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UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

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RESOURCES COMMUNITY,
AND ECONOMIC DEVELOPMENT
DIVISION

B-216876


The Honorable John C. Danforth
Chairman, Subcommittee
on Surface Transportation
Committee on Commerce, Science
and Transportation
United States Senate

Dear Mr. Chairman:

As you requested, the enclosed statement for the record discusses our report--Need to Assess Federal Role in Regulating and Enforcing Pipeline Safety (GAO/RCED-84-102, July 10, 1984). The statement summarizes our findings, conclusions, and recommendations on the Department of Transportation's pipeline safety program and the Department's actions on our recommendations. In addition, it includes our views on the feasibility of the Department's implementing user fees for interstate pipeline companies.

If we can be of any further assistance to you or your office in its deliberations over the pipeline safety program, please contact our office.

Sincerely yours,



J. Dexter Peach
Director

Enclosure



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UNITED STATES GENERAL ACCOUNTING OFFICE

WASHINGTON, D.C. 20548

STATEMENT FOR THE RECORD OF

THE GENERAL ACCOUNTING OFFICE

FOR THE

SUBCOMMITTEE ON SURFACE TRANSPORTATION

COMMITTEE ON COMMERCE, SCIENCE AND TRANSPORTATION

UNITED STATES SENATE

ON

GAO'S REVIEW OF THE

DEPARTMENT OF TRANSPORTATION'S PIPELINE SAFETY PROGRAM

Mr. Chairman and Members of the Subcommittee

We welcome the opportunity to submit for the record a summary of our report entitled Need to Assess Federal Role in Regulating and Enforcing Pipeline Safety (GAO/RCED-84-102, July 10, 1984), which was issued to the Subcommittee on Fossil and Synthetic Fuels, House Committee on Energy and Commerce. This statement discusses our findings, conclusions, and recommendations and the Department's actions taken on the recommendations. In providing information on the actions taken in response to our report, we relied on the Department's October 12, 1984, response to the Office of Management and Budget (OMB) as required by OMB Circular No. A-50 and supplemented the response on the basis of subsequent discussions with Department officials. However, we did not verify the actions that the Department said that it is taking. We are providing our views on the feasibility of the Department's

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implementing user fees for inspecting interstate pipeline companies. As you are aware, our analysis of user fees was also initiated at the request of the House Subcommittee on Fossil and Synthetic Fuels.

The Department of Transportation administers the federal pipeline safety program using authority contained in the Natural Gas Pipeline Safety Act of 1968, as amended, and the Hazardous Liquid Pipeline Safety Act of 1979, as amended. These pieces of legislation make the Department responsible for establishing and enforcing safety standards for both interstate and intrastate pipelines.

States may assume responsibility for enforcing the safety standards for all or a part of the intrastate pipelines located within their borders. Some states have been acting as agents of the Department by inspecting interstate pipelines. The states' participation in the program is strictly voluntary; participating states can obtain federal reimbursements for up to 50 percent of the costs incurred in operating their programs. In 1983, 51 state agencies (including agencies in the District of Columbia, Puerto Rico, and two agencies in Florida) participated in the federal gas pipeline safety program.¹

We found that the Department has not provided adequate inspection coverage of the interstate and intrastate pipeline operators for which it has responsibility. In addition, the Department's inspection coverage may be reduced further, since most states indicated that they do not plan to assume responsibility for (1) the intrastate gas pipelines for which the Department

¹Idaho dropped out of the program in July 1984.

is now responsible, or (2) the intrastate hazardous liquids pipelines in their states when the federal safety standards are amended to cover these pipelines. A few states also indicated that they are thinking of discontinuing all or a portion of their existing inspection activities, in which case the Department would have to pick up the responsibility. If this trend continues, the Department's inspection workload will no doubt increase.

The Department is responsible for ensuring that participating state agencies are adequately enforcing the federal safety standards. But, since state participation is strictly voluntary, we reported that the Department does not have effective means for requiring the states to correct deficiencies in their programs and/or assume responsibility for additional intrastate pipeline systems. Our report recommended that the Department (1) present to the appropriate congressional committees alternatives for better aligning federal program responsibilities and inspection resources, and (2) improve its inspection activities and its evaluations of the states' pipeline safety programs.

