Part 192
Subpart H
Customer Meters, Service Regulators, and Service Lines for Natural Gas Distribution
Contact Information

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§192.353 Customer meters and regulators: Location.

• Meters and regulators must be installed in a readily accessible location, whether inside or outside of a building.
• Protected from damage due to corrosion, vehicles, or other causes.
• Service regulators within a building must be located as near as practical to the point of service line entrance.
§192.353 Customer meters and regulators: Location.

- Each meter installed within a building must be located in a ventilated place and not less than 3 feet from any source of ignition or heat which might damage the meter.
- Where feasible, the upstream regulator in a series must be located outside the building, unless it is located in a separate metering or regulating building.
§ 192.353 Customer meters and regulators: Location.
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§192.355 Customer meters and regulators: Protection from damage.

- If the customer's equipment might create either a vacuum or a back pressure, a device must be installed to protect the system.
- Service regulator vents and relief vents must terminate outdoors, and the outdoor terminal must:
  - Be rain and insect resistant.
  - Located where gas from the vent can escape freely into the atmosphere and away from any opening into the building.
  - Protected from damage caused by submergence in areas where flooding may occur.
- Each pit or vault that houses a customer meter or regulator where vehicular traffic is anticipated, must be able to support that traffic.
§192.357 Customer meters and regulators: Installation.

• Each meter and regulator must be installed so as to minimize anticipated stresses upon the connecting piping and the meter.

• When close all-thread nipples are used, the wall thickness remaining after the threads are cut must meet the minimum wall thickness requirements of this part.

• Connections made of lead or other easily damaged material may not be used in the installation of meters or regulators.

• Each regulator that might release gas in its operation must be vented to the outside atmosphere.
§192.359 Customer meter installations: Operating pressure.

- A meter may not be used at a pressure of more than 67 percent of the manufacturer's shell test pressure.
- Newly installed meters manufactured after November 12, 1970, must have been tested to a minimum of 10 p.s.i. gage.
- A rebuilt or repaired tinned steel case meter may not be used at a pressure that is more than 50 percent of the pressure used to test the meter after rebuilding or repairing.
§192.361 Service lines: Installation.

- Each buried service line must be installed with at least 12 inches of cover in private property and at least 18 inches of cover in streets and roads.
- Where an underground structure prevents installation at those depths, the service line must be able to withstand any anticipated external load.
- Each service line must be properly supported on undisturbed or well-compacted soil, and material used for backfill must be free of materials that could damage the pipe or its coating.
§192.361 Service lines: Installation.

• Where condensate in the gas might cause interruption in the gas supply to the customer, the service line must be graded so as to drain into the main or into drips at the low points in the service line.

• Each service line must be installed so as to minimize anticipated piping strain and external loading.
§192.361 Service lines: Installation.

• Each underground service line installed below grade through the outer foundation wall of a building must:
  – In the case of a metal service line, be protected against corrosion;
  – In the case of a plastic service line, be protected from shearing action and backfill settlement; and
  – Be sealed at the foundation wall to prevent leakage into the building.
§192.361 Service lines: Installation.

- Where an underground service line is installed under a building:
  - It must be encased in a gas-tight conduit.
  - The conduit and the service line must, if the service line supplies the building it underlies, extend into a normally usable and accessible part of the building.
  - The space between the conduit and the service line must be sealed to prevent gas leakage into the building and, if the conduit is sealed at both ends, a vent line from the annular space must extend to a point where gas would not be a hazard, and extend above grade, terminating in a rain and insect resistant fitting.
§192.361 Service lines: Installation.

• Each underground nonmetallic service line that is not encased must have a means of locating the pipe that complies with §192.321(e).

(Plastic pipe that is not encased must have an electrically conducting wire or other means of locating the pipe while it is underground. Tracer wire may not be wrapped around the pipe and contact with the pipe must be minimized but is not prohibited. Tracer wire or other metallic elements installed for pipe locating purposes must be resistant to corrosion damage, either by use of coated copper wire or by other means.)
§192.363 Service lines: Valve Requirements.

- Each service line must have a valve that meets the applicable materials and design requirements of this part. A valve incorporated in a meter bar, that allows the meter to be bypassed, may not be used as a service line valve.
- A soft seat service line valve may not be used if its ability to control the flow of gas could be adversely affected by exposure to anticipated heat.
- Each service line valve on a high-pressure service line, installed aboveground or in an area where the blowing of gas would be hazardous, must be designed and constructed to minimize the possibility of the removal of the core of the valve with other than specialized tools.
§192.365 Service lines: Location of valves.

- Each service line valve must be installed upstream of the regulator or, if there is no regulator, upstream of the meter.
- Each service line must have a shutoff valve in a readily accessible location that, if feasible, is outside of the building.
- Each underground service line valve must be located in a covered durable curb box or standpipe that allows ready operation of the valve and is supported independently of the service lines.
§192.367 Service lines: General requirements for connections to main piping.

- Each service line connection to a main must be located at the top of the main or, if that is not practical, at the side of the main, unless a suitable protective device is installed to minimize the possibility of dust and moisture being carried from the main into the service line.

