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PIPELINE SAFETY

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HEARING

BEFORE THE

SUBCOMMITTEE ON
HIGHWAYS, TRANSIT AND PIPELINES

OF THE

COMMITTEE ON
TRANSPORTATION AND
INFRASTRUCTURE
HOUSE OF REPRESENTATIVES

ONE HUNDRED NINTH CONGRESS

SECOND SESSION

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PIPELINE SAFETY

Thursday, March 16, 2006,

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
SUBCOMMITTEE HIGHWAYS, TRANSIT AND PIPELINES,
WASHINGTON, D.C.

The committee met, pursuant to call, at 10:00 a.m. in room 2167, Rayburn House Office Building, Hon. Tom Petri [chairman of the committee] presiding.

Mr. PETRI. The Subcommittee will come to order

Just by way of orientation, before we get started, we expect shortly after we get going a series of votes on the House Floor. So we will proceed as far as we can, then we will have to adjourn and reassemble, or we will see how we can handle that when it occurs. There probably will be 10 votes in order, and that could take as long as an hour.

The purpose of today's hearing is to review the status of pipeline safety programs, and in particular the implementation of the Pipeline Safety reauthorization passed in the 107th Congress. Before looking ahead to a new reauthorization in the months ahead, we want to take a look at how the current program is working.

The Pipeline Safety and Security Act of 2002 was signed into law in November of that year. The goal of that Act was to improve the safety and security of the Nation's 2,200,000 miles of pipeline. One of the significant provisions of the Act was the requirement that half of all interstate pipelines be inspected within five years, with the remainder facing initial inspection within a decade, call for inspections within ten years of enactment with re-inspections every seven years thereafter. Daily civil penalties for companies found to be operating below safety standards were increased from $25,000 to $100,000, with the maximum penalty for a related series of violations raised from $500,000 to $1 million.

At the time, the Office of Pipeline Safety had not been reauthorized for several years. There were significant issues that made the reauthorization process contentious and the completion of the bill in 2002 required compromises, patience and good faith on everyone's part. Four years later, we are approaching the end of the authorization period. It is important, therefore, that we gain an understanding of how things are going in the pipeline safety regime and what improvements we have seen in the safe operation of pipelines since that law was passed.

To advance this goal, we have before us representatives from various governmental agencies, pipeline operators and safety advocates. We look forward to their appraisal of the current situation.

Several days ago, there was a leak in an oil pipeline on the North Slops in Alaska. As we understand the situation, it resulted from a quarter-inch hole in the pipe from which approximately 250,000 gallons of oil leaked over a 10 hour period. We understand the leak was contained to a two acre area and that no oil has crept into any waterways. Hopefully, we understand it is expected by the experts that nearly all the oil is expected to be recovered.

Representatives from the operator, British Petroleum, the Pipeline Hazardous Materials Safety Administration, the Department of Transportation, as well as State officials, have been engaged in the cleanup and appear to have the situation under control. It is important to note that this leak was quickly discovered and appropriate action taken. Hopefully that does not indicate a larger failure in the pipeline safety regime.

Welcome to all of our witnesses here today. We look forward to your testimony. Now I would yield to my colleague, Mr. Larsen, for any opening statement he would like to make.

Mr. LARSEN. Thank you, Mr. Chairman. I want to thank you for holding this hearing today and I want to thank the witnesses for being here today to share your expertise.

Pipeline safety is of great importance to me and the constituents that I have in the Washington State Second Congressional District. We all know on June 10th of 1999, a rupture in a liquid fuel line resulted in an explosion in my district, in Bellingham, Washington. The rupture released more than a quarter million gallons of gasoline into Whatcom Creek. The gasoline ignited, sending a fireball down the creek and this fireball claimed the lives of two 10 year old boys and a young man of 18.

This was a tragedy that could have been prevented, should have been prevented. I am deeply committed to the families of these victims and the citizens of Whatcom County, who have all helped lead the fight for increased pipeline regulations and safety regulations that will prevent future catastrophes.

Carl Weimer, from the Pipeline Safety Trust, and now a Whatcom County council members, is one of those dedicated individuals, and I am happy to have him here today to testify on a later panel.

This Committee did good work in the last reauthorization of the Pipeline Safety and Enhancement Act back in 2002. It was a very proud moment for me to be able to tell my constituents that all together, we increased accountability and strengthened the reliability of our Nation's pipeline infrastructure. With that 2002 law, we increased penalty fines and improved operator qualifications, provided whistleblower protection, improved pipeline testing time lines and allowed for some State oversight.

Since then, the law seems to be working well. Oversight and safety have gotten better, largely due to the work of PHMSA. However, we must remain vigilant. I am interested in hearing from our witnesses today on where they see room for improvement. As we begin the reauthorization, I hope we can all work toward this common goal.

I strongly encourage the Committee to set an expeditious time line as well to ensure that this important bill is reauthorized this year.

Thank you, Mr. Chairman. With that, I conclude my remarks.

Mr. PETRI. Thank you.

Any other opening statements will be made a part of the record when submitted.

The opening panel consists of Mr. Brigham McCown, Acting Administrator, Pipeline and Hazardous Materials Administration, United States Department of Transportation; Kate Siggerud, Director of Physical Infrastructure Issues, U.S. Government Accountability Office; Todd Zinser, Acting Inspector General, U.S. Department of Transportation; and Mr. Bob Chipkevich, National Transportation Safety Board, Director, Office of Railroad, Pipeline and Hazardous Material Safety.

We welcome you all. We thank you for the effort that you and your organizations have made in preparing your opening statements, and we look forward to your summary remarks of approximately five minutes each, beginning with Mr. McCown.

TESTIMONY OF BRIGHAM MCCOWN, ACTING ADMINISTRATOR, PIPELINE AND HAZARDOUS MATERIALS ADMINISTRATION, UNITED STATES DEPARTMENT OF TRANSPORTATION; ACCOMPANIED BY: STACEY GERARD, ACTING ASSISTANT ADMINISTRATOR/CHIEF SAFETY OFFICER, PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION AND ASSOCIATE ADMINISTRATOR FOR PIPELINE SAFETY; KATE SIGGERUD, DIRECTOR, PHYSICAL INFRASTRUCTURE ISSUES, UNITED STATES GOVERNMENT ACCOUNTABILITY OFFICE; TODD J. ZINSER, ACTING INSPECTOR GENERAL, UNITED STATES DEPARTMENT OF TRANSPORTATION; BOB CHIPKEVICH, NATIONAL TRANSPORTATION SAFETY BOARD, DIRECTOR, OFFICE OF RAILROAD, PIPELINE AND HAZARDOUS MATERIAL SAFETY

Mr. MCCOWN. Mr. Chairman and distinguished members of the Subcommittee, thank you for the opportunity to appear before you today to discuss the Department's ongoing efforts to improve the safety of America's pipeline transportation system. I appreciate your time in taking up this very important matter.

Under Secretary Mineta's leadership we have made every effort to address every single aspect of Congressional provisions mandated by the 2002 Pipeline Safety Improvement Act. We hope we are meeting your expectations.

Through our hard work, we have eliminated most of the 12 year old backlog of outstanding mandates and recommendations of Congress, the GAO, our Inspector General and the NTSB. I am pleased to report to you that yesterday we published a final rule to define and regulate natural gas-gathering lines, finishing an 18 year old mandate.

Safety at the Department and in the Administration remains our single highest priority. It is also perhaps our greatest challenge. For advancing pipeline safety in the growing construction, urban expansion and development and increased underground utility congestion within our communities is a distinct challenge that we have to address. So working with the Common Ground Alliance, we have led many stakeholders to share responsibility on this biggest issue, which is damage prevention. I would like to thank the CGA and

its volunteer members and partners and leadership in helping us fight this war.

Planning to implement our newest, most important tool is the three-digit dialing for the one-call system. Eight-one-one will provide one action for all Americans across the Country to call to find out where underground utilities are and to avoid third party excavation damage. It is a big task and we need help to succeed. Stronger oversight has been important in our strategy to combat these threats and strengthen pipeline safety.

In the past 12 years, we have increased pipeline safety staff from 28 inspectors to 88 today. While the growth of our staff has helped us make tremendous progress, our success in this area depends heavily on our ability to solicit assistance from our State partners who provide an additional 400 inspectors. Working with others, we are raising the quality of public education that operators provide as well as what we provide. We have called for new consensus standards for public education. The stakeholders have responded by creating one that significantly raises the bar.

We are improving our efforts to reach the public by preparing local officials to be education resources within our communities. We also understand the introduction of new pipeline technologies can dramatically increase the safety of pipeline operations. Over the past three years, our R&D program has jump started more than 70 projects across the Country and has already generated 8 new patent applications.

Along with technology, I should mention our enforcement actions. We are imposing and we are collecting larger penalties, while at the same time guiding pipeline operators to deliver higher performance. Compared to 2002 in 2004, we doubled our penalties, and in 2005 we have tripled to over $4 million of what we have imposed. Lastly, we are achieving results. And when compared to the previous four years, hazardous liquid pipeline incidents are down by 18 percent. Over the past 10 years, pipeline excavation related incidents have decreased by 59 percent. Accidents of the most severe consequences, or those involving death, injuries, fire, explosion, evacuation, are also trending steadily downward.

We recognize, however, there is more room for improvement. And we know there is more work to be done. I would like to reassure the members of the Subcommittee that the hard working men and women of PHMSA are committed to improving safety, reliability and public confidence in our Nation's pipeline infrastructure. We look forward to continuing our work with each of you, the States and our stakeholders in achieving zero deaths, zero injuries and zero incidents involving pipelines.

Ms. Gerard and I will be pleased to answer any questions the Subcommittee may have. Thank you, sir.

Mr. PETRI. Thank you.

Ms. Siggerud?

Ms. SIGGERUD. Mr. Chairman, and members of the Subcommittee, I appreciate the opportunity to participate in this hearing on the Pipeline Safety Improvement Act of 2002.

My testimony today is based on the preliminary results of our work about the effects on safety stemming from first, PHMSA's integrity management program for natural gas transmission pipe-

lines; and second, the requirement that pipeline operators reassess their natural gas pipelines for corrosion every seven years. We will be reporting in more detail on both of these issues this fall.

In addition, I would also like to briefly touch on how PHMSA has acted to strengthen its enforcement program since I testified on this topic before this Subcommittee almost two years ago. My statement is based on our review of laws, regulations and other PHMSA guidance and discussions with a broad range of stakeholders. In addition, we contacted 25 pipeline operators that are most affected by the program, including larger and smaller operators. We also surveyed State inspectors.

Early indications are that the integrity management program has enhanced public safety by requiring that operators identify and address the greatest risks to their pipelines in highly populated areas, known as HCAs. We found broad support for the program among both operators and stakeholders concerned with safety and the environment. Operators said that the benefits of the program include better knowledge of their pipeline systems and improved communications within their companies.

Pipeline operators are making good progress in assessing their pipelines. Since 2004, operators have assessed 6,700 of the 20,000 miles of pipelines in high consequence areas and have completed 338 repairs that by definition needed to be made immediately. While it is not possible to know how many of these repairs would have been identified without integrity management, it is clear that assessing pipelines identifies problems that would otherwise go undetected.

To oversee the program, PHMSA has conducted 11 inspections of operators and found that operators are doing well in conducting assessments and making repairs. However, some of them are having difficulty in documenting their management processes. Operators we identified also expressed concern and confusion about the level of documentation that would be sufficient.

PHMSA took other actions to implement the program, including adopting performance measures and developing inspection protocols and a series of training courses. Furthermore, PHMSA has been working to improve communication with States about their role in overseeing the integrity management program. I am pleased to report that the early reports from our survey show that a majority of States believe this communication has been useful.

As you know, the Act requires that pipelines be reassessed every seven years. The regulations require that these reassessments focus on corrosion. The regulations also adopted a pipeline industry consensus standard that requires comprehensive reassessments every 5, 10, 15 or 20 years, depending on the stress in the pipes and the types of problems identified.

Most of the operators told us that in the absence of the 7 year reassessment, the conditions they identified would lead them to reassess their pipelines in 10, 15 or 20 years. The requirement is generally consistent with the reassessment standard for higher stress pipelines, which is five or ten years. Our interviews and industry data suggested a majority of transmission pipelines fall into this category.

Most operators told us that the seven year reassessment interval is conservative for pipelines that operate under lower stress. This is especially true for local distribution companies that transport natural gas under lower pressures from larger cross-country lines to feed smaller distribution lines. Most we spoke with reported finding conditions that would necessitate another assessment in 15 to 20 years.

Operators viewed reassessment as valuable for public safety. However, they prefer a risk-based requirement based on engineering standards. This approach would be consistent with the overall thrust of the integrity management program. Many noted that reassessing pipeline segments with few defects every seven years takes resources away from riskier segments that require attention. They told us that while PHMSA's regulations allow for a less comprehensive assessment to meet the seven year requirement, it is likely that they will use more extensive testing.

Operators and inspection contractors we contacted told us the services and tools needed to conduct reassessments will likely be available to most operators, including during the overlap period during 2010 through 2012, when some assessments and reassessments will be happening at the same time. Another issue debated regarding the seven year interval is that natural gas supplies could be interrupted and affect energy markets during years when a large number of assessments and reassessments occur because operators must reduce pressure in their pipelines to conduct assessments and make repairs. We are still analyzing this issue and will be reporting on it this fall.

Finally, we reported in 2004 that PHMSA did not have a clear and comprehensive enforcement strategy. PHMSA reconsidered its approach for enforcing pipeline safety standards in response to our concern and adopted a strategy last year that is focused on using risk-based enforcement, increasing knowledge and accountability for results and improving its own enforcement activities. Our preliminary view is that this is a reasonable framework and is responsive to the concerns that we raised.

Mr. Chairman, that concludes my statement. I will take questions at the appropriate time.

Mr. PETRI. Thank you.

Now we welcome Mr. Zinser, who is making his debut as the Acting Inspector General of the Department of Transportation.

Mr. ZINSER. Thank you, Mr. Chairman, Ranking Member, and members of the Subcommittee. We appreciate the opportunity to testify today on pipeline safety.

We have seen considerable progress since we first testified on this issue over six years ago. That progress is the direct result of the attention of this Subcommittee, Secretary Mineta, the Pipeline and Hazardous Materials Safety Administration and its Office of Pipeline Safety, as well as the States, industry, citizen groups and groups such as the Common Ground Alliance.

PHMSA's Office of Pipeline Safety is making progress in clearing out Congressional mandates. Today only one mandate is open from 1992. All mandates from 1996 are closed, and OPS has completed actions on 18 of the 23 mandates from the 2002 Act.

But there is still more work to be done. I would like to briefly summarize my statement in six points.

First, our audit work shows that operators are identifying integrity threats and making timely repairs. Operators are well underway toward completing baseline assessments of pipeline systems in or affecting high-consequence areas. Even though they have until 2009 to do so, as of December 2004, hazardous liquid operators had completed baseline assessments on approximately 95 percent of the 72,000 pipeline miles affecting high-consequence areas.

At the end of 2005, natural gas transmission pipeline operators had completed around 33 percent of their baseline assessments, even though they have until 2012 to do so. Our auditors visited seven hazardous liquid pipeline operators and found that the operators had repaired all 409 integrity threats we examined, with approximately 98 percent of the repairs completed within the established IMP timeframe or OPS-approved extensions.

Secondly, however, we also found the pipeline operator reports contained errors, and OPS needs to work with the operators to correct and improve their reporting. Six of the seven hazardous liquid operators we visited had errors in their reports caused by such things as the use of preliminary data and data outside of the reporting period. This needs to be improved. OPS is working on it, but we consider it an important watch item, because without accurate reporting, OPS will not have effective oversight.

Third, OPS' integrity management inspection program is helping operators comply with IMP requirements. As of December 2005, OPS and its State partners had conducted one or more integrity management inspections for over 86 percent of the 249 hazardous liquid pipeline operators. We have seen evidence that the OPS enforcement program is helping improve pipeline safety. At one operator we visited, OPS inspectors found integrity threats not repaired due to errors in analyzing pig data. The operator has since made the necessary repairs.

Fourth, we have seen a sea change in the industry toward establishing IMPs for natural gas distribution pipelines. Natural gas distribution pipelines make up over 85 percent of the natural gas pipeline miles. Nearly all are located in high-consequence areas where a rupture could be disastrous. Over the past five years, while actual numbers remain low, injuries and fatalities involving gas distribution pipelines have gone up.

Even though OPS does not currently require IMPs for gas distribution pipelines, since 2004 OPS, its State partners, and a broad range of stakeholders have come to agree that all distribution pipeline operators should implement an IMP. OPS is drafting a rule and expects to develop integrity management plans during 2008 and begin implementing those plans in 2009.

Fifth, work is still needed on establishing pipeline security roles and responsibilities between OPS and TSA. In September 2004, DOT and DHS signed an umbrella MOU to improve their cooperation. But in October 2004, when Congress established PHMSA, it told DOT and DHS to come up with an annex to the MOU specifically for pipeline and hazardous material transportation matters. This has not been done. A lack of clearly defined roles could lead

to duplicating or conflicting efforts, and most importantly, the potential for an uncoordinated response to a terrorist attack.

My final point, Mr. Chairman, is that DOT and PHMSA deserve recognition for an outstanding job in the wake of Hurricane Katrina. One of the lessons learned in this area is that the Secretary's emergency authority could be strengthened. Loss of electrical power to pumping stations during Katrina forced three major operators to cut off sources of fuel to the Eastern Seaboard. OPS sent its inspectors to remote pumping stations to ensure the operator personnel were technically qualified to manually operate the pipeline system, thus avoiding any question about whether a waiver for the operators was needed to keep the fuel flowing.

By law, the Secretary may waive a pipeline safety regulation but only after public notice and an opportunity for a hearing. With an emergency like Katrina, this would not have been practical. Congress should consider whether the Secretary's authority for responding to a terrorist attack or major disaster involving pipeline transportation needs to be strengthened.

Mr. Chairman, this concludes my statement and I will be pleased to answer any questions that you or the other members may have.

Mr. PETRI. Thank you.

Mr. Chipkevich?

Mr. CHIPKEVICH. Good morning, Chairman Petri and members of the Subcommittee. Acting Chairman Rosenker has asked me to represent the Board today.

Since I last testified before this Subcommittee in June 2004, the Pipeline and Hazardous Material Safety Administration has continued to make progress to improve pipeline safety. After a series of pipeline accidents, the Safety Board had recommended that PHMSA assess industry public education programs and require pipeline operators to periodically evaluate the effectiveness of those programs.

In December of 2003, the American Petroleum Institute published Recommended Practice 1162 that addressed these issues. In May of 2005, PHMSA incorporated the recommended practices into its pipeline safety requirements. PHMSA has also made progress in the area of mandatory pipeline integrity assessments. The Safety Board had recommended that PHMSA require periodic inspection to pipelines to identify corrosion, mechanical damage and other time dependent defects that could be detrimental to the safe operation of pipelines. Final rules were published by PHMSA and both hazardous liquid and gas transmission operators must now conduct integrity assessments.

The Safety Board had supported PHMSA's rulemaking in this area and closed the 1987 recommendations as acceptable action. PHMSA must now ensure that the pipeline operators implement effective integrity management programs. Quantifying inputs into various risk management models can be difficulty and subjective. PHMSA has shared its inspection protocols with the Safety Board, and when we investigate accidents that involve integrity issues, we will examine PHMSA's process for evaluating those integrity management programs.

In 2001, after investigating an accident involving the explosion of a new home in South Riding, Virginia, the Safety Board again

recommended that PHMSA require gas pipeline operators to install excess flow valves in all new and renewed gas service lines when operating conditions are compatible with readily available valves. Only about one half of the operators currently install these vales at cost. Excess flow valves should be a standalone requirement and not the result of a decision based on risk analysis. Risk factors may change over time due to community growth or other events, and the cost of excavating existing service to install excess flow valves would be another factor to then overcome. Excess flow valves are inexpensive safety devices that can save lives.

PHMSA's final rule on operator qualification, training and testing standards was issued in 2001, and focused on qualifying individuals performing certain tasks. But it did not require training or specify maximum intervals for requalifying personnel. Last year, PHMSA published a rule that does require operators to have training, and it held public meetings to explore ways to strengthen the operator role. These developments are positive, and the Board encourages PHMSA to continue moving forward on this important issue.

The Safety Board believes that operator qualification requirements must include training, testing to determine if the training was effective and requalification of personnel on a timely basis.

With respect to damage prevention, the recent efforts of PHMSA and the Common Ground Alliance to establish a national one-call number, 8–1–1, is especially noteworthy. We hope that the States will now move quickly to ensure that this number is incorporated into all telephone exchange systems.

Finally, the Safety Board recently completed a study of a series of accidents that involved delayed reaction by pipeline controllers. The study found that an effective alarm review audit system by operators would increase the likelihood of controllers responding appropriately to alarms associated with pipeline leaks and recommended that PHMSA require such reviews by operators. The Safety Board continues to review activities involving pipeline safety. There clearly has been progress made in the last five years.

Thank you, and I would be glad to answer questions when appropriate.

Mr. PETRI. Thank you.

Any questions, Mr. Larsen?

Mr. LARSEN. Thank you, Mr. Chairman, for allowing me to start. I will just try to take five minutes so we can move to someone else before we have to get to votes, as well.

First question, for Mr. McCown, we have done a little bit of work in looking at your data base and looking at accidents reported since 2002 on hazardous liquid pipeline, natural gas transmission and natural gas distribution. I don't know if you can see it here, but the colors are big and bright, so you can see the pattern, in 2002 and 2005. That is hazardous liquid pipelines, some variation in accidents.

Natural gas transmission accidents, 2002 to 2005, this is using your threshold of, I think, $50,000 in damage or over, increasing. And on the distribution, somewhat the same pattern in terms of, from information out of your data base. I would just like you to re-

spond to why we see those increases and do you agree with those numbers and what do you propose to do about that?

Mr. MCCOWN. We have noted the numbers that you have just shown, and I think several things are important to say. First of all, we are concerned that incidents in certain categories appear to be trending upward. We need to normalize that data over a several year period to determine whether or not we have a real problem.

I think this dovetails into my earlier opening statement that excavation damage, most notably by third parties, is a significant, real concern. I mention that even over the integrity management program, because the integrity management program I think to some extent has taken care of lot of the internal corrosion problems. But now we need to address the leading cause of damage, which is now excavation damage. I think if you look at the gas, more of the gas data is in localities where you have more digging going on. That is why it is important for us to continue to support Common Ground Alliance and also support the development of local organizations that involve planners, excavators and utility companies. We are watching this very carefully.

I will say, though, the other good news is that the rate of incidents with serious consequences does continue to trend downward. We are very pleased with that. But we agree with you that excavation damage, as you are saying, is something we have to aggressively address.

Mr. LARSEN. Even tough you haven't normalized the data yet, that's four years of data, what you're seeing at least within those, within the bar graph, is it a majority or plurality of those are a third party damage?

Mr. MCCOWN. On that, Ms. Gerard, the Associate Administrator for Pipeline Safety, and PHMSA's first Acting Chief Safety Officer, is with us.

Ms. LARSEN. Ms. Gerard, it is good to see you.

Mr. MCCOWN. When it comes to gas distribution, that is indeed the leading cause of those.

Mr. LARSEN. I think you mentioned PHMSA has now completed 13 percent of gas transmission integrity management inspections. Do you have enough resources, including inspectors, to complete these and other required inspections on a timely basis?

Mr. MCCOWN. We believe we do. We have received about a 245 percent increase in resources over the past five years. I think we are in pretty good shape today.

Mr. LARSEN. One of the issues that we are going to hear later on from the community folks has to do with access, public access, to information. Do you intend to reinstate access to the National Pipeline Mapping System? And if not, what is PHMSA doing to help communities determine where pipelines are located?

Mr. MCCOWN. We are very aware of the desire to have the access to pipeline locations reinstated. We also acknowledge that to some extent this information is available in other sources. The data base was pulled after 9/11 and designated by the Department as sensitive security information. It is, however, still available to State and local governments, and we have made operator information available on a zip code by zip code basis.

All that to say, we are studying whether or not there are opportunities to release further information. Right now, we are in the inter-government consultation phase with the Department of Homeland Security to determine whether or not we can release more data and put it back up. But we are aware that many people would like to see that information returned.

Mr. LARSEN. I certainly look forward to hearing from the community folks who are here on that very issue as well.

I am going to hold tight to five minutes right now, and thank you, Mr. Chairman, for a chance to ask some questions.

Mr. PETRI. Mr. Hayes.

Mr. HAYES. Thank you, Mr. Chairman. And thank all of you for being here.

I would like to ask a couple of questions, particularly of Mr. McCown and Ms. Siggerud, on the seven year interval for pipeline inspection. In looking at the GAO testimony, is the seven years somewhat of an arbitrary number at this point, or is that scientifically based? Do you think that that number could be increased safely? If so or if not, the overlapping years, how do we handle that?

Ms. SIGGERUD. The regulation and the Act set out two different standards. The seven year reassessment standard is required to review for corrosion in these pipelines once the baseline assessments have been done. The regulations also adopted an industry consensus standard, which laid out different intervals that are based on a risk-based approach that look at the amount of pressure in the pipeline and the types of problems identified during the baseline reassessment, and then allow a reassessment interval based on that information that is specific to the pipe condition. Those reassessment intervals generally are from 5 to 10 years for the higher stress pipelines and longer, a 15 to 20 year interval, for lower stress pipelines.

We have done a couple of things to look at this issue. We have looked at the standard setting approach that was used to develop the consensus standard. It was approved by the American National Standards Institute and therefore we believe the process to put it in place was an appropriate one. Therefore, those intervals are appropriate to consider.

We have also talked to about 25 operators at this point. We are finding that most operators are actually, would have assessed their pipelines over a longer period than seven years in the absence of the seven year interval.

Mr. HAYES. So am I hearing you say that you are open to evaluating that period of time, and if so, would pipeline safety, PHMSA and the industry be able to work together to develop a protocol to determine what a an appropriate inspection interval would be? I am a recovering utility contractor, I must confess. This is not foreign to me at all.

Ms. SIGGERUD. There is already a consensus standard that exists and that is adopted into the regulation. So in terms of PHMSA working with the industry and others, I think we can say that is already in place and is being used in terms of determining reassessment intervals. We will be reporting in more detail on this in

the fall, but I think at the moment we are feeling supportive of and generally open to a more risk-based standard.

Mr. HAYES. Mr. McCown, do you care to comment?

Mr. MCCOWN. Yes, sir. First, what we have tried to do really hard at PHMSA is base all of our decisions on risk analyses and data. We are reevaluating and frankly, one size may not fit all. When you look at the risk factors, depending on the pipelines, some of those intervals may be decreased, some of them may be increased. We have also seen a lot of technology advances over the last four years, and that is something that we are looking at right now.

Mr. HAYES. Any other comments? Make sure I am hearing you correctly, we are reevaluating, the decisions will be based on the circumstances? And by the way, if you see somebody with their hand up, that's probably somebody in politics. But if you see somebody doing this, that is probably a utility contractor looking for his track hoe.

So is it safe to say that you are reevaluating based on conditions and risks and you are more than willing to, using science and good, sound common sense, with safety first, evaluate based on the combination of what you find?

Mr. MCCOWN. Absolutely, yes.

Mr. HAYES. Thank you very much. Thank you, Mr. Chairman, I yield back.

Mr. PETRI. Thank you.

Mr. Pascrell?

Mr. PASCRELL. Mr. Chairman, I am extremely disappointed that despite the direction from this Committee and the White House, it is still unclear exactly who is in charge overseeing industry's pipeline security plans, over two years. So Mr. Zinser, a broader memorandum of understanding between the DOT and Homeland Security was a long overdue first step, I think we would agree to that.

But despite the requests of this Committee for a specific pipeline security MOU, the roles and responsibilities of the OPS and the TSA for pipeline security remain undefined. Why?

Mr. ZINSER. Sir, I do not think I have the definitive answer as to why. I would note that even before 9/11, there were security protocols in place that the Office of Pipeline Safety had responsibility for. They are continuing to carry those out.

I think our concern is that TSA has come onto the scene. They do have statutory authority in this area, and they have not clarified what their role is versus what OPS' or PHMSA's role is. I would have to speculate, sir, but I do not think that the issue rests with the Office of Pipeline Safety or PHMSA.

Mr. PASCRELL. Do we have TSA coming in here, Mr. Chairman?

Mr. PETRI. We haven't.

Mr. PASCRELL. I think we should. Because I think after examination of the facts that there is some kind of ineptness here.

Mr. PETRI. We could have Ms. Gerard respond to your question, as well.

Mr. PASCRELL. Sure.

Ms. GERARD. After 9/11, we worked with State agencies, the industry and other Government agencies to create consensus guidelines tied to threat levels for exactly what critical pipeline facilities

needed to be prepared to do, and to ramp up in time of threat. Those guidelines are in place today. They have not been changed. We have, prior to the standing up of TSA and DHS, gone out and inspected operators against those guidelines. With the standing up of DHS, we have cooperated with them at their request, when necessary, to accompany them on those types of audits.

In the most recent years, DHS has taken full responsibility for that. They ask for our help in reviewing plans and guidelines. We work with them every day to do that. There just is no MOU that lays out the relationship. They definitely have the lead role. We definitely have a support role, and we are there whenever they ask for our help.

Mr. PASCRELL. Don't you think there should be memorandum of understanding on such a critical issue? We've come a long way in four years. The industry has been very cooperative. Go back to where we were four or five years ago, we were down each other's throat. We have come a long way. We have fumbled. Now, why don't we have a memorandum of understanding? This goes to the heart of security.

Ms. GERARD. I think we will develop that memorandum.

Mr. PASCRELL. When?

Mr. GERARD. Pipeline safety has not been the top priority with TSA. We are working more actively on the hazardous materials side and we are using the more complex hazardous materials interaction as the guideline for the strategy we will take on pipelines.

Mr. PASCRELL. Are you suggesting that TSA, when you say this is not the priority of TSA, I know you have a lot of things to deal with, there is no question about that. But we made this. This Committee made this a priority. It would seem to me that there has not been a proper response and we are not simply talking about rearranging chairs in a room, we are talking about security. There is a tremendous amount of pipelines throughout the United States of America. Why isn't this a priority?

Ms. GERARD. I don't mean to say it is not a priority, top, the top priority. So we are working on these issues, but there are some others that are receiving a little bit more attention right now.

Mr. PASCRELL. Like what?

Ms. GERARD. Hazardous materials, aviation. So——

Mr. PASCRELL. I am on the Homeland Security Committee, and I have been from the very beginning. I know you are being careful with your words.

But I think we deserve an answer on the question of, why don't we have a memorandum of understanding. You can pass all the notes around you need. It is a simple question. I didn't stay up all night to ask the question.

Ms. GERARD. We agree with you, sir, there should be one. And we will get one done as soon as we can.

Mr. PASCRELL. It's been over two years. Am I being unreasonable?

Ms. GERARD. No, sir.

Mr. PASCRELL. Oh.

Mr. McCown, the 2004 law created the Pipeline Hazardous Materials Safety Administration. The Committee included language, at the request of many of us, strongly urging that the DOT and the

DHS execute a memorandum of understanding. That memorandum of understanding would define the roles, the responsibilities, resources, et cetera, of each of the agencies. We don't have that memorandum of understanding. Why don't you elaborate on why we don't?

Mr. MCCOWN. Well, like I say, there is an MOU umbrella between the Department of Transportation and the Department of Homeland Security. The particulars as to why we don't have a memorandum or why we do, I frankly am probably not educated enough to comment on.

All I can tell you, sir, is that I spent almost every single day on the phone with the Deputy Administrator of TSA, my counterpart, and also with DHS' Infrastructure Protection Office. During the hurricanes, we worked very closely with both and I think it worked very well. There is always room for improvement. But we have made great strides from department to department and agency to agency in the past nine months.

Mr. PASCRELL. I am pleased that the Administration, the PHMSA, in partnership with the industry stakeholders, is developing a plan to strengthen safety of natural gas distribution pipeline systems, using integrity management principles. I would like to know from you, how would you characterize the negotiations that are going on right now? I understand we need to run, Mr. Chairman. We will come back and have a couple of round?

Mr. PETRI. Yes, I am just curious though, in fairness, Mr. Osborne has been very patient.

Mr. PASCRELL. I will withdraw.

Mr. PETRI. Did you have a question you wanted to ask at this time?

Mr. OSBORNE. Thank you, Mr. Chairman. I just had one brief question, and that would go to Mr. McCown. Specifically, what would you recommend be done on excavation damage?

Mr. MCCOWN. Well, sir, we are working first to recommend what we are doing with the Common Ground Alliance, which is a nonprofit prevention organization, to promote and develop best practices to prevent damage to underground facilities. With the Common Ground Alliance, we are now ready to implement our latest tool, which is the one-call, the 8–1–1 number. I think the most productive work we do is in a partnership role with the CGA and to continue to enhance these cooperative developments at the local level as well.

The down side, I guess, of a booming economy in recent years is that construction of new underground infrastructure and facilities brings risks of hitting or damaging pipelines that are already underground. We believe that outside force damage is preventable. Whether it is through working with municipalities, zoning boards and commissions, that we can continue to significantly reduce excavation damage.

Mr. OSBORNE. Thank you.

Mr. Chairman, in the interest of time I will yield back. I know we have to get over for votes.

Mr. PETRI. Thank you. There will be opportunities.

We will recess until 12:00 noon or as close thereafter as we finish the series of votes on the House floor. I think in fairness, there are

some members who may be coming back to ask questions of this panel at that time. Then we will proceed with the rest of the hearing.

The Subcommittee will recess until 12:00.

[Recess.]

Mr. PETRI. The Subcommittee will resume. The panel is here, I see.

I have a question or two myself I thought I would ask. For particularly Mr. McCown, if you could shed any light on anything that the Department of Transportation needs from the Council for Environmental Quality to make the pipeline repair permit streamlining program effective or more effective, we would appreciate your putting that into the record.

Mr. MCCOWN. Mr. Chairman, we are working closely with CEQ. I would say what PHMSA and the Department really needs is the continual commitment that the other Federal agencies have shown to work together with us and to help us in prioritizing the work. We are in a situation where, through reimbursable agreements, we actually pay for several of the other agencies, including U.S. Fish and Wildlife, for example, to do a lot of that work for us. It is just important that the other agencies, in balancing their own workloads, continue to support our needs during this process.

Mr. PETRI. Thank you.

And then a question for Ms. Gerard, would you be willing to spend a few minutes discussing the adequacy of your regulations for valves and leak detection and discuss any action you are taking in that regard?

Ms. GERARD. Within our integrity management requirements, we have within the body of that regulation specified what factors an operator must consider in the placement of valves. And in the past few years of inspection of that, there has been at least nine instances where the Department has taken an action to require a company to improve the process where they would use valves.

We have found at least 46 operators that we required them to take additional measures to improve the quality of their leak detection programs.

Mr. PETRI. Thank you. Are there other questions?

Mr. DeFazio, welcome.

Mr. DEFAZIO. Thank you, Mr. Chairman. I was in Homeland Security, where we are doing a markup where the chairman was trying to re-privatize aviation security. It worked so well before. So we were engaged in a little bit of discussion there.

I understand a question I have may have been addressed by the panel. But at the risk of being repetitive or redundant, since I did just come from Homeland Security, my understanding is that we are supposed to have sort of a memorandum of understanding regarding the coordination and/or steps required for pipeline security between the various agencies involved, DHS, DOT, pipeline safety folks. I have not yet seen that document, and I was wondering if anybody here could address that, when it might be forthcoming or whether they just don't think it's necessary, we don't need to take any steps or secure a plan or assess the situation.

No volunteers? So should I pick on someone? Let's see, well, we have DOT here, Mr. Zinser. Perhaps you could address that from your Department's perspective.

Mr. ZINSER. Yes, sir, we actually raise that issue in our testimony. We think that it is very important that this annex be executed between DHS or TSA and PHMSA now. My response earlier was that I do not really have the definitive answer to why it has not been done. But I do not think that it is for lack of PHMSA and DOT trying to get it done. I think it is probably more on the other side.

Mr. DEFAZIO. So I should have asked the question when I was over in Homeland Security?

Mr. ZINSER. Yes, sir.

Mr. DEFAZIO. I see. All right, I think you have pointed the appropriate finger. Thank you.

[Laughter.]

Mr. DEFAZIO. That is helpful. I will pursue it with the other agency involved here. That would be all I have for questions at the moment, Mr. Chairman.

Mr. PETRI. Are there other questions? Mr. Larsen.

Mr. LARSEN. Thank you, Mr. Chairman. I thank Mr. DeFazio for allowing me to continue in this seat, I appreciate that. I was trying to hold down the fort for you while you were doing work over on the other committee.

Ms. Siggerud, you stated earlier that a risk-based approach would be preferable, I think you said preferable, to a seven year reassessment interval. This proposal, the information we have here is preliminary. The GAO just completed the design of the study in February, if I am not mistaken, February 22nd. The final report is not due until November 16th. You've been saying in the fall, let's put a date on it, November 15th, that is 2006.

Operators have not yet gone through one reassessment interval. Do you think we should be waiting before we change things? Should we go through one reassessment interval before we take a look at whether or not to go to risk assessment model versus a firm time line? It may be even far too early to tell us what the final report might say, I don't know. But we are trying to move this bill this year.

Ms. SIGGERUD. Right.

Mr. LARSEN. And we have to try to answer these questions.

Ms. SIGGERUD. Yes, you are right. We will be issuing our report that provides considerable detail on this issue in November of this year. We will, of course be available to talk with Subcommittee staff about our findings at any time between now and then, if that is helpful, during reauthorization deliberations. At this point we have talked to about half of the operators that we plan to talk with over the course of doing our work. They cover about half of the high consequence mileage that has been assessed to date. So we have talked to operators that have had a pretty significant experience with the initial baseline assessments.

The data that we can bring to bear at this point on the interval question is whether the baseline assessments that have happened so far are indicating a greater or a lesser reassessment interval in terms of, more than seven or less than seven years, what this con-

sensus standard would recommend. What we are generally finding so far, and it is based on about half the work we plan to do, is that the standard has recommended an interval that is greater than seven years in most cases with the operators that we have spoken with.

So that is why I said in my earlier statement that we are certainly open to the concept of moving in the direction of a risk-based interval as we proceed with our work.

Mr. LARSEN. I am not familiar with what is appropriate or not appropriate as you continue through your study. But it would seem since we are trying to again get this reauthorization done, we want to obviously do it right. But if it is appropriate for you all to check back with the staff at certain times, whether it is every month, every six weeks or whatever it is, just so we can kind of get a check on the progress to help inform us as we try to get this bill reauthorized.

Ms. SIGGERUD. I will commit to doing that. Our overall report on integrity management programs in general is due in September. We will be talking with the Subcommittee staff on our results as they progress there as well.

Mr. LARSEN. OK. Mr. McCown, is PHMSA considering regulating low-stress pipelines? Does that require any authority?

Mr. MCCOWN. Yes, sir, actually we are considering that. Back in just last year, in 2005, we actually began a rulemaking to consider what regulatory changes or what additional oversight may be needed for low-stress liquid pipelines that could potentially affect environmentally sensitive areas.

Mr. LARSEN. Do you think you are doing this under current authority? You don't believe you need any additional authority to do that?

Mr. MCCOWN. That is correct. I think we have the authority and we are in rulemaking right now.

Mr. LARSEN. I think, Mr. Chairman, that is enough out of me.

Mr. PETRI. Mr. Pascrell, any additional questions of this panel?

Mr. PASCRELL. Yes, I do. I had one more question. Ms. Siggerud, as part of the IMPs, the pipeline operators are required to complete baseline assessments of all pipeline segments located in what we call high consequence areas, high population areas, within 10 years, I believe, correct?

Reassessment of these pipeline segments is required every seven years. We have talked about that earlier. I understand that the GAO is currently developing a report on the necessity of a seven year reassessment period. I just wonder, I know you touched upon it, tell us what the preliminary findings are.

Ms. SIGGERUD. Yes. We are doing a number of things to address that question. As I mentioned to Mr. Larsen, we will be reporting out on the seven year interval issue in particular in November of this year and working with Subcommittee staff in the meantime.