PIPELINE SAFETY

Gas and hazardous liquids pipelines total about 1.75 million miles and transport more than one-half of the nation's energy supply. While statistics indicate that pipeline transportation is relatively safe when compared with other modes of transportation, each year several number of the pipeline failures which occur result in deaths, serious injuries, and considerable property and environmental damage. In 1982, for example, the 1,711 gas pipeline failures reported to the Department (excluding telephone reports) resulted in 31 fatalities and 266 injuries. Similarly,

the 200 failures reported on hazardous liquids pipelines resulted in 6 injuries, an estimated commodity loss of 221,411 barrels, and property damage of \$1.5 million.

The Materials Transportation Bureau (MTB) under the Research and Special Program Administration (RSPA) is responsible for administering the Department's gas and hazardous liquids pipeline safety program. For fiscal year 1984, program funding amounted to \$7.464 million for pipeline safety. This includes \$3.5 million for grants-in-aid to participating state agencies.

FEDERAL INSPECTION PROGRAM CAN BE IMPROVED

The Department has not had enough inspectors to meet its goal of performing an annual, comprehensive inspection of each pipeline operator in its workload inventory.

Although we did not evaluate the reasonableness of this goal, we believe that the Department has not provided adequate inspection coverage of all pipeline operators under its jurisdiction. The inspection personnel assigned to the Department's five regional offices--16 as of December 31, 1983--are responsible for inspecting about 360 interstate gas and hazardous liquids pipeline operators, 290 interstate gas pipeline operators, and 16 liquefied natural gas facilities. According to our analysis of inspection records, 24 percent of the pipeline operators received comprehensive inspections in 1981 and 17 percent received them in 1982. Some operators had been inspected only once every 3 to 5 years. In addition, some types of intrastate gas operators (master meter and liquefied petroleum gas) have not been included in the Department's workload inventory and are inspected only when a complaint is received, an accident occurs, or a specific request is made.

Acknowledging the Department's limited pipeline inspection resources, we believe inspection coverage of the pipeline operators under federal jurisdiction could be enhanced. Thus, we recommended that the Secretary of Transportation direct the Administrator, RSPA, to take the following measures:

- Evaluate and, if the benefits of having pipeline operators establish a quality assurance program outweigh the cost, implement a mandatory quality assurance program for interstate pipeline operators. While the Department's inspectors would still need to spot-check the operators' quality assurance programs to determine their reliability, such programs would help reduce the amount of time needed by the Department to perform an inspection. We did not determine the operators' cost of establishing and operating quality assurance programs, however, and a cost-benefit evaluation should be made before requiring such programs.
- Complete and update its inspection workload inventory by dividing all interstate gas and liquid operators into common inspection units, and include the master meter and liquefied petroleum (LP) gas operators that are under its jurisdiction. The existing workload data do not include (1) many of the small intrastate gas operators that the Department is responsible for inspecting and (2) a breakout of the large interstate operators into common inspection units or segments. One operator may have several pipelines, constructed at different times, carrying different commodities, and transversing a half dozen or more states. But the Department considers this to be one inspection

unit, just as it considers another operator whose system consists of one line, one commodity, and operates in one or two states to be one inspection unit.

--Require MTB's regions to expand and refine the inspection workload and activity data inventory they maintain and report to headquarters for each category of operator, the number of inspection units subject to inspection and the number of units that have been inspected one or more times during the year, and a breakout of the number of inspections performed by type of inspection. The inspection activity data being reported do not differentiate between the various types of inspections, such as comprehensive inspections, followups on prior inspections, and inspections of new pipeline construction.

Agency comments and actions taken

In responding to OMB Circular No. A-50, the Department stated that it would undertake an evaluation of the concept of a mandatory quality assurance program for interstate pipeline operators, complete and update its inspection workload by dividing all interstate gas and liquid operators into common inspection units, and revise its regional monthly activity report to headquarters to include data on inspections. The Department stated that master meter and LP gas operators will be included in its overall review of the program.

DEPARTMENT'S MONITORING OF STATE PROGRAMS COULD BE IMPROVED

The Department is responsible for ensuring that the states' pipeline safety programs are adequate to assure operator compliance with the federal safety standards. In carrying out this

responsibility, the Department (1) requires the states to maintain and report certain data on their inspection workload and activities and (2) performs an annual evaluation of each state agency. The annual evaluations are based primarily on on-site monitoring visits, which include reviewing the state agency's inspection records, discussing the program with state program personnel, and accompanying a state inspector on an inspection of a pipeline operator. In reviewing the Department's guidelines for state participation in the program and its annual evaluations of the states' programs, and the training the Department offers to state inspectors, we found that the Department could improve (1) its monitoring of states' programs and (2) the criteria for determining the qualifications and training for state inspectors.

