The Subcommittee on Economic Development, Public Buildings, Hazardous Materials & Pipeline Transportation

Hearing

Reauthorization of the Natural Gas and Hazardous Liquids Pipeline Safety Program

2253 Rayburn House Office Building

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PURPOSE

The Subcommittee on Economic Development, Public Buildings, Hazardous Materials and Pipeline Transportation will meet on Tuesday, July 27, 1999, at 11:00 A.M. in room 2253 Rayburn to receive testimony on reauthorizing the natural gas and hazardous liquid pipeline safety program.

BACKGROUND

A. The Law.

Pipeline safety, for pipelines transporting natural gas and hazardous liquid, is governed by Chapter 601 of Title 49 of the United States Code. Pipeline safety formerly was governed by the Natural Gas Pipeline Safety Act of 1968 and the Hazardous Liquid Pipeline Safety Act of 1979. The two laws were combined under a single authority in the recodification of Title 49 in 1994. In 1996, the 104th Congress enacted the Accountable Pipeline Safety Act, which reauthorized the pipeline safety program for five years, as well as dramatically reformed the pipeline safety program from a prescriptive regulatory based program to one that employs a risk based approach. The program authorization expires in 2000.

The 1996 Act provided a number of reforms to the pipeline safety program. First, the legislation required DOT to employ risk assessment analysis to the consideration of new pipeline safety standards, including the weighing of costs and benefits of proposed standards. Second, the legislation authorized DOT to implement a risk management demonstration project intended to provide opportunities for DOT and pipeline interests to mutually agree on practices and develop plans that achieve pipeline safety based on risk management principles, focusing limited resources on risks that pose the greatest threat to the community and the environment. By law, the plans approved by DOT under this program must provide an equal or greater level of safety than currently provided by the regulations.

In addition, the Transportation Equity Act for the 21st Century (TEA 21) enacted in 1998, added a new chapter to the pipeline title providing for an enhanced grant incentive program to encourage states to establish or improve one call notification programs. The expiration of the authorization of this program does not occur until 2001, and therefore will not be addressed in this hearing.

B. The Program.

The pipeline safety program is administered by the Department of Transportation (DOT), under delegation by the Secretary to the Research and Special Programs Administration, and executed through the Office of Pipeline Safety (OPS).

DOT has regulatory authority over approximately 2 million miles of pipeline, including natural gas gathering, transmission and distribution lines; as well as hazardous liquid lines (which mainly transport gasoline and fuel oil). These lines transport approximately 22 trillion cubic feet of gas per year and distribute 64% of all the petroleum transported in the United States.

The pipeline safety program administered by DOT regulates the design, construction, installation, inspection, testing, operation, maintenance and emergency response plans and procedures pertaining to natural gas and hazardous liquid pipeline systems and liquefied natural gas facilities. The program also supports research and development, as well as directs public education activities on pipeline safety. Additionally, DOT collects, compiles and analyzes pipeline safety and operating data; and conducts training programs through the Transportation Safety Institute for government and industry personnel in the application of the pipeline safety regulations.

For FY 1999, the program is funded at $33 million. In accordance with the Consolidated Budget Reconciliation Act of 1985, the program primarily is funded from annual "user fees" from the pipeline industry. The user fees are assessed on pipeline companies based on the mileage of transmission pipeline in their system, and a portion of the assessed fee is passed through to local distribution companies.

1. The Federal-State Partnership.

Although DOT is charged with the primary responsibility of developing and enforcing pipeline safety regulations, the agency carries out its duties in partnership with the states. Generally, DOT assumes responsibility for regulatory and enforcement functions for interstate pipelines, while state agencies assume these responsibilities for intrastate pipelines. Under current law, there are three provisions which provide varying levels of state participation to carry out the regulatory functions, based on grant incentives: state certification, state agreement and interstate agent. DOT monitors the performance of the state agencies participating in the programs. By participating in one of these programs, states are

eligible for reimbursement by DOT for up to 50% of reasonable expenses. The grant funds are distributed through a performance-based allocation process in which a state's grant is reduced if federal performance standards are not met. However, in recent years DOT has been unable to fully fund this program.

2. Risk Based Regulation and Risk Management.

The 1996 program reauthorization contained two significant changes to the existing pipeline safety program: 1. the requirement that DOT evaluate new safety regulations on a risk assessment basis including a cost-benefit analysis of proposals, pursuant to Executive Order 12866; and 2. the creation of a risk management pilot program.

As to risk assessment, pursuant to the Act, DOT is now required to evaluate proposed safety regulations based on risk assessment methodology, including cost-benefit analysis. However this evaluation requirement does not apply if a new regulation is the result of a negotiated rulemaking or other rulemaking that does not receive adverse comment in the process; or is based on a recommendation supported by three quarters of the appropriate technical standards committee(s). The technical standards committees serve as peer review committees for pipeline safety standards which must undergo risk assessment, as well as for the safety program in general; and are composed of representatives from government, industry and the public. DOT is required to submit a report to Congress on the implementation of the risk assessment measures by March 31, 2000.

Prior to enactment, DOT employed cost-benefit analysis and risk assessment in proposal evaluations, pursuant to Executive Order 12866. The Act complemented and codified this practice. To date, DOT has completed 11 rulemaking actions employing the risk assessment evaluation, since the 1996 enactment, as well as continuing to act on other rules through consensus or by embracing industry standards. According to DOT the statutory changes have not hindered the regulatory process, but instead have contributed to enhancing the effectiveness of the regulatory process.

As to the risk management pilot program, the Act directed DOT to establish demonstration projects which would permit pipeline companies on a voluntarily basis to develop customized safety programs. The programs must be reviewed and

approved by OPS on the condition that the programs provide "superior safety" to the current regulatory program, and may include the waiver of some existing regulations. The purpose of the program is to allow companies greater flexibility to define pipeline specific problems and employ cost-effective solutions, to make best use of limited resources in a more effective manner and achieve superior safety results for the community as well as the environment.

To date, DOT has approved four demonstration projects in the liquid pipeline industry, and three more are pending including one involving the natural gas pipeline industry. Most of these projects do not involve waivers from the regulations. By Presidential directive, DOT is limited to approving 10 projects in total for the pilot program. DOT also is required to submit a report on the implementation of this program by March 31, 2000.

Transportation by pipeline is one of the safest modes of transportation. However, there remains great potential for loss of life and significant damage to the environment. According to DOT records, in the five-year period from 1994 to 1998, 2,000 incidents were reported, involving over 120 fatalities, 2,000 injuries, and more than $450 million in property damage. These incidents leaked a total of 17.6 million gallons of hazardous liquids into the environment. Outside force damage is the leading cause of pipeline accidents involving fatalities or significant property damage, followed by corrosion. DOT maintains statistics on the industry categorized by year, by cause of incident, and by type of pipeline to monitor the industry record.

C. Commerce Committee Action.

The Committee on Commerce, which has secondary jurisdiction over the pipeline safety program, held a hearing on reauthorization of the program on February 3, 1999. Reauthorization legislation sponsored by Chairman Barton, H.R. 1378, was reported by the Commerce Committee on April 21, 1999, with two amendments. The legislation provides for a clean reauthorization of funds through fiscal year 2002. The Pallone amendment authorizes $500,000 to be appropriated for supporting activities arising out of the "best practices" study authorized by TEA 21; and the Markey amendment requires OPS to be more responsive to recommendations made by the National Transportation and Safety Board.

The Subcommittee on Economic Development, Public Buildings, Hazardous

Materials and Pipeline Transportation will meet at 1 PM on Tuesday, May 11, 1999 in room 2253 Rayburn to receive testimony on the General Services Administration FY 2000 Capital Investment Program. This will provide members an opportunity to hear from GSA on its investment plans for the coming fiscal year.

The GSA Capital Investment Program (CIP) represents detailed prospectuses submitted by GSA to the Committee, which contain information on the need, extent of authority, scope of projects, location, cost, size and related information regarding the projects. Generally, the CIP consists of requests for authority to repair existing Federal buildings, design projects for future repair of existing buildings, national programs such as the upgrade of energy conservation measures, or removal of harmful substances from Federal buildings, or to acquire sites, design, and construct new Federal buildings. In each case the total cost of the project exceeds $1.9 million, which is the current threshold for requiring a prospectus to be submitted for approval by the Committee under the Public Buildings Act of 1959. Many of these projects are multiyear in nature, such as the national program to remove Chlorofluorocarbons (CFC), from Federal buildings, or remove asbestos from Federal buildings. Other major repair or renovation projects of headquarter buildings span several years, and the Committee's approval of a prospectus for these projects are subsequently funded over two or three years.

GSA FY 2000 CAPITAL INVESTMENT PROGRAM

REPAIR AND ALTERATIONS

GSA has requested new authority totaling $142,122,000 to repair 10 Federal buildings. This is part of the appropriations request of $664 million for the national repair and alteration program. The total program consists of $350 million for below prospectus projects, $200 million for prospectus level projects (of which $142 million requires Committee authorization for FY 2000), and $113 million for continuing programs for CFC replacement, elevator replacement, energy conservation, glass fragmentation mitigation, and design of future repair and alteration programs. Chart 1 provides financial details of the prospectus level requests.

By way of comparison, GSA requested $668 million in FY 1999, of which $344 million was for basic repair, $255 million was for prospectus level projects (of

which $142 million required Committee authorization), and $66 million for continuing programs for CFC replacement, energy program and design of future repair projects.

NEW CONSTRUCTION

Additionally, GSA is requesting $83,301,000 in new authority to acquire sites, design or construct eight Federal buildings nationwide. This includes design or construction of five border stations, construction of a child care center for the Social Security Administration, on a reimbursable basis, and demolition of the U.S. Mission to the United Nations in New York City. $40 million in authority will be for the new Federal facility in Oklahoma City, Oklahoma to replace the Murrah Federal Building, which was destroyed in the bombing in 1995. Funds for this project were appropriated in the antiterrorism provisions of the Emergency Supplemental Appropriations Act of 1995, subject to authorization. Subtracting the Oklahoma City project and the child care project, GSA requests new authority of $36 million. This compares with the FY 1999 new authority request of $9.9 million.

The Administration has requested $55 million for the FDA consolidation project at White Oak, Maryland. This effort was authorized by the FDA authorization Act of 1990, which authorized the FDA to consolidate its operations. Since passage of that Act, GSA has obligated $156 million in connection with FDA related projects in Suburban Maryland. In 1996, the Committee requested a comprehensive study of FDA's plans, and this plan has undergone several changes. It is expected that there will be a submission to the Committee in the next few weeks of a plan on FDA.

Finally, the FY 2000 budget requested $15 million to acquire a site for the headquarters for the Bureau of Alcohol, Tobacco and Firearms in Washington, DC. GSA and ATF have begun preliminary study of a site on North Capitol Street, NE. The Committee authorized this activity last year. Chart 2 provides details of appropriations requests for previously approved projects.

Border Stations

Construction of border stations has seen considerable activity in recent years.

These facilities provide modern transit points for the flow of goods, and people, that has mushroomed since the signing of the North American Free Trade Agreement. Many of the northern facilities are obsolete. GSA constructed 32 border stations on the Southern border in the late 1980's and early 1990's, and these facilities for the most part are managing the increase in traffic. Several truck facilities were constructed near older crossings in order to divert commercial truck traffic from crossings. This is the case in southern California, where the San Ysidro border crossing between the United States and Mexico at Tijuana now has a truck crossing at Otay Mesa, five miles away. That facility now processes 2,300 trucks daily and San Ysidro processes 70,000 persons daily. It is the world's busiest land border crossing facility.

GSA proposes to acquire sites and design facilities in Roosville, Montana and Fort Hancock, Texas, and construct new stations that had been previously designed in Sault St. Marie, Michigan, Sweetgrass, Montana, and Oroville, Washington. Construction on the northern border is now catching up with the construction activity on the southern border earlier this decade.

US Mission to the United Nations

The demolition of the existing U.S. Mission to the United Nations in New York City is the second phase of a multiyear effort to modernize the facility for the U.S. Mission to the UN. The current facility is over 39 years old, and faces several security challenges. A new facility, to be built on the ground of the existing facility, would expand space for U.S. staff assigned to the Mission, plus provide modern facilities for public events, conference facilities, and other features not in the current structure. However, construction of a new facility will be expensive, given its location in the heart of New York City, and the special security needs of the mission. GSA's portion of the construction will be $43 million, or $305 per square foot. This does not include above standard security features that the State Department will provide.

