

**REAUTHORIZATION OF THE
PIPELINE SAFETY PROGRAM**

HEARING

BEFORE THE

**COMMITTEE ON COMMERCE,
SCIENCE, AND TRANSPORTATION**

UNITED STATES SENATE

ONE HUNDRED NINTH CONGRESS

SECOND SESSION

NOVEMBER 16, 2006

Printed for the use of the Committee on Commerce, Science, and Transportation



U.S. GOVERNMENT PRINTING OFFICE

66-984 PDF

WASHINGTON : 2011

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
Fax: (202) 512-2104 Mail: Stop IDCC, Washington, DC 20402-0001

SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED NINTH CONGRESS

SECOND SESSION

TED STEVENS, Alaska, *Chairman*

| | |
|-------------------------------|---|
| JOHN McCAIN, Arizona | DANIEL K. INOUE, Hawaii, <i>Co-Chairman</i> |
| CONRAD BURNS, Montana | JOHN D. ROCKEFELLER IV, West Virginia |
| TRENT LOTT, Mississippi | JOHN F. KERRY, Massachusetts |
| KAY BAILEY HUTCHISON, Texas | BYRON L. DORGAN, North Dakota |
| OLYMPIA J. SNOWE, Maine | BARBARA BOXER, California |
| GORDON H. SMITH, Oregon | BILL NELSON, Florida |
| JOHN ENSIGN, Nevada | MARIA CANTWELL, Washington |
| GEORGE ALLEN, Virginia | FRANK R. LAUTENBERG, New Jersey |
| JOHN E. SUNUNU, New Hampshire | E. BENJAMIN NELSON, Nebraska |
| JIM DEMINT, South Carolina | MARK PRYOR, Arkansas |
| DAVID VITTER, Louisiana | |

LISA J. SUTHERLAND, *Republican Staff Director*

CHRISTINE DRAGER KURTH, *Republican Deputy Staff Director*

KENNETH R. NAHIGIAN, *Republican Chief Counsel*

MARGARET L. CUMMISKY, *Democratic Staff Director and Chief Counsel*

SAMUEL E. WHITEHORN, *Democratic Deputy Staff Director and General Counsel*

LILA HARPER HELMS, *Democratic Policy Director*

CONTENTS

| | Page |
|---|------|
| Hearing held on November 16, 2006 | 1 |
| Statement of Senator Inouye | 2 |
| Prepared statement | 2 |
| Statement of Senator Lautenberg | 13 |
| Statement of Senator Pryor | 51 |
| Statement of Senator Stevens | 1 |

WITNESSES

| | |
|---|----|
| Barrett, Thomas J., Vice Admiral, USCG (Retired); Administrator, Pipeline and Hazardous Materials Safety Administration, Department of Transportation | 3 |
| Prepared statement | 4 |
| Bender, E. Frank, Vice President, Gas Distribution and New Business Division, Baltimore Gas and Electric Company; on behalf of the American Gas Association and the American Public Gas Association | 42 |
| Prepared statement | 44 |
| Boss, Terry, Senior Vice President, Environment, Safety and Operations, Interstate Natural Gas Association of America | 31 |
| Prepared statement | 33 |
| Felt, Timothy, President/CEO, Explorer Pipeline Company; Member, American Petroleum Institute Pipeline Committee; and Vice Chairman/Treasurer-Elect, Association of Oil Pipe Lines | 24 |
| Prepared statement | 26 |
| Weimer, Carl, Executive Director, Pipeline Safety Trust | 17 |
| Prepared statement | 18 |

APPENDIX

| | |
|---|----|
| Barrett, Thomas H., Administrator, Department of Transportation, letter, dated December 4, 2006, to Hon. Jim DeMint | 55 |
| Peters, Hon. Mary E., Secretary of Transportation, letter, dated November 28, 2006, to Hon. Ted Stevens | 56 |
| Response to written questions submitted by Hon. Daniel K. Inouye to: | |
| Thomas J. Barrett | 58 |
| E. Frank Bender | 58 |
| Terry Boss | 59 |
| Timothy Felt | 60 |
| Carl Weimer | 61 |
| Sandherr, Stephen E., CEO, Associated General Contractors of America, prepared statement | 56 |

REAUTHORIZATION OF THE PIPELINE SAFETY PROGRAM

THURSDAY, NOVEMBER 16, 2006

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Committee met, pursuant to notice, at 10 a.m. in room SR-253, Russell Senate Office Building, Hon. Ted Stevens, Chairman of the Committee, presiding.

OPENING STATEMENT OF HON. TED STEVENS, U.S. SENATOR FROM ALASKA

The CHAIRMAN. We are here today to hear testimony on the reauthorization of the pipeline safety program.

The Pipeline and Hazardous Materials Safety Administration has jurisdiction that covers approximately 160,000 miles of hazardous liquid interstate transmission pipelines, 305,000 miles of natural gas transmission pipelines, and 1.9 million miles of natural gas distribution pipelines throughout our Nation. Generally, this Administration is responsible for overseeing interstate transmission pipelines, while the states are responsible for monitoring the safety of intrastate pipelines.

The state's authority is delegated by the Administration to the intrastate pipelines safety offices. The Administration also allows state officials to act as agents in administering interstate pipeline safety programs excluding enforcement actions which are handled by the Administration directly for those sections of the interstate pipelines which are within a state's boundaries.

Now, pipelines are one of the safest forms of transportation, in most cases their safety records have steadily improved. Unfortunately, recent events in our State of Alaska demonstrate there is much that can be done. All of that, by the way, occurred in 22 miles of pipe.

In September, Senator Inouye, Senator Lott, Senator Lautenberg and I introduced legislation known as the PIPES Act to reauthorize and strengthen the Federal pipeline safety programs through the Fiscal Years 2007–2010. This comprehensive bill is based upon the draft pipeline safety authorization legislation submitted by the Administration, reports and testimony from the Government Accountability Office and the Department of Transportation Inspector General. In addition, representatives from the pipeline industry and pipeline safety advocate community, many of whom are represented by the witnesses here today, also provided valuable input and perspective.

The House Transportation and Infrastructure Committee and the House Energy and Commerce Committee are also working on pipeline safety legislation. A total of three hearings pertaining to pipeline safety were held in the House, and our Alaska delegation held a listening session in October on the overall topic in Alaska.

I appreciate Vice Admiral Barrett and his staff for driving down to Anchorage to be with us at that listening session. It is my hope that the three of our committees can work together to develop a joint legislative product that both Chambers will pass this year. We've had contact with the House, and the House has been willing to work toward a bill prepared that it will be a joint bill that can pass in the first week of December. As far as I know, there are no political differences with regard to the goals of this bill so I hope that this hearing will produce the information we need to proceed to work with the House and to work out a bill before the first week in December. Senator Inouye?

**STATEMENT OF HON. DANIEL K. INOUE,
U.S. SENATOR FROM HAWAII**

Senator INOUE. Thank you very much, Mr. Chairman. I hope that our presence here this morning would indicate to one and all that this is a bipartisan matter. That our energy supply depends on a safe and efficient pipeline system. The House has similar legislation, and time is of the essence. We hope to get this through right away. I ask that my statement be made part of the record. [The prepared statement of Senator Inouye follows:]

PREPARED STATEMENT OF HON. DANIEL K. INOUE, U.S. SENATOR FROM HAWAII

Our Nation's energy supply depends on a safe and efficient pipeline system. As we saw this summer in Alaska, pipeline disruptions can have a major impact on consumers. With this in mind, Chairman Stevens and I, together with Chairman Lott and Senator Lautenberg, approached the task of reauthorizing the Federal pipeline safety program with great care and keen interest.

We met with the Pipeline and Hazardous Materials Safety Administration (Pipeline Administration) to review the Administration's reauthorization proposal and listened to the interests and concerns of the pipeline industry and pipeline safety advocates. We then crafted S. 3961, the Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006, known as the PIPES Act, this September. The bill builds upon the successes of the reauthorization in 2002 and all of the good work already done by the Office of Pipeline Safety and the Pipeline Administration over the past several years. Much of the bill comes from the Administration's own proposal and refines the current Federal safety program to ensure that we have the safest and most dependable pipeline system in the world.

Additionally, our bill takes several new steps to address areas of growing concern including the prevention of third-party damage, low-stress pipeline standards, human factors mitigation, and increased pipeline security and disaster recovery. Most importantly, the bill also significantly increases funding for pipeline safety inspectors and pipeline safety research, allowing us to double our efforts on these important fronts.

I know many of the witnesses here represent different elements of our complex pipeline system and you each have different interests. I believe our legislation presents an excellent opportunity to strengthen our current system, and I hope that you will work with us toward this goal. I understand that the House Transportation and Infrastructure and Energy and Commerce Committees both have bills similar to ours and I look forward to working with them to quickly pass a bill into law as soon as the opportunity arises.

The CHAIRMAN. Thank you very much, it will be part of the record. The statements of the witnesses will be printed in full in

the record, we hope that you will summarize them to the extent that you can. Our first panel is just one person. Once again, Vice Admiral Thomas Barrett, retired. He's the Administrator of the Pipeline and Hazardous Materials Safety Administration. Thank you for appearing, we'd be pleased to have your statement.

STATEMENT OF THOMAS J. BARRETT, VICE ADMIRAL, USCG (RETIRED); ADMINISTRATOR, PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

Admiral BARRETT. Mr. Chairman, thank you. Mr. Co-Chairman, thank you both for your opportunity to testify and for the leadership you've exhibited on this particular issue. I'm pleased to discuss your proposal to reauthorize the Federal Pipeline Safety Program.

As you know, pipelines—as you mentioned, Mr. Chairman—are a safe way to transmit and transfer energy. But the data shows that we have an opportunity here to close some remaining gaps in the pipeline safety program and do a better job for the public in terms of ensuring that energy can be transmitted across our country safely.

It's abundantly clear at this time that the risk posed by construction-related damage to underground gas distribution systems is growing. In fact, it's the only area where our safety trends are headed in the wrong direction. It is the leading cause of pipeline accidents in which people are killed or seriously hurt. And that's why I ask for your help in passing this legislation now.

On a daily basis I see reports reflecting incidents on gas distribution pipelines. These distribution pipelines are located where the majority of American families live, where schools are located. Recently, for example, in Oklahoma, a residential developer using Earth-moving equipment struck a natural gas pipeline and caused the evacuation of a nearby elementary school. Over 14,000 schools nationwide, from elementary through colleges, are located near distribution pipelines. And in my judgment, the safety margin between a precautionary evacuation of a school and tragedy following an incident is not adequate.

We need to cut these incidents off better, up-front. And we believe the best approach, as proposed by the Administration and reflected in your Committee proposal is to support our state partners who oversee nearly 1.7 million miles of distribution pipeline systems with incentives that would raise the cap on grants to their agencies from 50 percent to 80 percent over 6 years, an incentive approach coupled with stronger civil enforcement authority. And we need this authority to be successful, and the states need it.

The benefits of this enhanced authority and enhanced damage prevention programs will benefit oil and gas distribution lines and the gas distribution system in particular.

I would invite your attention and maybe we can turn that picture so you can see it, I was up recently at Baltimore Gas & Electric, this is a picture—can you see all right, sir? This is what the underground looks like—you have telecommunications, you have water, you have gas, you have sewer all in very compacted areas. In this case, you had a telecommunication line run across the top of a gas

line. That runs the risk of taking the coating off the line. Perhaps, eventually—had it not been discovered, leading to a failure and the resultant risk of breach.

And the benefits of preventing distribution problems, the One-Call systems, the incentive programs, better state enforcement, run to not simply the gas lines, but they run to everybody in that underground—the telecommunications industry, they run to the water supply, they run to the sewer lines—you will have less disruption, less accidents, less traffic jams, if we are able to move this program forward successfully, to say nothing of less safety risks to life and property.

I particularly appreciate the Committee's attention also, to better leadership accountability. I think that is a key way of improving the emphasis on the accuracy and the data that are reported to the Federal Government, and allows us to assess and get at problems. I particularly appreciate your personal leadership on that. I think it's key to involve senior corporate leadership in understanding the conditions that are reflected in their own organizations and what they report to us.

I would point out as you indicated, that the core reauthorization concepts are supported very broadly across our stakeholder community. And as you indicated there are—as far as we can tell—this is a bipartisan issue, it is a fundamental safety issue. And I believe that the core concepts in the Senate provision as you work out issues with the House are fundamentally sound. And I am hopeful that with your support, we will be able to bring this to a successful conclusion.

I assure the members of the Committee, that the Administration, Secretary Peters and the men and women of PHMSA draw on your strong personal and Committee commitment to improving the safety, the liability and public confidence in our Nation's pipeline infrastructure safety. I appreciate the opportunity to be here, and I would be pleased to answer any questions that you have for me. Thank you, sir.

[The prepared statement of Admiral Barrett follows:]

PREPARED STATEMENT OF THOMAS J. BARRETT, VICE ADMIRAL, USCG (RETIRED);
ADMINISTRATOR, PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION,
DEPARTMENT OF TRANSPORTATION

I. Introduction

Chairman Stevens, Co-Chairman Inouye, members of the Committee, thank you for the invitation to appear today to discuss your proposal to reauthorize the Federal program our Nation depends on to maintain safety in its energy pipeline network. I very much appreciate the Committee's interest in pipeline safety and I am pleased to provide my testimony on your proposal and the need to pass a reauthorization bill this year.

I believe your bill embodies key concepts that will help us reach our goal of eliminating pipeline safety incidents. It provides a solid foundation for the energy transportation infrastructure we need to continue our strong economic growth into the future.

Your bill addresses the most important safety concern we face—the growing rate of construction-related pipeline accidents, driven by a growing economy. These accidents, the leading cause of pipeline-related injuries and deaths, can and must be prevented. To do so, we need to strengthen the ability and authority of the states and ourselves to address these safety issues. That is why we need reauthorization now.

II. Why Two Issues Matter More Than Any Others

In the past few years, PHMSA has taken a hard look at incidents, their causes and what can be done to prevent them. Issue number one is crystal clear—the leading cause of incidents in which people are hurt or killed is construction-related activities that cause an immediate rupture or damage which later grows to failure.

Construction related damages on gas distribution systems has increased at a rate of 50 percent from 1996 to 2005 and will continue to get worse if we don't do something about it. These gas distribution systems run through the neighborhoods where people live and work and, even more concerning near our children's schools. Just last week a careless residential developer using Earth-moving equipment, ruptured a natural gas pipeline and caused the evacuation of an elementary school in Oklahoma. Over 14,000 schools nationwide, including elementary and secondary schools, are located in the vicinity of pipelines. Fortunately, this school and its community experienced only an evacuation and a temporary suspension of natural gas service. It could have been worse. Reducing the frequency and community impacts of incidents such as this receives the foremost attention of PHMSA and our closest partners in public safety, state pipeline safety agencies. The natural gas pipeline distribution network is almost entirely under the jurisdiction of states.

Where operators are improving their pipeline safety performance, the gains come because operators are managing pipeline safety based on system risk. Clearly, to make a difference in saving lives, we must minimize damage to pipelines and other underground utilities, associated with construction related activity. Construction damage is almost always preventable and we have worked to find practices that will eliminate this problem. The challenge is managing this activity without damaging a very crowded underground infrastructure—one that gets more crowded everyday, not just with pipelines but new telecommunications, electric, water and sewer, and other infrastructure.

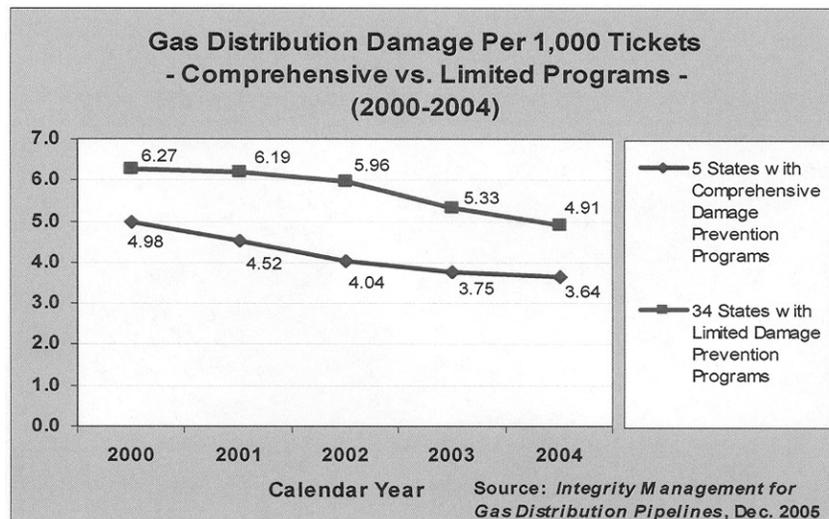
The photo below is a depiction of this crowded infrastructure and the very problem we're continuing to face. The photo shows an instance in which an operator discovered newly installed fiber optic lines directly over its natural gas pipeline. In this case, One-Call was not contacted and the operator was unaware of construction taking place in the vicinity of its pipeline.



Several states including Virginia and Minnesota have led the way with strong damage prevention programs and have seen up to 50 percent reductions in this and other construction-related damages. We need to prioritize the resources for pipeline safety to be sure that our state partners have sufficient resources to share responsibility with us in getting this job done. The Committee's proposal recognizes this need by adopting important concepts which the Administration forwarded, including

new civil enforcement authority, incentives for states to improve their damage prevention programs, technology grants to advance the safety and efficiency of the One-Call notification process, and more funding for state pipeline safety programs.

The following chart from a PHMSA report gives a picture of the progress possible with a strong enforcement program. There are degrees of success with enforcement and two model states, Virginia and Minnesota both have fewer than 3 damages per 1,000 One-Call tickets by enforcing the practice of calling before digging. (A "One-Call" ticket is a record of receipt by a state agency of a notice of the caller's intention to excavate.)



Issue number two is helping states more. We need new authority to address this concern by establishing a grant program to encourage states to develop effective damage prevention programs. State agencies and PHMSA would also gain authority to conduct civil enforcement actions against anyone who fails to contact "One-Call" prior to digging. Our focus, however, will continue to be placed on state enforcement.

Ensuring the safety of 2.3 million miles of pipelines is an enormous task. Our state partners oversee 90 percent of operator compliance with pipeline safety regulations. We seek to raise the cap on grants provided to state pipeline agencies over 6 years from 50 percent to 80 percent to offset the increasing cost of the programs they execute, consistent with the programs of the Department. State agencies do utilize PHMSA's national regulatory pipeline safety standards to inspect the majority of the pipeline infrastructure and we increasingly invest in state training and decision-support as we function as a coordinated workforce. We need them, and they need our help to be most effective.

III. Senate Reauthorization Proposal

Your proposal incorporates the Administration's proposed core safety improvements to address these top two issues—additional authority to extend effective enforcement of state "one-call" laws to any violator and improve damage prevention programs through greater incentives, and additional authority to strengthen state oversight of distribution pipelines generally.

Your proposal also addresses a third issue, the importance of a strong and resilient energy transportation infrastructure. Americans depend on pipeline transportation for the safe movement of the vast majority of critical energy supplies. Over 97 percent of the Nation's transportation energy needs are met by petroleum products, and 64 percent of these energy products are moved through America's pipeline networks. The system is near capacity all the time.

Your proposal would authorize the Administration's proposed petroleum transportation capacity study, intended to identify limitations in the pipeline network that could adversely affect supply. This is important to improving our understanding of how to protect strategic energy supplies, a question that has been of increasing concern in recent months.

In times of emergencies, a lack of redundancy and system capacity makes it important for PHMSA to work along with our state partners and other Federal agencies to assure that energy product transportation is not interrupted. Last year's devastating Gulf Coast storms taught us lessons about the vulnerability of pipelines to natural and man-made disasters. We believe we can help minimize pipeline system disruption while maintaining safe operations. To clarify our objective, we sought authority in the statute to address the need for PHMSA coordination within the Federal family to assist with recovery of the energy infrastructure. In the years to come, we hope to contribute to increasing the resiliency of this infrastructure.

Your Committee's proposal reflects significant bipartisan collaboration on a range of proposals, some of which have been offered by the Administration and some which have not. We believe that the Administration's interests would be best served by passage of a bill this year, and we do not believe that any one or the combination of provisions we did not propose presents a serious concern. Some of the provisions are welcome additions.

We support the initiative on executive certification of integrity management performance. This places an increased emphasis on the importance and accuracy of performance reporting. To get the results we want out of pipeline operators, we need to increase management's accountability and place additional attention on the importance of having more precise information to target safety risks.

We strongly favor a systems-based approach to assessing and managing safety related risk, especially as the risks to large infrastructure systems, like pipelines, often change over time. We expect to see increasing results from our effective systems risk management approach, which this committee helped devise. For integrity management programs to be effective, operators must be free to focus on making the best use of information as it becomes available. This must be a dynamic process in which the operator is able to deploy attention and resources against the greatest risks, worst first.

In keeping with this approach, we urge the Committee to grant the Secretary broader authority to adjust the inspection intervals for natural gas pipelines on the basis of risk factors. Reliance on prescribed 7 year retest intervals as established in current law goes against this process. It seems a disincentive to the continuous evaluation and readjustment of a dynamic systems approach that is a basic element of an ongoing "whole-health" review of a pipeline system. The goal is to regularly and systematically utilize the most current information about the pipeline system so that it may be maintained to operate safely in the best condition for the longest amount of time. We believe that if the Secretary determines that pipeline safety will be enhanced by establishing risk-based reassessment intervals, the Secretary should be able to issue rules establishing criteria for reassessing natural gas pipeline facilities on shorter and longer intervals not exceeding 10 years.

In issuing such rules, the Secretary should be able to consider all significant risk factors, including, but not limited to, design, fabrication, and environmental and operating conditions. The Secretary should be able to determine the pipelines to which these rules apply. For a pipeline to be subject to a reassessment interval in excess of 7 years, we would consider as a prerequisite that the pipeline is operating under an integrity management program that has been reviewed by the Department or an authorized state agency and a determination is made that the operator is providing appropriate risk analysis and control.

Your proposal would also require DOT to impose standards for low-stress liquid transmission lines. Although we already have a notice of proposed rulemaking on this subject, we have not determined yet whether covering more pipeline mileage and imposing more requirements can be justified by cost/benefit analysis. We have this matter under consideration and would appreciate having flexibility for the Secretary to make an appropriate decision to maximize protection of public safety, the environment and the reliability of energy supply.

Another provision would require DOT to develop standards to address risks associated with pipeline control operations and would require some limitation on hours of service. In keeping with our systems risk management philosophy, we believe operators should have flexibility to develop their own systems plans to assess pipeline control management risks associated with human factors. We find this provision limits the development of risk control measures to certain prescribed solutions. We believe the Secretary should have more flexibility to consider the need for procedures, processes and other system measures to ensure effective performance in pipeline control functions, communication, information exchange, warning, or management of controller schedules and rest periods.