- Each compression type service line to main connection must:
  - Be designed and installed to effectively sustain the longitudinal pullout or thrust forces caused by contraction or expansion of the piping, or by anticipated external or internal loading.
  - If gaskets are used in connecting the service line to the main connection fitting, have gaskets that are compatible with the kind of gas in the system.
§192.369 Service lines: Connections to cast iron or ductile iron mains.

• Each service line connected to a cast iron or ductile iron main must be connected by a mechanical clamp, by drilling and tapping the main, or by another method meeting the requirements of §192.273.

• If a threaded tap is being inserted, the requirements of §192.151(b) and (c) must also be met.

(Where a ductile iron pipe is tapped, the extent of full-thread engagement and the need for the use of outside-sealing service connections, tapping saddles, or other fixtures must be determined by service conditions.)
§192.371  Service lines:  Steel.

• Each steel service line to be operated at less than 100 p.s.i. gage must be constructed of pipe designed for a minimum of 100 p.s.i. gage.
§192.373 Service lines: Cast iron and ductile iron.

• Cast or ductile iron pipe less than 6 inches in diameter may not be installed for service lines.
• If cast iron pipe or ductile iron pipe is installed for use as a service line, the part of the service line which extends through the building wall must be steel pipe.
• A cast iron or ductile iron service line may not be installed in unstable soil or under a building.
§192.375 Service lines: Plastic.

- Each plastic service line outside a building must be installed below ground level, except that –
  - It may be installed in accordance with §192.321(g); and
  - It may terminate above ground level and outside the building, if-
    - The above ground level part of the plastic service line is protected against deterioration and external damage.
    - The plastic service line is not used to support external loads.

- Each plastic service line inside a building must be protected against external damage.
§192.377 Service lines: Copper

• Each copper service line installed within a building must be protected against external damage.
§192.379 New service lines not in use.

• Each service line that is not placed in service upon completion of installation must comply with one of the following until the customer is supplied with gas:
  – The valve that is closed to prevent the flow of gas to the customer must have a locking device or other means designed to prevent unauthorized opening of the valve.
  – A mechanical device or fitting that will prevent the flow of gas must be installed in the service line or in the meter assembly.
  – The customer's piping must be physically disconnected from the gas supply and the open pipe ends sealed.
§192.381 Service Lines: Excess flow valve performance standards

• Excess flow valves to be used on single residence service lines that operate continuously throughout the year at a pressure not less than 10 p.s.i. gage must be manufactured and tested by the manufacturer according to an industry specification, or the manufacturer's written specification, to ensure that each valve will:
  – Function properly up to the maximum operating pressure at which the valve is rated.
  – Function properly at all temperatures reasonably expected in the operating environment of the service line.
§192.381 Service Lines: Excess flow valve performance standards

- At 10 p.s.i. gage:
  - Close at, or not more than 50 percent above, the rated closure flow rate specified by the manufacturer; and
  - Upon closure, reduce gas flow-
    - For an excess flow valve designed to allow pressure to equalize across the valve, to no more than 5 percent of the manufacturer's specified closure flow rate, up to a maximum of 20 cubic feet per hour; or
    - For an excess flow valve designed to prevent equalization of pressure across the valve, to no more than 0.4 cubic feet per hour; and
  - Not close when the pressure is less than the manufacturer's minimum specified operating pressure and the flow rate is below the manufacturer's minimum specified closure flow rate.
§192.381 Service Lines: Excess flow valve performance standards

- An excess flow valve must meet the applicable requirements of the materials and design subparts of this part.
- An operator must mark or otherwise identify the presence of an excess flow valve on the service line.
- An operator shall locate an excess flow valve as near as practical to the fitting connecting the service line to its source of gas supply.
§192.381  Service Lines: Excess flow valve performance standards

• An operator should not install an excess flow valve on a service line where the operator has prior experience with contaminants in the gas stream, where these contaminants could be expected to cause the excess flow valve to malfunction or where the excess flow valve would interfere with necessary operation and maintenance activities on the service, such as blowing liquids from the line.
§192.383 Excess flow valve customer notification.

§192.383 has been revised under the new DIMP Rule.

Previous: §192.383 Excess flow valve customer notification.

Revised: §192.383 Excess flow valve valve installation.
§192.383 Excess flow valve installation.

- **Definitions:**
  - *Replaced Service Line* means a natural gas service line where the fitting that connects the service line to the main is replaced or the piping connected to this fitting is replaced.
  - *Service line serving single-family residence* means a natural gas service line that begins at the fitting that connects the service line to the main and serves only one single-family residence.
§192.383 Excess flow valve installation.

- Definitions:
  - **Installation Required.** An excess flow valve (EFV) installation must comply with the performance standards in §192.381. The operator must install an EFV on any new or replaced service line serving a single-family residence after February 2, 2010, unless one or more of the following conditions is present:
    - The service line does not operate at a pressure of 10 psig or greater throughout the year.
§192.383 Excess flow valve installation.

- Definitions:
  - The operator has prior experience with contaminants in the gas stream that could interfere with the EFV’s operation or cause loss of service to a residence.
  - An EFV could interfere with necessary O&M activities, such as blowing liquids from the line; or
  - An EFV meeting performance standards in §192.381 is not commercially available to the operator.
§192.383 Excess flow valve installation.

- Definitions:
  - **Reporting.** Each operator must, on an annual basis, report the number of EFV’s installed pursuant to this section as part of the annual report required by §191.11.
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