During deliberation on this project last year, there was a question about providing living space in this facility for the deputy ambassador, and the ambassador. The original plan called for a 2,400 square foot living quarters for the deputy. Currently, both the Deputy and the Ambassador reside in subsidized housing in New York. The Deputy receives a housing allowance of $125,000 annually, and the Ambassador resides at the Waldorf Astoria in a 4,000 square foot

penthouse suite. This has been the case for over 30 years. Current cost is about $338,000 annually. Members of the Subcommittee urged the State department and GSA to include additional housing in the new facility for the Ambassador, and terminate the Waldorf arrangement. However, the State Department wrote back to the Committee to inform members that to do so would cost an additional $3.6 million in design and construction costs, plus $700,000 to equip and furnish the space, $100,000 to provide services the Waldforf currently provides as part of the rent, plus $680,000 annually to maintain the new space. GSA will be prepared to discuss this proposal. The current prospectus does not include any living quarters in the proposed project.

Oklahoma City, Oklahoma

Following the bombing of the Murrah Federal Building in Oklahoma City, Oklahoma, the Committee directed GSA to study the feasibility of constructing a replacement facility. In August 1995, GSA reported back to the Committee with a recommendation that agencies displaced by this tragedy remain in leased space. Since then, GSA has reevaluated the situation, with the support of the city; GSA now recommends a $40 million campus facility of 179,000 square feet in an area near the site of the Murrah building. A memorial is currently under construction at the site of the Murrah building, which was destroyed. This campus like facility will house the Department of Housing and Urban Development, Indian Health Services, and U. S. Military Processing Center. Several smaller agencies will also locate to the new facility. Chart 3 provides financial details of these projects.

COURTHOUSE CONSTRUCTION

For the third year, the Administration has not requested funding for courthouse related projects. Last year, Congress included funding for 14 projects at a cost of $462 million. The Committee created a program by adding change sheets to prospectuses from earlier years, and requested 11-b studies for those projects for which there had been no previous request. In so doing, the Committee provided the necessary authority for funds to be appropriated. The committee did reserve approval for the new courthouse in Savannah, due to its significant cost increases, and uncertain support within the congressional delegation and judicial community. That project is being reevaluated at the request of this Committee.

The judiciary's plan for FY 2000 called for the consideration of 17 court related

projects at an estimated cost of $570 million. Those projects are currently being held up by the Administration, and there are no current plans to release these requests.

WITNESSES

Panel One
The Honorable Jack Metcalf
U.S. House of Representatives

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Panel Two
Ms. Kelley Coyner
Administrator
Research and Special Programs Administration
U.S. Department of Transportation

Accompanied by:
Mr. Richard B. Felder
Associate Administrator
Research and Special Programs Administration
U.S. Department of Transportation

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Panel Three
The Honorable James E. Hall
Chairman
National Transportation Safety Board

Accompanied by:
Bob Chipkevich

Director
Office of Pipelines and Hazardous Materials Safety
Barry Sweedler
Director
Office of Safety Recommendations
National Transportation Safety Board

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Panel Four

The Honorable Edward J. Holmes
Vice Chairman
Kentucky Public Service Commission
Representing the National Association Regulatory Utility Commissions
and the National Association of Pipeline Safety Representatives

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Panel Five

Mr. Steve Ball
Senior Vice-President and General Manager
Williams Energy Group
Representing the Association of Oil Pipe Lines and the American Petroleum Institute

Mr. John Zurcher
Manager
Pipeline Safety
Columbia Gas Transmission Corporation
Representing the Interstate Natural Gas Association of America

Mr. Willard S. Carey
Regulatory Leader-Federal
Public Service Electric and Gas Company
Representing the American Gas Association

STATEMENT OF KELLEY S. COYNER

ADMINISTRATOR

RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

U.S. DEPARTMENT OF TRANSPORTATION

BEFORE THE U.S. HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON ECONOMIC DEVELOPMENT, PUBLIC BUILDINGS, HAZARDOUS MATERIALS AND PIPELINE TRANSPORTATION

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

JULY 27, 1999

I would like to thank Chairman Bob Franks and Ranking Minority Member Bob Wise for the opportunity to speak to the Committee today. My name is Kelley Coyner and I am the Administrator of the Research and Special Programs Administration (RSPA).

About three years have passed since the Accountable Pipeline Safety and Partnership Act was enacted and we are just beginning to see the results of changes brought about by that law. Many of the initiatives are still under development and we look forward to evaluating the results when they are completed. In our oversight of the national pipeline system, we face many pressing safety and environmental challenges to keeping American communities safe and livable. Today, I will discuss how we are addressing each of the four major causes of pipeline failure, how we are enhancing environmental protection, and how we are preparing for emergencies that can occur when prevention is not successful.

Within the Research and Special Programs Administration (RSPA), the Office of Pipeline Safety (OPS) is charged with regulating the safe and environmentally sound operation of the Nation=s natural gas and hazardous liquid pipeline systems. Pipelines transport natural gas to 60 million residential and commercial customers.

They also transport 60 percent of the crude oil and petroleum products that fuel our industry, our economy and our households. We have responsibility for over 2 million miles of pipelines involving approximately 2,400 operators, a number that has grown 10% since 1999. Our regulations cover the design, construction, inspection, testing, operation, and maintenance of pipeline systems. We achieve compliance with our regulations through a partnership with state agencies, which assume regulatory and enforcement functions primarily as they apply to intrastate pipeline transportation, while the Federal government assumes these responsibilities for interstate pipelines.

Our mission is to ensure the safe, reliable, and environmentally sound operation of the Nation=s pipeline transportation system. Consistent with the Department=s Strategic Plan, we strive to eliminate pipeline-related deaths, injuries, and property damage, and reduce pollution to the environment. Last month, we set a new goal of reducing pipeline incidents caused by outside force damage by 25 percent over the next three years, five times higher than our previous goal. Other top priorities are reducing to zero the accidents caused by non-compliance with pipeline regulations and working with operators to reduce threats to pipeline integrity.

SAFETY AND ENVIRONMENTAL RECORD

The growth of underground utility systems, like the growth of the nation itself, has been impressive, but not necessarily orderly. During times of prosperity, all systems expanded to meet growing demand. Pipelines placed in areas that were originally rural or sparsely populated have

increasingly acquired new neighbors. Each successive business cycle has added to the complexity of the already tangled web of underground facilities and increased the likelihood of damage from nearby construction.

Over the past six years, we have seen our economy grow to the strongest in a generation. Yet, the benefits of prosperity bring new threats to many communities= safety and quality of life. Population shifts to the suburbs have led to increased traffic congestion, reduced air quality, loss of open space, and increased encroachment on environmentally sensitive areas. Most relevant here, increased surface activity has meant increased risk to the subsurface infrastructure.

It is in this context of growth, today, that we must examine the pipeline safety and environmental record over the last ten years and determine the best strategies to improve that record. I will speak of the record in general, and then address each of the four leading causes of pipeline failure, in order of their significance: (1) outside force damage, (2) corrosion, (3) human error and (4) material defects.

Federal regulations, in conjunction with historically good industry operating practices, have resulted in a generally positive safety and environmental record. Over the past 30 years, there has been a steady decline in the overall number of pipeline incidents. While the rate of decline has slowed in the past decade, it remains moving in the right direction. Also on the decline is the number of oil pipeline spills into water. This is important because when pipelines spill into water, the results can be far-reaching, long-term, and significant. Of greater concern is the increasing number of fatalities B most, but not all, of which occur in gas distribution systems. The tragic consequences of the pipeline incidents in St. Cloud and Bellingham B to name only two B underscore the need for unremitting attention to the potential impact of pipeline transportation on people=s lives. We are committed to improving the pipeline safety and environmental record.

Damage Prevention - the Foremost Challenge for Safe & Livable Communities

Given the challenges of growth, how do we ensure that pipelines contribute to making American communities what we all expect them to be - safe and livable. For most of us, the American standard of living means being connected to the vast underground web of pipes and wires. If we are to ensure that our communities are both safe and livable, we must find ways to protect these vital arteries without imposing onerous restrictions on other key activities. This Administration has consistently sought to empower the people who are most affected by an issue to develop bottom up, community-based solutions, and when it comes to making communities safer from pipelines, we are taking a bottoms up approach.

The Research and Special Programs Administration=s (RSPA) Office of Pipeline Safety (OPS) has used this common sense approach to problem solving, most recently in the area of outside force damage. Despite the success of state-based one-call systems, outside force damage continues to be the leading cause of disruption of pipelines and other underground utilities. Something new was needed -- a damage prevention initiative that worked better. Common sense says if you don=t

know the answer, ask a question. We asked people at the grassroots level what they have done that works to prevent damage to pipelines and telecommunications, electric, water and sewer lines. The level of response in two strategic initiatives has been tremendous.

First, in the area of public education, a Damage Prevention Quality Action Team has been working to develop and test a campaign that can help communities teach their citizens how to prevent damage to pipelines and underground utilities. Last month, Secretary Slater unveiled our new national public education campaign, called Dig Safely. The campaign highlights four critical damage prevention steps: Call Before You Dig; Wait the Required Time; Observe the Marks; and Dig With Care. We pilot-tested our campaign materials in Virginia, Georgia, and Tennessee from May to October last year. Results were very encouraging. The volume of calls to one-call centers increased significantly in all jurisdictions, and Virginia data shows a decline in excavation damage to natural gas pipelines. We plan to continue our work with the coalition of one-call organizations, facility operators, and others to promote the Dig Safely campaign nationwide over the next year.

In another strategic damage prevention initiative, more than 160 participants have volunteered their time and expertise over the past year to identify and document best practices in preventing damage to underground facilities. The result of this effort is the first document of its kind, a compendium of best practices in one-call systems and damage prevention programs throughout the country. The report of best practices is aptly titled Common Ground. The term captures the sense of collective interest. Like the Safe and Livable Communities initiative of which it is part, this damage prevention initiative is based on communities deciding which solutions best fit their needs, with the federal government providing leadership, information and assistance.

The teams that produced Common Ground and the Dig Safely campaign are both good models for communities to consider as they prepare to meet the challenges of growth. Successful strategies involve extensive cooperation and communication among a broad range of stakeholders. Just as we sought participation from railroad and highway departments, water departments, telecommunication, public utilities, contractors, state agencies, labor and so on, so should efforts at the community level.

As a follow-on to the Common Ground report, we will be implementing a new

grant program authorized by Congress in the Transportation Equity Act of the 21st Century to assist communities in reducing damage to underground facilities. Grants can be used to improve the operational efficiency of one-call centers, marking and locating techniques, design and planning practices and other techniques identified as best practices in the Common Ground study. The Transportation Equity Act for the 21st Century authorizes $1 million in fiscal year 2000 and

$5 million in fiscal year 2001 for grants.

The Secretary has announced the Department=s commitment to furthering the excellent beginning of Common Ground with follow-on efforts to encourage implementation of the best practices and identifying and promoting other innovative approaches to advance underground damage prevention.

We believe the spirit of cooperation and enhanced communication flowing from our Common Ground and Dig Safely initiatives will greatly stem the problems posed by damage done to underground life lines. We also believe that participation of all concerned parties in the one-call system is critical. We have established regulatory requirements to promote widespread participation of all concerned parties in the one-call system. Finally, let me stress that we support using the entire range of options to promote damage prevention -- education, positive incentives, and, where appropriate, enforcement and other negative consequences. We want to use all available tools to prevent occurrences like the one in Plummer, Minnesota, where 5700 barrels of petroleum leaked from a pipeline after it was struck, and then covered up, by an excavator who failed to use one-call.

Preventing Corrosion

The second leading cause of pipeline failure and threat to the safety and livability of communities is corrosion. While statistical analyses indicate the rate of incidents may be beginning to decline, we think the record warrants attention and indicates reasons to improve our corrosion control standards. We are especially interested in evaluating the best long term corrosion control measures to determine if there are better means of further reducing corrosion. We expect to make the regulations more effective, more encouraging of modern practices, and more encouraging of any new

alternatives that might improve performance.

To this end, we have held several public meetings to invite comments and participation in resolving how our corrosion control regulations should be changed to make them clearer, more effective, and compatible with new technology. The comments we are receiving, as well as recommendations from the National Transportation Safety Board, indicate that additional definition to the hazardous liquid corrosion regulations would improve their effectiveness. We are currently working with state agencies to complete our assessment of the need for changes in the hazardous liquid regulations. Our assessment of the need for any modifications to the natural gas pipeline regulations will be completed in the fall.

Addressing Human Error

At the same time that we are working to reduce failures caused by outside force damage and corrosion, we need to address another important and preventable cause of failure -- human error. We believe it is particularly important to get the commitment of top management in pipeline companies if we are to succeed in making safety the first priority of every employee.

