

Approved March 22, 1989
Date

MINUTES OF THE HOUSE SUBCOMMITTEE ON ENERGY AND NATURAL RESOURCES

The meeting was called to order by Representative Kerry Patrick at
Chairperson

3:30 ~~am~~ p.m. on March 15, 1989 in room 526-S of the Capitol.

All members were present except:

Committee staff present:

Raney Gilliland, Legislative Research
Mary Torrence, Revisor of Statutes' Office
Betty Ellison, Committee Secretary

Conferees appearing before the committee:

William H. Reeder, Union Gas System, Inc.
William E. Asbury, K N Energy, Inc.
Charles Butterfield, Peoples Natural Gas Company

The third meeting of the Subcommittee on Natural Gas Pipeline Safety was called to order by Chairman Kerry Patrick.

William Reeder, Executive Vice President and Chief Operation Officer of Union Gas System, Inc., explained the policy of the company relative to safety in the past, as well as plans for the future. He also discussed possible causes of the explosions which occurred in Independence, Kansas and Kensington Manor in Overland Park, Kansas. Relative to the new Kansas Corporation Commission regulations, Mr. Reeder said that the company would conduct leak surveys of company mains, company service lines and customer yard lines in all areas on an annual basis. They would repair or replace all customer yard lines determined to be leaking as the result of the leak survey, shut-in tests, or unusual customer consumption pattern. He displayed a chart illustrating the difference between "company service lines" and "customer yard lines."

Mr. Reeder commented that part of the Union Gas agreement with the Kansas Corporation Commission (KCC) was to electrically survey and "hot spot" protect, where required, all 900 miles of bare steel pipe which exist in their system. Another chart was shown, outlining the amount of capital improvements which had been made in the past four years, and showing that \$18.5 million had been expended in gross capital expenditures over that period.

It was noted that Union Gas supported the "one-call" system as proposed in House Bill 2453. They also had no objection to House Bills 2454, 2456 and 2457 as proposed by the KCC. Attached to Mr. Reeder's written testimony, Attachment 1, were an illustration of customer yard lines and company service lines, 1a and a paper showing gross capital additions, 1b.

During discussion, Mr. Reeder answered questions regarding implementation of the "one-call" system, percentage of meters located at the house or property line and where leakage is most commonly found. He also explained the difference between plastic, bare steel and wrapped steel pipe. In response to a question, Mr. Reeder said it was safer to have a meter situated at the customer property line, rather than at the house, because a regulator which reduces gas pressure would be located on a meter at the property line.

The details of the "Agreement and Plan" entered into by Union Gas and the KCC on September 16, 1988 were discussed. This dealt with the 32 alleged violations, requirements to rectify those problems and a time frame to complete the work. The \$100,000 fine set at that time was

Unless specifically noted, the individual remarks recorded herein have not been transcribed verbatim. Individual remarks as reported herein have not been submitted to the individuals appearing before the committee for editing or corrections.

CONTINUATION SHEET

MINUTES OF THE HOUSE SUB- COMMITTEE ON ENERGY AND NATURAL RESOURCES,
room 526- Statehouse, at 3:30 ~~xxx~~ p.m. on March 15, 1989

increased to \$200,000 on February 16, 1989 when the KCC issued another order and moved the dates for completion of improvements up by one year. The \$200,000 fine can be increased to as much as \$400,000 if the target dates for compliance are not met. It was determined that the net effect of repairing service lines would probably be less than \$7.50 per customer per year.

Charles Butterfield, Vice President of the Nebraska, Colorado and Kansas operations for Peoples Natural Gas Company, noted that their leak survey, cathodic protection and other practices exceed DOT requirements, but these requirements apply only to company-owned facilities, not to customer-owned yard lines. The biggest issue to be addressed is the customer-owned yard line. He believed that the best solution long-term would be for the company to work with the KCC on regulations where the company would have a replacement program for customer-owned yard lines. Their estimate for that would average \$400 per service line. Mr. Butterfield described a four to five year plan which Peoples had proposed to the Commission and would be in the range of \$3 million per year for the number they estimate would have to be replaced. This would be about \$77 per year, or \$6.50 per month, for the individual customer. He felt that this proposal to the KCC needed to be coupled with some regulatory process change in Kansas which would make it possible to recoup the return of investments at a more rapid rate. Attachment 2.

Mr. Butterfield answered questions relative to replacement of all steel lines, but did not have a figure for the annual cost. At the request of the Chairman, he agreed to provide for the committee information regarding how many customer yard lines are required to be replaced annually and his best estimate as to the cost of those yard lines.

William E. Asbury, Vice President, Gas Service of K N Energy, Inc., discussed K N's past safety efforts and recommendations for future changes in state law. He commented that K N also believed it was safer to have the meter placed at the property line. In meetings with the KCC staff in 1986, K N had agreed to accept responsibility for operation and maintenance of yard lines, but not for ownership. He suggested that consideration be given to track costs of these additional safety measures specifically on an annual basis, and that all operators be allowed to recover these costs through annual surcharges to Kansas customers. Attachment 3.

Brief discussion followed.