We are doing a couple of things to look at that issue. First of all, we are interviewing large and small operators that have pipelines in high consequence areas and asking them about what they are finding so far in their baseline reassessments as well as what their plans are to conduct reassessments, how they will do them and what the timing will be.

We have also looked at the standard that was adopted into the regulations in terms of the recommendations that it makes about reassessment intervals. At this time we have concluded that that standard was developed appropriately in agreement with American National Standards Institute procedures, which governs such standard setting processes.

Mr. PASCRELL. I want to ask a question if I may, Mr. Chairman, to the panel. Do you think that TSA should have a role in the process of inspections? Who would like to address that? Mr. Zinser?

Mr. ZINSER. Yes, sir. This is really an issue that the Department has been dealing with since they established TSA.

Mr. PASCRELL. Right.

Mr. ZINSER. I guess our view is that for several different reasons, it is hard to justify why we should afford a whole separate inspection staff at TSA when an inspection staff exists at the Pipeline Office that is qualified and is out in the field already and has experience inspecting for compliance with security regulations.

So I guess my short answer is that our view would be that TSA does have a role to play in promulgating regulations and setting policy and providing guidance. I think the bill that set up TSA provides for a collaboration, since the bill established an oversight board to deal with interagency issues. That would be the proper role for TSA, and let the Pipeline Office take care of the inspections.

Mr. PASCRELL. And do you think that would be adequate? And do you think that the industry agrees with you?

Mr. ZINSER. My sense is that the industry would agree with us. Whether it is adequate or not, I think that we would want to take a look at whether we can set up for security the same type of risk-based approach for inspections as we are setting up for safety.

Mr. PASCRELL. It would seem to me that what has happened over the past five or six years, and we have come to agreements on all sides of the issue, and it would get it together, it wasn't imposed. From what I see, it has been working fairly well. I don't know if I want to make this any more bureaucratic than it already is. So I would tend to probably agree with your answer, unless there are other factors that I don't know about.

Mr. ZINSER. No, sir. I think that you are right.

Mr. PASCRELL. I can be right once in a while. It is possible.

[Laughter.]

Mr. PASCRELL. Mr. McCown, did you have a response to that?

Mr. MCCOWN. No, sir, I was actually hoping you were going to skip over me on this.

[Laughter.]

Mr. PASCRELL. Not a chance.

Mr. MCCOWN. I would just like to add that between 90 Federal inspectors and the 400 or so State inspectors we have, we have a force of over 500 really on the ground. I would like to say that we did, the Department did develop security protocols after 9/11 but before TSA was stood up. Those security protocols are still being used today. I certainly think that we need to work cooperatively with TSA. I certainly think there is a realization by all of us that you can't be safe if you are not secure, and that these two concepts are interrelated to some extent.

Mr. PASCRELL. Thanks. Thank you, Mr. Chairman.

Mr. PETRI. Thank you.

Are there other questions? Mr. Boozman? If not, we thank the panel very much. Sorry for the interrupt, but that is the nature of things here on the Hill.

We will proceed to the next panel. It consists of Mr. Michael Mears, who is Vice President of Transportation, Magellan Midstream Partners, who is testifying on behalf of the American Association of Oil Pipelines and the American Petroleum Institute; Mr. Jeryl Mohn, Senior Vice President, Operations and Engineering, Panhandle Energy, appearing on behalf of the Interstate Natural Gas Association of America; Mr. E. Frank Bender, Vice President, Gas Distribution and New Business Division, Baltimore Gas and Electric Company, who is speaking on behalf of the American Gas Association and the American Public Gas Association; and the fourth is Mr. Donald L. Mason, Public Utilities Commission of Ohio, who is the Chairman of the NARUC Committee on Gas.

As you know, we thank you for your prepared statements, and we invite you to summarize them in approximately five minutes, beginning with Mr. Mears.

TESTIMONY OF MICHAEL N. MEARS, VICE PRESIDENT, TRANSPORTATION, MAGELLAN MIDSTREAM PARTNERS, L.P.; JERYL L. MOHN, SENIOR VICE PRESIDENT, OPERATIONS AND ENGINEERING, PANHANDLE ENERGY; E. FRANK BENDER, VICE PRESIDENT, GAS DISTRIBUTION AND NEW BUSINESS DIVISION, BALTIMORE GAS AND ELECTRIC COMPANY; DONALD L. MASON, COMMISSIONER, PUBLIC UTILITIES COMMISSION OF OHIO

Mr. MEARS. Thank you, Mr. Chairman and members of the Subcommittee.

I am Vice President Transportation for Magellan Midstream Partners. Magellan operates the Nation's longest pipeline in the United States for refined products. Our 8,500 petroleum products pipeline system crosses 13 States and extends from the Gulf Coast throughout the middle portion of the United States.

I chair the executive committee of the Association of Oil Pipelines, and appreciate the opportunity to appear today on behalf of the AOPL and the American Petroleum Institute. Together, AOPL and API represent the vast majority of U.S. liquid pipeline transportation companies.

Mr. Chairman, I will summarize my written testimony, which has been submitted for the record.

It has been over three years since the enactment of the Pipeline Safety Improvement Act of 2002. On behalf of the members of AOPL and API, I wish to thank the members of the Subcommittee for their leadership in passing that comprehensive and very important legislation.

As the Subcommittee reviews the current state of pipeline safety and the progress that has been made since the 2002 bill was enacted, there are five points I would like to emphasize. First, the 2002 Act is widely recognized as a success. Implementation of this Act, coupled with actions by DOT and the industry, has produced significant improvements in pipeline safety. This improvement is

demonstrated by the record. The record is reflected on a chart that I will address in a few minutes.

Number two, respect for the pipeline safety program has grown as DOT has implemented the law. Three, the oil pipeline industry is making the investments that are required to produce continued improved safety performance and has embraced the new law. Fourth, there is no urgent need for significant changes in the oil pipeline safety statutes at this time. What is needed is continued vigorous implementation of the 2002 Act, and that is happening.

And last, it is important that Congress act before adjournment this year to affirm the direction of the 2002 Act by reauthorization the pipeline safety program for at least five more years. About 40 percent of the total U.S. energy supply comes from petroleum. The transportation sector depends on petroleum for 96 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 transport a gallon of petroleum by pipeline is very low, typically two to three cents a gallon. Oil pipelines are common carriers whose rates are controlled by the Federal Energy Regulatory Commission.

Oil pipeline income is not related to the price of the products that are transported. In fact, high oil prices have a negative impact on oil pipelines by raising power costs and reducing demand for petroleum.

Oil pipeline operators have bene subject to the PHMSA integrity management regulations since March of 2001, before enactment of the 2002 Act. Initially, PHMSA estimated approximately 22 percent of the pipeline segments in the national oil pipeline network would be assessed and provided enhanced protection. However, as shown in PHMSA's inspections of operator plans, it is estimated that integrity testing will cover approximately 82 percent of the Nation's oil pipeline infrastructure.

Our members who are large operators, which are greater than 500 miles of pipeline, completed the required 50 percent of their baseline testing of the highest risk segments prior to the September 30th, 2004 deadline set by the regulations. PHMSA has audited each of these operators under these regulations at least two times, an initial quick-hit audit and one subsequent full audit.

Although operating under a different deadline, the same actions have been taken by the small operators as well. Operators are finding and repairing conditions that need the repair, and less serious conditions are found in the course of investigating defects. Operators are fixing what they find, often going beyond the requirement of the law.

It appears the first cycle of the program will cost the oil pipeline industry approximately $1 billion and the industry is committed to full implementation of the program. As a result of this program, the oil pipeline spill record has improved dramatically in the last five years, as these slides show. The data for these exhibits come from a voluntary industry program that since 1999 has collected data on oil pipeline performance.

These figures represent line pipe releases, which are those that occur outside the company's facilities. For each cause category, the

trend is down. The number of total releases has dropped 51 percent. Releases due to corrosion have dropped 67 percent. Releases due to operator error have dropped by 63 percent. Finally, releases from third-party damage have dropped 37 percent.

Even though this represents a notable decrease, releases caused by excavation damage tend to be more traumatic, larger and more likely to threaten the public and the environment in comparison of releases from other causes. We believe this is an area where new legislation may be appropriate to strengthen underground damage prevention.

The safety improvement has been dramatic, even though we have only completed 50 percent of the required baseline inspections through 2004. We would expect this trend to continue as we complete the first full cycle and begin the reassessment intervals. This provides a clear indication that the program is working.

In closing, I will make three points, or re-emphasize three points. We do believe what is in place is working. We do believe that it does not need any significant changes. And we would like Congress to reaffirm the direction and reauthorize the program for five years.

That concludes my remarks. Thank you.

Mr. PETRI. Thank you. Right on the button, just about.

Mr. Mohn.

Mr. MOHN. Thank you, Mr. Chairman. I am testifying, as you have observed, on behalf of the Interstate Natural Gas Association of America, or INGAA. Through this trade organization, we represent virtually all of the gas pipelines in North America. My particular company operates five major interstate gas companies across the United States.

My testimony today will highlight some of the successes in pipeline safety and suggest further improvements for your consideration. When Congress passed the Pipeline Safety Improvement Act in 2002, you set in motion one of the most significant regulatory improvement processes since the original Pipeline Safety Act in 1968, namely integrity management programs. In short, as you have heard repeatedly today, the Act mandated assessment and remediation of defects for pipelines in high consequence areas.

We have ten years to complete a baseline assessment that will be complete by 2012 and we have a seven year assessment interval that begins in 2010. We have made considerable process in implementing integrity management. Through 2005, as you have heard, we have completed about 30 percent of our HCAs. We are on track to complete all of the required HCAs within ten years, including those highest priority HCAs, the highest 50 percent, within five years. We are taking defects out of our pipeline systems that will prevent future incidents.

Even though HCAs represent only about 7 percent of the mileage of gas transmission pipelines, we will actually inspect between 55 and 60 percent of our systems, due primarily to the physical layout of our facilities to accommodate smart pigs.

Lastly, PHMSA has started their audits in gas transmission pipelines last year, continuing this year, and we believe that their audits will validate the results I have just mentioned.

Now let me focus briefly on the matter before you, the reauthorization of the Act. As the gentleman to my right observed, we believe the law is working and only minor changes are needed. But yet, some significant items are on the table for your consideration. INGAA does believe that all of our interests are best served by a reauthorization 2006 for a five year period.

Our INGAA companies have three primary issues that are described further in my written testimony. First, you have heard a lot about already the reassessment interval. That was mandated in the 2002 Act, adopted as a compromise as the Committee and Congress eventually moved forward with the passage of the integrity management requirement.

This means that in years eight, nine and ten of the baseline period, we will be reassessing pipeline that we had already assessed in the baseline period. Very simply stated, instead of assessing 10 percent on average of our pipeline in those three years, we will be assessing 20 percent. And rightfully Congress asked GAO, and you have heard the report from GAO this morning, regarding the effectiveness of that interval.

INGAA believes this: number one, that the assessment interval should be based on science, technology and experience. Number two, that the seven year mandatory period is not the best allocation of resources. Number three, in fact, an ASME study that was conducted looking at the technical and scientific aspects of this a few years ago concluded that 10 years was a good target. However, in many cases, as you have heard earlier today, the pipelines could go 12 to 15 years. Likewise, we may have some pipelines that we need to inspect more frequently than seven years.

Fourthly, the requirements to assess that 20 percent in three consecutive years and every ten year period, will strain the resources, although those people selling pigging services and assessment services will tell you otherwise, we expect there will be a strain on those resources and our ability to reduce the operation of pipelines or take pipelines out of service in order to service those needs.

Secondly, let me move to our other point, damage prevention. We have been on a continuous path to prevent this leading cause of incidents, namely third-party damage. I see my time is about up. If I can just finish my point on damage prevention, Mr. Chairman.

One-call organizations have matured extensively over the years. The Common Ground Alliance was formed in 2000 and is working well. Now is it time to go to the next level, by challenging and endorsing States that meet the damage prevention expectations that produce zero incidents.

We urge you to consider taking a major step to crush these types of incidents. One option is to empower PHMSA to incent States to create programs modeled after such successful State programs as Virginia and Minnesota in significantly reducing the number of third-party incidents.

Mr. Chairman, I appreciate the time and look forward to answering your questions.

Mr. PETRI. Thank you.

Mr. Bender.

Mr. BENDER. Thank you, Chairman Petri, Ranking Member DeFazio, other distinguished members of the Subcommittee.

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 at Baltimore Gas and Electric Company, a subsidiary of Constellation Energy. BGE delivers natural gas to 634,000 customers in Maryland. Our company is proud of its heritage as the first gas utility in the United States, tracing its history back to 1816. We are also proud of the focus that we place on our customer service and public safety.

I am testifying today on behalf of the American Gas Association and the American Public Gas Association. Together we represent over 850 local natural gas utilities, serving almost 60 million customers nationwide. The 2002 reauthorization of the Pipeline Safety Act resulted in several significant mandates and initiatives aimed at enhancing safety. The Pipeline and Hazardous Materials Safety Administration and the industry have made significant progress on each of those initiatives.

In our opinion, only a few minor adjustments should be considered at this point, indeed our companies have identified only one major area we believe requires considerable improvement, and that is excavation damage prevention. Congressional attention to more effective State excavation damage programs can and will result in real measurable decrease in the number of incidents occurring on natural gas distribution pipelines each year. Excavation damage is the single cause of a majority of natural gas distribution pipeline incidents.

We believe Congress should provide an incentive for States to adopt stronger damage prevention programs. Gas distribution utilities bring natural gas service to customers' front doors. Understandably, most customers think that all pipelines are alike. There are, however, significant differences between liquid transmission systems, natural gas transmission systems and gas distribution systems that are operated by local gas utilities.

Each type of pipeline system faces different challenges, operating conditions and consequences from incidents. Distribution pipelines are generally small in diameter, operate at pressures ranging upward from under one pound per square inch and are constructed of several kinds of materials, including a large amount of non-corroding plastic pipe. Federal regulations recognize the differences between distribution pipes and other types of pipeline and different sets of rules have been created for each. At the same time, State regulators who have direct oversight over distribution operators are frequently inspecting and reviewing our operations.

Our commitment to safety extends beyond Government oversight. Indeed, safety is our top priority, a source of pride and a matter of corporate policy for every company. We continually refine our safety practices. Natural gas utilities spend an estimated $6.4 billion each year in safety related activities. Our industry's commitment to safety is borne out each year through the Federal Bureau of Transportation Statistics' annual figures. Delivery of energy by pipeline is consistently the safest mode of energy transportation.

What are the facts about gas safety incidents? There are two kinds of incidents involving natural gas distribution systems. One, those caused by factors the pipeline operator can to some extent control, such as improper welds, material defects, incorrect operation and corrosion or excavation damage by a utility contractor; and two, those caused by factors the pipeline has little or limited ability to control, such as excavation damage by a third party, earth movement, structure fires, floods, vandalism and lightning.

The record shows that between 2001 and 2005, 82 percent of all reported incidents were the result of excavation damage by a third party or other factors a utility company had little or no control over. In many cases, the typical little or no control incident involves a local excavator who has decided to expedite an excavation project at the calculated risk of hitting a natural gas pipeline.

More needs to be done, and this is one area where Congress can make the most dramatic step toward increased safety. You have heard several times today that excavation damage represents the single greatest threat to distribution system safety, reliability and integrity. Although the nationwide education program on the three-digit one-call dialing to prevent excavation damage is a step in the right direction, more is needed.

Data from the last five years demonstrates that States that have stringent enforcement programs experience a substantially lower rate of excavation damage to pipeline facilities than States that do not have stringent enforcement programs or powers. Such programs exist in Virginia and Minnesota, and show that nine key elements must be present and functional for the damage prevention program to be effective.

We recommend that Congress modify existing law to insert a new section outlining these nine elements providing for additional funding. Such funding should be allocated directly to each State agency having oversight over pipeline safety.

You have heard about the progress being made on distribution integrity. Last year, PHMSA embarked on an effort to develop a regulation governing distribution integrity management programs. We have been committed to working with all members of the joint Federal, State and industry and public stakeholder group that has been working toward the completion of distribution integrity management rule by PHMSA. Thus, industry and Government stakeholders are working collaboratively on their own initiative to improve the safety of the Nation's distribution lines. We believe this process is moving forward successfully and should continue without further legislative imperatives.

The team to which I just referred also found that federally mandated installation of excess flow valves and service lines to customers is not appropriate. It did, however, suggest that operators be required to perform a risk assessment and outline risk criteria for the installation of valves. It is our hope that in evaluating the appropriateness of the seven year reinspection requirement with respect to transmission integrity, that in evaluating that requirement the U.S. Government Accountability Office will uncover all the pertinent facts and Congress will consider options for allowing a change to the interval that would be consistent with GAO findings.

In summary, we believe that Congressional passage of pipeline safety reauthorization this year will result in timely and significant distribution safety improvements. Thank you for the opportunity to appear today.

Mr. PETRI. Thank you.

The next and last panelist, Mr. Mason.

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

I appreciate the opportunity to be here. I am the Chairman of the Natural Gas Committee of the National Association of Regulatory Utility Commissioners. We have compiled my presentation or remarks in conjunction with NAPSR, which is the pipeline safety administrator at the State level association. Plus, my remarks obviously do reflect in this case also the Public Utilities Commission of Ohio.

I would like to start off, and I will summarize, since I have filed our comments, that one of the most important jobs as a regulator is to make sure that the terms and conditions of service and the charges are reasonable and non-discriminatory as we pass on the cost of gas as well as the cost of delivering gas to consumers. So one of the things we always try to bear in mind is maximizing the value the ratepayers are getting for what they are spending. So that is why we take very much a risk-based approach to our comments today.

One of the things we are looking at is grant funding should increase to meet resource requirements of the State pipeline programs. Again, consumers ultimately pay the PHMSA pipeline safety user fees that are passed on by natural gas and hazardous liquid pipeline transmission companies. State pipeline safety program funding is heavily dependent upon PHMSA's proper sharing of these user fees. The State pipeline safety programs represent approximately 80 percent of the Federal-State inspector workforce. That has been commented on in an earlier panel. And of course, we oversee these nationwide.

But without adequate funding, States will not be able to conduct required inspections of existing pipeline facilities or new pipeline construction projects and encourage compliance with minimum safety standards. Last year, instead of having a 50/50 funding, the States funded well over 60 percent of that, so I would just ask each of you to bear that in mind. Because again, the States are the first line of defense at a community level to promote pipeline safety, underground utility damage prevention, public education, and awareness regarding pipelines.

State inspectors are required to have at least nine training programs, mandatory training, computer based programs prior, within their first three years of service, and then have subsequent refresher courses after that. We do to make sure the people we have in the field are properly trained. But again, that is expensive.

Number two, we think that Congress should increase the current $1 million damage prevention grant to States to approximately $2.5 million. That is based on the fact that every year the PHMSA has approximately $1 million for that program, about $2.4 million worth of requests come into that.

I would like to hit upon a topic that has been discussed earlier, and I think it has been a great achievement in the last year or so. In March of 2005, with NARUC's strong support, the FCC did designate the 8–1–1 number as the nationally abbreviated dialing code for one-call systems, in compliance with the Pipeline Safety Act of 2002. This three-digit 8–1–1 will make it easy, it will be easy to remember by excavators to help reduce damages. But I want to pass on to you also, it will be easy for citizens to remember when they are doing such things as extending their patio or putting new trees in, other areas where a lot of times we have cut-ins.

In Ohio right now we have an extensive docketed process going on to actually implement that 8–1–1. I think only Tennessee and maybe only one other State actually has it in place, perhaps Pennsylvania right now.

Fourth, though, is NARUC supports 80 percent grant funding for the pipeline safety programs that enforce excavation damage prevention. I want to go back, I saw the chart earlier that talked about how much damage to the system was from third-party cut-ins. I can't emphasize strongly enough that we can reduce third-party cut-ins through 8–1–1, as through other things, we can significantly reduce the damage to property and obviously personal injury.

The integrity management gas distribution report, the Excavation and Damage Prevention Task Force found that excavation damage by far poses the single greatest threat to distribution system integrity. It is thus the most significant opportunity for distribution pipeline safety improvements. Reducing the threat of excavation damage requires affecting the behavior of persons not subject to the jurisdiction of pipeline safety. What I am saying is, they are excavators. They might be homeowners, they might be people who are doing masonry work. So it is not the LDCs, the utilities.

I am running short on time, so fifthly I want to talk about something very important. That is the Federal mandate of excess flow valves. We are in favor of the States having guidelines we will off of for EFV installation. I have been in the field on the installation of EFVs, excess flow valves. We recognize there are pressures and times that they work very well. But we also recognize this time, there are times and pressure when they don't work well. So we would encourage the use of EFVs in those cases where the in fact do optimize and do work well, but obviously discourage them in those times when in fact they might actually create more problems.

I am ready for questions, along with the other panelists. Thank you.

Mr. PETRI. Thank you.

Chairman Young.

Chairman YOUNG. Mr. Chairman, I appreciate the testimony from the panel, although I have not heard all of it. I have read most of it. I would like to make a short statement and ask one question, then I will have to go to another meeting.

Mr. Chairman, several days ago there was a leak in an oil pipeline on the North Slope of Alaska, remember, in an oil pipeline, not the pipeline. We understand the situation, the leak was from a small hole in the pipe likely caused by corrosion. This segment of pipe was pigged in 1998. The inspection data is now under study.

It is currently estimated approximately 250,000 gallons of oil leaked in the roughly 10 hours that the leak occurred. The leak is contained to a two-acre area. No oil has crept into any waterways and virtually 100 percent of the oil, because of the climate, is expected to be recovered.

Representatives from the operator, BP, the Federal regulatory, PHMSA, as well as State officials, have been engaged in the clean-up and appear to have the situation under control.

I want to make sure everyone understands this event is not our primary focus here today. We are here to affirm the widely held view that the Pipeline Safety Improvements Act of 2002 are working and working very well. The event in my home State is not indicative of any gap or failure in the law. In fact, the matter is that sometimes leaks will occur. The real question is, how fast is the response, how well is the event understood and corrected and is this occurring fewer and fewer times as time goes by.

Our real concern for leaks is excavation damage. That is one area where things are not as good as they should be. Mr. Chairman, my question is to Mr. Mason, or anyone else who would like to answer it, excavation is the most dangerous thing. You made some suggestions about, or will you make some suggestions about how to solve this? These are municipalities, private contractors, individual homeowners or individuals actually digging into the soil without prior approval from somebody. Can you tell me how many in fact have occurred in the past year as far as excavation damage? Can anyone answer that? Mr. Bender, I see you leaning forward. Either you are a sucker or you know what you are talking about. Go ahead.

[Laughter.]

Mr. BENDER. Let's hope it's the latter.

I would say that in Baltimore Gas Electric Service territory, we have been 800 and 1,000 per year. We think we have a pretty good program. We are not one of the leading States. The model States are Virginia and Minnesota. But on any given day, you could have three, on some days none. But over the course of a year, 1,000 is a lot. Because they are uncontrolled, they are dangerous to the public. You have to close streets, you have to evacuate. So it is a great deal.

Now, what can be done about it, in my written testimony I pointed out that the distribution integrity group that was put together and facilitated by PHMSA has suggested a model similar to the model that is used in the State of Virginia and Minnesota, for Federal legislation. We believe that is what is needed. There are nine points specified in the testimony. We believe that with Federal legislation, the States, in funding for the States to implement, that that will tremendously improve the damage prevention programs currently in existence today.

Chairman YOUNG. If I am a municipality and I am guilty of an excavation disruption of one of your lines, who is responsible for liability, you or the person who did the damage?

Mr. BENDER. Ultimately, the local distribution company is always responsible for reliability.

Chairman YOUNG. Even if someone else digs the hole and tears your line up, you are still responsible?

Mr. BENDER. Absolutely, absolutely.

Chairman YOUNG. Does the municipality have any responsibility?

Mr. BENDER. If the municipality digs in or if the municipality's contract digs in, then they have responsibility for reimbursement of the costs associated with the repair. But we are the first responder to securing the site, stopping the leak and repairing it.

Chairman YOUNG. It seems to me that some of these excavation incidents could be slowed down if there was some type of penalty involved and where they were held responsible, not the carrying company.

Mr. BENDER. In the models the States of Virginia and Minnesota have, there is a process where all the stakeholders actually sit on a commission or a group, if you will, and they review every damage. They ferret out who the guilty party was, and not only do they charge damages, but they also assign penalties in some cases. So that is the model that we are suggesting.

Chairman YOUNG. Again, I think our Act of 2002 is a good act. I think it has been well documented and it has been successful. But where you have intruders that really cause you problems, I think we ought to be addressing the intruders, not necessarily the carrier. I think maybe we can look at that down the line.

Thank you, Mr. Chairman. I appreciate it.

Mr. PETRI. Thank you.

Mr. Larsen?

Mr. LARSEN. I just have a few questions. But I think maybe we ought to adopt the penalty that Alaska has for people. They hook them up with Don Young and Don beats the living heck out of them.

[Laughter.]

Mr. LARSEN. Some questions about assessment intervals. I think one of the concerns that, well, I know one of the concerns that I have heard, I will put it in terms of backsliding, there is a concern that if we went to a risk assessment versus the time line, that there is a concern that we are moving backwards from where we ought to be to ensure the integrity of transmission lines. Mr. Mohn, could you help me understand what a risk assessment model looks like?

Mr. MOHN. The industry standard referenced earlier today provides a various series of flow charts to follow through in making the decision about how one deals with a defect that they find in the pipeline. The structure of that standards and those flow charts leads you to the decision without applying or being able to apply very much the judgment to the means by which you remediate an anomaly. Those flow charts and the time frames in those are based upon science. For example, for a corrosion anomaly, over what period of time will the material continue to corrode and the wall thickness of the pipe continue to be reduced. They consider what, as you heard earlier, the operating stress level is of the pipeline.

So to suggest that it should be based on standards and technology is not throwing it to the wind, if you will. THe standards are still very structured and very focused.

Mr. LARSEN. Is this the ASME?

Mr. MOHN. Yes, it is ASME B318S.

Mr. LARSEN. As I recall, a few years back, there was some concern just about adopting by reference any one standard as opposed to putting it into law itself. How often is the ASME updated and how does your industry then take that updated information and move with it?

Mr. MOHN. Of course, it is a standard not of the industry. The ASME is a standards organization and the B318S standard for example had participation from the regulatory arena from various academia as well as other industry. To the extent that standards are changed and we have procedures that either because of regulatory requirements that adopt the standard or if we have procedures that dictate that we follow the procedures, we have a changed management process which I think is common to all of our companies to ensure that our implementation of those procedures is consistent with whatever change in the standard might have occurred.

If I might, Mr. Larsen, I didn't want to leave you with a mis-impression about the seven year standard.

Mr. LARSEN. Right.

Mr. MOHN. Our concern, more so about the hard wired seven year, is that it is hard to find science and technology that seven years was based upon. I appreciate, and I think we all do, in 2002 the significant step that Congress took to get that Act out the door required or at least resulted in that seven year standard. What we are suggesting to you now is that at least if you apply it, we want you to consider applying a standard that is based on the science and technology that is out there. Because there is a tremendous amount of experience in our industry that the GAO report is trying to tap in that regard.

Mr. LARSEN. You mentioned that you believe most companies in your industry would have some sort of common way to adopt, to get any new standards implemented. The obvious question for us, we have to write legislation, is how can we be assured that there is a common method or that each company has a way to have that information migrate into their operating procedures?

Mr. MOHN. I am making the assumption that if a standard is adopted as the means by which PHMSA will administer the law, that we would therefore be subject to the inspection and enforcement protocol that is a part of the PHMSA regime.

Mr. LARSEN. Thank you, Mr. Chairman. I will have more questions.

Mr. PETRI. Thank you. Mr. DeFazio?

Mr. DEFAZIO. Thank you, Mr. Chairman.

Mr. Chairman, I would like to get back to the problem, particularly, of the damage issue. Because I am trying to understand, I am wondering whether some of—have we created a problem with removing the mapping from the public domain? Are local jurisdictions who are permitting people to go out, I assume these are mostly permitted activities where the damage takes place, having to do with some sort of permitted construction, unless it is something else, whether it is some kind of routine maintenance, I don't know.

But if it is permitted construction, are local jurisdictions having trouble locating? Is that part of where we are going here? Because it says in number eight there, it says, use of technology to improve

all parts of the process. But yet with the new Federal restrictions on the availability of the mapping, is that part of the problem? I am just trying to get at why this is—Mr. Bender?

Mr. BENDER. Yes, sir. I don't think that is part of the problem. Because a big part of the problem is frankly what we call no-calls. People will dig without calling, in our case, Miss Utility or the agency that has been designated as the agency to go out and mark the line.

The entities that mark the lines have drawings provided by the utility. They have equipment. There are advances in technology and equipment being made all the time. I think that is what we are addressing there. Also the sharing of that information amongst the parties as is shared within the utility, maybe by electronic means or laptops and things of that nature. Really that is what we are referring to there.

So the problem isn't that there is not pipeline diagrams available. The problem is they are not always being, the people aren't always being called to come out and mark. People just go out and dig. That is one problem.

The other problem is sometimes even when it is marked, because in haste or lack of care, the infrastructure is still struck. So I would say that to my knowledge, in my cases, lack of diagrams and drawings has not been a significant cause of this.

Mr. DEFAZIO. In most of these cases would this be pertinent to something that would be a locally permitted activity? Or is it just more casual kind of excavation that doesn't even require permitting of some sort?

Mr. BENDER. I think it is both. I think most of the damage that we see is by permitted activity, because that is what most of the construction activity is.

Mr. DEFAZIO. And don't the local jurisdictions then have sort of a check-off, and say, so the local jurisdictions in part are failing to kind of push the, and say, did you do a locate? I mean, that is not required in the permit or prior to getting a permit or anything like that?

Mr. BENDER. Not to my knowledge, at lest not in our jurisdiction. I wouldn't call it a failure. I think the structure is in place. It is just that there is no enforcement capability to make people use it. Those who don't use it generally almost act with impunity. There is not sufficient enforcement or penalties then to punish them.

Mr. DEFAZIO. And the penalties would flow from what level for distribution systems? That would be from the State level I would assume?

Mr. BENDER. Yes, sir.

Mr. DEFAZIO. OK. So it is not really an issue of Federal, although I think someone else suggested we might somehow incent the States to adopt more rigorous enforcement procedures and other requirements.

Mr. BENDER. Yes, sir. The State would need funding. They would need the resources. In many cases, they are not the enforcing agency. The enforcing agency may be the attorney general's office. And the attorney, frankly, in fairness to them, the attorney general's office has a lot of higher priorities with respect to criminal activity and things of that nature.

So the Federal legislation, I think, is necessary to assist the State in terms of funding and direction and mandate to do what needs to be done.

Mr. DEFAZIO. OK, thank you.

Does anybody else want to comment on that?

Mr. MOHN. Mr. DeFazio, as an interstate, as a representative of interstate pipelines, this is an area where the State programs in States like Virginia, Minnesota and other States around the Country that have one-call programs are actively, are an active part of our damage prevention as well. We pay dues, we provide our maps. We participate in that one-call and in the follow-up programs to that.

So even though we are an interstate pipeline, we are subject to those, subject to and are active participants in those State programs and would love to be a part of State programs that fit the model of some of the States that you have heard mentioned here today.

Mr. DEFAZIO. What do you mean, pay dues? I am curious. So the State assesses?

Mr. MOHN. They are generally not State entities. They are enabled by some State legislation, but they are funded by the users, by those of us that, if you will, get the tickets, get the notification that there is an excavation that is going to occur near our facilities.

Mr. DEFAZIO. OK. Thank you. Thank you, Mr. Chairman.

Mr. MASON. Mr. Chairman, do you mind if I add from the State perspective?

Mr. Chairman, Ranking Member, since I am with the Public Utility Commission of Ohio, and we ran into the same situation. We pulled some maps offline. We have not seen any impact on the ability of people to know where they were building construction.

But I wanted to hit a key point. The users pay, now, that is always an interesting question, we are running into it right now in the 8–1–1. The user, the LDC pays, the phone company pays, the cable company pays when they get these tickets. It is not the user per se in terms of the ABC Excavation Company.

One of the things we are concerned with going forward is you have lawfully constructed something to the highest specs, you put it into the ground, but yet that person, that company continues to pay any time someone builds anywhere around it.

So in Ohio, we are trying to figure out, is there a way of assigning some of the cost back to the person who makes the call without discouraging them from calling. Because I think everybody at PHMSA would agree, you really want them to call. We have already identified the third-party cut-ins as the number one cause of damage. But yet we still want to make sure we share the cost with the appropriate party without discouraging them.

Mr. DEFAZIO. Potentially interesting balance. So I guess that goes to the penalty side, you have to say, OK, well, it is going to cost you a little bit here, but boy, if you do something wrong, the penalty is going to be such that, you are going to want to have made that call. Is that where you are headed?

Mr. MASON. Well, thank you for bringing that up. We mentioned in testimony before PHMSA last year that one of the things that we are looking at doing perhaps is expediting the process, almost

like the way a mechanic's lien is more expedited than just bringing your normal type of lawsuit in court to collect something. So we are looking at alternatives, so that the excavator is hit more quickly with the cost, because again, it may be more of a Pavlovian reaction there if he has to pay right away.

Mr. DEFAZIO. OK, thank you. Thank you, Mr. Chairman.

Mr. PETRI. Are there other questions? Mr. Larsen.

Mr. LARSEN. Mr. Mason, we have heard about the nearly 500 inspectors between the Federal Government and the State entities, including Washington State. From your members, are you hearing that they have enough resources to meet the demand for inspections, the mandates for inspections, the work that needs to be done to fulfill their organization's missions?

Mr. MASON. Mr. Chairman, Ranking Member, thank you for that question. I would be very remiss if I ever said the commissions were all well funded, we did not need any more.

Mr. LARSEN. I would be very shocked if I heard anything different.

[Laughter.]

Mr. MASON. And then that would make the entire credibility of what I had to say thereafter suspect, I guess.

But the bottom line is, we are funded the best our States can come up with. But the bottom line is, States are typically still funding slightly more than the portion, it was supposed to be 50/50 funding. We are still funding more than our share right now. So we do believe that as you intermingle with your colleagues who are on the budgetary committees, that perhaps you could encourage them to look at this to become equal partners in shouldering the financial burden.

But again, if more rules come down, again we are looking at this seven years. I was part of that GAO survey, and they said, would you like to see five or ten? And I was on the phone with NAPSR at the same time, and our response was, well, five only if science means it needs to be five, ten, again, only if science means it needs to be ten.

So our point is, what our funding level is is based off whatever regulations are promoted from the Federal level on down. Again, probably something more toward even 15 would be good on some things. And again, as indicated earlier, five years might be right on some other things.

Mr. LARSEN. In Washington State, we have, ours is the UTC, utility transportation commission. I will just use that term. The funding model for their work is largely, it is rates and fees and so on. Is that, even with the inspection on pipelines, is that consistent with your other members who have responsibilities for inspection of pipelines as well? Is there any State general fund money going into that for any of your members?

Mr. MASON. I would like to have the opportunity to give you the most accurate answer, so if you don't mind, NARUC will get back to the Committee on that exact question.

Mr. LARSEN. Sure. I just want to be able to understand that.

Mr. Mears, in your testimony, I am not sure of your verbal, but in your written testimony you discussed access to mapping and that it seems to be your position to try to encourage the release of

information that is consistent with sensitivity of that information. Can you tell us your reasoning behind that, what value you see to that, what obstacles you are meeting to get that achieved?

Mr. MEARS. I think that the value is just access to more public information. We do not, as an industry, we are not overly concerned with making that information more available. As has been pointed out in other testimony, most of that information can be obtained from other sources. We have a public education program where we are required to educate landowners and residents nearby the pipelines as to where those pipelines are and what is carried in those pipelines. In many cases, valve sites, tank farms are visually located, all of our pipelines have pipeline markers on them, so they are very easily identified. So we have little concern over making that information more publicly available.

Mr. LARSEN. Thank you.

Mr. PETRI. Thank you. I just have one last area. I wonder if you, Mr. Mason, or any of the others, could comment on which of the States, if there are some outstanding practices in terms of promoting State—obviously Ohio, but even internationally, because pipelines operate all over the world, in terms of either inspection, or there may be other ways of monitoring that end up promoting safety and that we should be looking at or encouraging.

Mr. MASON. Mr. Chairman, Ranking Member, that is a good question. I would have to say, it was mentioned earlier, I believe Wisconsin and Virginia have pretty good models and pretty good programs. But Texas, Tennessee, Ohio, California, there are a lot of very good programs out there. New York, I might add.

Mr. PETRI. Thank you all very much. We appreciate your being with us and your testimony.

The final panel consists of Mr. Carl Weimer, who is the Executive Director of the Pipeline Safety Trust; and Ms. Lois Epstein, Senior Engineer, Cook Inlet Keeper.

Mr. BOOZMAN. [Presiding] Mr. Weimer, you can go ahead and begin.

TESTIMONY OF CARL WEIMER, EXECUTIVE DIRECTOR, PIPELINE SAFETY TRUST; LOIS EPSTEIN, P.E., SENIOR ENGINEER, COOK INLET KEEPER, ANCHORAGE, ALASKA

Mr. WEIMER. Mr. Chairman, members of the Subcommittee, thank you for inviting me to speak today on the important subject of pipeline safety. My name is Carl Weimer, and I am the Executive Director of the Pipeline Safety Trust.

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 events have happened in other places before and since the Bellingham tragedy.

Before I speak of the need of improvements to prevent future tragedies, I would like to commend the Office of Pipeline Safety for the progress that has been made in the past five years under its current leadership. I would also like to commend the many progressive thinking pipeline companies who are now leading by example by operating 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 natural gas pipelines considerably safer yet. While progress has been made in the past five years, we must also acknowledge that there was also more than $846 million of property damage done by pipelines during that same period.

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 so they can gauge for themselves the safety of the pipelines that run through their communities and how well those pipelines are being regulated.

Since my time today is short, let me briefly mention important areas where improvement is needed. These are spelled out in much more detail in our written testimony. We believe that maps that allow local government and the public to know where pipelines are in relation to housing developments and businesses are critical to prevent pipeline damage and increase pipeline safety.

Unfortunately, after the 2001 terrorist attacks, the National Pipeline Map System was removed from public access and became a password-protected system that approved users have to agree note to share with anyone else. This new security removes the maps from the public altogether and makes the system mainly useless to local governments, since the map information cannot be added to local GIS systems or planning maps, because of the required non-disclosure.

The location of pipelines are no secret. In fact, they are required to be marked "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.

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

One of the most important functions that OPS provides is the ongoing independent inspection of pipelines companies operations and enforcement when companies fail to operate safely. Unfortunately, none of these inspection findings are available to local government or the public to review. And enforcement documentation is mostly non-existent and one-sided.

OPS should be required to create an internet-accessible inspection and enforcement docket, like the existing DOT rulemaking docket, where the public can review basic company inspection information and view enforcement as it progresses. One of the clearest measures of whether a pipeline company has good control of their pipeline system are the number of times that they allow their pipeline to exceed the maximum allowable operating pressure.

Unfortunately, the vast majority of these events are not required to be reported to OPS, so neither OPS nor the public can use this indicator to determine whether the pipeline company is causing unwarranted stress on their pipeline. The exemption from reporting these events should be removed.

The Pipeline Safety Improvement Act of 2002 included a new program to enhance the understanding and involvement of local

communities and State initiatives in the pipeline safety issues by making pipeline safety information grants of up to $50,000 available. Such local involvement is critical as OPS moves forward in the areas of pipeline damage prevention and encroachment.

To date, none of these grants have been awarded in large part because while Congress authorized this grant program, it never appropriated any money to fund it. We ask that you make sure that the authorization for this program continues and that the money funded is appropriated.

Finally, we would like to ask Congress to consider a phased expansion of what is included within the definition of high consequence areas to include things like important historical sites, parks and wildlife refuges, and in the case of liquid pipelines, swimmable and fishable waters.

Thank you again for this opportunity to testify today. I testified five years ago and it is amazing the sea change in the different testimony and how I agree with most everything I have heard today, unlike five years ago. So we have made some real progress. We hope you will consider the ideas we have brought forward today which we believe can take pipeline safety up another significant notch by including the public more in these decisions.

