U. S. DEPARTMENT OF TRANSPORTATION
OFFICE OF THE SECRETARY
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STATEMENT OF WILLIAM C. JENNINGS, ACTING DIRECTOR, OFFICE OF PIPELINE SAFETY, BEFORE THE SENATE COMMITTEE ON COMMERCE, SUBCOMMITTEE ON SURFACE TRANSPORTATION, REGARDING THE ADMINISTRATION OF THE NATURAL GAS PIPELINE SAFETY ACT, WEDNESDAY, JULY 9, 1969.

I am William C. Jennings, Acting Director, Office of Pipeline Safety, Office of the Secretary, Department of Transportation. With me are Joseph C. Caldwell, Deputy Director of the Office of Pipeline Safety, and Fred J. Emery, our legal adviser from the Office of General Counsel. We appreciate the opportunity to report on our administration of the Natural Gas Pipeline Safety Act of 1968, since its approval on August 12, 1968.

The Act gave the Secretary of Transportation the authority to regulate the "gathering, transmission, or distribution of gas by pipeline or its storage in or affecting interstate or foreign commerce" except for gathering lines in rural areas as determined by the Secretary. Section 3(a) of the Act required that the Secretary, not later than three months after its effective date (which was August 12, 1968), "adopt as interim minimum Federal safety standards for pipeline facilities and the transportation of gas in each State the State standards regulating pipeline facilities and the transportation of gas within such State on the date of enactment" of the Act. Section 3(b) of the Act requires the Secretary to establish not later than August 12, 1970, permanent minimum safety standards for the transportation of gas and pipeline facilities.

Section 5 of the Act provides two means whereby the States can take over the administration of the safety program for pipelines, other than those interstate lines subject to the jurisdiction of the Federal Power Commission. Under section 5(a), the performance of these functions with

respect to intrastate pipelines and facilities is transferred to any State which certifies that it "(1) has regulatory jurisdiction over the safety standards and practices of such pipeline facilities and transportation of gas; (2) has adopted each Federal safety standard applicable to such pipeline facilities and transportation of gas established under this Act as of the date of the certification; (3) is enforcing each such standard; and (4) has the authority to require record maintenance, reporting, and inspection substantially the same as are provided under section 12 and the filing for approval of plans of inspection and maintenance described in section 11". In addition, after August 12, 1970, a State will be required to certify that the State law "makes provision for the enforcement of the safety standards of such State agency by way of injunctive and monetary sanctions substantially the same as are provided . . ." under the Act.

Section 5(b) permits a State to enter into agreements with the Secretary for State enforcement of the Federal standards in those areas where the State is not able to certify under section 5(a).

Chronology of Events

The Office of Pipeline Safety was created in the Office of the Assistant Secretary for Research and Technology on September 10, 1968, Attachment #1. On October 2, we held our first meeting with representatives of State and Federal Government agencies, the gas pipeline and related industries, industry associations, the trade press, and the general public to discuss the administration of the Act. The general tone of that discussion is reflected in a recently issued policy statement, Attachment #2.

On November 12, we published the interim minimum Federal safety standards required by the Act, Attachment #3. All of the staff work was done with detailed personnel. Since the Act required that these standards be based on State standards, we collected and interpreted the standards of all the States. This required a considerable volume of correspondence, since the standards were written in a variety of formats and many could be interpreted only in the light of State administrative action. We found that the common denominator was the 1968 edition of the USAS B31.8 Code, which we adopted for those States which did not already have standards. As shown in Attachment #4, many State standards provided less than full coverage by excepting interstate transmission facilities or publicly owned facilities from regulation. Believing that Congress did not intend for Federal standards to leave some facilities unregulated, we made the interim standards apply to all pipeline facilities in each State.