We appreciate the Committee's leadership in recognizing the importance of several other issues, such as pipeline security and incident recovery; corrosion research; the advancement of national consensus standards; and inspection and enforcement

staffing. These provisions can each strengthen the Department's hand in meeting the growing challenges of pipeline safety. The Administration is making progress in pipeline security and incident recovery through the Department's and Department of Homeland Security's Memorandum of Understanding (MOU) and PHMSA and TSA's recently implemented annex to the MOU. We appreciate the concern about the need to plan to build a workforce for building pipelines in the future, and we will be happy to work with the Congress on making use of existing programs within the government.

We would be concerned that the added costs of the provisions significantly exceed that of the Administration's proposal. We would be pleased to work with the Committee to ensure appropriate fiscal controls and accountability are provided in any mechanism for recovering extraordinary inspection expenses. Perhaps the Congress also should consider providing for a more equitable distribution of cost over the entire pipeline industry, instead of limiting the burden to the transmission industry. The vast majority of the benefits of this proposal, if authorized, accrue for the first time to the distribution segment of the pipeline industry.

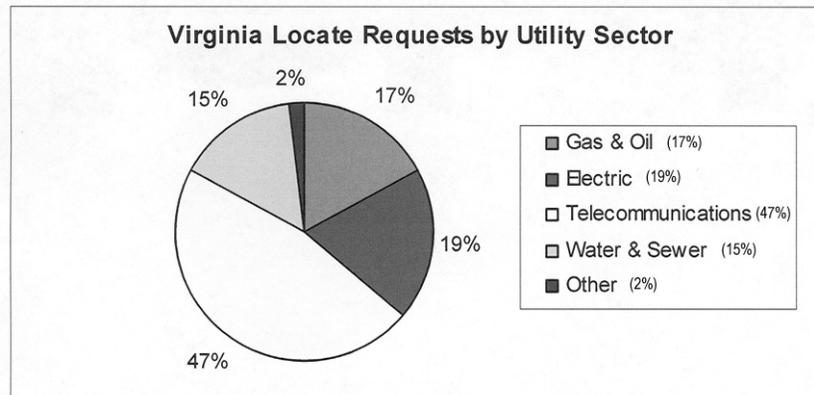
IV. Conclusion

Over the past 5 years we have seen a steady decline in the leading causes of pipeline failures, with the exception of construction damage in distribution systems. We need to step up our efforts to address this problem. Each of the authorizing committees with jurisdiction over the pipeline safety program has developed a proposal for reauthorizing the program for the years 2007–2010. Each of the proposals incorporates the Administration's core safety reforms—strengthening the ability of states to address our most serious safety concerns. The similarities are much more significant than the differences.

We understand that some efforts are being made to reconcile differences among the bills at the Committee level, with the hope that a single proposal could be voted on in both Houses before the end of the session. We ask Congress to pass a reauthorization bill this year, focusing on the key similarities among the bills.

As important as a reauthorization bill will be for the enhancement of pipeline safety, especially natural gas distribution lines, benefits of a final bill would extend far beyond pipelines. Indirectly, additional customers of a reauthorized pipeline safety program include other stakeholders in America's underground infrastructure, the electric, telecommunications, water and sewer and other industries.

The following chart shows the rate of which one of our leading states in underground damage prevention receives locate requests from utility sectors not related to pipelines—over 80 percent. Strengthening the Nation's pipeline safety program to include increased resources for states will ensure the safety of not only pipelines, but the underground infrastructure owned and operated by these utilities as well.



I assure the members of this committee, that the Administration, Secretary Peters, and the dedicated men and women of PHMSA share your strong commitment to improving safety, reliability, and public confidence in our Nation's pipeline infrastructure.

Like you, we understand the importance of our mission to the safety of our citizens and the energy reliability and continued economic growth of our great Nation. I would be pleased to answer any questions you may have.

Thank you.

The CHAIRMAN. Well, thank you very much. Are there any developing new technologies that will be put into place into pipelines to increase the safety of them?

Admiral BARRETT. There are multiple technologies, Senator, and we have a quite robust research and development program—partnered with industry, I might add—on a cost-sharing basis to bring those forward. They are extensive in the areas of corrosion detection and prevention in terms of assessing the condition of the pipelines, and in terms of maintaining the integrity of the system.

Our key program, as you know, is integrity management, so in terms of understanding the condition of the lines, you are very familiar with the pigging, the inline inspection devices, making those devices able to detect better the conditions of the internal portions of the lines as well as external corrosion, is enormously important. And as technologies are coming forward, we will continue to push for them.

The CHAIRMAN. The 2002 Act required regulations to be issued by your agency, and operators were required to complete their initial baseline assessments within 10 years of that Act and to reassess the lines not less than 7 years on an ongoing basis. Do you believe that that Act has been followed so far?

Admiral BARRETT. Yes, sir. The baseline assessments are progressing quite well, more than 50 percent of them are completed, the others are moving forward timely. I do not believe that the mandatory 7 year assessment is the most desirable approach—I would prefer that the assessment interval be based on an ongoing system risk analysis of the line and as an agency also we would be prepared to address that through waiver provisions on a case-by-case basis if we have to.

The CHAIRMAN. Do you have that power now, to have a waiver?

Admiral BARRETT. We do, sir. And we can exercise it—it is more resource intensive, it's a company-by-company, specific -by-specific approach—it's more burdensome on the particular company and on us, I'd rather have a set of standard criteria, but yes sir, we do have that authority.

The CHAIRMAN. One of the provisions of our bill would prohibit that future exercise of that power to exempt operators from the 7 year assessment, do you object to that?

Admiral BARRETT. Yes sir, I would. I would want the ability to exercise the waiver authority where it's suitable, because from a safety management point-of-view, I believe some flexibility is desirable.

The CHAIRMAN. Why would we want to exempt them altogether from a reassessment?

Admiral BARRETT. From a reassessment, no. I believe you absolutely have to have a reassessment. The integrity management program fundamentally requires, on an annual basis, that an operator look at the condition of their lines and determine where the greatest safety risks are and address those risks in a timely manner and we oversee that. And in some cases that—all I was saying is 7 years may not be the right interval—in some cases it might need to be earlier, in other cases it could well be later, as much as, say, 10 years.

The CHAIRMAN. I understood that you did object to that, all that really does is prohibit you from exempting any operator from the 7 year reassessment.

Admiral BARRETT. Maybe I misunderstood your question.

The CHAIRMAN. I'd appreciate it if you'd take a look at that because we heard that you disagreed with it, but I don't know why.

I understand you're working on a low-stress pipeline rule and you have a proposed rulemaking with regard to, not all low-stress pipelines, but to some. The bill that the four of us have introduced would require you to regulate a wider portion of the pipeline industry, particularly low-stress pipeline. What are your thoughts on that?

Admiral BARRETT. Sir, as you know, we have proposed regulating a portion of those lines, including the type of lines that BP operated up at Prudhoe Bay, the low-stress transmission lines and gathering lines. We received a fairly broad range of comments in response, our rulemaking period just closed November 6th. The commentary ranges from, what we proposed is too stringent and should not include mandatory cleaning or pigging requirements on one end, to another end that says we should regulate every low-stress line in the country and we are in the process of evaluating those comments right now. And obviously we will, early next year, bring forth a final ruling in that regard. But we are still evaluating the comments we received.

The CHAIRMAN. Those 16 miles of transit lines were actually high-stress pipelines but they're operated at a low-stress pressure level.

Admiral BARRETT. Yes sir, that's correct.

The CHAIRMAN. They were exempt, then, by means of operation in spite of the fact that they were designed for higher stress.

Admiral BARRETT. Yes, sir. Our rules exempt lines that are operated at less than 20 percent of the maximum operating rated strength of the lines.

The CHAIRMAN. Why?

Admiral BARRETT. Again, because of the perceived risk prior to this summer of those lines. We had started a rulemaking proposal to bring those lines under regulation about 2 years ago, and we're working that forward. Our view was not that they didn't need more oversight, but that was not the agency's highest priority, we were more concerned with getting at lines where there was a demonstrated greater safety risk to life and the performance record on lines of that type prior to this summer was relatively—I use that term—relatively, better.

The CHAIRMAN. Well, I'm still mystified by what happened up our way that the very fact that there are so many miles and it's just those 16 miles which were low-pressure which built up the corrosion which led to the leaks. Now, what you're saying is, is if they operate at a low enough pressure, we don't pay any attention to them. Why?

Admiral BARRETT. Again, I'm not saying that we not pay any attention to it, we had not gotten a regulatory package in place on those lines prior to the BP spills.

But what I'd also say, too, and you're of course very familiar with this—we also, frankly, would not have expected anybody to not

clean lines like that regularly, to not pig lines like that regularly. The standard of care exercised by BP on those lines was surprisingly well below what we typically see elsewhere in the industry. And the history of failures on lines like that, it has been modest in terms of oil spills or damage. And we were discouraged, and frankly it's a mystery to me why BP in contrast to other operators up there, did not maintain those lines better.

The CHAIRMAN. Well, I've taken up to the North Slope of Alaska over the years, probably the entire Senate at one time or another, and we got briefings about all of the safety programs and how all of these things were pigged and how there was this maintenance, and yet here these 16 miles of lines which carry the basic product after they've gone through the conditioning plants to the big pipeline, not only did they not pig it, but they didn't have a shunt to take out any material that gathered in that pipeline, in those pipelines before they had a pig pipeline.

Admiral BARRETT. Yes, sir, that's correct.

The CHAIRMAN. And one of the reasons for the low pressure was that they didn't want to try to push that stuff so it actually went into the big pipeline, because they would have had liability in the big pipeline if something happened. But I really don't understand a system that allows the operator to determine regulations simply by the amount of pressure.

Admiral BARRETT. Again, it was relatively—in the Agency's judgment—a relatively lower risk. There's the risk of failure to the line at lower pressure is less than the risk of failure on a line operating at high pressure, near its maximum operating strength. Particularly, as you always run the risk of some type of overpressure in a line that could test the rated strength of the line. So the pressure is one of the factors that affects the integrity of the line, or the risk that the line would fail, as will corrosion as you earlier mentioned.

The CHAIRMAN. Well there was some indication that at times that pressure may have been increased in order to do some cleaning of the line instead of pigging, did you know that?

Admiral BARRETT. Not specifically for that purpose, I know when you start-up a line or shut it down you may see some modest fluctuation around the pressure, so you might have seen a small bump on start-up, but not specifically for the purpose that you mentioned, I'm not aware of that.

The CHAIRMAN. Our bill will allow low-stress pipelines to be mapped in the National Pipeline Mapping System, and comply with regulations in place for other pipelines with respect to instant reporting. Have you looked at that provision?

Admiral BARRETT. Yes, sir.

The CHAIRMAN. Do you agree with that?

Admiral BARRETT. We support that. Yes, sir, we do.

The CHAIRMAN. Senator Inouye?

Senator INOUE. In the year 2000, the El Paso Pipeline had a terrible accident.

Admiral BARRETT. Yes, sir.

Senator INOUE. And the Pipeline agency announced a \$2.5 million fine, but apparently nothing has happened to it. Can you tell us what happened?

Admiral BARRETT. Yes, sir, I can. And that's not completely closed, but the Agency's penalty, if you will, is wrapped into a broader approach with the Department of Justice in terms of a more macro-settlement of issues related to that incident. Our penalty became wrapped up in a larger penalty settlement. I can provide the specifics on it, but I don't believe that is quite settled out yet.

Senator INOUE. Do you think there should be better transparency?

Admiral BARRETT. I think that transparency is always welcome, I strongly support it, and one of our objectives certainly is to improve the transparency of enforcement and inspection results generally so that everybody knows where we are taking enforcement actions and what the ultimate outcomes are. And we have recently posted up on our website better information on our enforcement record over the last 5 years, shows a steadily increasing use of that authority. It has about quadrupled over the last 5 years, but we will be looking to make our actions more transparent and more traceable. I take your point, though, I agree with you.

Senator INOUE. On the National Pipeline Mapping System, there are those who say you should do away with it, others say let's have it because otherwise states would have to bear the burden. What are your thoughts?

Admiral BARRETT. I think the mapping system is essential for several reasons. First, it's a terrific aid to local, county-level community planning efforts. And if you're deciding where to put in a new subdivision, where to locate a school, I think both local officials and quite frankly the public needs to understand what lines are running through those neighborhoods, and generally where those lines are.

Post-9/11, obviously the security of the national energy infrastructure and knowledge about key nodes on those systems and on a national level knowing where all of those lines are poses a security risk. We have been working closely—I've been working with Kip Hawley and TSA to find a way to reconcile both of these needs. But I think both, in terms of community planning and, by the way, we're fairly close to finding ways to accommodate that and also protecting our security interests—I think the mapping system provides substantial benefit to the public, and also to local planning and state planning officials. And I think the lines, as you know, in some cases are simply at a state level, but in many cases they are interstate. And I believe, to use your word, Senator, transparency to the extent it's consistent with security, is very helpful.

Senator INOUE. Mr. Chairman, may I submit a couple of questions?

The CHAIRMAN. Go ahead. Oh, you want to submit them. The Senator wishes to submit some questions to the record, he'd appreciate it if you could respond to them.

Admiral BARRETT. Absolutely, sir.

The CHAIRMAN. Senator Lautenberg?

**STATEMENT OF HON. FRANK R. LAUTENBERG,
U.S. SENATOR FROM NEW JERSEY**

Senator LAUTENBERG. Yes, thanks Mr. Chairman for holding this really timely hearing as we see the capacity requirements for moving our energy supplies increasing fairly rapidly. And we in New Jersey had a terrible incident in 1994, residents of Edison, New Jersey, fast asleep, suddenly a gas pipeline exploded and sent fire nearly 400 feet into the sky. And the Mayor of the town recalled that it was daylight at midnight, the fire consumed 8 apartment buildings, left 128 families with no homes, sent some 1,500 men, women and children fleeing into the night. Just this past August, I understand, Mr. Chairman, you discussed the BP spill up in Prudhoe Bay, and with Prudhoe Bay producing some 400,000 barrels of oil a day. And this summer when we're faced with a major oil supply shortage due to severe corrosion in the pipeline for maintenance and inspection seemed out of sync with what it was that we could have done to prevent that.

Now that private companies own and operate so many of these pipelines that bring natural gas to us and these pipelines supply 25 percent of the energy that we use in the United States. So, if anything, the last decade has demonstrated that strong Federal regulations can lead to better pipeline safety, stronger industry, safer homes and offices for everyone. And I'm pleased to be a co-sponsor of the PIPES Act that, Mr. Chairman, you and Senator Inouye have authored, affording introduction of new technology, excess flow valves for new or replacement pipes. These valves automatically shut off when there's a line that's ruptured to help prevent injury, protect property and most importantly, save lives. So, I hope our colleagues will support this bill and Admiral Barrett, thanks for being here today.

When we look out at things and we, I'm sure, can't possibly see reductions in the need for increased capacity, so how do we continue to expand that capacity? Do we just, exchange sizes of pipe or lay pipe alongside the—what do we do to keep up with this, even as we make sure that the pipelines that we presently have, have the capability and are operating in the most efficient manner?

Admiral BARRETT. Senator, thank you. And I do appreciate, sincerely, your support for this bill.

I think you need to do several things, and the list I would give you is not exhaustive. One solution we recently took action on, was to allow some new construction pipelines to operate at higher operating pressure, and that is, instead of limiting them to 70 percent of their maximum operating strength, allow them to operate at 80 percent, which allows the line to carry more capacity, these are gas lines we're talking about. But that was conditioned on new materials, new design, construction oversight and agreements on operating practices and procedures and inspection. So by providing a more rigorous, if you will, regime, we were able to issue waivers to let some newly constructed lines operate at higher pressure. So that was on the margins, but 6 or 7 percent more product moving through a line is very positive. So that's one approach.

I think we have to work more broadly and more closely with all communities, if you will, that are affected by new lines so that they can be put in with the assurance that they can be operated safely.

And by that I mean, we have an agreement and we work with the National Association of State Fire Marshals, we're working with the fire services, first responders, we do support and have—through hazmat grant programs helped to train first responders, but fundamentally to, through a public process, understand the risks to an area of bringing in new lines, and then provide a vehicle to manage those risks safely. And I believe that the job of pipeline safety with the support of this committee, the types of things we're talking about in this bill, the damage prevention programs with our state partners, can manage the risks in a way that will allow these developments to go forward with more confidence that they do not pose an unacceptable risk for our schools or our Nation.

Senator LAUTENBERG. Admiral Barrett, I'm sure that the physical ability to do these, to increase pipelines and increase capacity can be found, but the community resistance to these things is yet another major problem. Especially where there has been an incident along the way in a state or a town and people see what kind of a threat this poses. And I can tell you, we've tried to help companies put more pipe down and improve efficiency, and it's a battle of major proportions.

Admiral BARRETT. Senator, I could not agree with you more, and to take Senator Inouye's word, though, I believe what can help most is transparency, transparency in where the lines are, what the benefits are that they provide, what the risks are and how those risks can be managed.

You have a witness later, Carl Weimer from Pipeline Safety Trust, I was recently down in New Orleans at their annual meeting, I was up in Bellingham at the site of a tragedy up there, similar to the one you mention in New Jersey. I met with the families involved, and the commitment I gave them was that I understand how tragic these incidents can be. And I am committed, and this agency is committed to doing everything we can to ensure lines operate safely. And I think that's the assurance that we have to be able to provide communities, and to get there, is to have honest dialogue and robust dialogue about the concerns they have and how we would propose to address them.

And I agree with you, it is not an easy process.

Senator LAUTENBERG. I would propose your presence when we have these town meetings, I think.

Admiral BARRETT. I would be delighted to that, and—

Senator LAUTENBERG. I don't know whether you'll be delighted—you're nice to volunteer, but that's true of your background.

Admiral BARRETT. Senator, I do think we have to listen and understand.

Senator LAUTENBERG. You have the jurisdiction under the PHMSA as it is to issue technical assistance grants to local communities, have you done any?

Admiral BARRETT. Not specifically, and I believe there are provisions in some of the bills that would actually require us to do some demonstration grants. And part of the issue is devising criteria to make those grants smart and effective. And I believe we would support having a provision that would allow us to do some demonstrations, determine if they're effective, and go forward.

Senator LAUTENBERG. Hard to understand why something like that couldn't be expedited, especially if we're turning more to the states and the localities to participate more actively.

Your testimony calls for restoring public access, Senator Inouye talked about transparency to the National Pipeline Mapping System. Do you believe there are any valid security-related concerns about making that information more widely available?

Admiral BARRETT. Yes, sir, I do. We met with TSA and depending on how much fidelity is provided in the information and what type of information, but I think there's a way to balance those security concerns that are legitimate and they are serious in some cases. But nonetheless, I believe on a local level we can provide the information that community planners and community citizens need, and we are working closely with TSA to achieve that. And TSA, by the way, I would add, is supportive of finding a way to meet the public information need, at the same time protecting the legitimate security concerns.

Senator LAUTENBERG. Chairman, I think it's awful tough to have transparency, full knowledge in the communities without having those we do not like to see the map be able to see it. So, there are a compliment of problems here. I, for one, can't see how we can bypass the communities in terms of that information.

Mr. Chairman, thanks very much for having this hearing.

The CHAIRMAN. Thank you.

Admiral BARRETT. thank you, Senator.

The CHAIRMAN. Admiral one of the things that came out of our listening session in Alaska was that the Trans-Alaskan Pipeline, because of some apparent action and the Pipeline having become a conductor for induced electrical current, developed a series of grounds so that that current could not lead like electrolysis to affect any water that might be inside the pipeline. As we looked at these transit lines, they were supposed to have been cleaned by the cleaning plants, and the oil in the transit line is supposed to be free of gas and water and sludge. However, all three built-up in those transit lines, and the question has been asked, why doesn't your Administration look at the problem of this concept of induced electricity and the possibility of electrolysis having something to do with the erosion and corrosion inside the pipeline that lead to the leaked sections we had?

Admiral BARRETT. Senator, I think you're correct but we do. I think electrolysis-electrochemical reactions obviously are a risk of corrosion in any line, and in northern latitudes, you also have the possible, the telluric-type current effect from things like the Aurora. That has been an issue on the Trans-Alaska Pipeline.

I met, about 2 weeks ago, with Dr. Wong to talk about how we could get a better handle on that type of risk with respect to northern latitude pipelines in general. But it is an area that warrants attention and research and it is one that is actively looked at. But I agree with you that it's an area we will—

The CHAIRMAN. Are you going to pursue that? I think the Aurora comes down to, or Canada comes down to the northern part of what we call the South 48 states, but beyond that, some of it could be induced just from electrical storms.

Admiral BARRETT. Yes, sir. And we are going to pursue the further research in some appropriate way in that area, and I also intend to talk to the State of Alaska about it as well, because they obviously have some concerns, particularly in northern latitudes.

The CHAIRMAN. My last question—are you going to do anything about putting additional burdens on states? After all, they are monitoring the vast majority of the pipelines in this country, not you. They only come to you when there's a problem. But are you going to put them on notice of additional requirements if they are going to be delegated the right, as you do now, you delegate your authority under the law to the states.

Admiral BARRETT. We delegate a lot of authority to them, we do assess how strong their programs are and as you know this proposal would not simply strengthen their enforcement authority on damage prevention. But we're also looking to increase the grants authority from up to as much as 80 percent to help better resource them to execute the programs that they help us do. We view them very much as partners, and I believe they view us the same way. And as you indicated, they have more than three times, three and a half times the number of inspectors that the Federal Government does, and it's absolutely essential that our inspections and enforcement actions be coordinated.

But, fundamentally, also they are closer to the problems in many cases, certainly the gas distribution line issue that Senator Lautenberg mentioned, they're going to be closer to it in many cases, they'll get quicker, smarter solutions than we could from a little distance back. So, our goal would be to strengthen their programs, but also with the help of the Congress, provide additional resources to back-stop them.

The CHAIRMAN. Thank you very much for your testimony, Admiral, I appreciate it and look forward to working with you on the subject, we hope to get you a bill before the Congress recesses.

Admiral BARRETT. Senator, thank you very much, Mr. Co-Chairman, thank you, Senator Lautenberg, thank you for coming in and I look forward to working with you all the time. Thanks, sir.

The CHAIRMAN. Our second panel is Mr. Carl Weimer, he is the Executive Director of the Pipeline Safety Trust of Bellingham, Washington, Mr. Timothy Felt, the President and CEO of the Explorer Pipeline Company of Tulsa, Oklahoma, he's speaking on behalf of the Association of Oil Pipe Lines and the American Petroleum Institute. Third witness is Mr. Terry Boss, Senior Vice President for Environment, Safety and Operations to the Interstate Natural Gas Association of America and Mr. Frank Bender, Vice President of Gas Distribution and New Business Division of Baltimore Gas and Electric Company in Baltimore, Maryland on behalf of the American Gas Association and American Public Gas Association.