If you have any questions, I would be glad to answer them when it is appropriate or any time in the future. Thank you.

Mr. BOOZMAN. Thank you.

Ms. Epstein.

Ms. EPSTEIN. Good afternoon. My name is Lois Epstein and I am a licensed engineer with Cook Inlet Keeper in Anchorage, Alaska. Keeper is a non-profit membership organization dedicated to protecting the 47,000 square mile Cook Inlet watershed and a member of the Water Keeper Alliance of 130 plus organizations headed by Bobby Kennedy, Jr.

My background includes membership since 1995 on the U.S. Department of Transportation's Advisory Committee for Oil Pipelines, testifying before Congress two times before now on pipeline safety, and analyzing the performance of Cook Inlet's 1,000 plus miles of pipeline infrastructure and several research documents.

Based on the data shown in my written testimony in Figures 1 and 2, I am focusing my testimony particularly on reducing the impact of pipelines on the environment. I will discuss three legislative changes and summarize some of the regulatory improvements needed. With respect to legislative changes, I will cover, and we have heard a little bit about some of these, enforcement, high consequence areas and pipeline safety information grants.

On enforcement, the public and pipeline operators have little evidence that the increased penalties contained in the pipeline safety law since 2002 are being used and collected by PHMSA to send a message to pipeline operators that violations are both unacceptable and costly. This reality, along with PHMSA's lack of judicial enforcement, its minimal use of penalties for "preventive" enforcement for things like corrosion, and the current inability of qualified States to pursue pipeline safety enforcement actions for interstate pipelines leads to a problematic enforcement environment.

Consider the following, and I have more detailed evidence in my written testimony. The Bellingham, Washington, accident's pro-

posed penalty in 2000 was a $3.02 million, which was negotiated down to $250,000 nearly five years later. The Carlsbad, New Mexico accident's proposed penalty in 2001 was $2.52 million; however, to date, no penalty has been collected.

In contrast to PHMSA, EPA has issued and collected several multi-million dollar penalties from oil pipeline companies for their releases, including a $34 million penalty against Colonial Pipeline in 2003 and a $4.7 million penalty from Exxon Mobil in 2002.

While pipelines are nowhere near as deadly or injurious as mining, a recent statement in the New York Times about the Mine Safety Administration is illustrative: "The number of citations means nothing when the citations are small, negotiable and most often uncollected."

I am optimistic that PHMSA will be able to improve its enforcement program. I am just pointing out to the Subcommittee that to date, they have not made as much progress as they certainly can and should be doing.

As a result of the ongoing problems with PHMSA enforcement, Cook Inlet Keeper recommends that the pipeline safety state be amended to one, require PHMSA to provide web-based data on Federal and State pipeline inspection and enforcement activities; two, require PHMSA to submit an annual report to Congress on civil and criminal enforcement, including reasons for significant penalty reductions; and three, allow qualified State pipeline safety officials to pursue enforcement actions against interstate pipeline operators, which they cannot now do. They can only pursue enforcement actions on intrastate lines

Those portions of transmission pipelines that could affect high consequence areas, or HCAs, are subject to the greatest regulatory oversight by PHMSA. Congress needs to direct PHMSA to expand the regulatory definition of HCAs to include the following: parks and refuges and fishable and swimmable waters. That is a regulatory change.

At the time of HCA rule development, PHMSA took a narrow view of HCAs, partly for resource reasons and partly because of the need to issue the rule in a timely fashion. Additionally, Congress needs to include new language in the statute about HCAs to cover culturally and historically significant resources. For liquid pipelines, these expansions likely will not involve testing many more sections of pipelines than are being tested currently.

Pipeline safety information grants are technical grants that Congress authorized in 2002 to help involve the public in technical decisions. As time goes on, there are missed opportunities for use of these funds, which are detailed in my written testimony, some good examples, I believe. So Congress needs to remedy that situation as soon as possible and ensure the funds are appropriated.

The three regulatory changes needed are pipeline shutoff valve standards, beyond what we have now, leak detection system performance standards, and removing the low-stress pipeline exemption. On the low-stress pipeline exemption, as many of you know and we have heard today, two weeks ago, on March 2nd, 2006, the largest oil spill to date on the North Slope of Alaska was discovered at a caribou crossing, over 200,000 gallons. It occurred over a multi-day period.

With due respect to Chairman Young and Subcommittee Chair Petri, it occurred at a rate just slightly less than a leak detection limit of 40,000 gallons a day, which is 1 percent of the throughput. Since it was over 200,000 gallons, it occurred over at least a five day period before it was discovered, and not over the ten hours which was what we heard twice today.

This spill came from a BP Oil transmission pipeline. It was exempt from PHMSA regulations, because it is a low-stress line. It meet certain criteria. It was formerly not exempt, and it has some corrosion problems and they lowered the stress. So it is a problem and it is exempt now.

Figure 3 in my testimony shows that low-stress transmission pipelines can cause significant damage and costs when there are releases. Certainly had this occurred in a different season, we would have seen some very serious damage and inability to remediate that. So to protect the environment, Congress needs to direct PHMSA to remove the low-stress hazardous liquid pipeline exemption from the regulations.

In summary, Congress should pursue the following statutory changes during the 2006 reauthorization. One, provide web-based data on Federal and State pipeline inspection enforcement activities and an annual report to Congress on civil and criminal enforcement and allow State regulators to pursue enforcement on interstate pipelines.

Two, expand high consequence areas so they will include cultural and historic sites. Three, ensure that Congress appropriates money for pipeline safety and information grants.

Thank you very much for your interest in pipeline safety and for inviting me to present here today. Please feel free to contact me at any time with your questions.

Mr. BOOZMAN. Thank you very much.

Mr. Larsen.

Mr. LARSEN. Thank you, Mr. Chairman.

Ms. Epstein, the low-stress pipeline exemption, I think we hard earlier from Mr. McCown that they are pursuing a regulatory change. What are your thoughts on that?

Ms. EPSTEIN. Today is the first time I had heard that from the Pipeline and Hazardous Materials Safety Administration. I am glad to hear that. My recommendation would be not just to focus on the environmentally sensitive areas, because these are transmission lines that are fairly widespread, and to treat them fairly similarly to transmission lines elsewhere. There is one criteria for highly volatile liquids that PHMSA needs to look at to see whether they want to remove the exemption for that or not, because they are slightly different than this line which had a problem, which was a crude oil transmission pipeline.

Mr. LARSEN. Right. Mr. Weimer, we heard some testimony earlier on the ten year, seven year, ten year assessment, seven year reassessment and the risk assessment. Does the Pipeline Safety Trust have a view on any shift in how Congress approaches the assessment periods?

Mr. WEIMER. Well, I think from what you heard in some of the testimony today, some of that is just kind of still in the investigatory stage. GAO is looking at that. We haven't even completed the

first cycle of the investigation, yet, so our general sense is that it is probably too soon to change it until we get through that first cycle and the GAO report comes out.

There probably is some flexibility there, because as people have stated, that number was kind of pulled out of thin air during all the hassle last time around with this whole thing. So there may be some changes, and it certainly should be based on best science.

Mr. LARSEN. I am shocked to hear anybody say Congress pulls anything out of thin air. Just absolutely shocked.

[Laughter.]

Mr. LARSEN. With regard to the damage prevention plan, and ideas that people have talked about, where is the Pipeline Safety Trust on that? Have you all talked about the 8–1–1 program, what role the public might play in that? Do you have any thoughts on that, Mr. Weimer?

Mr. WEIMER. Yes. I think the public plays a very important role, because the public is out there with the pipelines running through their property every day. So the more we can enlist the public to be the eyes on behalf of the pipeline companies and to know when something is going wrong along those pipelines and report it, the better.

That is one of the reasons we think the maps are so important, so people really do have a sense of where the pipelines are. Because it is amazing talking to people around the Country that they do not know that they have pipelines through their neighborhoods and some of the local governments do not know that, either. So we see the maps as very important.

We also think that the program that OPS is moving forward, their PIPA program, is a great way to bring all the stakeholders that have different damage prevention, different reasons to be involved with damage prevention, together to bring that, all the stakeholders together to come up with solutions. That is one of the reasons that we believe the grants to local stakeholders is a very important thing, so all those people can really be even partners in that effort.

Mr. LARSEN. Is it fair, would it be fair for you to say that the experience in 1999, because obviously there was a lot of tragedy and so on, but this whole idea of not knowing there was a pipeline running through one's neighborhood, is it fair to say that a lot of folks in Bellingham were not aware of the existence of, actually two pipelines, the liquid fuel and there was a natural gas pipeline?

Mr. WEIMER. That is absolutely the truth. The day that the pipeline exploded, I was standing on the edge of Whatcom Creek and we looked up at what appeared to be an atomic explosion cloud going up over the city. Everybody that we were talking with was, what could we possibly have in our city that could create such an explosion?

And the City of Bellingham, who did a good job after the explosion, had lost track of the pipeline to the point they hadn't even renewed their agreements with the pipeline companies. So they are out of sight, out of mine, and that is really why we need to educate and encourage the public to be part of these solutions.

Mr. LARSEN. Because it was obviously pulled off the internet and there is limited access to it now, how would you propose the public

getting that information about the pipelines, the locations of pipelines?

Mr. WEIMER. I think it is fairly easy to put the National Pipeline Mapping System back up on the internet. You could restrict the scale to something like a 1 to 24,000 scale, so people could see that the maps are running through their neighborhoods without seeing exactly where it would be, something of that nature, if needed. That is what other States, like Washington State has done their own mapping system, Texas has an internet system already online, have done.

But for the most part, if a terrorist wants to find a bad spot to hit a pipeline, they can do it. I think it is very important that our local planning departments have access, so when a new housing development is going in in town, they know that there is a pipeline there when the person comes in to plat that property.

Mr. LARSEN. Yes. Good. Thank you, Mr. Chairman. I will have a few others questions.

Mr. BOOZMAN. If the seven year reassessment interval doesn't make sense from an engineering standpoint, wouldn't it be logical to address the overlap situation now, rather than wait for problems to develop before the next reauthorization?

Mr. WEIMER. Well, I will take a crack at it while she is finding her sheet. I think it would make sense when it makes sense, when the science says that, when the GAO report comes in, if they have talked with all the companies and talked with different independent experts about that, and there is some sense to be made of it, then it would make sense to do that. I think to move forward on that before all that information is in would be premature. And since we are not even through the first cycle of the baseline testing yet and haven't seen how that is all going, it may be a little early at this point.

Ms. EPSTEIN. I think it is important to remember that the GAO is still in the middle of its investigation. The statement that they submitted to the Subcommittee today says, the seven year reassessment requirement is generally consistent with the industry consensus standard of at least five to ten years for reassessing pipelines operating under high stress.

So it is not way far off. I agree that we need to wait until all the information is in. But I think it is important to remember that we are not at the point yet where it is clearly something that needs to be changed.

Mr. BOOZMAN. Thank you.

Mr. DeFazio.

Mr. DEFAZIO. Thank you, Mr. Chairman. Ms. Epstein, on the low-stress, you heard, as I did today for the first time, perhaps it is because of recent news accounts that they are considering rulemaking on that, but from your experience, since we gave them the authority to choose what to regulate and not to regulate, they chose not to regulate low-stress, but I don't know that agency in particular, but I know rulemaking generally. I would assume that we would be looking at a very lengthy process. It does not guarantee they would go forward. If they are a rulemaking they may well say, people should comment whether or not we have to adopt a rule. That would be part of their comment period.

Ms. EPSTEIN. That is right. But I actually have a pretty dog-eared copy of the 1992 Pipeline Safety Act. Congress recognized this as an issue, and the authority was given to Office of Pipeline Safety at the time. It says if you have a low-stress pipeline, you can't exempt it just simply because it is low-stress. So they put in extra criteria.

That seems to me enough authority for PHMSA to go ahead and change it, particularly given this was the largest North Slope spill to date, pretty significant, and something that absolutely has to be taken into account when we are talking about expanding pipeline networks and that sort of thing.

So the timing was interesting, because I was invited to testify before this spill occurred. And when it happened, it seemed like it was worthwhile to bring it up to the Subcommittee. Because it is an exemption right now. I would also like to see in the future NTSB come in and look at some of these exempt pipelines and see whether it warrants additional regulation and make some recommendations as well.

Mr. DEFAZIO. I don't know if you can answer this or not, but just in reading those accounts, I am puzzled as to how they could not have noticed the loss of that much product over that long a period of time.

Ms. EPSTEIN. It is a very good question, because it is only a three mile line between two BP-owned facilities. So it is, for the North Slope, certainly a very heavily monitored area by the company. It deserves a longer discussion than we have time for today. But the metering, the State does have some regulations that apply, including the leak detection requirement. The metering that is required at both ends, which is in addition to the leak detection system, probably could have been improved.

So given that it was a pipeline with a known corrosion problem, to have not paid additional attention and done additional pigging, maybe more recently than 1998, I think it is a pretty serious concern.

Mr. DEFAZIO. Thank you. Thank you, Mr. Chairman.

Mr. BOOZMAN. Mr. Larsen?

Mr. LARSEN. Mr. Weimer, the Distribution Pipeline Integrity Management Program process, could you comment on the process itself and how the Pipeline Safety Trust has perceived that, as well as, in particular, the excess flow valve issue? The reason I ask, your testimony is clear on it, but just verbally if you could point out what the view is.

Mr. WEIMER. For a little over the past year, there has been a Distribution Pipeline Integrity Management Program going on, where the industry regulators, the public has been involved fairly aggressively to develop a DMIMP integrity management program. I think that has been a wonderful effort and has moved along much faster than we ever dreamed it would. The initial report has come out, I think, in January, maybe December, which I think is already looked at, and it calls for a number of important things.

The one place that we disagree with that report is on the use of excess flow valves on the service lines. Both a number of the Firefighters Association, NTSB, we commissioned an independent study on excess flow valves. It came to the same conclusion, that

for a $15 valve, they should be installed when new housing is going in or when that pipeline is being renewed. It is going to be awful hard for people to explain to someone in the future who dies because that $15 wasn't put on their house when they were moving in how leaving that up to the industry to decide whether it should or should not be installed was a good decision.

Mr. LARSEN. Maybe that is something we can do some follow-up on as well.

Actually, I think that is all I have for questions. Thank you.

Ms. EPSTEIN. Mr. Chair, can I say one thing about excavation damage and damage prevention?

Mr. BOOZMAN. Sure.

Ms. EPSTEIN. I just wanted to clarify for the audience and the Subcommittee that we heard a number of phrases used today about how common third-party damage is as a cause of incidents. For distribution pipelines, absolutely it is clearly the greatest cause of incidents. But for the transmission pipelines, there is a big difference between calling it a leading cause and the leading cause. It actually is a significant but not clearly the leading cause of pipeline incidents and accidents.

Mr. BOOZMAN. Very good.

Do you have anything else?

Thank you again for being here and presenting your testimony. It is greatly appreciated.

Without objection, the meeting is adjourned.

[Whereupon, at 1:42 p.m., the Subcommittee was adjourned.]

Written Testimony 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

Before the U.S. House Transportation and Infrastructure Committee
Subcommittee on Highways, Transit and Pipelines

Oversight Hearing on Pipeline Safety

Good morning, Mr. Chairman and members of the Committee. I am pleased to appear before you today and wish to thank the Committee for calling this hearing on the important topic of pipeline safety. My name is Frank Bender. I am vice president of Gas Distribution and the New Business Division of Baltimore Gas and Electric Company, a subsidiary of Constellation Energy. BG&E delivers natural gas to 634,000 customers in an 800 square mile area in Baltimore and surrounding areas in Central Maryland. Our company is proud of its heritage as the first gas utility in the United States, tracing its history back to 1816.

I am here testifying today on behalf of the American Gas Association (AGA) and the American Public Gas Association (APGA). AGA represents 197 local energy utility companies that deliver natural gas to more than 56 million homes, businesses and industries throughout the United States. AGA member companies account for roughly 83 percent of all natural gas delivered by the nation's local natural gas distribution companies. AGA is an advocate for local natural gas utility companies and provides a broad range of programs and services for member natural gas pipelines, marketers, gatherers, international gas companies and industry associates.

APGA is the national, non-profit association of publicly owned natural gas distribution systems. APGA was formed in 1961, as a non-profit and non-partisan organization, and currently has 655 members in 36 states. Overall, there are approximately 950 municipally owned systems in the U.S. serving nearly five million customers. Publicly owned gas systems are not-for-profit retail distribution entities that are owned by, and accountable to, the citizens they serve. They include municipal gas distribution systems, public utility districts, county districts, and other public agencies that have natural gas distribution facilities.

I hope that my testimony will provide you with a better understanding of natural gas distribution systems, their regulatory setting, what is being done to further enhance their

safety and how together we can build upon the excellent record of safety natural gas utilities have established.

The last reauthorization of pipeline safety resulted in several significant mandates and initiatives aimed at enhancing safety. Since the passage of that bill in 2002, the Pipelines and Hazardous Materials Safety Administration (PHMSA) and the industry have made significant progress on each of those initiatives, and the record shows that things are proceeding very well, with only a few minor adjustments to be considered. In fact, our companies have identified only one major area we believe requires considerable improvement: that is the area of excavation damage prevention. Our companies believe your 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. Although I will speak today on a number of issues the industry has considered in terms of further enhancing the safety record of natural gas pipelines, I will spend the majority of my time addressing excavation damage, the cause behind the majority of natural gas distribution pipeline incidents, and the need for Congress to provide an incentive for states to adopt stronger damage prevention programs.

Gas Distribution Utilities Serve The Customer

In order to understand how distribution safety can be enhanced, it's first important to understand the function and structure of distribution pipelines.

Distribution pipelines are operated by natural gas utilities, sometimes called "local distribution companies" or LDCs. The gas utility's distribution pipes are the last, critical link in the natural gas delivery chain. To most customers, their local utilities are the "face of the industry". Our customers see our name on their bills, our trucks in the streets and our company sponsorship of many civic initiatives. We live in the communities we serve and interact daily with our customers and with the state regulators who oversee pipeline safety. Consequently, we take very seriously the responsibility of continuing to deliver natural gas to our communities safely, reliably and affordably.

The Difference in "Pipelines"

Understandably, most customers link all "pipelines" together, however there are indeed significant differences between the liquid transmission systems, natural gas transmission systems and the natural gas distribution systems operated by local gas utilities. Each type of pipeline system faces different challenges, operating conditions and consequences of incidents.

Interstate transmission systems are generally made up of long, straight runs of large diameter steel pipelines, operated at high volumes and high pressures. These larger transmission lines feed natural gas to the gas distribution utility systems.

Gas distribution utility systems, in contrast, are configured like spider webs, operate at much lower volumes and pressures and always carry gas that has been odorized for easy leak detection. Distribution pipeline systems exist in populated areas, which are predominantly urban or suburban.

Distribution pipelines are generally smaller in diameter (as small as 1/2 inch), operate at pressures ranging upward from under one pound per square inch, and are constructed of several kinds of materials including a large amount (over 40 percent) of non-corroding plastic pipe. Distribution pipelines also have frequent branch connections, since most customers require individual service lines. Most distribution systems are located under streets, roads, and sidewalks and when working on them, care must be taken not to unnecessarily disrupt the flow of traffic and of commerce. Because distribution pipelines provide a direct feed to customers, the use of in-pipe inspection tools usually requires natural gas service to customers to be interrupted for a period of time.

It should be further noted that utility system customers play a unique role in identifying and reporting gas odors. At BG&E, our 610,000 customers also serve as early alert systems, by monitoring for odors that may indicate an unsafe condition and promptly calling our call center. For these reasons, gas distribution utility systems are quite different from transmission systems.

Federal regulations recognize the differences between these types of pipelines, and different sets of rules have been created for each. 49 CFR Part 192 sets out the regulations for natural gas transmission and distribution pipelines and the rules discriminate between the two, while 49 CFR Part 195 sets out the regulations for liquid transmission lines.

Regulatory Authority

As part of an agreement with the federal government, in most states, state pipeline safety authorities have primary responsibility to regulate natural gas utilities as well as intrastate pipeline companies. However, state governments have to adopt as minimum standards the federal safety standards promulgated by the U.S. Department of Transportation (DOT.) In exchange, DOT reimburses the state for up to 50% of its pipeline safety enforcement costs. Therefore, the actions of Congress affect state regulations and our companies. The states may also choose to adopt standards that are more stringent than the federal ones, and many have done so. BG&E and many other distribution system operators report being in close contact with state pipeline safety inspectors. As a result of these interactions, distribution operator facilities are subject to more frequent and closer inspections than required by the pipeline safety regulations.

Natural Gas Utilities Are Committed to Safety

Our commitment to safety extends beyond government oversight. Indeed, safety is our top priority -- a source of pride and a matter of corporate policy for every company. These policies are carried out in specific and unique ways. Each company employs safety professionals, provides on-going employee evaluation and safety training, conducts rigorous system inspections, testing, and maintenance, repair and replacement programs, distributes public safety information, and complies with a wide range of federal and state safety regulations and requirements. Individual company efforts are supplemented by collaborative activities in the safety committees of regional and national trade organizations. Examples of these groups include the American Gas Association, the American Public Gas Association and the Interstate Natural Gas Association of America.

We continually refine our safety practices. Natural gas utilities spend an estimated $6.4 billion each year in safety-related activities. Approximately half of this money is spent in compliance with federal and state regulations. The other half is spent, as part of our companies' voluntary commitment to ensure that our systems are safe and that the communities we serve are protected.

Our industry's commitment to safety is borne out each year through the federal Bureau of Transportation Statistics' annual figures. Delivery of energy by pipeline is consistently the safest mode of energy transportation. Natural gas utilities are dedicated to continuing to improve on this record of safe and reliable delivery of natural gas to our customers.

What Are The Facts About Gas Distribution Safety Incidents?

As part of our commitment to safety, through the DOT pipeline statistic database, gas utility trade associations monitor the number and causes of all reportable incidents on the nearly 2-million mile natural gas distribution system. An examination of DOT's statistics tells a tale of two trends.

A comparison of reportable incidents along the natural gas distribution system between 2001 and 2005 is depicted in the chart labeled Exhibit 1. The chart highlights the existence of two different types of incidents: those caused by factors the pipeline operator can directly control, such as improper welds, material defects, incorrect operation, corrosion or excavation damage by a utility contractor; and those caused by factors the pipeline has little or limited ability to control, such as excavation damage by a third party, earth movement, structure fires, floods, vandalism and lightning.

The record shows that between 2001 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. The number of incidents operators could control

remained a small portion of overall incidents. In addition, statistics show that it is incidents caused by factors beyond the control of pipeline operators that are on the increase, with more reported incidents every year except 2002. (The dip in 2002 is attributed to a slowdown in construction-related activities to the post-9/11 downturn in the economy.)

In many cases, the typical "little or no control" incident involves a local excavator who has decided to expedite an excavation project at the calculated risk of hitting a line. The excavator's actions, while irresponsible and risky, generally lie outside the jurisdiction of PHMSA. Given that willful negligence is generally difficult to prove and despite efforts by PHMSA, pipeline operators and others to educate excavators about the need for safe digging practices, third party excavation damage remains the single largest cause of incidents along the natural gas distribution system, accounting for almost half (48 percent) of incidents beyond the utility's ability to control. Pipeline operators recognize the need to change this risky behavior in order to protect their lines and have used educational efforts to help raise awareness about the need for safe practices, but with a limited effect.

As the data demonstrates, the most effective way to minimize safety incidents on our distribution lines is to make incidents caused by excavation damage an endangered species. Congress has long recognized that excavation damage to gas and hazardous liquid pipelines is a major safety concern. This was the major reason for passage of damage prevention legislation passed in 1999 with the Transportation Equity Act of the 21st Century and in 2002 with the Pipeline Safety Improvement Act. These measures have made a substantial contribution toward decreasing the number of incidents; but more can be done, with your continued support.

How Can the Distribution Integrity Process Affect Pipeline Safety Reauthorization?

Since the passage of the 2002 Pipeline Safety Improvement Act, AGA and APGA member companies with natural gas transmission pipelines have been resolutely implementing the requirements of the gas transmission integrity rule. It is a learning process for both operators and inspectors as together they proceed through the various steps of the implementation process. When PHMSA decided to promulgate the transmission rule, AGA and APGA stated that our members supported taking a responsible course of action in seeking to enhance transmission pipeline integrity. Our members continue to believe that such a course of action will yield safety benefits, due to the transmission integrity regulation.

Last year, PHMSA embarked on an effort to develop a regulation governing distribution integrity management programs (DIMP). Again, AGA and APGA's member companies have fully supported taking a responsible course of action in seeking to enhance distribution pipeline integrity. As a starting point for distribution system regulation, PHMSA has followed the directives of the DOT Inspector General and the findings of a joint federal, state, industry and public stakeholder group that met for one year. Those

findings are presented in the report *Integrity Management for Gas Distribution, Report of Phase 1 Investigations* released in December of 2005. The DIMP stakeholder group found that to achieve distribution safety enhancements while ensuring continued reliable delivery of gas at an affordable cost to customers, a high-level flexible rule should be promulgated by PHMSA requiring each operator of a gas distribution system to develop and implement a formal integrity management plan that addresses key elements outlined by the DOT Inspector General. The group also found that this rule should be implemented in conjunction with a nationwide education program on 3-digit One-Call dialing, plus continuing R & D.

First and foremost, the stakeholder group determined that the wide differences between gas distribution pipeline systems operated across the U.S. make it impractical to simply apply the integrity management requirements for gas transmission pipelines to distribution. The diversity among gas distribution pipeline operators also makes it impractical to establish prescriptive requirements that would be appropriate for all circumstances. Over half the distribution operators that will be affected by this rule are small entities – city owned utilities that serve fewer than one thousand customers and have revenues less than one million dollars per year. Thus, it is important that any rule not impose a one-size fits all approach. The DIMP stakeholder group found that it would be most appropriate to require that all distribution pipeline operators, regardless of size, implement an integrity management program that would contain seven key elements:

1. Develop and implement a written integrity management plan.
2. Know its infrastructure.
3. Identify threats, both existing and of potential future importance.
4. Assess and prioritize risks.
5. Identify and implement appropriate measures to mitigate risks.
6. Measure performance, monitor results, and evaluate the effectiveness of its programs, making changes where needed.
7. Periodically report performance measures to its regulator.

These seven elements will be clarified by way of guidance being developed by a nationally recognized standards body to provide a basis for operator compliance and for regulator enforcement. The DIMP stakeholder group found that this guidance should also focus on ways of verifying the effectiveness of an operator's leak management program as an essential element of a risk-based distribution integrity management approach.

AGA and APGA are committed to working with all stakeholders toward completion of the distribution integrity management rule by PHMSA early next year.

The DIMP stakeholder group also found that federally mandated installation of excess flow valves on service lines to customers is not appropriate under the distribution integrity regulation. State, industry and public members of the DIMP stakeholder group submitted formal comments to PHMSA recommending that operators who choose not to voluntarily install excess flow valves, develop a process whereby the installation of these valves for specific service lines is based on defined risk criteria. The members of

this stakeholder group outlined decision criteria for installation of the valves, also concluding that, depending on the situation, there may be more effective methods for controlling the risk to a service line.

AGA does not support federally mandated installation of excess flow valves; nor does such a mandate have the support of the majority of state safety regulatory agencies, many of which are satisfied that operators are installing them where they can be effective. The National Association of Utility Regulatory Commissioners (NARUC) and the National Association of Pipeline Safety Representatives (NAPSR) passed resolutions to that effect. Many utilities already install these valves voluntarily and their number is expected to grow.

At the same time, over the past several years, AGA has facilitated forums with industry and regulators to ensure dissemination of the most up-to-date operational information about excess flow valves. We believe that operators now have the information needed to determine if these valves would be effective for their system. Combined with the proposed risk-based criteria, the operator's decision on whether to install the valves would have a sound technical basis to provide such protection where it is most appropriate.

Excavation Damage – The Big Threat to Distribution Pipelines

With that, we turn again to an examination of excavation damage on natural gas distribution lines. As the distribution safety statistics have repeatedly shown, excavation damage represents the single greatest threat to distribution system safety, reliability and integrity. Although the nationwide education program on the three-digit One-Call dialing to prevent excavation damage, together with the DIMP rule, is a step in the right direction, the DIMP stakeholder group found that more is needed.

Gas pipeline facility operators are required to have damage prevention programs under current DOT regulations. However, preventing excavation damage to gas pipelines is not completely under the control of such operators. Reducing this threat requires affecting the behavior of persons not subject to the jurisdiction of pipeline safety authorities (e.g. excavators working for entities other than pipeline facility owners/operators) Pipeline facility operators currently approach this through educational efforts.

Data from the last five years has demonstrated that states, such as Minnesota, Virginia, Georgia, Connecticut and Massachusetts, experienced a substantially lower rate of excavation damage to pipeline facilities than states that do not have stringent enforcement powers and/or programs. I've brought along a chart that compares the measurable results of effective programs in Virginia and Minnesota against the results in a state where the absence of some key processes precludes an effective program (Attachment 2). The lower rate of excavation damage translates directly to a substantially lower risk of serious incidents on gas and hazardous liquid pipelines and avoided consequences resulting from excavation damage to pipelines.

The DIMP stakeholder group explored a variety of approaches to enhance damage prevention programs. The group found that a comprehensive damage prevention program includes not only education but also effective enforcement. Currently, the U.S. Department of Justice is responsible for enforcing federal infrastructure damage prevention statutes on parties conducting excavations. However, and most unfortunately, the Department has rarely exercised such authority.

Programs such as Virginia's show that nine key elements must be present and functional for the damage prevention program to be effective. The DIMP group concluded that federal legislation would be necessary to encourage such programs in all states. This should include providing additional funding for the states, apart from funding already being provided under the matching grants or One-Call programs.

As quoted from the above mentioned DIMP report, the nine elements a state program should have are as follows:

(1) Effective communication between operators and excavators -- Provide for appropriate participation by operators, excavators, and other stakeholders in the development and implementation of methods for establishing and maintaining effective communications between stakeholders from receipt of an excavation notification until successful completion of the excavation, as appropriate.

(2) Fostering support and partnership of stakeholders -- Have a process for fostering and ensuring the support and partnership of stakeholders including excavators, operators, locators, designers, and local government in all phases of the program.

(3) Operator's use of performance measures – Include a process for reviewing the adequacy of a pipeline operator's internal performance measures regarding persons performing locating services and quality assurance programs.

(4) Partnership in employee training – Provide for appropriate participation by operators, excavators, and other stakeholders in the development and implementation of effective employee training programs. This would ensure that operators, the one-call center, the enforcing agency and the excavators have partnered to design and implement training for employees of operators, excavators and locators.

(5) Partnership in public education – Have a process for fostering and ensuring active participation by all stakeholders in public education for damage prevention activities.

(6) Dispute resolution process – Feature a process for resolving disputes that defines the state authority's role as a partner and facilitator to resolve issues.

(7) Fair and consistent enforcement of the law -- Provide for the enforcement of its damage prevention laws and regulations for all aspects of the excavation process including public education. The enforcement program must include the use of civil penalties for violations found by the appropriate state authority.

(8) Use of technology to improve all parts of the process – Include a process for fostering and promoting the use, by all appropriate stakeholders, of improving technologies that may enhance communications, locate capability, and performance tracking.

(9) Analysis of data to continually evaluate/improve program effectiveness – Contain a process for review and analysis of the effectiveness of each program element, and for implementing improvements identified by such program reviews.

AGA and APGA recommend that legislation be passed that modifies USC Title 49 Subtitle VIII, Chapter 601, *§ 60105 - State pipeline safety program certifications*, to insert a new section outlining the nine elements and providing for additional funding for implementation of the program. Such funding should be allocated directly to the State agency having oversight over pipeline safety. In addition to our own members as excavators, a variety of stakeholders will be affected by the proposed legislation, including in most states, entities presently not under the jurisdiction of state pipeline safety authorities. Accordingly, funding authority for the program should be sought from general revenues.

Past experience shows that without legislation, PHMSA's action under its existing authority had a limited effect mostly because many of the entities perpetrating excavation damage were outside the agency's jurisdiction. Moreover, without associated funding, a legislative mandate for an enhanced program -- be it at the federal level or at the state level -- would be equivalent to an unfunded mandate, and have minimal effect on existing state programs.

Finally, AGA and APGA support providing continued funding authority for grants to states to support One-Call programs and for partial funding of the Common Ground Alliance (CGA) damage prevention organization. The CGA has been instrumental in bringing to the forefront the need for excavation damage prevention as a shared responsibility among all locators, One-Call system operators, excavators and owners or operators of buried infrastructure facilities. Development and adoption of consensus-based best practices, education, and damage data collection are significant and worthwhile efforts under CGA sponsorship and should be continued.

The statistics are clear. Excavation damage prevention presents the single greatest opportunity for distribution safety enhancements.

Gas Transmission Integrity Reassessment Time Interval

The Interstate Natural Gas Association of America testimony today addresses the validity of the 7-year law-mandated reassessment interval required by the gas transmission integrity rule. In particular, gas company planning personnel view the overlap between the baseline assessments and the reassessments that must take place for a pipeline segment in year 7 after the baseline assessment, as representing an unwarranted spike in workload and demand for services, with possible gas supply interruptions. This will affect interstate as well as intrastate transmission systems. AGA and APGA believe that a pipeline segment's reassessment interval should be based on technical arguments. It is our hope that in evaluating the appropriateness of the 7-year requirement, the U.S. General Accountability Office (GAO) will seek to uncover all of the facts and that based on the GAO report, Congress would then consider options for

allowing a change to the interval that would be consistent with GAO findings. This will allow operators to continue to deliver natural gas safely and affordably.

Summary

The natural gas utility industry is proud of its safety record. Natural gas has become the recognized fuel of choice by citizens, businesses and the federal government.

Public safety is the top priority of natural gas utilities. We invite you to visit our facilities and observe for yourselves our employees' dedication to safety. We are committed to continue our efforts to operate safe and reliable systems and to strengthen One-Call laws and systems in every state.

AGA and APGA believe that Congressional passage of pipeline safety reauthorization this year will result in timely and significant distribution system safety improvements. Further, because of the wide variety of distribution systems across the U.S, promulgation of a distribution integrity regulation by PHMSA may yield effective enhancements in distribution safety if PHMSA allows gas utilities risk-based options to address threats to pipeline integrity in their specific systems and situations.

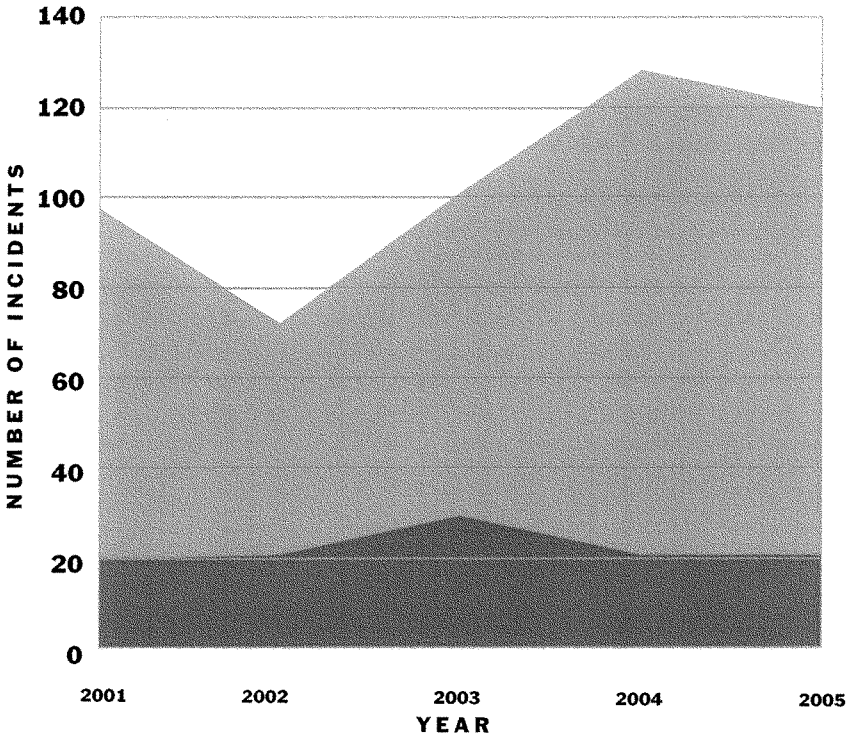
Despite the fact that our members, when excavating, would have to also abide by the provisions of an enhanced state damage prevention program, the members of AGA and APGA emphatically back the recommendation that Congress enact legislation that incentivizes states to adopt stronger damage prevention programs. By doing so, all states could realize significant, marked reduction in incidents on distribution lines, by adopting the 9 elements of a demonstrated, successful program.

Thank you for providing the opportunity to present our views on the important matter of pipeline safety. To reiterate, since the passage of the 2002 Pipeline Safety Act, PHMSA and the industry have made significant progress – and now to go a step further in that positive direction we would urge you to address excavation damage. Otherwise, we feel confident in reporting today that the pipeline safety program is going well.

Attachments:

1) Comparison of Incidents
2) States With Strong Prevention Programs
3) The Nine Elements of an Effective Excavation Damage Program
4) Path To Success

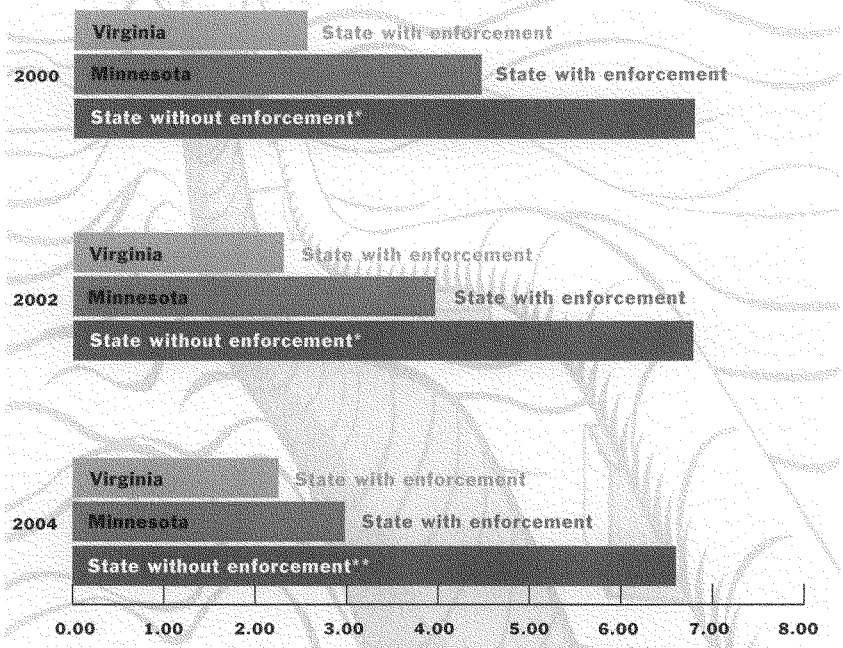
Comparison of Incidents Operators Can Control/Have Limited Ability to Control



Incidents Utility Can Control
Excavation by operator, corrosion, materials, welds, equipment error

Incidents Utility Has Only Limited Ability to Control
Excavation by 3rd parties, earth movement, floods, hurricanes, lightning, vandalism

States with strong prevention programs have lower percentage of pipeline hits



Overall, states with comprehensive damage prevention programs such as Virginia and Minnesota, experienced 26% fewer excavation damages to distribution pipelines.