Enforcement of the interim Federal standards for interstate facilities posed a problem. As discussed above, the Act provided for the States to enforce the standards for intrastate lines, if they wished to do so, but it made the interstate transmission facilities the sole responsibility of the Federal Government. The problem was that we did not have the staff to enforce the Federal standards. To provide enforcement, we authorized the States to act as agents of the Department for that purpose, to the extent that each State agency had enforcement authority under its own laws. This permitted each State to continue with respect to interstate transmission facilities whatever enforcement program it had in effect before we published the Federal standards. This is a voluntary action by each State with no Federal reimbursement.

As indicated above, the Act provides for substantial participation by the States in the pipeline safety program. We intend to work closely with the States in all aspects of the program, seeking their advice and assistance even in those areas which are exclusively a Federal responsibility. On November 11-14, we met with State regulatory officials at the annual convention of the National Association of Regulatory Utility Commissioners. Since then, we have attended all of the NARUC regional meetings. We have discussed the interim Federal safety standards, explained the States' enforcement role, and established channels of communication.

Initial response from the States augurs well for a productive relationship, Attachment #5. Forty-five States and the District of Columbia have submitted certificates or agreements under sections 5(a) and 5(b) of the Act; other jurisdictions either lack statutory authority or are reviewing their authority. Twenty-one States have agreed to act as our agents in enforcing the standards for interstate transmission lines.

We are working with the States to determine the cost data for their enforcement programs for 1967-1968 to be used as a basis for the initial grant-in-aid program authorized by section 5(c) of the Act. We may request an appropriation for the grant-in-aid program in the Fiscal Year 1971 budget.

Information is necessary for a rational regulatory program -- necessary for defining safety problems and for devising regulatory solutions. One of the prime sources of information is a procedure for collecting, classifying,

analyzing, storing, and retrieving information about pipeline system failures. Ideally, the information should include (i) the construction, maintenance, and operating history of the part of the system in which the failure occurred, (ii) an account of the failure including the immediate cause and surrounding circumstances, (iii) metallurgical analysis of the failed metal, (iv) the amount of gas which escaped and its behavior after escaping, and (v) damage resulting from the failure such as death and injury to people, damage to property, and interruption to community activities.

We started with little technical information pertinent to a regulatory program. We knew of the system failures which had made the newspaper headlines, of course, but they only indicated a need for regulation. There is a world of difference between the information which indicates a need for regulation and the information which defines what regulation is needed. A regulation is a solution to a defined problem. Therefore, the first step in a regulatory program is marshaling the facts which define safety problems. We must obtain detailed information about the causes of system failures accumulated through the systematic study of failures over a period of time. We could not find this information in any of the existing Government or industry programs.

On December 13, we entered into a contract with a major engineering and research company to advise us on a system for gathering information about system failures. The contractor was required to (i) review reporting systems used by Federal and State agencies, (ii) by working with representative operators, determine the information which gathering, transmitting, and distributing companies consider important about their system failures, (iii) develop a schematic reporting plan for companies to submit information, (iv) recommend a procedure for collecting, classifying, analyzing, storing and retrieving information about pipeline system failures.

This contract also called for the investigation of an actual pipeline system failure, so that the procedures could be tested and modified if necessary. Since a pipeline failure suitable for testing the proposed procedures did not occur during that phase of the contract, we modified the contract to require the contractor to develop comprehensive information on the use of various sealents to seal existing leaks in gas distribution systems. The use of sealents in reducing leaks in low pressure distribution systems is an area which offers great potential for immediately increasing safety. This effort will tell us what sealents are available on the market today, the feasibility of their use, and procedures for their application. Actual tests of recommended sealents on an existing gas distribution system are required.

Based on the contractor's initial study, we developed forms for reporting system failures. Before the end of this week, I expect to

issue a Notice of Proposed Rule Making, requesting public comment on the forms. We hope to have the system in operation by the end of the year.