Gentlemen, we appreciate your courtesy in coming to be with us today. This hearing is necessary in order that we may move our bill, and we would appreciate your statements as I indicated, your statements will be printed in the record in full, we look forward to your comments. Mr. Weimer, may we call on you first, please.

**STATEMENT OF CARL WEIMER, EXECUTIVE DIRECTOR,
PIPELINE SAFETY TRUST**

Mr. WEIMER. Yes, Mr. Chairman and members of the Committee, thank you for inviting me to speak here today on the important subject of pipeline safety.

The Pipeline Safety Trust came into being after the Olympic Pipeline tragedy in Bellingham that left three young people dead, killed every living thing in a beautiful salmon stream, and caused millions of dollars of economic disruption. Similar tragedies have happened in other places before and since the Bellingham tragedy.

I'd like to start this morning by saying we're quite pleased with S. 3961 and we want to thank you for bringing it forward. In our opinion, there are many things in it that will increase pipeline safety. Just to mention some of our favorites, we support the provisions in the Senate bill regarding low-stress pipelines. We support the inclusion in the Senate bill that requires an executive signature on integrity management reports. We support the 1-year requirement for the development of integrity management standards for gas distribution systems, and we support the language in the Senate bill which requires PHMSA to electronically post monthly summaries of its enforcement actions.

The House Energy and Commerce bill provided language that provides operators the opportunity to provide response to PHMSA enforcement actions, to better illustrate both sides of the enforcement story. This only seems fair, and we hope the Committee will adopt this and additional enforcement transparency language as well.

We support the language in the Senate bill which would authorize technical assistance grants to communities and provide PHMSA incentive to move demonstrations of this program forward sooner rather than later. There is one small change of an item already in the bill which we think would make the bill even stronger. The National Transportation Safety Board, and the International Association of Fire Chiefs has recommended to PHMSA that excess flow valve installation be mandatory in new construction when pipelines are being replaced or upgraded.

The Pipeline Safety Trust commissioned a review of excess flow valves, and that review came to the same mandatory installation conclusion. For these reasons, we support the language in the Senate bill that includes the development of criteria for requiring the installation of excess flow valves, but ask that that language be strengthened to ensure that these inexpensive safety devices are installed, unless a company can prove that they will not operate correctly on their particular system. In our opinion, the current language, which requires these valves on the basis of feasibility and risk analysis, provides too much wiggle room.

The only disagreement we have with the Senate bill is concerning permit streamlining. We have not seen any documented need for streamlining for the construction and expansion of pipelines. Until such need is proven, we oppose the language in Section 13 of the Senate bill.

Since my time today is so short, let me just briefly mention important areas where we believe all the bills still need improvement. After the 2001 terrorist attacks, the National Pipeline Mapping

System was removed from public access. We believe that maps that allow local government to know where pipelines are in relation to housing developments and businesses are critical to prevent pipeline damage and to increase pipeline safety. Current security concerns makes the mapping system mainly useless for local government, since the map information cannot be added to local GIS systems or planning maps because of the required nondisclosure. The location of pipelines are no secret, in fact, they are required to be marked at each public road crossing and railroad crossing and in sufficient number along each buried line, so that the location is accurately known. If terrorists want to find pipeline, they will.

For these reasons, we ask that you direct PHMSA to reinstate access to the National Pipeline Mapping System so that local governments can plan safely.

One of the most important functions that PHMSA provides is the ongoing independent inspection of pipeline companies' operations. We support the additional inspectors in the bill. Unfortunately, none of these inspection findings are available to local government, or the public for review. PHMSA should be required to create an Internet-accessible inspection docket similar to the enforcement transparency requirements in the Senate bill where the public could review basic company inspection information.

And finally, in 2004, the Transportation Research Board released a study on developing risk-informed land-use guidance near transmission guidance near transmission pipelines for use by state and local governments. One of the major pieces of that report was the recommendation to PHMSA for the establishment of a Pipeline and Informed Planning Alliance, a multi-stakeholder effort aimed at moving this risk-informed land-use guidance forward.

The Pipeline Safety Trust was invited to be on the steering committee for that effort in early 2005. Since that time not one meeting has been held, and progress on this important initiative seems to have stalled. We think that Congress should help move this process forward by setting a date certain for this initiative to get started, and require PHMSA to report to Congress on progress made at regular intervals.

Thank you again for this opportunity to testify today. In the past 5 years, pipeline safety has moved forward on many fronts, and we appreciate the part that PHMSA, the industry, and particularly Congress has had in this progress. We hope you will consider the ideas we have brought forward today, which we believe will take pipeline safety up another significant notch, and I'm glad to answer any questions now, that you have now, or any time in the future. Thank you.

[The prepared statement of Mr. Weimer follows:]

PREPARED STATEMENT OF CARL WEIMER, EXECUTIVE DIRECTOR,
PIPELINE SAFETY TRUST

Mr. Chairman and members of the Committee:

Good morning, and thank you for inviting me to speak today on the important subject of pipeline safety. My name is Carl Weimer and I am testifying today as the Executive Director of the Pipeline Safety Trust. I am also a member of the Office of Pipeline Safety's Technical Hazardous Liquid Pipeline Safety Standard Committee, as well as the Chairman of the Governor-appointed Washington State Citi-

zens Committee on Pipeline Safety. I also bring a local government perspective to these discussions as an elected County Commissioner in Washington State.

The Pipeline Safety Trust came into being after the 1999 Olympic Pipeline tragedy in Bellingham Washington that left three young people dead, wiped out every living thing in a beautiful salmon stream, and caused millions of dollars of economic disruption to our region. After investigating this tragedy, the U.S. Justice Department recognized the need for an independent organization that would provide informed comment and advice to both pipeline companies and government regulators; and, would provide the public with an independent clearinghouse of pipeline safety information. The Federal trial court agreed with the Justice Department's recommendation and awarded the Pipeline Safety Trust \$4 million which was used as an initial endowment for the long-term continuation of the Trust's mission.

The vision of the Pipeline Safety Trust is simple. We believe that communities should feel safe when pipelines run through them, and trust that their government is proactively working to prevent pipeline hazards. We believe that the local communities who have the most to lose if a pipeline fails should be included in discussions of how better to prevent pipeline failures. And we believe that only when trusted partnerships between pipeline companies, government, communities, and safety advocates are formed, will pipelines truly be safer.

The Pipeline Safety Trust is the only nonprofit organization in the country that strives to provide a voice for those affected by pipelines that normally have no voice at proceedings like this. With that in mind, I am here to speak today for the families who lost their husbands and fathers in the 2004 Walnut Creek California pipeline explosion caused when the pipeline company incorrectly marked the location of their pipeline. I am speaking today on behalf of the people living along the Kentucky and Ohio Rivers who in 2005 awoke to find 290,000 gallons of crude oil had been dumped by a pipeline into those rivers. And I am here to speak today on behalf of the people who were affected by the more than \$846 million of property damage that pipelines are responsible for in the past 5 years.

The Pipeline Safety Trust has already provided testimony this year to both the House Transportation and Infrastructure Committee and the House Energy and Commerce Committee. As the reauthorization process has proceeded many different ideas have been incorporated into the different bill versions, so I would like to start this morning by providing our opinion on which of these ideas will do the most to make pipelines safer.

Best Provisions in the Different Bills

Low-Stress Pipelines—We support the provisions in S. 3961, and appreciate the addition in Section 3(3) that clarifies that certain exemptions do not apply to incident reporting and the National Pipeline Mapping System.

The 200,000 gallon crude oil leak on the North Slope of Alaska last winter, the additional leak found this past summer followed by a partial shut-down of the Prudhoe Bay Oil Field, and the ensuing fiasco concerning BP's previously inadequate pipeline maintenance and testing have made it clear that all such low-stress pipelines should fall under the same minimum Federal standards as other transmission pipelines. Likewise, those sections of pipeline, which could affect Unusually Sensitive Areas, should be required to meet the same integrity management provisions as other transmission pipelines.

The Pipeline and Hazardous Material Safety Administration (PHMSA) is currently engaged in a rulemaking on these low-stress pipelines that has as a starting point a proposal that is much weaker, and more confusing, than what is included in S. 3961, and the version of the bill coming forward from the House Energy and Commerce Committee. We hope that Congress will pass these provisions soon so that PHMSA understands the importance Congress has put on ensuring these pipelines are maintained in a way that protects the environment and the economy.

Senior Executive Signature on Integrity Management Reports—We support this inclusion in S. 3961, and believe it is an excellent method to ensure that the senior management that makes decisions regarding maintenance, testing, and budget decisions affecting pipeline safety are also aware of the current integrity of their federally-regulated pipelines.

Distribution Integrity Management Program & Deadline—The majority of deaths and injuries from pipelines occur from incidents on the distribution pipeline systems that bring gas to our towns, businesses, and homes. From the period 2001 through 2005 sixty-one people died along these pipelines, and two hundred and thirty seven were injured. PHMSA, states, industry, and private organizations have undertaken an aggressive work plan to come up with an integrity management program for distribution pipelines. The Phase 1 report on this plan was released earlier this year, and all involved deserve our thanks for their efforts.

It is imperative that this plan now moves to the adoption of rules as soon as possible. We applaud and *support* the one-year requirement in all the present bills for the development of such standards.

One area that bills differ is regarding requirements to include criteria for the installation of excess flow valves. The National Transportation Safety Board (NTSB) has recommended to PHMSA that excess flow valve installation be mandatory in new construction and when existing service pipelines are being replaced or upgraded. The International Association of Fire Chiefs supports this mandatory installation position. The Pipeline Safety Trust commissioned an independent review of the literature and science on excess flow valves, and that review came to the same mandatory installation conclusion.

For these reasons we *support* the language in S. 3961 that includes the development of criteria for requiring the installation of excess flow valves.

Enforcement Transparency—One of the things that PHMSA has been criticized for in the past is the lack of the use of enforcement to deter future accidents. In our own Bellingham tragedy, PHMSA announced with great fanfare a proposed penalty of \$3.02 million. Then for nearly 5 years the regulators and the pipeline company went behind closed doors, and when they emerged the fine had been mysteriously reduced to \$250,000. The only information available to the public regarding why this drastic reduction had occurred was the short phrase in the Settlement Order that said “In order to avoid further litigation or expense, OPS and Olympic resolve this case.” This did not sit well with the people in Bellingham, and certainly does not instill confidence or trust in a regulatory agency.

In 2000, the El Paso Pipeline in New Mexico blew up killing an entire extended family of twelve. Again PHMSA announced with much fanfare a proposed \$2.52 million fine. Now, over 6 years later, there is no information available about the status of that penalty, and it appears that not one cent of it has been collected.

Most law enforcement in this country takes place in public for good reasons. Public scrutiny enhances credibility, accountability and fairness. Seeing PHMSA expeditiously enforce its regulations would instill confidence that safe pipeline operation is a requirement rather than a guideline. If companies challenge fines because regulations are poorly crafted, the public could demand better rules.

We *support* the language in S. 3961, which requires PHMSA to electronically post monthly summaries of its enforcement actions. We also *support* the language in the House Energy and Commerce Bill that provides operators the ability to provide response to PHMSA enforcement actions to better illustrate both sides of the enforcement story. This only seems fair, and we hope the Senate Commerce, Science, and Transportation Committee will adopt this additional language as well.

Technical Assistance Grants—The Pipeline Safety Improvement Act of 2002 included a new program to enhance the understanding and involvement of local communities and state initiatives in pipeline safety issues by making grants of up to \$50,000 available for “technical assistance to local communities and groups of individuals relating to the safety of pipeline facilities in local communities.”

These grants were envisioned as a way to keep valuable independent pipeline safety initiatives moving forward, and to ensure that those most directly impacted by pipeline failures have the resources to become legitimate stakeholders in processes to improve pipeline safety. Examples of groups that could benefit from such grants include the Washington City and County Pipeline Safety Consortium and the Kentucky Pipeline Safety Advisory Committee. Both of these groups formed after major pipeline failures and involve a broad spectrum of stakeholders looking for solutions to keep their communities safe and avoid further pipeline accidents. These grants would be a small price to pay to help foster such outstanding examples of independent pipeline safety initiatives, and pipeline safety involvement. Such local involvement is critical as PHMSA moves forward in the areas of pipeline damage prevention and encroachment. Another potential use of the grants is to pay for increased public and local government involvement in industry standards development and to assist in public comments on technical regulations.

To date none of these grants have been awarded, and to our knowledge PHMSA has not even begun the process to develop procedures to award such grants. We *support* the language in S. 3961, which would reauthorize these grants, and provide PHMSA an incentive to move demonstrations of this program forward sooner rather than later.

State pipeline damage prevention programs—For years now PHMSA has partnered with the Common Ground Alliance and One-Call centers to provide a nationwide structure to educate contractors, utilities, local government, and the public on the need to be aware of the underground pipeline infrastructure, develop best management practices, and use one-call locator services. These have been valuable

programs, and have laid the start of a national network to improve pipeline damage prevention.

It has become apparent over the past few years that for these efforts to be truly effective there needs to be enforceable laws, and adequate local enforcement of those laws, to provide the incentive for all who dig to pay attention to how and where they dig. Progressive states such as Virginia and Minnesota have proven that with good education programs coupled with data collection and adequate and fair enforcement, the number of incidents of damage to pipelines decreases considerably.

The only way that state and local enforcement will increase is if Congress provides increased funding to the state's pipeline programs, and allows PHMSA to distribute that funding in such a way that it is an incentive for states to increase their capacity for enforcement. We *support* the language in S. 3961, which provides for greater funding of state damage prevention programs, and provides clarity of what such programs should include. We also believe that at this point in time it is important that this money is available to help states develop such programs, so we also *support* the language that was included in the House Energy and Commerce Bill that amends 60105(b)(4) to make it clear that a state that is "encouraging and promoting the establishment of a program" can receive the grant funding even if the program is not yet fully in place.

Safety Orders—We fully *support* the language in S. 3961, which allows PHMSA to waive notice and a hearing in an emergency. We *oppose* the language in the Senate bill, which requires the new rules be in place before a safety order can be issued. We hope that these rules will be promulgated swiftly, and *support* the "within 1 year" provision in the House Energy and Commerce Bill, but we do not believe issuance of such important orders should be put on hold until these new rules are promulgated.

Permit Streamlining—We supported the language in Section 16 of the Pipeline Safety Improvement Act of 2002 that gave PHMSA authority to help expedite and coordinate the repair of existing pipelines to help ensure timely safety repairs without preempting any Federal, state, or local environmental laws. We have not seen any documented need for permit streamlining for the construction and expansion of pipelines. Until such documented need is proven we *oppose* the language in Section 13 of S. 3961. Additionally, this section does not contain critical language prohibiting preemption of Federal, state, or local environmental laws.

One-Call Civil Enforcement—We *support* the language in S. 3961. We agree that PHMSA's authority should not be limited in any state, and that calling 911 to report damage should not be the only method included. We also *support* the language that includes operators who fail to respond to location requests in a timely manner, or who mark pipelines incorrectly.

Gas Pipeline Integrity Reassessment Interval—The first cycle of integrity management assessment for gas pipelines has not even been completed yet, so we *support* the Senate bill's authors who chose not to address the reassessment interval at this early date.

Human Factor Risk Management Rulemaking—We *support* the 18 month requirement for development of these standards, and also *support* the specific language in S. 3961 that requires these standards to address work hours and schedules.

Leak Detection Technology Report—We *support* the language in S. 3961 which requires a report from PHMSA within 1 year on the effectiveness of current leak detection technology.

Although S. 3961 and the associated House Bills contain many important improvements to pipeline safety, we feel that there are still some significant omissions from all of these bills. We ask that you amend S. 3961 to include the following provisions.

Needed Improvements Missing at This Time

The Need for More Publicly Available Information

One of the Pipeline Safety Trust's highest priorities is to ensure that there is enough accurate information easily available to local governments and the public to allow them to independently gauge the safety of the pipelines that run through their communities. PHMSA has made a good deal of progress in this area, but some of the most important information pieces are still missing. We ask that you help make this information available.

Maps—Maps that allow local government emergency responders, planners, and zoning officials to know where pipelines are in relation to housing developments and a variety of infrastructure are critical to prevent pipeline damage and increase pipeline safety. Maps that allow the public to see what pipelines run through their neighborhoods are also the best way to capture the public's attention regarding pipeline safety, increase their awareness of pipeline damage issues, and enlist them to

be the eyes to help prevent pipeline damage. Maps also allow homebuyers to decide their own comfort level with living near pipelines.

The 2002 Pipeline Safety Improvement Act required that pipeline companies provide PHMSA with data for the National Pipeline Mapping System (NPMS) so such maps could be available for the above purposes. Unfortunately after the September 11, 2001 terrorist attacks the NPMS system was removed from easy access and became a password-protected system that approved users have to agree not to share with anyone else. This new NPMS security removes the maps from the public altogether, and makes the system mainly useless for local government since the map information can not be added to local GIS systems or planning maps because of the required nondisclosure.

This removal of maps out of fear that terrorists may use them to find targets flies in the face of common sense. The location of pipelines are no secret, in fact 49 CFR 195.410 requires that "Markers must be located at each public road crossing, at each railroad crossing, and in sufficient number along the remainder of each buried line so that its location is accurately known." If terrorists want to find pipelines, they will. All that has been accomplished by removing maps from the public is to increase the growing problem of encroachment near pipelines, and of unintentional damage to pipelines.

This removal of the NPMS from the public has also caused some states, such as Washington, Texas and Louisiana, to spend their limited state dollars to duplicate this mapping system so that local government and the public have access to this valuable information.

For these reasons we ask that you direct PHMSA to reinstate access to the NPMS, so local governments can plan safely and the public can be aware of the pipelines that run through their midst.

Access to Inspection Findings—One of the most important functions that PHMSA provides is the ongoing independent inspection of pipeline companies' operations, maintenance, and training programs. The findings of these inspections form one of the very basic protections to the public. Unfortunately none of these inspection findings are available for local government or the public to review, leaving them to only guess the condition of pipelines, or even if such inspections are taking place.

The pipeline industry themselves complains about this system. Individual companies do know when they have been inspected, but often have to wait months or years to learn the outcome of the inspections, and most times if no problems were found they hear absolutely nothing. This lengthy, or nonexistent, feedback system to pipeline companies is unfair, and does not improve safety the way a timely feedback system would.

Somewhere there must exist, or there should exist, a simple coversheet for each inspection that includes basic information such as pipeline segment included, the date of the inspection, type of inspection, concerns noted, and corrections required. If this basic information, along with associated correspondence between the agency and the pipeline company, were provided on an Internet-based docket system that could be searched by state or pipeline company name, we believe it would go a long way toward demonstrating progress, and thus increasing trust in pipeline safety. This inspection transparency would go hand-in-hand with the enforcement transparency that is already included in S. 3961.

Reporting of Over-Pressurization Events—One of the clearest measurements of whether a pipeline company has good control of their pipeline system is the number of times that they allow their pipeline to exceed the maximum allowable operating pressure plus a permitted accumulation pressure for gas pipelines, or 110 percent of the maximum operating pressure for liquid pipelines. Unfortunately the vast majority of these events are not required to be reported to PHMSA, so neither PHMSA nor the public can use this indicator to determine whether the pipeline company is causing unwarranted stress on their pipeline and therefore needs greater scrutiny.

In the 1980s when it was decided to provide an exemption to reporting most of these important events the reasoning was that the reporting would be extremely time intensive and costly for the industry, and PHMSA (RSPA at that time) had no database that would handle the data in a way that would be valuable for the agency. Fifteen years ago e-mail, the Internet, and integrated databases were a vague dream. That has all changed, so the arguments used against the collection of this valuable information no longer apply. Furthermore, with increased capabilities in control room technology, remote communications, and integrity management the number of over-pressurization events should have reduced. Without this reporting requirement we have no way to know.

For these reasons the exemptions from reporting these events contained in 49 CFR 191.23(b) and 49 CFR 195.55(b) should be removed.

Pipelines and Informed Planning Alliance (PIPA)

In August of 2004, the Transportation Research Board of the National Academies released a study on the feasibility of developing risk-informed land use guidance near existing and future transmission pipelines for use by state and local governments. This study was an attempt to address the need for local governments to use land use and zoning laws to try to protect citizens and pipelines from encroachment by development near existing pipelines and in the siting of new pipelines.

The vast majority of local planning departments have little expertise or knowledge of pipelines, so developing such guidance is a crucial part in the overall strategy of damage prevention. PHMSA provided a report to Congress on the development of these guidance activities in January of 2005. One of the major pieces of that report was the establishment of the Pipelines and Informed Planning Alliance (PIPA), a multi-stakeholder effort aimed at designing and moving this risk-informed land use guidance forward.

This effort will not be easy because many of these stakeholders have little reason to add concern for pipelines very high up on their already crowded list of priorities, but it is essential that this effort get underway. This is another area where increased funding for state participation, and funding of the Pipeline Safety Information Grants to allow these stakeholder groups to participate as equal partners, will be required for a successful outcome.

The Pipeline Safety Trust was invited to be on the steering committee for the PIPA effort in early 2005. Since that time not one meeting has been held, and progress on this important initiative seems to have stalled. We think that Congress should help move this process forward by setting a date-certain for this initiative to get started, and require PHMSA to report to Congress on progress made at regular intervals.

Greater Citizen Involvement—State Pipeline Advisory Committees

The Pipeline Safety Improvement Act of 2002 provided a vehicle for greater public involvement in pipeline safety issues for pipeline advisory committees appointed by state Governors. The states of Washington and Kentucky have both taken advantage of this opportunity to involve a broader range of stakeholders in pipeline safety discussions. The creation of state advisory committees is essential for greater public involvement, especially as PHMSA moves forward on efforts to involve local communities on issues regarding pipelines, encroachment and smart local planning. In Washington State the Citizen Committee on Pipeline Safety has become an integral part of rulemaking and public involvement, as well as a valuable sounding board for concerned citizens, local government, industry, and the state legislature.

We believe that greater public involvement, leads to greater trust and understanding, which leads to smarter, more comprehensive pipeline safety initiatives. For this reason we hope that Congress will encourage the creation of more state pipeline advisory committees. This could be accomplished by having PHMSA promote such advisory committees, while tying a small percentage of the state pipeline safety program grant to the appointment and ongoing meeting of such a Governor-appointed committee.