* Third Party ** Excavation

The nine elements of an effective excavation damage program:

1. Effective communication between operators and excavators

2. Support and partnership of stakeholders

3. Use performance measures

4. Partnership in employee training

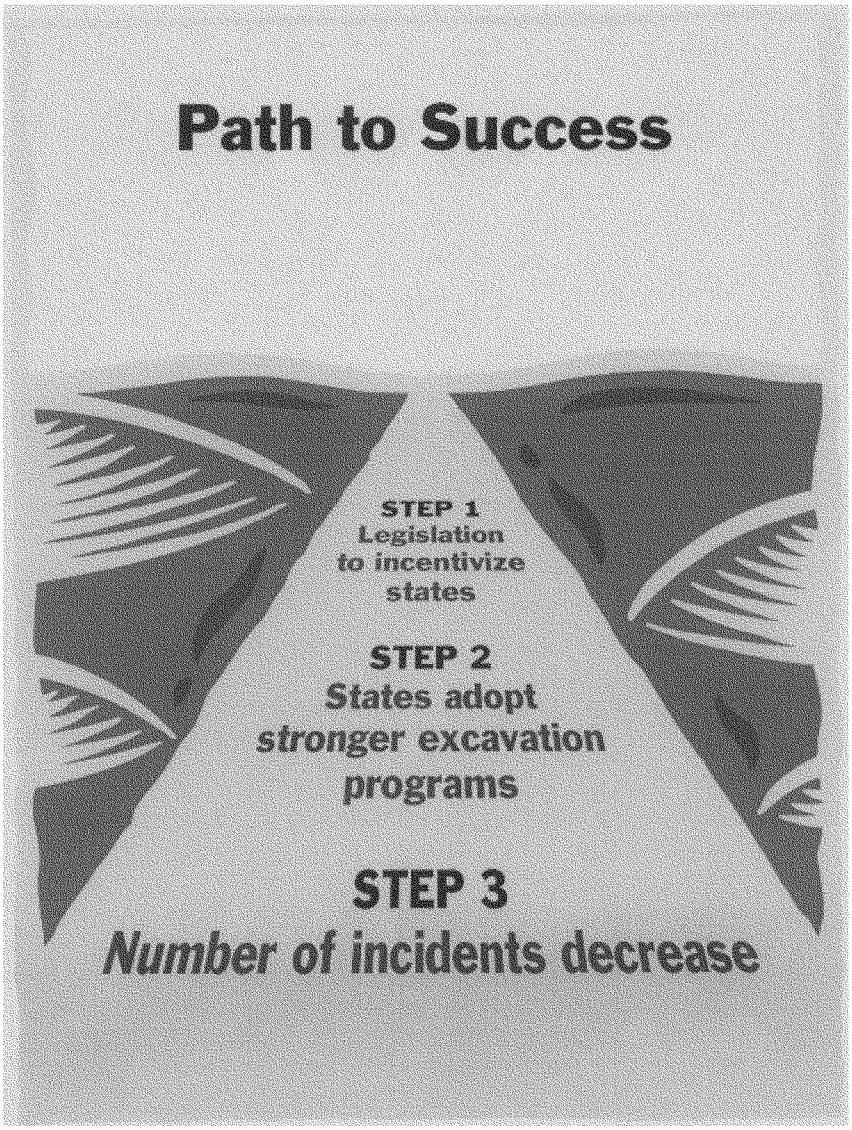
5. Partnership in public education

6. Process for resolving disputes

7. Fair and consistent enforcement of the law

8. Use of technology to improve all parts of the process

9. Ongoing evaluation and finetuning of program effectiveness


Path to Success
STEP 1
Legislation
to incentivize
states
STEP 2
States adopt
stronger excavation
programs
STEP 3
Number of incidents decrease

Congressman Russ Carnahan (D-MO)
House Transportation Committee
Subcommittee on Highways, Transit, and Pipelines
Hearing on Pipeline Safety
Opening Statement
March 16, 2006

- Mr. Chairman, I want to thank you for scheduling this hearing on pipeline safety.
- Since the 107th Congress, many changes have been made to the way we ensure the safety and security of our nation's pipeline. The most recent change created the Pipeline and Hazardous Materials Safety Administration.
- The safe transportation of natural gas, petroleum, and other hazardous materials by the 2.2 million miles of pipeline in America today is an issue that needs much consideration.
- I look forward to hearing the testimony of all the witnesses today. I especially look forward to hearing testimony on the effectiveness of current law as compared to previous years.
- Thank you.

COMMITTEE ON TRANSPORTATION & INFRASTRUCTURE
Subcommittee on Highways, Transit, and Pipelines

"Pipeline Safety"

March 16, 2006
10:00 a.m.
2167 Rayburn House Office Building

OPENING STATEMENT

Mr. Chairman:

I thank you for calling today's hearing to enable us to examine the effectiveness of the current regulatory regime for pipelines.

According to the Government Accountability Office, pipelines carry nearly all of the natural gas and about two-thirds of the oil that move across our nation on an annual basis. According to the Congressional Research Service the industry is compact – with just 180 companies operating all of the interstate pipelines in our nation.

Pipeline networks, which extend over 2 million miles throughout the United States, are statistically safer than other forms of transportation. The U.S. DOT reports that per ton-mile of freight moved, pipelines are safer than all other surface modes and have an environmental safety record comparable to those modes.

Pipelines generally receive little attention until something happens – such as a sudden explosion or a toxic leak. However, the prevention of such incidents requires that we have a rigorous regulatory regime in place to monitor pipeline safety and security at all times.

Congress last reauthorized the Office of Pipeline Safety when it enacted the Pipeline Safety Improvement Act of

2002 in the 107th Congress. Today's hearing enables us to review the impressive progress that the new Pipeline and Hazardous Materials Safety Administration has made in regulating pipelines and to look ahead toward the issues we will confront in the next reauthorization.

Some of these key issues will include the frequency of inspection routines, regulation of the environmental review and permitting process, and the expansion of programs implemented at the state level to prevent accidents by reducing the number of incidents of third party excavators hitting a pipeline.

Importantly, oversight of pipelines – like all transportation modes – is divided between the Department of Transportation's Office of Pipeline Safety and the

Department of Homeland Security. Another key issue as we develop the new reauthorization will therefore be examining how these two entities are working together to oversee pipelines and whether any regulatory issues are falling through the cracks as has occurred in other modes.

I look forward to hearing from today's witnesses and I yield back the balance of my time.

Testimony of
Bob Chipkevich, Director
Office of Railroad, Pipeline and Hazardous Materials Investigations
National Transportation Safety Board
Before the
Subcommittee on Highways, Transit and Pipelines
Committee on Transportation and Infrastructure
U.S. House of Representatives
Regarding Pipeline Safety
March 16, 2006

Good morning Chairman Petri, Ranking Member DeFazio and Members of the Subcommittee. My name is Bob Chipkevich, and I am the Director of the National Transportation Safety Board's Office of Railroad, Pipeline and Hazardous Materials Investigations. Safety Board Acting Chairman Rosenker has asked me to represent the Board today to discuss pipeline safety.

The Safety Board is currently investigating pipeline accidents in Dubois, Pennsylvania, involving a leaking butt fusion joint in a 2-inch diameter plastic gas main; Kingman, Kansas involving the failure of an 8-inch diameter hazardous liquid pipeline carrying anhydrous ammonia; and, Bergenfield, New Jersey where an apartment building was destroyed. Excavation activities were being conducted adjacent to a natural gas service line located near the apartment building.

Since I last testified before this Subcommittee in June 2004, the Pipeline and Hazardous Materials Safety Administration (PHMSA) has continued to make progress to improve pipeline safety.

After a series of natural gas pipeline accidents in Kansas in 1988 and 1989 and a liquid butane pipeline failure near Lively, Texas, in 1996, the Safety Board recommended that PHMSA assess industry programs for public education on the dangers of pipeline leaks and require pipeline operators to periodically evaluate the effectiveness of those programs.

In December 2003, the American Petroleum Institute published its Recommended Practice 1162 *Public Awareness Programs for Pipeline Operators* that addressed these issues. And in May of 2005, PHMSA incorporated this Recommended Practice into its pipeline safety requirements.

PHMSA has also made progress in the area of mandatory pipeline integrity assessments. The failure of pipelines with discoverable integrity problems has been a safety issue identified in pipeline accidents investigated by the Safety Board over many years, and related safety recommendations date back to 1987. The Safety Board recommended that PHMSA require periodic inspections or tests of pipelines to identify corrosion, mechanical damage, and other time dependent defects that could be detrimental to the safe operation of the pipelines.

PHMSA published final rules in 2000 and 2002 to require liquid pipeline operators to conduct integrity assessments in high-consequence areas. And in 2003, PHMSA issued similar requirements for natural gas transmission pipelines in high-consequence areas. Operators must now assess the integrity of these pipelines using in-line inspection tools, pressure tests, direct assessment, or other technologies capable of equivalent performance.

The Safety Board supported PHMSA's rulemaking in this area and closed the 1987 safety recommendations as "acceptable action. "

As the Safety Board has previously noted, PHMSA will have to ensure that pipeline operators implement effective integrity management programs. Risk management principles, if properly applied, can be powerful tools to identify the risks to pipeline integrity and should lead operators to take action to mitigate those risks. Quantifying inputs into various risk management models, however, can be difficult and subjective. To ensure that the new rules for risk-based integrity management programs are effectively employed throughout the pipeline industry, it is important that PHMSA establish an effective evaluation program. PHMSA has shared its inspection protocols with the

Safety Board, and when we investigate pipeline accidents that involve integrity issues we will examine PHMSA's process for evaluating pipeline operators' integrity management programs.

In 2001, after investigating an accident that involved the explosion of a new home in South Riding, Virginia, the Safety Board again recommended that PHMSA require gas pipeline operators to install excess flow valves in all new and renewed gas service lines when operating conditions are compatible with readily available valves. PHMSA currently requires gas distribution operators, for new or renewed services, to either install the valves at their cost or notify customers of their option to have them installed at the customer's cost. Only about one-half of the operators currently install these valves at their cost.

We understand that PHMSA plans to incorporate a decision-making process for the installation of excess flow valves into upcoming gas distribution integrity management rules. This would require each operator to employ a risk-based approach to consider the mitigation value of installing excess flow valves. PHMSA has asked the Gas Piping Technology Committee to develop guidance to address risk factors that would be appropriate for this determination.

The Safety Board believes that its recommendation to install excess flow valves should be a stand-alone requirement and not be the result of a decision based solely on risk analysis. A decision to install excess flow valves needs to be made when gas lines are newly installed or renewed. Once a service is installed, it normally has a very long life-- several decades-- before it must be renewed. Risk factors may change over time due to community growth or other future events, and the cost of excavating existing service to install excess flow valves would be another factor to overcome. Excess flow valves are inexpensive safety devices that can save lives. They should be installed whenever operating conditions are compatible with readily available valves.

In 1987, after investigating accidents in Kentucky and Minnesota, the Safety Board recommended that PHMSA require operators to develop training and testing programs to qualify employees. And following a 1996 accident in San Juan, Puerto Rico, the Safety Board recommended that PHMSA complete its rulemaking on operator qualification, training, and testing standards.

PHMSA's final rule, issued in 2001, focused on qualifying individuals for performing certain tasks. The Safety Board noted that the final rule did not include requirements for training, nor did it specify maximum intervals for re-qualifying personnel. The safety recommendation was closed as "unacceptable action."

On March 3, 2005, PHMSA published a direct final rule that amended the pipeline personnel qualification regulations to conform to the Pipeline Safety Improvement Act of 2002. Among other changes, this rule required operators to provide training. And on December 15, 2005, PHMSA held a public meeting to explore several issues and potential ways to strengthen the operator qualification rule. The Safety Board believes that operator qualification requirements must include training, testing to determine if the training was effective, and the re-qualification of personnel on a timely basis.

Over the years the Safety Board has investigated numerous accidents involving excavation damage to pipeline systems, and excavation damage continues to be a leading cause of pipeline accidents. Therefore, the recent effort of PHMSA and the Common Ground Alliance to establish a national one-call number -- 811 -- is especially noteworthy. Soon, contractors and homeowners across the country will have an easy to remember, easy to use means for getting underground utilities marked and identified before excavation activities begin. We hope that all States will now move quickly to ensure that this number is incorporated into all telephone exchange systems.

Last year, the Safety Board completed a study of a series of liquid pipeline accidents that involved delayed reaction by pipeline controllers and made several safety recommendations to PHMSA. The study had found that although most controllers

indicated that they received the right number of alarms, two controllers reported receiving up to 100 alarms an hour and one manager noted a reduction from 5,000 alarms a day in the control center to 1,000 by working with controllers to develop guidelines for more realistic alarm set points. The study found that an effective alarm review/audit system by operators would increase the likelihood of controllers responding appropriately to alarms associated with pipeline leaks and the Safety Board recommended that PHMSA require pipeline companies to have a policy for the review/audit of alarms. The study also found that most control centers worked 12-hour shifts, but that the cycle of shifts differed. The Safety Board believes that requiring operators to report information about controllers' schedules on accident reports could help PHMSA determine the contribution of fatigue to pipeline accidents and recommended that PHMSA require operators to provide related data.

Other safety issues with open recommendations include the need for determining the susceptibility of some plastic pipe to premature brittle-like cracking problems; ensuring that pipelines submerged beneath navigable waterways are adequately protected from damage by vessels; and requiring that new pipelines be designed and constructed with features to mitigate internal corrosion. Actions on these safety recommendations are classified as "acceptable response" by the Board.

The Safety Board continues to review the activities involving pipeline safety. There clearly has been progress made in the past 5 years.

Mr. Chairman, that completes my statement, and I will be happy to respond to any questions you may have.

STATEMENT OF
THE HONORABLE PETER DEFAZIO
SUBCOMMITTEE ON HIGHWAYS, TRANSIT, AND PIPELINES
HEARING ON
"PIPELINE SAFETY OVERSIGHT"
MARCH 16, 2006

- Thank you, Chairman Petri, for calling today's hearing on oversight of the pipeline safety program.

- This hearing is intended to see what progress has been made within the Pipeline and Hazardous Materials Safety Administration (PHMSA) and the natural gas and hazardous liquid pipeline industries since enactment of the Pipeline Safety Improvement Act of 2002 and the Norman Y. Mineta Research and Special Programs Reorganization Act of 2005. It also begins the process of discussing what is needed in the way of a pipeline safety reauthorization bill.

- From my standpoint, substantial progress has been made at PHMSA since 2002. The tragic accidents in Bellingham, Washington and Carlsbad, New Mexico coupled with the criticisms and concerns raised by Congress, the Department of Transportation's Inspector General (DOT IG), the Government Accountability Office (GAO), and the National Transportation Safety Board (NTSB) served as a wake-up call to an agency that – at the time – was characterized more by failure than by success.

- Since 2002, PHMSA has actively worked to reduce the number of open safety recommendations issued by the NTSB and the DOT IG, some of which were open since the 1990s. PHMSA has also made progress in closing out mandates from legislation enacted in 1992, 1996, and 2002. According to the DOT IG, of the 23 mandates from legislation enacted in the 2002 Act, PHMSA has completed its actions on time for 15 of the 17 mandates with deadlines that expired in 2004.

- PHMSA has also initiated a number of long-overdue rulemakings, and in doing so has made a concerted effort to reach out to its stakeholders, involving not only pipeline operators, but entire States, local communities, safety advocates, environmental groups, and Congress.

- This progress was the direct result of high-level management attention, most notably the work of PHMSA's Chief Safety Officer, Stacie Gerard, and her team of pipeline safety experts.

- Despite PHMSA's considerable progress, the safety and security of our Nation's pipelines as well as the local communities through which they operate remain real concerns. According to PHMSA's pipeline statistics, while accidents involving hazardous liquid pipelines have both increased and decreased since 2002, accidents involving natural gas distribution and transmission pipelines are on the rise.

- Accidents involving natural gas distribution operators have increased from 102 accidents in 2002 (resulting in 10 fatalities, 44 injuries and $24 million in damages) to 171 accidents in 2005 (resulting in 17 fatalities, 48 injuries and $27 million in damages). Accidents involving natural gas transmission operators have increased from 82 in 2002 (resulting in one death, five injuries and $26 million in damages) to 180 in 2005 (resulting in three deaths, seven injuries and $243 million in damages) – the highest number of accidents reported by PHMSA since at least 1986.

- These facts are a reminder that Congress – and this Subcommittee – has the responsibility to ensure the highest level of safety possible, despite the progress that has been made since 2002. We simply cannot risk reducing safety and security and increasing exposure of the public and the environment because things seem to be getting better.

- There is still a lot of work to be done, and I'd like to explore with PHMSA, the NTSB, the DOT IG, and the GAO ways in which we can improve the existing pipeline safety program.

- Thank you, Mr. Chairman. I look forward to hearing from the witnesses.

Testimony of Lois N. Epstein, P.E.

Senior Engineer and Oil & Gas Industry Specialist

Cook Inlet Keeper

Anchorage, Alaska

Before the Highway, Transit, and Pipelines Subcommittee
Committee on Transportation and Infrastructure

U.S. House of Representatives

Hearing on Pipeline Safety Act Reauthorization

March 16, 2006

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www.inletkeeper.org

Good morning. My name is Lois Epstein and I am a licensed engineer and an oil and gas industry specialist with Cook Inlet Keeper in Anchorage, Alaska. Cook Inlet Keeper is a nonprofit, membership organization dedicated to protecting Alaska's 47,000 square mile Cook Inlet watershed, and a member of the Waterkeeper Alliance of 130+ organizations headed by Bobby Kennedy, Jr. My background in pipeline safety includes membership since 1995 on the U.S. Department of Transportation's Technical Hazardous Liquid Pipeline Safety Standards Committee which oversees the Pipeline and Hazardous Materials Safety Administration's (PHMSA's) oil pipeline activities and rule development, testifying before Congress in 1999, 2002, and 2004 on pipeline safety, and researching and analyzing the performance of Cook Inlet's 1000+ miles of pipeline infrastructure by pipeline operator and type.[1] I have worked on environmental issues for over 20 years for two private consultants, the U.S. Environmental Protection Agency, Environmental Defense, and Cook Inlet Keeper. I also am a part-time consultant to the Pipeline Safety Trust, located in Bellingham, Washington.

My work on pipelines in Alaska allows me to see how well the policies developed in DC operate in the real-world. The Cook Inlet watershed, which includes Anchorage and encompasses an area approximately the size of Virginia, is where oil and gas first was developed commercially in Alaska beginning in the late 1950s. Cook Inlet is an extraordinarily scenic and fisheries- and wildlife-rich, region, so ensuring that fisheries and the environment remain in a near-pristine state is an important Alaskan value.

Background

The Pipeline Safety Improvement Act of 2002 was passed by Congress on November 15, 2002 following two particularly tragic pipeline accidents: in Bellingham, Washington in June 1999 and near Carlsbad, New Mexico in August 2000. The 2002 law contains some needed improvements but, like many acts of Congress, it represents a compromise among competing interests. As a result, safety will be improved, but not necessarily by as much or as fast as the public would like.

To put my presentation into context, the graphs below display the performance of the pipeline industry over time based on reported incidents and incidents/mile (the latter multiplied by appropriate factors for graphical display purposes). As you can see from the hazardous liquid pipeline data on Figure 1, reported hazardous liquid pipeline incidents dropped after 1994. 1994 is two years after Congress imposed mandatory requirements on the Office of Pipeline Safety (OPS) – now part of PHMSA – to prevent releases that impacted the environment (as opposed to releases which solely affect safety). From Figure 1, it appears that natural gas distribution pipeline incidents are trending slightly upward, while natural gas transmission pipeline incidents clearly are increasing.

[1] See *Lurking Below: Oil and Gas Pipeline Problems in the Cook Inlet Watershed*, 28 pp. plus appendices, 2002, and follow-up reports in 2003 and 2005. www.inletkeeper.org/pipelines.htm

Figure 1

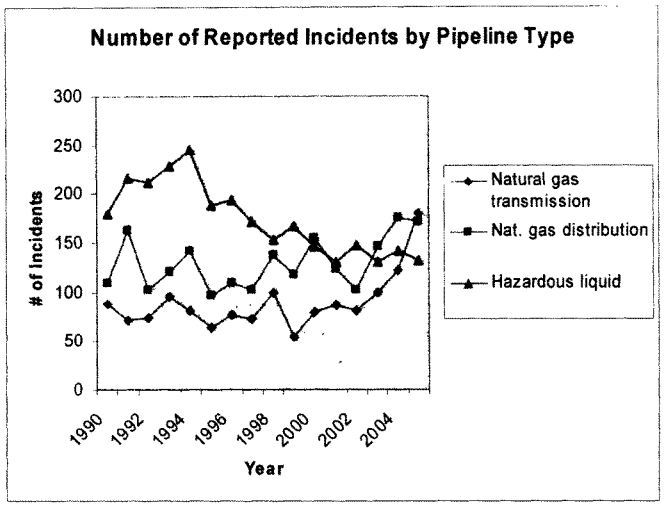


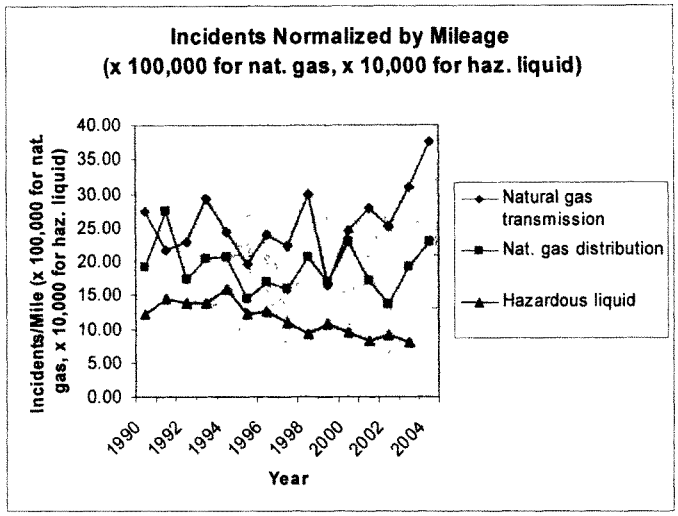
Figure 2 shows incidents divided by, or normalized by, pipeline mileage, which is a better way of measuring performance than the number of incidents alone since it accounts for changes in the number of incidents based on increased or decreased pipeline mileage. What is important to notice in Figure 2 is not the number of incidents per mile, but the trends this graph shows. The graph reinforces the improving performance of hazardous liquid pipelines, with a clear downward trend. Natural gas distribution pipelines do not show an upward or a downward trend in performance. Natural gas transmission pipelines, however, show a clear increase in the number of incidents per mile – a disturbing trend, though not surprising. As I stated in my June 15, 2004 testimony before the Senate Commerce Committee,

> The most important rule issued as a result of the 2002 law, the natural gas transmission pipeline integrity management rule published on December 15, 2003...will not reduce incidents on those lines for several years and it's unclear how much of a reduction we can expect. This is true for several reasons. First, the law requires baseline integrity assessments to occur within 10 years, with 50% of the assessments occurring within 5 years of the law's enactment; this long timeframe will delay the benefits. Second, because the rule only applies to an estimated 7% of transmission pipelines,[2] by 2007 (i.e., five years after the law's enactment) we may expect only a 3.5% reduction in incidents, though the incidents that do occur should take place in areas of lesser consequences. Third, since the rule allows the use of not-fully-proven methodologies (i.e., "direct

[2] OPS states in the preamble to the rule "that about 22,000 miles of gas transmission pipelines are located in the [High Consequence Areas] in a network of 300,000 miles of gas transmission pipeline." (68 Federal Register 69815, December 15, 2003)

assessment" and "confirmatory direct assessment"), we need to wait several years to see whether OPS' approach to this rule will result in a meaningful reduction in incidents.

Figure 2



Taking into account the different multipliers used, Figure 2 also shows that hazardous liquid transmission pipelines have a higher incident/mile rate than either type of natural gas pipeline.

Issues to Address During Reauthorization

Based on the data shown in Figures 1 and 2 and focusing my testimony particularly on how pipelines can reduce their impact on the environment, I will discuss legislative and regulatory improvements needed. With respect to legislative changes, I will discuss:

- Enforcement
- High Consequence Areas
- Pipeline Safety Information Grants

I also will discuss the following needed regulatory changes which build on existing statutory language in the following areas and/or known oil pipeline oversight problems:

- Pipeline shut-off valve location and performance standards
- Leak detection system performance standard(s)
- Removal of the "low-stress" pipeline exemption
- Providing searchable, web-based pipeline maps to the public

Enforcement. The public and, presumably, pipeline operators have very little evidence that the increased penalties contained in Section 8 of the 2002 pipeline safety law are being used and collected by PHMSA to send a message to pipeline operators that violations are both unacceptable and costly. This reality along with PHMSA's relative lack of judicial enforcement actions, its minimal use of penalties for "preventive" enforcement, and the current inability of qualified states to pursue pipeline safety enforcement actions, leads to a problematic enforcement environment for pipelines. Cook Inlet Keeper, representing the public interest community concerned about pipeline releases, proposes two modest and one substantive and significant change at the end of this section to the current pipeline safety statute in order to ensure improved enforcement accountability, visibility, and effectiveness.

As evidence of the problems with pipeline safety enforcement, consider that:

- According to the Government Accountability Office, in 2003, PHMSA proposed only 32 civil penalties with an average proposed penalty of $32,000, but assessed only 19 civil penalties with an average assessed penalty of $19,000.[3] These figures are nowhere close to the Pipeline Safety Improvement Act of 2002's increased penalties which raised penalty limits from $25,000 per daily violation with a $500,000 maximum to $100,000 per daily violation with a $1,000,000 maximum.
- As discussed in my response to follow-up questions from Senator Breaux after the June 15, 2004 Senate Commerce Committee hearing (relevant excerpts in the Attachment), PHMSA needs to pursue several, high-profile preventive enforcement actions related to pipeline safety requirements *in instances where there has not been a release*. These include violations of corrosion prevention requirements, improper performance of direct assessment (a less-proven means of integrity assessment than smart pigging, which PHMSA allows natural gas transmission pipelines to use), exposed pipelines, poorly performed repairs, etc. While PHMSA occasionally pursues enforcement actions related to these types of violations, practically no one except the violator knows that it has done so because penalties are low, media attention is limited or non-existent, it is hidden on the PHMSA website if it is visible at all, etc.
- PHMSA can pursue enforcement actions for interstate pipeline violations but not qualified state regulators, though the large number of state regulators can assist in inspection and analysis of violations. In fiscal year 2003, PHMSA employed approximately 75 inspectors[4] who were responsible for oversight of roughly 6,000 miles of interstate transmission pipeline each, a very large number of miles per inspector. Additionally, federal inspectors may not be as aware of certain technical, geographic, and even management issues associated with interstate pipelines as state regulators because of state officials' proximity to the lines.
- The Bellingham, WA proposed penalty in 2000 was $3.02 million, which was negotiated down to $250,000 nearly five years later. The Carlsbad, NM proposed penalty in 2001 was $2.52 million however, to date, no penalty has been collected.

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[3] *Pipeline Safety: Management of the Office of Pipeline Safety's Enforcement Program Needs Further Strengthening*, U.S. Government Accountability Office, GAO-04-801, July 2004, p. 26.

[4] GAO, op. cit., p. 12.

- In contrast to PHMSA, the U.S. Environmental Protection Agency (EPA) has issued and collected several multi-million dollar penalties from pipeline companies for their releases (of course, EPA cannot use its capabilities to enforce against natural gas pipeline releases). These EPA penalties are shown in the following table:

Company	Date	Penalty	Summary of Violations
Mobil E & P	8/04	$5.5 mill.	Oil and produced water releases, inadequate prevention and control, failure to notify EPA of releases
Olympic Pipeline/Shell	1/03	>$5 mill. - Olympic/ >$10 mill. - Shell	> 230,000 gal. of gasoline released, 3 human deaths, over 100,000 fish killed
Colonial Pipeline	4/03	$34 mill.	1.45 mill. gal. of oil released in 5 states from 7 spills (from corrosion, mechanical damage, and operator error)
ExxonMobil	9/02	$4.7 mill.	Approx. 75,000 gal. of crude oil released, fouling a river and nearby areas
Koch Industries, Inc.	1/00	>$35 mill.	Approx. 3 mill. gal. of oil released in 6 states (from corrosion of pipelines in rural areas)

While pipelines are nowhere near as deadly or injurious as mining, a recent statement in the New York Times about the Mine Safety and Health Administration is nevertheless applicable to PHMSA's enforcement efforts, "The agency keeps talking about issuing more fines, but it doesn't matter much," said Bruce Dial, a former inspector for the mine safety agency. "The number of citations means nothing when the citations are small, negotiable and most often uncollected."[5]

As a result of the ongoing problems with PHMSA enforcement, Cook Inlet Keeper recommends that the pipeline safety statute be amended to:

1. require PHMSA to provide web-based data on federal and state pipeline inspection and enforcement activities, including basic information such as pipeline segment inspected, inspection date, type of inspection, concerns noted, and corrections required;
2. require PHMSA to submit an annual report to Congress on civil and criminal pipeline safety enforcement, including penalty issuance, collection, and reasons for significant penalty reductions; and,
3. allow qualified state pipeline safety officials to pursue enforcement actions against interstate pipeline operators. This recommendation, while significant, is necessary to maximize use of state and federal regulatory resources in the service of pipeline safety.

[5] "U.S. Easing Fines for Mine Owners on Safety Flaws: Penalties Not Collected," Ian Urbina and Andrew W. Lehren, New York Times, March 2, 2006, p. A21.

High Consequence Areas. Those portions of transmission pipelines which could affect High Consequence Areas (HCAs) are subject to the greatest regulatory oversight, i.e., the hazardous liquid (or oil) and natural gas transmission pipeline integrity management rules. Currently, HCAs for hazardous liquid transmission pipelines cover commercially navigable waterways, high population areas, and drinking water and ecological resources. HCAs for natural gas transmission pipelines cover high-density and other frequently-populated areas. According to industry-submitted data, approximately 40% of hazardous liquid transmission lines could affect HCAs, but over 80% of hazardous liquid transmission pipelines likely will be smart-pigged or pressure-tested for pipeline integrity.[6] If, in fact, over 80% of the hazardous liquid transmission lines meet the standards of the integrity management rule (including post-pigging repairs), that is an excellent step toward improved pipeline safety.

There are portions of hazardous liquid transmission pipelines that do not fall within the 40% of the lines that could affect HCAs which nevertheless should have the protection afforded by the integrity management rule. Congress needs to direct PHMSA to expand the definition of HCAs to include the following areas – parks and refuges, and fishable and swimmable waters.[7] For reasons that are obvious to most anyone, parks and refuges and fishable and swimmable waters are areas of unusually high environmental sensitivity. At the time of HCA rule development, OPS took a narrow view of HCAs, partly for resource reasons and partly because of the need to issue the rule in a timely fashion. At this point in time, PHMSA is better able to expand the HCA rule to cover parks and refuges and fishable and swimmable waters.

Additionally, in mandating identification of HCAs in the 1992 statute, Congress did not include language about HCAs covering culturally and historically significant resources. This is a clear gap in the current statute, which Congress now needs to address.

Pipeline Safety Information Grants. Section 9 of the 2002 law states that:

> The Secretary of Transportation may make grants for technical assistance to local communities and groups of individuals (not including for-profit entities) relating to the safety of pipeline facilities in local communities...The amount of any grant under this section may not exceed $50,000 for a single grant recipient. The Secretary shall establish appropriate procedures to ensure the proper use of funds provided under this section. (§ 60130(a)(1))

To date, OPS has not established any such procedures, nor has it had any success obtaining appropriated funds for this purpose. As time goes on, there are missed opportunities for use of these funds, e.g., such funds might have helped community organizations understand the technical and regulatory issues associated with the Tucson gasoline pipeline accident in July 2003, as well as state-wide organizations working on the substantial Kentucky and Ohio River crude oil pipeline spill of January 2005. Likewise, such grants are needed to assist public

[6] PHMSA Pipeline Integrity Workshop, Houston, Texas, May 17-18, 2005.

[7] The federal Clean Water Act goals are fishable, swimmable, and drinkable waters. HCAs currently ensure only drinkable waters.

interest groups in commenting on technical regulations and to participate in technical standards development.

Cook Inlet Keeper and other public interest groups urge Congress to ensure that this section of the 2002 law is carried out as intended.

Pipeline shut-off valve location and performance standards. In 1992, 1996, and 2002, Congress required OPS to "survey and assess the effectiveness of emergency flow restricting devices…to detect and locate hazardous liquid pipeline ruptures and minimize product releases."[8] Following this analysis, Congress required OPS to "prescribe regulations on the circumstances under which an operator of a hazardous liquid pipeline facility must use an emergency flow restricting device (emphasis added)."[9]

OPS/PHMSA never issued a formal analysis on emergency flow restricting device (EFRD) effectiveness. Instead, in its hazardous liquid pipeline integrity management rule,[10] OPS rejected the comments of the National Transportation Safety Board, the U.S. Environmental Protection Agency, the Lower Colorado River Authority, the City of Austin, and Environmental Defense and chose to leave EFRD decisions up to pipeline operators (after listing in the rule various criteria for operators to consider). It is unlikely such an approach to EFRD use meets Congressional intent, partly because such an approach is virtually unenforceable and not protective of important environmental assets such as rivers and lakes. At this time, Congress needs to reiterate its previous mandate to PHMSA on EFRD use.

Leak detection system performance standard(s). In its hazardous liquid transmission pipeline integrity management rule, OPS requires that operators have a means to detect leaks, but there are no performance standards for such a system. Similar to the situation for EFRD use, OPS listed in the rule various criteria for operators to consider when selecting such a device.[11] Again, such an approach is virtually unenforceable and not protective of important environmental assets such as rivers and lakes. Thus, Congress needs to direct PHMSA to issue a performance standard(s) for leak detection systems used by hazardous liquid pipeline operators to prevent damage to HCAs.

As one model, the state of Alaska has a flow-based performance standard for crude oil transmission pipelines. This regulation requires that a crude oil transmission pipeline have a leak detection system which would detect a loss of 1% of daily throughput.[12] While the percentage may not be the one PHMSA would choose (lower would be better), a flow-based performance standard would be enforceable and would better protect environmental assets than PHMSA's current regulation.

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[8] 49 USC 60102(j)(1).
[9] 49 USC 60102(j)(2).

[10] 49 CFR 195.452(i)(4).

[11] 49 CFR 195.452(i)(3).

[12] 18 AAC 75.055(a).

Removal of the "low-stress" pipeline exemption. Two weeks ago on March 2, 2006, the largest oil spill to date on the North Slope of Alaska of 200,000 gallons or more was discovered at a caribou crossing. This spill came from a BP crude oil transmission pipeline which was exempt from PHMSA regulations because it was a "low-stress" hazardous liquid pipeline that met the following criteria: it did not transport a highly volatile liquid (HVL), it was located in a rural area, and it was outside a waterway currently used for commercial navigation.[13] Moreover, according to BP spokesperson Daren Beaudo, the pipeline "had known interior and exterior corrosion damage. Because of this, BP had downgraded the maximum pressure allowed within the line..."[14] Figure 3 shows the extensive cleanup operation now ongoing at this site.

Figure 3

Oil recovery efforts, March 6, 2006, Unified Command photo.

It's clear from Figure 3 that "low-stress" hazardous liquid transmission pipelines, regardless of their location, can cause significant damage when there is a release. Congress recognized this fact and included the following provision in the pipeline safety law:

[13] 49 CFR 195.1(a)(3).

[14] "Workers respond to Prudhoe spill: Leak may be one of largest in 29 years of production," Wesley Loy, Anchorage Daily News, March 4, 2006.

> **Prohibition against low internal stress exception.** The Secretary may not provide an exception to this chapter for a hazardous liquid pipeline facility only because the facility operates at low internal stress.[15]

To provide necessary protection of the environment, Congress now needs to direct PHMSA to remove the "low-stress" hazardous liquid pipeline exemption from the regulations, perhaps retaining only the "low-stress" exemption for HVL lines.

Providing searchable, web-based pipeline maps to the public. Pipelines do not require periodic renewals of operating permits so the public (and the media) has almost no knowledge of nearby pipelines except during a siting process or following a release. Providing maps to the public on the web, at whatever scale is detailed enough to make them useful to local communities but not so detailed that they provide security-relevant information, is an essential first step to promote public knowledge about pipelines. Since pipelines already have right-of-way markers, posting pipeline locations on the web does not provide information which cannot be obtained in another manner. Additionally, doing so will enable the public to help regulators identify HCAs locally – I have been told that parts of the Cook Inlet watershed are considered HCAs by some pipeline operators and not by other operators, however as a member of the public I cannot view the maps to weigh-in on this question.

Summary

In conclusion, Congress should pursue the following items during the 2006 reauthorization of the pipeline safety statute:

1. Provide web-based data on federal and state pipeline inspection and enforcement activities and an annual report to Congress on civil and criminal enforcement including penalty issuance and collection, and allow state regulators to pursue enforcement on interstate pipelines
2. Expand High Consequence Areas so they include cultural and historic sites (requires legislation), and parks and refuges and fishable and swimmable waters (requires regulatory changes)
3. Reauthorize and ensure that Congress appropriates money for Pipeline Safety Information Grants

Additionally, Congress needs to ensure that PHMSA makes the following regulatory and programmatic changes:

1. Requiring pipeline shut-off valve location and performance standards
2. Issuing leak detection system performance standard(s)
3. Removing the "low-stress" pipeline exemption (for non-HVL liquids)
4. Providing searchable, web-based pipeline maps to the public

Thank you very much for your interest in pipeline safety. Please feel free to contact me at any time with your questions or comments.

[15] 49 USC 60102(k).

ATTACHMENT

Senator John Breaux
Questions for the Pipeline Safety Oversight Hearing
Senate Committee on Commerce, Science and Transportation
June 15, 2004

(Excerpt)

Ms. Epstein, Cook Inlet Keeper

1. In your testimony, you discuss the need for "preventive enforcement actions to deter potential violators". Could you please provide us with a few examples of how this might work? What type of violations would be appropriate to address with preventive enforcement actions? Do other regulatory agencies regularly use preventive enforcement?

Response: There are several sections of the pipeline safety regulations that Office of Pipeline Safety (OPS) enforcement personnel should pay particular attention to in order to prevent releases. Enforcement of these "preventive" regulations would supplement OPS' non-preventive enforcement actions, which are enforcement actions that take place after releases have occurred.

In addition to OPS' current enforcement emphasis on proper implementation of its integrity management programs for both hazardous liquid and natural gas transmission pipelines, OPS preventive enforcement actions should address the following specific regulatory violations:

- Inadequate external and internal corrosion prevention (49 CFR 192, Subpart I; 49 CFR 195, Subpart H). Corrosion caused 24.5% of the natural gas transmission pipeline releases and 24.4% of the hazardous liquid transmission pipeline releases in 2003.
- Inadequate internal inspection testing and/or analysis of test results.
- Improper performance of direct assessment. Because direct assessment allows great operator flexibility and is a lower-cost and less-proven alternative to smart-pigging, OPS must ensure that operators perform direct assessments properly for them to have value in preventing releases.
- Exposed pipelines (49 CFR 192.327 and 49 CFR 195.248).
- Poorly-done repairs.

My point is not that OPS never pursues enforcement actions related to these types of violations – it does on occasion, but practically no one except the violator knows that it has done so. OPS needs to pursue several enforcement actions in each of these regulatory categories, imposing relatively high penalties for non-compliance and with high media exposure. By doing so, all pipeline operators would realize they are at risk of receiving similar high penalties for similar violations.

As an example of another agency pursuing preventive enforcement for oil releases, I refer the reader to the U.S. Environmental Protection Agency's (EPA's) Underground Storage Tank 1998 Deadline Enforcement Strategy at

http://www.epa.gov/Compliance/resources/policies/civil/rcra/storagetank-mem.pdf (Attachment A). Underground storage tank (UST) system releases derive from both tanks and their associated piping, so there is a strong correspondence with OPS' pipeline regulations. The UST enforcement strategy states that "sub-standard UST systems should not operate after December 22, 1998. Those who delay [compliance] can be subject to monetary penalties of up to $11,000 per day for each violation throughout their period of non-compliance" (p. 1). The strategy also states that "In pursuit of its goal, EPA will use all the enforcement tools available for dealing with UST violations, including administrative and judicial enforcement actions. Judicial enforcement actions are particularly appropriate in situations involving recalcitrant parties" (p. 3). A clearly articulated preventive enforcement strategy – available to both pipeline operators and the public on OPS' website – like the UST enforcement strategy, would be very beneficial to prevent pipeline releases.

2. Can you discuss the difference between OPS's enforcement approach and the EPA's, which I believe you are familiar with? Do you believe that OPS's enforcement strategy is less effective than EPA's in influencing industry's behavior?

