

MCCONNELL AFB, KS UTILITY SYSTEM DESCRIPTION

System Description: McConnell AFB, located southeast of Wichita, Kansas, is an active military installation. It is a joint-use installation with Boeing Aircraft sharing access to the runways on the western edge of the airfield. McConnell AFB occupies 2853 acres and contains approximately 653 buildings. McConnell AFB can be divided into a western section and eastern section, with the airfield separating the two sections. The West Side is mostly devoted to the Kansas Air National Guard, including aircraft operations and maintenance, industrial uses, and mission support. The majority of the base lies to the east of the airfield and it largely devoted to Air Force uses.

Natural Gas:

McConnell AFB:

Williams Natural Gas Company supplies natural gas to McConnell Air Force Base through an 18" high-pressure line (320 psig) that crosses beneath the northwest corner of the base and enters a metering station at the north-central part of base. This metering and regulating station serves the entire base at 50 psig. Williams Natural Gas owns the 18-inch supply line, metering station, and regulator; McConnell AFB owns the 4" steel line from the odorizer onward. The distribution system consists of approximately 160,349 linear feet of underground piping and associated valves, meters and regulators. Most of the piping is less than 10 years old. Approximately 99 percent of the system piping is polyethylene (PE); the remaining 1 percent is wrapped carbon steel. The 2" carbon steel section leading to the Weapons Storage Area was installed in 1987 while the 4" carbon steel section leading from the main metering station to the 6" main was installed in 1996. The PE piping sections (3/4 inch to 6 inch) were installed in 1990. No cathodic protection is currently being utilized on these two steel sections. Three (3) anodes were previously recommended and may have been installed as an upgrade to the system.

Kansas Air National Guard Base:

Kansas Air National Guard (KSANG) occupies the area of McConnell AFB west of the airfield. KSANG's supply of natural gas is through K,G,&E by way of two lines. KSANG purchases their gas through Mountain Energy. The majority of natural gas supplied to KSANG is from a 4" steel line at 20 psig that enters the base at a metering and regulating station. This metering and regulating station serves 95% of KSANG at 10 psig. Natural gas enters at a second point to the west of Building 80 through a 3" polyethylene line and serves only Building 65 at 10 psig. K,G, &E owns the regulators and meters at the two metering stations. KSANG owns the piping after the meters. One private entity, the Wichita Air Museum, owns a branch line from the main metering station.

The metering stations used for billing purposes are identified in the following table. The Kansas Air National Guard portion of the Air Force-owned distribution system consists of approximately 14,021 linear feet of underground piping and associated valves, meters and regulators. The piping ranges in age from 20 years to 3 years. Approximately 37 percent of the system piping is polyethylene (PE) and the remaining 63 percent is wrapped carbon steel. The steel piping ranges from 1 1/2 inches to 6 inch, and the PE piping ranges from 1.25 inches to 4 inch. The carbon steel sections were installed since 1969 and PE piping has been installed since 1990. The existing cathodic protection system has not been maintained for some time due to manpower shortages. Based on interviews with KSANG personnel, it is assumed that there is currently no cathodic protection for all steel pipes in the KSANG area. One rectifier and five (5) anodes were recommended and may have been installed as an upgrade to the system.

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