Financial Responsibility Requirements for Pipeline Corporations

Large corporations can shield themselves from liability for poor safety practices through certain strategies, such as holding assets that may generate liability (*e.g.*, pipelines) in subsidiaries or as shares of separate corporations. As part of this strategy, the parent corporation drastically undercapitalizes its subsidiary. In the case of pipelines, this is common. It is not unusual for a pipeline company to be capitalized by virtually 100 percent debt, lent by the large corporate shareholders.

In fact, the owners of the Olympic Pipeline used a similar strategy. In a major spill like Bellingham, the undercapitalized pipeline company is forced into bankruptcy when the owners decline to provide further financing. In the usual bankruptcy, the shareholders lose the company assets to the debt holders, but in this case, those are the same entities. Bankruptcy presents no meaningful threat to these shareholders but it does allow pipeline companies to avoid financial consequences for inadequate safety measures.

Congress should consider imposing financial responsibility requirements for pipelines as it already does for other companies under the Resources Conservation and Recovery Act (RCRA) and the Oil Pollution Act (OPA). To get this process started we urge Congress to ask for a study from either GAO or CRS, to describe how this works in other regulatory realms, and how it could best be adapted for pipelines.

Expansion of High Consequence Areas (HCA)

Finally, we would like Congress to consider a phased expansion of what is included within the definition of high consequence areas (HCA). This definition, to a large extent, is what determines which transmission pipelines are required to be inspected under the integrity management rules. At this time HCA's mainly include populated areas, areas where people congregate, and for liquid pipelines drinking water sources, and navigable waterways. This was a good starting place for integrity management since it represented the most crucial areas and a significant undertaking for the industry.

As the first phase of integrity management testing is accomplished we believe operator and regulator experience, along with the increases in industry infrastructure needed to undertake these inspections, makes it possible to expand the definition of HCA to include important areas that were left out of the initial definition. These left out areas would include things like important historical sites, national parks and wildlife refuges, and in the case of liquid pipelines swimmable and fishable waters.

Before I finish I would like to comment on the progress that PHMSA has made under its current leadership. In the past seven and a half years, since the Bellingham pipeline tragedy, due to strong efforts from citizens, Members of Congress, PHMSA, and the industry itself, progress has been made to prevent further tragedies like those that have occurred in Edison, NJ; Walnut Creek, CA; Blenheim, NY; Mounds View, MN; Lively, TX; San Bernardino, CA; Bellingham, WA; Carlsbad, NM; and elsewhere.

For the first time parts of gas and liquid transmission pipelines now have to be internally inspected, and rulemaking is proceeding to include integrity management requirements for gas distribution pipelines where the majority of deaths and injuries occur. Pipeline operators now have clear requirements for communicating to the public and local government, and OPS has unveiled new additions to their own website and communication programs. Perhaps just as significant, many progressive thinking pipeline companies have taken pipeline safety seriously enough that they are now leading by example by operating and maintaining their pipelines in ways that go beyond the minimum Federal standards.

We should all celebrate this progress, while acknowledging that continuous evaluation and improvement can make pipelines considerably safer yet, and thereby restore the public's trust in pipelines.

Thank you again for this opportunity to testify today. We hope that you will consider the ideas we have brought forward today, which we believe can take pipeline safety up another significant notch. If you have any questions now, or at anytime in the future, I would be glad to try to answer them.

The CHAIRMAN. Mr. Felt?

STATEMENT OF TIMOTHY FELT, PRESIDENT/CEO, EXPLORER PIPELINE COMPANY; MEMBER, AMERICAN PETROLEUM INSTITUTE PIPELINE COMMITTEE; AND VICE CHAIRMAN/TREASURER-ELECT, ASSOCIATION OF OIL PIPE LINES

Mr. FELT. Mr. Chairman, Mr. Co-Chairman, members of the Committee, my name is Tim Felt, I am President and CEO of Explorer Pipeline, headquartered in Tulsa, Oklahoma.

Explorer operates 1,400 miles of petroleum products pipeline, serving 16 states, extending from the Gulf Coast and throughout the mid-western United States. I appreciate the opportunity to appear today on behalf of API and AOPL. Together, these organizations represent the companies responsible for the vast majority of U.S. oil pipeline transportation. I will summarize my written testimony, and ask that the full text and attachments be included in the record of this hearing for the Committee's consideration.

Our primary message today is that we believe a pipeline safety reauthorization bill can be passed in this Congress. Congress should act now, not at some indefinite future date, to reaffirm and strengthen a program put in place with the Pipeline Safety Improvement Act of 2002. The 2002 Act is a success—industry and

DOT have cooperated to achieve significant improvement in pipeline safety, and this improvement is demonstrated by our industry's record. This record is reflected in the charts that accompany my testimony.

The oil pipeline industry plans to invest over \$1 billion in pipeline safety improvements over the next 5 years. Because of this, it is very important that Congress reauthorize the DOT pipeline safety program in 2006. Reauthorization sends a clear signal that these investments are appropriate, and that DOT is on the right track in implementing the Pipeline Safety Improvement Act of 2002.

In addition, several billions of dollars of investment in new oil pipeline infrastructure are underway or planned in the near-term. Certainty in the safety requirements this infrastructure must meet is very important for these investments. The prospects for a compromise pipeline safety reauthorization bill should be excellent—the proposals before us have a number of elements in common, and address for the most part, the same issues.

We've come this far and worked together so well that we must achieve passage of a bill. We should not wait for some future Congress to enact a compromise bill that could be passed now.

Let me discuss a few provisions of interest. Damage prevention—at the center of all bills are similar provisions that will strengthen enforcement of state laws designed to prevent underground damage. All include a comprehensive list of the elements, including effective enforcement, that characterize successful state underground damage prevention programs. DOT is given important new authority to assist in enforcing damage prevention laws. We strongly support these provisions and urge the Committees to build their final legislative product around underground damage prevention.

I serve on the Common Ground Alliance Board as a Member for the oil pipeline industry. The CGA is one of the best things that has happened to pipeline safety in many years. The CGA provides a forum to work underground damage prevention issues that simply doesn't exist anywhere else.

One of the current roles is to lead the public awareness campaign to promote use of the nationwide toll-free 8-1-1 telephone number for One-Call notification that was required by the 2002 Act. Your bill should explicitly authorize funds to support the 8-1-1 campaign.

Regarding safety orders—section 6 of S. 3961 contains a provision that modifies DOT current authority to issue mandatory orders to pipeline operators. As I explain in more detail in my written statement, we have concerns with this provision. As drafted, the Secretary of Transportation may order an operator to make extensive expenditures, including replacement of the operator's entire system to address any condition that poses a risk based on any factors the Secretary considers appropriate. Under these provisions, an operator could be powerless to contest a DOT order for unnecessary expenditures of scarce resources to address questionable risks.

We urge the Committee to transform the provision into a problem-solving tool instead of a provision that assumes a contest among lawyers is always necessary. We suggest the Committee direct that the administrative procedures implementing this order offer the pipeline operator an opportunity to confer informally with

DOT before exercising the operator's right to a hearing. Any action by mutual agreement as a result of the consultation could be reduced to words and made both public and enforceable. This simple modification will save time and legal costs and bring about safety improvements sooner. If the operator and DOT cannot agree promptly on a remedy, the DOT would still retain authority to conduct a formal hearing and issue its order.

In summary, current pipeline safety law is working, and working very well. The legislative proposals before Congress all would make real improvements in an already sound DOT safety program. The important goal at this point is enactment of the legislation reauthorizing this program. The passage of compromise legislation is more important than any concerns we have with individual provisions. We need to move promptly to agree on the improvements that can gain broad support and incorporate these improvements in a pipeline safety reauthorization bill that can be enacted this year. The public should not have to wait until next Congress to make the improvements we can agree on now.

We need to pass a pipeline safety reauthorization bill in this Congress and the oil pipeline industry stands ready to help in any way we can to achieve this worthwhile goal. Thank you.

[The prepared statement of Mr. Felt follows:]

PREPARED STATEMENT OF TIMOTHY FELT, PRESIDENT/CEO, EXPLORER PIPELINE COMPANY; MEMBER, AMERICAN PETROLEUM INSTITUTE PIPELINE COMMITTEE; AND VICE CHAIRMAN/TREASURER-ELECT, ASSOCIATION OF OIL PIPE LINES

Mr. Chairman, members of the Committee, my name is Tim Felt. I am President and CEO of Explorer Pipeline Company, headquartered in Tulsa, Oklahoma. Explorer operates 1,400 miles of petroleum products pipeline serving 16 states extending from the Gulf Coast throughout the mid-western United States.

I am a member of the API Pipeline Committee, Vice Chairman and Treasurer-Elect of the Association of Oil Pipe Lines, and the oil pipeline industry's Board Member for the Common Ground Alliance, a voluntary, private-sector organization dedicated to the prevention of excavation damage to underground facilities. I appreciate the opportunity to appear today on behalf of API and AOPL. Together, API and AOPL represent the companies responsible for the vast majority of U.S. oil pipeline transportation.

Summary

As the Committee reviews the current state of pipeline safety and the progress that has been made since the 2002 Act, these are the main points I would like to emphasize:

- We need to enact pipeline safety reauthorization legislation before the end of this Congress. A lot of work has gone into the current bills, and there are no major disagreements about what a compromise among the various bills should look like. Let's get a good bill passed now.
- The Pipeline Safety Improvement Act of 2002 is a success. Industry and DOT have cooperated to achieve significant improvement in pipeline safety, and this improvement is demonstrated by our industry's record. This record is reflected on the charts that accompany my testimony.
- The oil pipeline industry is making the investments needed to fully comply with the law and related regulations and in many cases to exceed their requirements. We plan to invest over \$1 billion in pipeline safety improvements over the next 5 years. Because of this, it is very important that Congress reauthorize the DOT pipeline safety program in 2006. Reauthorization sends a clear signal that these investments are appropriate, and DOT is on the right track in implementing the 2002 Act.
- In addition, several billions of dollars of investments in new oil pipeline infrastructure are underway or planned in the near-term. Certainty in the safety re-

quirements this infrastructure must meet is very important for these investments.

- The Administration, the jurisdictional Committees of the House and Senate, the industry and the pipeline advocates are in virtual agreement on the core provisions of a compromise reauthorization bill that could be passed in 2006. Passage of a bill before final Congressional adjournment is our shared goal.
- If this Congress passes a reauthorization bill, the protections provided by this compromise will be available now. If this Congress fails to pass a bill, a subsequent Congress must start over to adopt new legislation approving the needed authority. That could take months or years. Congress can act now and should act now.

We urge you to act promptly to reconcile any differences between the Senate bill, S. 3961, and the bills approved by the House Committees and send a compromise bill to the President this year.

The Role of Pipelines in Petroleum Supply

In discussing pipeline safety legislation, it is useful to remind the Committee of the role oil pipelines play in energy supply. An understanding of this role leads to appreciation of the need for effective and workable policies that provide certainty so this key part of the petroleum distribution system operates efficiently and safely.

About 40 percent of the total U.S. energy supply comes from petroleum, but the transportation sector depends on petroleum for 97 percent of its energy. Two-thirds of domestic crude oil and refined products transportation is provided by pipeline. Pipelines do this safely and efficiently. The cost to deliver a gallon of petroleum by pipeline is very low, typically 2–3 cents per gallon. Transportation—airlines, automobiles, trucks, barges and ships—could not function without pipelines to deliver crude oil to refineries and refinery output of petroleum fuels to consumers in various parts of the country. The national oil pipeline system is a bargain for consumers and an absolutely essential part of the U.S. economy.

Oil pipelines are common carriers whose rates are regulated by the Federal Energy Regulatory Commission. Oil pipeline income is driven by the volume delivered and does not depend on the price of the products transported. Oil pipeline companies do not profit from high oil prices. In fact, high oil prices have a negative impact on oil pipeline income by raising power costs and reducing demand for petroleum.

Progress in Pipeline Safety

Oil pipeline operators have been subject to the DOT's pipeline integrity management regulations since March 2001, before enactment of the 2002 Act. DOT's inspections of operators' plans show that integrity testing will eventually cover approximately 82 percent of the Nation's oil pipeline infrastructure. The oil pipeline industry is well past the halfway point in the implementation of integrity management. DOT has audited each of these operators under these regulations at least two times—an initial "quick hit" audit and one subsequent full audit. Many are involved in a third audit cycle. Operators are finding and repairing conditions in need of repair and less serious conditions discovered in the course of investigating defects. Operators are fixing what they find, often going beyond the requirements of the regulations.

Improved Spill Record

These inspections and repairs have improved the oil pipeline spill record dramatically in the last 5 years, as the exhibits show. The data for these exhibits comes from a voluntary industry program that since 1999 has collected extensive data on oil pipeline performance. These figures represent line pipe releases, which are those that occur outside the company's facilities and are the releases most likely to impact the public and the environment. Line pipe is rightly the primary focus of DOT's program, so the improvement in our record is direct evidence of the wisdom of the DOT approach.

The trend in oil pipeline incidents is down for each cause category. The number of total releases dropped 51 percent, releases due to corrosion dropped 67 percent, and releases due to operator error dropped by 63 percent. Finally, releases from third-party damage from excavation dropped 37 percent.

This safety improvement record only covers half the 7-year baseline assessment period for oil pipelines. We expect the record to show continued improvement as we complete the first full cycle and move through subsequent mandatory 5-year reassessment intervals.

The Federal pipeline safety program is working. Congress needs to pass a reauthorization bill that endorses and, where appropriate, strengthens this excellent program.

Legislation

The legislative proposals—the Administration’s H.R. 5678, the House versions of H.R. 5782 and the Senate’s S. 3961—all assume continuation of the current DOT program and seek to make it better. I would like to highlight the provisions of these proposals that we believe are the most significant and deserve the most attention by the Committee. My testimony will also discuss improvements we recommend for certain of the provisions. While none of these bills are perfect from our perspective, the Committee should understand that we see nothing that would cause AOPL and API to oppose enactment of compromise pipeline safety reauthorization legislation based on these bills. Enactment of the legislation is more important than any concerns we have with individual provisions.

Underground Damage Prevention

Pipeline releases caused by excavation damage are the most traumatic, the largest, and are the most likely to threaten the public and the environment. At the center of H.R. 5678, H.R. 5782 and S. 3961 are similar provisions that will strengthen the impact of state laws designed to prevent underground damage. Incentives are provided to states that adopt strong damage prevention laws and programs. To qualify for these incentives a state must also be adequately enforcing its damage prevention laws. Improvement in enforcement of state damage prevention laws would make real improvement in pipeline safety.

In addition, these bills all make it a Federal civil violation to ignore state underground damage prevention laws. We believe this expression of the seriousness the Federal Government attaches to damage prevention enforcement is one of the most important safety advances proposed in these or any recent pipeline safety bills.

Common Ground Alliance

As noted at the beginning of my testimony, I serve as the Common Ground Alliance Board Member for the oil pipeline industry. The CGA is one of the best things that has happened in pipeline safety in many years. CGA provides a forum to work underground damage prevention issues that simply doesn’t exist anywhere else. CGA brings solutions to the table instead of problems. One of CGA’s current roles is to lead the public awareness campaign to promote use of the nationwide, toll-free 8-1-1 telephone number for one-call notification that was required by the 2002 Act. Section 17 of S. 3961 should specifically authorize funds to support the 8-1-1 campaign.

Low-Stress Pipelines

Earlier this year there was a significant leak from a crude oil pipeline on the North Slope of Alaska that was under DOT’s jurisdiction, but was operating at less than 20 percent of specified minimum yield strength—low-stress. Crude oil from this release covered an approximately two-acre area. Based on API’s Pipeline Performance Tracking System, our industry’s internal data library on oil pipeline spills, this particular leak was a statistical anomaly in its size and is not at all typical of releases from low-stress pipelines. Nevertheless, the leak shows that anomalies do occur and must be considered in managing the risks pipelines present. That pipeline was regulated by the Alaska Department of Environmental Conservation, but was not covered by the DOT regulations then in effect because it was operating at low-stress, did not cross a navigable waterway, was in a rural area and did not transport highly volatile liquids.

DOT has accelerated a rulemaking process that was underway before the leak occurred to address the regulation of low-stress pipelines. In the House, one of the pipeline safety reauthorization bills directly addresses the regulation of low-stress pipelines other than gathering lines. AOPL and API worked with the House Energy and Commerce Committee and are supporting a provision in that Committee’s version of H.R. 5782 that would subject the pipeline on the North Slope that leaked and similar pipelines to the same DOT regulation that currently covers high-stress pipelines. Section 13 of S. 3961 is similar to this House provision. We continue to support the House Energy and Commerce Committee low-stress provision and urge this committee to adopt the same language so that the treatment of low-stress pipelines will be the same in each bill.

Safety Orders

Sec. 6 of S. 3691 modifies DOT’s current authority to issue mandatory orders to pipeline operators. Title 49 section 60117(l) was added by the Pipeline Safety Improvement Act of 2002 to allow DOT to issue a “safety order” to an individual operator in situations that appear to require action, but do not rise to the level of danger implied in a “hazardous facility” designation under section 60112, the principal authority available to DOT to order actions by an operator. The intent in 2002, as we

understand it, was to provide DOT with an enforcement tool with a lower threshold that would not require DOT to first declare that an operator's facility "is or would be hazardous" before actions would be required of the operator that could be documented in the public record. Unfortunately, the existing section 60117(l) does not provide for notice or an opportunity for a hearing before an order would be issued. This existing provision is seriously lacking in due process protection for pipeline operators who might be subject to such an order.

The Administration's bill, the House Energy and Commerce bill and Sec. 6 of S. 3961 all amend section 60117(l) to add a welcome notice requirement and opportunity for a hearing at DOT before any order could be issued. Ensuring a modicum of due process addresses a significant omission in the 2002 Act. However, Sec. 6 goes on, in effect, to eliminate the due process benefit by practically abolishing any threshold or burden of proof for DOT in triggering a safety order. The Secretary of Transportation may order an operator to make possibly extensive expenditures on all or a portion of the operator's system to address "any condition that poses a risk" based on any "factors the Secretary considers appropriate". Under these provisions an operator could be virtually powerless to contest effectively any DOT requirement to make what the operator believes to be unnecessary expenditures of scarce resources to address questionable risks.

Notwithstanding these concerns, we recognize that some version of Sec. 6 is likely to be included in any final pipeline safety reauthorization bill. Therefore we urge the Committee to transform the provision into a problem-solving tool instead of a provision that assumes a contest among lawyers is always necessary. We suggest the Committee direct that the administrative procedures implementing this order offer the pipeline operator an opportunity to confer informally with DOT before exercising the operator's right to a hearing. We believe informal consultation will produce remedies acceptable to both operator and DOT that will resolve the vast majority of DOT's concerns without the need for a formal hearing. Any action taken by mutual agreement as a result of the consultation could be reduced to writing and made both public and enforceable. We believe this simple modification will save time and legal costs and bring about safety improvements sooner. If the operator and DOT cannot agree on a remedy, the DOT would retain the authority to conduct a formal hearing and issue its order.

Finally, we suggest the Committee to modify Sec. 6 of S. 3961 to focus the authority on pipeline integrity risks and remove pipeline "replacement" as a remedy for this low-threshold order. If DOT is going to take the expensive step of ordering replacement of a pipeline, it should be done under the higher-threshold hazardous facility order authority of title 49 section 60112.

Enforcement Transparency

Sec. 9 of S. 3961 requires DOT to post information on a monthly basis about pipeline enforcement actions taken by the Secretary or the Pipeline and Hazardous Materials Safety Administration. We have no objection to this proposal as long as the normal due process and confidentiality attaching to negotiation and settlement of cases is preserved. The House Energy and Commerce Committee language captures these safeguards and in addition ensures that no information will be disclosed under this provision that would not be disclosed under the Freedom of Information Act. We believe consistency with the Freedom of Information Act should be required in whatever bill passes.

Cost Recovery for Extraordinary Events

Sec. 19 of S. 3691 authorizes DOT to recover DOT's costs of investigating major pipeline safety incidents "from the person or persons responsible for the incident." The amounts collected would not be returned to the Treasury, but would remain available to DOT until expended to cover the cost of investigating and monitoring incidents. We question the wisdom of this provision. DOT should budget for these types of expenses through the normal Federal budget process. The additional fees authorized by Sec. 19 would not be subject to Congressional control or oversight through the appropriations process. There would be no effective check on the operation of this authority once this bill passes.

Other Provisions

My comments today have not addressed every provision of every proposal. Most of the provisions I have not discussed we do not oppose or do not directly affect the oil pipeline industry. I would reiterate that the important goal at this point is enactment of the legislation. Passage of compromise legislation is more important than any concerns we have with individual provisions.

With so little time left in the current Congress, we hope the Committee will work with the House to put together (and quickly) a bill that has broad appeal and can

pass both Houses. The test for inclusion of a provision should be whether it is acceptable to all the interested parties. We need to move forward by consensus, and we need to move rapidly if a bill is to pass. It would be a shame to have come this far and worked together so well and yet not achieve passage of the bill. The protections for the public that a bill would provide are within reach, particularly in the area of damage prevention and state cooperation. These protections should be made available now. We should not make the public wait for some future Congress to enact these protections.

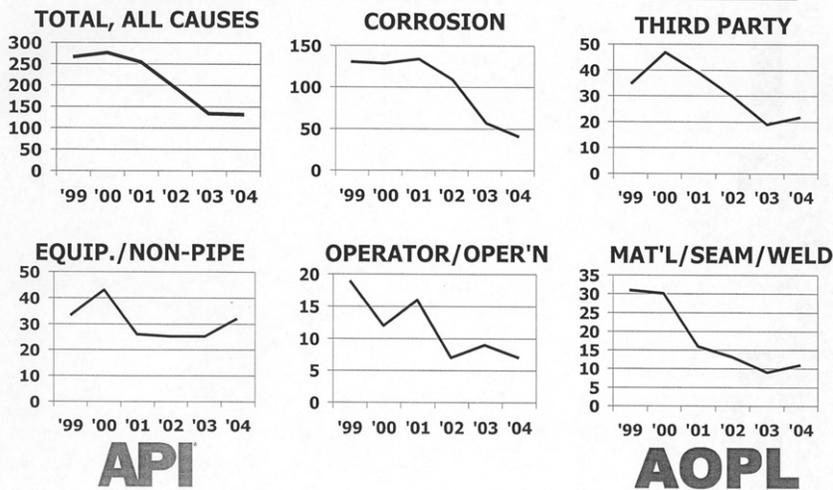
Closing

In summary, current pipeline safety law is working, and working very well. Improvements can be made, particularly in strengthening underground damage prevention, but fundamental changes are not needed. The legislative proposals before Congress all seek to make improvements in the fundamentally sound DOT pipeline safety program based on the Pipeline Safety Improvement Act of 2002. We need to move promptly to agree on the improvements that can gain broad support and incorporate these improvements in a pipeline safety reauthorization bill that can be enacted this year. The oil pipeline industry stands ready to help in any way we can in the achievement of this worthy goal.