Response: There are two major differences between EPA's enforcement strategies and OPS' enforcement strategies: 1. EPA pursues costly (to the operator), publicly-visible, and more-certain enforcement actions against the regulated community, which OPS does not do, and 2. EPA delegates enforcement to states if states are qualified to run their own enforcement programs, which OPS does not do for interstate pipelines because of an existing statutory prohibition.[16] For both these reasons, OPS' enforcement strategy is less effective than EPA's in improving industry's performance. These items are discussed below.

1. Costly, visible, and certain enforcement – The U.S. Government Accountability Office (GAO) recently issued a report on OPS' enforcement program that analyzed the size of the civil penalties levied by OPS. According to GAO, "the average civil penalty that OPS assessed from 2000 through 2003 was about $29,000"[17] Such penalties are far less than Congress envisioned when it raised the limits for OPS penalties in the Pipeline Safety Improvement Act of 2002 from $25,000 per daily violation with a $500,000 maximum to $100,000 per daily violation with a $1,000,000 maximum.

While I do not have data on the average civil penalty from EPA – and I encourage Congress or OPS to pursue that information – I can provide examples of pipeline releases that resulted in far higher (*more than 100 times higher*) penalties from EPA than from OPS for similar pipeline problems. These examples are shown in the following table, with more details provided in Attachment B:

[16] 49 USC § 60104(c).

[17] *Pipeline Safety: Management of the Office of Pipeline Safety's Enforcement Program Needs Further Strengthening*, U.S. Government Accountability Office, GAO-04-801, July 2004, p. 4.

Recent EPA Civil Penalties/Settlements for Pipeline Releases

Company	Date	Penalty	Summary of Violations
Mobil E & P	8/04	$5.5 mill.	Oil and produced water releases, inadequate prevention and control, failure to notify EPA of releases
Olympic Pipeline/Shell	1/03	>$5 mill. - Olympic/ >$10 mill. – Shell	> 230,000 gal. of gasoline released, 3 human deaths, over 100,000 fish killed
Colonial Pipeline	4/03	$34 mill.	1.45 mill. gal. of oil released in 5 states from 7 spills (from corrosion, mechanical damage, and operator error)
ExxonMobil	9/02	$4.7 mill.	Approx. 75,000 gal. of crude oil released, fouling a river and nearby areas
Koch Industries, Inc.	1/00	>$35 mill.	Approx. 3 mill. gal. of oil released in 6 states (from corrosion of pipelines in rural areas)

EPA penalties also are far more visible to the public, which make them more effective. First, EPA distributes press releases for its large penalties, which OPS has begun to do, and second, any EPA penalties greater than $100,000 must be reported to the Securities and Exchange Commission under 17 CFR 229.103. The latter requirement means that company investors are aware of the violations and the penalty, which can provide a strong deterrent effect against additional violations.[18]

Last, EPA's numerous civil penalty policies posted on the Internet at http://cfpub.epa.gov/compliance/resources/policies/civil/penalty/ help ensure uniform and thus more certain enforcement against violators.

2. Federal vs. state enforcement – A simple description of EPA-based environmental enforcement is that qualified states are delegated primary enforcement responsibilities for environmental laws even as EPA retains the right to pursue enforcement actions. In contrast, OPS alone can pursue enforcement actions for interstate pipeline violations, although certain states assist in inspection and analysis of violations. While the EPA system is not perfect and is similar to OPS' relationship with states with delegated responsibilities to oversee and enforce violations for intrastate pipelines, it is far superior to the current federal/state division of responsibilities for interstate pipelines.

According to the new GAO report, the states have approximately 400 pipeline safety inspectors and OPS has approximately 75 inspectors.[19] Natural gas and hazardous liquid transmission pipelines (327,000 miles and 161,000 miles, respectively) primarily are interstate. As a result, the typical federal inspector is responsible for oversight of approximately 6,500 miles of

[18] Note that GAO did not consider this deterrent effect in its analysis of the effectiveness of OPS penalties.

[19] GAO, op. cit., p. 12.

transmission pipeline. Additionally, federal inspectors frequently are not as aware of certain technical, geographic, and even management issues associated with interstate pipelines as state pipeline safety officials are because of their proximity to the lines. As a result of limited federal oversight resources and the federal lack of familiarity with certain interstate pipeline concerns, it would be beneficial to change current law and allow qualified state pipeline safety officials to pursue enforcement actions against interstate pipeline operators.

A final problem with the current federal/state interstate pipeline enforcement relationship is that the states' inability to pursue enforcement actions against interstate pipeline operators leads to frustrated state pipeline safety and elected officials. GAO spoke with one state pipeline safety official who stated that after his agency "alerted OPS to noncompliant activity at one company, it found the same violation 2 years later during the next scheduled inspection cycle."[20]

[20] Ibid., p.53.

Rep. Rick Larsen Opening Statement – Pipeline Safety Oversight Hearing, March 16, 2006

I want to thank the Chairman for holding this hearing today, and I'd like to thank the witnesses for being here to share their expertise.

Pipeline safety is of great importance to me and my constituents in Washington's 2nd Congressional district.

On June 10, 1999, a rupture in a liquid fuel line resulted in a massive explosion in my district in Bellingham, Washington. The fuel line rupture sent more than a quarter of a million gallons of gasoline into Whatcom Creek. The gasoline ignited, sending a fireball down the creek. This fireball claimed the lives of two 10-year-old boys and an 18-year-old young man.

This was a tragedy that could have been, and should have been, prevented. I am deeply committed to the families of these victims, and the citizens of Whatcom County who helped lead the fight for increased pipeline regulations and safety standards that will prevent future catastrophes. Carl Weimer, from the Pipeline Safety Trust, is one of those dedicated individuals and I'm happy to have him here today.

This committee did good work on the last reauthorization of the Pipeline Safety Enhancement Act back in 2002. It was a proud moment for me to be able to say to my constituents that we had increased accountability and strengthened the reliability of our nation's pipeline infrastructure.

With that 2002 law, we increased penalty fines; improved operator qualifications; provided whistle blower protection; improved pipeline testing timelines; and allowed for state oversight.

Since then, the law seems to be working well and oversight and safety have gotten better, largely due to PHMSA's work. However, we must remain vigilant and I'm interested in hearing from our witnesses today on where they see room for improvement.

As we begin the process of reauthorization, I hope we can all work together on this common goal.

I strongly encourage the committee to set an expeditious timeline to ensure this important bill is reauthorized this year.

Thank you, Mr. Chairman. And with that I conclude my remarks.

BEFORE THE
UNITED STATES HOUSE OF REPRESENTATIVES

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
HIGHWAY, TRANSIT, AND PIPELINES SUBCOMMITTEE

TESTIMONY OF THE HONORABLE DONALD L. MASON
COMMISSIONER, PUBLIC UTILITIES COMMISSION OF OHIO
ON BEHALF OF THE
NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS

ON

"Pipeline Safety"

March 16, 2006

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Good Afternoon Mr. Chairman and Members of the Subcommittee.

I am Donald L. Mason, a commissioner at the Public Utilities Commission of Ohio (PUCO). I have served in that capacity since 1998. I also serve as the Chair of the Committee on Gas for the National Association of Regulatory Utility Commissioners (NARUC). As Chairman of the NARUC Committee that focuses on some of the issues that are the subject of today's hearing, I am testifying today on behalf of that organization. In addition, my testimony reflects my own views and those of the PUCO as well as the comments of the National Association of Pipeline Safety Representatives (NAPSR). On behalf of NARUC, NAPSR and the PUCO, I very much appreciate the opportunity to appear before you this morning.

NARUC is a quasi-governmental, non-profit organization founded in 1889. Its membership includes the State public utility commissions serving all States and territories. NARUC's mission is to serve the public interest by improving the quality and effectiveness of public utility regulation. NARUC's members regulate the retail rates and services of electric, gas, water, and telephone utilities. We are obligated under the laws of our respective States to ensure the establishment and maintenance of such utility services as may be required by the public convenience and necessity and to ensure that such services are provided under rates and subject to terms and conditions of service that are just, reasonable, and non-discriminatory. NAPSR is a non-profit organization of state pipeline safety directors, mangers, inspectors and technical personnel who serve to support, encourage, develop and enhance pipeline safety.

This morning I will focus on what NARUC believes are the five main issues facing the States with regard to the pipeline safety program.

1. Grant Funding Must Increase To Meet Resource Requirements Of State Pipeline Safety Programs

State pipeline safety agencies are closely connected to the ultimate consumers of natural gas and liquid hydrocarbons through the oversight of facilities that distribute products near or at the end of the transportation supply chain. These consumers ultimately pay the Pipeline Hazardous Material Safety Administration (PHMSA) pipeline safety user fees that are passed on by natural gas and hazardous liquid transmission companies. State pipeline safety program funding is heavily dependent upon PHMSA's proper sharing of these user fees. State pipeline safety programs represent approximately 80 percent of the federal/State inspector work force that oversees pipelines nationwide. Without adequate funding, States will not be able to conduct the required inspections of the existing pipeline facilities or new pipeline construction projects, and encourage compliance with new and existing safety regulations. Grant funds are an effective way to leverage resources and increase total inspection capability since States match or exceed federal funding provided for pipeline safety.

However, federal base grants to States who administer the gas and liquid pipeline safety program are not keeping up with their actual expenditures. The Pipeline Safety Act provides for States to receive a federal grant up to 50 percent of actual expenses for their safety programs. For example, in 2005 the States estimated that the total cost of their portion of the program to be approximately $36.2 million. Due to the 50 percent limit imposed in the Pipeline Safety Act, the

most the States can be granted to cover their costs was $18.1 million. However, the actual base funding grant level that was given to the States was $15.9 million.

State pipeline safety programs have jurisdiction over 222,000 miles of natural gas & liquid transmission and gathering lines, 1.15 million miles of natural gas distribution pipelines and 764,000 miles of service lines. Therefore, States are responsible for over 2.14 million of the total 2.41 million miles of pipe (PHMSA oversees 272,000 miles), which represents 89 percent of the total pipelines in the United States. However, while the States are responsible for 89 percent of the pipelines, in FY 2005 they only received 28% of the total dollars appropriated by Congress for pipeline safety. Unless Congress recognizes the need for additional State inspection resources this funding shortfall will continue to widen in the future, jeopardizing the States' working relationship and partnership agreement with PHMSA creating a potential public safety concern.

The responsibility for State pipeline safety programs is carried out by approximately 325 qualified engineers and inspectors who represent more than 80 percent of the State/federal inspection workforce that are currently inspecting natural gas and liquid pipeline operators on a daily basis.

State inspectors are the "first line of defense" at the community level to promote pipeline safety, underground utility damage prevention, public education and awareness regarding pipelines, interface with emergency management agencies on security and reliable energy issues. Daily activities include inspection of existing facilities, renewal or new pipeline construction projects, review of safety maintenance and operations records, drug and alcohol records, compliance and enforcement actions, training and education programs for operator and public, and accident investigation of reportable incidents.

State inspectors are required to attend nine mandatory training and computer based training (CBT) courses provided by PHMSA's Transportation Safety Institute within three years of employment with a State agency and refresher training required within 7 years of their attendance to the course. These one week courses already impact State expenditures and resources for the program, however, PHMSA has recently added two additional courses that gas safety engineers must attend in order to act as their agent and participate in integrity management audits. We believe all the courses are positive. It seems, however, the federal government is providing additional mandates while not funding the program at a level commensurate with the existing responsibilities, let alone any additional requirements.

2. Congress Should Increase The Current $1 Million Damage Prevention Grant To States To $2.5 Million

For several years now, Congress has funded a $1 million grant to assist all States with their existing excavation damage prevention programs. Every year, PHMSA receives more than $2.4 million in requests from States to support and continue their existing prevention efforts. NARUC is respectfully requesting that Congress increase this very important grant to at least $2.5 million to better support existing damage prevention efforts.

One-Call grants have assisted State pipeline safety personnel in their communities to educate local officials, excavators, utilities and the public on the importance of preventing damage to all underground facilities. States support and participate in the efforts of the Common Ground Alliance through committees and assistance in the development of best practices and educational programs. The One-Call grant to States provides an opportunity for an agency to personalize the message on damage prevention and encourage changes in their underground utility damage prevention law to meet federal guidelines. In March 2005, with NARUC's strong support, the Federal Communications Commission designated the 811 number as the national abbreviated dialing code for One-Call systems to comply with the Pipeline Safety Act of 2002. The three-digit number 811 will be easy to remember and use by excavators to help reduce damages to all underground facilities. States are approving applications submitted to their agencies by the local One-Call organization for the assignment of the 811 number. The States will need funds to help promote the awareness of this service. State programs requested $2.2 million in One-Call grant funds during the last application period.

3. Distribution Integrity Management Program Should Provide Additional Safety Improvement.

NARUC is of the opinion that implementing gas distribution integrity management consistent with the findings and conclusions contained in the "Integrity Management for Gas Distribution" report released in December of 2005 and prepared by representatives from NARUC, other government agencies, industry, and public joint work/study groups should provide additional safety improvement. Specifically, this study found that the most useful option for implementing distribution integrity management requirements is a high-level flexible federal regulation in conjunction with implementation guidance developed by the government and industry.

The report finds that a high-level flexible rule requiring distribution operators to formally develop and implement integrity management plans that address the key elements outlined by Department of Transportation Inspector General; understand the infrastructure, identify and characterize the threats, and determine how best to manage the known risks, should be sufficient to address distribution safety enhancements. NARUC members participated in each of the four task teams in the development of the report and on going development of guidance material to assist operators, small and large, in compliance with the proposed rule.

This report was too lengthy to be included in my testimony, however it can be found at:

http://www.cycla.com/opsiswc/docs/S8/P0068/DIMP_Phase1Report_Final.pdf

4. NARUC Supports 80% Grant Funding For Pipeline Safety Programs That Enforce Excavation Damage Prevention

NARUC recommends that the present 50 percent reimbursement ceiling contained in federal statute be changed to 80 percent. A State pipeline safety program's cost to enforce damage prevention laws is not presently considered to be allowable costs for the Base Grant. As noted in the Integrity Management for Gas Distribution Report to PHMSA, excavation damage to pipelines was considerably less in States where State pipeline safety programs enforced damage

prevention laws. States should be encouraged to place pipeline damage prevention responsibilities within State pipeline safety programs. The cost associated with implementing effective damage prevention programs along with additional resources needed to carry out the core pipeline safety programs justifies the 80 percent funding. This funding level is consistent with other non-pipeline safety grants to States administered by DOT. Providing cost reimbursement of 80 percent to State pipeline programs will allow States to accomplish their pipeline safety responsibilities and provide an important incentive for States to implement effective damage prevention programs, distribution integrity inspections and other mandated programs thus improving the safety of the nation's gas distribution infrastructure.

In the Integrity Management for Gas Distribution Report, the Excavation Damage Prevention Task Group found excavation damage by far poses the single greatest threat to distribution system integrity and is thus the most significant opportunity for distribution pipeline safety improvements. Reducing the threat of excavation damage requires affecting the behavior of persons not subject to the jurisdiction of pipeline safety authorities (i.e. excavators). Federal legislation is needed to support the development and implementation of effective comprehensive State damage prevention programs. Data from the Task Group report over the last 5 years has demonstrated that States with comprehensive damage prevention programs that include effective enforcement experience results in substantially lower rates of excavation damage to pipeline facilities than programs that do not. The lower rate directly translates to a substantially lower risk of serious incidents, accidents, and consequences resulting from excavation damage to pipelines. PHMSA's reaction to the report recommendations has been positive, including the view that the agency should consider providing seed funding to States as an incentive to develop stronger damage prevention programs. The program would be a separate grant fund, apart from funding already being provided under the matching grants or One-Call programs and may be entitled, Excavation Damage Prevention Grant. Once the State takes steps to implement the program, which would be similar to the damage prevention enforcement programs in Virginia and four other States, it would be granted additional funds via the matching grants program. Obviously, the new programs will need funding up to 80% at the beginning for staffing levels to respond to calls and investigations of damages by outside parties. Such funding may be reduced as outside damages are lowered by enforcement. The funds should be provided to State agencies having experience and knowledge in underground utility damage prevention for pipeline safety. The Task Group reviewed several approaches to provide incentives for this program and developed proposed legislation which I have included in this testimony as an attachment.

5. Federally Mandated Installation Of Excess Flow Valves (EFVs) On Service Lines To Customers Is Not Necessary

A survey performed at the request of NARUC by the National Regulatory Research Institute in July of 2005 supports the majority of State regulatory agencies which are satisfied that operators are installing them where they can be effective. NARUC passed resolutions encouraging federal agencies and legislators to recognize that State officials are well positioned to have knowledge of the operational conditions and circumstances for the installation of these devices and understand that a decision whether or not to install the devices is best determined by the affected State regulatory body.

Distribution Integrity Management Program steering committee members submitted formal comments to PHSMA consistent with other organizations on the installation of these valves. Operational experience verifies that of the thousands of EFVs installed in the past, very few have had false activations. When properly specified and installed, EFVs can reliably interrupt the gas flow under certain conditions when there is an excess flow in the service line. These valves are primarily installed in new and replaced service lines on single family residences where operating pressure is greater than 10 psig. Addressing safety requires an overall approach that allows consideration of all tools and technologies for the various threats to distribution pipelines. EFVs can be used to address the threat of excavation damage for single family residential lines. There may be other tools that can equally or more effectively address this same threat. Therefore, rather than a blanket mandate for installation of EFVs, a provision of Distribution Integrity Management should state that each operator consider the use of EFVs on its own operating system.

Mr. Chairman and members of the Subcommittee, this concludes my remarks. Thank you again for the opportunity to appear before you today and share these views on a most important issue. I will be happy to address any question you may have.

ATTACHMENT

Draft Federal Legislation

§ 60105. State pipeline safety program certifications

Subsection (b) of section 60105 is amended by revising paragraph (b)(4) to read as follows:

"(4) has or will adopt, within 36 months of [the date of enactment of this amendment], a program designed to prevent damage by excavation, demolition, tunneling, or construction activity to the pipeline facilities to which the certification applies that meets the requirements of section 601XX."

(i) If a state fails to develop and implement an excavation damage prevention program in accordance with item (4), above, the Secretary shall take any action deemed appropriate to ensure an effective damage prevention program within that state.

(ii) Annually, if a state can demonstrate to the Secretary that it has taken all reasonable actions to implement such a program without success, funding for the remainder of its pipeline safety program shall not be affected.

§ 601XX. State damage prevention programs

(a) Minimum standards. In order to qualify for a grant under this section, each State authority (including a municipality if the agreement applies to intrastate gas pipeline transportation) having an annual certification in accordance with section 60105 or an agreement in accordance with section 60106 shall have an effective damage prevention program that, at a minimum, includes the following elements:

(1) Effective communication between operators and excavators- Each state program shall provide for appropriate participation by operators, excavators, and other stakeholders in the development and implementation of methods for establishing and maintaining effective communications between stakeholders from receipt of an excavation notification until successful completion of the excavation, as appropriate.

(2) Fostering support and partnership of stakeholders- Each state program shall include a process for fostering and ensuring the support and partnership of stakeholders including excavators, operators, locators, designers, and local government in all phases of the program.

(3) Operator's use of performance measures – Each state program shall include a process for reviewing the adequacy of a pipeline operator's internal performance measures regarding persons performing locating services and quality assurance programs.

(4) Partnership in employee training – Each state program shall provide for appropriate participation by operators, excavators, and other stakeholders in the

development and implementation of effective employee training programs to ensure that operators, the one-call center, the enforcing agency and the excavators have partnered to design and implement training for operators,' excavators' and locators' employees.

(5) Partnership in public education – Each state program shall include a process for fostering and ensuring active participation by all stakeholders in public education for damage prevention activities.

(6) Dispute resolution process – Each state program shall include a process for resolving disputes that defines the state authority's role as a partner and facilitator to resolve issues.

(7) Fair and consistent enforcement of the law- Each state program shall provide for the enforcement of its damage prevention laws and regulations for all aspects of the excavation process including public education. The enforcement program must include the use of civil penalties for violations assessable by the appropriate state authority.

(8) Use of technology to improve all parts of the process – Each state program shall include a process for fostering and promoting the use, by all appropriate stakeholders, of improving technologies that may enhance communications, locate capability, and performance tracking.

(9) Analysis of data to continually evaluate/improve program effectiveness – Each state program shall include a process for review and analysis of the effectiveness of each program element and include a process for implementing improvements identified by such program reviews.

(b) Application. If a State authority files an application for a grant under this section not later than September 30 of a calendar year, the Secretary of Transportation shall review that State's damage prevention program to determine its effectiveness. For programs determined to be effective, the Secretary shall pay 80 percent of the cost of the personnel, equipment, and activities the authority reasonably requires during the next calendar year to carry out an effective damage prevention enforcement program as defined in (a) of this section.

(c) Authorization of Appropriations. There is authorized to be appropriated to the Secretary for carrying out this section [the dollar amount equal to the 80% referenced in (b) above] for each of the fiscal years 2006 through 2010. Such funds shall remain available until expended. Any funds appropriated to carry out this section shall be derived from general revenues and shall not be derived from user fees collected under section 60301.

UNITED STATES DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION

Oversight Hearing: Progress in Enhancing Pipeline Safety

Before the Subcommittee on Highways, Transit and Pipelines
Committee on Transportation and Infrastructure
United States House of Representatives

Written Statement of Brigham A. McCown
Acting Administrator
Pipeline & Hazardous Materials Safety Administration
U.S. Department Of Transportation

Expected Delivery 10:00 a.m. EST
March 16, 2005

STATEMENT OF BRIGHAM A. MCCOWN
ACTING ADMINISTRATOR & DEPUTY ADMINISTRATOR
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
U.S. DEPARTMENT OF TRANSPORTATION
BEFORE THE
SUBCOMMITTEE ON HIGHWAYS, TRANSIT AND PIPELINES
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
UNITED STATES HOUSE OF REPRESENTATIVES

March 16, 2006

Good morning, Mr. Chairman. Thank you for inviting the department to testify today before your Subcommittee to provide you and the other members an update on the successes of the Department's pipeline safety program. With me today is Stacey Gerard, who is currently serving in dual roles as the Pipeline and Hazardous Materials Safety Administration's (PHMSA) Acting Assistant Administrator/Chief Safety Officer as well as the agency's Associate Administrator for Pipeline Safety.

This opportunity to discuss our progress in improving the safety and reliability of the Nation's pipeline infrastructure is welcome. The 2.3 million miles of natural gas and hazardous liquid pipelines carry nearly two-thirds of the energy consumed by our Nation. As such, their role in transportation is vitally important. Pipelines are our energy highways, and they remain the safest and most efficient way to transport the enormous quantities of natural gas and hazardous liquids America uses each day. We greatly appreciate this subcommittee's attention to our efforts in advancing pipeline safety. We are achieving results – pipeline incidents of severe consequences to people are trending steadily downward.

Under Secretary Mineta's leadership, PHMSA has succeeded in achieving every mandate set forth in the Pipeline Safety Improvement Act (PSIA) of 2002, and the agency has done so in a timely manner. This testimony today will provide an update on the progress report given 18 months ago.

Recent increased attention for the need to remain vigilant when it comes to pipeline safety is rooted in demographic changes taking place in our country. Increasing urbanization of previously rural areas is placing people closer to pipelines. Expansion and development also means more construction activity near pipelines and it should come as no surprise therefore that third party excavation damage is a leading cause of pipeline accidents. Encroachment on areas containing pipelines increases the potential for pipeline accidents, which although infrequent, can have tragic consequences. We have stepped up our efforts to address third party damage because of greater congestion in our underground infrastructure. It is also worth noting that the underground is increasingly crowded with new fiber optics and telecommunications infrastructure central to our way of life.

Our record as a regulator and overseer of public safety is important to us. Safety is, and remains the Administration's top priority when it comes to regulating the pipeline industry. In addition to addressing the many mandates of the PSIA, PHMSA has eliminated most of a 12-year backlog of outstanding mandates and recommendations from the Congress, the National Transportation Safety Board (NTSB), the

Department of Transportation (DOT) Inspector General, and the Government Accountability Office (GAO). Over the past five years, the agency has responded positively to 46 NTSB safety recommendations and is working to close the three recommendations remaining from the pre-2002 environment. The GAO recently closed eight pipeline safety recommendations— six in enforcement, and two in research and development. Just yesterday we published the final rule to define and regulate natural gas gathering lines.

Stronger oversight has been an important strategy in strengthening pipeline safety. In the past 12 years, the agency has added 60 inspectors to PHMSA's pipeline safety staff, from 28 inspectors in 1994, to 88 inspectors today. PHMSA's state agency partners employ over 400 additional inspectors who oversee 90 percent of the infrastructure and contribute 50 percent of the total costs. The federal-State partnership is crucial to the agency's success.

PHMSA is fulfilling its plan to improve the safety, reliability, and environmental performance of the Nation's energy transportation pipeline network. Our plan includes a multi-phase strategy which leaves no stone unturned in identifying and addressing pipeline risks. To manage the risks inherent in pipeline transportation, PHMSA has have been building a new, more comprehensive and informed approach to pipeline safety consistent with the PSIA.

This plan, discussed 18 months ago, is based on improving pipeline performance by: (1) managing risk; (2) sharing responsibility; and (3) providing effective stewardship.

I. We Are Implementing A Plan To Manage Risk

We have raised the bar on safety. By collecting and using better information about pipelines, today we know more about pipelines, the world they traverse, and the consequences of a pipeline failure.
By strengthening our ability to better collect and analyze data, we can better characterize safety issues and highlight pipeline operators with performance concerns. We have also strengthened our regulations and oversight to respond to problems.

1. Higher Standards

We have raised the standards for pipeline safety across the board through requirements for integrity management, operator qualification, public education and 19 other regulations, and incorporated 68 new national consensus safety standards.

2. Better States' Partnership

We have strengthened our partnerships with State pipeline safety agencies through increased policy collaboration, better training, shared databases, and a distributed information network to facilitate communication. In partnership with our State inspectors, we are working hard to deliver better oversight in accordance with higher standards.

3. Stronger Enforcement

We have taken advantage of higher penalty authority and have institutionalized a tough-but-fair approach to enforcement. We are imposing and collecting larger penalties, while guiding pipeline operators to enhance higher performance. We also coordinated much more effectively with other agencies in the Executive Branch including the Department of Justice and the Environmental Protection Agency. We have identified several performance measures to track the impact of our enforcement efforts, such as the severity of inspection findings. Compared to 2002, when penalty limits were raised, we doubled the civil penalties proposed in 2004 and tripled them in 2005. For calendar year 2005, the proposed penalties amounted over $4,000,000.

4. Better Technology

To improve the technology available to assess and repair pipelines, we have invested over $18 million in technology research and development since 2002 and leveraged an additional $21 million in investments from the private sector. These investments have jumpstarted more than 70 projects across the country and have already generated eight new patent applications.

5. Greater Resources

DOT has requested, and the Congress has appropriated, 24.5 percent more resources since 2002 to help implement the plan to improve pipeline safety.

II. Sharing Responsibility — Preparing Partners

Advancing pipeline safety in the face of growing construction in our communities is a big task and we need help to succeed.

We have identified clear roles for others at the Federal, State, and local levels of government and citizens to help us and they are responding. These roles range from environmental and emergency planning to better zoning and management of land use near pipelines, to helping prevent damage and permitting repairs to pipelines, to citizens taking safety actions to protect themselves.

Our pipeline safety communications program provides crucial knowledge about the pipeline system to our various stakeholders, including our citizens, which enables them to share responsibility for continuously improving safety.

We recognize that by "going local", we are better able to affect pipeline safety where it matters most— in the neighborhoods where our Nation's citizens work, play and live.

III. Effective Stewardship

Our role has evolved in response to a dynamic environment. The energy pipeline infrastructure in the United States represents a $31 billion investment. These energy highways also provide a myriad of goods and services to our economy and makes millions of jobs possible.

The agency's relationship with the industry it regulates has proved vital in the timely understanding of operational problems caused by natural disasters and our ability to rapidly respond. During Hurricanes Katrina and Rita, PHMSA moved quickly to assess interruptions in energy product transportation and facilitated rapid restoration of supply. By working with our sister agencies and pipeline operators, DOT was responsible for returning our pipeline infrastructure to full operating capability within days of each storm's passing.

From our vantage point as safety regulators over the entire industry, we have a unique knowledge of this infrastructure. By what we know, we can inform other agencies to help with energy capacity planning as well as economic and security considerations.

IV. Responding to the Pipeline Safety Improvement Act of 2002

The Congress recognized the critical importance of pipelines to our Nation's vitality when it passed the Pipeline Safety Improvement Act of 2002. Under Secretary Mineta's leadership, PHMSA has aggressively responded to these new mandates.

1. Integrity Management

Since last appearing before the committee in June 2004, PHMSA is now enforcing regulation of integrity management programs for both hazardous liquid and natural gas transmission operators. PHMSA and its State partners have completed comprehensive inspections of large hazardous liquid operators who are assessing and repairing nearly 80 percent of the Nation's hazardous liquid pipelines, resulting in the

elimination of over 20,000 time sensitive pipeline defects. PHMSA has now completed 13 percent of gas transmission integrity management inspections, providing supplemental protections for approximately two-thirds of American communities living along natural gas pipelines. We expect eventually that nearly 60 percent of the natural gas transmission pipeline mileage will be similarly assessed and repaired.

In June 2005, PHMSA submitted our plan to Congress to strengthen the safety of gas distribution pipeline systems through use of integrity management principles. We work closely with the State Utility Commissions who have jurisdiction over distribution systems and the ultimate authority to decide what additional protections to require and what costs to pass on to consumers. We are following the guidance provided in the February 16, 2005 National Association of Regulatory Utility Commissioners' "Resolution on Distribution Integrity Management" in implementing this safety plan which urges a performance based approach that leaves states flexibility.

2. Operator Qualification

Our regulations require operators of gas and hazardous liquid pipelines to conduct programs to qualify individuals who perform certain safety-related tasks on pipelines. In early 2003, we developed a standard to evaluate the adequacy of operators' programs, as required by the PSIA. We also issued a Direct Final Rule that codifies the new mandated requirements concerning personnel training, notice of program changes, government review and verification of programs, and use of on-the-job performance as a qualification method.

We completed all reviews of interstate operators' qualification programs and met the 2005 statutory deadline. States have made similar progress. Our report to the Congress is due December 2006. We held two public meetings to seek more comprehensive information from states, the public and the pipeline industry to inform the report.

We are considering some additional improvements in our regulations. We plan to incorporate in our enforcement approach improved consensus standards for the qualification of pipeline operators for safety critical functions.

As required by the PSIA, we conducted a controller certification pilot program to evaluate how best to further assure pipeline controllers have and maintain adequate qualification for their required job tasks. We reviewed information on training and qualification programs from a variety of resources, including programs of other industries, the NTSB, operators, trade associations, public interest groups, system vendors, and simulator specialists. We have completed our assessment and will hold a spring public meeting to share our findings.

3. Public Education and Mapping

Working with others, we are raising the quality of public education operators provide, as well as what we provide. First we oversaw operators' self assessments required in the PSIA and determined considerable improvement was needed. We called for a new consensus standard for public education and stakeholders responded by creating

one that significantly raised the bar. Industry provided strong evidence of support. The NTSB acted to close all its recommendations on public education. We conducted four nationwide, webcast public meetings on this standard to build effective public awareness programs. Currently, we are developing a clearinghouse to review and evaluate the adequacy and effectiveness of more than 2,200 public safety and education programs established locally by the pipeline industry.

We have recruited the help of State fire marshals to bring information and guidance to communities across America and build an understanding of pipeline safety and first responder needs. In less than 15 months, we made great strides in advancing our fire service training curriculum. We have provided training to approximately 5,000 trainers in 31 States and distributed over 13,000 textbooks, 5,000 instructor guides and 6,000 training videos. The first-of-its-kind pipeline accident response training and public education program for first responders will help pipeline operators to identify high consequence areas in communities and provide an understanding of liquefied natural gas operations.

We are improving our efforts to reach the public by preparing local officials to be public education resources within communities and providing additional resources for citizens to learn how they can protect themselves and pipelines. Our community assistance and technical services staff provide information to citizens and advise local officials to guide their decisions about local land use. We also utilize the efficiency of the World Wide Web to give citizens and other

stakeholders instant access to community specific pipeline information with our newly established stakeholder communications website.

We completed the base structure of the National Pipeline Mapping System in 2003, and keep it up to date with improvements. We recently made the system available for public web searches on contact information of pipeline companies and made other web improvements to help the public access information on pipelines and operator performance.

Working with the pipeline industry and State agencies, we annually hold about 15 public meetings per year to acquaint citizens and public officials with essential safety information to make informed decisions about living safely with and minimizing damage to pipelines.

4. Damage Prevention

Helping communities know how they can live safely with pipelines by preventing damage to pipelines is a very important goal. We cannot succeed without enlisting the help of State and local officials and the full range of public safety stakeholders who share an interest in protecting all underground infrastructure.

We work with the Common Ground Alliance (CGA) on all damage prevention efforts, leading many stakeholders to share responsibility for damage prevention. We are now planning to implement the most important new tool in our assault on third-party damage to pipelines, three digit dialing, required in the PSIA. The Federal Communications

Commission responded favorably to our request for one – three-digit number for one call anywhere in the U.S. Three-digit dialing of "811" provides one action all Americans can take to improve safety. Since 2002, our partnership with the CGA has helped us address nine NTSB recommendations in preventing damage to pipelines.

We also worked with CGA to create 40 new regional CGA's to help communities implement damage prevention best practices across all underground facilities. These alliances provide synergy in the "underground" among other utilities, railroads, insurance companies, public works and other municipal organizations, to implement best safety actions. The CGA highlights best practices of leading States such as Minnesota, Virginia, Connecticut, Georgia, and Massachusetts in identifying and enforcing the elements of an effective damage prevention program for other States to follow. These States' enforcement against all who violate their laws led to a 50 percent decrease in damages in just a few years. Strengthening enforcement is one of many important best practices we promote through the CGA and with our state partners and we believe all states can achieve similar results.

5. Research and Development

Over the past three years, PHMSA has built a research and development (R&D) program that funded 70 projects at nearly $40 million to address better diagnostic tools, testing of unpiggable pipes, stronger materials, improved pipeline locating and mapping, prevention of outside force damage, and leak detection.

We are focused on near-term technology development needs. We support technology demonstrations such as remote sensing of gas leaks and internal inspection of unpiggable pipes.

We are maximizing the return on our R&D investment by coordinating activities within and with other Federal agencies such as the Department of Commerce National Institutes of Standards and Technology and the Department of Interior.

6. Interagency efforts to Implement Section 16 of the PSIA

Since our last testimony, we have designed and are testing a web-based environmental permit review process to: (a) provide early electronic notification of proposed pipeline repairs to Federal agencies, and solicit state and local agencies involved in the review process for pipeline repairs and (b) expedite coordination and approval of recommended best practices for operators to use to manage environmental damage when repairing their pipelines in environmentally important areas. This process meets the requirements of the PSIA by ensuring all environmental laws are addressed in the most efficient manner. A remaining issue is timely, consistent participation by all permitting agencies.

IV. We are achieving results.

When we compare the years 2001-2005 to the previous five-year period of 1996-2000, the rate of hazardous liquid pipeline incidents is decreased by 18 percent. In addition, by 2005 the volume of significant oil spills decreased by 34 percent from the previous 10 year average,

and the 10-year average volume of net spills for the same period decreased 36 percent.

Pipeline excavation related accidents decreased over the past ten years by 59 percent. This outcome is largely due to the result of working with our state partners and the more than 900 volunteer members of the Common Ground Alliance who strive to foster damage prevention activities.

In the face of growing dependency and ten years of increased new construction, other incident types remain relatively stable. Accidents of most severe consequence, involving death, injuries, fire, explosion and evacuation, are trending steadily downward.

In closing, I want to reassure the members of this Subcommittee, that the Administration, Secretary Mineta, and the hardworking men and women of PHMSA share your strong commitment to improving safety, reliability, and public confidence in our Nation's pipeline infrastructure.

Ms. Gerard and I would be pleased to answer your questions.

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Testimony of Michael N. Mears
Vice President Transportation
Magellan Midstream Partners, L.P.
On Behalf of the Association Oil Pipe Lines
And the American Petroleum Institute
Before the U.S. House Subcommittee on Highways, Transit and Pipelines
March 16, 2006

Introduction

I am Mike Mears, Vice President, Transportation, Magellan Midstream Partners, L.P. and Chairman of the Association of Oil Pipe Lines (AOPL). I am here to speak on behalf of AOPL and the pipeline members of the American Petroleum Institute (API). I appreciate this opportunity to appear before the Subcommittee today on behalf of the AOPL and API.

AOPL is an unincorporated trade association representing 48 interstate common carrier oil pipeline companies. Our membership is predominately domestic, but we also represent oil pipeline companies affiliated with Canadian pipeline companies. AOPL members carry nearly 85% of the crude oil and refined petroleum products moved by pipeline in the United States. API represents over 400 companies involved in all aspects of the oil and natural gas industry, including exploration, production, transportation, refining and marketing. Together, these two organizations represent the vast majority of the U.S. pipeline transporters of petroleum products.

Magellan Midstream Partners, L.P. is a publicly traded master limited partnership formed to own, operate and acquire a diversified portfolio of energy assets. Magellan Midstream Partners, L.P. assets consist of an 8,500-mile refined petroleum products pipeline system including 45 terminals; seven marine terminal facilities; 29 inland terminals; and a 1,100-mile ammonia pipeline system. Our petroleum products system is a common carrier pipeline that provides transportation, storage and distribution services for refined petroleum products and liquefied petroleum gases in 13 Midwestern states. Our marine and inland terminals store and distribute petroleum products such as gasoline, diesel, crude and jet fuel throughout 11 states. Our ammonia pipeline and terminals system delivers ammonia from production facilities in Texas and Oklahoma to various points in the Midwest for use as an agricultural fertilizer.

Summary

It has been over three years since the enactment of the Pipeline Safety Improvement Act of 2002 (Public Law 107-355, the "PSIA"). On behalf of the members of AOPL and API, I wish to thank the Members of this Subcommittee for their leadership in passing that comprehensive and very important legislation.

As the Committee reviews the current state of pipeline safety and the progress that has been made since the PSIA 2002 became effective, there are a few points that we would like to emphasize.

- The PSIA, actions by DOT's Pipeline and Hazardous Materials Safety Administration (PHMSA) and initiatives taken by industry on its own have combined to produce significant improvement in pipeline safety, and this improvement is demonstrated by the record.

- Substantial changes at DOT and in the industry are under way as a result of greater safety oversight and strengthening in safety requirements. Under the PSIA, industry and its regulators are driving towards even stronger safety programs that will result in further improvements in performance in the future.

- The oil pipeline industry is making the investments that are required to produce this improved performance.

- Since the hurricanes in 2005, a new awareness of the vital importance of a robust, reliable and secure pipeline system has developed in government, industry and the public.

- There is no urgent need for significant changes in the pipeline safety statutes at this time. What is needed is vigorous implementation of the 2002 Act, and that is happening.

- It is important that Congress send a signal before adjournment in 2006 affirming the general direction of the PSIA by reauthorizing the pipeline safety program for at least 5 more years with increases in funding levels to match projected inflation.

The Role of Pipelines in Petroleum Supply

About 40 percent of total U.S. energy supply comes from petroleum, but transportation in the U.S. depends on petroleum for 96 percent of its energy. Very few of the elements of the nation's transportation system – the core of this Committee's jurisdiction – could operate without petroleum. Fully two-thirds of the ton-miles of domestic petroleum transportation are provided by pipeline. The total amount delivered by both crude oil and refined petroleum products pipelines (13.4 billion barrels in 2004) is nearly twice the number of barrels of petroleum consumed annually in the United States.

The major alternatives to pipelines for delivery of petroleum are tank ship and barge, which require that the source and user be located adjacent to navigable water. Trucks and rail also carry petroleum, but are limited in very practical ways in the volume they can transport. In fact, pipelines are the only reasonable way to supply large quantities of petroleum to most of the nation's consuming regions. Pipelines do so efficiently and cost-effectively – typically at 2-3 cents per gallon for the pipeline transportation cost charged to deliver petroleum to any part of the United States.

