

PI-03-0106

09-12-03

Mr. James F. Wunderlin, P.E.  
Vice President/Engineering  
Southwest Gas Corporation  
5241 Spring Mountain Road  
P.O. Box 98510  
Las Vegas, NV 89193-8510

Dear Mr. Wunderlin:

This is in response to your August 13, 2003, request for an interpretation of the gas pipeline distribution system valve regulations at 49 CFR 192.181 and 192.747. Section 192.181 addresses spacing of emergency valves, location of emergency valves on the inlet piping to a regulator station, and accessibility and operability requirements for all valves installed on a main for operating or emergency purposes. Section 192.747 requires the operator to perform annual checks and service on these valves to ensure safe operation of the gas system.

You request a response to the following questions:

1) Does § 192.181(c)(l) require an operator to maintain every valve installed on a gas system, even if they are not identified as emergency "key valves" for operating or emergency purposes,... as readily accessible in accordance with § 192.747?

No. Section § 192.181(c)(l) is in Subpart D, *Design of Pipeline Components*. It addresses minimum requirements for the design and installation of pipeline components. It does not require an operator to maintain all valves in accordance with § 192.747.

Valve maintenance is addressed in § 192.747, *Valve Maintenance: Distribution Systems*. This section requires that "[e]ach valve, the use of which may be necessary for the safe operation of a distribution system, must be checked and serviced at intervals not exceeding 15 months, but at least once each calendar year." In compliance with this regulation, Southwest Gas has designated many, but not all, gas distribution system valves as "key valves." ,

2) Is an operator required to abandon, remove, or render inoperable valves not identified as emergency "key valves."

No. An operator is not required to "abandon, remove, or render inoperable valves" simply because they are not identified as "key valves." The pipeline safety regulations at 49 CFR Part 192 do not address this issue.

All valves installed in a gas pipeline system must comply with § 192.53, *General*, which requires that all components installed in a gas system must be structurally sound, chemically compatible with the gas transported, and qualified in accordance with the requirements of 49 CFR Part 192, Subpart B, *Materials*. Valves in gas systems must also meet the requirements of § 192.145, *Valves*, which requires that each valve be manufactured and tested in accordance with standard API 6D. In addition, an operator must also include all valves in leak inspection programs and corrosion control programs.

If you have any further questions about the pipeline safety regulations, please contact me at (202) 366-4565.

Sincerely,  
Richard D. Huriaux, P.E.  
Manager, Regulations  
Office of Pipeline Safety

August 13, 2003

Ms. Stacey Gerard  
Associate Administrator of Pipeline Safety, DPS-1  
Office of Pipeline Safety  
400 7th Street, SW  
Washington, DC 20590

RE: Request for Formal Interpretation of Title 49 CFR §192.181, Distribution line valves and §192.747, Valve Maintenance: Distribution Systems

Dear Ms. Gerard:

Southwest Gas Corporation (Southwest) is a natural gas local distribution company serving over 1.4 million customers and operates approximately 1,481 miles of transmission and 22,999 miles of distribution pipelines in California, Nevada and Arizona. Southwest formally requests an interpretation with respect to 49 CFR Part 192.181, Distribution line valves and §192.747, Valve Maintenance: Distribution Systems.

Title 49 CFR §192.181(a), Distribution line valves states:

*"(a) Each high-pressure distribution system must have valves spaced so as to reduce the time to shut down a section of main in an emergency. The valve spacing is determined by the operating pressure, the size of mains, and the local physical conditions."*

Southwest installs valves on its gas pipeline systems to facilitate new construction and to perform maintenance activities. During the engineering design and emergency isolation plan annual review process, Southwest evaluates and revises its emergency isolation plan as necessary to maintain its ability to isolate portions of its gas system during emergencies. This involves the identification of "key valves" based upon the size of mains, operating pressures and physical location, such as, business districts and class location. In addition, Southwest utilizes local physical conditions like natural and man made boundaries (i.e. railroads, bridges, highways, desert washes, etc.) during this process.

Title 49 CFR §192.181(b), Distribution line valves states:

*"(b) Each regulator station controlling the flow or pressure of gas in a distribution system must have a valve installed on the inlet piping at a distance from the regulator station sufficient to permit the operation of the valve during an emergency that might preclude access to the station."*

Southwest installs and maintains valves on its regulator station inlet piping at a distance from the regulator station sufficient to permit the operation of the valve during an emergency that might preclude access to the station.

Southwest installs and maintains valves on its regulator station inlet piping at a distance from the regulator station sufficient to permit the operation of the valve during an emergency that might preclude access to the station.

Title 49 CFR § 192.181 (c)(l), Distribution line valves states:

*"Each valve on a main installed for operating or emergency purposes must comply with the following:  
(1) The valve must be placed in a readily accessible location so as to facilitate its operation in an emergency."*

Southwest identifies "key valves" to be utilized during an emergency that are installed in accordance with the above requirements and maintains them in accordance with Title 49 CFR § 192.747, Valve Maintenance: Distribution Systems. Other valves that are installed on Southwest's gas systems to facilitate new construction and to perform maintenance activities are **not** considered "key valves" and may or may not be maintained in accordance with Title 49 CFR §192.747, Valve Maintenance: Distribution Systems.

Title 49 CFR §192.747, Valve Maintenance: Distribution Systems states:

*"Each valve, the use of which may be necessary for the safe operation of a distribution system, must be checked and serviced at intervals not exceeding 15 months, but at least once each calendar year."*

Based upon the information provided, Southwest requests your interpretation of the following questions:

1. Does Title 49 CFR §192.181(c)(l) require an operator to maintain every valve installed on a gas system, even if they are **not identified as emergency "key valves"** for operating or emergency purposes, within its' gas system as readily accessible in accordance with §192.747?
2. Is an operator required to abandon, remove or render inoperable valves **not identified as emergency "key valves?"**

Southwest appreciates the assistance of the DOT/OPS in clarifying the intent of the requirements outlined in Title 49 CFR §192.181, Distribution line valves and §192.747, Valve Maintenance: Distribution Systems. If you have any questions, need any additional information or would like to discuss Southwest's request for interpretation please contact me.

Sincerely,

James F. Wunderlin, P.E. Vice President/Engineering