Staff explained the amendments which had been requested by the Subcommittee. The first one would provide that the operator would have full responsibility for maintenance of the yard line regardless of the ownership of it. This change in the law would mean that the operator would now be liable for maintaining the customer yard line in the proper manner from the gas meter to the wall of the customer's house. Attachment 4.

The second amendment would provide for the Corporation Commission to contract with cities in this state to train building inspectors of the cities to inspect new installations of gas pipeline between a main and a customer residence. Also that the city could agree that those building inspectors would inspect those pipelines on behalf of the Corporation Commission and report back the results of the inspections. The Chairman explained that this would not obligate any city or the Corporation Commission to do this--it would be a voluntary agreement between the city and the state. Attachment 5.

It was noted that this amendment could be expanded to include a county in rural areas which might not have building inspectors. There was a consensus to change "city" to "city or county" and to change "building

CONTINUATION SHEET

MINUTES OF THE HOUSE SUB-COMMITTEE ON ENERGY AND NATURAL RESOURCES,
room 526-S Statehouse, at 3:30 ~~am~~ p.m. on March 15, 1989

inspectors" to "building inspectors or someone designated by the city or county who has had the training."

Chairman Patrick announced that if there was no objection, he would submit these amendments to House Bills 2454 and 2456 in addition to the Subcommittee minutes to serve as a report and recommendation to the Standing Committee on Energy and Natural Resources.

Attention was called to the minutes of March 1 which had been distributed. There were no objections to the minutes of February 22, and they stood approved.

The meeting was adjourned at 5:00 p.m.

Date: March 15, 1969

GUEST REGISTER

HOUSE

COMMITTEE ON ENERGY AND NATURAL RESOURCES

NAME	ORGANIZATION	ADDRESS	PHONE
Louie Stroup	KMU	Box 1225 M ^c Pherson	316 241-1423
DAVE CORLISS	LKM	112 W 7TH ^{TOPEKA}	354-9565
Jim Ludwig	KPL Gas Service	Topeka	296-1978
KEVIN ROBERTSON	ENRON CORP	TOPEKA	233-0535
Woody Woodman	KCPH	KCMo	816 556-2155
Rick Kready	KPL Gas Service	Topeka	296-6474
Tom Taylor	KPL Gas Service	Topeka	296-1927
Bill Asbury	KN Energy	Hastings, Ne.	402 462-2141
AARON HARMAN	KN Energy	Phillipsburg KS	913 543-2135
James Schwart	KN Energy	Topeka KS	234-0001
David L. Gorman	Union Gas System, Inc	Independence KS	316 331-4500
Bob Storey	Union Gas System, Inc	Topeka KS	913 773-4570
W. H. Fleisch	" " "		
Tim Triplett	Bethwell, Sanders	Ovland Park, KS	913- 345-8400
ED SCHAUB	COSTAL CORP	TOPEKA	233-4512
Robert Anderson	MidCont Oil	Ovland	934 6589
Herbert Whitlow	KANS PLbg Htg ASSN.	Topeka	357-1281
Karen Arnold Bays	City of Ovland Park	Ovland Park	381-5252
William W Snow	Union Gas	TOPEKA	273-7122
TREVA POTTER	PEOPLES NAT. GAS	" "	235-5986
Mike Grier	Union Gas	Ovland Park	345-8900
Kay J. Marny	Topeka	Mech. Cont. Co. of KS	

Testimony Before

HOUSE ENERGY AND NATURAL RESOURCES SPECIAL SUBCOMMITTEE

Review of Laws and Regulations on
the Transportation of Natural Gas

By **WILLIAM H. REEDER**
UNION GAS SYSTEM, INC.
Executive Vice President and
Chief Operating Officer

March 15, 1989

Good Afternoon. My name is Bill Reeder. I am the Executive Vice President and Chief Operating Officer of Union Gas System, Inc. I have been asked to appear before this Subcommittee and respond to questions and also to address future changes in state law Union Gas System, Inc. ("Union Gas") believes should be made.

Before responding directly to the questions put forward by the Subcommittee, I believe some preliminary comments may be helpful.

Initially, let me state that Union Gas is committed to serving its gas customers in this state in a safe, reliable and efficient manner. Union Gas now serves some 65,000 customers throughout our service territory which extends from southeastern Kansas up to and including major portions of Johnson County, Kansas, and the Metropolitan Kansas City area on the Kansas side.

Union Gas has a long and distinguished history of service to the Kansas community. Our firm was founded in 1926 in Independence, Kansas. We have grown from that start to be one of the larger natural gas suppliers in Kansas. Throughout this

H Energy and NR
3-15-89
Attachment 1

growth, we have endeavored to provide economic and reliable service to our customers.

We are committed to complying with all Kansas Corporation Commission (the "Commission") regulations applicable to our Company and its operations. We are ready, willing and able to meet that commitment. In keeping with that endeavor, we just recently entered into an Agreement and Plan with the Commission which calls for Union Gas to follow through on various commitments for upgrading, testing and protecting our entire gas distribution system. We are working closely with the Commission staff to assure those commitments are met fully and timely. We believe it is in the best interest of our customers, our employees, and our Company to proceed forward with their Agreement and Plan in order to get on with the business of running a reliable, safe natural gas utility.