Oil pipelines are common carriers whose rates are controlled by the Federal Energy Regulatory Commission. Pipelines only provide transportation, and our owners do not profit from the sale of the fuels they transport.

Oil pipeline income is not related to the price of the products that are transported. In fact, high oil prices can have negative impacts on oil pipelines by raising power costs and reducing the demand for petroleum.

Oil pipelines move 17% of interstate ton-miles at only 2% of the cost of interstate freight transportation, a bargain that American consumers have enjoyed for decades.

The oil pipeline infrastructure is crucial to American energy supply. The care and stewardship of this critical national asset is an appropriate public policy concern and an important joint responsibility of the industry I represent, the Department of Transportation and Congress through this Subcommittee.

Progress Report on Pipeline Safety Integrity Management

Companies represented by AOPL and API operate 85 percent of the nation's oil pipeline infrastructure. Since March 2001 (for large operators) and February 2002 (for small operators), these oil pipeline operators have been subject to a mandatory federal pipeline safety integrity management rule (Title 49, section 195.452) administered by the DOT's Pipeline and Hazardous Material Safety Administration (PHMSA). The oil pipeline industry's experience with pipeline integrity management preceded the enactment of the PSIA. Our members who are large operators completed the required 50 percent of their baseline testing of the highest risk segments prior to the September 30, 2004 midpoint deadline set by the integrity management regulations. PHMSA has inspected the performance of each of these operators under these regulations at least three times – an initial "quick hit" inspection and two subsequent full inspections. Regular inspections are a permanent part of our future. Oil pipelines have experience with the PHMSA integrity management program that will be instructive to the Subcommittee in its review.

Improvement in spill record

The oil pipeline spill record has improved dramatically in the last five years as exhibit 1 and 2 show. The data for these exhibits comes from a voluntary industry program that since 1999 has collected data on oil pipeline performance. This program is the Pipeline Performance Tracking System sponsored by the American Petroleum Institute and the Association of Oil Pipe Lines. (For more on PPTS, see http://api-ep.api.org/industry/index.cfm?bitmask=002007003001000000). The PPTS spill database is more detailed than any other similar database in existence, including data maintained by PHMSA. Exhibit 1 shows PPTS data for line pipe releases for the 1999-2004 period. Line pipe releases are those that occur outside the company's facilities. They are the releases that have the most direct potential effect on the public and the environment. For each cause category, the trend is down. The number of total releases dropped 51 percent between 1999 and 2004. Releases due to corrosion dropped 67

percent. Releases due to third party damage dropped 37 percent. Releases due to operator error dropped by 63 percent. During this period, the volume released in incidents on line pipe dropped 40 percent.

Pipeline inspection and repair

In 2000, OPS estimated that under its proposed pipeline integrity management program approximately 22 percent of the pipeline segments in the national oil pipeline network would be assessed and provided enhanced protection. In fact, when oil pipeline operators carried out their analyses of how many of their segments could affect high consequence areas under the terms of the regulation, it turned out that almost twice as many segments, 43 percent of the pipeline network nationally, were covered. But in fact, the actual benefits realized have been even larger. The predominant method of testing oil pipelines utilizes internal inspection devices. The ports at which these devices are inserted into and removed from a pipeline are fixed in the system. As the internal inspection devices travel between ports they generate information about all the pipeline segments between those ports, which can be 35 to 50 miles apart. As a result, as shown in OPS inspections of operators' plans, it is estimated that integrity testing will cover approximately 82 percent of the nations' oil pipeline infrastructure. Thus the actual pipeline mileage protected by the program as implemented will be almost four times the original OPS estimate.

Operators are finding and repairing conditions in need of repair and less serious conditions that are found in the course of investigating defects. Operators are fixing what they find, often going beyond the requirements of the law. The largest cost to the operator is in the scheduling and renting of the internal inspection device, obtaining the permits and carrying out the excavation, so once the pipeline is uncovered, operators fix many conditions that might never have failed in the lifetime of the pipeline. This provides an additional benefit to pipeline safety that will reduce the risk of pipelines to the public far into the future.

Cost

Although benefits from the integrity management rule are much greater than originally estimated, so is the cost. Costs per operator are often in the low tens of millions of dollars per year, far more than originally anticipated. We estimate that the cost of inspection and repair for the industry has averaged nearly $8,000 per mile. Operators have nevertheless moved aggressively to provide the resources needed to implement integrity management.

The pipeline cost benchmarking survey conducted by the oil pipeline industry provides a snapshot for 2004 of the cost of integrity management activities of 19 oil pipeline companies. These companies operated 71,000 miles of pipeline (approximately 42% of the U.S. total of 167,000 miles of oil pipelines under DOT jurisdiction), about half of which was identified as segments that could affect a high consequence area. The total cost of the integrity management programs of these 19 companies in 2004 was $215 million. These operators inspected some 27,500 miles of pipeline in 2004 using inline

inspection or hydrostatic pressure testing (some segments are tested with more than one technique), at a total cost of $7,820 per mile.

PHMSA's performance

The members of AOPL and API appreciate the leadership of this Subcommittee and the full Committee in the establishment of DOT's Pipeline and Hazardous Materials Safety Administration. Our members have seen positive results from elevating pipeline safety to the modal level within the DOT. In our view, PHMSA has been very aggressive in seeking to implement the provisions of the PSIA, has shown enhanced ability to work effectively with other federal agencies whose activities impact pipeline safety and has joined with the pipeline industry and interested stakeholders to achieve important results for pipeline safety and reliability.

Security

In addition, PHMSA has been playing a very important and positive role in assisting the pipeline industry and the Department of Homeland Security in developing a security program to protect critical pipeline infrastructure that complements the risk-based integrity management program that PHMSA administers under the Pipeline Safety Act. PHMSA's September 5, 2002 Pipeline Security Information Circular remains the principal federal guidance for pipeline industry security programs. The DHS's Transportation Security Administration has joined PHMSA in conducting inspections of pipeline facilities based on the provisions of this circular.

PHMSA currently has the mission of regulating security with respect to non-pipeline hazardous materials transportation in coordination with DHS. We believe Congress should consider assigning PHMSA a parallel role in the security of pipeline transportation. PHMSA has an experienced inspection force and by far the greatest expertise in pipeline operations of any of the federal agencies. Therefore, it makes sense to leverage those resources and expertise in developing an effective federal pipeline security program. PHMSA is familiar with the use of risk management and cost benefit techniques that are critical to developing security measures that work in the real world of limited resources.

Oil pipeline operators will continue to cooperate with PHMSA, TSA and DHS to meet the government's pipeline security expectations pending clarification by Congress of the federal agency oversight responsibilities for pipeline security.

Pipeline Personnel Qualification

The PSIA required pipeline operators to develop programs to qualify pipeline personnel for tasks performed on the pipeline. These programs must require training where appropriate and periodic reevaluation of the qualifications of all pipeline personnel. Pipeline operators have responded with comprehensive programs that provide added assurance that only qualified personnel work on our pipelines. An important recent

development is a joint pipeline industry association letter to PHMSA recommending a modification to PHMSA's pipeline personnel qualification rules to indicate specifically when training of personnel may be appropriate and to provide for intervals for the periodic re-evaluation of the qualifications of individual personnel. Our letter is attached. Ensuring the ability of PHMSA to enforce appropriate training and evaluation requirements has been a long-standing interest of the National Transportation Safety Board. It is our understanding that PHMSA is considering modifications to its rules that will fully address the NTSB interest. The purpose of our letter is to indicate the joint industry's support for such a modification.

Areas for improvement in the federal pipeline safety program

The pipeline industry 's first priority is a clear Congressional reaffirmation -- before the 2006 adjournment -- of the direction charted by Congress for DOT and the industry in the Pipeline Safety Improvement Act of 2002. Accordingly, we urge that the Subcommittee at a minimum pass a bill in this Congressional Session that extends PHMSA funding authority for at least 5 years. If in addition Congress decides that improvements to the pipeline safety statutes are appropriate and can be enacted in this Session, we would be prepared to participate and put forward our own recommendations consistent with the thrust of the 2002 Act. If the opportunity to include substantive legislation arises, we would recommend consensus legislative provisions addressing excavation damage prevention, streamlining transmission pipeline integrity management and enhancing the efficiency and effectiveness of PHMSA. Below we discuss several areas where improvement in the federal pipeline safety program is warranted, although in many cases this improvement may be able to be achieved without new legislation.

Damage prevention

An area where new legislation may be appropriate is underground damage prevention. Damage to buried pipelines during excavation is a persistent, preventable and significant cause of pipeline releases. Releases caused by excavation damage tend to be more traumatic, larger and more likely to threaten the public and the environment in comparison to releases from other causes. Damage prevention programs are almost totally controlled by the laws of the several states, and the federal interest in promoting damage prevention must be expressed in partnership with the states in most instances. Enforcement of damage prevention laws varies among the states across the entire spectrum of effectiveness. The affected interests in damage prevention are typically beyond the reach of any single regulatory authority, so often the most feasible approach is a cooperative one that brings affected interests together in a voluntary commitment to improvement. The Common Ground Alliance is an organization that Congress helped start that brings the key interests in damage prevention together to work cooperatively to improve safety. We understand that a promising approach to improving state damage prevention programs has recently been developed under the auspices of CGA and the Distribution Integrity Management Team. We would urge the Subcommittee to take this approach seriously and, if appropriate for purposes of reauthorization in 2006, include the necessary legislative provisions in your reauthorization bill.

Public Information, including the National Pipeline Mapping System

Prior to the terrorist attacks of September 11, 2001 PHMSA developed the National Pipeline Mapping System (NPMS). Pipeline maps and basic information about the pipeline were made available to public through the internet. After 9/11 access to information on the NPMS was restricted. The public could only obtain pipeline operator contact information within a specified geographic location and could no longer view the maps. PHMSA then developed the Pipeline Integrity Management Mapping Application (PIMMA) for use by pipeline operators and federal, state, and local government officials. The application contains sensitive pipeline critical infrastructure information. PIMMA is intended to be used solely by the person who is given access by PHMSA and is not available to the public.

PHMSA also requires pipeline operators to prepare annual reports of their operations, and these annual reports are available to the public upon request. Many pipeline companies also provide general information about their pipelines on the internet and as part of their public awareness programs. Much of the information in NPMS and other locations in PHMSA would help better inform the public and could be made available at some level that would not pose an undue security risk.

We believe it is time that PHMSA and the Transportation Security Administration re-establish public access to the NPMS and determine what non-sensitive information already submitted by pipeline operators to PHMSA may be made available to the public.

Pipeline Repair Permit Streamlining

An important initiative of the PSIA is section 16, "Coordination of Environmental Reviews", which is concerned with expediting the repair of pipeline defects. While progress has been made on implementing this section, more work remains to be done, and the deadlines for agency action under the provision have passed. Since passage of the PSIA, the Council on Environmental Quality has played an important leadership role in implementing section 16. In June 2004, CEQ Chairman James Connaughton testified on before the Senate Committee on Commerce, Science and Transportation. He described an ambitious plan to coordinate pipeline repair information and decision-making among the federal agencies. We were very pleased at the time to hear Chairman Connaughton's plan for implementing section 16. It is unfortunate that that plan has not been carried out, despite its obvious merit under the terms of the PSIA. On December 15, 2005, the joint industry associations wrote to CEQ seeking action on an important provision of the Connaughton/CEQ plan: a pilot test for a set of pre-approved Best Management Practices (BMPs) for pipeline repair site access, use and restoration. A copy of the letter is attached. To date, our letter has not been answered.

Under the Connaughton/CEQ plan, a commitment by an operator to adhere in good faith to the BMPs would result in expedited permission to access repair sites to carry out the repair in order to allow repairs to be completed within the timeframes specified by DOT

regulation. A multi-agency website would be used to coordinate response to requests for permits such that involved agencies operate in parallel or in concert to issue all required permissions to the operator in a timely fashion. To the extent possible the permitting process would be consolidated to limit to one the number of permits required (a consolidated permit) for each project. The process would also ensure that federal agencies are aware of the relationships in permitting pipeline repairs among federal, state and local requirements and can act accordingly to achieve the goal of section 16.

We may need assistance from the Subcommittee to achieve the goals of section 16 while complying with the Endangered Species Act. One way to accomplish this would be through an agreement between the Department of Transportation and the Department of the Interior under which DOT would voluntarily assume the role of default coordinator (or *nexus*) for pipeline repairs in those cases where no other federal agency is available or able to act as the federal nexus for ESA consultation. If legislation is judged to be necessary to facilitate such an agreement and role for DOT, we recommend that the Subcommittee seriously consider it.

Our industry is eager to help carry out the vision Chairman Connaughton has articulated. We urge the CEQ to assign appropriate staff resources to accelerate progress with the plan. Section 16 is Congress's direction to the executive branch agencies under CEQ's leadership to facilitate full compliance with applicable environmental laws in the conduct of pipeline repairs while at the same time meeting the time periods for completion of repairs specified in DOT regulations. We have no intention other than full compliance with the applicable environmental laws, and are eager to assist in any way possible to devise a process that will harmonize objectives of the pipeline safety statutes with compliance with those laws.

Encroachment

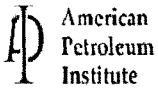
Section 11 of the PSIA required DOT to study land use practices, zoning ordinances and preservation of environmental resources in pipeline rights-of-way to determine effective practices to limit encroachment on these rights-of-way. DOT complied with section 11 by contracting with the Transportation Research Board of the National Academies to carry out the study. "Transmission Pipelines and Land Use, a Risk-Informed Approach", is available from the TRB website at http://www.nap.edu/catalog/11046.html.
The TRB study recommended that DOT convene a multi stakeholder process to develop practices to limit encroachment that could be recommended to state and local government, developers and landowners along pipelines. The TRB favorably noted experience with the Common Ground Alliance in addressing excavation damage issues as a possible model for addressing encroachment issues. The oil pipeline industry is ready to participate enthusiastically, and encouragement of the process from the Subcommittee would be welcomed.

Conclusion

The PSIA 2002 continues to provide valuable guidance that has resulted in significant improvement in the safe operation of hazardous liquid and natural gas pipelines. AOPL and API urge this Subcommittee and Congress to pass legislation in 2006 that will reaffirm the overall direction provided by the PSIA 2002 and extend its provisions for at least an additional 5 years.

Thank you for the opportunity to testify before the Subcommittee on these important matters.

AOPL



March 7, 2006

Stacey L. Gerard
Associate Administrator of Pipeline Safety
Pipeline and Hazardous Materials Safety Administration
U.S. Department of Transportation
400 7th St. SW
Washington, DC 20590

Re: Request for Operator Qualification (OQ) Program Modifications and Clarifications (Title 49 Part 192 Subpart N & 195 Subpart G)

Dear Ms. Gerard:

The member companies of AGA, AOPL, APGA, API, and INGAA represent the majority of the U.S. hazardous liquid and natural gas pipeline infrastructure. We support and appreciate the efforts of the Pipeline and Hazardous Materials Safety Administration (PHMSA) to review and make appropriate modifications to PHMSA's Operator Qualification (OQ) program in anticipation of possible Congressional consideration of pipeline safety legislation this year.

At the PHMSA OQ public meeting on December 15, 2005, pipeline operating companies gave presentations describing the efforts and accomplishments of the pipeline industry with respect to the OQ program. These testimonies, along with comments from industry associations, revealed that pipeline operator qualification programs are effectively meeting or exceeding PHMSA's high expectations.

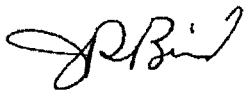
We believe that the OQ requirements in the Pipeline Safety Improvement Act of 2002 and several OQ issues expressed by the PHMSA and NTSB do not require major changes to the rule. For your consideration, we propose on Attachment 1, minor rule changes to address all but one of the issues discussed in PHMSA's latest concept paper on strengthening OQ.

We generally support clarifying the regulatory requirements for training and requalification intervals. The concept paper issue not addressed in our proposal is new construction. We believe that regulations, technical standards and codes already exist that establish quality control processes and ensure integrity of new construction. These procedures address key safety areas of new construction more effectively than could be done by the OQ program. Our review of several years of PHMSA pipeline safety data showed no indication of a major trend or significant level of accidents attributable to work error during new pipeline installation. Therefore, we believe the new construction OQ concept would create undue burdens on operators without providing discernable benefits to safety.

We also believe that audit protocols must be strictly based on the rule requirements, must not impose excessive administrative burdens to prove compliance, and must be uniformly applied. With this in mind, we request that PHMSA add language to the "Headquarters OQ Inspection Protocol" that would provide an operator the option to have a written qualification program that strictly complies with either 49 CFR 192.801 or 195.501. Also, the protocols should state that usage of all or part of ASME B31Q is acceptable as a method to assure compliance, as was stated by PHMSA during the public meeting. This would provide the flexibility many operators are seeking by providing the operator implementation choices using clear stated practices.

We look forward to working with PHMSA and the rest of the pipeline industry to improve the OQ regulations and fashion a progressive, performance based OQ program. By bringing together the best practices from every segment of our industry, we will all continue to improve pipeline safety.

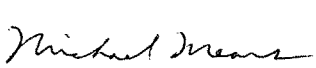
Sincerely,



Richard Bird
Group VP, Liquids Transportation
Enbridge Energy Partners LP
Chairman, API Pipeline Segment

Ronald W. Jibson
Vice President of Operations
Questar Gas Company

Tom Sewell
Director of Operations
Clearwater Gas System
Chairman APGA Operations Committee



Mike Mears
Vice President, Transportation
Magellan Midstream Partners LP
Chairman, Association of Oil Pipe Lines

Jeffrey L. Barger
Vice President, Operations
Dominion Transmission, Inc.

David N. Parker
President and CEO
American Gas Association

Donald Santa
President
Interstate Natural Gas Association
of America

Benjamin S. Cooper
Executive Director
Association of Oil Pipe Lines

Red Cavaney
President and CEO
American Petroleum Institute

Bert Kalisch
President and CEO
American Public Gas Association

Attachment 1 – Proposed Rule Modifications

Proposal:
We believe that these modifications to the rule will meet the needs of NTSB, allow companies to manage resources more effectively and will enhance the OQ rule. Below is a summary of our recommendations:

1. Provided language to address "Evaluation Interval" (192.805 and 195.505)
2. Provided language to address "Training" (192.805 & 195.505)

Recommended new language:
We are providing the following suggestions in revising the regulatory language to make these improvements (changes from the text of the current language are in *italic* and underlined):

49 CFR 192 Subpart N

§192.805 Qualification program

Each operator shall have and follow a written qualification program. The program shall include provisions to:

(a) Identify covered tasks;

(b) Ensure through evaluation that individuals performing covered tasks are qualified;

(c) Allow individuals that are not qualified pursuant to this subpart to perform a covered task if directed and observed by an individual that is qualified;

(d) Evaluate an individual if the operator has reason to believe that the individual's performance of a covered task contributed to an incident as defined in Part 191;

(e) Evaluate an individual if the operator has reason to believe that the individual is no longer qualified to perform a covered task;

(f) Communicate changes that affect covered tasks to individuals performing those covered tasks;

(g) Identify those covered tasks and the intervals at which evaluation of the individual's qualifications is needed. *The evaluation interval for each covered task may not exceed 5 years;*

(h) After December 16, 2004, provides training, as appropriate, to ensure that individuals performing covered tasks have the necessary knowledge and skills to perform the tasks in a manner that ensures the safe operation of pipeline facilities. *The operator's plan must identify circumstances in which training is required and should include situations where the individual:*

1) *Is seeking qualification for a covered task not previously performed;*
2) *Is seeking qualification for a covered task outside their knowledge and skills;*
3) *Has had a qualification suspended or revoked;*
4) *Fails an evaluation for qualification;*
5) *Requires new or different knowledge or skills to perform a covered task;*
6) *Will utilize new equipment or procedures to perform a covered task; or*
7) *Has completed an evaluation and requires additional knowledge or skills to implement specific requirements that are outside the scope of the evaluation.; and*

(i) After December 16, 2004, notify the Administrator or a state agency participating under 49 U.S.C. Chapter 601 if the operator significantly modifies the program after the Administrator or state agency has verified that it complies with this section.

49 CFR 195 Subpart G

§195.505 Qualification program

(a) Identify covered tasks;

(b) Ensure through evaluation that individuals performing covered tasks are qualified;

(c) Allow individuals that are not qualified pursuant to this subpart to perform a covered task if directed and observed by an individual that is qualified;

(d) Evaluate an individual if the operator has reason to believe that the individual's performance of a covered task contributed to an incident as defined in Part 191;

(e) Evaluate an individual if the operator has reason to believe that the individual is no longer qualified to perform a covered task;

(f) Communicate changes that affect covered tasks to individuals performing those covered tasks;

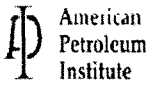
(g) Identify those covered tasks and the intervals at which evaluation of the individual's qualifications is needed. *The evaluation interval for each covered task may not exceed 5 years;*

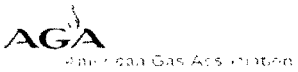
(h) After December 16, 2004, provides training, as appropriate, to ensure that individuals performing covered tasks have the necessary knowledge and skills to perform the tasks in a manner that ensures the safe operation of pipeline facilities. *The operators plan must identify circumstances in which training is required and should include situations where the individual:*

1) *Is seeking qualification for a covered task not previously performed;*
2) *Is seeking qualification for a covered task outside their knowledge and skills;*
3) *Has had a qualification suspended or revoked;*
4) *Fails an evaluation for qualification;*
5) *Requires new or different knowledge or skills to perform a covered task;*
6) *Will utilize new equipment or procedures to perform a covered task; or*
7) *Has completed an evaluation and requires additional knowledge or skills to implement specific requirements that are outside the scope of the evaluation; and*

(i) After December 16, 2004, notify the Administrator or a state agency participating under 49 U.S.C. Chapter 601 if the operator significantly modifies the program after the Administrator or state agency has verified that it complies with this section.

AOPL





December 15, 2005

The Honorable James L. Connaughton
Council on Environmental Quality
722 Jackson Place, NW
Washington, DC 20503

Dear Mr. Connaughton:

We wish to thank you and the Council on Environmental Quality for your strong support for carrying out the requirements of Section 16 of the Pipeline Safety Improvement Act 2002 (PSIA 2002). At this time, your prompt action is urgently needed to take the next key step in the government-wide pilot test of the council's own innovative approach to improving the efficiency of permitting for pipeline repairs under Section 16. In signing the Section 16 Memorandum of Understanding, each agency agreed to cooperate in designing and carrying out the Section 16 program. Cooperation is needed from the regional and district offices of each signatory agency in expediting review and concurrence with the pipeline repair Best Management Practices (BMPs) relevant to that region or district. We ask that you communicate as soon as possible your request that each of the agencies involved in the pilot program instruct its regional and district offices to give priority treatment to review of these BMPs.

The Department of Transportation convened a very successful public meeting on May 6, 2005, for Section 16 of the PSIA 2002. The participants included officials from federal and state partnering agencies and industry. The purpose of the public meeting was to allow participants to share their experiences with meeting pipeline repairs and obtaining permits. Bryan Hannegan of CEQ was the keynote speaker. He outlined the pilot program, which comprises a Pipeline Repair Permit System (PRPS) website, Activity Manager System (AMS), and recommended BMPs. Since the public meeting, the interagency task force under Section 16 has designed and developed the AMS and drafted a series of BMPs. The next key step is to expedite the review and concurrence of the pilot program's BMPs with regional and district offices of affected agencies. Review and approval of these BMPs will serve the needs of this pilot program and likely will contribute to the joint Department of Energy and Department of Interior action to designate energy corridors under the Energy Policy Act of 2005.

We recognize that these agencies have limited resources and numerous demands on those resources. We support continued efforts to respond in a timely manner to pipeline permit applications submitted under existing programs such as those lead by the Federal Energy Regulatory Commission. Nevertheless, we believe that the initial investment in staff resources to develop the pilot program will have a beneficial effect on agency resource demands. This program will allow agencies to process routine permits much more efficiently, preserve resources for more difficult cases and better protect the environment. In addition, the pilot program will ensure that the pipelines are repaired expeditiously, which will help keep

our energy supply reliable and affordable. This pilot program will be an important model, showing that government can work efficiently and protect the environment not only for pipeline work, but also for other transportation and energy projects.

We urge your prompt action in response to this request.

Sincerely,

Red Caveney
American Petroleum Institute

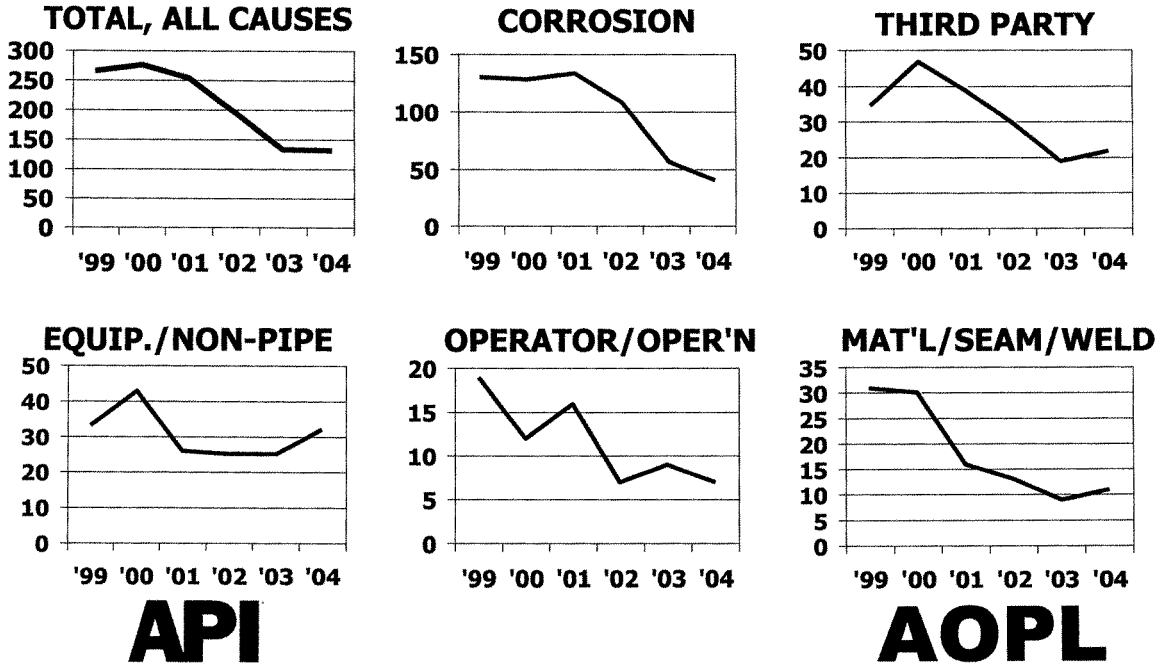
David N. Parker
American Gas Association

Don Santa
Interstate Natural Gas Association of America

Ben Cooper
Association of Oil Pipe Lines

Exhibit 1

Onshore Pipe Incidents, '99-'04



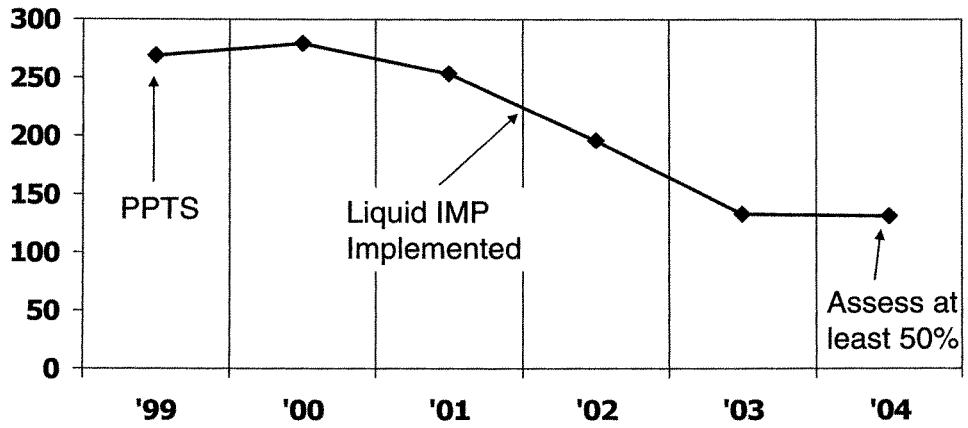
API

AOPL

Exhibit 2

Total Incidents, All Causes

(with pertinent milestones)



API AOPL

Corrected

TESTIMONY OF
JERYL L. MOHN
SENIOR VICE PRESIDENT, OPERATIONS & ENGINEERING
PANHANDLE ENERGY

ON BEHALF OF THE
INTERSTATE NATURAL GAS ASSOCIATION OF AMERICA

BEFORE THE
SUBCOMMITEE ON HIGHWAYS, TRANSIT AND PIPELINES
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
U.S. HOUSE OF REPRESENTATIVES

REGARDING THE
REAUTHORIZATION OF THE PIPELINE SAFETY ACT

MARCH 16TH, 2006

Mr. Chairman and Members of the Subcommittee:

Good morning. My name is Jeryl Mohn, and I am Senior Vice President of Operations and Engineering for Panhandle Energy. I am testifying today on behalf of the Interstate Natural Gas Association of America (INGAA). INGAA represents the interstate and interprovencial 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 200,000 miles of transmission pipeline. These transmission pipelines are analogous to the interstate highway system – in other words, large capacity systems spanning multiple states or regions.

Panhandle Energy, headquartered in Houston, Texas, is a subsidiary of the Southern Union Company, and owns or holds a major ownership interest in five interstate pipelines and a liquefied natural gas import terminal. Our pipelines serve a significant share of the markets in the Midwest, the Southwest including California, and Florida. In addition, our Trunkline LNG terminal in Lake Charles, Louisiana is one of the nation's largest LNG import facilities.

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 our 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. And 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 practices 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 nonetheless compares very well to other modes of transportation. Since natural gas pipelines are buried and isolated from the public, pipeline accidents involving fatalities and injuries are unusual.

The annual number of fatalities and injuries associated with natural gas transmission lines is typically around 10 to 15, combined. For example, in 2005 there were 3 fatalities and 7 injuries associated with our pipelines and in 2002 -2004, there was 1 fatality per year. Most of these fatalities and injuries are either pipeline company personnel, excavators associated with accidental damage from excavation equipment, or vehicle collisions with pipeline facilities.

There are rare exceptions. The accident that occurred near Carlsbad, New Mexico in 2000 resulted in the deaths of 12 family members who were camping on a remote pipeline right-of-way. That accident was the result of internal corrosion on a section of pipe that could not be inspected by internal inspection devices due to engineering

constraints (more on that issue below). This has been the only gas transmission corrosion incident with fatalities since 1985, when PHMSA changed its record keeping system.

The Department of Transportation defines a "reportable incident" as one that results in a fatality, an injury, or property damage exceeding $50,000. Included in the determination of property damage, however, is damage to the pipeline itself and the *monetary value of the natural gas lost*. Without question, the largest single factor in recent numbers has been the value of the natural gas lost. This is due to the fact that natural gas commodity prices have increased, on average, 300 percent since 2002. Minor incidents that, a few years ago, would not have met the threshold for a reportable incident, are now being reported because natural gas commodity prices are so much higher now than five years ago. This fact is skewing the accident data in unintended ways, pointing to the need to change the criteria for reportable incidents so that safety performance results and trends may be accurately identified and evaluated. For example, normalizing the data based on 2002 gas prices would have resulted in 60 fewer onshore incidents being reported for 2005.

Natural gas commodity prices are likely to remain volatile for the foreseeable future, meaning that safety data based on the value of natural gas lost will also be subject to major swings. INGAA suggests that PHMSA or Congress consider a volumetric threshold instead based on 2002 prices. This volumetric approach would provide more consistency in the accident data and therefore more accurately reflect accident trends.

THE PIPELINE SAFETY IMPROVEMENT ACT OF 2002 AND INTEGRITY MANAGEMENT

The most recent reauthorization bill – 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. But the most significant provision of the bill that will improve long-term pipeline safety dealt with "Integrity Management Programs" (IMPs) 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," or 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, or 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 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" device); 2) hydrostatic pressure testing (filling the pipe up 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), or 4) "other alternative methods that the Secretary

determines would provide an equal or greater level of safety." The pipeline operator is then required to fix all non-innocuous imperfections. For natural gas transmission pipelines, internal inspection devices will be the primary means of integrity assessments. This is due to the fact that the other alternatives listed in the legislation are more difficult to use, and/or require the pipeline to cease or significantly curtail gas delivery operations for periods of time unacceptable long to both ourselves and our customers.

In-line internal inspection "smart pig" devices were actually invented by the natural gas pipeline industry several decades ago, and over the years their capabilities and effectiveness as analytical tools has increased. However, there are some legacy issues our industry must deal with in order to more fully utilize these devices.

First, our pipelines were originally engineered to move natural gas, a compressible substance. This means that older pipelines were often built with tight pipe bends, or non-full pipe diameter valves, continuous sections of pipe with varying diameters, and side lateral piping. In all these circumstances, the movement of natural gas is not impeded because of its relative compressibility. However, introducing a solid object into such pipelines is another matter. These older pipeline systems must be modified to allow the use of internal inspection devices.

The other legacy issue is the modification of pipelines to launch and receive internal inspection devices. Since a pipeline is buried underground for virtually its entire length, the installation of aboveground pig launchers and receivers is usually done at or near other above ground locations such as compressor stations. These stations are typically located along the pipeline at a spacing of 75 to 100 miles apart. Therefore, for every segment, another set of launchers and receivers needs to be installed. Once installed, these launchers and receivers can usually remain in place permanently.

Surveys conducted by our industry about five 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 challenging.

The natural gas pipeline industry will use hydrostatic 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.

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 subsequent inspections. Disturbing other infrastructures, including roads and other utilities, is also a significant risk and inconvenience for the public.

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. The two years of data is starting to identify a trend that our pipelines are becoming safer.

PHMSA immediately initiated a rulemaking to implement the gas integrity requirements upon enactment of the 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.

INGAA has surveyed its membership on progress achieved thus far:

1. Total Gas Transmission Mileage in the United States – There are approximately 295,000 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 *intra*state transmission systems or local distribution companies.
2. Total High Consequence Area (HCA) Mileage – There are approximately 20,000 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 to Date –
    - 2004 – 4,043 miles (incorporated some prior inspections before rule took effect).
    - 2005 – 2,739 miles
    - Therefore, 6,686 miles of HCA pipeline inspected to date, or 33 percent of total.
4. Total Pipeline Miles Inspected (including non-HCA pipeline) –
    - 2004 – 30,628 miles (7.57 to 1 over-test ratio)
    - 2005 – 19,670 miles (7.18 to 1 over-test ratio)
    - Therefore, 50,298 total miles, or approximately 17 percent of total transmission pipeline mileage.

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

The 2002 Act also required a prioritization of these HCA assessments, so that the "riskiest" HCA pipeline segments would be scheduled for assessment within five years of enactment. This means that by December of 2007 we must have completed 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 miles actually counted as being assessed in 2004 is higher than what we anticipate the average annual miles will be going forward, because we were able to include some HCA segments that had been inspected in the few years immediately prior to the rule taking effect. As mentioned previously, this helped to jump-start the program and make up for the fact that the final IMP rule did not take effect until December of 2003, thus reducing the *de facto* baseline period to nine years.

The vast majority of the assessments to date have been completed via smart pig devices. As discussed previously, these devices can only operate across entire 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 our systems. While we have completed assessments on 6,686 miles of HCA pipe thus far, the industry has actually inspected almost 50,298 miles of pipe in order to capture the HCA segments. Any problems that are identified as a result of inspections, whether in an HCA or not, are repaired.

As you can see from the data, only about 7 percent of total gas transmission pipeline mileage is located in HCAs. Yet, due to the over-testing situation, we anticipate that about 55 to 60 percent of total transmission mileage will actually be inspected during the baseline period.

Now let us look at what the integrity inspections have found to date. For this data, we focus on information from HCA segments, since these segments are the only ones covered under the integrity management program.

1. Reportable Incidents in HCAs (20,116 miles)
    - 2004 – 9 (2 time-dependent)
    - 2005 – 9 (0 time-dependent)
2. Leaks (too small to be classified as a reportable incident) in HCAs (20,116 miles)
    - 2004 – 117 (29 time-dependent)

- 2005 – 105 (22 time-dependent)

3. Immediate Repairs in HCAs Found by Inspections (repair within 5 days)
    - 2004 – 106 (3,947 miles inspected)
    - 2005 – 237 (2,739 miles inspected)
4. Scheduled Repairs in HCAs Found by Inspections (repair generally within 1 year)
    - 2004 – 628 (3,947 miles inspected)
    - 2005 – 402 (2,739 miles inspected)

In the data for incidents and leaks, we separate out the number associated with time-dependent defects, since these are the types of defects the reassessment aspects of the integrity management program are really designed to address. What do we mean by time-dependent? By this, we mean problems with the pipeline that develop and grow over time, and should therefore be examined on a periodic time basis. The most prevalent time-dependent defect is corrosion; therefore, the IMP effort is focused most significantly on corrosion identification and mitigation. These same assessments might also be able to identify other pipeline defects such as excavation damage or original construction defects. However, most reportable incidents caused by excavation damage (more than 85 percent) result in an immediate pipeline failure, so periodic assessments are not likely to reduce the number of these types of accidents in any significant way. Original construction defects are usually found and addressed during post-construction inspections; any construction defects found with this new inspection technology would be fixed "for good" so that future assessments looking for these types of anomalies are unnecessary. Periodic assessments on a fixed schedule are therefore most effective for time-dependent defects.

You can see that the number of incidents and leaks associated with time-dependent defects is fairly low. As these defects are found and repaired, we expect these numbers to drop even further, since the gestation period for these defects is significantly longer than the re-inspection interval. Also, data from operators who have completed more than one such periodic assessment over several years strongly suggest a dramatic decrease in the occurrence of time-dependent defects requiring repairs.

As for repairs, we have identified the number of "immediate" and "scheduled" repairs that have been generated by the IMP inspections thus far. 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 failure 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 we are very early in the baseline assessment period, the data suggests a very positive conclusion regarding the effectiveness of integrity management programs. "Immediate repairs" in HCA's removed 50 anomalies for every 1000 pipeline miles inspected. The number of "scheduled repairs" removed an additional 60 anomalies per

1000 miles inspected. By completing these immediate and scheduled repairs in a timely fashion, we are reducing the possibility of future incidents or leaks.

Many of the gas pipelines being inspected under this program are 50 to 60 years old. While is it often hard for non-engineers to accept, well-maintained pipelines can operate safety for many decades. Policymakers often compare pipelines to vehicles and ask questions such as: Would you fly in a 50-year-old airplane? The comparison to aircraft or automobiles is an unsound one, though, from an engineering standpoint. In fact, 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-certification of the safety on these older pipeline systems.

ISSUES FOR THE 2006 REAUTHORIZATION

The 2002 Act authorized the federal pipeline safety program at the Department of Transportation through fiscal year 2006. INGAA and its members support completion of the 2006 reauthorization by the beginning of the fiscal year in October. Although the Congressional schedule for the rest of 2006 is short, the current program is working very effectively and therefore needs only modest changes. We therefore see no reason why Congress cannot reach consensus and complete a reauthorization bill this year. INGAA also urges the Congress to pass a five-year reauthorization bill that would take the next reauthorization outside of the time-crunch of a future election year.

INGAA would like the Subcommittee 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) re-consideration of the seven-year reassessment interval, to one based instead upon a more reasoned 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 their pipeline segments located in high consequence areas (HCAs). However, operators are also required to begin reassessments of previously inspected pipe seven years after the initial baseline, and every seven years thereafter. PHMSA has interpreted these two requirements to mean that, for those segments baseline-inspected in 2004 and 2005, or if a prior assessment is relied upon, reassessments must be done in years 2011 and 2012, respectively – *even though the baseline inspections are still being conducted.*

If we assume that ten percent of HCA mileage will be inspected under the baseline for each of these three years, as well as the same 10 percent of mileage required for re-inspection in each of the last three years, that translates into our industry conducting inspections on approximately 20 percent of total HCA mileage for each of years 2010, 2011 and 2012. This "overlap" in baseline inspections and re-inspections will cause, we believe, some significant operational challenges as we also work to keep sufficient natural gas flowing to markets.

