



U.S. Department
of Transportation

1200 New Jersey Avenue, SE
Washington, DC 20590

**Pipeline and Hazardous
Materials Safety Administration**

June 02, 2021

Mr. Neil Pascual
Senior Pipeline Engineer
Public Utilities Commission of Nevada
1150 East William Street
Carson City, NV 89701

Dear Mr. Pascual:

In a letter to the Pipeline and Hazardous Materials Safety Administration (PHMSA), you requested an interpretation of 49 Code of Federal Regulations (CFR) Part 192. Specifically, you requested an interpretation regarding §§ 192.197 and 192.201.

You stated that the Public Utilities Commission of Nevada's Pipeline Safety Program (Nevada PSP) requested its two largest regulated gas pipeline operators to provide documentation of the maximum safe delivery pressure for each of its "large volume customers" (recipient) where the delivery pressure provided to the recipient's facilities exceeds 5 pounds per square inch gauge (psig) pressure. You stated that Nevada PSP is aware that the operators set the over-pressure/relief devices at the recipient sites at a pressure above the minimum delivery pressure to maintain service to each recipient. You stated, however, that the operators provided documentation to Nevada PSP of only the minimum calculated/required delivery pressure for each recipient, but did not provide the maximum safe delivery pressures.

You stated that these two gas pipeline operators provide elevated pressure service ranging from 6 psig to 690 psig to approximately 200 recipients, and that these recipients include power generation plants, large resort properties, and manufacturing/industrial facilities. Your letter stated that the Nevada PSP believes that the operators should know the maximum safe delivery pressure for each of the recipients; that the operators should have a record of the maximum safe delivery pressure for each recipient; and that the operators make that information available to personnel when overpressure protection equipment at a recipient's facility is being worked on or maintained. You stated that the Nevada PSP is concerned about the potential for a gas pipeline operator over-pressurizing a recipient's piping or equipment. You stated that one of the two largest regulated gas pipeline operators in your state does not believe it is the operator's responsibility to know the maximum pressure rating of each recipient's equipment and piping.

You stated that since the September 2018 Merrimack Valley Massachusetts over-pressurization incident, the Nevada PSP has been looking closely at where potential risks for over-pressurization events could occur. You identified regulating equipment that provide elevated delivery pressure to a specific recipient that is served by equipment that functions as a city gate

The Pipeline and Hazardous Materials Safety Administration, Office of Pipeline Safety provides written clarifications of the Regulations (49 CFR Parts 190-199) in the form of interpretation letters. These letters reflect the agency's current application of the regulations to the specific facts presented by the person requesting the clarification. Interpretations are not generally applicable, do not create legally-enforceable rights or obligations, and are provided to help the specific requestor understand how to comply with the regulations.

regulating station as one such area of concern. Based on the issues and concerns detailed in your letter, and outlined above, you requested an interpretation of §§ 192.197 and 192.201. Specifically, your letter seeks an interpretation of these regulatory sections as it relates to information that a regulated pipeline operator must have regarding the equipment and piping of recipients that are provided with elevated gas pipeline pressure services.

In your letter and subsequent discussions with our staff, you focused on distribution operators (not transmission operators) providing gas from high-pressure distribution pipeline systems to recipients, with delivery pressure exceeding 5 psig.

In PHMSA's reply to your request, we are answering your questions based upon the design, operations, and maintenance of a natural gas high-pressure distribution pipeline system's overpressure protection system to meet the pipeline maximum allowable operating pressure (MAOP) requirements in 49 CFR Part 192. The MAOP of a high-pressure distribution pipeline system connected to a customer's¹ service line² is set forth in § 192.621 and is based, in part, on the design requirements in §§ 192.195, 192.197, 192.199, and 192.201.

Specifically, § 192.197 requires operators to have one or more regulators or pressure limiting devices "to regulate and limit, to the maximum safe value, the pressure of gas delivered to the customer." This in turn requires that high-pressure distribution operators to know the maximum safe pressure that can be delivered to each customer.