This Subcommittee should also know Union Gas believes it has actually been the leader among state utilities in terms of some safety requirements. For example, we believe that Union Gas was one of the first natural gas utilities in Kansas to systematically conduct flame ionization leak surveys of all its mains and service lines. More recently, those surveys have been expanded to cover customer yard lines. In addition, since 1982, we have conducted shut-in tests on customer yard lines and customer piping, and for the last two years, checked consumption patterns of our customers. With coming new regulations, we will

accelerate flame ionization leak surveys of Company mains, Company service lines and customer yard lines to an annual basis. We know of no other utility which provided this level of service until recently.

Customer yard lines are the service lines between the outlet side of the Union Gas meter and the building wall. In order to remove any confusion that might still exist about "Company service lines" and "customer yard lines", I have brought an illustration which distinguishes between the two for the Subcommittee's reference. Flame ionization testing is not only a proven method for detecting leaks, but is also the most sensitive way to assure that no leaks are occurring.

I would like to say to this Subcommittee that upon careful examination, Union Gas has shown itself to be a safe and reliable utility. Obviously, we view any incident which occurs with regard to our system as one too many.

We strongly disagree with statements reported by the media that Union Gas is somehow a "repeat offender" with regard to citations issued by the Commission involving safety. That simply is not true. Where problems have existed, we have moved forward with a committed response to resolve those situations.

The rules and regulations governing the operation of a utility are long and complex. Well-meaning disagreements of opinion can exist on what such rules and regulations actually require, as they can with any set of complex regulations. No

two individuals agree on exactly what the U. S. Tax Code requires in all situations. The same is true of the rules and regulations governing our industry. Nevertheless, we feel that a detailed review of Union Gas' history reveals a company that is committed to complying with applicable regulations, running a safe system for its customers, and is not in any way a "repeat offender". Unfortunately, when explanations are long and complex, often the accusations are much easier to understand, and unfortunately accept, than the explanations.

The point is that Union Gas is committed to compliance with all statutes, rules and regulations and does not have any objection to any of the recently adopted Commission regulations. We hope that this session today, and our response to your questions, will help better our lines of communications.

I will now turn to the specific questions put forward by the Subcommittee.

The first question put forward by the Subcommittee was:
Why did the accidents of the recent past occur?

We have interpreted this question to make reference to an explosion which occurred in downtown Independence, Kansas, approximately 1½ years ago and the explosion which occurred in Kensington Manor in Overland Park shortly thereafter. It is important we clearly distinguish between the two, because it is anything but clear that both were caused by natural gas.

In September 1987, an explosion occurred in downtown Independence, Kansas. The origin of the explosion was a small meat-packing and locker plant. The meat lockers contained within this operation used both freon and a much older ammonia system for cooling purposes. Ammonia is also a highly explosive gas under certain circumstances.

The cause of this explosion is being hotly contested in civil litigation which is still proceeding at this time.

Union Gas has retained experts, including one expert who is known nationwide with regard to natural gas migration through soil and the use of odorants. The opinions we have received point towards instant release of ammonia as the cause of the explosion--not natural gas.

Without belaboring the facts before the Subcommittee, I want to state on behalf of Union Gas that we do not accept the proposition that the explosion in Independence in September 1987 was caused by natural gas. We have studied the situation in great detail and simply do not believe that natural gas was involved in the explosion. I might also point out to the Committee that typically in an explosion involving natural gas, a fire is present. There was absolutely no fire in Independence, Kansas.

The explosion in December 1987 in Kensington Manor presents a different situation. Here, it does appear that natural gas was involved. The source of the natural gas appears to have been a leak which developed between the Company service line

and the so-called "saddle-tee". The saddle-tee is used to actually tap onto the main line. A separation between the Company service line and the saddle-tee occurred, thus allowing natural gas to escape and migrate into one of the homes within the subdivision.

Second Question: Could the incidents described above have been prevented?

Since we do not believe that the explosion in Independence, Kansas, was caused by natural gas, we really do not believe this question applies to that situation. The Commission, in its report in June 1988, did question our interpretation of several rules and regulations involving procedures which were in progress at the time of the Independence, Kansas, explosion. In cooperation with the Commission, we have instituted changes in our uprating procedures.

With regard to Kensington Manor, we have also instituted changes in our procedures of installing and testing Company service lines after installation of saddle-tees, which I mentioned earlier. We have also agreed to go back and retest some 351 service lines and saddle-tee's pursuant to the Commission's outlined procedures. In the interim, we have already tested all Company mains and Company service lines for leaks, pressure tested all of the mains and Company service lines to 90+ pounds, and repaired any leaks found to exist as the result of either test.

I want to emphasize that we have redoubled our efforts to make sure all of our employees are well trained with regard to the procedures used to install Company service lines and saddle-tees and that those procedures are strictly followed.

Third Question: What is the Company doing to reassure customers about gas line safety?