This concludes my remarks, I will be happy to respond to questions.

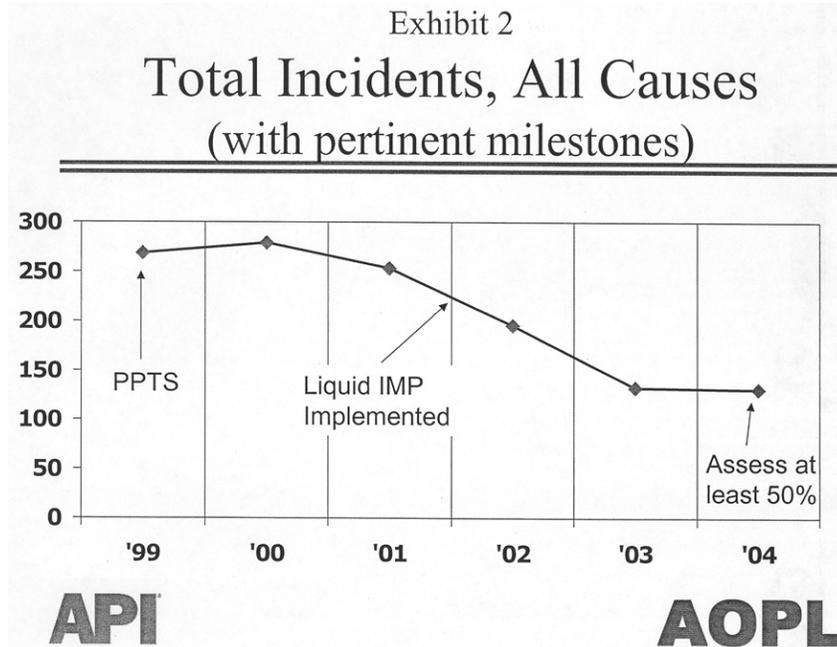
Exhibit 1

Onshore Pipe Incidents, '99-'04



API

AOPL



The CHAIRMAN. Thank you very much. Senator Inouye has been called away because of a problem relating to the death of a friend, so he's not going to be here the balance of the time.

Mr. Boss, you're next, please.

**STATEMENT OF TERRY BOSS, SENIOR VICE PRESIDENT,
ENVIRONMENT, SAFETY AND OPERATIONS, INTERSTATE
NATURAL GAS ASSOCIATION OF AMERICA**

Mr. BOSS. Good morning Chairman and Members of the Committee. I am Terry Boss, Senior Vice President of Environment, Safety and Operations of the Interstate Natural Gas Association of America, or INGAA.

INGAA is a trade association that represents virtually all of the interstate and inter-provincial pipelines and natural gas pipelines in North America. Pipelines represented by INGAA have been regulated for safety issues by the Federal Government since 1968. Our pipelines were, in fact, the first to be covered under the Federal Pipeline Safety Act. Some of you may know that the 2002 reauthorization of the Pipeline Safety Act included a provision requiring the establishment of a natural gas pipeline integrity management program.

This program requires each natural gas pipeline operator first to identify all segments located in high consequence areas. Second, to develop an integrity management program for reducing risks to the public in these areas. Third, to undertake baseline integrity assessments of all of the segments identified in these areas within 10 years of enactment. Fourth, develop a process for making repairs to any anomalies found as a result of these assessments; and fifth,

reassess segments at least every 7 years thereafter in order to verify continued pipe integrity.

How has this program worked so far? To quote the GAO in its recent report, 06-946, "The gas integrity management program is benefiting public safety by supplementing existing safety requirements with risk-based management principles that focus on safety risks." INGAA agrees that this largely has been a successful program. The amount of inspection and repair work completed to date is covered in my written testimony. To keep it brief, what I can say is that the natural gas pipeline industry is on track for completing the baseline assessments within the 10 year requirement. We have not found a large number of problems with the pipelines that have been inspected, but the anomalies that are being found are being corrected.

As I noted, the program requires we focus on these high consequence areas, which we call HCAs. These segments represent about 7 percent of the total natural gas transmission mileage in the U.S. However, because we are principally using internal inspection devices called smart pigs for the vast majority of this work, and because these smart pigs can primarily be put into and taken out of the pipelines at compressor stations placed about 75 miles apart, we are really assessing far more than just the HCAs targeted in the program. In fact, we anticipate we will actually inspect between 55 and 60 percent of the total pipeline mileage during this baseline period. Any anomalies found are corrected, even though they are not located in HCA areas.

In looking forward to the current reauthorization bill, I would like to focus on two of the INGAA priorities in the limited time I have. The highest priority for INGAA is changing the current requirement that all of the reassessments be completed at least once every 7 years. This static, one-size-fits-all number was—and remains the source of—continued frustration for the INGAA membership and that it has no basis in engineering or risk analysis and actually limits the effectiveness of the program. A risk-based reassessment interval determined for each pipeline segment is the most logical and effective alternative for focusing efforts and improving safety performance overall.

When the House and Senate were renegotiating the 2002 bill, INGAA agreed to the 10 year baseline requirement, but had strong misgivings about the fixed 7 year reassessment interval. Our support for that bill hinged on the fact that Congress included a provision requiring the GAO to perform an analysis on this interval. The GAO has, in fact, released this report in September, and it supports the idea of changing the 7-year requirement with one based on risk and engineering analysis. The title of the report really says it all. *Risk-Based Standards Should Allow Pipeline Operators To Better Tailor Reassessments to Pipeline Threats.*

Mr. Chairman, we urge the Committee to heed GAO's recommendation and include risk-based standards for reassessment intervals in your reauthorization bill.

I also want to mention one other issue—excavation damage, the primary cause of serious incidents on our pipelines. In 1998, Congress approved legislation to encourage improvements in state damage prevention programs. The 1998 legislation accomplished a

great deal with respect to improving these programs, but we believe the time has come to take things to the next level. We suggest the development of national standards, including enforcement, for state One-Call programs. INGAA supports the damage-prevention provisions in S. 3961, and believes these efforts would result in the reduction of serious incidents.

My written testimony includes comments on several additional issues, but at this point I would like to conclude my remarks. Thank you, Mr. Chairman, for giving me the opportunity to testify before the Committee. I'd be happy to answer your questions.

[The prepared statement of Mr. Boss follows:]

PREPARED STATEMENT OF TERRY BOSS, SENIOR VICE PRESIDENT, ENVIRONMENT, SAFETY AND OPERATIONS, INTERSTATE NATURAL GAS ASSOCIATION OF AMERICA

Mr. Chairman and members of the Committee:

Good morning. My name is Terry Boss, and I am Senior Vice President of Environment, Safety and Operations for the Interstate Natural Gas Association of America (INGAA). INGAA represents the interstate and inter-provincial natural gas pipeline industry in North America. INGAA's members transport over 90 percent of the natural gas consumed in the United States through a network of approximately 212,000 miles of transmission pipeline. These large capacity pipelines spanning multiple states or regions are analogous to the interstate highway system.

Industry Background

Mr. Chairman, natural gas provides 25 percent of the energy consumed in the U.S. annually, second only to petroleum and exceeding that of coal or nuclear. From home heating and cooking, to industrial processes, to power generation, natural gas is a versatile and strategically important energy resource.

As a result of the regulatory restructuring of the industry during the 1980s and early 1990s, interstate natural gas pipelines no longer buy or sell natural gas. Interstate pipelines do not take title to the natural gas moving through their pipelines. Instead, pipeline companies sell transportation capacity in much the same way as a railroad, airline or trucking company.

Because the natural gas pipeline network is essentially a "just-in-time" delivery system with limited storage capacity, customers large and small depend on reliable around-the-clock service. That is an important reason why the safe and reliable operation of our pipeline systems is so important. The natural gas transmission pipelines operated by INGAA's members and by others historically have been the safest mode of transportation in the United States. The interstate pipeline industry, working cooperatively with the Pipeline and Hazardous Materials Safety Administration (PHMSA), is taking affirmative steps to make this valuable infrastructure even safer.

Congressional involvement in pipeline safety dates back almost 40 years to enactment of the Natural Gas Pipeline Safety Act in 1968. This legislation borrowed heavily from the engineering standards that had been developed over the previous decades. The goals of this Federal legislation were to ensure the consistent use of best practices for pipeline safety across the entire industry, to encourage continual improvement in safety procedures and to verify compliance. While subsequent reauthorization bills have improved upon the original, the core objectives of the Federal pipeline safety law have remained a constant.

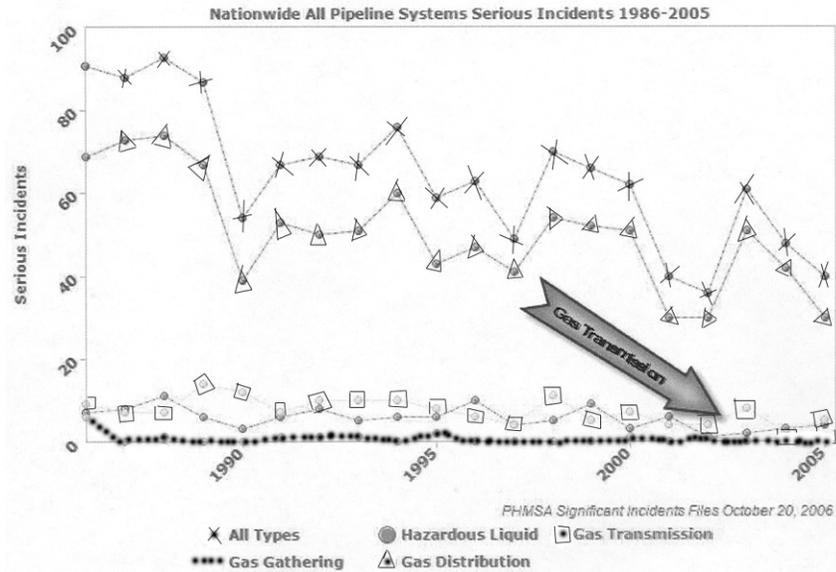
How Safe Are Natural Gas Pipelines?

While the safety record of natural gas transmission lines is not perfect, it compares very well with that of other modes of transportation. Since natural gas pipelines are buried and isolated from the public, pipeline accidents involving fatalities and injuries are unusual.

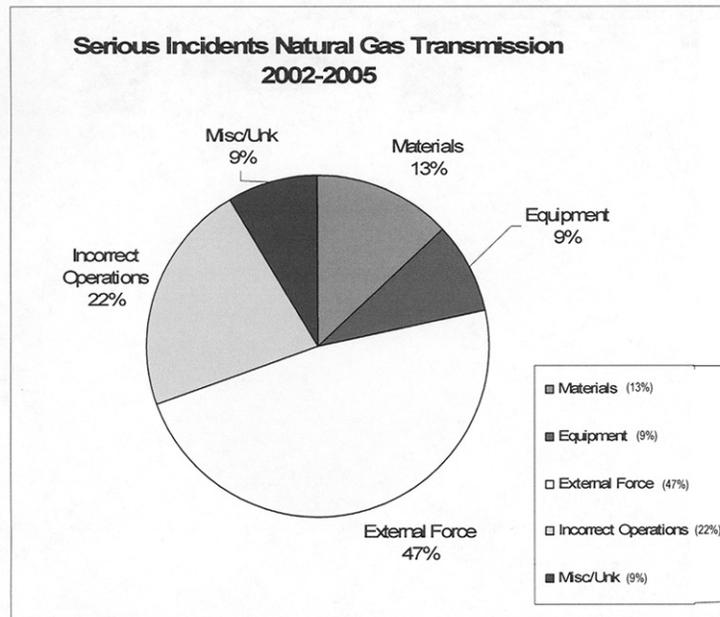
Pipeline accidents generally are reported to the Department of Transportation when one of three things occurs: (1) a fatality, (2) an injury, or (3) \$50,000 or more in property damage. Recently, the Department of Transportation has categorized most "reportable incidents" either as "significant incidents" or as "serious incidents" and placed that data on its website.

"Serious incidents" are defined as incidents that involve fatalities and injuries. The PHMSA graph below shows the decreasing trend of "serious incidents" on natural gas transmission pipelines from 1989-2005. For the last 5 years, the number

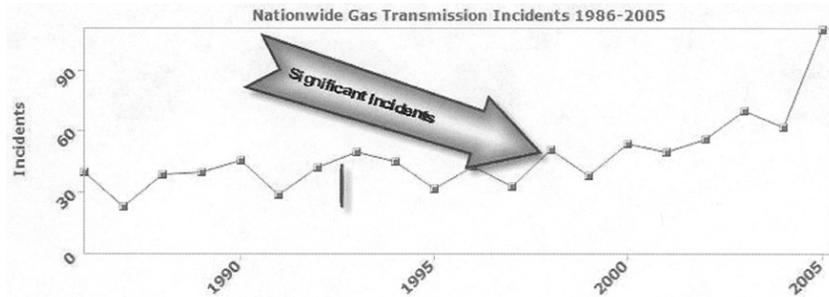
of serious incidents that occurred on natural gas transmission pipelines has averaged five incidents per year.



It is instructive to look at the causes of these serious incidents for clues on where to devote resources that can prevent serious incidents in the future. The pie chart below depicts the causes of these serious incidents. Since 2002, all the fatalities that have occurred during “serious incidents” on natural gas transmission pipelines have been excavation-related.

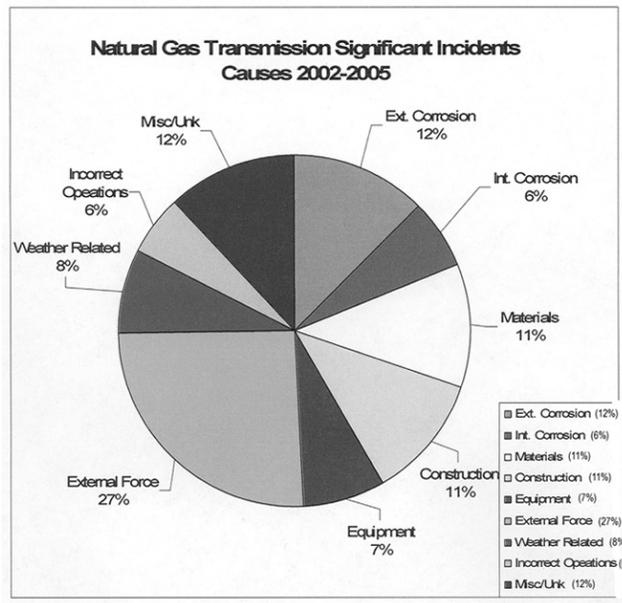


“Significant incidents” include not only the aforementioned “serious incidents,” but also reportable incidents where property damage and gas lost exceeds \$50,000 in 1984 dollars. Property damage and natural gas cost are adjusted using the Consumer Price Index for property damage and the Energy Information Administration data for delivered gas cost. The PHMSA graph below shows the trend of “significant incidents” on natural gas transmission pipelines since 1989. It is worth noting that the spike in “significant incidents” reported in 2005 reflects the pipeline damage caused by hurricanes Rita and Katrina. Property damage jumped from an average of \$40 million a year (2005 dollars) to over \$220 million in 2005. It is interesting to note that over 75 percent of these property damage costs associated with gas transmission pipeline incidents are either damage to the pipeline operator’s facilities or the value of the natural gas lost (*i.e.*, these are not damages to third-party property).



PHMSA Significant Incidents Files October 20, 2006

As with the serious incidents, it is informative to understand the causes of these significant incidents so that technology and management practices can be focused on preventing future incidents. For example, periodic inspections using smart pig technology are effective at discovering “time dependent” defects, such as corrosion, before they result in significant incidents. Periodic inspections, however, are not effective in preventing “time independent” incidents such as external force (*i.e.*, excavation and weather-related damage). The pie chart below depicts the causes of the reported significant incidents.



One note on the reportable incident statistics. From the raw data on reportable natural gas transmission accidents over the last 10 years, it could be concluded that the safety of natural gas transmission pipelines has deteriorated, especially over the last 6 years. This conclusion would be misleading, however, because the increase in the commodity value of natural gas has skewed the number of reportable incidents. As noted earlier, “reportable incidents” include those in which property damage exceeds \$50,000 including the value of the natural gas lost in the incident. Natural gas commodity prices have increased by over 200 percent since 2000, and this has significantly affected the number of incidents where property damage has exceeded the \$50,000 threshold. In examining the natural gas transmission integrity management program, the Government Accountability Office (GAO) noted this anomaly (in report 06–946) and suggested that DOT amend the reporting criteria to eliminate the linkage to natural gas commodity prices. While the establishment of the significant and serious incidents categories by PHMSA accurately depicts incident trends, INGAA agrees that the recommendation by GAO would provide more accurate and useful accident data.

The Pipeline Safety Improvement Act of 2002 and Integrity Management

While the Pipeline Safety Improvement Act of 2002 (PSIA) focused on a variety of issues (including operator qualification programs, public education, and population encroachment on pipeline rights-of-way), the most significant provision of the 2002 reauthorization law that would improve long-term pipeline safety was the “Integrity Management Program” (IMP) for natural gas transmission pipelines.

Section 14 of the PSIA requires operators of natural gas transmission pipelines to: (1) identify all the segments of their pipelines located in “high consequence areas” (areas adjacent to significant population); (2) develop an integrity management program to reduce the risks to the public in these high consequence areas; (3) undertake baseline integrity assessments (inspections) at all pipeline segments located in high consequence areas, to be completed within 10 years of enactment; (4) develop a process for making repairs to any anomalies found as a result of these inspections; and (5) reassess these segments of pipeline at least every 7 years thereafter in order to verify continued pipe integrity.

The PSIA requires that these integrity inspections be performed by one of the following methods: (1) an internal inspection device (or a “smart pig”); (2) hydrostatic pressure testing (filling the pipe with water and pressurizing it well above operating pressures to verify a safety margin); (3) direct assessment (digging up and visually inspecting sections of pipe selected based on various electronic measurements and other characteristics); or (4) “other alternative methods that the Secretary of Transportation determines would provide an equal or greater level of safety.” The pipeline operator is required by regulations implementing the 2002 law to repair all non-innocuous imperfections and adjust operation and maintenance practices to minimize “reportable incidents.” For natural gas transmission pipelines, internal inspection devices are the primary means for assessing integrity because, when they can be used, such devices are more versatile and efficient. The other assessment methods enumerated in the reauthorization law are useful when smart pig technology cannot be effectively used. A drawback associated with such alternatives is that they require a pipeline to cease or significantly curtail gas delivery operations for a period.

There are some practical issues that must be addressed in order to utilize “smart pig” inspection devices more fully:

- First, older pipelines were not engineered to accept such inspection devices because these pipelines often were built with tight pipe bends, or non-full pipe diameter valves, continuous sections of pipe with varying diameters, and side lateral piping. While these features do not impede the movement of natural gas through the pipeline (because natural gas can be compressed), moving a solid object through such pipelines is another matter. These older pipeline systems must be modified to allow the use of internal inspection devices.
- Another legacy issue is modifying pipelines to launch and receive internal inspection devices. Since a pipeline is buried underground for virtually its entire length, the installation of above-ground pig launchers and receivers is usually done at or near other above-ground locations, such as compressor stations. Occasionally, however, new sites must be obtained for these facilities. Compressor stations are typically located along the pipeline at a spacing of 75 to 100 miles apart. Therefore, a set of launchers and receivers must be installed for every pipeline segment between compressor stations because the inspection device cannot go through a compressor. Once installed, these launchers and receivers can usually remain in place permanently.

Surveys conducted by our industry about 5 years ago suggested that almost one-third of transmission pipeline mileage could immediately accommodate smart pigs, another one-quarter could accommodate smart pigs with the addition of permanent or temporary launching and receiving facilities, and the remainder, about 40–45 percent, would either require extensive modifications or never be able to accommodate smart pigs due to the physical or operational characteristics of the pipeline. Scheduling these extensive modifications to minimize consumer delivery impacts has been one of the most challenging aspects of the integrity management program.

The natural gas pipeline industry will use hydrostatic pressure testing and direct assessment for segments of transmission pipeline that cannot be modified to accommodate smart pigs, or in other special circumstances. There are issues worth noting with both hydrostatic testing and direct assessment. In the case of hydrostatic testing, an entire section of pipeline must be taken out of service for an extended period of time, limiting the ability to deliver gas to downstream customers and potentially causing market disruptions as a result. In addition, hydrostatic testing—filling a pipeline up with water at great pressure to see if the pipe fails—is a destructive or “go—no go” testing method that must take into account pipeline characteristics so that it does not exacerbate some conditions while resolving others. Also, because of this “go—no go” nature, testing must go on continuously until the segment successfully completes the test, generally 8 hours at pressure, with no leaks or failures.

Direct assessment is generally defined as an inspection method whereby statistically chosen sections of pipe are excavated and visually inspected at certain distance intervals along the pipeline right-of-way based on sophisticated above ground electrical survey measurements that predict problem areas. The amount of excavation and subsequent disturbance of landowner’s property involved with this technology is significant and does not decrease with future reassessments. Disturbing other infrastructure, including roads and other utilities, also creates a risk and an inconvenience for the public.

Finally, while the pipeline modifications and inspection activity generally can follow a pre-arranged schedule, repair work is an unpredictable factor. A pipeline operator does not know ahead of time how many anomalies an inspection will find, how severe such anomalies will be, and how quickly they must be repaired. Only the completed inspection data can provide such information. Repair work often requires systems to be shut down even if the original inspection work did not effect system operations. The unpredictable nature of repair work must be kept in mind, especially during the baseline inspection period, when it can be expected the number of required repairs to be the greatest.

Integrity Management Progress to Date

The integrity management program mandated by the PSIA is performing very well. The program is doing what Congress intended; that is, verifying the safety of gas transmission pipelines located in populated areas and identifying and removing potential problems before they occur. Based on 2 years of data, the trend is that natural gas transmission pipelines are safe and becoming safer.

PHMSA immediately initiated a rulemaking to implement the gas integrity requirements upon enactment of PSIA in December of 2002. The Administration successfully met the one-year deadline set by the law for issuing a final IMP rule. Therefore, 2004 was the first full year of what will end up being a nine-year baseline testing period (the statute mandates that baseline tests on all pipeline segments in high consequence areas must be completed by December of 2012). PHMSA’s final rule credits pipeline companies for some integrity assessments completed before the rule took effect, thereby mitigating the effects of the shorter baseline period.