Our report recommended that the Secretary of Transportation direct the Administrator , RSPA, to improve state agency inspection activity reporting and MTB's monitoring of state agency pipeline safety programs by

- using more performance-oriented measures to evaluate state agency actions in enforcing federal pipeline safety standards, which would include revising the monitoring form to eliminate irrelevant questions, redesigning other questions to provide more meaningful data, and developing additional questions to evaluate state program performance;
- providing the regional offices with additional guidance to assure consistent interpretations of the questions on the monitoring form--for example, what must a state be doing before its performance is to be considered "adequate" or "acceptable";

- updating criteria used to determine the minimum level of state inspection activity or establishing new criteria for this purpose;
- clarifying instructions provided for data collection and reporting by state agencies, particularly for data on inspection days, operators inspected, noncompliances, and enforcement actions; and
- having the regional offices (1) review and advise headquarters as to the probable accuracy of the program activity data at the time the state agencies submit such data and (2) devote more time to verifying the accuracy of these data during their annual monitoring visits.

Our report also recommended that the Secretary of Transportation direct the Administrator, RSPA, to better define state inspector qualifications and training requirements and assist the states in obtaining the needed inspector training by

- identifying what knowledge and skills are necessary to conduct effective inspections of operators;
- determining what training the states' inspection workforce needs to conduct effective inspections; and
- working with the states to determine the most efficient and effective way for all state inspectors to obtain the identified training needs within a reasonable time period.

Agency comments and actions taken

In responding to OMB Circular No. A-50, the Department stated that the MTB would (1) redesign its state monitoring form, (2) provide regional offices with guidance to assure consistent evaluations of program adequacy during monitoring, (3) update criteria

for the minimum level of state inspection activity, (4) issue new definitions and orders to clarify instructions to states for data collection relating to inspection days, operators inspected, noncompliances, and enforcement actions, and (5) have the regional offices verify the accuracy of state program activity data during their state monitoring visits.

The Department stated that the qualifications which a state inspector should possess will be made known to each state agency by the MTB staff during annual monitoring visits and during annual meetings with the staff of each state agency on a regional basis.

The Department stated that the MTB will generally require attendance at all pipeline safety courses for each state pipeline safety inspector within a 3-year period from start of employment as an inspector.

FEDERAL RESPONSIBILITIES NEED TO BE
ALIGNED WITH THE DEPARTMENT'S AUTHORITY
AND STAFFING

The Department does not have adequate program authority and resources to carry out its current program responsibilities. Since state participation is voluntary, the Department does not have a viable means of requiring states to correct deficiencies in their programs and/or assume responsibility for additional intrastate pipeline systems. Furthermore, possible future increases in the Department's inspection workload may cause further deterioration in its already limited inspection coverage.

As previously mentioned, the Department has not provided adequate inspection coverage of all pipelines for which it has been responsible--including the intrastate gas pipelines--and this

problem may worsen. Although the states have assumed responsibility for most intrastate gas pipelines, a large number of intrastate operators (including 255 municipals and an estimated 27,400 master meters) are still under the Department's jurisdiction, and this situation is likely to continue for some time. In addition, as of June 1983, 17 of the 39 states with intrastate hazardous liquids pipelines did not have the state legislation necessary to assume jurisdiction over these pipelines. They also indicated that they were not interested in assuming this responsibility when the federal safety standards are amended to include the intrastate hazardous liquids pipelines. Of the remaining 22 states, 14 had the necessary state legislation and 8 were requesting it.

Although a few states have expanded their gas pipeline safety inspection programs in recent years, 15 states experiencing staffing and/or funding constraints have already reduced or are planning to reduce their inspection activities. Another four states may consider dropping out of the program. To the extent the states drop out of the existing gas program, as Idaho did in 1984, and do not accept the new hazardous liquids program responsibility, the Department will have to take on this additional inspection workload involving intrastate operators.

The Department also lacks the leverage needed to require increases and improvements to state agency programs. It has had moderate success in getting states to make program changes as a result of their state agency evaluations. But the Department can do little to require a state to implement recommended changes if the state is unable or does not want to do so. If a state is not satisfactorily carrying out a safety program, the Department may

(1) withdraw the state's certification and assume jurisdiction over all the state's operators or (2) withhold grant-in-aid funds. In a case where grant-in-aid funds are withheld and the state's inspection activity seriously decreases, the Department in turn might have to withdraw the state's certification and assume jurisdiction over all of the state's operators. This would place a further demand on the Department's already limited resources.