For many years, Union Gas has been taking substantial steps to reassure its customers that gas being delivered to their homes or businesses is being accomplished in a safe, reliable and efficient manner.

Union Gas has for many years been conducting flame ionization leak surveys of all Company mains and Company service lines in keeping with the Federal Pipeline Safety Regulations. As early as 1985, these surveys were expanded to include customer yard lines throughout our southern division. In August 1988, this leak survey program was again expanded to include all customer yard lines in the northern division.

Flame ionization leak surveys have been conducted in most areas on an annual basis, including rural communities and all business districts. The annual business district survey includes all basements, schools, churches, hospitals and other similar institutions regardless of location. Other areas, including

residential areas, are surveyed at least once every five years, or approximately 20% of our entire system each year. This is also in keeping with existing Federal Pipeline Regulations.

Under the new regulations, Union Gas will conduct leak surveys of Company mains, Company service lines and customer yard lines in all areas on an annual basis. We will repair or replace all customer yard lines determined to be leaking as the result of the leak survey, shut-in tests, or unusual customer consumption pattern.

It is our understanding the Commission will hold generic hearings concerning who is to pay for the cost and expense of the repair or replacement of the customer yard lines; however, in the interim Union Gas will absorb these costs.

We have also taken the following steps which we believe have added to the safety of our system and help to assure our customers about gas pipeline safety:

- . Since 1982, we have been conducting "shut-in tests" each time we set a meter or turn on an appliance. A "shut-in" test consists of turning off all appliances within a house and then checking the dial hands on the meter to make sure no gas is passing through the meter. In 1988 alone, we conducted about 12,000 of these shut-in tests, which represents about 20% of our customers. The last two

years, Union Gas has also been monitoring customers' history of normal usage. If a customer's consumption increases dramatically, we send someone out to determine if the meter was inaccurately read, or if accurately read, then determine if a leak could exist by means of a shut-in test.

. Each of our field personnel are trained to check for signs of dying vegetation in laws and shrubbery. Dying vegetation can be caused by natural gas, and if this is noted, a follow-up check is conducted.

. Last year, Union Gas examined every regulator station in their entire system, and made major improvements to some of these stations. Over 200 stations were upgraded and improved. All of our regulator stations will have been examined and/or upgraded before the next heating season.

. We have continued to work closely with the Commission staff. We have met with the Commission staff several times in the past month, and we will continue to meet on at least a monthly basis over the next two years to address any problems as they arise.

. We have continually increased our in-house training of all operations personnel to about 80 hours annually. This does not include off-site training for leak survey technicians, corrosion control technicians, pipeline inspector training or training conducted by the KCC and DOT.

Finally, as part of our Agreement and Plan with the Commission, we have agreed to a very aggressive program of improving, upgrading and testing our existing system.

For example, Union Gas has agreed to electrically survey and "hot spot" protect, where required, all 900 miles of bare steel pipe which exists in our system. Even before executing the Agreement with the Commission, Union Gas has already completed the electrical survey of nearly 40% of such lines and is moving as rapidly as possible to complete the remainder. I might add that the electrical surveys which have been completed were done in the more highly populated areas of our operating system.

Union Gas' effort in this entire area is clearly reflected in the capital improvements which have been made to our system over the past four years. I have brought a chart which outlines the amount of capital improvements which have recently been made.

Since fiscal year ending August 31, 1984, Union Gas has expended \$18.4 million in gross capital expenditures. This reflects an average capital improvement expenditure of \$4.6

million per year over the last four years. In addition, we have already budgeted an additional \$4.0 million in capital expenditures for each of the next four years.

We think the steps I have outlined above, in addition to the routine annual maintenance of our gas distribution system, which is an ongoing matter, clearly shows that Union Gas is committed to having a safe, efficient and reliable system. We are ready and able to meet not only the safety concerns of our current customers, but also the needs of our future customers in a safe, reliable and efficient manner.

Question No. 4: What changes does Union Gas believe are necessary in state law?

Union Gas is actively supporting the Commission's effort to promote a mandatory "one-call" system as proposed in House Bill 2453. As I am sure you know from previous testimony before this Committee, the "one-call" legislation would help protect underground utility facilities from damage and help protect workers from injury resulting from contact with such facilities. On an average, Union Gas has one line cut or damaged by a third party every business day, which obviously causes potentially hazardous situations. Accidental damage to our pipeline system by individuals digging in the area of our mains and service lines cause many leaks each year. The "one-call" system could greatly

reduce not only the unnecessary expenditure of money to fix these leaks but, more importantly, provide a safer system for our customers by reducing the number of potentially hazardous situations.

Union Gas also has no objection to House Bill 2454 which is an effort to keep our statutes current with the Federal Pipeline Safety Act.