A qualified workforce will help reduce the likelihood and consequence of incidents caused by human error. We recently completed a regulatory negotiation on a comprehensive rule requiring that individuals performing safety-related tasks on pipeline facilities are fully qualified to perform those tasks. This rule will require pipeline operators to develop and maintain a written qualification program that assesses the ability of each worker. This assessment may include written examination, oral examination, on-the-job training, testing, simulator training or other means. An emphasis is placed on pipeline workers= reactions to abnormal operating conditions. Our agency has begun working with operators individually and in workshops to develop training

programs so they can meet compliance dates. Although this rule goes far in addressing human error, we have also begin to look at the possible contributions to pipeline incidents from other human factors such as fatigue.

Considering Material Defects

The last of the four leading causes of pipeline failure is material defects. Material factors may be our next greatest challenge in improving communities= protection from pipelines due to the diversity of issues and complexity of technical questions concerning this subject. RSPA is leading an interagency workgroup investigating development and application of advanced materials for transportation to help evolve the science in this area. This issue is important to understand, particularly related to hazardous liquid pipelines, because the size of spills from this failure mode, and the consequences of these spills, can be very serious.

Defective welding and defective pipe are cited as the cause in about fifteen percent of liquid incidents over the past five years. Issues we are researching include fatigue behavior of dented and gouged pipelines and the extent to which pipe leaks before it ruptures. We plan to continue to investigate pipe strength for opportunities to learn and improve in this area.

In gas distribution systems, the material quality issue on which we are most focused is the long term performance of plastic pipe. While the use of plastics in distribution systems has increased significantly in the past decade, and incidence of failure has remained relatively low, valid questions have been raised about the susceptibility of older pipe to brittle-like fractures. We have issued several advisory bulletins to warn operators of this potential problem. We have a new research effort underway to analyze plastic pipe performance and the adequacy of our regulations in this area.

On April 7, 1999, RSPA proposed to adopt a safety performance standard for the repair of corroded or damaged steel pipe in gas or hazardous liquid pipelines. Currently, safety standards specify particular methods of repair. Operators must get approval from government regulators to use innovative repair technologies. We expect to publish a final rule this summer that will encourage technological innovations that may reduce repair costs without reducing safety.

PROTECTION OF THE ENVIRONMENT

I would now like to discuss what we are doing to enhance environmental protection. The pipeline safety regulations currently contain a comprehensive set of design, construction, operation and maintenance standards intended to prevent releases of oil to the environment. Operators must inspect and test systems which prevent corrosion, mainline valves, welding, and overpressure protection devices.

Operators must periodically patrol lines to check for evidence of leaks or encroachment and monitor operational data on pipeline pressure and product flow. We review written operations and maintenance plans and may require an operator to change the plan and to adhere to it. In addition, we have oil spill planning requirements by which operators must assess the risk of each segment or section of pipeline, calculate worst case spill volumes and scenarios, and take relevant protective and preventive actions specific to the environmental sensitivity of the area. These activities are intended to prevent spills, mitigate the amount and impact of product spilled in the event of a release, and accelerate the recovery of the spilled product.

To enhance our protection of those areas where a spill would cause irreparable harm, we are identifying those geographic areas which are most critical to provide supplemental protection beyond our existing requirements. Once we have identified them, we can evaluate what additional protections would be effective. For example, though RSPA has not found substantial justification for widespread use of remotely-controlled valves, we are reviewing the possibility of their use in densely populated and unusually environmentally sensitive areas (USAs). We will hold a public meeting to explore the use of these valves or the availability of alternatives that provide equal safety, once USAs are defined.

While we are expert in the integrity of pipelines, we do not have extensive environmental expertise. In order to determine the geographic areas most in need of supplemental protection, we have extensively consulted with other federal and state agencies, industry, and environmental experts from organizations such as The Nature Conservancy, about how to define areas unusually sensitive to environmental damage (USAs) from hazardous liquid pipelines. We have found that this definition and identification process is very difficult and takes a great deal of time and effort by many organizations. After years of work, we have produced a model to identify and designate USAs accurately on maps. We are evaluating the process through field pilot tests in the states of California, Texas and Louisiana, in conjunction with the American Petroleum Institute. These states house 45% of the nation=s hazardous liquid pipelines. To illustrate the extent of the effort, in the state of Texas alone, there are over 10,000 data points on drinking water systems which must be verified and reviewed. We are putting all this information in a digital data base that meets our own needs and those of state agencies, industry and the public for a usable process upon which to base decisions on additional protection.

RSPA plans to publish a Federal Register notice on the results of this pilot late this summer and we hope to use it to move forward on a definition of USAs soon thereafter.

Mapping

The Department is building a National Pipeline Mapping System to provide government and the public with the information it needs to help manage pipeline risk, respond to pipeline incidents, and generally improve protection of public safety and the environment. Our goal is to collect 70% of the natural gas transmission and liquid trunk line data by the end of the 2000 calendar year.

The Department, with a government and industry team, created the first national pipeline locational standard for the National Pipeline Mapping System. These are compatible with U. S. Geological Survey standards. This standard was pilot-tested by 22 operators and 10 states. Pilot participants indicated the standard was understandable and could be met with minimum burden. We have since awarded cooperative agreements to nine states to serve as data repositories as part of the national mapping system. They will process the information for pipelines and LNG facilities within their boundaries. We are expecting the vast majority of operators to submit their data on a voluntary basis over the next two years, and we are working with the major trade associations to secure this participation. We also awarded a contract to a national repository to collect, manage and distribute the data received from pipeline operators and state repositories.

We work with the Environmental Protection Agency, the Department of the Interior and other Federal and state agencies to obtain or create databases on environmental resources, population, natural disaster probability, and national resources so that we can prioritize where additional prevention actions should be taken. Once the Department has completed a definition of what unusually sensitive areas are, they will be depicted graphically via our National Pipeline Mapping System in relation to pipelines, populated areas, political boundaries, and other geographic features. This data will enable government and industry to better evaluate what protections are needed.

Our regional offices and headquarters are now equipped with the best pipeline information available, natural disaster probability and consequence data, environmental data, and other data to better inform our deployment of resources for

inspection, regulatory analysis, and emergency response.

EMERGENCY RESPONSE AND PREPAREDNESS

RSPA requires all operators to assess risks on their pipelines and to operate and maintain them in a safe and environmentally sound manner that prevent failures. In the event that the best prevention strategies fail, maintaining effective response plans and capabilities is critical to keeping our communities safe and livable. We have requirements for emergency preparedness in both our oil pollution program and pipeline safety program, and we have taken an active approach to working with companies to assess and plan for problems associated withY2K concerns.

Working together on many response planning activities spurred by the Oil Pollution Act of 1990, government and industry are reducing the environmental consequences of oil spills from pipelines. We work closely with the U.S. Coast Guard and the Environmental Protection Agency in the program to improve industry and governments= capability to immediately and effectively respond to an oil spill. On a regular basis, we review and approve pipeline facility response plans and work with operators and response agencies to test these plans. We conduct two to three area-wide full equipment deployment exercises each year, and 20 tabletop exercises to address issues at the strategic level. Improving awareness of specific strategies to protect environmental areas, improving communications between responders, and integrating all responders= understanding of command and control structures are critical objectives of these exercises. State pipeline safety and environmental agencies participate in all these exercises.

In addition to these oil spill response requirements, pipeline safety regulations for gas and oil pipelines also protect communities by requiring pipeline operators to plan for pipeline emergencies. The pipeline safety regulations require natural gas and hazardous liquid operators to establish written emergency plans which require establishing and maintaining communication with fire, police and other public officials, providing prompt and effective response to emergencies, maintaining adequate tools and equipment to respond to emergencies, establishing safe emergency shutdown procedures, establishing procedures for achieving a safe condition from the emergency, and returning the pipeline to normal operation following an emergency. Operators must also establish a continuing public education program near the operator=s facilities so that the public can recognize a pipeline emergency and report such emergencies to the pipeline operator and the

appropriate public officials.

Addressing Y2K Concerns

We all know that the year 2000 (Y2K) has the potential for serious disruptions in the transportation of oil and gas and other services that would threaten our communities= well-being. Government must ensure that there is the appropriate level of industry/government cooperation, public awareness, and sharing of information on issues and solutions. We must ensure that companies are actively addressing identified problems. We are working with the Energy Sector, Oil and Gas Workgroup of the President=s Council on Y2K Conversion to efficiently integrate public and private sector efforts and to notify all pipeline operators about Work Group activities. On a quarterly basis, the Work Group provides industry status reports, and we follow up on these with enhanced contingency planning efforts where attention is warranted.

We recently published a Federal Register Notice clarifying our compliance policy, indicating that we will pursue enforcement against companies that failed to prepare for Year 2000 problems and experience a Year 2000 failure. We continue coordinating with the Council Sectors on Transportation, Environment, Emergency Services, Telecommunications and Electricity to share information, facilitate solutions and plan for contingencies. We have distributed an advisory bulletin to the industry and our state partners outlining the problem, the Work Group strategy, and government contacts for companies needing advice. We also provide similar information during our inspections. We are keeping our state partners informed and are monitoring their Y2K remediation activities.

State Programs

Since the inception of the pipeline safety program, Congress intended a common stewardship and protection of the more than 2 million miles of pipelines shared between the Federal and state governments.

States take jurisdiction over intrastate transmission and distribution pipelines. Unfortunately, over 75 percent of incidents involving fatalities occur in distribution pipelines, which are located in densely populated areas. In addressing the highest risks, oversight activities at the state level become of critical importance. We support the states through a wide variety of actions such as pipeline safety grants,

regulatory training, and limited funding to facilitate their participation in several RSPA initiatives.

CONCLUSION

Since the 1996 reauthorization, we have moved increasingly to a program based heavily on risk that incorporates cost-effective regulation and targeted compliance activities. Consistent with this approach, we focus on addressing the leading causes of pipeline failure, most notably outside force damage. We have challenged ourselves, and the utility and transportation industries, to work with communities to enhance collaborative damage prevention programs. We have set a formidable goal and aim to reduce the number of pipeline incidents resulting from outside force damage by 25% over the next three years. The only way we can reach this goal is if all of us work together on long term, community based partnerships for safety and protection of the environment.

Thank you, and I would be pleased to answer any questions you might have.

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Testimony of

Jim Hall, Chairman

National Transportation Safety Board

before the

Committee on Transportation and Infrastructure

Subcommittee on Economic Development, Public buildings, Hazardous Materials, and Pipeline Transportation

House of Representatives

Regarding

Pipeline Safety

July 27, 1999

Good morning Mr. Chairman and Members of the Committee. I am pleased to represent the National Transportation Safety Board before you today to discuss pipeline safety issues. Because of Board activity over the past ten days, I have not had an opportunity to share this statement with the Board's other members and, therefore, the comments below do not have Board concurrence.

Before I begin, I would like to update the Committee on the status of the Safety Board's investigation of the pipeline rupture that occurred June 10, 1999, in Bellingham, Washington, that resulted in the release of approximately 250 thousand gallons of gasoline. The released gasoline flowed down a creek and ignited, resulting in three deaths as well as property and environmental damage. Safety Board investigators were on-site for over a month because of several difficulties. Exposing and conducting an initial examination of the failed segment of pipe was complicated, because gasoline continued to seep from the failed pipeline and fueled lingering fires at the rupture site. In addition, the failed segment of pipe was within a water treatment plant yard.

The gasoline pipeline crossed directly underneath major water pipelines that supplied water to portions of the city and its surrounding areas. Because of the need by pipeline company and city officials to construct a temporary pumping station to bypass the damaged pumping station and allow the water pipelines to be excavated, excavation of the ruptured pipeline was delayed. Further, the ability to gather information from key pipeline company personnel was complicated because they declined be interviewed by Board investigators. We have, however, collected a large amount of information, including the electronic data from the pipeline company's operating system, that will help us assess the conditions leading up to the accident.

The investigation is still in its early stages; however, we will closely examine the failed segment of the pipeline, the design and operation of the pipeline, the adequacy of pipeline company and federal inspection procedures, as well as the actions and training of the pipeline controllers.

I would now like to discuss general pipeline safety issues. As the Federal regulatory oversight agency for pipeline safety, the Research and Special Programs Administration (RSPA) plays a crucial role. It is the Board's view, however, that RSPA has not responded as aggressively as we and the American people would expect. RSPA's implementation rate of pipeline safety recommendations is 68.9 percent, the lowest acceptance rate of any modal administration in the Department of Transportation. We do not think this low percentage is a result of ill-conceived recommendations. In fact, the acceptance rate of our pipeline safety recommendations issued to the pipeline community as a whole is 86.9 percent.

RSPA's acceptance rate of Safety Board recommendations also reflects the tenuous relationship between our two agencies over the years. In an April 14, 1998, letter to Secretary Rodney E. Slater I stated: "… I am … troubled by OPS' lack of concern and responsiveness to open pipeline safety recommendations issued by the Safety Board. OPS had not provided any written update on actions taken on some of these recommendations since 1992. In October 1997, the NTSB requested such an update on 28 recommendations in preparation for upcoming investigations reports. As of this date, we have received updates on only 7 of these recommendations."