PHMSA has summarized the progress achieved through 2005 as follows:

1. Total Gas Transmission Mileage in the United States—There are 295,665 miles of gas transmission pipeline in the U.S. (INGAA’s members own approximately 200,000 miles of this total, with the remainder being owned by *intrastate* transmission systems or local distribution companies.)
2. Total High Consequence Area (HCA) Mileage—There are 20,191 miles of pipeline in HCAs (*i.e.*, mileage subject to gas integrity rule). This represents about 7 percent of total mileage.
3. HCA Pipeline Miles Inspected through 2005—
 - 2004—3,979 miles (incorporated some prior inspections before rule took effect).
 - 2005—2,744 miles.

- Therefore, 6,723 miles of HCA pipeline inspected to date, or 33 percent of total.
4. Total Pipeline Miles Inspected (including non-HCA pipeline)—
 - 2004—30,452 miles (7.65 to 1 over-test ratio).
 - 2005—19,884 miles (7.24 to 1 over-test ratio).
 - Therefore, 50,366 total miles, or approximately 17 percent of total transmission pipeline mileage.

The total HCA pipeline mileage inspected to date suggests that the industry is generally on track to meet the 10-year baseline requirement. With 3 years of the baseline period completed at the end of 2005, about 30 percent of the HCA mileage had been inspected. This translates into 10 percent being completed annually—exactly the volume of work needed in order to meet the baseline requirement.

The 2002 law also required a risk-based prioritization of these HCA assessments so that higher-ranking HCA pipeline segments would be scheduled for assessment within 5 years of enactment. This means that by December of 2007, the industry must complete at least half of the total HCA assessments, by mileage; and that work contains the segments with the highest probability of failure. Again, we appear to be on track for meeting this requirement.

The mileage counted as being assessed in 2004 is higher than what we anticipate will be the average annual mileage going forward because the industry was able to include some HCA segments that had been inspected in the few years immediately prior to the rule taking effect. As mentioned, this jump-started the program and compensated some for the fact that the final IMP rule did not take effect until December of 2003, thus reducing the *de facto* baseline period to 9 years.

The vast majority of the assessments to date have been completed using smart pig devices. As discussed, these devices can only operate across large segments of pipeline—typically between two compressor stations. A 100-mile segment of pipeline may, for example, only contain 5 miles of HCA, but in order to assess that 5 miles of HCA, the entire 100-mile segment between compressor stations must be assessed. This dynamic is resulting in a large amount of “over-testing” on gas transmission systems. While it has completed assessments on 6,723 miles of HCA pipe thus far, the industry actually has inspected over 50,000 miles of pipe up through 2005 in order to capture the HCA segments. Any problems identified as a result of inspections, whether in an HCA or not, are repaired.

In summary, while only about 7 percent of total gas transmission pipeline mileage is located in HCAs, it is anticipated that, due to over-testing situations, about 55 to 60 percent of total transmission mileage actually will be inspected during the baseline period.

In addition, PHMSA has made the data available for the first half of the 2006. This shows that an additional 1,885 miles of natural gas transmission line in HCAs were inspected during this period, keeping the program on track to meet its target.

Now let us look at what the integrity inspections have found through 2005. This data focuses on information from HCA segments since these segments are the only ones specifically covered under the integrity management program.

1. Reportable Incidents in HCAs (in 20,191 miles)
 - 2004—9 (2 time-dependent).
 - 2005—10 (0 time-dependent).
2. Leaks (too small to be classified as a reportable incident) in HCAs (in 20,191 miles)
 - 2004—117 (29 time-dependent).
 - 2005—104 (20 time-dependent).
3. Immediate Repairs in HCAs Found by Inspections (repair within 5 days)
 - 2004—101 (3,979 miles inspected).
 - 2005—237 (2,744 miles inspected).
4. Scheduled Repairs in HCAs Found by Inspections (repair generally within 1 year)
 - 2004—595 (3,979 miles inspected).
 - 2005—403 (2,744 miles inspected).

Time-dependent defects are separated out in the data for incidents and leaks because these types of defects are the prime target of reassessment under the integrity management program. By time-dependent, we mean problems with the pipeline that develop and grow over time and, therefore, can be managed by reinspecting on a periodic basis. The most prevalent time-dependent defect is corrosion; therefore, the

IMP effort focuses most intently on corrosion identification and mitigation. These same assessments might also be able to identify other pipeline defects such as original construction defects or excavation damage. Original construction defects (stable defects) are usually found and addressed during post-construction inspections; any construction defects found with this new, more sensitive inspection technology would be fixed “for good” so that future assessments looking for these types of anomalies will be unnecessary. Most reportable incidents caused by excavation damage (more than 85 percent of the incidents in these HCA areas during this time period) result in an immediate pipeline failure, so periodic assessments are unlikely to reduce the number of these types of time-independent incidents in any significant way. Periodic assessments on a reasonable schedule are, therefore, most effective for time-dependent defects.

The number of incidents associated with time-dependent defects in HCA areas is fairly low, and these reportable incidents (*e.g.*, one reportable incident per year average) have occurred in HCA areas not yet assessed under this program. As critical time-dependent defects are found and repaired, these incident and leak numbers should approach zero since the gestation period for these defects is significantly longer than the reassessment interval.

As for repairs, we have identified the number of “immediate” and “scheduled” repairs that have been generated by the IMP inspections through 2005. These are anomalies in pipelines that have not resulted in a reportable incident or leak but are repaired as a precautionary measure. “Immediate repairs” and “scheduled repairs” are defined terms under both PHMSA regulations and engineering standards. As the name suggests, immediate repairs require immediate action by the operator due to the higher probability of a reportable incident or leak in the future. Scheduled repair situations are those that require repair within a longer time period because of their lower probability of failure.

Even though it is early in the baseline assessment period, the data suggest a very positive conclusion regarding present state of the gas transmission pipeline system and the effectiveness of the integrity management programs. “Immediate repairs” in HCAs removed 50 anomalies for every 1,000 pipeline miles inspected. “Scheduled repairs” removed an additional 140 anomalies per 1,000 miles inspected. By completing these immediate and scheduled repairs in a timely fashion, the pipeline industry is reducing the possibility of future reportable incidents or leaks. Also, data from operators who have completed more than one such periodic assessment over a number of years strongly suggests there will be a dramatic decrease in time-dependent defects requiring repairs the second time around.

For the inspections that have occurred during the first half of 2006, the trend is continuing with removing 38 “immediate” anomalies and 50 “scheduled” anomalies for every 1,000 miles inspected.

Many of the gas pipelines being inspected under this program are 50 to 60 years old. While it is often hard for non-engineers to accept, well-maintained pipelines can operate safely for many decades. Policymakers often compare pipelines to vehicles and ask questions such as: Would you fly in a 50-year-old airplane? From an engineering standpoint, the comparison to aircraft or automobiles is an unsound one. Natural gas pipelines are built to be robust and are not subject to the same operational stresses as vehicles. Much of the above inspection data comes from pipelines that were built in the 1940s and 1950s. And yet, the number of anomalies found on a per-mile basis is low. Once these anomalies are repaired, the “clock can be reset” and these pipelines can operate safely and reliably for many additional decades. One important benefit of the integrity management program is the verification and re-establishment of the known safety factors on these older pipeline systems.

Issues for the 2006 Reauthorization

The PSIA authorized the Federal pipeline safety program at the Department of Transportation through Fiscal Year 2006, and it has, therefore, expired. INGAA would like the Committee to consider amendments addressing three issues in the pipeline safety law. Each of these would achieve an evolutionary change in the current pipeline safety program: (1) reconsideration of the seven-year reassessment interval, to one based instead upon a more reasoned, data-driven and scientific approach; (2) improvements in state excavation damage prevention programs; and (3) change in the jurisdictional status for direct sales lateral lines.

Seven-Year Reassessment Interval

Under the PSIA, gas transmission pipeline operators have 10 years in which to conduct baseline integrity assessments on all pipeline segments located in HCAs. Operators are also required by law to begin reassessing previously-inspected pipe 7 years after the initial baseline and every 7 years thereafter. PHMSA has inter-

preted these two requirements to mean that, for those segments baseline-inspected in 2003 through 2005 (including those for which a prior assessment is relied upon), reassessments must be done in years 2010 through 2012—even though baseline inspections are still being conducted.

In 2001, INGAA provided Congress with a proposed industry consensus standard on reassessment intervals that had been developed by the American Society of Mechanical Engineers (ASME). The ASME standard used several criteria to determine a reassessment interval for a particular segment of pipe, such as the operating pressure of a pipe relative to its strength and the type of inspection technique used. This standard relied upon authoritative technical analyses and a “decision matrix” based on more than 50 years of operational and performance data for gas pipelines.

For most natural gas transmission pipelines (operating at high pressures), the ASME standard proposed a conservative 10-year reassessment interval. The standard suggested longer inspection intervals for lower pressure lines (a small number of pipelines that are lower in risk due to their lower operating pressures). The standard also suggested *shorter* intervals for pipeline segments operating in higher-risk environments, including those where unusually aggressive corrosion would be more likely to occur. Recent and past pipeline inspection data confirms that the ASME criteria are conservative.

There are several reasons for being concerned about whether the seven-year reassessment interval is appropriate. First, there is the “overlap” in years 2010 through 2012. The ability to meet the required volume of inspections is daunting given the limited number of inspection contractors and equipment available. In addition, this stepped-up level of inspection activity would be difficult to accommodate without affecting gas system deliverability. This last point is critical. Some assume that we are focusing on the re-assessment interval only because of the costs to industry. In fact, our costs will be modest compared to the potential costs to consumers in the form of higher natural gas commodity prices if pipeline capacity becomes too constrained. Some regions of the country can handle more frequent reductions in pipeline deliverability due to the volume of pipeline capacity serving those regions. The Chicago region and the Gulf Coast, for example, are better equipped to handle frequent pipeline capacity interruptions due to the abundance of pipeline capacity in those regions. Other regions, such as the Northeast and Southern California, face greater risk that gas commodity prices will spike if pipeline capacity is reduced too often. These downstream market effects should be carefully considered, especially during the baseline inspection period when pipeline modifications (to accommodate inspection equipment), inspections, and repair work will all be at peak levels.

Some also suggest that if the pipeline industry is technically capable of inspecting its lines for corrosion more frequently than engineering standards suggest, it should do so and not worry about the costs or the logistics. It is certainly true that large interstate pipelines could, in fact, be inspected more frequently than every 7 years, especially once systems have been modified to accommodate smart pig devices. But just because pipelines can be inspected more often does not mean it is rational to require a one-size-fits-all inspection policy. Most automobile manufacturers recommend vehicle oil changes every 3,000 miles. Congress could instead mandate that all vehicles have oil changes every 1,000 miles, but, of course, there would be little, if any, additional benefit to the more frequent oil changes, and the costs associated with the more frequent oil changes would take money away from other, more beneficial maintenance activities.

The integrity management program requires that the industry identify and mitigate risks to the public associated with operating our pipelines. Inspections are but one tool to achieve that end and they do not accomplish all of the required goals of the program. The inspections carried out pursuant to the integrity management program focus primarily on one cause of pipeline accidents—corrosion. Corrosion causes about 25 percent of the failures on gas transmission lines. What about the other 75 percent of accidents? What can be done to mitigate the risks of those? A credible and effective integrity management program prioritizes risks and develops strategies for addressing all risks. A program that mandates system-wide inspections too frequently can seriously affect an operator’s ability to perform even more frequent inspections at the very few locations that may warrant shorter time-frames and may detract from other important integrity activities such as damage prevention. Focusing attention and resources on unnecessarily frequent inspections may also lead to a false sense of security that such inspections are addressing all significant threats to pipeline safety.

We recognize that some lawmakers may be hesitant to change to the seven-year reassessment interval given the debate on this issue in 2002. The authors of the PSIA realized this discussion would be ongoing and requested that the Government Accountability Office (GAO) review this issue. GAO has completed its report (Report

06–945) and has concluded that the fixed re-inspection interval (*i.e.*, 7 years) is too conservative for the majority of the natural gas transmission pipelines and, therefore, has recommended intervals be based on risk and engineering analysis. INGAA concurs with the GAO recommendation. The baseline assessments already underway are yielding valuable information from which to make reasoned decisions about re-assessment intervals going forward. INGAA therefore urges the Congress to address the reassessment issue in *this* reauthorization bill. As the GAO stated in its report, there is no compelling reason to wait and address this issue at a later time—the facts already support a risk-based program of re-assessments.

Damage Prevention

In 1998, the Transportation Equity Act for the 21st Century (TEA–21) highway legislation included a relatively modest program called the “One-Call Notification Act.” The goal of this legislation was to improve the quality and effectiveness of state one-call (or “call-before-you-dig”) damage prevention programs. By developing Federal minimum standards and then giving grants to those states that adopted the minimum standards, this law contributed to improving damage prevention efforts all across the Nation. And it did so without mandating that states adopt the Federal minimum standards.

Over the last 8 years, there has been a great deal of improvement in damage prevention. INGAA believes that the time has come to take these efforts to the next level. Excavation damage prevention has been, and should remain, a major focus for pipeline safety. On gas transmission pipelines, accidental damage from excavation equipment is the leading cause of fatalities and injuries. The majority of incidents that have raised public and Congressional concern have been due to excavation damage. These accidents are the most preventable of all, and better communication between pipeline companies, excavators and the public is the key to such accident prevention. Despite all the progress that has been made since 1998, some excavators still do not call before they dig.

Unfortunately, there was a fatal accident involving excavation damage to one of our member company pipelines just last week in Wyoming. While the investigation is still in progress, it is not unreasonable to assume that there was at least some level of misunderstanding between the excavator and the pipeline operator. With the right level of communication and understanding, however, these accidents are avoidable.

One state, in particular, has developed an outstanding damage prevention program based on improved communication, information management, and performance monitoring and enforcement. That state is Virginia. Not only does Virginia require broad participation by all utilities and excavators, but also it has effective public education programs and effective enforcement of its rules. INGAA believes that effective enforcement is the most important element to improving state programs beyond the progress already made, and we believe Virginia offers a model for other states to adopt. Statistics demonstrate the success of the Virginia program—the state has experienced a 50 percent decrease in the excavation damage since implementing its program.

For 2006, INGAA asks the Congress to emphasize once again the importance of excavation damage prevention by including a new program of incentives for state action. A modest amount of focused grant funds could go a long way to encourage states to improve the content and enforcement of their damage prevention programs.

Safety Regulation of Direct Sales Laterals

One of the goals of the original Pipeline Safety Act enacted in 1968 was to establish a clear line of demarcation between Federal and state authority to enforce pipeline safety regulations. Prior to 1968, many states had established their own safety requirements for interstate natural gas pipelines, and there was no particular consistency in such regulations across the states. This created compliance problems for interstate pipeline operators whose facilities crossed multiple states. The Pipeline Safety Act resolved this conflict by investing the U.S. Department of Transportation with exclusive jurisdiction over interstate pipeline safety while delegating to the states authority to regulate intrastate pipeline systems (generally, pipelines whose facilities are wholly within a single state).

The statutory definition of an “interstate gas pipeline facility” subject to Federal regulation was clarified further when the Congress reauthorized the Pipeline Safety Act in 1976 (Pub. L. 94–477). As part of this clarification, the Congress stated that “direct sales” lateral pipelines were not subject to Federal jurisdiction. Direct sales laterals are typically smaller-diameter pipelines that connect a large-diameter interstate transmission pipeline to a single, large end-use customer, such as a power

plant or a factory. Such direct sales laterals often are owned and maintained by the interstate transmission pipeline operator to which they are connected.

This clarification was made necessary by a 1972 U.S. Supreme Court decision (*Federal Power Commission v. Louisiana Power and Light*, 406 U.S. 621) in which the Court ruled that for purposes of economic regulation (*i.e.*, rate regulation), direct sales laterals were subject to preemptive Federal jurisdiction. This ruling created uncertainty regarding the authority to regulate the safety of direct sales laterals because when the Pipeline Safety Act was enacted in 1968, it was assumed by the Congress that such pipelines would be subject to both economic and safety regulation at the state level.

While this exemption from Federal jurisdiction may have made sense 30 years ago, it now is an anachronism. As mentioned, many of these direct sales laterals are owned and operated by interstate pipelines. The natural gas transported in such lines travels in interstate commerce, and the lateral lines are extensions of the interstate pipelines to which they are interconnected.

Additionally, interstate natural gas pipelines are now subject to the PHMSA's Gas Integrity Management Program and are required to undergo a specific regimen of Congressionally-mandated inspections and safety verification. State-regulated pipelines are not covered under the Federal program. Instead, states are allowed to create their own safety programs, which may have different processes/procedures covered than the Federal integrity management program. Given the comprehensive Federal program, there is no particular reason for small segments of the interstate pipeline system to be subject to differing and potentially inconsistent regulation at the state level. The inefficiency of this approach is further compounded by the fact that an interstate pipeline operator with direct sales laterals in multiple states likely will be subject to inconsistent regulation across the states. It is therefore understandable that interstate pipelines wish to have their direct sales laterals subject to the same Federal integrity management requirements as mainline facilities. This would ensure a consistent and rational approach to integrity management system-wide, in contrast to being compelled to exclude parts of the pipeline network on the basis of an outdated set of definitions.

INGAA supports amending the definitions of "interstate gas pipeline facilities" and "intrastate gas pipeline facilities" in the Pipeline Safety Act to eliminate the jurisdictional distinction between direct sales laterals and other segments of an operator's interstate natural gas pipeline system. This would make such segments of pipeline subject to Federal safety regulation consistent with the approach taken for the economic regulation of such pipeline facilities.

Direct sales laterals that are not owned by an interstate pipeline would still be regulated by states. This amendment also would have the benefit of permitting the states to concentrate their resources on developing and enforcing integrity management programs for their natural gas distribution lines.

Conclusion

Mr. Chairman, thank you once again for inviting INGAA to participate in today's hearing. I would like to provide some written comments on S. 3961 for the record. INGAA has made the reauthorization of the Pipeline Safety Act a top legislative priority, and we want to work with you and the Committee to move a bill forward as soon as possible. Please let us know if you have any additional questions, or need additional information.

The CHAIRMAN. Thank you very much, Mr. Boss. Mr. Bender?

**STATEMENT OF E. FRANK BENDER, VICE PRESIDENT,
GAS DISTRIBUTION AND NEW BUSINESS DIVISION,
BALTIMORE GAS AND ELECTRIC COMPANY; ON BEHALF OF
THE AMERICAN GAS ASSOCIATION AND
THE AMERICAN PUBLIC GAS ASSOCIATION**

Mr. BENDER. Thank you, Senator.

Good morning, I'm pleased to appear before you today and would like to thank the Committee for convening this hearing on the important topic of pipeline safety. My name is Frank Bender, I'm Vice President of Gas Distribution and New Business at Baltimore Gas and Electric Company, and we deliver natural gas to 634,000 customers in Maryland.

I'm testifying today on behalf of the American Gas Association, and the American Public Gas Association. Together, AGA and APGA represent more than 850 local gas utilities serving more than 56 million customers nationwide.

I'd like to begin my testimony by first commending the Committee, particularly Chairman Stevens and Co-Chairman Inouye and their staffs, as well as Senators Lott and Lautenberg, for putting together what we believe is a good legislative proposal. We hope that the Committee will act quickly to get a bill passed this year.

In our opinion, the Pipeline Safety Act of 2002 has been working well, and only minor adjustments should be considered at this point, with one exception. Our companies have identified one major area we believe requires considerable improvement, and that is excavation damage prevention.

The term "excavation" as I use it here, and as defined by the Department of Transportation in its regulations includes all types of digging, demolition, tunneling or construction activities.

Congressional attention to more effective state excavation damage programs can and will result in real, measurable decreases in the number of incidences occurring on natural gas distribution pipelines each year. Excavation damage is the single-largest cause of natural gas distribution pipeline incidents, and we are very pleased that S. 3961 addresses this very important issue.

I'm pleased to report here also today that natural gas utilities do a good job in minimizing incidents that they can control. The record shows that between 2002 and 2005, 82 percent of all reported incidents were the result of excavation damages by a third-party, not under the control of the utility. In many cases, the typical "little or no control" incident involves a party that is even outside the jurisdiction of authorities overseeing pipeline safety.

Most unfortunately, during this same 4-year period, incidents due to third-party excavation more than doubled. Excavation damage thus represents the single greatest threat to distribution system safety, reliability and integrity. AGA and APGA are pleased that the provisions of S. 3961 outline nine elements of an effective state damage prevention program in the legislation, and provide for additional funding for state implementation of the program. The Associations also urge Congress to provide continued funding authority over the upcoming reauthorization period for grants to states to support One-Call programs, and to the Common Ground Alliance.

I might digress a minute and say while I was sitting here, I received a page saying that there was a gas main struck by third-party excavation in Laurel and 37 homes are impacted. This is not an unusual occurrence. I get sometimes one, sometimes two, sometimes even three of these a day.

The other issues of importance I would like to highlight briefly for the Committee have to do with gas transmission pipeline integrity management, and pipeline controller fatigue management.

With regards to pipeline integrity, GAO suggests allowing operators to reassess their systems at intervals based on technical data, risk factors and engineering analyses. AGA and APGA agree with using technically-based assessment intervals.

Finally, AGA and APGA support the proposed directive that DOT proscribe standards to reduce risk associated with managing fatigue in pipeline controllers. However, we are concerned about the possibility of complex regulations on “mandatory” working hours. DOT, in fact, recently held a public meeting on that topic, and the excellent information exchanged served to reinforce our belief that controller functions in the natural gas transmission, hazardous liquid and gas distribution industries are too diverse to be addressed by a one-size-fits-all regulation.

In summary, AGA and APGA believe that Congressional passage of Pipeline Safety reauthorization this year will result in timely and significant distribution system safety improvements. We commend the Committee for putting together a solid bill and commit to working with you to secure passage of the final bill this year. Thank you for the opportunity to appear here today.

[The prepared statement of Mr. Bender follows:]

PREPARED STATEMENT OF E. FRANK BENDER, VICE PRESIDENT, GAS DISTRIBUTION AND NEW BUSINESS DIVISION, BALTIMORE GAS AND ELECTRIC COMPANY; ON BEHALF OF THE AMERICAN GAS ASSOCIATION AND THE AMERICAN PUBLIC GAS ASSOCIATION

Good morning, I am pleased to appear before you today and would like to thank the Committee for convening this hearing on the important topic of pipeline safety. My name is Frank Bender, I am Vice President of Gas Distribution and New Business Division of Baltimore Gas and Electric Company, a subsidiary of Constellation Energy. BG&E delivers natural gas to 634,000 customers in Maryland.

I am testifying today on behalf of the American Gas Association (AGA) and the American Public Gas Association (APGA). Together AGA and APGA represent more than 850 local natural gas utilities serving more than 56 million customers nationwide.

I would like to begin my testimony by first commending the Committee, particularly Chairman Stevens and Co-Chairman Inouye and their staffs, as well as Senators Lott and Lautenberg, for putting together what we believe is a good legislative proposal. We hope that the Committee will act quickly to get a bill passed this year.