Section 192.605 requires operators to prepare and follow a manual of written procedures for conducting operations and maintenance activities and for emergency response. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted. The manual must include, among other things, procedures for operating the pipeline in accordance with each of the requirements of subpart L, including the MAOP requirements in § 192.621. Operators must keep records necessary to administer these procedures under § 192.603(b), and such records must include information necessary to ensure compliance with the MAOP specifications and controlling pressure as specified by § 192.197. Accordingly, operators must have in their records the maximum safe delivery pressure for each customer's connected piping and utilization equipment.

Section 192.201 provides that each pressure relief station or pressure limiting station installed to protect a pipeline must have the listed capacity (pressure) depending on the MAOP of the high pressure distribution system. Please note, the capacity (pressure) limits in § 192.201 are based on the MAOP of the high pressure distribution system, not the maximum safe pressure that can be delivered to a customer as specified in § 192.197. There is no explicit allowance in § 192.197 for exceeding the maximum safe pressure when delivering gas to a customer. For pressure relief or pressure limiting stations where § 192.201 is applicable any overpressure situations must be limited based upon maximum allowable operating pressure of the gas pipeline system.

¹ For purposes of this interpretation, "customer" as used in reference to § 192.197 has the same meaning as "recipient" as used in this letter.

² A service line is defined in § 192.3.

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PHMSA also notes that §§ 192.605(b)(10)(iii) and 192.739 require periodic inspection and testing of pressure limiting equipment (overpressure protection equipment) to determine that it is in a safe operating condition and has adequate capacity. The overpressure protection equipment must have capacity to limit MAOP exceedance to the requirements of § 192.621. The procedural manual must include procedures for disseminating information essential (such as equipment and piping pressure limits) for its technicians to have when they perform work that requires the need for the information. Also, § 192.605(b)(8) requires the work of operating personal to be periodically reviewed by the operator to determine the effectiveness and adequacy of the procedure used in normal O&M, and to modify the procedures when deficiencies are found.

The below MAOP operations and maintenance activities are examples where documentation is required by the operator to meet § 192.603(b):

- Section 192.621 has MAOP requirements for the ongoing operations of high-pressure distribution pipelines, which includes how to determine the MAOP based upon the maximum safe pressure for the pipeline operating conditions.
- Section 192.739 has requirements for the inspection and testing of pressure limiting and regulating stations, which includes being “adequate from the standpoint of capacity and reliability of operation for the service in which it is employed” and “set to control or relieve at the correct pressure consistent with the pressure limits of § 192.201(a).”
- A high-pressure distribution pipeline operator that delivers gas directly to a customer at its low-pressure gas burning equipment must meet the requirements of § 192.197 to prevent an operating pressure that would cause the unsafe operation of any connected and properly adjusted gas utilization equipment. To meet § 192.621 and referenced § 192.195 MAOP requirements, an operator would need to maintain documentation as required in § 192.603(b).
- Also, low-pressure distribution pipeline systems must have documentation of how operating pressures are maintained at pressures that are safe “for the operation of any connected and properly adjusted low-pressure gas burning equipment” to meet § 192.623 and the recordkeeping requirements of § 192.603(b).

If we can be of further assistance, please contact Tewabe Asebe at 202-366-5523.

Sincerely,

John A. Gale
Director, Office of Standards
and Rulemaking



STEVE SISOLAK
Governor

STATE OF NEVADA
PUBLIC UTILITIES COMMISSION

HAYLEY WILLIAMSON
Chair

C.J. MANTHE
Commissioner

STEPHANIE MULLEN
Executive Director

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January 7, 2020

John A. Gale, Director
Office of Standards and Rulemaking (PHP-30)
PHMSA, U.S. Department of Transportation
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Washington, DC 20590-0001

RE: Jurisdictional Interpretation Request
49 CFR 191.197-Control of the pressure of gas delivered from high-pressure distribution systems
49 CFR 192.201-Required capacity of pressure relieving and limiting stations

Dear Mr. Gale:

The Public Utilities Commission of Nevada's ("PUCN") Pipeline Safety Program ("PSP") requests an interpretation from the Pipeline Hazardous Materials Safety Administration ("PHMSA") as to whether a jurisdictional operator must have in its records, and provide upon request, the maximum safe delivery pressure for each customer's connected piping and utilization equipment where the delivery pressure from a jurisdictional natural gas system exceeds 5 pounds per square inch gauge ("PSIG") where the requirements of 49 CFR 192.197(a) are not satisfied by the service regulator.