We believe that RSPA's lack of action continues to place the American people at

risk. Ms. Kelly Coyner, the new RSPA Administrator, has met individually with our Board members and has made a commitment to improve RSPA's response rate to Safety Board safety recommendations. As a result, we have seen improvement in some areas. However, we are still concerned about the lack of timely action on some much needed safety improvements, and we feel the areas listed below need improvement:

- pipeline integrity;
- training;
- corrosion protection;
- controlling the operation of a pipeline;
- valve automation; and
- excavation damage prevention.

Pipeline Integrity

The continued operation of pipelines with integrity problems is a recurring issue in accidents investigated by the Safety Board. There are over 1.7 million miles of natural gas pipelines, and over 165,000 miles of liquid pipelines crisscrossing this country. A mechanism needs to be in place to find problems with these pipelines before defects can grow to a critical size and result in catastrophic failure.

In 1987, as a result of investigations into three pipeline accidents (in Beaumont, Kentucky; Lancaster, Kentucky; and Mounds View, Minnesota), the Safety Board recommended that RSPA require that pipeline operators periodically determine the capability of their pipelines to safely operate by performing inspections or tests capable of identifying corrosion, mechanical damage, or other time-dependent defects that could be detrimental to the safe operation of pipelines. Since the Safety Board recommended this action, RSPA has been studying the issue, but has yet to reach any conclusions. Due to the length of time that has passed without final RSPA action, the Safety Board in June of this year classified its recommendation as "Open—Unacceptable Response."

In 1996, nearly a million gallons of fuel oil were released into the Reedy River near Fork Shoals, South Carolina, when a corroded section of pipe ruptured. Also in 1996, almost 500 thousand gallons of gasoline were released into marsh land and the Blind River near Gramercy, Louisiana, when a damaged section of pipeline ruptured. Both of these failures occurred at time-dependent damage locations.

In addition, the Safety Board is currently investigating two other pipeline accidents with potential pipeline integrity problems that occurred this year. One is the Bellingham, Washington, pipeline accident where we found indications of previous external mechanical damage in the vicinity of the rupture. The other occurred in February in Knoxville, Tennessee. Approximately 45,000 gallons of diesel fuel were released into the Tennessee River. In the Knoxville accident, we are also studying the effects of corrosion and metal fatigue on older pipe.

Training Of Pipeline Personnel

The Safety Board has long been concerned about the need to adequately train personnel in all transportation modes, including pipeline. In 1987, after several pipeline accidents in which inadequate training was an issue, the Safety Board recommended that RSPA require operators to develop training programs for pipeline personnel. After 11 years had passed since the recommendation was issued without final action, the Safety Board classified the recommendation as "Closed—Unacceptable Action."

However, inadequate training continues to be a factor in pipeline accidents. In the 1996 Fork Shoals, South Carolina, pipeline accident, the Safety Board found that pipeline controllers had been inadequately trained to recognize and handle emergency conditions. In that accident, the controller mistakenly shut down a pump station, failed to recognize his mistake, and continued to operate the pipeline after it ruptured. As mentioned earlier, this action resulted in the release of nearly one million gallons of fuel oil into the Reedy River.

On November 21, 1996, a pipeline accident in San Juan, Puerto Rico, resulted in 33 fatalities and 69 injuries. Our investigation determined that the gas company’s employees were not properly trained to survey, pinpoint, or test for pipeline leaks, and failed to locate a reported leak before the explosion occurred. In January 1998, the Safety Board recommended that RSPA complete a final rule on employee

qualification, training, and testing within one year.

In October 1998, RSPA published a Notice of Proposed Rulemaking (NPRM) to require pipeline operators to develop a written qualification program for individuals operating pipelines. Although the Safety Board was told that the rule would meet the intent of our recommendation, it does not. The NPRM does not establish training requirements for personnel. Rather, it allows a company to evaluate an individual's ability to perform tasks using such methods such as oral examinations, or observations of on-the-job performance.

As you are aware, Mr. Chairman, observation of on-the-job performance is a routine supervisory function. The Safety Board believes that strong training and testing requirements are needed to ensure that employees can properly perform their tasks. Tests must be administered in conjunction with training so that an objective assessment can be made of the training's success. In January 1999, the Safety Board provided comments to RSPA on this rulemaking and again urged RSPA to amend its final rule to require that individuals be trained, that they be tested to assess the success of the training, and that they be periodically retrained and retested. In February 1999, the Safety Board classified its recommendation as "Open—Unacceptable Action," because the NPRM does not require adequate training or testing. At this point, we are still awaiting RSPA's final rule.

Corrosion Protection

The third area of concern I would like to discuss is the lack of adequate requirements for corrosion protection on pipelines.

The Safety Board investigated a pipeline accident that occurred in Lively, Texas, on August 24, 1996, that sent a butane vapor cloud into a residential area. The resulting fire killed two residents. The Safety Board concluded that the pipeline was inadequately protected from corrosion. In addition, the Safety Board identified weaknesses in federal regulations concerning corrosion protection, and in November 1998, we recommended that RSPA strengthen these requirements. For example, the Board recommended that RSPA provide performance measures so that one would know when an acceptable level of corrosion protection exists. Based on information provided in meetings by RSPA staff, we are encouraged that RSPA will soon take action on this issue.

Valve Automation

The fourth area I would like to discuss is the need to limit the release of product into the environment following a pipeline rupture. The increased use of valve automation to protect public safety and the environment by reducing the consequences of pipeline failures has been a long-standing concern of the Safety Board. We first addressed this issue 29 years ago in a study entitled *Effects of Delay in Shutting Down Failed Pipeline Systems and Methods of Providing Rapid Shutdown*.

Since then, there have been a number of additional accidents which have highlighted the need to reduce the release of product. On July 8, 1986, in Mounds View, Minnesota, gasoline spewed from a pipeline and flowed down a city street before igniting and seriously burning three people, two of whom later died. The Safety Board found that the pipeline operator could not promptly stop the release of gasoline.

On March 23, 1994, in Edison, New Jersey, a high-pressure natural gas pipeline exploded and a fire ensued. Heat from a fire then ignited several building roofs in an apartment complex. The Safety Board again found that the inability of the pipeline operator to promptly stop the flow of natural gas contributed to the severity of the accident. In February 1995, the Safety Board recommended that RSPA expedite requirements for rapid shutdown of failed pipeline segments on high-pressure pipelines in urban and environmentally sensitive areas. RSPA held a public workshop on this subject later in 1995, and they continue to study this issue. Although RSPA still does not require these systems, we are pleased that several pipeline companies have voluntarily put in valves that allow them to rapidly shut-down failed pipelines.

In an accident that occurred in May 1996 near Gramercy, Louisiana, it took the pipeline company approximately 4½ hours to manually close the valves on either side of a ruptured pipeline. Almost 500 thousand gallons of gasoline were ultimately released into the environment. In September 1998, the Board recommended that the pipeline operator evaluate and install a higher degree of valve automation into its pipeline system. The pipeline operator has advised the Safety Board that it is using risk management principles to evaluate existing valves to automate. The company also plans to install this technology into a new pipeline that may run from Kenova, West Virginia, to Columbus, Ohio.

Mr. Chairman, this technology is available and is obviously being used. But we should not have to rely on the industry's altruism. RSPA needs to finally act to require the installation of these systems to limit the release of product from major pipeline ruptures before the next accident, the next environmental release, and the next death occurs.

Excavation Damage Prevention

As you may know, excavation damage is the leading cause of pipeline accidents. This issue was added to the Safety Board's "Most Wanted" list of transportation issues in 1997, and in December 1997, we published a study entitled *Protecting Public Safety Through Excavation Damage Prevention*. As a result, the Board issued 26 recommendations aimed at improving excavation damage prevention covering such areas as:

- technology to accurately locate and mark underground facilities;
- training and educating of excavation personnel;
- use of data to evaluate programs; and
- enforcement of damage prevention programs.

RSPA has taken some steps in excavation damage prevention. At Congress' direction, in June RSPA held a joint symposium on excavation damage with the Safety Board. In addition, it has forwarded to Congress a report on best practices for preventing damage to underground facilities. It is our understanding that RSPA will use the best practices to evaluate State damage prevention programs.

Closing

Let me close by saying that we are encouraged by commitments made by the new RSPA Administrator. She has advised she will be more proactive and will improve the Office of Pipeline Safety's responsiveness to our safety recommendations, and we look forward to better communications with RSPA regarding the Board's recommendations.

Mr. Chairman, this concludes my testimony. I would be happy to answer the Committee's questions.

STATEMENT OF

STEVEN BALL

SENIOR VICE PRESIDENT AND GENERAL MANAGER

WILLIAMS ENERGY SERVICES

FOR THE

ASSOCIATION OF OIL PIPE LINES

AND THE

AMERICAN PETROLEUM INSTITUTE

BEFORE THE

ECONOMIC DEVELOPMENT, PUBLIC BUILDINGS, HAZARDOUS MATERIALS, AND PIPELINE SAFETY SUBCOMMITTEE

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

U.S. HOUSE OF REPRESENTATIVES

July 27, 1999

I am Steve Ball, Senior Vice-President and General Manager of

Williams Energy Group. Williams Energy Services operates, through wholly owned subsidiaries, 30,366 miles of pipelines carrying crude oil, liquid propane gas and refined petroleum products, including gasoline, jet fuel, diesel fuel, heating oil and kerosene. Our facilities operate in 17 states: Arkansas, Colorado, Illinois, Kansas, Minnesota, Mississippi, Missouri, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah, Wisconsin and Wyoming. I am here today representing the Association of Oil Pipe Lines and the American Petroleum Institute.

The Association of Oil Pipe Lines (AOPL) is an unincorporated trade association representing 58 common carrier oil pipeline companies. AOPL members carry nearly 80 percent of the crude oil and refined petroleum products moved by pipeline in the United States. The American Petroleum Institute (API) represents over 400 companies involved in all aspects of the oil and natural gas industry, including exploration, production, transportation, refining and marketing. Together, these two organizations represent the vast majority of the U.S. pipeline transporters of petroleum and petroleum products.

America’s quality of life – including how and where we work and the leisure time we enjoy – would not exist as we know it if these pipelines did not exist. They are so fundamental to our national economy, that it is impossible to imagine an American society without them. While most pipelines are not visible, and their contribution is not generally understood, there is no question that they are essential to us all.

The 200,000 miles of U.S. interstate oil pipelines carry about 64 percent of the ton-miles of petroleum moved domestically. Chances are, the gasoline you put in your car got to you at least in part by a pipeline. Oil pipeline transportation is economical. In 1997 oil pipelines carried 17.3 percent of the intercity freight ton-miles at a cost of only 1.7 percent of the nation's intercity freight bill. Oil pipeline transportation has become even more economical over time. Oil pipelines' share of the nation's freight bill today is about half of what it was in 1980. That gallon of gasoline you pumped may have cost a dollar or more, but the pipeline contribution to its cost was less than two cents. For long distances where water routes are not available, oil pipelines are the only sensible mode of transport for significant volumes of petroleum. Oil pipelines have a good safety record. Deaths are very rare. For example, deaths are 87 times less likely to occur per gallon moved by pipeline than for petroleum carried by truck. Oil pipeline spills release a very small volume in relation to the enormous amount transported – about one-thousandth of one percent. Members of the public, those who use the products we transport, depend on us to supply these products as efficiently, effectively and safely as we can. It is a responsibility we take very, very seriously.

INTRODUCTION

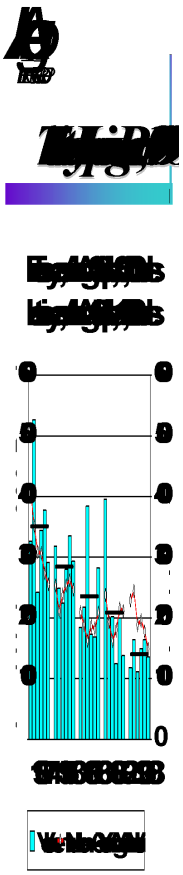
Pipeline safety and pipeline integrity are top priorities for the oil pipeline industry. The emphasis on safety and integrity is woven into the fabric of our corporate decision making and the industry-driven initiatives undertaken by our trade organizations. This emphasis has made pipelines the safest mode for moving

petroleum and petroleum products and one we are constantly striving to make safer. We believe no release of oil from our lines is acceptable.

The Department of Transportation's Office of Pipeline Safety (OPS) is a valued partner in this effort. We especially appreciate OPS's ability to bring industry and other affected interests together to work cooperatively to raise the overall level of safety. OPS has been an especially effective ally in our pursuit of excellence in the period since the last legislative reauthorization of the federal pipeline safety reauthorization in 1996.