The seven-year reassessment interval included in the PSIA does not have a basis in either science or engineering. This reassessment interval was included in the 2002 law as a compromise, and with the understanding that Government Accountability Office (GAO) would conduct an analysis of this question prior to the next reauthorization. That GAO study has been underway for some time now, and INGAA and its member companies have provided information to the GAO for its consideration. We hope the GAO will agree that a more technically-based inspection interval alternative is preferable.

What interval does make sense? 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 about gas pipelines.

The ASME standard proposed, for most natural gas transmission pipelines (operating at high pressures), a conservative ten-year reassessment interval. This is not a radical departure from the current seven-year interval in the statute. The standard suggested longer inspection intervals for lower pressure lines, but these are a small number of pipelines, and at any rate, are less risky due to their lower operating pressures.

Why are we so concerned about the seven-year reassessment interval? First, there is the question of 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, a heavy amount of inspection activity would be difficult to accommodate without impacting gas system deliverability.

Second, there is the question of whether inspections that are mandated too frequently divert resources from other, more effective safety efforts. The Integrity Management Program asks us to identify and mitigate risks to the public associated with the operation of our pipelines. Inspections are one way to achieve that end – but they are not the only way. The current integrity assessment program focuses primarily on one class of causes of pipeline accidents – corrosion. There are, however, a variety of other risks as well. A credible and effective integrity management program prioritizes risks and develops different strategies for addressing those risks. There may, in fact, be instances where we would want to inspect some pipeline segments *more frequently than seven years* – in highly corrosive environments, for example. A program that mandates system-wide

inspections too frequently will severely impact an operator's ability to perform even more frequent inspections at the very few locations that may warrant shorter timeframes.

Damage Prevention

In 1998, the TEA21 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 some federal minimum standards, and then giving grants to those states that adopted the minimum standards, this Act helped to improve damage prevention efforts all across the nation. And it did so without mandating that states adopt the federal minimum standards.

Over the last eight 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 our 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 and excavators is the key. Despite all the progress that has been made since 1998, we still have some excavators that do not call before they dig.

One state, in particular, has developed an outstanding damage prevention program based on improved communication, information management and performance monitoring. 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 the rules. We believe that 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, we ask the Congress to once again emphasize the importance of excavation damage prevention by including a new program of incentives for state action. A modest amount a grant funds could go a long way in reducing accidents. INGAA would like to work with the American Gas Association and the Common Ground Alliance in proposing some legislative language on this issue in the next few weeks.

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 (P.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. Courts have subsequently affirmed that direct sales laterals are FERC-jurisdictional with respect to economic regulation (see *Oklahoma Natural Gas Co. v. FERC,* 28 F.3d 1281 (1994)), and that states are therefore preempted.

In addition, 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 in order 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 could continue to 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 me to participate in today's hearing. INGAA has made the reauthorization of the Pipeline Safety Act a top legislative priority for 2006, and we want to work with you and the Subcommittee to move a bill forward as soon as possible. Please let us know if you have any additional questions, or need additional information.

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Summary of Testimony

INGAA appreciates the opportunity to testify on reauthorization of the Pipeline Safety Act. We want to provide the Subcommittee with some background on the natural gas pipeline industry, and discuss the progress being made with the Integrity Management Program that was a part of the 2002 reauthorization. In general, INGAA believes the Integrity Management Program is working well in meeting the intent of Congress to reduce risks to the public. Our recommendations for legislation to reauthorize the Act in 2006 include:

- Five-year reauthorization
- Re-examination of the seven-year reassessment interval that was part of the gas integrity management requirement in the 2002 legislation. We recommend a reassessment interval based on scientific and/or engineering criteria.
- Incentives to further improve state damage prevention programs nationwide.
- Change the definition in the Pipeline Safety Act of "direct sales lateral" pipelines to make those owned by interstate pipelines jurisdiction to federal, rather than state, oversight.

STATEMENT OF
THE HONORABLE JAMES L. OBERSTAR
SUBCOMMITTEE ON HIGHWAYS, TRANSIT, AND PIPELINES
HEARING ON
"PIPELINE SAFETY OVERSIGHT"
MARCH 16, 2006

- Thank you, Chairman Petri, for calling today's hearing on oversight of the pipeline safety program.

- This hearing is intended to see what progress has been made within the Pipeline and Hazardous Materials Safety Administration (PHMSA) and the natural gas and hazardous liquid pipeline industries since enactment of the Pipeline Safety Improvement Act of 2002. Today, we also begin the process of discussing what improvements are needed in a pipeline safety reauthorization bill.

- Prior to enactment of the Pipeline Safety Improvement Act in 2002, there were complaints about the Office of Pipeline Safety's (OPS) lack of responsiveness to safety recommendations issued by the Department of Transportation's Inspector General, the National Transportation Safety Board, and the Government Accountability Office, as well as their lack of progress in carrying out congressional mandates. At the time, OPS had not complied with 22 statutory mandates on pipeline safety. Concerns were also raised about inspections and enforcement, and later the placement of OPS within the Department of Transportation (DOT).

- We were able to address many of those concerns in the Pipeline Safety Improvement Act and the Norman Y. Mineta Research and Special Programs Reorganization Act. In the Mineta Act, OPS was transferred to a new Administration, called the Pipeline and Hazardous Materials Safety Administration (PHMSA). PHMSA has made considerable progress in closing out long-overdue mandates and open safety recommendations. According to DOT's Inspector General, there is only one open mandate from the 1992 Act, and PHMSA expects to close it by the end of 2006. All of the mandates from the 1996 Act are closed, and PHMSA has completed actions on 18 of the 23 mandates from the 2002 Act.

- Clearly, PHMSA is making good progress and should be congratulated for its successes. But there is still a lot of work to be done.

- The industry's safety record has not improved. There have been 3,138 hazardous liquid pipeline accidents resulting in death, serious injury, and property damage

since 1987, when I first held hearings on this subject. Accidents involving natural gas distribution lines and natural gas transmission lines have increased. Since the Pipeline Safety Improvement Act was enacted in 2002, natural gas distribution pipeline incidents have increased from 102 accidents in 2002 to 171 incidents in 2005 resulting in 17 fatalities, 48 injuries, and $27 million in damages. Natural gas transmission pipeline incidents have increased from 82 accidents in 2002 to 180 incidents in 2005 – the highest number of accidents reported by PHMSA since at least 1986.

- There are concerns about enforcement – whether PHMSA has enough inspectors and whether fines and penalties are being collected. Following the tragic pipeline accident in Bellingham, Washington in June 1999, the DOT announced with great fanfare its intention to seek $3.05 million in penalties against Olympic Pipeline for safety violations related to the accident. I have the press release. In it, the Research and Special Programs Administrator stated: "Today we are seeking the largest civil penalty in the history of our pipeline safety program. In cases like this, where a pipeline operator fails to take appropriate actions to ensure safety, we will penalize the company to the fullest extent possible to ensure full compliance with federal safety rules."

- But five years later, Olympic ended up settling for a meager $250,000 – a slap on the wrist as far as I'm concerned. Most companies consider $250,000 the price of doing business, not serious punishment for violating the law.

- Again, after the pipeline accident in Carlsbad, New Mexico, the Office of Pipeline Safety announced DOT's intention to collect $2.52 million in fines against El Paso Pipeline. Nearly five years later, El Paso hasn't paid a dime in fines to PHMSA. The fact is that if you are going to issue a fine and never actually collect it or you settle it for some small percentage of the total fine then what is the deterrent for companies not to break the law?

- Inspections are another issue we should consider. I'm eager to hear from PHMSA and the other agencies about how the integrity management program for hazardous liquid and gas transmission pipelines is proceeding, and how PHMSA ensures that companies are complying with the program's requirements. The success of that program really relies upon the accuracy of reporting by the companies and the ability of PHMSA to conduct inspections.

- I'm also interested in hearing about what PHMSA is doing to require integrity management for gas distribution pipelines, where a majority of the deaths and

injuries occur. The fact that they cannot use smart pigs in these distribution pipelines because the pipelines are so narrow and curve is not a sufficient reason to require other types of inspections. There are other pipelines as well that are not currently regulated by PHMSA, such as low-stress pipelines, much like to one involved in the BP spill in Alaska on March 2nd. I'd like to know whether PHMSA is considering regulating those as well, and what NTSB's role is in investigating such accidents.

- I'm interested to hear what sort of progress PHMSA has made in requiring mandatory installation of excess flow valves, as recommended by the NTSB and numerous safety advocates. And I'm interested to learn why DOT has not yet executed a Memorandum of Understanding between the DOT and DHS clarifying the roles, responsibilities, and resources of the departments in addressing pipeline and hazardous materials transportation security. Congress requested this action in the House Report accompanying the Norman Y. Mineta Research and Special Programs Improvement Act.

- Adequate training for personnel operating pipelines is also critically important. I understand that PHMSA has completed the pilot program that we established in the Pipeline Safety Improvement Act for certification of certain pipeline workers, and is in the process of drafting a report on the program for Congress. It's important that we ensure that employees performing safety sensitive tasks have the skills and abilities to respond quickly and appropriately to emergency situations, and I urge you to submit your report to Congress as soon as possible.

- Thank you, Mr. Chairman. I look forward to hearing from the witnesses.

The Honorable Bill Pascrell, Jr.
Opening Statement
Highways, Transit and Pipeline Subcommittee
Hearing on Pipeline Safety
March 16, 2006 at 10:00 am

- Thank you Chairman Petri. I am pleased that this subcommittee is continuing its oversight on this important issue.

- For years, many of us in Congress attempted to pass legislation to give Office of Pipeline Safety some teeth and force them to adopt better safety and tighter regulations.

- In 2002, after contentious debate, I was proud that this Committee helped write and pass a strong pipeline safety law.

- We are fast approaching the end of the law's authorization period and it is important that the committee take stock of the current safety situation.

- By all accounts, OPS and the industry have made significant progress since then.

- The national mapping system has been completed for some time.

- **One call centers** are prevalent throughout the nation, and their "dig safely" campaigns are well publicized. I believe that the **811** "one-call" systems that excavators and the public can use to easily connect to the appropriate one-call center will only improve compliance.

- I would also like to commend the OPS for actually **meeting deadlines** placed in the 2002 Act and for promptly following-up to complete NTSB regulation recommendations.

- However, there is much work to be done, as the GAO and IG will tell this subcommittee.

- The Inspector General will testify that his office found evidence that the OPS enforcement program is helping to improve pipeline safety. I am pleased to know that the integrity management program is working.

- Thousands of threats have already been found and corrected; but there are still hundreds of thousands of miles to go.

- Another pressing issue I see is that of pipeline security. I am extremely disappointed that despite direction from this committee and the White House, it is still not clear exactly who is in charge overseeing industries pipeline security plans.

- The broader Memorandum of Understanding between DOT and DHS was a long overdue first step. But despite requests by this committee for a specific pipeline security MOU, the roles and responsibilities of OPS and TSA for pipeline security remain undefined.

- While I am pleased that things are getting better, we still have a great deal of work left to do.

- I hope that this Committee will move quickly, diligently, and most importantly, **in a bipartisan manner**, to ensure a fair reauthorization bill.

- I thank the witnesses for being here to discuss this important subject. Thank you.

United States Government Accountability Office

GAO

Testimony

Before the Subcommittee on Highways, Transit and Pipelines, Committee on Transportation and Infrastructure, House of Representatives

For Release on Delivery
Expected at 10:00 a.m. EST
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GAS PIPELINE SAFETY

Preliminary Observations on the Integrity Management Program and 7-Year Reassessment Requirement

Statement of Katherine Siggerud, Director
Physical Infrastructure Issues

GAO
Accountability * Integrity * Reliability

GAO-06-474T

March 16, 2006

GAO
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Highlights

Highlights of GAO-06-474T, a testimony before the Subcommittee on Highways, Transit, and Pipelines, Committee on Transportation and Infrastructure, House of Representatives

GAS PIPELINE SAFETY

Preliminary Observations on the Integrity Management Program and 7-Year Reassessment Requirement

Why GAO Did This Study

About a dozen people are killed or injured in natural gas transmission pipeline incidents each year. In an effort to improve upon this safety record, the Pipeline Safety Improvement Act of 2002 requires that operators assess pipeline segments in about 20,000 miles of highly populated or frequented areas for safety risks, such as corrosion, welding defects, or incorrect operation. Half of these baseline assessments must be done by December 2007, and the remainder by December 2012. Operators must then repair or replace any defective pipelines, and reassess these pipeline segments for corrosion damage at least every 7 years. The Pipeline and Hazardous Materials Safety Administration (PHMSA) administers this program, called gas integrity management.

This testimony is based on ongoing work for this Subcommittee and for other committees, as required by the 2002 act. The testimony provides preliminary results on the safety effects of (1) PHMSA's gas integrity management program and (2) the requirement that operators reassess their natural gas pipelines at least every 7 years. It also discusses how PHMSA has acted to strengthen its enforcement program in response to recommendations GAO made in 2004.

GAO expects to issue two reports this fall that will address these and other topics.

www.gao.gov/cgi-bin/getrpt?GAO-06-474T.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Katherine Siggerud at (202) 512-2834 or siggerudk@gao.gov.

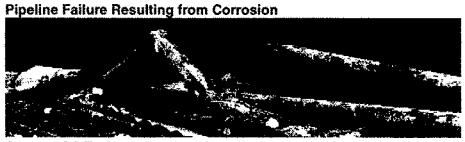
What GAO Found

Early indications suggest that the gas transmission pipeline integrity management program enhances public safety by supplementing existing safety standards with risk-based management principles. Operators have reported that they have assessed about 6,700 miles as of December 2005 and completed 338 repairs for problems they are required to address immediately. Operators told GAO that the primary benefit of the program is the comprehensive knowledge they must acquire about the condition of their pipelines. For some operators, the integrity management program has prompted such assessments for the first time. Operators raised concerns about (1) their uncertainty over the level of documentation that PHMSA requires and (2) whether their pipelines need to be reassessed at least every 7 years.

The 7-year reassessment requirement is generally consistent with the industry consensus standard of at least every 5 to 10 years for reassessing pipelines operating under higher stress (higher operating pressure in relation to wall strength). The majority of transmission pipelines in the U.S. are estimated to be higher stress pipelines. However, most operators told GAO that the 7-year requirement is conservative for pipelines that operate under lower stress because they found few problems requiring reassessments earlier than the 15 to 20 years under the industry standard. Operators GAO contacted said that periodic reassessments are beneficial for finding and preventing problems; but they favored reassessments on severity of risk rather than a one-size-fits-all standard. Operators did not expect that the existence of an "overlap period" from 2010 through 2012, when operators will be conducting baseline assessments and reassessments at the same time, would create problems in finding resources to conduct reassessments.

PHMSA has developed a reasonable enforcement strategy framework that is responsive to GAO's earlier recommendations. PHMSA's strategy is aimed at reducing pipeline incidents and damage through direct enforcement and through prevention involving the pipeline industry and stakeholders (such as state regulators). Among other things, the strategy entails (1) using risk-based enforcement and dealing severely with significant noncompliance and repeat offenses, (2) increasing knowledge and accountability for results by clearly communicating expectations for operators' compliance, (3) developing comprehensive guidance tools and training inspectors on their use, and (4) effectively using state inspection capabilities.

Pipeline Failure Resulting from Corrosion



Source: CC Technologies, Inc. (Used by permission.)

Mr. Chairman and Members of the Subcommittee:

We appreciate the opportunity to participate in this oversight hearing on the Pipeline Safety Improvement Act of 2002. The act strengthens federal pipeline safety programs and enforcement, state oversight of pipeline operators, and public education on pipeline safety. The information that we and others will provide today should help the Congress as it prepares to reauthorize pipeline safety programs.

My statement is based on the preliminary results of our ongoing work for this Subcommittee and others. As directed by the 2002 act, we are assessing the effects on safety stemming from (1) the Pipeline and Hazardous Materials Safety Administration's (PHMSA) integrity management program for gas transmission pipelines and (2) the requirement that pipeline operators reassess their natural gas pipelines for certain safety risks at least every 7 years.[1] In addition, I would also like to briefly touch on how PHMSA has acted to strengthen its enforcement program. I testified on PHMSA's enforcement program before this Subcommittee almost 2 years ago,[2] and believe that this is a good opportunity to update you on some positive accomplishments.

Our work is based on our review of laws, regulations, and other PHMSA guidance, as well as discussions with a broad range of stakeholders, including industry trade associations, pipeline safety advocate groups, state pipeline regulators, and consensus standards organizations.[3] In addition, we contacted 25 pipeline operators about the matters that I will discuss today. We chose operators for which integrity management could have the greatest impact, all else being equal: larger and smaller operators with the highest proportion of pipelines in highly populated or frequented areas to total miles of pipeline. These operators represent about half of the miles of pipeline assessed to date.[4] We relied on pipeline operators' professional judgment in reporting on the conditions that they found during their assessments of safety risks. As part of our work, we assessed the internal controls and the reliability of the data elements needed for this engagement, and we determined that the data elements were sufficiently reliable for our purposes. We performed our work in accordance with generally accepted government auditing standards from August 2005 to March 2006.

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[1] Under integrity management, operators systematically assess the portions of their pipelines that are in highly populated or frequented areas (such as parks) for safety risks. Although the gas integrity management program applies to natural, toxic, and corrosive gases, the overwhelming majority of gas pipelines in the United States carry natural gas. Our work therefore focuses on natural gas. Transmission pipelines transport gas products from sources to communities and are primarily interstate. Distribution pipelines (local distribution companies) that carry natural gas to ultimate users, such as homes, are not subject to the 2002 act unless they are operated by companies that also operate transmission pipelines.

[2] GAO, *Pipeline Safety: Preliminary Information on the Office of Pipeline Safety's Efforts to Strengthen Its Enforcement Program*, GAO-04-875T (Washington, D.C.: June 16, 2004) and GAO, *Pipeline Safety: Management of the Office of Pipeline Safety's Enforcement Program Needs Further Strengthening*, GAO-04-801 (Washington, D.C.: July 23, 2004).

[3] Standards are technical specifications that pertain to products and processes, such as the size, strength, or technical performance of a product. National consensus standards are developed by standard-setting entities on the basis of an industry consensus. PHMSA's regulations incorporate reassessment standards developed by the American Society of Mechanical Engineers: *Managing the System Integrity of Gas Pipelines* (ASME B31.8S-2004).

[4] The information that we obtained from the 25 operators is not necessarily generalizable to all operators.

least every 5, 10, 15, or 20 years, depending on the pressure under which the pipeline segments are operated and the condition of the pipeline.

There are about 900 operators of about 300,000 miles of gas transmission and gathering pipelines in the United States. As of December 2005, according to PHMSA, 429 of these operators reported that about 20,000 miles of their pipelines lie in highly populated or frequented areas (about 7 percent of all transmission pipeline miles). Operators reported that they had as many as about 1,600 miles and as few as 0.02 miles of pipeline in these areas.

PHMSA, within the Department of Transportation, administers the national regulatory program to ensure the safe transportation of gas and hazardous liquids (e.g., oil, gasoline, and anhydrous ammonia) by pipeline. The agency attempts to ensure the safe operation of pipelines through regulation, national consensus standards, research, education (e.g., to prevent excavation-related damage), oversight of the industry through inspections, and enforcement when safety problems are found. PHMSA employs about 165 staff in its pipeline safety program, about half of whom are pipeline inspectors who inspect gas and hazardous liquid pipelines under integrity management and other more traditional compliance programs. Nine PHMSA inspectors are currently devoted to the gas integrity management program. In addition, PHMSA is assisted by inspectors in 48 states, the District of Columbia, and Puerto Rico.

Early Indications Suggest that Gas Integrity Management Enhances Public Safety, but Operators Raise Some Concerns About Implementation

While the gas integrity management program is still being implemented, early indications suggest that it enhances public safety by supplementing existing safety standards with risk-based management principles. Prior to the integrity management program, there were, and still are, minimum safety standards that operators must meet for the design, construction, testing, inspection, operation, and maintenance of gas transmission pipelines. These standards apply equally to all pipelines and provide the public with a basic level of protection from pipeline failures. However, minimum standards do not require operators to identify and address risks that are specific to their pipelines nor do they require operators to assess the integrity of their pipelines. While some operators did assess the integrity of some of their pipelines, others did not. Some pipelines have been in operation for 40 or more years with no assessment. The gas integrity management requirements, finalized in 2004, go beyond the existing safety standards by requiring operators, regardless of size, to routinely assess pipelines in highly populated or frequented areas for specific threats, take action to mitigate the threats, and document management practices and decision-making processes.

Representatives from the pipeline industry, safety advocate groups, and operators we have contacted agree that the integrity management program enhances public safety. Some operators noted that, although the program's requirements can be costly and time consuming to implement, the benefits to date are worth the cost. The primary benefit identified was the comprehensive knowledge the program requires all operators to have of their pipeline systems. For example, under integrity management, operators must

gather and analyze information about their pipelines in highly populated or frequented areas to get a complete picture of the condition of those lines. This includes developing maps of the pipeline system and information on corrosion protection, exposed pipeline, threats from excavation or other third-party damage, and the installation of automatic shut off valves. Another benefit cited was improved communications within the company. Investigations of pipeline incidents have shown that, in some cases, an operator possessed information that could have prevented an incident but had not been shared with employees who needed it most. Integrity management requires operators to pull together pipeline data from various sources within the company to identify threats to the pipelines, leading to more interaction among different departments within pipeline companies. Finally, integrity management focuses operator resources in those areas where an incident could have the greatest impact.

While industry and operator representatives have provided examples of the early benefits of integrity management, operators must report semi-annually on performance measures that should quantitatively demonstrate the impact of the program over time. These measures include the total mileage of pipelines and the mileage of pipelines assessed in highly populated or frequented areas, as well as the number of repairs made and leaks, failures, and incidents identified in these areas. In the 2 years that operators have reported the results of integrity management, they have assessed about 6,700 miles of their 20,000 miles of pipelines located in highly populated or frequented areas and they have completed 338 repairs that were immediately required and another 998 repairs that were less urgent. While it is not possible to determine how many of these needed repairs would have been identified without integrity management, it is clear that the requirement to routinely assess pipelines enables operators to identify problems that may otherwise go undetected. For example, one operator told us that it had complied with all the minimum safety standards on its pipeline, and the pipeline appeared to be in good condition. The operator then assessed the condition of a segment of the pipeline under its integrity management program and found a serious problem causing it to shut the line down for immediate repair.

One of the most frequently cited concerns by the 25 operators we contacted was the uncertainty about the level of documentation needed to support their gas integrity management programs. PHMSA requires operators to develop an integrity management program and provides a broad framework for the elements that should be included in the program. Each operator must develop and document specific policies and procedures to demonstrate their commitment to compliance and implementation of the integrity management requirements. In addition, an operator must document any decisions made related to integrity management. For example, an operator must document how it identified the threats to its pipeline in highly populated or frequented areas and who was involved in identifying the threats, their qualifications, and the data they used. While the operators we contacted did not disagree with the need to document their policies and procedures, some said that the detailed documentation required for every decision is very time consuming and does not contribute to the safety of pipeline operations. Moreover, they are concerned that they will not know if they have enough documentation until their program has been inspected. After conducting 11 inspections, PHMSA found that, while operators are doing well in conducting assessments and

making the identified repairs, they are having difficulty overall in the development and documentation of their management processes. Another concern raised by most of the operators is the requirement to reassess their pipelines at least every 7 years. I will discuss the 7-year reassessment requirement in more detail shortly.

As part of our assessment of the integrity management program, we are also examining how PHMSA and state pipeline agencies plan to oversee operator implementation of the program. To help federal and state inspectors prepare for and conduct integrity management inspections, PHMSA developed detailed inspection protocols tied to the integrity management regulations and a series of training courses covering the protocols and other relevant topics, such as corrosion and in-line inspection.[9] Furthermore, in response to our 2002 recommendation,[10] PHMSA has been working to improve its communication with states about their role in overseeing integrity management programs. For example, PHMSA's efforts include (1) inviting state inspectors to attend federal inspections, (2) creating a website containing inspection information, and (3) providing a series of updates through the National Association of Pipeline Safety Representatives. I am pleased to report that preliminary results from an ongoing survey of state pipeline agencies (with more than half the states responding thus far) show that the majority of states that reported believe that the communication from PHMSA has been very or extremely useful in helping them understand their role and responsibilities in conducting integrity management inspections.[11]

7-Year Reassessment Requirement May be Appropriate for Some Operators but Conservative for Others

Nationwide, pipeline operators reported to PHMSA that they have found, on average, about one problem requiring immediate repair or replacement for every 20 miles of pipeline assessed in highly populated or frequented areas. Operators we contacted recognize the benefits of reassessments; however, almost all would prefer following the industry national consensus standards that use safety risk, rather than a prescribed term, for determining when to reassess their pipelines. Most operators expect to be able to acquire the services and tools needed to conduct these reassessments including during an overlap period when they are starting to reassess pipeline segments while completing baseline assessments.

Operators Favor a Risk-based, Rather than a One-Size-Fits-All Reassessment Standard

As discussed earlier, as of December 2005, operators nationwide have notified PHMSA of 338 problems that required immediate repair in the 6,700 miles they have assessed—

[9] In-line inspections are accomplished by running specialized tools through pipelines to detect problems, such as reduced wall thickness and cracks.

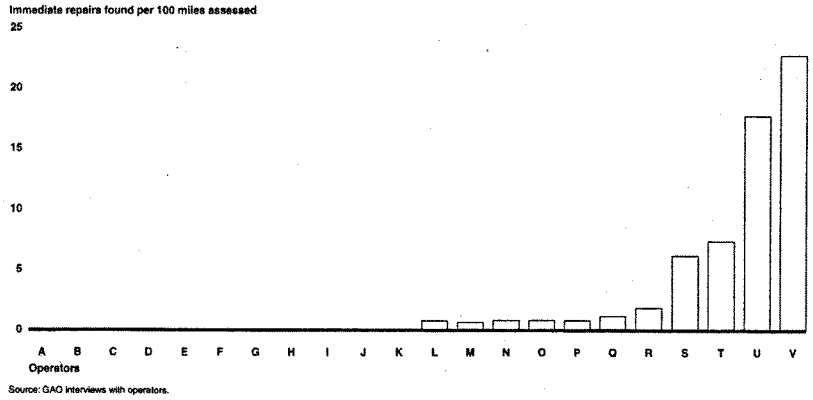
[10] GAO, *Pipeline Safety and Security: Improved Workforce Planning and Communication Needed,* GAO-02-785 (Washington, D.C.: Aug. 26, 2002).

[11] Twenty-nine states responded to the survey as of early March 2006. Three states indicated that PHMSA information was extremely useful, 15 states said the information was very useful, 3 states said it was moderately useful, 4 said it was somewhat useful, and 4 had no opinion.

about one immediate repair required for every 20 miles of pipeline assessed in highly populated or frequented areas.

The number of immediate repairs may be due, in part, to some operators systematically assessing for the first time as a result of the 2002 act. Of the 25 transmission operators and local distribution companies that we contacted, most told us that they found few safety problems that required reducing pressure and performing immediate repairs during baseline assessments covering (1) about 3,000 miles of pipeline in highly populated or frequented areas and about (2) 35,000 miles outside of these areas.[12] (See fig. 1.) Most operators reported finding pipelines in good condition and free of major defects, requiring only minor repairs or recoating. A few operators found more than 10 immediate repairs. Operators nonetheless found these assessments valuable in determining the condition of their pipelines and finding damage.

Figure 1: Number of Immediate Repairs Needed as Found During Baseline Assessments



Source: GAO discussions with operators.

Note: To prevent distortion, we excluded 3 of the 25 operators we contacted because they had assessed 0 miles of pipeline to date. This figure includes the immediate repairs for pipeline located both inside and outside of highly populated or frequented areas.

Most of the operators told us that, if the 7-year reassessment requirement was not in place, they would respond to the conditions that they identified during baseline assessments by reassessing their pipelines every 10, 15, or 20 years, based on industry consensus standards. These baseline assessment findings suggest that—at least for the operators we contacted—the 7-year requirement is conservative. However, the 7-year

[12] Pipeline operators, for example, told us that, when they run an in-line inspection tool through a pipeline, they will not collect data solely within the boundary of the highly populated or frequented area if the insertion and retrieval points for the tool extend beyond the highly populated or frequented area. Rather, they gather information on the pipeline's condition for the entire distance between the insertion and retrieval points because, in doing so, they gather additional insights into the condition of their pipeline.

reassessment requirement may be more appropriate for higher-stress pipelines than for lower-stress pipelines.

The 7-year reassessment requirement is generally more consistent with scientific- and engineering-based intervals for pipelines operating under higher-stress. Higher-stress transmission pipelines are typically those that transport natural gas across the country from a gathering area to a local distribution company. For higher-stress pipelines, the industry consensus standard sets maximum reassessment periods at 5 or 10 years, depending on operating pressure. PHMSA does not collect information in such a way that would allow us to readily estimate the percentage of all pipeline miles in highly populated or frequented areas that operate under higher pressure. For the 25 operators that we contacted, the operators told us that about three-fourths of their pipeline mileage in highly populated or frequented areas operated at higher pressures. Finally, industry data suggest that in the neighborhood of 250,000 miles of the 300,000 miles (over 80 percent) of all transmission pipelines nationwide may operate at higher pressure.

Some operators told us that the 7-year reassessment requirement is conservative for pipelines that operate under lower-stress. This is especially true for local distribution companies that use their transmission lines mainly to transport natural gas under lower pressures for several miles from larger cross-country lines in order to feed smaller distribution lines. They pointed out, for example, that in a lower-pressure environment, pipelines tend to leak rather than rupture. Leaks involve controlled, slow emissions that typically create little damage or risk to public safety. Most local distribution companies we spoke with reported finding few, if any, conditions during baseline assessments that would necessitate another assessment within 7 years. As a result, if the 7-year requirement did not exist, the local distribution companies would likely reassess every 15 to 20 years following industry consensus standards. Some of these operators often pointed out that since third-party damage poses the greatest threat to their systems. Operators added that third-party damage can happen at any time and that prevention and mitigation measures are the best ways to address it.[13]

Operators viewed a risk-based reassessment requirement such as in the consensus standard as valuable for public safety. Operators of both higher-stress and lower-stress pipelines indicated a preference for a risk-based reassessment requirement based on engineering standards rather than a prescriptive one-size-fits-all standard.[14] Such a risk-based reassessment standard would be consistent with the overall thrust of the integrity management program. Some operators noted that reassessing pipeline segments with few defects every 7 years takes resources away from riskier segments that require more attention. While PHMSA's regulations require that pipeline segments be reassessed only for corrosion problems at least every 7 years using a less intensive assessment technique

[13] Prevention and mitigation measures include one-call programs, proper marking of the pipeline's location, inspection by air, and public education programs. In one-call programs, persons who want to dig in an area contact a clearinghouse. The clearinghouse notifies pipeline operators and others that someone is going to be digging near their pipeline, so that the operator can mark the pipeline's location prior to the digging work.

[14] On a related note, the Congress expressed a general preference for technical standards developed by consensus bodies over agency-unique standards in the National Technology Transfer and Advancement Act of 1995.

(confirmatory direct assessment) some operators point out that it has not worked out that way. They told us that, if they are going to the effort of assessing pipeline segments to meet the 7-year reassessment requirement, they will typically use more extensive testing—for both corrosion and for other problems–than required, because doing so will provide more comprehensive information. Thus, in most cases, operators plan to reassess their pipelines by using in-line inspections or direct assessment for problems in addition to corrosion sooner than required under PHMSA's rules.[15]

Services and Tools Are Likely to be Available for Reassessments

Most operators and inspection contractors we contacted told us that the services and tools needed to conduct periodic reassessments will likely be available to most operators. All of the operators reported that they plan to rely on contractors to conduct all or a portion of their reassessments and some have signed, or would like to sign, long-term contracts that extend contractor services through a number of years. However, few have scheduled reassessments with contractors, as they are several years in the future, and operators are concentrating on baseline assessments.

Nineteen of the 21 operators that reported both baseline and reassessment schedules to us said that that they primarily plan to use in-line inspection or direct assessment to reassess segments of their pipelines located in highly populated or frequented areas. In-line inspection contractors that we contacted report that there is capacity within the industry to meet current and future operator demands. Unlike the in-line inspection method, which is an established practice that many operators have used on their pipelines at least once prior to the integrity management program, the direct assessment method is new to both contractors and operators. Direct assessment contractors told us that there is limited expertise in this field and one contractor said that newer contractors coming into the market to meet demand may not be qualified.[16] The operators planning to use direct assessment for their pipelines are generally local distribution companies with smaller diameter pipelines that cannot accommodate in-line inspection tools.[17]

An industry concern about the 7-year reassessment requirement is that operators will be required to conduct reassessments starting in 2010 while they are still in the 10-year period (2003-2012) for conducting baseline assessments. Industry was concerned that this could create a spike in demand for contractor services resulting from an overlap of assessments and reassessments from 2010 through 2012, and operators would have to compete for the limited number of contractors to carry out both. The industry was worried that operators might not be able to meet the reassessment requirement and that

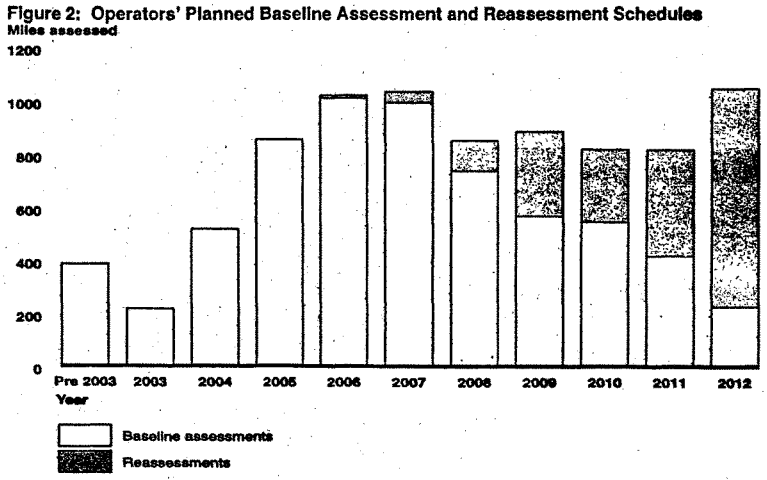
[15] Direct assessment is used to identify corrosion and other defects in pipelines. It is used when in-line inspection cannot be used and to avoid interrupting gas supply to a community fed by a single pipeline. Direct assessment involves several steps, including digging holes at intervals along a pipeline to examine suspected problem areas.

[16] To prepare for this hearing, we contacted the Inline Inspection Association, one company offering in-line inspection services, and two companies offering direct assessment services.

[17] According to industry estimates, 35 percent of all local distribution company pipelines (as measured in miles likely to be located in highly populated areas) cannot accommodate an in-line inspection tool, compared to only about 4 percent of transmission operators' pipelines.

it was unnecessarily burdensome.[18] Most operators that we contacted do not anticipate a spike and baseline activity should decrease as they begin to conduct reassessments. (See fig. 2.) They predict that operators will have conducted a large number of baseline assessments between 2005 and 2007 in order to meet the statutory deadline for completing at least half of their baseline assessments by December 2007 (2 years before the predicted overlap).

Figure 2: Operators' Planned Baseline Assessment and Reassessment Schedules



Source: GAO.

Note: This figure shows the baseline assessments conducted, or planned to be conducted as well as the reassessments that are planned in highly populated or frequented areas for the 20 of 25 operators we contacted. Five operators did not report their reassessment plans.

There has also been a concern about whether baseline assessments and reassessments would affect natural gas supply if pipelines are taken out of service or operate at reduced pressures when repairs are being made. We are addressing this issue and will report on it in the fall.

PHMSA Has Developed a Reasonable Framework for Its Enforcement Program

Recently, PHMSA reassessed its approach for enforcing pipeline safety standards in response to our concern that it lacked a comprehensive enforcement strategy. In August 2005, PHMSA adopted a strategy that focuses on using risk-based enforcement, increasing knowledge of and accountability for results, and improving its own enforcement activities. The strategy also links these efforts to goals to reduce and prevent incidents and damage, in addition to providing for periodic assessment of results. While we have neither reviewed the revised strategy in depth nor examined how

[18] The 2002 act allows operators to request a waiver from conducting reassessments when inspection tools are not available and when operators need to maintain product supply. PHMSA has not issued guidance on conditions under which it would grant a waiver.

it is being implemented, our preliminary view is that it is a reasonable framework that is responsive to the concerns that we raised in 2004.

PHMSA has established overall goals for its enforcement program to reduce incidents and damage due to operators' noncompliance. PHMSA also recognizes that incident and damage prevention is important, and its strategy includes a goal to influence operators' actions to this end. To meet these goals, PHMSA has developed a multi-pronged strategy that is directed at the pipeline industry and stakeholders (such as state regulators), and ensuring that its processes make effective use of its resources.

For example, PHMSA's strategy calls for using risk-based enforcement to, among other things, take enforcement actions that clearly reflect potential risk and seriousness and deal severely with significant operator noncompliance and repeat offenses. Second, the strategy calls for increasing knowledge and accountability for results through such actions as (1) soliciting input from operators, associations, and other stakeholders in developing and refining regulations, inspection protocols, and other guidance; (2) clearly communicating expectations for compliance and sharing lessons learned; and (3) assessing operator and industry compliance performance and making this information available. Third, the strategy, among other things, calls for improving PHMSA's own enforcement activities through developing comprehensive guidance tools and training inspectors on their use, and effectively using state inspection capabilities.

Finally, to understand progress being made in encouraging pipeline operators to improve their level of safety and, as a result, reduce accidents and fatalities, PHMSA annually will assess its overall enforcement results as well as various components of the program. Some of the program elements that it may assess are inspection and enforcement processes, such as the completeness and availability of compliance guidance, the presentation of operator and industry performance data, and the quality of inspection documentation and evidence.

Concluding Observations

Our work to date suggests that PHMSA's gas integrity management program should enhance pipeline safety, and operators support it. We have not identified major issues that need to be addressed at this time. We expect to provide additional insights into these issues when we report to this Subcommittee and others this fall.

Because the program is in its early phase of implementation, PHMSA is learning how to oversee the program and operators are learning how to meet its requirements. Similarly, operators are in the early stages of assessing their pipelines for safety problems. This means that the integrity management program will be going through this shake down period for another year or two as PHMSA and operators continue to gain experience.

* * * * *

Mr. Chairman, this concludes my prepared statement. I would be pleased to respond to any questions that you or the other Members of the Subcommittee might have.

GAO Contacts and Staff Acknowledgement

For further information on this testimony, please contact Katherine Siggerud at (202) 512-2834 or siggerudk@gao.gov. Individuals making key contributions to this testimony were Jennifer Clayborne, Anne Dilger, Seth Dykes, Maria Edelstein, Heather Frevert, Matthew LaTour, Bonnie Pignatiello Leer, James Ratzenberger, and Sara Vermillion.

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UNITED STATES HOUSE OF REPRESENTATIVES

BEFORE THE

SUBCOMMITTEE ON HIGHWAYS, TRANSIT, AND PIPELINES

OF THE

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

HEARING ON

PIPELINE SAFETY

March 16, 2006, 10 a.m.

TESTIMONY OF
THE PIPELINE SAFETY TRUST

1155 North State Street, Suite 609
Bellingham, WA 98225
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Presented by:

Carl Weimer, Executive Director

Mr. Chairman and Members of the Subcommittee:

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 vice-chair of the Governor appointed Washington State Citizens 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 Pipe Line 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 non-profit 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 dollars of property damage that pipelines are responsible for in the past five years.

In my testimony this morning I will cover the following areas that are still in need of improvement:

- Publicly available information
- Financial & liability requirements for pipeline companies
- Funding & implementation of Public Safety Information Grants
- Increased pipeline damage prevention laws and enforcement at the state level
- Implementation of integrity management for distribution pipelines
- Expansion of High Consequence Areas

Before I speak to the needed improvements I would like to comment on the progress that the Office of Pipeline Safety (OPS) has made under its current leadership. The last time I testified to this Subcommittee, in the fall of 1999 just four months after the tragedy in Bellingham, I was angry at both the clear incompetence of the Olympic Pipe Line Company, and the lack of regulatory oversight by the Office of Pipeline Safety.

