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Pipeline Safety: Progress and Remaining Challenges

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Summary of Hearing Statement

The Office of Pipeline Safety (OPS) is making good progress in implementing congressional mandates and improving pipeline safety. I would like to briefly summarize my major points.

Operators are identifying integrity threats and making timely repairs. Although operators have not yet fully implemented their Integrity Management Programs (IMP), preliminary indications show that the baseline integrity assessments of hazardous liquid and natural gas transmission pipelines are working well. 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 having been completed on time.

However, pipeline operator reports contain errors and OPS needs to work with operators to improve their reporting. Six of the seven hazardous liquid pipeline operators we visited had errors in their annual reports. OPS is taking steps to improve the accuracy of operator annual reports but needs to verify the accuracy of reported threat data during integrity management inspections. Inaccurate reports degrade OPS's ability to analyze integrity threats, identify important trends, and focus limited inspection resources.

OPS's integrity management inspection program is helping operators comply with the 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 also have seen evidence that OPS's enforcement program is helping to improve pipeline safety.

Initiatives are underway to establish IMPs for natural gas distribution pipelines. OPS, its state partners, and a broad range of stakeholders agree that all gas distribution pipeline operators should implement IMPs. OPS is drafting a rule requiring IMPs for all gas distribution operators and plans to have the final rule issued in mid-2007. It expects operators of natural gas distribution pipeline systems to develop integrity management plans during 2008 and begin implementing those plans in 2009.

OPS and TSA need to establish their respective pipeline security roles and responsibilities. In September 2004, the Departments of Transportation and Homeland Security signed a Memorandum of Understanding (MOU) to improve their cooperation and coordination. Now OPS and the Transportation Security Administration (TSA) 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.

The Secretary's waiver authority for responding to disasters may need to be strengthened. OPS took an active role in responding to and recovering from Hurricane Katrina disruptions to the pipeline system. 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. It may not always be possible for OPS and pipeline operators to work around waiver requirements. Thus, Congress should consider whether the Secretary's waiver authority for responding to a disaster involving pipeline transportation needs to be strengthened.

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 and other congressional subcommittees 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 2,200¹ natural gas pipeline operators and 250 hazardous liquid pipeline operators.

Within the DOT's 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 pipelines, while fundamentally a safe way to transport these inherently dangerous resources, 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 the House Subcommittee on Highways, Transit, and Pipelines on the reauthorization of the pipeline safety program in February 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 in July 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 through a rulemaking establishing safety regulations for hazardous liquid gathering lines and low stress transmission pipelines. The importance of completing and finalizing this rule cannot be overstated as it is pertinent to the low stress transmission pipeline that failed just last month on the North Slope of Alaska. As a result of the failure, an estimated 200,000 gallons of crude oil spilled, impacting the Arctic tundra and covering approximately 2 acres of permafrost.

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

² OIG Report No. SC-2004-064, "Actions Taken and Needed for Improving Pipeline Safety," June 14, 2004.

³ OIG Report No. SC-2006-003, "Actions Taken and Needed in Implementing Mandates and Recommendations Regarding Pipeline and Hazardous Materials," October 20, 2005. See OIG reports on this website: www.oig.dot.gov.

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 their pipelines for risk of a leak or failure using smart pigs⁵ 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* because the assessments led operators to identify and correct a significant number of integrity threats. 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

⁴ HCAs include unusually sensitive areas (defined as drinking water or ecological resource areas), urbanized and other populated places, and commercially navigable waterways.

⁵ A "smart pig" is an in-line inspection device that traverses a pipeline to detect potentially dangerous defects, such as corrosion.

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 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. In our June 2004 report, we recommended 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 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 in mid-2007. 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 before this Subcommittee on the issue of pipeline security in July 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 operate the pipeline systems manually 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 completing approximately 95 percent and 18 percent, respectively. This latter figure jumps to 33 percent when 2005 assessment numbers are added.⁶

**Table 1. Completed Baseline Assessments
(As of December 31, 2004)**

| Operator | HCA*s* | 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

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 threats⁷ 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

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.

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 49 percent (i.e., from 53 to 79). 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 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 had completed inspections of 10 percent (11 of 110) of the operators for which it is responsible as of March 2006.

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 the 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. 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. On April 10, 2006, OPS and Kinder Morgan entered into a consent agreement that met all of the elements of the Order.

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 July 2004, our concern then was, as it is today, 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

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.

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.

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 those for 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 IMP 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 education, 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 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 level, with at least one center already accepting calls directed to 811.

We believe a comprehensive damage prevention program is needed as outlined in the December 2005 report⁹ 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.

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, which hit on August 29, 2005, 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.*

⁹ The December 2005 report, "Integrity Management for Gas Distribution," was prepared by OPS, its state partners, and a broad range of stakeholders.

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 Clarifying Security Roles and Responsibilities. In our July 2004 testimony, we reported that it was unclear which 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, 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 Report¹⁰ 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 roles 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.

¹⁰ House Report No. 108-749, dated October 6, 2004.

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 can be found in their response 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 waive regulations 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 operate the pipeline systems manually 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 notifying the public 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.