It is important for the Committee to understand, as well, that our industry does not depend solely on the federal government or the Office of Pipeline Safety to tell us how to operate our pipelines in a safe and environmentally responsible manner. Compliance with OPS rules and regulations is only one aspect of our constant concern with effective management of safety and environmental risks. We must take responsibility ourselves for operating our pipelines safely and with respect for the environment. Our work is in the oil pipeline industry, but we are also citizens. We care about the safety of people, and we care about preserving the environment. We are determined to operate the safest possible pipeline systems, because this is the right thing to do as well as the smart thing to do. As a result, our companies frequently operate with more care than federal and state regulation would require. Our industry has often been on the cutting edge by developing the new technologies to inspect lines and enhance line protection and improving techniques for pipeline construction and repair.

A breach in pipeline integrity is a fundamental threat to our stewardship of this enterprise and its assets. A pipeline accident can cause injury or death and significant disruption to surrounding areas. For the company, it threatens the loss, for an unknown period of time, of the ability to control its entire enterprise. We simply must avoid these situations. We would do our very best to avoid them under any program of safety regulation.



The proof is in the results over the years. Real trends in safety performance take a long time to see. Three years or five years is not enough. Oil pipelines have a 30-year record, which shows a trend of constantly improving safety performance,

whether measured in number of incidents or volume released. The number of pipeline incidents has decreased by 40%, and the volume released has gone down by 60%. The oil pipeline record has improved, despite ever increasing volumes moving through our pipeline systems. Between 1977 and 1997, the volume of crude oil and petroleum products moved by liquid lines increased almost 13%. Pipeline safety has

been improving, and will continue to improve due in part to on-going work of the Office of Pipeline Safety and in part to industry efforts. Safety is improving because safety is a priority.

SUMMARY

With that introduction, I'd like to leave you with four principal points in my testimony today:

1. The public–private partnership approach of the OPS is working and should be continued and strengthened.
2. The current OPS program is making good progress under current law and at existing funding levels, which should be extended in real terms for four years.
3. The oil pipeline industry is moving forward with initiatives of its own to enhance safety and environmental protection results.
4. The OPS Risk Management Demonstration program is successful and promises safety and environmental results exceeding those available from existing regulations. Congress should find a way to allow risk management to be more broadly adopted in the OPS

pipeline safety program.

Congress and OPS should continue the good work already in progress and strengthen the public-partnership in our federal pipeline safety program.

Congress has done an excellent job with the two most recent pieces of pipeline safety legislation that have become law. Both these efforts had strong bipartisan support. Most recently, in the 105th Congress, the Comprehensive One-Call Notification legislation was enacted as part of the Transportation Equity Act for the 21st Century. The leading cause of large volume releases from oil pipelines is inadvertent damage during excavation. The One-Call legislation you enacted directly addresses this cause. The Common Ground Initiative is the first fruit of this statute. A broad spectrum of public and private participants from a number of industries and jurisdictions, many of which are not subject to DOT regulation, worked on a voluntary basis to identify best practices in underground damage prevention. These participants now plan to join this effort with the Dig Safely Campaign, another public-private partnership led by OPS to promote public awareness of underground damage prevention. Our hope is that the present government–private partnership can continue the work of Common Ground and Dig Safely through an entirely private cooperative effort with the goal of reducing the incidence of excavation damage to underground facilities. This effort would include excavators and one-call notification centers, owners of telecommunications facilities, internet cable,

television cable, electric power and water and sewer lines, in addition to pipelines.

The success we have seen in the implementation of the One-Call legislation follows naturally from its predecessor, the Accountable Pipeline Safety and Partnership Act of 1996. Both these laws stress a system of cooperation between government and industry rather than an inflexible regime of command and control. This approach produces results. Since enactment of the 1996 amendments a regulatory logjam has broken. Rulemakings that were languishing have moved forward. New initiatives are making progress rather than bogging down in political gridlock. We believe the record shows that the cooperative model works. We urge the 106th Congress to support and strengthen partnership and cooperation in the federal pipeline safety program through the reauthorization legislation under consideration today.

The current OPS program is making good progress under current law and at existing funding levels, which should be extended in real terms for four years.

As part of the Accountable Pipeline Safety and Partnership Act of 1996, you reviewed and restructured outstanding regulatory mandates with OPS to enable OPS to concentrate on those requirements that would do the most to move safety forward. Since that time, OPS has worked diligently to develop and adopt standards and regulations through negotiated rulemakings with the input of all stakeholders. While this process sometimes takes longer than traditional command and control regulation, the

results have been regulations that all agree avoid protracted legal challenge, make sense, and truly enhance safety and environmental protection.

Examples of the rulemakings that have reached a final rule or are actively moving forward are:

- Adoption of aboveground storage tank standards

- Improving corrosion standards

  - Development of new excavator damage prevention initiatives
  -
  - Implementation of the mapping initiative
  - Defining Unusually Sensitive Areas
  - Determining operator qualification requirements

We do not recommend major change in the pipeline safety program in the 106th Congress. We just need to keep the progress coming in what is basically a well-run program. We pay for OPS through user fees. We think the current level of authorization for the OPS program is about right and should be extended in real terms for at least four more years. A full four-year extension will provide ample time to develop an adequate record of the results of the 1996 reforms.

H.R. 1378, reported earlier this year by the House Commerce Committee, extends the OPS program for two years rather than four. We did not oppose the Commerce Committee's bill. We favor a four-year extension and believe that is the right policy,

but we can certainly live with a two-year extension if that is Congress' wish.

The oil pipeline industry is moving forward with initiatives of its own to enhance safety and environmental protection results.

Our industry has a number of our own initiatives aimed at raising the performance bar for our companies.

First, we sought to understand the existing data on the safety and environmental impact of oil pipelines. We have undertaken a comprehensive review of available federal data on past pipeline spills to determine what this data can teach us about pipeline accidents. Our widely-recognized report "The U.S. Oil Pipeline Industry's Safety Performance," prepared by Allegro Energy Group, is attached to our testimony for inclusion in your hearing Record. We intend to add results as new data becomes available to keep this report current. Any interested member of the public may obtain a copy of this report at the AOPL web site at www.aopl.org/safety/report.pdf.

Second, we set the stage to obtain better quality data in the future. Our companies have begun an ambitious program to voluntarily report to API internal data that will focus on a wider range of accidents and the causes and frequency of smaller spills – including those that are not required to be reported to either the federal or state governments. You can't manage what you don't measure. We are investing resources to create a more comprehensive database because we believe we will be able to

use it ourselves to help our companies to reduce the number, size and impacts of spills. We will be reporting on this database as it accumulates entries.

Third, we sought to understand what makes a good pipeline safety and environmental protection program. We are providing today the first copies of our new report, "The Environmental and Safety Programs of Oil Pipeline Companies: A Prevention Ethic." This report profiles the programs of five member companies and draws lessons we intend to use to improve the programs of all companies. This report will be available at our website.

Fourth, we have begun a project to learn how to communicate better. We expect this effort to benefit our communications: among ourselves; with our employees; with our right-of-way neighbors; with the public affected by pipeline construction, expansion, or conversion; with policymakers and with the activist community. Only one of these efforts is required by regulation. All companies must engage in efforts to communicate with adjacent landowners. We have used periodic mailings, door-to-door visits and community meetings. These efforts have often been less effective than desired. Our new communications plan is intended to improve outreach to the public. It will be designed to enhance understanding of pipelines, help the public recognize pipeline markers, to understand the signs of a pipeline leak and to report any situations to officials.

The Risk Management Demonstration program you authorized in 1996 is a success, and the 106th Congress

should find a way to permit application of these powerful principles more broadly in the program.

Four oil pipeline risk management demonstration projects are in operation. Each project is described in the testimony below. OPS is carrying out these projects in a completely open fashion. Anyone with access to the internet can find all the detail they want on the OPS website http://ops.dot.gov under PRIMIS (Pipeline Risk Management Information System). As additional information on this program, we have attached to this statement a copy for your hearing record of "Beyond Compliance: Creating a Responsible Environment that Promotes Excellence, Innovation, and Efficiency." This progress report on the OPS Pipeline Risk Management Demonstration Program was prepared by OPS, API and the Interstate Natural Gas Association of America (INGAA).

The bottom line is that this is an excellent nuts-and-bolts program that offers the regulator the chance to really learn how pipeline systems operate and what are the risks. The program explores new and different ways to enhance pipeline safety and provides practical, enhanced protection above that required by existing regulations. We believe these improvements could be spread throughout the OPS program with your help. We also believe systematic and widespread recognition by federal regulators of risk management would lead to a far more effective and efficient regulatory program.

DISCUSSION

With that summary, the remainder of my testimony will further describe the interaction between the pipeline safety program and our companies' own programs to manage safety and environmental risks. I will also include remarks on our efforts to address the Y2K issue.

COOPERATION BETWEEN INDUSTRY AND OPS

Under current law, current practice and under the current management at the Department of Transportation, the Office of Pipeline Safety is a positive force in our efforts to ensure safety and protection of the environment in oil pipeline operations. Often working in consultation with OPS, the industry has developed programs, training and operational standards designed to avoid spills. The Office of Pipeline Safety has recognized the effectiveness of these standards by adopting and incorporating them into OPS regulations.

It has been very helpful to have the Office of Pipeline Safety working with us in our safety efforts. OPS has been willing to provide guidance and recommendations on how to make industry's programs more effective. Congress facilitated this cooperative approach with the changes made to the Pipeline Safety Act through the 1996 reauthorization. We are here to commend you on these changes and to tell you that they are working. They are having a noticeable and positive effect on safety and environmental protection.

The 1996 reauthorization added two important new elements to the pipeline safety program. First, it enhanced the effectiveness

of pipeline safety regulation by requiring new safety regulations to undergo a risk assessment and cost benefit analysis based largely on President Clinton's Executive Order 12866. Second, Congress authorized OPS to carry out a Pipeline Risk Management Demonstration Project. Under this program, OPS could approve new company-designed processes to manage safety and environmental risks. As a result of an Administration directive, these risk management processes are designed to achieve superior results, significantly exceeding the level of safety that would be gained by compliance with existing standards. The goal was to enable the pipelines to use risk management tools to address the greatest threats to pipeline integrity on a specific segment of pipeline. Both the pipeline and DOT learn from these efforts how to better manage risks across pipeline systems.

IMPACT ON OPS REGULATIONS

The ideal of the risk assessment and cost benefit analysis is to achieve smarter, more effective regulations at a lower cost. In addition, Congress encouraged OPS and its stakeholders to work together to develop alternatives to traditional regulatory rulemaking by waiving the risk assessment and cost benefit requirement if a rule

-- is developed through negotiated rulemaking,

-- is a consensus rule,

-- adopts industry standards, or

-- is adopted with the consent of OPS technical advisory boards.

To their credit, OPS seized this opportunity to reach out to all stakeholders, including pipelines, on a number of regulatory mandates that had been languishing. By working together with the stakeholders using these alternatives to traditional rulemaking, a lot of good work has been done and a veritable logjam of initiatives that will promote safety and environmental protection has broken loose. The results are good, and the various stakeholders are enthused about them, as they should be.

EXAMPLES

Aboveground Storage Tanks Standards

In an effort to enhance safety and environmental protection at tanks along the pipeline system, the OPS decided to adopt new aboveground tank standards. The new regulations incorporate 13 consensus standards of the National Fire Protection Association and the API. The standards apply to design, construction, operation and maintenance of new tanks; repair of existing tanks; and spill prevention. The final rule was published in the Federal Register on April 2, 1999. See 64 Federal Register at 15926. These strong standards focus on prevention, not spill response, and should make the rare tank leak or failure even more remote.

Corrosion Standards

Late last year, the OPS began an intensive negotiated rulemaking on developing new corrosion standards for pipelines. Corrosion is the second leading cause of incidents on liquid lines and one we would like to see diminish. With participation by all stakeholders, and significant help from the National Association of Corrosion Engineers, the framework for the new rules was developed. The OPS has held a number of public hearings on the proposed rules and published the proposed rule for comments, which were due June 30, 1999. See 64 Federal Register at 16885 (April 7, 1999). The industry has participated in the process and believes the new corrosion rules will be both cost and operationally effective.

Excavation Damage Prevention

One of the greatest risks facing pipelines is encroachment from expanding urban populations. Pipelines laid in the ‘50s and ‘60s in largely rural areas are now part of our suburban landscape. The largest source of large volume pipeline releases are accidents caused by construction crews digging into the ground and inadvertently damaging the pipe with a mechanized auger, post hole digger, backhoe, or other excavation equipment. Even a nick in the specially coated pipes can lead to corrosion causing leaks years down the road. Despite conspicuous pipeline markers and regular mailings or visits by pipeline operators, many people are not really aware of their pipeline neighbors. In an effort to educate communities about pipelines, the OPS and industry have worked jointly on a more effective outreach effort.