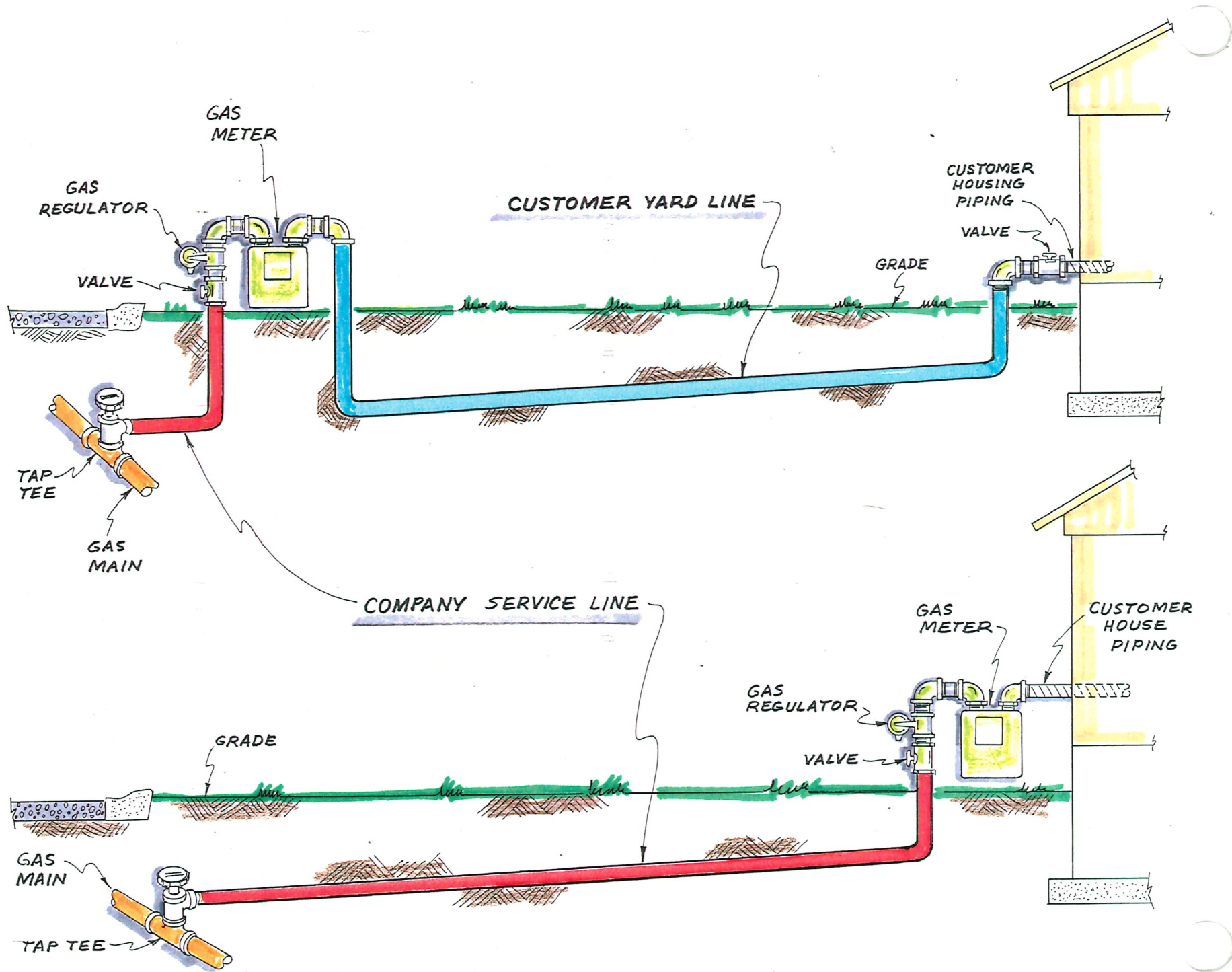
House Bill 2456 concerning the Commission's ability to conduct on-site investigations, and receive or take possession of any and all property which constitutes evidence, is acceptable to Union Gas.

Similarly, we have no objection to House Bill 2457 concerning civil penalties for certain violations of Commission rules and regulations.

SUMMARY

I hope that I have responded adequately to the questions you have put forward. We appreciate the opportunity to appear before this Subcommittee and address some of the issues which have recently arisen. Because of recent tragic incidents involving natural gas, public interest in this area is quite high. However, I want to assure you that Union Gas has a safe and reliable system for the delivery of natural gas, and we are taking substantial additional steps to make that system even better.

The public's right to receive natural gas in a safe and efficient manner is unquestioned. We believe something of a corner has been turned regarding everyone's heightened awareness of the importance of taking safety measures now and in the future. With the help of the Commission and subcommittees such as this, we intend to do everything we can to further that goal.



1a

GROSS CAPITAL ADDITIONS

1985	5.3
1986	1.8
1987	4.0
1988	<u>7.2</u>
	18.5

Avg. per year: 4.6 million

TESTIMONY BEFORE THE HOUSE AND NATURAL RESOURCES
SPECIAL SUBCOMMITTEE

Review of Laws and Regulations on the Transportation of Natural Gas

By - Charles Butterfield
Vice President, NE/CO/KS Area

I am Chuck Butterfield, Vice President of the Nebraska, Colorado, and Kansas operations for Peoples Natural Gas Company. On behalf of Peoples Natural Gas, I want to first say that we appreciate the opportunity to appear before this subcommittee to address these very important safety issues. We have a good safety record. We will gladly do whatever we can to keep it that way--including compliance with new legislation or rules.

