

Subject: NATURAL GAS METER INSTALLATIONS

General Requirements

Gas meters used to measure the quantity of natural gas used by a customer are owned by the HPUC. The HPUC and the customer will jointly determine the location of all natural gas meters. The HPUC will install, set, and maintain the natural gas meter. Only authorized HPUC personnel can set a meter, turn a meter on or off (except in emergencies), connect a meter to the main gas system, or remove a natural gas meter.

Residential Natural Gas Installations

The location of residential meters will be jointly determined by the HPUC and then customer in accordance with the following guidelines:

1. Meter installations must comply with all local, state, or federal regulations as stipulated in CFR Part 192.
2. Meters will be located in a safe location that is readily accessible for meter reading and repair.
3. Outside meter locations are mandatory. Outside meters will be installed by a meter set bracket.
4. Inside gas meters are prohibited.
5. Meters and associated relief valves will not be closer than 3 feet to any source of ignition such as electric meters, switches, and transformers.
6. Meter locations will avoid water taps, electric facilities, air intake vents, edges of sidewalks, and driveways.
7. Meters must be installed at least 6 inches above finished grade level.

Commercial and Industrial Natural Gas Meter Installations

- 1) Factors that determine the design of a commercial or industrial natural gas meter installation include:
 - a. Volume of natural gas to be delivered
 - b. Pressure at which natural gas is metered
 - c. Type of structure or business
 - d. Public or non-public nature of structure
 - e. Number of occupants
- 2) All buildings must install new natural gas meters outside. The meters will be hard case and hung where practicable. Meter installations at schools and playground buildings must be protected from potential damage.
- 3) Outside meters and relief valves must not be installed closer than 50 feet from any standby propane storage tank or fuel transfer points.
- 4) Meter setting materials and natural gas pipe materials must comply with standards specified for natural gas service.
- 5) Using a mounting bracket for support of the meter is preferable. A meter shelf or slab may be required.
- 6) Meters will not be installed where rapid deterioration from corrosion or other causes is likely.
- 7) A protective device such as a backpressure regulator or check valve, will be installed by the customer downstream of the meter under the following conditions:
 - a. If the nature of utilization equipment may induce a vacuum at the meter, install a backpressure regulator downstream from the meter.
 - b. Install a check valve if the utilization equipment might induce a backpressure, if gas utilization equipment will not be connected to a source of oxygen or compressed air, or if liquefied petroleum gas or other supplementary gas is used as standby and might flow back through the meter.
 - c. A three-way valve installed to admit the standby supply and shut off the regular natural gas supply at the same time may be substituted for a check valve.
- 8) Appropriate instruction as given for residential meter installations will apply to commercial and industrial meter installations.

- 9) A bypass valve and piping with test tees may be required on the large volume or interruptible meters, depending on the method used to test the meters.

Special Large Capacity Natural Gas Meter Installations

- 1) Special natural gas meter installations that require more than the standard metering facilities include:
 - a. Installations where metering is done at unregulated medium pressure and above.
 - b. Installations where metered natural gas exceeds 5 mcf per hour, any pressure class.
 - c. Installations where a meter house or enclosure is required.
- 2) Factors that determine the degree of special treatment design of a natural gas meter installation include:
 - a. Volume of natural gas to be delivered
 - b. Pressure at which natural gas is metered
 - c. Type of structure or business
 - d. Public or non-public nature of structure
 - e. Number of occupants
 - f. Need for securing accessibility to the metering facilities
- 3) If customers request or require a separate meter house or enclosure, the HPUC will provide information and will approve the final plan.
- 4) Typical meter installations for various applications can be obtained from the HPUC Heat Department
- 5) All natural gas piping from the point where the service enters the structure to the meter will be exposed and accessible. The piping to the meter will be installed so that the connections to the meter fit without strain.
- 6) The HPUC will furnish a separate meter for each consumer classified as a complete apartment or business.
- 7) Natural gas services will not be turned on before piping has been completed to at least one major appliance and after an inspection has been made and passed by the HPUC.