The OPS and industry sponsored damage prevention quality action team (DAMQAT) included stakeholders from OPS, the pipeline industry, the states, the contractor community, the insurance industry and the general public. They worked together to develop a new campaign aimed at increasing awareness of pipelines in the excavator community and to increase community awareness of the presence of pipelines. Most pipeline operators already significantly exceed the minimum requirements for public education programs. We recognize the value of an educated citizenry both as pipeline facility neighbors and sources of valuable information about activities along pipeline right-of-ways, including potential or actual emergencies. The DAMQAT educational program tested its new outreach methods and messages in three states: Virginia, Georgia and Tennessee, to help judge the effectiveness of the program. According to a recently released report, calls to damage prevention centers in the pilot states are up and incidents are down.

Mapping Initiative

OPS and industry conducted a similar outreach effort to develop a national pipeline mapping system. OPS brought all the stakeholders to the table to form the Mapping Quality Action Team. The Mapping Team first developed requirements for a system of national maps useful to multiple members of the

federal family without costing any party an inordinate amount of money. Using standards built on those of the U.S. Geological Survey, the Team developed standards for national and state repositories of pipeline maps and other location information. The system, when complete, will show the location and selected attributes of all major pipelines. OPS then intends to add data layers to the mapping system. These layers could include population, unusually sensitive areas, natural disaster probability and high consequence areas, hydrography, and transportation networks.

Unusually Sensitive Areas

In implementing its responsibilities to identify areas along pipeline rights-of-way that may be especially sensitive to oil in the environment, OPS brought all stakeholders together to develop a set of guiding principles. These areas include drinking water resources and significant ecological resources. OPS conducted a series of meetings and workshops beginning in 1995 to develop criteria to identify those resources that constitute an "area unusually sensitive to environmental damage" (USA). The pipeline industry helped to sponsor these workshops. The OPS was successful in developing criteria for determining a drinking-water USA and has a proposed set of criteria for ecological resources. Because several federal agencies have oversight over the environment, a consensus definition of USAs has been difficult to achieve. It is particularly difficult to predict the impact such a definition might have once it is in place.

When efforts in the federal government stalled because the

federal agencies were not able to agree among themselves how best to proceed, the industry sought to move the process forward, and to test the definition developed through the workshop process. The pipeline industry, under the umbrella of the API, developed an industry guidance document on the definition and its initial use. This led to the development of a model which OPS and industry are currently testing in three states: Texas, Louisiana and California. Collectively, these states represent about 46% of liquid pipelines in the United States. They also encompass many potentially sensitive environmental areas. Government stakeholders, environmental groups and academia, as well as the industry will review the results of the three state pilot test.

The purpose of the test is to determine whether there is readily available, uniform data sources to support the requirements of the model, whether the model can be applied uniformly in other states, and whether the model results in a functional definition that lends itself to appropriate and consistent analysis throughout the United States. The model's effectiveness in identifying unusually sensitive drinking water and ecological resources from available governmental and environmental sources is crucial to implementation. The proposed model, the test results and the analysis of those results will be published for public comment in the fall. See generally 64 Federal Register at 38173 (July 15, 1999).

Operator Qualification

Little progress was made on DOT's operator qualification rule

until, following the 1996 amendments, the OPS initiated a negotiated rulemaking. OPS brought all stakeholders, including interstate and intrastate carriers, state safety officials, unions representing pipeline workers and standards organizations to the table for a negotiated rulemaking. A proposed rule was issued last October, comments on the draft Environmental Assessment for the rule were due July 6th and a final rule is expected shortly.

The proposed rule changes how pipelines qualify and evaluate their operation and maintenance personnel. The industry has sponsored a number of well-attended workshops to exchange information on defining an evaluation and qualification program for covered tasks. The workshops are designed to help the operator to develop a qualification program that meets the requirements of the proposed rule. The new operator qualification rule should enhance operation and maintenance personnel qualifications to meet or exceed existing industry efforts, all of which will be documented for the first time. As a result of the negotiation process, a good result was achieved in much less time than a traditional rulemaking takes.

RISK MANAGEMENT DEMONSTRATION PROGRAM

In an era when every dollar must count to its fullest potential, all of our companies have moved towards use of comprehensive risk management systems that continuously monitor the thousands of factors affecting pipeline operations and integrity to focus on the greatest risks. Many of these efforts go way beyond anything being requested or required by our safety partners in state and federal government.

The Office of Pipeline Safety has supported and encouraged these industry initiatives. Congress too recognized the potential effectiveness of these programs when it authorized the risk management pilot project in the 1996 reauthorization act. Four oil pipeline risk management demonstration proposals to the Department of Transportation are approved or are near approval. Each of these is summarized below. Details are available on the OPS web site http://ops.dot.gov under PRIMIS (Pipeline Risk Management Information System).

OIL PIPELINE RISK MANAGEMENT DEMONSTRATION PROJECTS

Equilon Pipeline (formerly Shell Pipeline)

This project was originally submitted by Shell Pipeline and has been continued after Shell and Texaco Trading & Transportation, Inc. joined to form Equilon in 1998. The 4-year demonstration project embodies a multi-faceted approach to enhancing Damage Prevention and Emergency Response with the goal of future expansion and integration company-wide. The pilot consists of a 260-mile segment of a 502-mile CO2 pipeline from Cortez, CO to Denver City, TX and a 205-mile segment of a 250-mile pipeline transporting ethylene from Deer Park, TX to Napoleonville, LA. Consistent with improved management of the risk of external damage, heightened emergency preparedness, and appropriate technical assurance, OPS – after thorough technical analysis - will allow Equilon to operate a 25-mile portion of the CO2 pipeline demonstration segment at a slightly higher pressure, achieving an approximate 20% increase in

throughput, without constructing a new mid-line pump station.

Mobil Pipe Line

Mobil will work with OPS to demonstrate application of Mobil's Environmental, Health and Safety Management System to achieve enhanced release prevention and tank integrity at Mobil's crude oil storage facility at Patoka, IL. OPS will get first-hand experience with how aboveground storage tank standards address the most important risks at tank facilities. These same standards were recently adopted into the pipeline safety regulations.

Phillips Pipe Line

The project will use Phillips' risk management system to enhance protection in connection with all company and third-party excavations along a 60 mile-long segment of both a 12" and an 18" refined products pipeline connecting Phillips Sweeny Refinery to its Pasadena, TX terminal.

Chevron Pipe Line

The goal of this project is to demonstrate that application of Chevron's risk management program to two 330-mile-long 8" pipelines provides superior protection for the system. The Salt Lake Products Pipeline System carries refined products from Salt Lake City, UT to Boise, ID.

Each risk management demonstration project provides enhanced protection above that provided by existing regulations.

The Chevron, Phillips and Mobil projects involve no exemption from existing regulations. Equilon's plan provides for a variance (which could be received under existing OPS regulations) to accomplish the pressure increase on the 25-mile portion of the CO2 line. Equilon and OPS both believe the risk control activities proposed under the project provide superior safety for both lines.

The primary benefit of these projects is the knowledge gained by OPS about how to achieve protection in excess of that provided by current regulations in specific real world situations. For example, in the Mobil project, the OPS will learn lessons about storage tank standards that can benefit the entire program. An additional benefit for our companies is that we obtain validation from our regulators that the application of the risk management techniques we use and believe in provide enhanced protection according to the regulators' metrics.

REAUTHORIZATION

The liquid industry believes the Office of Pipeline Safety has an excellent program. Since the program is primarily funded with user fees, this is not lightly stated. The industry believes the current level of staffing is appropriate for the responsibilities of that office and support continuation of the program at the present level.

The risk assessment and cost benefit analysis and the regulatory alternatives created under the last reauthorization have

revitalized the pipeline safety program and offer the promise of making it much more efficient and effective in using resources made available to OPS. The regulators are talking to all parties affected and the response has been overwhelming. Communication has become a real dialogue that is truly moving the safety program forward.

The risk management demonstration project is still in a fairly nascent stage but initial results appear to be positive. The OPS has been cautious in moving the program forward, which is probably appropriate at this stage. As the public becomes more comfortable with the program and the parties learn more about each other, we expect the benefit to far exceed the cost. We need to continue these good efforts.

The bulk of the OPS program is funded through user fees paid by the gas transmission and liquid pipeline industry. The user fee is assessed based on mileage of pipeline. We have a keen interest in keeping the OPS program as efficient as possible. The current program is working well. The oil pipeline industry supports continuing the current funding levels in real terms.

Y2K COMPLIANCE

As the world moves towards the year 2000 and concern grows over the ability of the industrial community to function due to the "millenium bug," the pipeline industry and the OPS have been in the forefront in addressing the problem. Last summer, the President’s Council of Y2K Compliance tasked the Federal Energy Regulatory Commission with the job of assessing the oil

and gas industries' state of readiness. By August, the industries, the FERC and the OPS had developed and agreed upon a survey best aimed at achieving that answer. John Koskinen, who leads the Presidents Council, has referred to the oil and gas working group as the Council's best example of a successful working group. Working as one and sharing mailing lists to achieve the greatest level of dissemination, the industry survey went out. We now have surveys for the last three quarters under our belt. The response to the survey has been phenomenal, with almost a 94% response rate. The most recent survey shows that industry is in the final stages of their Y2K repair programs. The results can be viewed on the web site http://www.api.org. Substantial progress also has been made by the joint effort with suppliers of two critical services to the industry – electricity and telecommunications – including the development and release of a technical paper on Y2K strategies for managing interdependencies among these key infrastructure sectors.

The industry focus during the current quarter will be on completion of testing and audits of operations and embedded systems, contingency planning, and communication with the public. Companies continue to share technical, testing and planning information through the API and other industry trade groups.

CLOSING

I want to thank the Subcommittee for moving the reauthorization of this vital program so expeditiously. We want to work with you to achieve a successful, bipartisan reauthorization. The

public-private partnership for safety and environmental protection developed under the 1996 amendments to the Pipeline Safety Act has made valuable contributions to public policy. If we work together we can make these benefits much more widely available.

STATEMENT OF

JOHN S. ZURCHER

MANAGER, PIPELINE SAFETY

COLUMBIA GAS TRANSMISSION CORPORATION

REPRESENTING THE

INTERSTATE NATURAL GAS ASSOCIATION OF AMERICA

(202) 216-5900

BEFORE THE

SUBCOMMITTEE ON ECONOMIC DEVELOPMENT, PUBLIC BUILDINGS, HAZARDOUS MATERIALS AND PIPELINE TRANSPORTATION

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

U.S. HOUSE OF REPRESENTATIVES

REGARDING THE

FEDERAL PIPELINE SAFETY PROGRAM

July 27, 1999

Testimony of

John S. Zurcher

Columbia Gas Transmission Corporation

Representing the

Interstate Natural Gas Association of America

Mr. Chairman and Members of the Subcommittee, I am John S. Zurcher, Manager of Pipeline Safety for Columbia Gas Transmission Corporation, and Chairman of the INGAA Pipeline Safety Committee. I am speaking today on behalf of Columbia Gas Transmission Corp. and the Interstate Natural Gas Association of America (INGAA).

Columbia Gas Transmission is a wholly owned subsidiary of the Columbia Energy Group, based in Herndon, Virginia. Columbia Energy Group is one of the nation's leading energy services companies, with 1998 revenues of nearly $6.6 billion and assets of about $7 billion. Its operating companies engage in all phases of the natural gas business, including exploration and production, transmission, storage and distribution, as well as commodities marketing, energy management, propane sales and electric power generation, sales and trading. Columbia companies serve customers in 34 states and the District of Columbia.

Columbia Gas Transmission Corp. transports 3 billion cubic feet (Bcf) of natural gas per day to markets along a 12,500-mile pipeline network, which reaches across 10 mid-western, northeastern and mid-atlantic states. Columbia operates one of the largest natural gas storage systems in the country, with nearly 230 Bcf of working capacity.

INGAA is the trade association that represents virtually all of the interstate natural gas transmission pipeline companies operating in the U.S., as well as comparable companies in Canada and Mexico. INGAA represents approximately 200,000 miles of the 280,000 miles of natural gas transmission pipeline in this country. Its members transport over 90 percent of the nation's natural gas.

Natural gas is a colorless, odorless fuel that is a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in porous geologic formations. The primary component is methane. Natural gas is lighter than air; it rises and disperses when released. Interstate natural gas pipelines transport natural gas from natural gas processing plants to local distribution companies or large, direct sale end users such as electric generating facilities. (See attachment A).