The Nevada PSP requested that its two largest jurisdictional operators provide the maximum safe delivery pressure for each customer where the delivery pressure being provided to those customers exceeds 5 PSIG.¹ Nevada PSP Staff was instead provided with only the minimum calculated/required delivery pressure for each of these customers—no maximum information was provided. Staff is aware that each of its two largest jurisdictional operators set the over-pressure/relief devices at these customer sites at a pressure above this minimum delivery pressure to maintain service to each customer.

In total, Nevada's two largest jurisdictional operators provide elevated pressure service ranging from 6 PSIG to 690 PSIG to approximately 200 customers. These customers include power generation plants, large resort properties, and manufacturing/industrial facilities.

Based upon the Nevada PSP's review of 49 CFR 192.195, 49 CFR 192.197 and 49 CFR 192.201, Nevada PSP Staff believe that each operator that delivers gas from a jurisdictional system at an elevated pressure, as outlined above, must be able to demonstrate that the downstream customer utilization equipment and piping is rated to handle the maximum safe delivery pressure provided by the operator and its regulating equipment. Nevada PSP Staff also believe that the MAOP allowances (6 PSIG or 10 percent MAOP exceedance)

¹ Meaning there is a worker/monitor regulator setup or regulator and pressure relief device providing service to the customer.

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provided by 49 CFR 192.201 do not necessarily apply to non-jurisdictional customer equipment and piping, especially if this equipment/piping is not designed to handle the additional pressure.

Therefore, the Nevada PSP believes that each operator should request the maximum safe delivery pressure from each of these elevated delivery customers, and that each operator should include the maximum safe delivery pressures in its records and make that information available to operating personnel when over-pressure protection equipment at the elevated customer's sites is being worked upon and maintained.

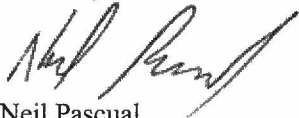
Nevada PSP is concerned about the potential for a jurisdictional operator over-pressurizing a customer's piping or equipment. One operator in Nevada has stated that they do not believe it is their responsibility to know the maximum pressure rating of each customer's equipment and piping; instead, they believe it is the responsibility of the local building code enforcement agency such as the county or city. However, this position does not appear to be valid, because it is going to be the jurisdictional operator (not the local building code enforcement agency) who is going to setup and configure the delivery pressure to that customer, including how much allowable build-up to include in the worker/monitor or regulator/pressure relief device configuration.

Since the September 2018 Merrimack Valley, Massachusetts over-pressurization incident, the Nevada PSP has been looking closely at where potential risks for over-pressurization events could occur. One of these areas is on regulating equipment that provide elevated delivery pressure to specific customers who are served by equipment that, for all intents and purposes, looks like and acts like a city gate regulating station.

The Nevada PSP, therefore, seeks an interpretation of **49 CFR 192.197** and **49 CFR 192.201** in regard to what information the jurisdictional operator must have regarding the equipment and piping of a customer provided with elevated pressure service in order to guide the Nevada PSP's future evaluation efforts regarding the safe delivery of natural gas at elevated pressure to customers in Nevada.

Should you have any questions please feel free me at (702) 305-9519.

Sincerely,



Neil Pascual
Senior Pipeline Engineer, and Nevada Pipeline Safety Program Manager

- cc: Anne-Marie Cuneo, Director of Regulatory Operations
Paul Maguire, Engineering Manager
David Noble, Assistant Staff Counsel
Pipeline Safety Personnel
Zach Barrett, PHMSA (Zach.Barrett.dot.gov)