Peoples has gas distribution operations in five states. In Kansas we serve approximately 39,000 customer in 19 cities and rural areas, primarily in the western part of the state. The majority of these customers have our meter and regulator at the property line and

H Energy and NR
3-15-89
Attachment 2

gas flowing at low pressure through a customer-owned yard line. This situation may be different from other Kansas utilities. Our leak survey, cathodic protection and other practices exceed DOT requirements, but these requirements only apply to Company-owned facilities, not customer-owned yard lines. In our opinion, this is the most important issue resulting from the recent KCC rule changes, even though some 20 other rule changes are being made.

The Kansas Corporation Commission has recently begun efforts to expand upon the DOT rules. We supported the KCC in these rulemaking changes, and the process to allow input from us was very much appreciated. However, we believe there will have to be some ratemaking flexibility in addressing the customer yard line problem.

Before anyone passes judgment on the Commission or the utilities, you should have some perspective on the history of customer-owned yard lines and the development of corrosion technology. You should understand, from an historical perspective, how customer-owned yard lines developed. Most of our customers began receiving natural gas

service in the 1940s and 1950s. During that period of time, most utilities used bare steel lines for their mains, distribution lines and service lines. There was, simply, no corrosion control technology at that time. Actual ownership of the line was thus not a terribly important issue, since neither the utility company nor the customer could do very much to protect the line after it was installed. In the late 1950s and 60s, the utility companies began what is known as cathodic protection of steel lines.

Let me explain this technology in some detail. This relatively recent technological change involves placing a small electrical charge on the steel lines. The electrical charge will control the corrosion of steel lines. The electrical charge is applied through either a rectifier or a buried sacrificial anode. The sacrificial anode acts just like a dry cell battery, in that it reacts with the ground and surrounding area to produce an electrical charge which is transferred to the protected line. Electrical surveying is used to determine whether that electrical charge still exists and whether or

not an electrical "short" is taking place through some contact with surrounding objects. Electrical surveys can also be used to locate corrosion "hot spots" on steel lines which are not cathodically protected.

To do any electrical surveying, the customer's yard line must first be "insulated" from the customer's house piping. This requires the installation of an insulated coupling at the point where the service line enters the building. Without a coupling, electrical surveys will not be meaningful and will usually be misleading.

Installation of one of these couplings costs an average of \$200 and entails excavation and cutting of customer lines; temporary shut-off of gas; as well as pilot relights, and most likely the attachment of anodes where hot spots subsequently show up. Attachment of anodes would raise average costs to \$300-350 per line. Even with the insulators and anodes, we are still left with a line that is, at best, an unknown entity. These lines have been in the ground for decades, with potential corrosion in many locations. That they don't

leak when they are first electrically surveyed does not mean they won't begin leaking a day or two later. In their potentially "weak" condition, they are also more susceptible to external stresses, including "freeze/thaw" effects, roadbed construction stress, internal house piping movement, and "dig-in" problems. We just don't know and can't know the true condition and potential problems these lines represent unless we dig them up and expose them. That, is cost prohibitive.

Because of the fairly recent corrosion technology, we are now left with a problem in that our company lines are protected from corrosion, but customer lines are not. Keep in mind that this was not planned, nor were utilities or the Commission at fault for the current situation. This was just an historic practice that did not predict the development of cathodic protection technology. Once the practice of customer ownership was begun, it was also difficult to change because of concerns about illegal discrimination in the facilities offered to similar customers. The utility's historic

obligation was to take care of utility-owned property and not to maintain the appliances, furnaces, water heaters, or yard lines owned by the individual customers. With the recent incidents involving yard lines and the reports concerning the frequency of leaks on customer-owned lines, it is obvious that many customers have not been adequately maintaining and replacing their own lines. The Kansas Corporation Commission is well on the way to adopting standards which would effectively require utilities to be responsible for customer-owned yard lines. With that responsibility, however, comes some rather extraordinary expense. Let me explain why. We are very reluctant to assume responsibility for the leaks occurring to lines which are old; with possible existing corrosion; which we did not install or maintain records on. We cannot determine through electrical surveys whether any yard line will begin leaking tomorrow, two months from now, ten years from now, or ever. This electrical survey technology allows us only to predict a potential for corrosion at specific spots. It tells us nothing about prior corrosion.

We have already begun leak surveying customer-owned yard lines. This is being done to comply with the new KCC rules which are not yet final. While leak surveys may surely prevent some accidents, they will not provide the virtual guarantee of safety which a utility is obligated to provide.

The safest and most effective response may be to begin a comprehensive yard line replacement program in which any line which is not made of modern materials would be replaced with a polyethylene service line. As Peoples has in excess of 34,000 customers which own their own yard lines, we believe the cost of this project would approach \$13.6 million, which is based on an average replacement cost of \$400 per service. It still compares favorably with the cost of the inadequate \$300 to \$350 cathodic protection and electrical survey response. This would virtually eliminate the risk at these lines of unknown integrity represent. We have proposed this solution to the Commission, and we are optimistic that we will receive a go-ahead from them. This project does represent a \$3 million annual cost to

the Company which, when recovered through rates, will result in about a \$77 addition to the average residential customer's bill per year; about \$6 per month. We do not feel this is an inappropriate cost to correct this longstanding problem with customer-owned yard lines.

