



National Transportation Safety Board

Washington, D. C. 20594

Safety Recommendation

Log P-29/B

Date: November 21, 1988

In reply refer to: P-88-11 and -12

Mr. Robert O. Wells
Chairman
North Carolina Utilities Commission
Post Office Box 29510
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On January 18, 1988, a natural gas explosion destroyed the building housing the K&W Cafeteria and the lobby of the Sheraton Motor Inn at 380 Knollwood Street, Winston-Salem, North Carolina. Two adjoining motel wings suffered structural damage. Of the four persons in the lobby/cafe building at the time of the explosion, three sustained minor injuries. The fourth person sustained a fractured ankle. One motel guest also sustained minor cuts but refused treatment.¹

Although the Pipeline Safety Section of the Transportation Division of the North Carolina Utilities Commission (NCUC) appears to have sufficient staff to inspect and monitor normal pipeline operations in the State of North Carolina, the Safety Board is concerned that NCUC inspectors are working at their maximum capabilities. However, any unanticipated situation, such as a major accident investigation workload, that removes an inspector from his assigned field work will adversely affect the pipeline safety program. Consequently, the NCUC should reevaluate the staffing levels of the Pipeline Safety Section not only on the basis of normal inspection activities, but also on the basis of other activities, such as investigations, training, and special enforcement actions requiring additional monitoring of an operator.

The NCUC and the Office of Pipeline Safety of the Research and Special Programs Administration of the U.S. Department of Transportation have not taken sufficient enforcement actions against the Piedmont Natural Gas Company (Piedmont) to ensure its compliance with the corrosion protection and telephonic notification requirements. When the Federal safety standards for gas pipelines became effective in 1971, operators were given 5 years to place pipelines in areas of active corrosion under cathodic protection. The NCUC properly took action in the early 1970s to review the corrosion protection plans for the operators in the State. However, the NCUC failed to advise Piedmont in a timely manner of the

¹For more detailed information, read Pipeline Accident Report--Piedmont Natural Gas Company, Natural Gas Explosion and Fire, Winston-Salem, North Carolina, January 18, 1988 (NTSB/PAR-88/01).

inadequacies in its corrosion plan, and this left the company in a difficult position. Although Piedmont learned that its plan did not meet the intent of the regulations slightly less than a year before the compliance date, the NCUC assessed a \$1,000 penalty against Piedmont for failure to designate areas of active corrosion on pipelines installed before August 1, 1971, and failure to place these pipelines under cathodic protection by August 1, 1976. Despite the NCUC assessment against Piedmont in 1977, Piedmont still had not satisfied the corrosion protection requirements when the accident occurred. More than 8 years had passed from the detection of the first corrosion leak on the distribution line along Knollwood Street until it was completely under cathodic protection by March 1988. The detection of a second leak in 1984 apparently did not cause Piedmont to reassess its priorities to place the distribution line under cathodic protection more promptly. Recognizing that nearly 12 years had passed since the initial deadline for compliance with these requirements, the Safety Board does not believe that Piedmont has made an adequate effort to comply with the corrosion protection requirements.

The NCUC, knowing the historical problems Piedmont has had with complying with corrosion protection standards, should have continued to monitor its progress closely beyond 1979. Although the NCUC noted in its inspection reports for 1986 and 1987 of the Winston-Salem district that Piedmont had not complied with the corrosion protection requirements for all of its pipeline, the NCUC has taken no subsequent enforcement action. As a result, Piedmont has not been motivated to comply with the corrosion protection regulations in a timely manner.

Therefore, the National Transportation Safety Board recommends that the North Carolina Utilities Commission:

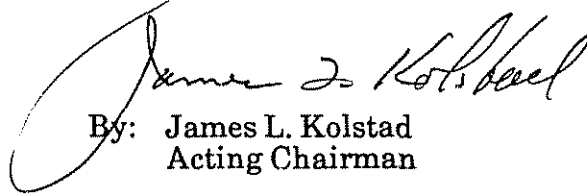
Increase the staffing level of the Pipeline Safety Section to provide sufficient resources for responding to responsibilities beyond programmed inspection activities. (Class II, Priority Action) (P-88-11)

Review its use of sanctions against noncomplying gas operators to ensure that its sanctions reflect the gravity of the violation and the operator's compliance history as a means for motivating operator compliance with Federal and State pipeline safety standards. (Class II, Priority Action) (P-88-12)

Also, as a result of its investigation, the Safety Board issued Safety Recommendations P-88-4 through -9 to the Piedmont Natural Gas Company; P-88-10 to the City of Winston-Salem, North Carolina; P-88-13 to the Research and Special Programs Administration of the U.S. Department of Transportation; and P-88-14 to the American Gas Association.

The National Transportation Safety Board is an independent Federal agency with the statutory responsibility "... to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations" (Public Law 93-633). The Safety Board is vitally interested in any action taken as a result of its safety recommendations. Therefore, it would appreciate a response from you regarding action taken or contemplated with respect to the recommendations in this letter. Please refer to Safety Recommendations P-88-11 and -12 in your reply.

KOLSTAD, Acting Chairman, and BURNETT, LAUBER, NALL, and DICKINSON, Members, concurred in these recommendations.



By: James L. Kolstad
Acting Chairman