Considering the Department's present inspection workload, possible future increases in its workload, and its lack of program authority, we believe that the Department, with input from the states, should consider changes to the present program in terms of its responsibilities and/or its funding and staffing levels.

Our report recommended that the Secretary of Transportation direct the Administrator, RSPA, to develop alternatives to redefine the federal role and responsibilities for assuring the safety of intrastate gas and liquids pipelines and present these alternatives to congressional oversight and appropriations committees. These alternatives should propose different combinations of responsibilities for intrastate operators not currently under a state's jurisdiction as well as defining the federal responsibility for assessing state agency programs. Each alternative proposed should include (1) the role and responsibility of both the Department and the state agencies, (2) a discussion of the safety risks associated with the alternatives, and (3) the identification of any legislative changes associated with each alternative. Each of the alternatives presented should also include (1) estimates of the staffing and funding levels RSPA and the states

would need to carry out those functions that would be their responsibility and (2) analysis of the impact each alternative would have on inspection activity.

Agency comments and actions taken

In commenting on our report, the Department agreed to reevaluate the federal and state roles in ensuring the safety of pipelines and to present alternatives to the congressional committees as we recommended. The Department has begun its study of the federal and state pipeline safety roles with an anticipated completion date of October 1985. An outline has been developed for the study. By querying its Pipeline Safety Technical Advisory Committees on federal/state issues, the Department obtained input from these committees and from the National Association of Regulatory Utilities Commissioners' Staff Subcommittee on Pipeline Safety which submitted comments to the committees. A Department official in charge of the study said that the study will focus on the roles and responsibilities of the Department and state agencies and will identify legislative changes as they pertain to the alternatives. Instead of a discussion of safety risks associated with each alternative, the study will focus on financial alternatives to maintain or obtain state participation in the program. The Department plans to analyze the impact of each alternative on inspection activity and will provide information to the congressional committees on general staffing and funding needs, including types of funding mechanisms as they apply to each alternative (e.g., user fees). Because the study is in its formative stages, we are not able to provide specific comments at this time. However, the Department's initial plans have the potential to produce the program alternatives we recommended.

ADDITIONAL PIPELINE FACILITIES MAY
NEED REGULATING

The Department is currently not regulating a number of pipeline facilities and commodities transported by pipeline. These include: rural gas gathering lines, gas service lines, hazardous liquids storage facilities, and various commodities such as liquefied carbon dioxide, ammonium hydroxide, ethanol, and methanol. These may have associated safety problems and may need to be regulated, depending upon the degree of hazard.

The Department, however, does not currently have sufficient information to decide whether these pipeline facilities and/or commodities should be regulated. Therefore, additional information should be collected to decide whether regulation is warranted. Our report recommended that the Secretary instruct the Administrator, RSPA, to

- gather and analyze the data necessary to determine whether there are sufficient hazards, involving personal injury or environmental damage, to warrant regulation of rural gas gathering lines, gas service lines, hazardous liquids storage facilities, and substances transported in liquefied form that are not presently regulated and
- take appropriate actions to amend the regulations and, in the case of rural gas gathering lines and/or gas service lines, propose the legislation needed to provide coverage of those additional pipeline facilities that warrant coverage.

Agency comments and actions taken

In responding to OMB Circular No. A-50, the Department stated that the issues of regulatory coverage and the relative roles of

each level of government will be best addressed in its overall review of the program. In addition, the Department stated that it will also initiate a study in fiscal year 1985 on the safety performance of hazardous liquid storage facilities that are associated with pipeline transport.

The Department has initiated a study of the risk of all hazardous liquid pipeline terminal storage. The study is expected to be completed in calendar year 1985. The Department is aware of only one unregulated substance transported an appreciable distance--liquefied carbon dioxide. The Department will be collecting information on liquefied carbon dioxide and other substances to determine if they should be studied.

ESTABLISHING USER FEES

As part of our current ongoing review of aspects of the pipeline safety program for the House Subcommittee on Fossil and Synthetic Fuels, we analyzed the feasibility of establishing user fees for interstate pipeline companies to finance the Department's interstate pipeline safety inspection program. On the basis of our analysis, we believe that the imposition of user fees are both legal and feasible. In addition, we believe that financing the costs of interstate pipeline safety inspections through fees to pipeline companies and their customers is equitable as compared with financing such costs by taxes on the general public. Furthermore, our analysis shows the impact of user fees on pipeline operators and their customers will be extremely small, on the basis of the present size of the Department's pipeline safety inspection program.