Before we can make such major investments and greatly expand our sphere of responsibility, we must have some form of interim rate relief. We don't want to have to file annual rate cases. These only partially recover our capital costs anyway. There is a substantial lag in recovery of capital under current Kansas ratemaking procedure. Not only does the new plant have to be in service, but there is at least an 18-month additional lag before the regulatory process could even begin to provide a return on investment. We do not get to recover the cost of the capital which was invested in the system prior to a final rate order. It is a little like putting your money in a savings account that won't pay interest for two years-- when other banks in other states pay interest from the time of deposit.

We have proposed a surcharge mechanism to the Commission which would allow directly charging customers for the costs of extending our utility's jurisdiction into this completely new area--the customer's yard line. Surcharges would, of course, be subject to Commission review and disallowance. Alternatively, some form of interim rate relief would be required to prevent substantial earnings decline. We suspect that either type of relief would encourage utilities to spend the capital necessary to upgrade and replace the customer-owned yard lines. Without such interim relief, utilities will continue to resist making large capital expenditures in new areas where the subsequent earnings shortfalls make their stocks unattractive and which leads to higher rates in the future. It would also bring Kansas into sync with the rest of the states we operate in where interim relief is available and capital projects are not prohibitively expensive to the shareholders.

I know you're very interested in investigating and exploring areas where legislation may be required. We believe that the

Corporation Commission is already responding to this yard line problem and that no specific legislative response may be necessary. We think that the Kansas Commission is the appropriate body to address safety matters in Kansas and has the technical expertise in dealing with safety matters. For that reason, we would ask that the Legislature consider doing something short of passing new statutory safety legislation until the Commission has an opportunity to finalize its new safety regulations. Alternatively, the Legislature may want to consider passing a resolution to provide for some continuing oversight of Commission safety regulation. If the Legislature also wants utilities to make prudent investments in utility plant--such as insulators, anodes, or service lines--then you must also eliminate the penalties for such investment. You should mandate the right to interim rate relief for utilities in Kansas.

I would now be more than happy to attempt to answer any questions the subcommittee may have.

Testimony Before

HOUSE ENERGY AND NATURAL RESOURCES SPECIAL SUBCOMMITTEE

Review of Laws and Regulations on
the Transportation of Natural Gas

By: William E. Asbury
K N Energy, Inc.
Vice President - Gas Service

March 15, 1989

Good afternoon. My name is William E. Asbury. I am Vice President-Gas Service of K N Energy, Inc., a Kansas corporation ("K N"). Thank you for inviting me to speak today on the very important topic of pipeline safety. I plan to discuss K N's past safety efforts and future changes in state law that K N believes would be beneficial.

I. K N BACKGROUND INFORMATION

K N is an integrated natural gas utility which operates primarily in the states of Kansas, Nebraska, Colorado and Wyoming. By integrated, I mean that K N's pipeline systems involve the gathering, transmission and distribution of natural gas. K N serves over 200,000 retail end-users, including residential, commercial, industrial and agricultural customers. These customers utilize natural gas for space heating, water heating, cooking, air conditioning, industrial processes, powering irrigation pumps and other uses. In Kansas, K N serves over 31,000 retail customers.

*H. Energy and NR
3-15-89
Attachment 3*

II. K N's SAFETY EFFORTS

There is no matter of greater importance to K N than the safety and well being of our employees and the public we serve. Accordingly, safety is a way of doing business, not just a slogan. Because natural gas can be dangerous if improperly handled, K N has programs for pipeline testing, corrosion control, damage prevention, gas leak investigation and awareness of construction work under pipeline facilities. Odorant is placed in the natural gas stream to increase the likelihood of detection in those instances when natural gas does escape.

Our understanding is that most of the recent incidents in Kansas have involved customer-owned piping or yard lines. As a result, my comments as to K N's existing safety programs will be geared primarily to this subject. Before proceeding, a brief explanation of K N's distribution policies might be helpful.

K N prefers to install its metering and regulating facilities just inside each customer's property line, rather than at the building wall. The yard line which transports gas from our meter set assembly at the property line to a customer's residence is owned by the customer.

K N believes this practice to be preferable for several reasons. First, K N's distribution mains operate at pressures not exceeding 60 psig and generally under 30 psig. K N reduces the pressure of natural gas being delivered to customer-owned piping to 4 ounces of pressure (1/4 psig) at the meter facilities located at the property line. By doing so, in the event of a leak on customer-owned piping, less gas will be leaking from the customer-owned piping in the vicinity of the customer's residence. Secondly, in the event of an emergency at a customer's residence, it is easier to interrupt the supply of natural gas to the residence with a shutoff valve located at the

property line rather than the building wall. Third, the properties where service lines or yard lines are located are not under K N's care, custody or control. In other words, K N has no ~~legal~~ rights authorizing it to control the ^{CUSTOMERS'} property's where such piping facilities are located. Customers are in the best position to prevent excavation damage to the piping facilities on their property.

