Avenue • Belmont, Ca., 94002
Telephone: (650) 593-9302 • Fax: (650) 593-9302

Product Order Information

CARRIER	**Aluminum box, with H.P. & L.P. regulators, gauges and pipe fittings. (Less Hose, PB Assembly & Cylinder)** _____
CARRIER II	**Same as Carrier I with Adaption for quick coupler bypass.** _____
CYLINDER	**Model 20 cu. ft. with neck ring and capped valve.** _____
CALIBRATION KIT (not shown)	**Tests combustible gas and/or carbon monoxide indicators. Used with 20 cu. ft. cylinder of certified test gasses.** _____
TOTE TRAY	**Tray, with regulator, gauges, and shut-off valve. For Low Pressure cylinders to 300 psi.** _____
FLEX HOSE	**1/2" I.D. plastic hose with spring:** **5 ft. length** _____ **7.5 ft. length** _____
	REPLACEMENT ITEMS
WATER COLUMN GAUGE	**Gauge: 0 - 15" Water Column** _____
FISHER	**Regulator: Low Pressure**
SERIES 600	Regulator: High Pressure _____ Gauge: 0 - 100 psi _____ Gauge: 0 - 4000 psi _____ Tail Piece _____ Face Plate _____
CARRIER BOX	**Aluminum box with handle**
BALL VALVE	**1/2" Shut Off Valve**
QUICK COUPLER	**1/4" x 3' Versicord hose, 1/4" Coupler, 1/4" Nipple & 1/8" Ball check valve.** _____

CALL FOR CURRENT PRICES

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Gas Meter Quick-Change Equipment Training Videos Available

M E M O R A N D U M

RE: GRUNSKY METER CHANGE METHOD

Submitted by: William F. Clauhs
Division Engineer
Schuylkill Division
October 21, 1985

THE GRUNSKY METER CHANGE METHOD

BACKGROUND:

The Grunsky Method was developed by Southern California Gas and Pacific Gas and Electric in the 1950's. The Method implemented when the outdoor meter sets installed after World War II became due for a periodic meter change. The initial emphasis in designing the Grunsky "Hot-Change" method was based on making the P.M.C. more convenient for the customer By using a supply of compressed natural gas, Charles Grunsky invented a system of providing continuous gas service to a customer's fuel line while isolating the gas meter. His method only provided uninterrupted service, but allowed the growing number of outdoor gas meters to be changed without gaining access to the customer's premise

According to Bob Hudson of Pacific Gas and Electric, his company is presently averaging 14.7 meter changes per day using Grunsky Method. By using the Grunsky Method, the California Gas Companies were not only able to improve "customer convenience, found the "Hot Change" system also afforded labor savings by eliminating the need to purge fuel lines, relight appliances make revisits to C.G.I. customers.

DESCRIPTION OF METHOD:

To use the "Hot Change" method, a standard threaded tee must be installed in lieu of an elbow on the outlet piping of the meter set. The "Tee" installation allows the use of the Probe and Bag Assembly invented by Grunsky.

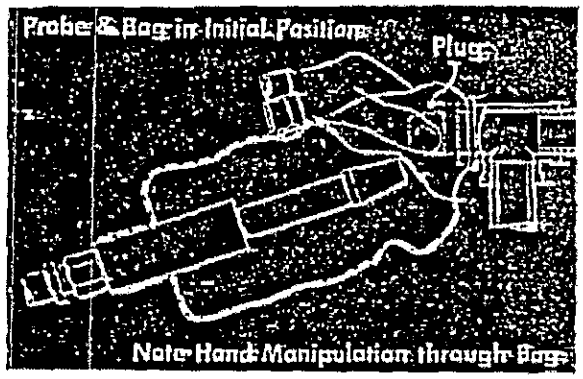
The Grunsky meter changer includes a standard D.O.T. 20 S.C.F. cylinder to store C.N.G. at 2,000 PSIG and two regulators to reduce the pressure in stages to six (6) inches W.C. Each regulator has over pressurization relief devices. The patented invention is a hollow, tapered, hard-rubber probe surrounded by a pliable rubber bag. The probe and bag assembly is connected to the outlet side of the L.P. regulator via a 3/4 inch seven-foot flexible hose with a quarter-turn valve. Probes are available in sizes to accommodate 3/4, 1, 1½, and 2-inch tees. The total kit, enclosed in an aluminum carrying case, weighs 26 pounds.

