



Issue Date:	March 24, 2014
Code/Section:	2012 International Fuel Gas Code (IFGC) Section 402.4
Approved:	Technical Review Team
Developed By:	Planning & Development Staff

Issue: This guideline establishes procedures for obtaining approval of elevated delivery pressure in natural gas piping systems. The city of Phoenix Planning & Development Department (P&D) releases permits for all gas piping installations. The local gas supplier for the Greater Phoenix Area is Southwest Gas Corporation (SWG).

Guideline: There are generally three reasons considered by SWG for a proposed elevated delivery pressure.

- At least one of the customer’s appliances requires more than 7” water column (1/4 psi).
- If customer’s gas piping sizing is 4” or larger at ¼ psi, higher pressure may be granted to decrease the piping size below 4”.
- The use of flexible gas piping such as CSST that requires the use of 2 psi gas pressure.

Southwest Gas currently offers ¼ psi, 2 psi, and 5 psi delivery pressure dependent on the geographic location. Each customer shall submit a request for elevated delivery pressure to SWG per the published Elevated Delivery Pressure Guidelines. The gas piping isometric shall be stamped by the project engineer and contain the following information:

1. Requested pressure
2. One-line diagram of the entire gas system
3. Pipe sizes, lengths and type of pipe material
4. Location of gas equipment, including the input BTU ratings and required pressure
5. Location of all shut off valves and pressure regulators
6. Total connected gas load and total connected load
7. Phoenix Fuel Gas Code table used to size the gas system.

The following procedures help ensure that gas permits issued by P&D meet the Phoenix Fuel Gas Code and Southwest Gas Corporation guidelines.

For projects that are processed through the P&D preliminary approval process;

- P&D staff provides a copy of the SWG Elevated Delivery Pressure Guidelines document during the pre-application meeting.
- A stipulation of preliminary approval requires approval from SWG before submitting construction drawings.
- Customer provides P&D staff with written or e-mail verification from a SWG representative that proposed delivery pressure is available and approved.

For all other gas permits requesting elevated pressure, the following is required,

- P&D plan reviewer requests verification from SWG that the proposed elevated delivery pressure is available, or;
- Customer provides P&D staff with written letter or e-mail verification from SWG representative that proposed delivery pressure is available and approved.

In both cases design of an elevated pressure natural gas system shall be under the seal and signature of an Arizona registrant.

The builder / customer must call SWG to request a meter set. SWG will need proof of the City of Phoenix's (COP) final & approved inspection. Proof of the approved inspection can be sent to the SWG Inspection Desk, or a green tag stating approval can be placed on the gas line.