On January 2, 1969, we established the 15-member Technical Pipeline Safety Standards Committee required by the Act, Attachment #6. This Committee represents technical knowledge, gained through training and experience, in all aspects of pipeline construction, maintenance, and operation. The Act requires us to seek the Committee's advice on the technical feasibility, reasonableness, and practicability of proposed regulations. We intend to seek the Committee's advice on all aspects of our administration of the Act. Initially, we plan to meet with the Committee four times a year. At the first meeting on January 30, the Committee discussed the philosophy under which we should administer the Act and the role of the Committee. On April 29 and 30, the Committee discussed the proposed system failure reporting system.

On January 17, 1969, we issued an order limiting the operating pressure on a new 36-inch pipeline operated by Great Lakes Gas Transmission Company. The reason for the Order is explained in Attachment #7. The Federal Power Commission cooperated fully in this case, responding in a few hours to our request for information under Section 7 of the Act and sending an advisor to the meeting in Lansing, Michigan, on January 17. On May 29, after electronic tests established the integrity of the pipe, we allowed the company to resume normal operations.

On June 30, we entered into a contract to develop state-of-the-art information on the detection and control of corrosion on ferrous pipelines. Corrosion is a major cause of system failures.

During the first few months, we administered the Act with personnel detailed from elements within the Department and from the Federal Power Commission. On October 21, Congress appropriated $250,000 for FY 1969, which provided for a staff of 20. We hired the first employee on October 27 and completed the staffing on June 30, 1969, Attachment #8. Due to personnel shortages in the petroleum and natural gas engineering disciplines, recruiting of qualified technical personnel was not easy.

Investigations of Pipeline Systems Failures

We have participated in the investigation of four major system failures. Two were in New York City on October 15, 1968, and January 3, 1969. The New York Public Utilities Commission is still investigating these failures, so there is no final report. In these two cases, our interest was largely educational; we wanted to find out how an established regulatory agency went about collecting information on system failures. We also participated with the States of Michigan and Wisconsin in the investigation of the Great Lakes Gas Transmission Company failure on January 17, 1969. As indicated above, that investigation resulted in the order included as Attachment #7. The most recent was a June 3 system failure in a residential area in Gary, Indiana, which injured nine persons and caused an estimated $345,000 in property damage. Seven houses were destroyed and 44 others damaged by fire and explosions. In view of the National Transportation Safety Board investigation of this accident, I shall not attempt at this time to state the facts or to indicate the probable cause thereof. However, as I shall discuss later, I believe

that we have learned a lot from the Gary failure. I should point out that my office cooperated fully with the National Transportation Safety Board, both before and during its public hearing in Gary on June 24-27.

Plans For The Future

As I indicated previously, information is necessary for a rational regulatory program. Since the Act requires us to publish permanent minimum Federal safety standards by August 12, 1970, we had to decide how best to meet this deadline. Ideally, we should wait until we had accumulated information from the reporting system described above and then, based on this information, develop comprehensive Federal safety standards for gas pipelines and facilities. It has become clear that, by this ideal method, we could not possibly meet the deadline. We have concluded that we should develop the permanent Federal standards by (i) combining the best features of the existing Federal, State, and Industry standards and company practices and (ii) adding such further requirements as we are able to justify, based on the knowledge that we have gained from those failures that we have investigated. While it is premature at this time to state any final conclusions concerning the Gary failure, we believe that existing standards should be improved. For example, the existing industry practice includes a recommended procedure for converting a low pressure distribution system to a medium pressure system. Even if, as it appears, this recommended practice was substantially followed in the Gary situation, we shall probably propose additional safeguards for

future upgradings of the type that was taking place in Gary when the failure occurred. By identifying and solving individual safety problems in this manner, we hope that in the near future we shall be able to make some significant strides toward pipeline safety.

In concluding, I think it is only fair to point out that our present 20-member staff will not support both a regulatory and enforcement program. Therefore, we plan to give priority to establishing regulations, limiting our field activities to investigation of major system failures and to developing our relationship with the States. At such time as our resources permit, we plan to establish regional offices for surveillance and enforcement.