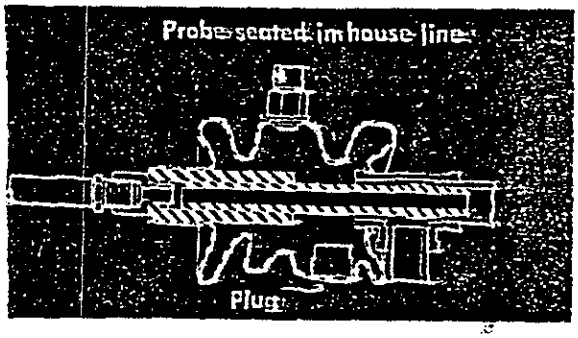
The manufacturer's procedure for replacing a meter with the "Hot Change" method is as follows:

CHANGE PROCEDURES:

Serviceman carries hot change equipment and replacement meter to meter location. This requires only one trip. He then proceeds as follows:

1. With wrench, back out plug at meter outlet tee to finger tight and also loosen meter nuts.
2. Snap mouth of bag over end of tee.
3. Turn on auxiliary gas valve.
4. Purge air from bag with purge valve at bag.
5. Remove the plug with fingers by manipulation through rubber bag. Plug drops into bag. At this stage auxiliary gas is mingling with meter gas.
6. Force probe into house line through tee, using a twisting motion. This places house load entirely on auxiliary supply.
7. Shut off service cock and quickly make meter change.
8. Open service cock and purge new meter by opening bag valve.
9. Remove probe from house line so meter gas can flow to appliances.
10. Manipulate plug through bag and screw into tee one or two turns.
11. Shut off auxiliary gas valve and remove bag.
12. Dope remaining threads on plug and tighten with wrench.
13. Make soapsuds test and return equipment to truck.





PILOT PROGRAM:

The pilot program in Schuylkill Division was designed to evaluate three areas: the load capacity of the equipment, the cost to retrofit existing outdoor sets, and the actual field changing of meters using the Grunsky equipment.

PILOT PROGRAM (cont'd):

Load Capacity of the Equipment:

To determine the load capacities of the 3/4 and 1-inch probe, "Tees" were installed on the fuel line feeding the high-efficiency heaters in the appliance service training area at West Conshohocken Gas Plant. Connected to the fuel line was a demonstration cart, containing four burners and six (6 pilot assemblies. U-gauges were connected at the outlet of the regulator and the burner fuel line. While the gas was being supplied by the Grunsky kit, all pilots were lit and various loads were created. The variation of loads was accomplished by turning on and off the different water heater burners and high-efficiency heaters. For each load condition, pressure readings were recorded.

The manufacturer supplies a Fisher 912 regulator with a capacity of 100 cu. ft. per hour. As expected, fuel line pressures drop excessively on loads over 150 C.F.H. However even with cycling loads as high as 269 C.F.H., the pilots remained on.

The 912 regulator was replaced by our standard Rockwell house regulator with a 1400 C.F.H. capacity. With adequate regulation the 3/4-inch probe could handle a 291 C.F.H. load with a 3-inch drop in pressure

PILOT PROGRAM (cont'd):

Retrofitting Existing Outdoor Meter Sets:

The plan to retrofit existing sets during the 1985 periodic meter changes had two major considerations: first, tees were required for a realistic field test (what better locations than the meters relocated outdoors 16 years ago where we planted bushes.) Secondly, with 60 percent of the class "A" meters already outdoors, a cost figure for the additional expense to install the "Tee" would be required.