In addition to the foregoing, K N's other programs to minimize problems experienced on customer-owned piping are as follows:

1. Installation of Yard Lines. All new customer-owned yard line piping material, coated and wrapped joints, as well as repairs to the yard lines, must be inspected and approved by K N, regardless of who performed the actual installation or repair. K N has followed this practice since the early 60's. Also there are some communities on the K N system which require a permit to be obtained and city inspection of yard line installations. Scott City is one community in Kansas which requires a permit and city inspection on all yard line installations.

2. Pressure Testing. All new yard lines and any yard line which has been disconnected from gas service by the removal of K N's metering facilities are pressure tested for at least 20 minutes to determine there are no leaks before gas service is initiated or reinstated.

3. Premise Surveys. Before the initiation of gas service to any residential customer, K N conducts a survey of the customer's premise to determine whether the premise is fit for gas service as of that date. Among other checks, there is a visual inspection of gas-burning equipment to determine that equipment is connected and vented in accordance with ANSI Z223.1, NFPA54 (National Fuel Gas Code), a pressure test of customer-

owned piping from the meter at the property line to the gas valve on the customer's equipment, a test of the operation of equipment where practicable. Nearly 13,000 premise surveys were conducted in Kansas during in 1988.

4. Odorization. The natural gas delivered to customers is odorized. In the event of a leak, this should allow customers to detect such leakage and report such information in a timely fashion to K N. Periodic checks are made by K N's employees to verify that gas being supplied customers is properly odorized.

5. Leak Surveys. In each town, a complete leak survey of K N's facilities is performed at intervals not exceeding 15 months but at least once each calendar year. A business district survey of all distribution mains, service lines and customer-owned piping up to the building wall is conducted twice each year. Commercial and public building surveys are conducted twice each year to check for the presence of combustible vapors inside each building and in bar testing outside at the foundation near the gas line entrance to the building.

6. Operation and Maintenance of Customer-Owned Lines. Prior to the recent incidents, K N agreed to accept responsibility for the operation and maintenance of customer-owned lines from the property line to the building wall, regardless of meter location as a result of the KCC's generic yard line policy in calendar year 1986. K N further agreed to conduct periodic leak surveys, provide cathodic protection and ensure compliance with K N's standards for the repair or replacement of yard lines. KCC has previously agreed with these approaches.

III. CHANGES NECESSARY IN STATE LAW

One major change has already taken place. The KCC has adopted sweeping changes in its pipeline safety regulations that

make such regulations amount to the most stringent in the United States. K N supports all efforts to assure that it and other industry members can continue to provide reliable, safe and reasonably priced gas service. K N has also been a member of an industry task force which has worked with the KCC to develop both cost-effective and improved safety requirements.

K N is also aware of several bills, House Bill Numbers 2453, 2454, 2456 and 2457, which have been introduced in the current Kansas legislative session pertaining to pipeline safety. K N supports the thrust of these legislative proposals except the provision in House Bill 2456 authorizing the KCC staff to receive and take possession of all property which constitutes evidence of the cause or origin of an accident. Essentially, K N's concerns are that such authorization may impact the admissibility of such items in evidence in a subsequent legal proceeding without extensive new procedures by the KCC to protect the "chain of custody" of such evidence which may impact an operator's ability to investigate incidents as currently required.

Because the KCC's new regulations will be costly to implement, K N proposes that all operators be allowed to recover all costs incurred in the new required safety efforts through annual surcharges to Kansas customers. The prudence of such costs should be beyond question. By allowing such treatment, two benefits would be derived. First, operators would recover their capital costs and higher operating and maintenance costs more promptly and they would avoid more frequent rate cases. Second, it would enable the KCC to see the expenditures being incurred by operators to comply with the more stringent safety regulations on a more timely basis.

CLOSING

I thank you for the opportunity to appear before the subcommittee. I would be happy to address any questions.

DRAFT OF PROPOSAL OF SUBCOMMITTEE ON PIPELINE SAFETY

Section 1. (a) As used in this section, terms have the meanings provided by 49 C.F.R. 192.3, as in effect on the effective date of this act.

(b) An operator shall have full responsibility for maintenance of all pipeline between the main and the customer's building wall, regardless of the ownership of such pipeline.

H Energy and NR
3-15-89
Attachment 4

DRAFT OF PROPOSAL OF SUBCOMMITTEE ON PIPELINE SAFETY

Section 1. (a) As used in this section, terms have the meanings provided by 49 C.F.R. 192.3, as in effect on the effective date of this act.

(b) The state corporation commission may enter into a contract with any city in this state whereby:

(1) The commission agrees to train building inspectors of such city to inspect new installations of natural gas pipeline between a main and residential property; and

(2) the city agrees that such building inspectors will inspect such new installations of pipeline on behalf of the commission and report the results of such inspections to the commission.

H Energy and NR
3-15-89
Attachment 5