INGAA Position on Reauthorization

I want to thank you, Mr. Chairman, Chairman Shuster and this subcommittee for this hearing on reauthorization of the Accountable Pipeline Safety and Partnership Act. INGAA believes that this Act is working well and supports a full four-year reauthorization of this Act. This legislation requires that new safety regulations undergo a risk assessment/cost-benefit analysis prior to final approval. It also establishes a risk management demonstration program. We believe these new risk-based approaches represent the right combinations of efforts to enhance safety and protect the public and the environment.

Safety of Prime Importance to Natural Gas Pipelines

Pipeline safety is a top priority of all of INGAA's members. Aside from being in our own best interests, it is our responsibility to assure our customers, our employees, our shareholders and all citizens that we operate a safe pipeline system. Natural gas pipelines are

the safest method of delivering the energy our nation needs. Year after year, statistics released by the National Transportation Safety Board (NTSB) on transportation-related fatalities demonstrate this fact. (See attachment B).

However, INGAA continues to seek ways to assure that our systems become even safer.

For example, after the natural gas accident in Edison, New Jersey, in 1994, the INGAA Board took decisive measures to review our safety management procedures. The significance of this incident, which resulted from third party damage, caused our Board to pursue any and all additional measures and procedures that could be available to improve our safety efforts.

Actions on One-Call

An INGAA Board task force developed an aggressive plan with seven priority initiatives. (See attachment C). These included seeking passage of legislation to encourage states to improve their underground facility damage protection programs. Third-party damage is the leading cause of pipeline accidents and is responsible for approximately 40% of the natural gas pipeline transmission accidents. (See attachment D). With your help, we were successful. The l05th Congress passed the "Comprehensive One-Call Notification" provisions of the Transportation Equity Act for the 21st Century (TEA 21). This legislation encourages states to increase participation in their one-call programs (call before you dig) by all contractors and all underground facilities unless a risk assessment shows minimal risk if the contractor or facility is excluded from the program. It also directed the Department of Transportation to assemble a list of one-call center "best-practices" that then can be disseminated to the states. I want to thank this Committee for your work to help to pass this important legislation.

INGAA and its member companies have worked to implement the goals of TEA 21.

We participated in both the Damage Prevention Quality Action Team and the "best-practices" review called for in the One-Call legislation passed last year. This task force, now called "Common Ground," has just issued a report that concludes that communication among all parties is critical. We are working with other underground facilities and contractors as well as DOT to pursue continuation of these efforts through a private non-profit organization. This organization would represent all the parties concerned about third-party pipeline damage, not just natural gas and liquid pipelines, and would be dedicated to protecting underground facilities and, therefore, improve pubic safety, worker safety, and the environment.

Research and Development Activities

INGAA has developed a coordinated research program that prioritized development of products and procedures to assist our continuing efforts to provide safer and more reliable service.

We worked with the Gas Research Institute and the Pipeline Research Committee International (PRCI) to reassess the capabilities and limitations of internal inspection devices, such as smart pigs, and also of automatic and remotely operated shutoff valves.

We also continue to seek improvements in technology through focused research and development efforts. For example, as a result of our findings, we are working to improve smart pigs so they may better detect mechanical damage. We worked with the office of Pipeline Safety to fund research to improve sensors and analysis systems for these tools.

Public Education Efforts

We have developed materials to improve our public education and emergency preparedness efforts in order to elicit the public's support in preventing accidents and minimizing the consequences of those accidents.

Risk Management Development

We also developed a process to introduce risk management principles to take our safety measures to a new level of sophistication. This will be discussed further later in my testimony. In this framework, risk is a function of the probability of an event occurring and the resulting consequences. Reducing either one lowers the risk to the public.

This INGAA Board action plan, that I have detailed, and its effect on the culture of both the industry and OPS has resulted in an improvement of our safety record during a period of unprecedented growth. The chart shown as attachment E displays the result.

Pipeline Summit

Finally, the INGAA Foundation, composed of interstate natural gas pipelines and our pipeline suppliers, is also holding its 2nd Annual Pipeline Safety Summit in Washington, D.C., in September. This conference will focus on construction and permitting issues that impact safety. We will also discuss potential ways to mitigate the impact of encroachment threats to our pipelines. We invite you to participate.

The Accountable Pipeline Safety and Partnership Act of 1996

During debate on reauthorization of the Pipeline Safety Act in 1996, the Department of Transportation's (DOT) Office of Pipeline Safety (OPS) joined with industry in exploring ways in which resources – public and private – could be used most effectively to enhance public safety. We agreed that a risk-based approach to regulation was the key. Together, government and industry worked with Congress for passage of the Accountable Pipeline Safety and Partnership Act of 1996 (P.L. 104-304).

As stated earlier, the 1996 Act contains two important elements. First, it requires (with exceptions) new safety regulations to undergo a risk assessment/cost-benefit analysis prior to approval. Based largely on President Clinton's Executive Order 12866, this provision is consistent with the "reinventing government" ideal of smarter, more effective regulation. It is important to note, however, that not all new regulations are required to undergo this analysis. The risk assessment/cost-benefit requirement is waived if a rule is the product of a negotiated rulemaking, is a consensus rule, adopts industry standards, or is enacted with the consent of standing advisory boards within OPS. As the Joint OPS Stakeholder Workgroup had been seeking agreement on a collaborative framework for these cost-benefit analyses (a report was issued April 12, 1999), all rulemakings since 1996 have been issued under one of these alternative procedures.

The other important element of the 1996 reauthorization is the Risk Management Demonstration Project. This should not be confused with the risk assessment provision. The risk assessment/cost-benefit analysis looks at new safety regulations that are applicable across the entire industry. Under the Risk Management Demonstration Project, pipelines can volunteer to work with OPS to create an alternative compliance program, subject, of course, to OPS approval, which would tailor each pipeline's efforts to address the specific risks along its system. This will permit the pipeline to target its resources in a more effective manner, based on the potential safety risks to its system.

Individual pipeline companies have the option of submitting a risk management plan for some or all of their systems. In order for the plan to become effective, the Department of Transportation must review the application and certify that it provides an "equal or greater

level" of safety as compared to compliance under existing minimum standards. In addition, based on a directive from President Clinton, each risk management project must provide "superior safety" in order to gain departmental approval. The President also directed that OPS provide meaningful public communication on specific risk management proposals, and that a maximum of 10 projects be approved prior to the department making its report to Congress on the progress of the demonstration project. This report is due in 2000.

To date, the department has approved five risk management projects. Another seven are at various stages in the process. One of the pending proposals is one that Columbia Gas Transmission and Columbia Gulf Transmission submitted to DOT last year.

Columbia is in the final phase of project approval, and I am optimistic that an order from DOT will be issued in the near future. We are looking at a system-wide application of the risk management program that we expect will allow us to better allocate resources to those areas that have the greatest risk, in order to enhance safety to the public and our employees, while protecting the environment. Columbia's project involves alternatives to existing regulations, such as: basing inspection and testing of certain facilities on actual performance rather than the calendar; use of inspection and testing techniques that are more in line with today's technology; and providing additional services to our customers while maintaining reliability.

As stated above, a number of natural gas pipeline risk demonstration plans await approval by DOT. We believe these plans should take us to the next level of sophistication to improve our safety record.

INGAA supports the four-year reauthorization of the Accountable Pipeline Safety and Partnership Act. We support the risk assessment/cost-benefit review for new regulations and want it to continue. We also believe that extension of the risk demonstration program should assist in our continuing efforts to improve our safety record. It also will help OPS representatives to better understand the operation of the pipeline infrastructure and its implications for pipeline safety.

Mr. Chairman, thank you for permitting me to testify today. I would be pleased to answer any questions.

APPENDIX

INGAA BOARD SAFETY TASK FORCE

ACTION PLAN 1994

1. Seek passage of legislation to encourage states to improve their one-call (call before you dig)

programs.

Third party damage causes sixty percent of all the natural gas accidents that occur.

2. Work with the Gas Research Institute to determine the limitations of internal inspection devices, such as smart pigs.
3. Work with the Gas Research Institute to determine the capabilities of automatic and remotely operated shutoff valves.

Regarding numbers two and three: We are reviewing the state-of-the-art of these technologies and identifying new or enhanced technologies that may more effectively detect pipeline cracks and corrosion or control product loss without causing unwanted customer supply curtailments.

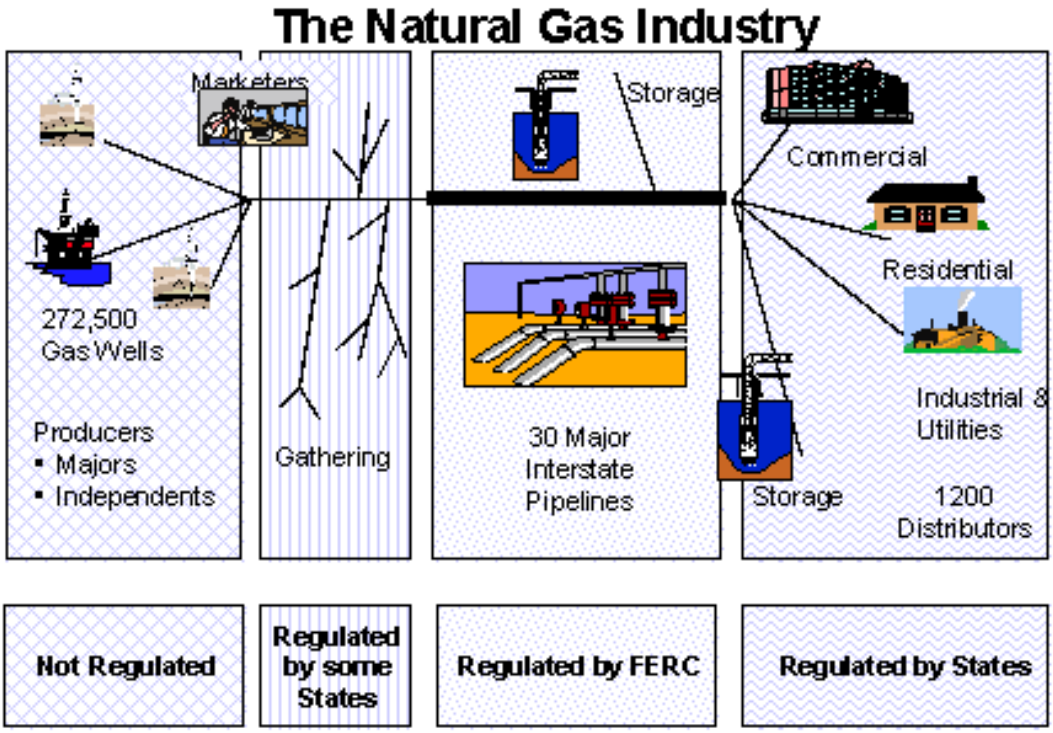
4. Review our patrolling and monitoring procedures and through benchmarking to determine whether improvements are needed.
5. Review industry practices with respect to the need to improve public education and emergency preparedness.

We have identified some priority projects and work has begun to develop better pipeline safety information materials.

6. Review the current pipeline safety-related research programs of the Gas Research Institute and the Pipeline Research Committee International.

We have developed a coordinated research program which assigns priorities and develops products and procedures to assist our continuing effort to provide safer and more reliable service to the public.

7. Work to develop a risk management approach to pipeline safety that will target our resources based on the potential safety risks to our individual systems.


The Natural Gas Industry
Marketers
Storage
Commercial
Residential
272,500
Gas Wells
Producers
▪ Majors
▪ Independents
Gathering
30 Major
Interstate
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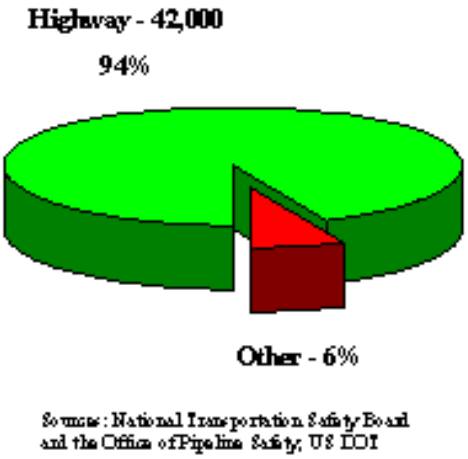
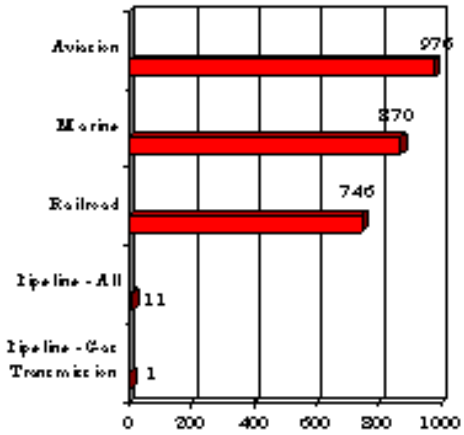
8.