In our opinion the Pipeline Safety Act of 2002 has been working well and only minor adjustments should be considered at this point with one exception. Our companies have identified one major area we believe requires considerable improvement: *excavation damage prevention*. Congressional attention to more effective state excavation damage programs can and will, result in real, measurable decreases in the number of incidents occurring on natural gas distribution pipelines each year. *Excavation damage is the single largest cause of natural gas distribution pipeline incidents—and we are very pleased that S. 3961 addresses this very important issue.*

There are two kinds of incidents involving natural gas distribution systems: Those caused by factors the pipeline operator can to some extent control (such as improper welds, material defects, incorrect operation, corrosion or excavation damage by a utility’s contractor) and those caused by external forces, which are due to factors the pipeline has little or limited ability to control, such as excavation damage by a third-party, earth movement, floods, vandalism, lightning and structure fires).

The term “excavation” as I use it here and as defined by the Department of Transportation in its regulations includes demolition, excavation, tunneling or construction activities. Excavation is wide spread—from directional boring for new cable lines to installation of fences.

I am pleased to report here today that natural gas utilities do a good job in minimizing incidents that they can control.

The record shows that between 2002 and 2005, 82 percent of all reported incidents were the result of excavation damage by a third-party or other factors the utility company had little or no control over. In many cases, the typical “little or no control” incident involves a party that is outside the jurisdiction of authorities overseeing pipeline safety.

However—and most unfortunately—during the same four-year period, incidents due to 3rd party excavation *more than doubled*. Excavation damage thus represents the single greatest threat to distribution system safety, reliability and integrity.

The Common Ground Alliance (CGA) is a member-driven organization dedicated to ensuring public safety by reducing damage to underground facilities. Along with pipeline operators, the CGA membership includes excavators, locators, road builders, electric utilities, telecommunications, regulators and other stakeholders. Efforts by the Common Ground Alliance damage prevention organization, such as the nationwide education program to educate the citizenry about the three-digit One Call "8-1-1" number to prevent excavation damage, are steps in the right direction. But clearly more is needed.

AGA and APGA are pleased that the provisions of S. 3961 outlines nine elements of an effective state damage prevention program in the legislation and provide for additional funding for state implementation of the program.

Other issues of importance that I would like to highlight briefly for the Committee are:

Gas Transmission Integrity Management

The Department of Transportation and pipeline operators have put forth a tremendous amount of effort to implement the gas transmission pipeline integrity management requirements of the Pipeline Safety Act of 2002. The Government Accountability Office (GAO) recently issued a report on the subject of transmission integrity management reassessment intervals. The report states that the gas integrity management program appears to be working.

The GAO also suggested allowing operators to reassess their systems at intervals based on technical data, risk factors and engineering analyses. AGA and APGA agree with using technically-based assessment intervals.

Safety Orders

AGA and APGA believe that the language in S. 3961 that allows a safety order to be issued for "*any condition* that poses a risk to public safety, property, or the environment" is overly broad. DOT already is using its authority to issue corrective action orders to enforce safety rules on facilities that are determined to present a hazard to life, property and the environment.

Human Risk Factors Risk Management

AGA and APGA support the proposed directive that DOT prescribe standards to reduce risks associated with fatigue, but we are concerned about the possible development of complex regulations on "mandatory" working hours.

DOT recently held a public meeting on the topic, and the excellent information exchanged served to reinforce our belief that controller functions in the natural gas transmission, hazardous liquid, and distribution industries are too diverse to be addressed by a "one-size-fits-all" regulation.

Funding for One Call Grants and the Common Ground Alliance

AGA and APGA urge Congress to provide continued funding authority over the upcoming reauthorization period for grants to states to support One Call programs and to the Common Ground Alliance.

Enforcement Transparency

We support the idea of enhancing enforcement transparency, so long as due process is preserved and confidentiality during the administrative process of individual cases is protected. The Department of Transportation has a system where notices of probable violations are issued and operators are given an opportunity to promptly respond. If transparency during enforcement activities improves public confidence, we support enhancements with administrative due process.

Summary

AGA and APGA believe that Congressional passage of pipeline safety reauthorization this year will result in timely and significant distribution system safety improvements. We commend the Committee for putting together a solid bill, and commit to working with you to secure passage of a final bill this year.

Thank you for the opportunity to appear here today.

The CHAIRMAN. Well thank you all very much. We're pleased with the general endorsement of the work we've done so far, Senator Inouye and I have agreed we will ask the staff to prepare the final draft and have a vote to report this bill out this afternoon, sometime after the vote around five o'clock. We'll be prepared to go to conference with the House when we get back from having an opportunity for both the House and Senate staff to work on trying to

get a compromise ready for us so we can get it done for the 2 weeks we're back in December.

We generally thank you for your positive comments. None of you mentioned the certification by CEOs of the safety program—did any of you find objections to that provision?

Mr. BOSS. No, sir.

The CHAIRMAN. Good, thank you.

It's my understanding that there are a number of gas transmission lines in high consequence areas that cannot be pigged. And these are inspected using different methods. Is there anything that's going to come forward—new technology or a new process or new procedure that will give us the same protection that pigging might give in those areas? Would any of you wish to comment on that? Mr. Bender?

Mr. BENDER. Yes, sir, I'd like to comment. We have—even though we're a distribution company—because we have about 150 miles of distribution pipeline that operates at the pressure that requires that it comes under the transmission integrity management program. About 54 of those miles are in what we call high consequence areas.

We actually have an improving, very effective means of detecting problems in that pipe with a process called Direct Assessment. In fact, the picture that Admiral Barrett had on display, that situation was discovered by using Direct Assessment, which is essentially measuring along the path of the pipe externally at the ground level with electronic sensing devices to determine defects and things of that nature. So we feel that pigging is not appropriate, and that's of course what makes distribution systems so much different.

Many of those lines in the distribution system don't have alternate feeds, so if you have to shut down that line to pig, in all likelihood you're inconveniencing customers and taking them out of service. So, the Direct Assessment technique is finding defects, so it is working, and we think in our case that technology is proving its effectiveness.

The CHAIRMAN. Mr. Boss?

Mr. BOSS. Yes, I agree with Frank on that subject. In my former life I worked as, handling research for pipeline integrity. That technology is very good, it is a flexible technology, so as new tools become available—and the key to this technology is the integration of separate tools to give you refined information about the location. And the way the regulation is designed it gives the flexibility as new technology comes along to incorporate it to improve it as we move forward. But we feel it's a very effective technology in finding some of these things.

The CHAIRMAN. In looking at what happened to our transit lines in Alaska, I was surprised to find that in places there was corrosion, erosion inside the pipeline that eliminated almost 80 percent of the thickness of the pipeline in a small location, but that's what lead to the failure of the pipeline.

I was told we're developing some things like ultrasound and other things that will be able to locate that kind of a defect. Are you all working on similar technologies? Do you have similar problems?

Mr. BOSS. There have been extensive programs going on for many years with Pipeline Research Committee and GTI, PHMSA has a significant amount of funds that they are using for those technologies, and we are proving a lot of those technologies out. One thing, we're a very conservative industry, we want to be sure the technology really does work before we do apply it, so there are a lot of efforts going that way. The thing that we had talked about on the Direct Assessment work is that it puts a very, a lot of rigor into the process, so that people do a very much step-by-step process which helps significantly.

The CHAIRMAN. Would Direct Assessment find where the pipeline integrity has been weakened by corrosion and erosion inside?

Mr. BOSS. There are standards for both external corrosion and internal corrosion, and like I said, the National Association of Corrosion Engineers have published this, those have been incorporated into the regulation and it's a matter of using the right tools in combination with that rigorous process to help find some of those areas.

The CHAIRMAN. It's hard for this Senator to imagine the ability of using Direct Assessment on thousands of miles of pipe. That comes to my mind—how do you deal with thousands of miles of pipe and say that the system works?

Mr. BENDER. In the case of distribution systems, pigging is just not a good option, so even though it is expensive to use Direct Assessment, we have found it a useful tool to do, you know, the miles that we have, at least as a distribution company under the Pipeline Integrity regulation. Distribution systems—if you looked at a distribution system on a map, essentially they would look like, almost like spaghetti, a lot of elbows, a lot of turns, a lot of regulators, a lot of valving, different sizes, different soil conditions, so Direct Assessment, we find, works. So, to Mr. Boss's point, we're not currently just using one method, we're using three methods and correlating the effect. So, it's not an inexpensive approach, but by the time we took customers out of service, by the time we had to deal with elbows and regulators and valving, Direct Assessment still would be less expensive than pigging, and more effective in our system than pigging.

The CHAIRMAN. Most of those pipelines are buried, aren't they?

Mr. BENDER. That's correct, Senator.

The CHAIRMAN. Mr. Boss?

Mr. BOSS. Yes, and that's a very important part of the 7-year reassessment. If you're actually inspecting these lines quite a bit more often than you need to be, given the risk that's involved with those, and the deterioration, the expense of doing this Direct Assessment process does not depreciate over the years, it's a very, very expensive process.

The CHAIRMAN. Senator Lautenberg?

Senator LAUTENBERG. We talked earlier about access to the mapping data. Now, I ask you, Mr. Weimer, and I asked Admiral Barrett about this as well—do you believe that there are valid security-related concerns about having more public access to the mapping?

Mr. WEIMER. I guess my answer would be the same as Admiral Barrett's that there probably are valid security concerns, depending

on the level of information provided. We've been having this argument in Washington State, because Washington State is about to put maps on the Internet live that they've went out and collected the data on themselves. And what they're doing is providing just the maps of the line pipe and not all of the attributes on those pipes, so they're not showing where the valves are and where the taps are and those types of things, they're just showing a map at a 1-to-24,000 scale that would allow local governments to know where the maps run in relation to proposed housing developments and hospitals and schools and those types of things. And at that level, I don't think that there is a security concern.

Senator LAUTENBERG. Yes, you know one of the things, unfortunately, in the age in which we now live, this question arises in many ways. For instance, chemical plant storage facilities, do you put out an alert to the community that these are highly dangerous facilities if attacked, incinerated in any way, and so we have to decide between safety from the routine causes, and that which could invite an attack of some sort. And I don't think that you get by by not disclosing this information, this is of significant value. We talk about excavations being a primary cause of problems, accidents in pipes, and so I think it's awful hard to eliminate public access to mapping. How do any of you feel about it? Is there a difference in view?

Mr. FELT. Sir, I have a little bit of a concern, we will support the bill and whatever is finally decided, but we personally meet with the communities, we meet with the homeowners and homeowner's associations, we spend considerable money trying to educate the public on the location of the pipeline and what to look out for on a pipeline. There are markers all over the place, and yes, the terrorists could see the markers, but so could the public. It's been my experience—and I don't say that this is the case all over—but we can meet with communities and they don't seem to have a concern until there's an issue. We've met with communities, for example, on new developments and shopping centers where people know there's a pipeline there, they want to pave over it and they want to put a building right next to it. We've met with the local city council and expressed our opinions, but the developer would win out. Now, we've actually met with Mr. Weimer and some of his associates, and they're going to help come to some of these communities and help educate them. Because until they have an accident, they don't appreciate it. Having the maps there ahead of time, to me, makes it easier for someone looking to do damage by having access to the entire scope of all of the pipes in the country, which makes it easier for them—yes, they could do the research, but make them do the research. Someone interested in their local community is better off getting the information locally. We are very willing to have that information available to the communities and to the homeowners, I'm just not sure that the National Pipeline Mapping System—with too much information—is the best way to do that.

Senator LAUTENBERG. There are questions raised, but as life has its risks, normally, crossing roads and that kind of thing, at some point I think we're better off, we'll continue to know what's there, and to be able to take the precautions. And I think as has been

said, if the community is made aware of the fact that this is where these pipes run, but particularly on permits on excavation and so forth to be fairly reliably managed is a critical issue.

Mr. Weimer, the excess flow valves—what do you think we might do to improve the bill with respect to requiring excess flow valves? First of all, are these—these are safety devices, not without cost. And, what's the value in these? To try and implant these all over, especially in new construction?

Mr. WEIMER. Right, this is one of the things that the National Transportation Safety Board has been recommending for some time that PHMSA hasn't implemented, and PHMSA is going through the process, through the distribution integrity management program of looking at this. What the bill says, I think, is commendable and probably goes exactly where we want to go to encourage the criteria to be developed that requires these excess flow valves in just new pipelines and pipelines that are being replaced. Depending who you talk to, and excess flow valve costs from seven to thirty dollars, fifteen dollars is what we hear most of the time. So, if you're putting in a new pipeline that's already exposed, it's not that costly to install one of those.

The problem we saw with the bill is the language in there talks about the criteria would be based on feasibility and risk analysis, and that kind of provides a lot of wiggle room for a company to argue that it's not feasible because of cost or not feasible because of some other reason. Where I think it should be turned around, let the company prove that it's not feasible for their own system, and if they can't prove that, then they should be installed.

Senator LAUTENBERG. Well, if the question of cost is really not significant you're saying it is seven dollars—did I understand you correctly?"

Mr. WEIMER. Yes, seven to thirty dollars is what the valve itself costs and then—

Senator LAUTENBERG. Are these things one per leg, close to the house or within the house?

Mr. WEIMER. Typically it would be one per house between the main on the street and where the house is, because they operate, if the line is—

Senator LAUTENBERG. Tell me what you can do for seven dollars to put something in that's not a—it's obviously not a mechanical thing—seven—a soda pop almost costs seven bucks in some places. What do you get with a—?

Mr. WEIMER. It's a little valve that automatically shuts if the pressure breaks in the pipeline. So it shuts off the gas coming from the main to the house if there is excavation damage, or if a homeowner is out shoveling and breaks the—

Senator LAUTENBERG. Does it buildup pressure behind the valve?

Mr. WEIMER. No, because that's already, that pressure is already in that pipeline and it just stops it at that point so it doesn't continue to leak into people's basements or into the house, causing an explosion.

Senator LAUTENBERG. It sounds like a pretty good investment, Mr. Bender?

Mr. BENDER. I'd just like to say that AGA, APGA supports the legislation, the current wording in the legislation. We don't con-

sider cost when we're talking about our customer's safety, so the word feasibility to us means, although excess flow valves do work, there are certain conditions where they don't work. If the gas pressure, if the house is on a low pressure main, which is essentially a third of a pound, it's almost like puffing on a soda straw. Our belief and from the manufacturers of these excess flow valves is that you have to have at least 10 pounds of pressure for them to work. So, I think PHMSA's approach is the right approach because you don't want to mandate something where you could be re-directing that effort and those resources to something that could really make a difference. So we like the wording as it currently exists, and support PHMSA's approach.

I would say also that use of excess flow valves is increasing across the country by many utilities, and so I think utilities on their own are finding the benefit of excess flow valves and are introducing them in new construction as well and I've got to tell you, PHMSA's made it pretty clear they expect to see the use of excess flow valves increase.

Senator LAUTENBERG. What kind of a record do you have that highlights the number of incidents that result from excess pressure building up? Is that a frequent occurrence?

Mr. BENDER. In our service territory, we've never seen a case where we thought an excess flow valve being installed would have prevented a house explosion. We've seen house explosions many times, people try to commit suicide, believe it or not, by disconnecting the gas line. But nationally I know down in Virginia, the case down in Virginia, was it Riding, Virginia? They felt that an excess flow valve would have prevented that there. So, we're not disputing that.

Senator LAUTENBERG. It's not a high incidence of accident, I take it? Are there numbers of these reported where the pressure became excessive and an explosion or a fire resulted?

Mr. WEIMER. If I can try to answer that, I think you could probably get the best accurate answer if you ask the National Transportation Safety Board to provide their information, they've been looking at that. Certainly as we've heard, third-party damage, excavation damage to these types of distribution pipelines is the highest cause of damage, so any time you have—between the main and the house—some kind of excavation damage, these valves can potentially save people's lives.

Senator LAUTENBERG. I have one last question, Mr. Chairman. The PHMSA inspections—do you support making the results of these inspections publicly available?

Mr. WEIMER. I certainly support that, that was in our testimony. We don't support everything, we don't need to have the pig data and all of that stuff, but a basic cover sheet that talks about the company's name, what section of the pipeline was inspected, what was found, when it was fixed, and the company's response to that, so both sides of the stories are shown, seems like a relatively easy thing to put up along with the enforcement transparency that we're talking about. That's already done in certain states, I know in Washington State you can go onto the Internet, type in any company's name, and all of the intrastate pipelines that Washington State is in control of, you can look at the inspection records. And

it helps, I think people realize how often pipelines are inspected and how good the companies are doing, so I think it would be a benefit to both the public and the company.

Senator LAUTENBERG. Seems so to me. Any objection to—

Thanks, Mr. Chairman.

The CHAIRMAN. Senator Pryor?

**STATEMENT OF HON. MARK PRYOR,
U.S. SENATOR FROM ARKANSAS**

Senator PRYOR. Thank you, Mr. Chairman. I have a couple of questions for Mr. Boss, if I may, about the reassessment, which I understand—or assessment—as I understand that's your term used for inspections and you, as I understand, you do not like the 7-year inspection. Is that arbitrary? Is that why you don't like it? And you prefer kind of a risk-based formula, is that right?

Mr. BOSS. Yes, Senator, there is an engineering consensus standard out there from the American Society of Mechanical Engineers that makes recommendations on how to do it. I would use an analogy, it basically gives you some idea on when to change the oil, every 3,000 miles. Right now as we're looking at this, it's looking to change our oil every thousand miles. We're looking at a lot of new technology that will be very similar to some of the automobiles that basically tell you when to inspect this and turn to the findings. So, we think it's very arbitrary and it's taking a lot of investment to these areas that don't need to be done at this time where we could use that investment otherwise.

Senator PRYOR. I'd say from the regulators standpoint, it's easier to have a flat rule, like a 7-year investment, you force industry to look every 7 years on every part of their system, and you have sort of done that and you know it's up to standards and blah, blah, blah, it may be a little overkill, but it does seem to be a safe approach. From a regulator's standpoint, or from an oversight standpoint from the government's perspective, if you go into some different approach, some different formula, calculation, whatever it is—how does the public know that you are maintaining a safe pipeline? One of the things you're saying is—7 years costs too much money. How does the public out there know, well, these pipeline companies aren't going to skimp, and they're going to push their pipeline safety issues out to the very edge, the very limit and maybe to the breaking point and maybe then your system is dangerous over time—what assurance does the public have there?

Mr. BOSS. Well as mentioned in the GAO studies, there are extensive inspections that go on by PHMSA inspectors up to 3 weeks at a time with these different companies, look at these details. The engineering standards are built with a lot of different safety factors, to give an example, a table may say every 5 years, every 10 years, every 15 years, simplifying that sort of thing, and there's extensive work being used in all the international communities where the regulators look at, on a risk-based methodology, in Canada and also in Europe.

Senator PRYOR. So, you like the risk-based because you get to look at each section of the pipe based on all of the circumstances around it, based on all of the circumstances around it, based on

whatever environmental circumstances and whatever capacity it has, and all of the various factors you take into consideration.

Mr. BOSS. Senator, since 1953, the engineering standards had specific requirements for high-density population areas for natural gas transmission, PHMSA adopted those in regulation in the 1970s. We've had risk-based standards for high population density areas. This program has added to that effort on the assessment area on that.

Senator PRYOR. So, in other words, you're comfortable with the risk-based assessment.

Mr. BOSS. Yes, and there are limits and believe me, PHMSA is out there checking very hard to be sure things are being done right.

Senator PRYOR. And in your industry, from your perspective, the 7-year flat rule just doesn't make a lot of sense.

Mr. BOSS. No, there are some places where we may have to do it more often, there are some cases where we should be doing it at a longer period.

Senator PRYOR. Mr. Bender, let me ask you in your testimony, you mention Section 15 of S. 3961 and you talk, I think you said it was a one-size-fits-all regulation.

Mr. BENDER. Right.

Senator PRYOR. I'd like to get a little more detail on your thoughts on that because the way I read it, and maybe I misunderstand it, but it looks like the approach that we're taking actually recognizes the diversity and the varying circumstances on pipelines, so could you tell me what you mean by "one-size-fits-all?"

Mr. BENDER. Thank you, Senator. The distribution systems and how they're operated are different than liquid pipelines and gas transmission pipelines—the control rooms, the equipment, the pressures, the amount of gas that you're moving, the risk of inappropriate action, the staffing of a control room, you may have two or three people in a control room, you may only have one person in a control room. To have a mandatory limit or prescription regarding schedules, and I guess the example I'll give is we have three people normally in our control room and we, in flu season, somebody may call in sick. And if the mandatory restriction or window or plan has been submitted that an operator won't work past 8 hours, that would not be good for us because you've got to sometimes say, "Tell the operator that he or she may have to stay over and work a second shift." Now that is within their realm of ability, it's not a physical job and we do that frequently, and plus there are other people in the control room, there's not a case where somebody's going to be asleep at the throttle.

Now I'm not saying there are cases where working a second shift wouldn't be appropriate, depending on the circumstances of the staffing of the control room, of the system and what was going on in the system, so that's when I say, really, one size doesn't fit all, and that's our concern. You know, it's not, it's just, we are just concerned that because the systems are different, we wouldn't want to have very prescriptive regulation regarding the schedules.

Senator PRYOR. Mr. Chairman, that's all I have, thank you.

The CHAIRMAN. Thank you, Senator. We thank you—all of you—for your testimony and for your support of our endeavors so far.

We're going to do our best to get this bill passed this year, and we'll be obviously in a period of some negotiation with the House when we come back in December if we can get the bill out of here today or tomorrow. We'd be happy to have your comments along the line, this is a bill we want no surprises, we're pleased with the general support we have now, you've made some suggestions here this morning, I've asked the staff to pursue those suggestions. We'll do our best to make sure we have a good bill and I do thank you for your attitude, it is very supportive of what we want to do, and increases the confidence in this inspection and safety system. Thank you very much.

[Whereupon, at 11:25 a.m. the hearing was adjourned.]

A P P E N D I X

DEPARTMENT OF TRANSPORTATION
Washington, DC, December 4, 2006

Hon. JIM DEMINT,
Senate Committee on Commerce, Science, and Transportation,
Washington, DC.

Dear Senator DeMint:

The Senate may have an opportunity this week to reauthorize the pipeline safety program by adopting the Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006. I am writing to urge your support for reauthorization and to explain how the Pipeline and Hazardous Materials Safety Administration (PHMSA) intends to use its statutory authority in connection with the current requirement (codified at 49 U.S.C. § 60109(c)(3)(B)) that operators of natural gas pipelines reassess the integrity of their pipelines at intervals not to exceed 7 years.