In January, to accomplish the retrofitting, the Schuylkill Division Utilization Mechanics were trained on installing tees for the Grunsky Method. Tees were to be installed in less than ten minutes. Any instances where tees could not be installed or where the time exceeded the ten minute limit were to be reported by turning in a Miscellaneous Ticket. There were 1300 outdoor periodics completed, with only six (6) tickets turned in. To verify the "feed-back" information, and also to set up the field demonstrations, addresses of completed outdoor periodics were visited on a random basis. Overall, the results from the field survey were outstanding. The mechanics not only showed innovative methods of installing tees, but practically installed tees on every outdoor periodic

Initially, we estimated the "Tee" installation would add an additional five to ten minutes to the job-site time on a periodic. When comparing Schuylill's periodic change times including tee installation with those periodic change times

PILOT PROGRAM (cont'd):

Retrofitting Existing Outdoor Meter Sets (cont'd):

f the four other divi ons it determined that Schuy ki l had premise time charged to the pe iodic accounts than the divis ons using the traditiona methods Th no additiona nstal ti expense was discernabl

Field Testing:

To fi d te t the Grunsky equipment appointments were made th tome on th sam tre t who previous y had the Tee connection instal ed Th customers re to d f our test program and entrance to their home was required

Th fi d te ting was accompl hed by two one man tua y changing the outdoo meter and the second man inside th prem monitoring the fue line pressures cyc ing oad and checking the tabi i y of the pilots

To stimu ate the typical work day meters were oaded d un aded t both the serv ce bui ding p tf and th customer premise Routine paperwork such as meter rders and the Chron-Time Sheet also comp eted for each ob ocation

Re u ts from the two day of fi d testing were encouraging On the irst day fourteen meters were changed while ixteen changed on the second day More mete cou d have been changed on the fir day but three C G I were encountered

PILOT PROGRAM (cont'd):

Field Testing (cont'd):

On the thirty meters changed, not one pilot was lost. The only time the pressure significantly fluctuated to a nine (9 W.C. was when the probe was inserted under a "no-load" situation. The increased surge was caused by the pressurized bag collapsing as the probe was inserted. One method we found to rectify the "no-load" customer was to "create" load by momentarily cracking the purge valve on the bag.

The Field Testing also indicated the 20 SCF bottle supplied would generally be sufficient for a typical springtime day of P.M.C.'s. Our customers' consumption of gas was very slight during the field test days of April and May. Most of the CNG used was contributed to meter purging.

The presence of bushes did not dramatically effect the use of the Grunsky equipment. Basically, the room required to change the meter is adequate to install the bag and probe assembly.

ADVANTAGES OF GRUNSKY METHOD:

Block Meter Changes:

One of the major benefits of going to the "Hot Change method on outdoor meters is the ability to perform "block" meter changes. Under the Grunsky Method all of the outdoor meters due for a P.M.C. could be geographically changed, minimizing or eliminating travel time between jobs. Although

ADVANTAGES OF GRUNSKY METHOD (cont d):

Block Meter Changes (cont d):

po tm t pa q h to

j to

'h y :h d

pe :h gu

th im pe

SCHUYLKILL DIVISION 1985 P.M.C.

Month	Hrs. Charged	Meters Changed	Hours/Meter
Y			
M :h			
A			
Y			
Y			
A qu	5.	3.	1.54
T			

Y :h

Me :h d :h

pe 'h po

:y q

y y ry

No Appointments:

th ky Method .h im th k pe

th tm

pe Cu y th

ADVANTAGES OF GRUNSKY METHOD (cont'd):

No Appointments (cont'd):

clerk spends approximately three (3) hours of phone calling to make 27 appointments. The appointment expense amounts to $.80 per periodic. Projecting 85% of the meters will be outdoors 16 years from now, the total system expense for appointments would be approximately $10,400 in today's dollars.