In the past six and a half years, due to strong efforts from citizens, members of Congress, OPS, and the industry itself, progress has been made to prevent further tragedies like those that have occurred in Edison NJ, Blenheim NY, Mounds View MN, Lively TX, San Bernadino CA, Bellingham WA, Carlsbad NM, and elsewhere.

For the first time 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.

I am no longer angry like I was last time I testified here, but I am still just as committed to the implementation of more common sense initiatives to

make pipelines safer, and prevent tragedies like the one that brought me here six and a half years ago. I would like to speak about those areas now.

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. The Office of Pipeline Safety 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 home buyers to decide their own comfort level with living near pipelines.

The 2002 Pipeline Safety Improvement Act required that pipeline companies provide OPS with data for the National Pipeline Mapping System (NPMS) so such maps could be available for the above purposes. Unfortunately after the September 11th, 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 GPS systems or planning maps because of the required non-disclosure.

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 and Texas, 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 OPS 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 the OPS 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 non-existent, 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.

Access to Enforcement Records – One of the things that OPS has been criticized for in the past is the lack of the use of enforcement to deter future accidents. In our own Bellingham tragedy, OPS announced with great fanfare a proposed penalty of 3.02 million dollars. Then for nearly five 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 Pipe Line in New Mexico blew up killing an entire

extended family of twelve. Again OPS announced with much fanfare a proposed 2.52 million dollar fine. Now, nearly five 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 OPS 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.

OPS should be required to create an internet accessible enforcement docket, like the existing DOT rulemaking docket, where the public could view enforcement as it progresses. The docket would include the OPS Notice of Probable Violation, the company's responses, transcripts of hearings and the final decision. This would provide the public with a transparent enforcement system that would either instill confidence in OPS' efforts, or provide the documentation for changes in the system.

We also think it would be wise for Congress to add an annual reporting requirement on progress in civil and criminal enforcement and penalty collection. As the GAO pointed outin 2004, OPS' current system is lacking in the ability to judge whether enforcement is being used in a manner that enhances safety. This is an important issue that Congress should track until it is clear this situation has been remedied. Until the mid-1990s OPS was required to report such information in their annual reports to Congress, but for some reason these valuable annual reports were discontinued.

One other way to increase enforcement, especially if OPS lacks the resources to process enforcement issues in a timely manner, would be to change the law so that state partners with Interstate Agent status who serve as the lead inspectors in their states could independently take on enforcement activities.

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% of the maximum operating pressure for liquid pipelines. Unfortunately the vast majority of these events are not required to be reported to the OPS, so neither the OPS 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 1980's 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 OPS had no database that would handle the data in a way that would be valuable for the agency. Fifteen years ago email, 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.

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% debt, lent by the large corporate shareholders.

In fact, a similar strategy was used by the owners of the Olympic Pipeline. 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.

Ensure dissemination of Pipeline Safety Information 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 OPS moves forward in the areas of pipeline damage prevention and encroachment.

To date none of these grants have been awarded, and to our knowledge OPS has not even begun the process to develop procedures to award such grants. This is due in large part to the fact that while Congress authorized this grant program, it never appropriated any money to fund it. We ask that you make sure that authorization for this program continues, and that money to fund it is appropriated.

Need for better pipeline damage prevention programs at the state level

Better implementation and enforcement of damage prevention laws – For years now OPS 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 OPS to distribute that funding in such a way that it is an incentive for states to increase their capacity for enforcement. Congress also needs to give OPS the ability to enforce these laws nationally in cases where states are doing an inadequate job.

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. OPS 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.

Distribution pipelines integrity management program

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. OPS, 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 recently, 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 ask that Congress continue to provide oversight of this important program, and consider adopting a deadline for rulemaking to occur.

One area that we have concerns over the current Distribution Integrity Management Plan is the section concerning the use of excess flow valves. Congress has asked OPS to set standards for the circumstances in which excess flow valves should be required. The National Transportation Safety Board (NTSB) has recommended to OPS 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.

The current Phase 1 report does not ask for mandatory installation, but instead states that *"It is not appropriate to mandate excess flow valves (EFV) as part of a high-level, flexible regulatory requirement. An EFV is one of many potential mitigation options."* We hope Congress will ask OPS and the industry how they plan to explain to the families of those who will be killed in the future, because of the lack of a $15 excess flow valve, how a "flexible regulatory requirement" protected their loved ones.

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 swimable and fishable waters.

Thank you again for this opportunity to testify today. In the past five years pipeline safety has moved forward on many fronts, and we appreciate the part that Congress has had in that progress. 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.

Before the Committee on Transportation and Infrastructure
Subcommittee on Highways, Transit, and Pipelines
U.S. House of Representatives

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Pipeline Safety: Progress and Remaining Challenges

Statement of
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Mr. Chairman, Ranking Member, and Members of the Subcommittee:

We appreciate the opportunity to testify today on the progress and remaining challenges in strengthening pipeline safety. We have done a great deal of work over the years evaluating the Department of Transportation's (DOT) efforts to improve pipeline safety and have issued a number of reports and testified several times before this Subcommittee about progress and challenges the Department and industry have faced.

The pipeline infrastructure consists of an elaborate network of more than 2 million miles of pipeline moving millions of gallons of hazardous liquids and more than 55 billion cubic feet of natural gas daily. The pipeline system is composed of predominantly three segments—hazardous liquid transmission pipelines, natural gas transmission pipelines, and natural gas distribution pipelines—and has about 2,200[1] natural gas pipeline operators and 250 hazardous liquid pipeline operators.

Within the DOT's Office of Pipeline and Hazardous Materials Safety Administration (PHMSA), the Office of Pipeline Safety (OPS) is responsible for overseeing the safety of the Nation's pipeline system. This oversight is important because, while pipelines are fundamentally a safe way to transport these inherently dangerous resources, they are subject to forces of nature, human actions, and material defects that can cause potentially catastrophic events. OPS sets safety standards that pipeline operators must meet when designing, constructing, inspecting, testing, operating, and maintaining their pipelines. In general, OPS is responsible for enforcing regulations over interstate pipelines and certifies programs the states implement to ensure the safety of intrastate pipelines.

Today, I would like to discuss three major points regarding pipeline safety:

- Progress made in implementing integrity management program (IMP) requirements and the challenges that remain.
- Initiatives underway to strengthen the safety of natural gas distribution pipeline systems.
- Need for clearer lines of authority to address pipeline security and disaster response.

Before I discuss these points, I would like to briefly summarize the considerable progress we have seen since we first testified on pipeline safety over 6 years ago. This progress is the direct result of congressional attention, including that of this Subcommittee; high-level management attention under the leadership of Secretary

[1] Of the 2,200 operators of natural gas pipelines, there are approximately 1,300 operators of natural gas distribution pipelines and 880 operators of natural gas transmission pipelines.

Mineta; and OPS's priority to improve its pipeline safety program. This progress started under what was then the Research and Special Programs Administration and continues today under PHMSA, which was created under the Norman Y. Mineta Research and Special Programs Improvement Act. Even during this reorganization, OPS was able to sustain its progress in improving pipeline safety.

As an indication that we were seeing clear signs of improvement, we removed pipeline safety from our DOT top management challenge report in 2002. As we testified before this Subcommittee in 2002, OPS was making progress in implementing prior congressional mandates and our recommendations. However, with 8 mandates open from 1992 and 1996, plus an additional 23 mandates enacted in the Pipeline Safety Improvement Act of 2002, a lot of work remained.

Our June 2004 report,[2] "Actions Taken and Needed To Improve Pipeline Safety," recognized OPS's continued progress in clearing out most, but not all, of the congressional mandates enacted in 1992 and 1996. This included completing the development of the national pipeline mapping system and issuing regulations requiring IMPs for operators of hazardous liquid and natural gas transmission pipelines. These results were included in our last testimony before this Subcommittee, also in June 2004.

In our October 2005 report,[3] we again recognized that OPS's progress in closing out the long-overdue mandates and National Transportation Safety Board safety recommendations. Currently, there is only one open mandate from 1992, and OPS expects to close it by the end of 2006. All of the mandates from 1996 are closed, and OPS has completed actions on 18 of the 23 mandates from the 2002 Act. Three of these open mandates are not yet late, since the congressional deadlines for completing them have not come due.

Clearly, OPS is making good progress in implementing congressional mandates and improving pipeline safety, but it is not at an end state because operators are in the early stages of implementing IMPs. I would now like to turn to my three points on pipeline safety.

Progress Made in Implementing Integrity Management Program Requirements and the Challenges That Remain. The most important congressional mandates required IMPs for operators of hazardous liquid and natural gas transmission pipelines. Operators are required to identify their pipelines in or potentially affecting high-consequence areas (HCA)[4] and assess

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[2] OIG Report No. SC-2004-064, "Actions Taken and Needed for Improving Pipeline Safety," Jun 14, 2004.

[3] OIG Report No. SC-2006-003, "Actions Taken and Needed in Implementing Mandates and Recommendations Regarding Pipeline and Hazardous Materials," Oct 20, 2005. See OIG reports on this website: www.oig.dot.gov.

[4] HCAs include unusually sensitive areas (defined as drinking water or ecological resource areas), urbanized and other populated places, and commercially navigable waterways.

their pipelines for risk of a leak or failure using smart pigs[5] or equivalent inspection methods. Hazardous liquid pipeline operators were first to come under the new IMP requirements, starting in 2001. Natural gas transmission pipeline operators followed 3 years later. Operators were also required to categorize and repair integrity threats within specified timeframes and to report these threats to OPS.

Although operators have not yet fully implemented their IMPs, preliminary indications show that the baseline integrity assessments of hazardous liquid and natural gas transmission pipelines are working well, and there was *clearly a need for such assessments*. This is a key outcome as the IMP is the backbone of OPS's risk-based approach to overseeing pipeline safety.

According to data provided by OPS, hazardous liquid and natural gas transmission pipeline operators have identified all of their HCAs and are well on their way toward completing their baseline assessments on time. As of December 31, 2004 (the latest data reported), hazardous liquid operators had completed baseline assessments of approximately 95 percent of their pipeline systems in or potentially affecting HCAs, even though they have until 2009 to do so. In comparison, at the end of 2005, natural gas transmission pipeline operators had completed around 33 percent of their baseline assessments of pipelines in or potentially affecting HCA pipeline systems, but they have until 2012 to complete the assessments.

Operator baseline assessments have been instrumental in helping identify and repair a significant number of integrity threats. In our current review of integrity threats to hazardous liquid pipelines, we found that operators had repaired all 409 threats we examined, with approximately 98 percent of the repairs completed within established IMP timeframes or OPS-approved extensions. OPS has also made noticeable progress in overseeing IMP implementation through its integrity management inspection program, and we have seen examples of OPS directing operators to take corrective actions when violations were found. As of December 2005, OPS and its state partners had conducted one or more integrity management inspections of 86 percent (215 of 249) of hazardous liquid pipeline operators.

However, we have concerns with the reports submitted to OPS on integrity threats. Specifically, six of the seven hazardous liquid pipeline operators we visited had errors in their reports. Reporting errors were due to a variety of factors, such as the submission of preliminary numbers, of data outside the reporting period, or of threats involving non-HCA pipeline segments. OPS is taking steps to improve the accuracy of operator annual reports and to help operators better understand the reporting requirement. But OPS needs to review integrity threat data and related

[5] A "smart pig" is an in-line inspection device that traverses a pipeline to detect potentially dangerous defects, such as corrosion.

documentation as part of its integrity management inspection program. Our primary concern is that OPS's risk-based approach to safety relies on accurate reporting from operators. Inaccurate reports degrade OPS's ability to analyze integrity threats, identify important trends, and focus limited inspection resources on areas of greatest concern.

Initiatives Underway To Strengthen the Safety of Natural Gas Distribution Pipeline Systems. When we last testified before this Subcommittee on pipeline safety in June 2004, we recommended that OPS require operators of natural gas distribution pipelines implement some form of pipeline integrity management or enhanced safety program with the same or similar integrity management elements, except pigging, as the hazardous liquid and natural gas transmission pipelines.

Since 2004, there has been a sea change in the industry toward integrity management for natural gas distribution pipeline systems. OPS, in partnership with the industry stakeholders, is developing a plan to strengthen the safety of natural gas distribution pipeline systems using integrity management principles. So far, the process for developing a natural gas distribution IMP has worked well, and indications are that progress will continue.

Although much has been accomplished, much more remains to be done before distribution IMPs can be implemented. OPS, its state partners, and a broad range of stakeholders have decided that all distribution pipeline operators, regardless of size, should implement an IMP. OPS is drafting a rule requiring integrity management for all gas distribution operators and plans to have the final rule issued within 2 years. It expects operators of natural gas distribution pipeline systems to develop integrity management plans during 2008 and begin implementing those plans in 2009.

Need for Clearer Lines of Authority To Address Pipeline Security and Disaster Response. Not only is it important that we ensure the safety of the Nation's pipeline system, but we must also ensure the security and recovery of the system in the event of a terrorist attack or natural disaster.

Since we last testified on the issue of pipeline security in June 2004, DOT and the Department of Homeland Security (DHS) signed a Memorandum of Understanding (MOU) to improve their cooperation and coordination in promoting the safe, secure, and efficient movement of people and goods throughout the U.S. transportation system. Finalizing the MOU was the first critical step in what is a very dynamic process. However, OPS and the Transportation Security Administration (TSA) still need to spell out their roles and responsibilities at the operational level in an annex to the MOU. A lack of clearly defined roles among OPS and TSA at the working level could lead to duplicating

or conflicting efforts, less than effective intergovernmental relationships, and—most importantly—the potential for an uncoordinated response to a terrorist attack.

With respect to natural disasters, OPS took an active role in responding to and recovering from Hurricane Katrina disruptions in the pipeline system. What we learned from this disaster is that, by law, the Secretary of Transportation is authorized to grant waivers of pipeline safety requirements only after public notice and an opportunity for a hearing. However, with an emergency like Katrina, this would not have been practical. Katrina disruptions to the pipeline system caused the pipeline operators to switch their operations from automated to manual. When responding to Katrina, OPS had to send its inspectors out to remote pumping stations immediately following the storm to personally ensure that the pipeline operator personnel were technically qualified to manually operate the pipeline systems and keep the fuel flowing.

It may not always be possible for OPS and pipeline operators to work around waiver requirements, as occurred in this case. Therefore, Congress should consider whether the Secretary's waiver authority for responding to a terrorist attack or disaster involving pipeline transportation needs to be strengthened.

SPECIFIC OBSERVATIONS

I. Progress Made in Implementing Integrity Management Program Requirements and the Challenges That Remain

Operators Are Making Significant Progress in Fulfilling IMP Requirements. According to data provided by OPS, hazardous liquid and natural gas transmission pipeline operators have made significant progress in recent years in implementing key elements of their IMPs. For example, according to OPS, both pipeline segments have identified all of their HCAs. Operators are also well on their way toward completing their baseline assessments of pipeline systems in or affecting HCAs. As Table 1 indicates, operators have completed baseline assessments on approximately 77 percent of their pipeline systems as of December 31, 2004, with hazardous liquid and natural gas transmission segments

Table 1. Completed Baseline Assessments (As of December 31, 2004)

Operator	HCAs*	Baseline Assessments*	% Completed
Hazardous Liquid	71,903	67,982	95%
Natural Gas Transmission	21,727	3,947	18%
Total	**93,630**	**71,929**	**77%**

* Measured in pipeline miles

completing approximately 95 percent and 18 percent, respectively. This latter figure jumps to 33 percent when 2005 assessment numbers are added.[6]

Although hazardous liquid and natural gas transmission pipeline operators are only required to assess pipelines in or potentially affecting HCAs, some operators on their own initiative have extended their baseline assessments to some of their non-HCA pipeline segments. For example, hazardous liquid pipeline operators have conducted baseline assessments on over a quarter of their non-HCA pipelines as of December 31, 2004.

Large Numbers of Integrity Threats Are Being Identified and Repaired on Time, Although Operator Annual Reports Need Improvement. According to OPS, tens of thousands of hazardous liquid pipeline integrity threats have been discovered and repaired as of the end of 2004. Approximately one quarter of these threats fell into time-sensitive repair categories of immediate, 60-day, or 180-day. The majority of threats were categorized as "other," which are not considered time-sensitive. In our current review of integrity threats to hazardous liquid pipelines, we found that operators had repaired all 409 threats[7] we examined, with approximately 98 percent of the repairs completed within established IMP timeframes or OPS-approved extensions.

While recognizing IMP success in identifying and repairing integrity threats, we have concerns with the reports submitted to OPS on integrity threats. OPS uses the data in these reports, much of which is available to the public, in a variety of ways, including identifying important trends, prioritizing integrity management inspections, and monitoring industry performance and regulatory compliance. Yet, our current review found reporting errors in the integrity threat data submitted by six of the seven operators we visited. We asked each of the seven operators to re-examine the 2004 threat data that they reported to OPS. Six of the seven operators acknowledged having made errors in their annual reports, in some cases significant errors. For example, one operator's numbers of immediate, 60-day, and 180-day threats reported to OPS had to be increased by 98 percent (i.e., from 53 to 105). In a second example, the operator had to decrease his numbers by 41 percent (i.e., from 186 to 110).

These reporting errors were due to a variety of factors. For example, one operator mistakenly reported preliminary pig data instead of actual numbers obtained from subsequent excavation and repair work. A second operator reported integrity threat data involving non-HCA pipeline segments. Other types of errors included reporting data outside the 2004 reporting period and entering numbers relating to

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[6] We do not have 2005 data for hazardous liquid pipeline operators since their annual reports are not due to OPS until June 15, 2006. In comparison, natural gas pipeline operators were required to submit their 2005 data by February 28, 2006.

[7] Our sample of 409 threats was pulled from operator data bases, not from information reported to OPS.

pipeline mileage rather than integrity threats. Our primary concern is that OPS's risk-based approach to safety needs accurate reporting from operators. Inaccurate reports hamper OPS's ability to analyze threat data, identify important trends, and focus limited inspection resources on areas of greatest concern.

OPS officials are taking steps to improve the accuracy of operator reports and to help operators better understand new reporting requirements. OPS plans on issuing new reporting guidelines by mid-2006, including clearer definitions of each threat category. Starting in January 2006, OPS began posting operator annual integrity threat reports to its public website as a means of providing transparency and encouraging greater accuracy. While these efforts to improve the accuracy of operator IMP reports should help, OPS needs to have operators verify the accuracy of threat data contained in their earlier annual reports and submit revised data if errors are found. OPS also needs to verify the accuracy of the integrity threat data as part of its integrity management inspection program.

OPS Inspection and Enforcement Programs Are Helping Achieve Operator Compliance With IMP Requirements. OPS has made progress in overseeing IMP implementation through its inspection and enforcement programs. During inspections for both hazardous liquid and natural gas transmission pipeline operators, OPS and state inspectors look at whether operators: (1) perform a thorough and effective review of pig results, (2) identify all integrity threats in a timely manner, (3) remediate integrity threats in a timely manner, and (4) use the appropriate repair or remediation methods. As of December 2005, OPS and its state partners had conducted one or more integrity management inspections of 86 percent (215 of 249) of hazardous liquid pipeline operators. Even more important, those operators inspected were responsible for approximately 98 percent of all pipeline miles in or potentially affecting HCAs. With respect to natural gas transmission pipeline operators, which OPS only recently began inspecting, OPS has completed 10 percent (11 of 110) of the operators for which it is responsible.

During our current review of integrity threats, we found evidence of how the OPS enforcement program is helping to improve pipeline safety. At one of the seven operators we reviewed, OPS inspectors found that the operator had failed to discover integrity threats (approximately 160) due to an error in analyzing pig data. Although the operator had identified the error and had asked the pig vendor to recalculate its data, subsequent repairs were not completed before an integrity management inspection 2 months later. OPS directed the operator to make necessary corrections and warned the operator that OPS would take enforcement action should the operator not address the problem. The operator has since made the necessary repairs.

OPS also took action against Kinder Morgan Energy Partners (Kinder Morgan). On August 24, 2005, OPS issued a Corrective Action Order to Kinder Morgan in response to numerous accidents in its Pacific Operations unit and designated the entire unit as a "hazardous facility."[8] The Corrective Action Order requires a thorough analysis of recent incidents, a third-party independent review of operations and procedural practices, and a restructuring of Kinder Morgan's internal inspection program. According to OPS officials, Kinder Morgan has offered to enter into a consent agreement that would meet all of the elements of the Corrective Action Order. As of March 10, 2006, OPS and Kinder Morgan officials were still in negotiations over this matter.

II. Initiatives Underway To Strengthen the Safety of Natural Gas Distribution Pipeline Systems

OPS has implemented IMP requirements for hazardous liquid and natural gas transmission pipelines. No similar requirements presently exist for natural gas distribution pipelines, and we have recommended that some form of pipeline integrity management or enhanced safety program be required. Since 2004, there has been a sea change in the industry toward integrity management for natural gas distribution pipeline systems.

The natural gas distribution system makes up over 85 percent (1.8 million miles) of the 2.1 million miles of natural gas pipelines in the United States. Nearly all of the natural gas distribution pipelines are located in highly populated areas, such as business districts and residential communities, where a rupture could have the most significant consequences.

When we testified in June 2004, our concern then, as it is today, was that the Department's strategic safety goal of reducing the number of transportation-related fatalities and injuries was not being achieved by natural gas distribution pipelines. In the 10-year period from 1996 through 2005, OPS's data show accidents in natural gas distribution pipelines have caused more than *3.5 times* the number of fatalities (173 fatalities) and nearly *4.0 times* the number of injuries (616 injuries) as the combined total of 48 fatalities and 156 injuries for hazardous liquid and gas transmission pipeline accidents. In the past 5 years, the number of fatalities and injuries from accidents involving natural gas distribution pipelines has increased from 5 fatalities and 46 injuries in 2001 to 17 fatalities and 48 injuries in 2005. Given that most pipeline fatalities and injuries involve natural gas distribution pipelines, OPS needs to ensure that it moves quickly to enhance the safety of these pipelines.

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[8] Normally OPS will designate pipeline segments immediately adjacent to a rupture a "hazardous facility." This Corrective Action Order designated the entire Pacific Operations unit a "hazardous facility" because of OPS's conclusion that the unit had systemic problems with its IMP.

Initiatives Leading up to the Development of a Natural Gas Distribution Integrity Management Program. To close the safety gap on natural gas distribution pipelines, we recommended in our June 2004 report on pipeline safety that OPS require operators of natural gas distribution pipelines to implement some form of pipeline integrity management or enhanced safety program with the same or similar integrity management elements as hazardous liquid and natural gas transmission pipelines.

In its fiscal year 2005 report, the Conference Committee on Appropriations recognized the need for enhancements in the safety of natural gas distribution pipelines and agreed with the findings of our June 2004 report that certain IMP elements can readily be applied to this segment of the industry, such as developing timeframes on how often inspections should take place and when repairs should be made. The Committee directed OPS to submit a report detailing the extent to which integrity management plan elements may be applied to natural gas distribution pipeline systems to enhance safety. The report was submitted in May 2005 with detailed specific milestones and activities, including the development of requirements, guidance, and standards.

As part of the initiatives in collecting data to prepare the report for the Committee, in December 2004, OPS held a public meeting on enhancing integrity management of natural gas distribution pipelines. OPS invited our office to participate in the meeting and present our views. At the meeting, we outlined three areas that in our view were fundamental to integrity management: understanding the infrastructure, identifying and characterizing the threats, and determining how best to manage the known risks (i.e., prevention, detection, and mitigation). These three areas are essentially the same as those underlying the natural gas transmission IMP and would become the foundation for building a natural gas distribution IMP.

Identifying the Need for and Developing a Distribution IMP. In its report to Congress in May 2005, OPS outlined the extent to which integrity management plan elements could be applied to natural gas distribution pipeline systems to enhance safety. A December 2005 report prepared by OPS, its state partners, and a broad range of stakeholders concluded that all distribution pipeline operators, regardless of size, should implement an integrity management program that includes seven key elements, three of which are fundamental to integrity management: know the infrastructure, identify the threats, and assess and prioritize risks. OPS is currently drafting a rule to implement IMP requirements for operators of natural gas distribution pipelines.

With respect to identifying and characterizing threats, the December 2005 report points out that "excavation damage poses by far the single greatest threat to distribution systems safety, reliability, and integrity: therefore excavation damage

prevention presents the most significant opportunity for distribution pipeline safety improvements."

The source of excavation damage to distribution pipelines can be from anyone who has a reason to dig underground, such as homeowners, landscapers, local water and sewer departments or their contractors, cable companies, electric companies, and owners and operators of distribution pipeline systems or their contractors.

The December 2005 report also points out that what is needed to prevent excavation damage to distribution pipelines in the first place is a comprehensive damage prevention program that includes nine important elements, such as enhanced communication between operators and excavators, partnership in employee training, partnership in public educations, and fair and consistent enforcement of the law.

An important factor in preventing excavation damage is a well-established one-call system that excavators must use by law before they dig in an area of a pipeline. A one-call notification system is already in place and provides a telephonic communication link between excavators and operators of underground pipeline and facilities. The heart of the system is an operational center whose main function is to transfer information from excavators about their intended excavation activities to the operators of underground pipelines and facilities participating in the system.

To further enhance this service, the Federal Communication Commission established a three-digit number—811—for one-call systems that excavators and the public can use to easily connect to the appropriate one-call center. It is anticipated that the 811 number will increase the use of the one-call system service and help avoid excavation damage. Under the Federal Communication Commission rule, the 811 number must be used as the dialing code for one-call centers by April 13, 2007. Currently, implementation lies at the state levels, with at least a one center already accepting calls directed to 811.

We believe a comprehensive damage prevention program is needed as outlined in the December 2005 report[9] and that Congress may want to consider legislation to support the development and implementation of the damage prevention program with special emphasis on effective enforcement.

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[9] The December 2005 report, "Integrity Management for Gas Distribution," was prepared by PHMSA/OPS, its state partners, and a broad range of stakeholders.

III. Need for Clearer Lines of Authority To Address Pipeline Security and Disaster Response

The attacks of September 11, 2001, and the devastation and destruction of Hurricane Katrina in August 29, 2005, in the Gulf Coast regions of Louisiana, Mississippi, and Alabama demonstrated the vulnerabilities of the Nation's critical transportation and energy infrastructure to catastrophic events. What has become clear as a result of these events is the continuing need for a well-defined, well-coordinated, interagency approach for preparing for, responding to, and recovering from such events.

DOT has the responsibility of working with other agencies to secure the U.S. transportation system and protect its users from criminal and terrorist acts. In our report "DOT's Top Management Challenges" for FY 2005 and 2006, we discussed the growing interdependency among Federal agencies in this area. The imperative for DOT is to effectively integrate new security measures into its existing safety regimen and to do so in a way that promotes stronger security without degrading transportation safety and efficiency.

Initiatives Clarifying Security Responsibilities. Certain steps have been taken to establish what agency or agencies would be responsible for ensuring the security of the Nation's critical infrastructure, including pipelines. For example, in December 2003, Homeland Security Presidential Directive 7:

- Assigned DHS the responsibility for coordinating the overall national effort to enhance the protection of the Nation's critical infrastructure and key resources.
- Assigned the Department of Energy the responsibility for ensuring the security of the Nation's energy, including the production, refining, storage, and distribution of oil and gas.
- Directed DOT and DHS to collaborate on all matters relating to transportation security and transportation infrastructure protection and to the regulation of the transportation of hazardous materials by all modes, *including pipelines*.

Although the Presidential Directive directs DOT and DHS to collaborate in regulating the transportation of hazardous materials by all modes, including pipelines, it is not clear from an operational perspective what OPS's relationship will be with TSA.

Identifying the Need for Sorting Out Security Roles and Responsibilities. In our June 2004 testimony, we reported that it was unclear what agency or agencies

will have responsibility for pipeline security rulemaking, oversight, and enforcement and recommended that the delineation of roles and responsibilities between DOT and DHS be spelled out by executing an MOU or Memorandum of Agreement.

Since then, DOT and DHS signed a MOU in September 2004 to improve their cooperation and coordination in promoting the safe, secure, and efficient movement of people and goods throughout the U.S. transportation system. Finalizing the MOU was the first critical step in what is a very dynamic process, but much more remains to be sorted out between the two departments. For example, the delineation of roles and responsibilities between OPS and TSA needs to be spelled out by executing a security annex to the MOU specifically relating to pipelines.

In the October 2004 House Report[10] accompanying the Norman Y. Mineta Research and Special Programs Improvement Act (Public Law 108-426), which created PHMSA, the Committee strongly urged DOT and DHS to execute an agreement clarifying the roles, responsibilities, and resources of the departments in addressing pipeline and hazardous materials transportation security matters upon establishment of the new agency. Today, this has still not been done.

Resolving pipeline security role and responsibilities between OPS and TSA is necessary to avoid, at the working level, duplicating or conflicting efforts, less than effective intergovernmental relationships, and—most importantly—the potential for problems in responding to terrorism. OPS already has a set of well-established security requirements pre-dating September 11th that it oversees and enforces for operators of liquid petroleum gas facilities. What is not clear in this situation is whether oversight and enforcement remains with OPS or whether it will be transferred to TSA.

The pipeline industry clearly supports the need for a security regimen but has pointed out to us that it does not need two separate agencies overseeing two separate sets of rules, and that the issue of security roles and responsibilities needs to be clarified and formalized.

We agree that the roles and responsibilities of OPS and TSA for pipeline security-related subjects need to be clarified. These subjects include security grant activities, emergency communication, rulemaking and adjudications, and the oversight and enforcement jurisdiction of TSA and OPS inspectors.

Identifying the Need for Waiver Authority When Responding to Disasters. In addition to security issues, the growing interdependency among Federal agencies

[10] House Report No. 108-749 dated October 6, 2004.

can be found in responding to catastrophic natural or man-made disasters. The National Response Plan, adopted in December 2004, requires extensive coordination, collaboration, and information sharing between Federal, state, local, and tribal governments to prevent, prepare for, respond to, and recover from any type of national incident, such as Hurricane Katrina.

We would like to recognize OPS's efforts in preparing for, responding to, and recovering from Hurricane Katrina disruptions on the pipeline system. Loss of electrical power to their pumping stations forced three major pipeline operators to shut down. This eliminated most sources of fuel to the entire Eastern seaboard and led to a wide array of economic disruptions, including hoarding and severe price spikes. OPS's efforts immediately following Hurricane Katrina included, among other things, deploying teams to move generators to pipeline pumping stations so that the flow of petroleum products to the Southeastern and Mid-Atlantic regions was restored.

When OPS was preparing for Katrina, a question was raised about whether the Secretary had the authority to waive compliance with pipeline safety regulations. By law, the Secretary may act on a waiver but only after public notice and an opportunity for a hearing. However, with an emergency like Katrina, this would not have been practical. Katrina disruptions to the pipeline system caused the pipeline operators to switch their operations from automated to manual. When responding to Katrina, OPS had to send its inspectors out to remote pumping stations immediately following the storm to personally ensure that the pipeline operator personnel were technically qualified to manually operate the pipeline systems and keep the fuel flowing. It may not always be possible for OPS and pipeline operators to work around waiver requirements, as occurred in this case.

The economic disruptions from Katrina were felt immediately and making public notice and holding a hearing would have significantly delayed restoring the flow of energy, causing severe economic consequences. Given the lessons learned from Hurricane Katrina, Congress should consider whether the Secretary's waiver authority for responding to a terrorist attack or disaster involving pipeline transportation needs to be strengthened.

Mr. Chairman, this concludes my statement. I will be pleased to answer any questions that you or the other members might have.

Testimony of
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United States House of Representatives
Committee on Transportation and Infrastructure
Highways, Transit, and Pipelines Subcommittee

Pipeline Safety Hearing
March 16. 2006

Mr. Chairman, I would like to thank you and the Committee for the opportunity to provide testimony regarding the very important issue of pipeline safety. The Danielle Dawn Smalley Foundation deeply appreciates your attention to this matter.

My name is Candice Caperton and I serve as the Director of External Affairs for the Danielle Dawn Smalley Foundation which is headquartered in Crandall, Texas. The Smalley Foundation was founded in 2002 and is a 501C3 non-profit organization dedicated to educating a wide array of audiences about pipeline safety and pipeline public awareness. The Foundation's sole purpose is to promote pipeline safety and awareness. We are not a political organization and take no position on political matters related to pipelines.

The Smalley Foundation was established by Mr. Danny Smalley following the August 1996 death of his 17 year old daughter Danielle. Danielle and her friend Jason Stone, also 17, drove their truck into a highly explosive vapor cloud leaking from a pipeline near the Smalley home in Lively, Texas. Danielle and Jason drove the truck into a low area where the vapor had pooled and the truck's engine provided the ignition source for an explosion that instantly killed the teenagers and incinerated 14 acres. Had Danielle or Jason been provided the type of training the Smalley Foundation now brings the public, they might have known that a vehicle engine could provide the spark that ignited this terrible explosion and this tragic accident could have been avoided. Mr. Smalley established the Smalley Foundation to provide this valuable training with the hope that raising awareness regarding pipeline safety will save lives.

Mr. Smalley was the Foundation's initial benefactor and continues to be a major financial contributor. The Foundation also receives donations from individuals, civic groups, and private industry. The Foundation also partners with specific pipeline companies to deliver their public awareness programs and to train to their employees and the public.

The Smalley Foundation's training and awareness programs reach a diverse audience, from first responders such as firefighters, police officers, and EMS personnel to civic and community groups, as well as school faculty and students. The Foundation has trained all 2500 Texas state troopers for the Texas Department of Public Safety at its headquarters in Austin, Texas.

Our first responder program consists of an hour-long DVD presentation directed by a Foundation trainer, who is often an active or retired firefighter. A question and answer session, combined with a review quiz, rounds out the two-hour program which also provides continuing education credits. First responders also get training manuals, public awareness brochures, and laminated visor cards which can be placed in vehicles as quick reference guides.

Excavator, school, civic, and community groups receive presentations designed specifically for those audiences. These 20 minute DVD presentations can also be facilitated by a Foundation trainer. These audiences receive the same written materials as the first responders, with the exception of the training manual. These presentations are less technical than those designed for first responders, and focus more on general pipeline public awareness.

The Smalley Foundation has several on-going partnerships with industry, institutions of higher education, and other non-profit organizations. As mentioned earlier, the Foundation partners with specific companies to deliver their public awareness programs. For example, the Foundation has trained county officials, first responders, and civic and community groups on behalf of Atmos Energy in 50 Texas counties and is currently providing this training in another 25 counties in 2006.

The Smalley Foundation has formed an alliance with New Mexico One call, and New Mexico State University which will bring our pipeline safety training program to all 33 New Mexico counties. This project, called "Safer Together," would utilize New Mexico State's extension service and volunteer network as a delivery system. The extension service's publication, The Family Times, would carry a pipeline awareness supplement, reaching over 460,000 readers in the process. This innovative coalition continues to seek funding sources to implement the project.

Outreach to school systems has been a hallmark of the Smalley Foundation since its inception. Students seem to relate to the Foundation's story, especially since Danielle and Jason were teenagers who had just recently graduated from high school. The Foundation works closely with the Texas Education Agency (TEA) and the Texas Association of Secondary School Principals to incorporate the message of pipeline safety into Texas high schools. Texas student councils now have the Smalley Foundation curriculum as part of their Drugs, Alcohol, Safety, and Health (DASH) program. The plan is to extend this program into other states if funding can be procured.

The Foundation also developed a training program targeted at school bus drivers. In Texas alone, there are more than 40,000 school bus drivers. As school bus drivers carry our most valued cargo, our children, and they travel virtually every road in Texas and throughout the United states on an almost daily basis, school bus drivers must know how to identify and react to potential pipeline leaks. When describing the accident that killed Danielle Smalley, we always point out that had this leak occurred at the same time at the same location on a school day, the ignition source could have easily been a school bus full of children.

Making pipeline safety information available to school bus drivers is extremely important. Mr. Charles Kennington, Program Administrator for School Transportation in Texas, will be incorporating Smalley Foundation curriculum into the training procedures for new Texas school bus drivers. According to Mr. Kennington, Texas school bus

drivers log over 385 million miles a year! The Foundation hopes to be able to reach all existing Texas school bus drivers within the next year.

The Smalley Foundation is also preparing to expand this valuable program to other states and has presented our training materials to the Southeastern States Pupil Transportation Conference. The Southeastern area of the United States is home to over 170,000 pupil transportation workers. As a result of the presentations, great interest has been generated in expanding the school bus driver initiative beyond Texas. Foundation trainings have been conducted for the pupil transportation divisions of the departments of education in Alabama, Arkansas, Louisiana, Mississippi, South Carolina, Tennessee, and West Virginia. The Foundation also conducted presentations for the National Association of Pupil Transportation (NAPT) and the National Association of Pupil Transportation Directors in 2005. These regional and national associations support the Foundation's school bus driver initiative, and the Foundation continues to receive requests from across the country to conduct these types of trainings.

The Foundation is also currently partnering with several Texas school districts located in the area known as the Barnett Shale. This is a North Texas region which is experiencing an incredible increase in the production of natural gas. The area encompasses several counties, including urban locations in and around Fort Worth. The rise in the number of drilling rigs and pipelines in such highly populated areas has increased the need for heightened public awareness of industry hazards. Several schools have rigs under construction on their campuses. Smalley Foundation trainings and materials will be presented to numerous school districts in the Barnett Shale over the next few months, provided adequate funding can be secured for this project.

The Smalley Foundation and the Pipeline Association for Public Awareness (PAPA), which is also a non-profit organization, reached an agreement just this month to begin the initial phase of a school outreach project. The concept will entail the identification of and the outreach to schools within a half-mile radius of several cross-country pipeline routes. Some industry support for this endeavor has been identified, but more will be needed and governmental assistance would be most helpful.

Over the last ten years since the Smalley accident, great improvements have been made concerning pipeline safety regulations and mandates. The accident which claimed the lives of Danielle and Jason was followed by other fatal accidents in Washington and New Mexico with which we are all familiar. The Pipeline Safety Improvement Act of 2002 and now the Recommended Practice (RP) 1162 have brought the issue of pipeline safety and public awareness into sharp focus. These new, more stringent regulations will result in a more informed public.

Traditionally, industry has largely neglected school systems in its public awareness efforts. This is changing somewhat with companies like El Paso Energy willing to contribute to programs such as the pilot project mentioned above. However,

even with the advent of RP 1162, many pipeline industry decision-makers view school outreach as a secondary, supplemental endeavor and therefore a lesser priority.

A truly successful public awareness campaign must take root in school systems across America. Learning about pipeline safety at an early age reduces some of the fears and anxieties which the public might otherwise have about the petroleum industry. Of course, subject matter retention rates will also increase when programs are presented sooner rather than later. Educating our schools will also result in a more vigilant citizenry - something of crucial importance in our post 911 world where pipeline terrorism is a very real threat.

Although the oil and gas industry is increasingly providing financial assistance to cover the costs associated with providing pipeline safety and awareness training to our schools, first responders and others, federal assistance is still greatly needed. As this Committee continues its work regarding pipeline safety, we hope that you will see fit to include language or funding mechanisms in upcoming legislation that will build upon the community outreach and safety initiatives outlined in the 2002 Pipeline Safety Improvement Act and the Recommend Practice 1162 that will supplement the efforts of groups like the Smalley Foundation in delivering a positive message about pipelines and safety. Further, we hope that you will encourage the Pipeline and Hazardous Materials Safety Administration to work with safety and training organizations like the Smalley Foundation, as well as the U.S. Department of Education to ensure that these programs are available through our public schools.

Again, I would like to thank the Committee for the opportunity to provide the testimony and thoughts of the Danielle Dawn Smalley Foundation. We appreciate that you have recognized the need for increased public safety and awareness training programs in this area.

Thank you.

Supplemental Contact Sheet

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Presentation Summary:

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- Foundation Programs & Audiences
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