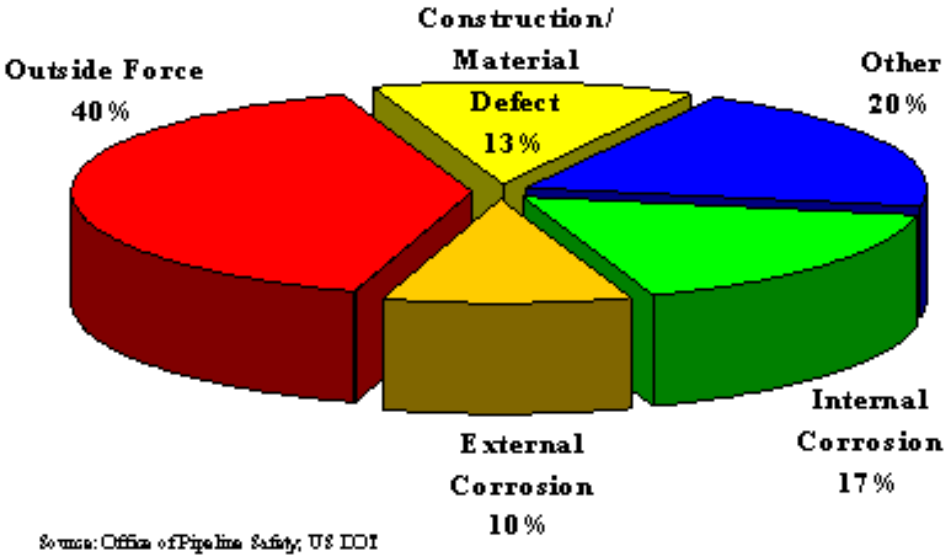
Transportation-Related Fatalities
1997



Sources: National Transportation Safety Board and the Office of Pipeline Safety, US DOT

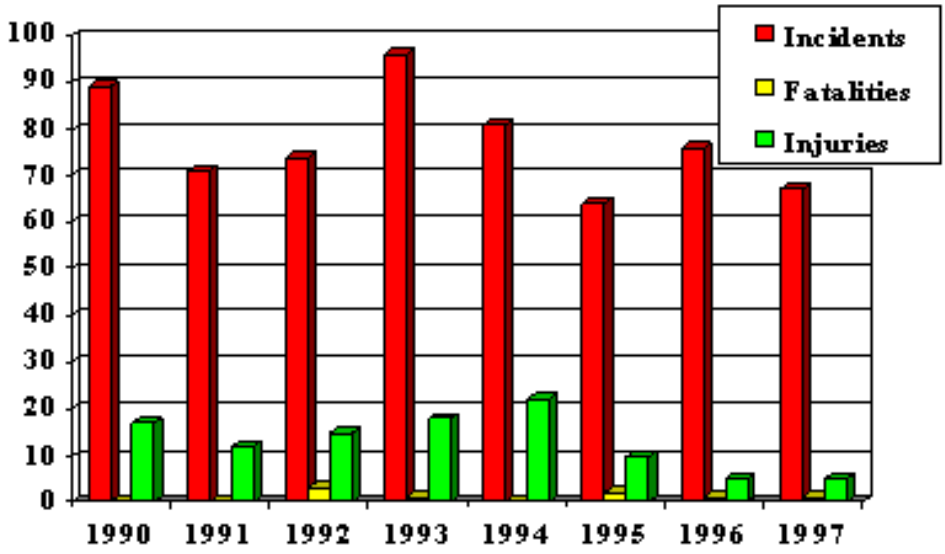


Total Number of Natural Gas Transmission Pipeline Accidents, by Cause 1994- 1997



Source: Office of Pipeline Safety, US DOT

Natural Gas Transmission Pipeline Accident Summary 1990 - 1997



Source: Office of Pipeline Safety, US DOT

Statement of Mr. Willard S. Carey

For the

American Gas Association

Before

The Subcommittee on Economic Development, Public Buildings, Hazardous Materials and Pipeline Transportation

Committee on Transportation and Infrastructure

United States House of Representatives

Hearing on the Reauthorization of the Pipeline Safety Act

July 27, 1999

Good afternoon, Mr. Chairman and members of the Subcommittee.

My name is Willard S. Carey and I am the Regulatory Leader – Federal for Public Service Electric and Gas Company headquartered in Newark, New Jersey. I thank you for this opportunity to appear before the Subcommittee in regard to reauthorization of the pipeline safety statute.

Public Service Electric and Gas Company is a combination utility in New Jersey that provides service to approximately 1.9 million electric customers and 1.5 million gas customers. We serve about 70 percent of the New Jersey population.

I am also here this afternoon representing the member companies of the American Gas Association (A.G.A.). A.G.A. represents 189 local distribution companies (LDCs) that deliver natural gas to almost 60 million homes and businesses in all 50 states. LDCs comprise that segment of the natural gas industry that delivers natural gas to homes and businesses; we are at the end of a line stretching from the producing fields, through the interstate and intrastate pipeline system to the natural gas burner tip. We are, to the general public, the faces of the natural gas industry. The delivery of safe, reliable service at a reasonable cost to our customers is paramount to maintaining and growing our business. It is in our own best interests to operate safely and with excellence.

Although each State utility commission has primary regulatory authority over LDCs, federal pipeline safety regulations impact our operations. States adopt the federal safety rules as minimum requirements in order to qualify for grants for up to fifty percent (50%) of their pipeline safety enforcement costs from the Department of Transportation's (DOT) Office of Pipeline Safety (OPS) each year. This system has provided a level of consistency from State to State. While this has worked well, LDCs do not stand still. We are always interested in finding better ways to provide safe, reliable service to our customers.

The natural gas utility industry's safety record is exemplary. With an estimated 1.5 million miles of

distribution lines nationwide and serving approximately sixty million customers, our accident rate is consistently very low. Our number one safety concern continues to be unintentional strikes by excavators – what we call "third party damage". Unintentional dig-ins by third parties are the number one cause of accidents on natural gas pipelines. Call before you dig, or a one-call program, is our principal tool in our damage prevention program in combating this problem.

DOT has recognized the importance of damage prevention and initiated two major and significant projects. First, OPS formed the Damage Prevention Quality Action Team (DAMQAT) that developed and is now implementing the Dig Safely Damage Prevention Education Campaign. Through legislation last year, Congress directed DOT to form the One Call System Study or "Common Ground" group to identified best practices within the One-Call industry. I had the distinct honor of serving on both of these initiatives. On June 30th. 1999 the Dig Safely Campaign and the One-Call Best Practices were formally presented to the DOT Secretary Rodney Slater at a public meeting. We thank you for recognizing the importance of strengthening damage prevention efforts and we thank DOT for moving expeditiously in this area.

Reauthorization for the 106th Congress

The current authorization for the federal pipeline safety program expires in September 2000. We appreciate the early attention that reauthorization is receiving from this Congress and look forward to working with you in a bipartisan and expeditious fashion to reauthorize the program. A.G.A. and Public Service Electric and Gas Company respectfully urge Congress to reauthorize the current pipeline safety statute without major modifications. This will allow the initiatives created by the 1996 reauthorization to continue to unfold. We believe that they are working well. While we would prefer the normal reauthorization cycle of four more years, we can live with a two-year reauthorization if Congress so desires.

The last reauthorization modified the federal pipeline safety program by applying flexible and non-prescriptive risk assessment and cost/benefit analyses requirements for new rules. The legislation also authorized the development of voluntary risk management demonstration projects to allow companies and regulators to explore better ways to provide safety for individual systems. Both of these new initiatives are underway and are progressing. Rules are being issued and DOT is steadily working through its backlog of rulemakings.

Lastly, we believe the funding level approved for FY 2000 should be sufficient to carry the program forward through the next reauthorization cycle. The levels should be increased only to account for inflation.

Update on the Implementation of the 1996 Reauthorization Statute

Risk Assessment and Cost/Benefit
The policy and regulatory changes imposed by the 1996 pipeline safety reauthorization bill are working well and moving forward smoothly. The 1996 law included a new section modeled after President Clinton's "Reinventing Government" initiatives outlined in Executive Order 12866. This initiative allows the application of flexible risk assessment and cost/benefit analysis to new pipeline safety standards in order to gather as much information as possible prior to issuing a rule. The analysis is waived if OPS elects to utilize alternatives such as a negotiated rulemaking, consensus rule or simply adoption of industry standards if no party objects.

This "front-end loading" of information and discussion of issues at the beginning of the process leads to better, workable rules in the end. Using this approach, OPS has been able to drastically reduce the time it takes to issue final rules. The initial information gathering and analysis takes substantial time, to be sure, but once done OPS is able to move much more rapidly through the formal rulemaking process. Furthermore, working with the stakeholders throughout the process should result in fewer legal challenges. The government will realize savings in time, personnel resources and money.

Of major concern was the suggestion that the new approach would either diminish OPS' ability to issue new regulations, or result in rules that did not protect the public or the environment. This has not proven to be the case. Experience to date has shown that regulators and the regulated industry can work together to reach safety objectives. We don't always agree but we continue to share information and ideas. This leads to a better understanding of differing viewpoints, which can only lead to better results.

OPS is beginning to apply objective risk assessment and cost-benefit analyses to new standards. For the past two years they have worked with a joint stakeholder group to develop the methodologies that will be utilized. A Final Report, "A Collaborative Framework for Office of Pipeline Safety Cost-Benefit Analyses" was issued on June 4, 1999.

Risk Management
The 1996 law also authorized OPS to work with companies on a voluntary basis to develop customized safety plans that may or may not strictly comply with existing safety regulations. These are called risk management demonstration projects. The initial projects are limited to interstate liquid and natural gas pipelines. Some LDCs are also interested in exploring this concept. Approximately one-half of the average LDC's safety budget is spent in complying with federal and state regulations. The other half is frequently allocated using some type of internal risk assessment tools. Companies have developed expertise in employing these risk assessment methodologies and have developed confidence in them. It seems logical to apply these tools to compliance activities to critically assess whether they truly provide an additional margin of safety.

A.G.A. is participating on a team organized by DOT comprised of A.G.A. member companies and state regulatory and DOT representatives. Their mission is to examine whether risk management is feasible and appropriate for LDCs. We expect an interim report by year-end and are planning a series of presentations to interested parties. A.G.A. will certainly ensure that this Subcommittee is fully informed and kept updated on the team’s progress.

Funding for OPS
Funding for OPS' safety program comes from user fees assessed on transmission pipelines. A portion of the fees assessed on natural gas interstate transmission lines is passed through to the LDC. This in turn is

passed on to the consumer. Congress should, therefore, ensure that the funding level for OPS is both adequate and proper.

During negotiations for the 1996 law, the natural gas industry agreed that OPS needed funding to develop guidelines and protocols for the new initiatives. OPS also needed to be able to clear its backlog of pending regulations and provide adequate inspectors in the field. We believe OPS is well on the way to accomplishing these objectives and urge that funding remain at the FY2000 level for the next four years.

If Congress decides to increase the authorization, the additional funds should come from OPS' reserve. This reserve contains previously collected but as yet unused pipeline safety user fees. It seems appropriate that these monies be used for OPS activities until entirely drawn down. On a related issue, the federal one-call law passed last Congress called for $6 million total to be provided out of general revenues to fund and implement a state grant program.

As one-call programs help protect not only natural gas and liquid pipelines but telecommunication carriers, water, sewer and steam lines, buried electricity, cable TV and phone lines, excavators and the public, it is reasonable that funding for the federal grant program come from general revenues. There is a concern within our industry that Congress will take the monies from pipeline safety user fees instead. We believe this to be counter to the intention of the law. Furthermore, we already have a portion of user fees committed to education about damage prevention to pipelines. As the authorizing committee we ask you help to ensure that the appropriators follow your directions when funding the one call grants program.

Conclusion

Congress should retain the provisions of the 1996 pipeline safety law and extend the risk management demonstration program. The processes created by Congress in 1996 are working; we ask that they be allowed to continue. OPS has not been hampered by the new requirements of the 1996 law. In fact, the knowledge and expertise of OPS inspectors and personnel have been increased to the benefit of public safety. Continuation of these programs will bring about greater knowledge and understanding for all parties, leading to better rules and programs in the future. Initiatives such as these represent a real "reinventing of government" by allowing innovative processes to improve public safety as well as providing a systemic change in the way industry is regulated.

I appreciate the opportunity to appear before you today, and look forward to answering any questions that you may have. Thank you.