

I. General

DENC and DESC Welding Manual - Version 2019.1 May 1, 2019

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A. Scope

This manual covers groove and fillet welding in piping used in the transmission and distribution of natural gas. Welding may be done by the shielded metal arc process using a manual technique. The welds may be produced by position, roll, or a combination.

This manual also covers the standards of acceptability to be applied to production welds tested to destruction or inspected by radiography.

It is intended that all work performed in accordance with this manual shall meet or exceed the requirements of the existing codes. As codes change in the future this manual will be revised as necessary.

B. Definitions

Terms of this Welding Manual are defined as follows:

Company means Dominion Energy North Carolina (DENC) and Dominion Energy South Carolina (DESC). Company may act through an inspector or other authorized representative.

Compressor Station means all of the piping and fittings associated with the compressor unit that is located downstream of the suction valve and upstream of the discharge valve.

Distribution Line means a pipeline other than a gathering or transmission line.

Downstream means in the direction of the gas flow

Gas means natural gas.

In-service weld means are those that fuse directly to the wall of an in-service pipeline that contains petroleum based products or fuel gases that may be pressurized and/or flowing.

Main means a distribution line that serves as a common source of supply for more than one service line.

Maintenance weld (see "in-service weld")

Maximum actual operating pressure (MOP) means the maximum pressure that occurs during normal operations over a period of 1 year.

Maximum allowable operating pressure (MAOP) means the maximum pressure at which a pipeline or segment of a pipeline may be operated under this part.

May means the procedure or standard is optional.

Pipe means any pipe or tubing used in the transportation of gas, including pipe-type holders.

Pipeline(s) means all parts of those physical facilities through which gas moves in transportation, including pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies.

Pipeline facility means new and existing pipelines, rights-of-way, and any equipment, facility, or building used in the transportation of gas or in the treatment of gas during the course of transportation.

Production weld means any joint weld that is to be placed into a pipeline that is considered new construction and is to be later placed in-service and utilized to transport gas.

Service line means a distribution line that transports gas from a common source of supply to (a) a customer meter or the connection to a customer's piping, whichever is farther downstream, or (b) the connection to a customer's piping if there is no customer meter. A customer meter is the meter that measures the transfer of gas from an operator to a consumer.

Shall means the procedure or standard is mandatory.

Should means the procedure or standard is recommended but not mandatory.

SMYS means: a) For steel pipe manufactured in accordance with a referenced specification, the yield strength specified as a minimum in that specification; or b) For steel pipe manufactured in accordance with an unknown or un-referenced specification, the yield strength determined in accordance with § [192.107](#)(b).

Transmission line means a pipeline, other than a gathering line, that: (a) Transports gas from a gathering line or storage facility to a distribution center or storage facility; (b) Operates at a hoop stress of 20 percent or more of SMYS; or (c) Transports gas within a storage field.

Upstream means in the direction opposite the flow of gas

WPS means a Company qualified welding procedure specification

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