Legal basis for user fees

Ample legal basis exists for the Department to charge interstate pipeline operators for the costs of safety inspections. Case law involving the general "User Charge Statute," 31 U.S.C. section 9701, indicates that the Department may (although it is not required to) charge safety inspection fees to interstate pipeline operators under the authority of that statute. Its authority to charge safety inspection fees under the User Charge Statute is contingent upon these inspections providing a special government benefit to specific, identifiable recipients.

The proposition that safety inspections provide a special benefit to those inspected received judicial recognition in a Nuclear Regulatory Commission (NRC) case.² The Fifth Circuit Court of Appeals upheld charges assessed by NRC for the routine inspections of nuclear power facilities. The court recognized that the general public benefits from these inspections since they reduce the risk of accidents but we reasoned that operators of inspected facilities also benefit. These operators benefit because safety inspections assure their compliance with NRC's regulations, and thus allow them to continue operating. Similarly, the Department's safety inspections not only benefit the public but also provide special benefits to pipeline operators by assuring the compliance needed to maintain safety and continue operating.

²Mississippi Power and Light Co. v. Nuclear Regulatory Commission, 601 F.2d 223 (5th Cir. 1979), cert. denied, 444 U.S. 1102 (1980).

Feasibility of user fees

While pipeline safety inspection fees have not previously been adopted by the federal government, they are successfully used in some states. We contacted 11 states³ that employ various fee systems to finance their pipeline safety inspection programs, in order to learn what their experiences have been. The fee systems employed by these states vary in structure, the proportion of costs covered by revenues collected, the length of time the fees have been in effect, and the types of pipeline operators charged. Despite these differences, the state officials that we interviewed generally reported success with their fee systems. In 6 of the 8 states that offered an opinion, state officials believe their pipeline companies appear to willingly pay their allocated share of the safety inspection programs' costs. Only two states have reported opposition from interstate pipeline companies for charging fees on pipeline inspections.

Two federal agencies charge fees in situations that are similar to the Department's safety oversight of interstate pipelines. As already mentioned, the NRC charges for routine safety inspections of the facilities that it licenses (see 10 CFR part 170). These fees are specifically designed to recover the NRC's costs of conducting safety inspections. Fees charged by the Federal Energy Regulatory Commission (FERC) are not so specific, however. FERC levies a general annual assessment on the private hydroelectric power facilities that it licenses (18 CFR part 36).

³Alabama, Arkansas, California, Kansas, Mississippi, Nebraska, New Hampshire, Oklahoma, South Carolina, Tennessee, and West Virginia

The revenues collected from these assessments cover the costs of FERC's entire hydropower regulatory program, only part of which is devoted to safety inspections. As with NRC, however, the FERC safety program is ultimately financed by those inspected.

Equity issues and alternative fee systems

Equity issues involve who should finance the costs of interstate pipeline safety inspections--the general public in the form of taxes or the interstate pipeline companies and their customers in the form of safety inspection fees. The salient issues are who benefits from the Department's safety inspections and who should bear the cost of risks created by interstate pipeline operations. We believe it is equitable for interstate pipeline operators and their customers to finance Department safety inspections because the risks that these inspections reduce are entirely created by pipeline operations. Furthermore, it is commonly accepted that economic efficiency is improved if those for whom a product is produced, such as pipeline customers, bear the costs of providing the product. These costs include the Department's expenditures on pipeline safety inspections. Alternative fee systems to finance interstate pipeline safety inspections could be based on (1) the carrying capacity of a pipeline company, (2) the mileage operated by a pipeline company, or (3) the pipeline company's gross revenues. Each of these user fee alternatives are being used by states.

Economic consequences

Our economic analysis shows that the impact of a fee on interstate pipeline operators and their customers will be

extremely small since the Department's interstate safety inspection program is so small relative to industry revenues.

Currently, the Department's interstate safety inspection program costs less than \$5 million. A rough estimate of the size of the pipeline industry is \$100 billion in revenues. Spreading the interstate pipeline program cost over the pipeline industry would increase prices a maximum of $5/1000$ of 1 percent. Doubling the current program cost would potentially increase prices by $1/100$ of 1 percent. Charging user fees for the current program level could potentially increase the price of gasoline 0.005 cents per gallon. The price of a therm of natural gas might go up 0.025 cents. These impacts are so small as to be indiscernible. Should all of the costs be passed to the pipeline customers, they would bear the ultimate burden of the fee in the form of almost imperceptible price increases.

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This completes our statement for the record. Should you need any additional information, please contact our office.