Another office expense encountered in our present system is the handling of post-card appointments. Presently, the G.S.D. maintains a file of P.M.C.'s where the customer has been notified that their gas meter is due for a change. Upon receipt of the post-card, the G.S.D. must match the request with the original meter change order and dispatch a serviceman from the board on the date requested. Under the Grunsky Method, not only would we minimize the dispatchers' time to indoor sets, but more importantly, we reduce the number of customers requesting meter changes on peak workload days. A good example is the peak transfer days we experience near the first and 15th days of every month.

Elimination of C.G.I.'s:

As experienced in our field testing, customers "break" appointments. During March through June this year, the divisions charged 831 hours to periodic C.G.I.'s for the 10,400 class "A" meters changed. The projected yearly C.G.I. expense for 1985 can be estimated at $40,000.

ADVANTAGES OF GRUNSKY METHOD (cont'd):

Other Uses:

By having the ability to maintain continuous service without the customer being home, we open a new avenue for other operating procedures. With the tee installed, we have the possibility of replacing other gas facilities such as regulators, defective I.V.U.'s or the installation of a meter bar. In distribution work, the tee and the use of larger cylinders would play a role in maintaining service to residential heating customers in cold weather in lieu of electric space heaters.

SAFETY CONSIDERATIONS:

A major concern expressed during the pilot program was the number of potential hazards that would go undetected under the Grunsky Method. A review of Schuylkill's red tags during our peak P.M.C. change month indicated some interesting results. Most of the red tags generated in March resulted from customer requested service, namely odor and appliance service calls.

SCHUYLKILL DIVISION - RED TAGS
March, 1985

Type of Work	Number of Jobs	Number of Red Tags	% Red Tags Per Job
Appliance Service	766	18	2.3%
Meter Installations	137	4	2.9%
Inside Odor Call	167	15	9.0%
P.M.C.	712	9	1.3%
Transfers	2813	5	0.2%

SAFETY CONSIDERATIONS (cont'd):

Using March's ratio of 1.3 red tags per 100 meters changed, we project that Schuylkill will red tag 36 appliances during the 2800 P.M.C.'s in 1985. In the last 12 months ending in June, 666 red tags were installed, indicating periodics account for five (5) to six (6 percent of the precautionary or hazardous conditions found in Schuylkill Division.

In future years, the F.O.D. system could be used to identify potential red tag addresses. One scenario could be customers requiring a meter change where P.E.Co. has not provided appliance service work for a pre-determined number of years. Appointments would be made for the non-serviced customers, while the Grunsky Method was used for the vast majority of outdoor periodics.

SUMMARY:

As proven by Pacific Gas and Electric and our Field Testing, the Grunsky Method offers a tremendous way of increasing our productivity in future meter changes. Grunsky's Method coupled with block changes, elimination of appointments and C.G.I.'s, offers a potential yearly savings to the Company of $258,000.

To capitalize on these savings, we must not only install "Tees" on the new or rebuilt sets, but also retrofit the existing outdoor set during a P.M.C. or other meter work. Schuylkill Division has proven the tee retrofit can be accomplished at a minor incremental expense.

The field order dispatch computer system will open a new door for gathering service history about our customers. In

SUMMARY (cont'd):

the next decade, computer programs could be developed to pin-point addresses where visitations should be made, rather than continuing a work-practice as a stop-gap measure to catch a relatively few number of red tag conditions.

RECOMMENDATIONS:

1. The diaphram outdoor meter standards be revised to include the "Tee."

2. Allow the retrofitting of the 1986 outdoor periodics with "tees" unless a division exceeds a preset economic break-point of 1.1 hours per meter.

3. Stress compliance of the Red Tag Policy on customer-requested work.

4. Place a note in the "bring-up" file for January, 2001, to "Develop Program for the F.O.D. System to Identify Potential Red Tag Addresses."