As you know, the Administration's reauthorization proposal would have granted the Secretary of Transportation authority to establish through rulemaking risk-based reassessment intervals that would have superseded the seven-year statutory standard. Our proposal was strongly supported by industry and endorsed by the Government Accountability Office in a report issued earlier this year, but it appears doubtful that any bill considered this week would propose the new authority.

Nevertheless, as I testified before the Committee on Commerce, Science, and Transportation last month, PHMSA is prepared to address the need for risk-based reassessment intervals under its existing authority. The Secretary of Transportation has specific authority under existing law to modify the seven-year reassessment requirement on a case-by-case basis through issuance of regulatory waivers. Under 49 U.S.C. 60109(c)(5), the Secretary may waive or modify the 7-year reassessment requirement if the Secretary determines that such a waiver is "not inconsistent with pipeline safety." In making waiver determinations, the Secretary may consider "any relevant factor," including the need to maintain local product supply or the unavailability of inspection equipment. Waiver applications under the current provision must be decided in accordance with the Act's general waiver provision (Section 60118(c)), which imposes certain procedural requirements, including notice and opportunity for a hearing.

Under that standard, an operator requesting a waiver of the seven-year reassessment requirement would have an opportunity to demonstrate that a longer interval is justified considering all of the relevant operating parameters and conditions on the pipeline. PHMSA is inclined to grant such a waiver where an operator can demonstrate that the subject pipeline is covered by an integrity management program that has been reviewed by PHMSA and determined to provide appropriate risk analysis and control; a baseline assessment has been completed; the data on the current condition of the pipeline is sufficient to validate its integrity; and the proposed interval is consistent with the overall risk profile of the line.

In the circumstances, with the Congress' support, we expect to be able to accomplish the objective underlying our rulemaking proposal—moving to a risk-based reassessment program—even though the specific provision proposed by the Administration will not be adopted. My staff has discussed this matter with the staffs of the authorizing committees, and we understand that a risk-based approach such as I have described has been specifically contemplated in the drafting, staff deliberation, and pre-conference processes.

Thank you for your continued interest in, and support of, the pipeline safety program. If I may be of assistance to address any additional concerns, please do not hesitate to contact me.

Sincerely and very respectfully,

THOMAS H. BARRETT,
Administrator.

DEPARTMENT OF TRANSPORTATION
Washington, DC, November 28, 2006

Hon. TED STEVENS,
 Chairman,
 Senate Committee on Commerce, Science, and Transportation,
 Washington, DC.

Dear Mr. Chairman:

On behalf of the Administration, I want to thank you and your Committee for the commitment you have shown to pipeline safety and to the continued improvement of programs administered by the U.S. Department of Transportation. When I appeared before the Committee as a nominee in September, I pledged to make reauthorization of the pipeline safety program a top priority. I urge Congress to do the same as it heads into the final weeks of the session.

As you know, four pipeline reauthorization proposals are pending before this Congress. Each of the bills would give the Department and our state partners new tools to address safety risks, including growing risks posed by construction-related damage to underground pipelines, an unfortunate and largely preventable consequence of our growing economy. The Administration and the Department are committed to addressing this problem, but we need additional authority to be successful.

The rate and severity of construction-related pipeline incidents are growing. These incidents hit close to home—on distribution lines that run through neighborhoods where families live and schools are located. And the consequences are tragic; excavation damage is the overwhelming cause of pipeline accidents in which people are injured or killed.

To reduce these accidents, we need to better support and strengthen our state partners. State pipeline safety agencies oversee nearly 1.7 million miles of the pipeline distribution system that is at greatest risk of serious construction damage. Consistent with sound integrity management, the Department needs greater flexibility to put pipeline safety resources where they are needed most. When it comes to addressing construction-related damage, this means fostering comprehensive programs for enforcing existing “one-call” laws, as a few States have demonstrated with positive results.

Beyond helping states with damage prevention and overall integrity management, each of the legislative proposals builds on the success of past safety reforms, with somewhat varying detail and emphases. I would be happy to share our views on particular provisions or to assist the Congress in any other way in reconciling differences among the four bills. In the final analysis, however, what the bills have in common is vastly more important than any one or combination of their differences. I urge Congress to reauthorize the pipeline safety program this year to give us more authority to help save lives. By preventing damage to pipelines, Congress will also strengthen the Nation’s energy highways, improve the reliability of critical energy supplies, and, in the case of one-call enforcement, enhance the protection of other underground infrastructure and utilities, including communications and electrical distribution.

Thank you for the opportunity to provide the Department’s views on reauthorization of the pipeline safety program. We would be pleased to provide assistance as legislation is considered by the Congress. The Office of Management and Budget has advised that there is no objection to the presentation to Congress of these views from the standpoint of the Administration’s program.

An identical letter has been sent to the Co-Chairman of the Senate Committee on Commerce, Science, and Transportation, and the Chairmen and Ranking Members of the House Committees on Transportation and Infrastructure and Energy and Commerce.

Sincerely yours,

MARY E. PETERS,
Secretary of Transportation.

PREPARED STATEMENT OF STEPHEN E. SANDHERR, CEO,
 ASSOCIATED GENERAL CONTRACTORS OF AMERICA

On behalf of the Associated General Contractors of America (AGC), I appreciate the opportunity to comment on S. 3961, the Pipeline Inspection, Protection, Enforcement and Safety Act of 2006. AGC is especially concerned about Sec. 4(a) which creates a new permanent Federal one-call enforcement program. While this provision may be good to encourage the few states that do not have strong one-call laws that include enforcement and civil penalties, it takes a step back from the progress we

have made to ensure a strong partnership for damage prevention. The success of the Common Ground Alliance and the successful records of state one-call laws comes from the participation of the construction industry, the locating industry and the underground facility owners in a true partnership committed to damage prevention.

AGC believes that Federal enforcement provisions do not further the partnership that we have been committed to for the last 8 years. A permanent Federal program is unnecessary. AGC and the Common Ground Alliance both support the premise that the best place for enforcement decisions to be made is in the states themselves. The Federal Government should encourage states to adopt policies and procedures that promote effective one-call programs, then withdraw and allow the states to operate and enforce them.

We strongly believe that the most important thing the Committee can do to improve safety would be to modify the bill to ensure that all owner/operators, locating personnel, and excavators share equally in the responsibility for facility integrity, and most importantly public and worker safety. Absent this focus in the enforcement language, the successful partnership may begin to falter.

AGC is proud of our history as a construction industry sponsor of the Common Ground Alliance (CGA). AGC believes that in the spirit of "shared responsibility," a concept promoted by the CGA, owner/operators and locating personnel must be held to just as high a standard as excavators for damage prevention process enforcement to be equitable. States such as Virginia and Minnesota have demonstrated that enforcement works—when it is equally applied to all stakeholders to the damage prevention process across the board. We are pleased that these state's One-Call programs were used as models for the nine points listed in the Administration's proposal. the House Transportation and Infrastructure Committee's bill and the House Energy and Commerce Committee's bill as well as S. 3961.

AGC supports best practices as outlined by the CGA. AGC members call before they dig; wait the required amount of time for utilities to locate and mark their facilities; dig with care; and so much more. It is just as important, if not more so, that utilities respond in a timely manner and that locators mark the facilities clearly and accurately as prescribed by law.

The Commonwealth of Virginia provides an excellent example of how an effective program operates. They enjoy a successful partnership between the excavators, the facility owners, the locators and the state. One of their hallmarks is strict enforcement—across all stakeholder groups. Virginia has data from 1996 to 2005 indicating a 60 percent increase in one-call excavation notices while documenting a 50 percent reduction in excavation damage to gas pipelines.

Clearly, no one wants to cause damage. Criminal penalties are not appropriate for any stakeholder be they a locator, utility owner, professional excavator or a private citizen operating in good faith. They should not be included in any reauthorization of the Pipeline Safety Act. Civil penalties, however, send a strong message that stakeholders must operate in a responsible, safe manner.

AGC also urges the Committee to include authorizations for funding for the Common Ground Alliance, promotion of 8-1-1 three-digit nationwide dialing for one-call (which goes online in 2007), and for technology development grants to enhance locating technologies and render underground utilities more locatable. These programs are critical to getting universal adoption of our common best practices.

Again, AGC encourages the Committee to promote successful damage prevention programs. But the most important lesson we have learned from our successful efforts in the Common Ground Alliance are that these laws must take into account the entire damage prevention process, not simply focus on the excavator. AGC encourages leveling the playing field between stakeholders—easing the inequitable burden included in the bill which currently lies primarily with the excavator when it should recognize that to be successful these programs must recognize the role that all parties have in public and worker safety, facility integrity and damage prevention.

Again, thank you for the opportunity to comment on this important issue. I look forward to working with the Committee to enact meaningful and fair legislation re-authorizing the Pipeline Safety Improvement Act.

Thank you.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DANIEL K. INOUE TO
THOMAS J. BARRETT

Question 1. I understand that the Administration generally supports the enforcement provisions of S. 3961, with some added changes that were incorporated into the House Energy and Commerce Committee's bill. The 2000 El Paso Pipeline accident in New Mexico, which killed an entire extended family of twelve, triggered the need for the provision. The Pipeline agency originally announced a proposed \$2.52 million fine. Today, 6 years later, no penalty has ever been collected. Can you provide the Committee with information regarding the status of that penalty and whether any funds have been collected from the operator?

Answer. PHMSA proposed a \$2.52 million fine against El Paso Natural Gas Company following the New Mexico accident and we remain determined to bring this matter to a just resolution. We are working with the Department of Justice to apply our strongest options available. The United States is in nonpublic discussions with the company at this time.

Question 2. Do you believe that a similar enforcement transparency policy might be a good practice for your hazardous materials enforcement activities at the Pipeline agency or the other DOT administrations?

Answer. Yes, we believe this to be a good practice. PHMSA's hazardous materials enforcement program has led our effort in enforcement transparency, making comprehensive enforcement data available on a PHMSA webpage. We have designed a new webpage about our pipeline safety enforcement actions, which will provide information on each action and current status. I am committed to making our inspection and enforcement activities more transparent.

Question 3. Some feel that the security restrictions imposed on the National Pipeline Mapping System (NPMS) do little to improve security, but do hamper safety efforts to reduce building encroachment near pipelines and third-party damage. Additionally, I understand that the removal of the NPMS from the public domain has forced some states, such as Washington, Texas and Louisiana, to spend their limited state dollars to duplicate this mapping system so local government and the public have access to this valuable information. Are you considering reinstating public access to the NPMS so local governments can plan safely and the public can be aware of the pipelines that run through their area?

Answer. Yes. PHMSA is working to restore public access to the NPMS information that will be available in mid-2007, in a way that accommodates both public and security concerns. We believe the restored information will meet the needs for environmental, emergency, land use and other planning activities. We are consulting with all relevant parties—including pipeline safety advocates, the Department of Homeland Security's Transportation Security Administration, other Federal agencies, the pipeline industry and our state partners in developing our approach.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DANIEL K. INOUE TO
E. FRANK BENDER

Question 1. In your testimony, you seem to suggest that Section 15 of S. 3961 requires the development of a "one-size-fits-all" regulation to address pipeline controller fatigue and other human factors. In fact, our bill requires each pipeline operator to develop their own rules on worker's hours of service, consistent with current science on fatigue management. This approach recognizes the "diversity" of pipeline controller functions among different pipeline operations by letting operators devise their own strategies to reduce human factors. What about this approach is troubling to your members?

Answer. We commend the Senate for the recent passage of the Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006, which includes requirements for controller work plans to address fatigue and other human factors. I acknowledge the flexibility that was provided in the Senate bill. The language should be sufficient for DOT to develop regulations that provide the needed flexibility for the more than 1,100 natural gas distribution operators, whose control operations are vastly different from gas transmission and hazardous liquid operators.

Question 2. Regarding third-party damage, I believe much of the prevention effort has focused on the commercial excavation community, including contractors, utility, cable and telecommunications companies. Is there also a third-party damage problem from ordinary citizens engaged in routine excavation near their property, particularly in urban areas? If so, should our damage prevention programs take this into account?

Answer. Yes, and I believe the language in the reauthorized Pipeline Act successfully addresses that problem. There is the potential for problems with ordinary citizens engaged in routine excavation near their property causing damage to underground utilities. The reauthorized Pipeline Safety Act states in 49 U.S.C. 60134(b) that an effective damage prevention program includes “A process for fostering and ensuring active participation by all stakeholders in public education for damage prevention activities.”

Some operators are already working to educate ordinary citizens about the dangers of not using one-call before digging. The Common Ground Alliance best practice for public education includes children and property owners as target audiences, as well as excavators and contractors.¹

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DANIEL K. INOUE TO
TERRY BOSS

Question 1. Under existing authority and the nonemergency waiver provision of S. 3961, gas transmission pipeline operators would be able to request a waiver of the seven-year reassessment interval. While I know INGAA had hoped that the interval would be changed statutorily, why wouldn't this approach work just as well? In effect, the seven-year interval would become a back-stop and operators who could demonstrate to the Pipeline agency that a longer interval would not have an impact on safety, would be allowed to change it.

Answer. INGAA agrees that gas transmission operators can request waivers from the seven-year reassessment interval. Senator DeMint had raised this issue with PHMSA Administrator Thomas Barrett prior to the passage of H.R. 5782 in the Senate. Administrator Barrett's response (see pages 55 and 56) makes it clear that PHMSA does intend to entertain waiver requests of this nature, so long as the operator can “demonstrate that a longer interval is justified considering all of the relevant operating parameters and conditions on the pipeline.” We appreciate the willingness of Administrator Barrett—and the Congress—to support these waivers where they can be justified. INGAA remains convinced, however, that waivers are a temporary solution.

Congress chose to enact a specific statutory requirement for reassessment intervals in 2002. The seven-year requirement was never based upon an actual analysis of the safety and engineering associated with natural gas transmission lines; it was instead the product of political compromise. This is why the provision in the 2002 bill requiring an analysis by the Government Accountability Office (GAO) was so important. The GAO was able to spend over a year gathering and analyzing data on this issue so that it could recommend a more reasoned alternative. As you know, the GAO (Report 06-945) did recommend to Congress that the statute be changed to allow PHMSA to undertake a rulemaking for changing the seven-year interval to one in which reassessment intervals are based upon risk analysis. Until the statute is changed by Congress, though, the seven-year requirement remains the standard—even though it does not have any justification from an engineering standpoint. PHMSA has the authority to review waiver requests, but those requests do not have to be acted upon, and if granted, can be revoked at any time. INGAA also has concerns about the consistent application of waiver authority across a large number of pipelines. INGAA's members have consistently advocated regulatory certainty in such matters—an opportunity to participate in the rulemaking process and a clear understanding by both operators and regulators of the requirements. The waiver process leaves much more uncertainty for both parties to manage.

In terms of using the seven-year requirement as a “back-stop,” INGAA would be much more comfortable with using a time-frame that actually has some justification. The GAO report highlights the work that has been done by the American Society of Mechanical Engineers (ASME), which has recommended prescriptive intervals of 10 years for most high-stress natural gas pipelines (*i.e.*, the vast majority of INGAA member company pipelines). This ten-year standard has undergone review and approval by the American National Standards Institute, and therefore has been demonstrated to have a scientific and engineering justification. If there is to be any back-stop on reassessment intervals, the ASME standard is the one that makes the most sense.

The reauthorization bill approved by Congress requires PHMSA to report back within 60 days on a legislative provision for enacting the GAO recommendation. INGAA hopes that Congress will seriously consider and approve the legislative pro-

¹ Common Ground Alliance Best Practices, Version 3.0 Public Education and Awareness Practice Statements & Description.

posal from PHMSA. Granting waivers from the seven-year requirement is a short-term solution at best. There is no reason why Congress cannot allow PHMSA to develop a more logical and justifiable reassessment interval policy for the long-term. INGAA believes this development is best accomplished through the rulemaking procedure, with public notice and participation, consideration of comments by all interested parties, and advice from the Technical Advisory Committee.

Question 2. In the GAO report on the seven-year reassessment interval, the GAO noted that it was difficult to evaluate the nature and cause, such as corrosion, of individual pipeline problems discovered during initial pipeline assessments because the Pipeline agency does not require pipeline operators to report such information. Would you be opposed to providing such information to the Pipeline agency?

Answer. No, INGAA would not be opposed. We are in the process of surveying our own association members as to the nature and causes of the defects that were repaired in the high consequence areas subject to Integrity Management Program for years 2004–2006 and plan on sharing the results of that information with PHMSA.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DANIEL K. INOUE TO
TIMOTHY FELT

Question 1. In your testimony, you reference the Association of Oil Pipe Lines' opposition to the requirements in §. 3961's section 3 that all low-stress pipelines be subject to Federal incident reporting and National Pipeline Mapping System regulations. Can you explain your opposition to these regulations?

Answer. In our testimony we supported the House Energy and Commerce Committees bill language that significantly broadens the regulation of low-stress pipelines and exceeds the Administration's proposed requirements for these lines. This bill language would subject oil pipelines operating at low-stress that are similar to the Prudhoe Bay lines that leaked in March 2006 to the same regulations as oil transmission pipelines operated at high-stress.

We oppose additional DOT mapping and reporting requirements for the remaining lines operated at low-stress that would not be covered by the House bill. These remaining lines are:

- I. regulated by the Coast Guard; or
- II. serving refining, manufacturing, or truck, rail or vessel terminal facilities, if the pipeline is less than 1 mile long (measured outside the facility grounds) and does not cross an offshore area or a waterway currently used for commercial navigation.

These are the reasons for this opposition:

1. With respect to I., we recommend against dual regulation of facilities or disrupting existing regulatory arrangements by shifting regulatory responsibility from one agency to another unless there is a very good reason. The Coast Guard is not lax in its attention to the facilities it regulates. Pipelines regulated by the Coast Guard should be all the Coast Guard's responsibility, not part the DOT's and part the Coast Guard's responsibility.
2. With respect to II., these pipelines are short and so closely associated with the facilities they serve that mapping details would be obscured and not helpful. The facilities served by these pipelines are not subject to DOT regulations currently, and we do not believe adding DOT reporting requirements for them is merited.
3. Also with respect to II., leak reporting for these pipelines could be required by PHMSA under existing law if the benefits would justify the costs. PHMSA has not chosen to do so, most likely because the benefits do not justify the costs. These facilities are for the most part inside a company's fence. So are the infrequent and generally quite small leaks, which occur primarily at valves rather than in pipe itself. Rather than a Congressional mandate for a program to collect data on leaks from these facilities, it would be better for PHMSA to propose such a program through the administrative process and tailor it to meet a cost-benefit test.

Question 2. In your testimony, you note that oil pipelines are subject to a baseline assessment period of 7 years and a reassessment period of 5 years under integrity management rules. Do you anticipate problems or difficulty in meeting the five-year reassessment interval for your members' pipelines in high consequence areas?

Answer. When these requirements were proposed by PHMSA's predecessor in 2000–2001, we were concerned that the vendor capacity available for pipeline as-

assessment—internal inspection devices and the people to interpret the output of the devices—might not be sufficient to the requirements of the regulations. We have worked through these concerns, in part because the vendor community has responded to the need and in part because PHMSA’s regulations provide flexibility to the operator to design assessment schedules. The oil pipeline industry is on track to meet the pipeline integrity regulatory requirements applicable to our pipelines. Our industry has embraced integrity management as good business. The application of integrity management is successfully making lasting improvements in the oil pipeline infrastructure, and not just in those portions of the infrastructure that are in high consequence areas.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. DANIEL K. INOUE TO
CARL WEIMER

Question. In your testimony, you recommend that Congress consider studying the imposition of financial responsibility requirements for pipelines as it already does for other companies under the Resources Conservation and Recovery Act (RCRA) and the Oil Pollution Act (OPA). Can you further explain why this is needed?

Answer. Thank you for the opportunity to expand on our testimony regarding the possible need for financial responsibility (also referred to as financial assurance) measures for pipelines to increase protection of communities and the environment.

As stated in our earlier testimony because of the corporate structuring of pipeline companies as independent companies owned solely by larger corporations there exists the potential to under-capitalize these pipeline companies, and thus avoid or significantly delay large liabilities caused by accidents by simply declaring bankruptcy. This in fact was exactly what happened with the Olympic Pipeline Company after the Bellingham tragedy, where two of the largest corporations in the world, (British Petroleum and Shell), allowed their solely-owned pipeline company to enter bankruptcy.

There are a number of Federal statutes that include financial assurance clauses to prevent this type of liability dodging, and also to help ensure that safety will be internalized into a company’s management. Financial assurance is required under the Oil Pollution Act (OPA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or Superfund), the Resource Conservation and Recovery Act (RCRA), the Safe Drinking Water Act, the Outer Continental Shelf Lands Act (OCSLA), the Federal Land Policy and Management Act, and the Surface Mining Control and Reclamation Act (SMCRA).

A number of studies have been done that show the value of such financial assurance. A Programmatic Regulatory Assessment of OPA 90 done by the U.S. Department of Transportation in 2001 showed that the single largest contributor to reducing spills was the financial responsibility rule within OPA 90. Other studies done by the independent group Resources For The Future have shown a similar successful effect of financial responsibility rules in a number of different statutes.

Here is a list of what we have found to be the most relevant studies, and where they can be found. We have also attached copies of these studies for your convenience.*

OPA 90 Programmatic Regulatory Assessment (PRA)—Benefit, Cost, and Cost Effectiveness of Eleven Major Rulemakings of the Oil Pollution Act of 1990 (May 2001)—Prepared by: Economic Analysis Division, John A. Volpe National Transportation Systems Center, Cambridge, Massachusetts <http://www.uscg.mil/hq/g-m/regis/PDF/pr-main.pdf>.

Financial Assurance Rules and Natural Resource Damage Liability: A Working Marriage? James Boyd (March 2001)—Discussion Paper 01–11 <http://www.rff.org/rff/Documents/RFF-DP-01-11.pdf>.

Financial Responsibility for Environmental Obligations: Are Bonding and Assurance Rules Fulfilling Their Promise? James Boyd (August 2001)—Discussion Paper 01–42 <http://www.rff.org/rff/Documents/RFF-DP-01-42.pdf>.

While it is clear to us that financial assurance rules do serve as a valuable way to prevent spills and internalize the costs of such prevention for many industries, we are not as clear on what benefits these rules would provide to pipelines. Because of the lack of public information on the bankruptcies of pipeline companies, and the collection of fines and total damages, there is no way for us to assess whether such additional rules are needed. For this reason, in our testimony we suggested that

*The information referred to has been retained in Committee files.

Congress ask for a study of the need and benefit for such financial assurance rules for pipelines. We still believe that such a study is called for, and should be able to answer whether financial assurance rules would be beneficial to increasing pipeline safety.

Thank you again for this opportunity to provide additional testimony.

