Basin Electric Power Cooperative



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ABOUT BASIN ELECTRIC POWER COOPERATIVE

The Basin Electric Power Cooperative Natural Gas Pipeline System consists of 2 pipelines in SD. The first serves the Deer Creek Station in Elkton, SD. It is a 13.2 mile pipeline with a 10" in diameter running from the Northern Border Pipeline starting approximately 1 mile east and 0.7 miles north of Astoria, SD and terminating at the Deer Creek Station 6 miles east and 2 miles south of White, SD.

The second serves Groton Generation Station in Groton, SD. It is an 11.6 miles in length, 10" in diameter steel coated pipeline. This Natural Gas Pipeline is located in Brown and Spink Counties in NE South Dakota. The Pipeline starts at Northern Border Valve Site 37 located in Spink County and runs Northeast 1.6 mile and runs adjacent to SD Highway 37 10 miles north before entering Basin Electric Power Cooperative Groton Generation Station. This pipeline is a high pressure with normal operating pressure range of 900 -1340 psi. Underground pipeline are one of the safest and most reliable modes of transportation of natural gas.



GROTON GENERATION STATION Groton, SD - 95 MW (gas)

Groton Generation Station, Basin Electric's first peaking station near Groton, SD, has two generating units (video). Each 95-megawatt unit is powered by a GE LMS 100® simple cycle gas turbine.

The station is fueled by natural gas supplied from Dakota Gasification Company via the Northern Border Pipeline, and is connected to the electrical grid connected via a nearby substation operated by Western Area Power Administration.

Unit 1 went into commercial operation on July 1, 2006, and Unit 2 went into commercial operation on July 1, 2008.



DEER CREEK STATION - 300 MW

Located in Brookings County near Elkton, SD, Deer Creek Station is a 300-net megawatt capacity combined-cycle power plant. The \$405-million Deer Creek Station began commercial operation in 2012. There are 28 full-time employees at the plant.

The power plant uses natural gas delivered via the Northern Border Pipeline and a new 14-mile underground pipeline to the plant. The gas is purchased from Dakota Gasification Company.

Deer Creek is connected to the electric grid by less than one mile of new 345-kilovolt transmission line. The plant features two turbine-generator sets: one turbine fired by natural gas; the other is driven by steam. Both of the turbines are connected to generators.

Major equipment at the plant includes a combustion turbine fueled by natural gas; a heat recovery steam generator; a steam turbine driven by steam created from the heat of the gas turbine's exhaust; and an air-cooled condenser to cool and convert steam to water for re-use.

Deer Creek Station will operate about 12-16 hours per day, five days a week (more, if during peak load periods).

THE ENVIRONMENT

Basin Electric has always been committed to meeting the needs of its members by producing electricity in the most economical and environmentally responsible manner possible. In addition to developing a broad portfolio of renewable resources and emission controls, Basin Electric operates some

EMERGENCY CONTACT: 1-800-339-5616 or 1-701-223-0041

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:Natural Gas 1971 115

SOUTH DAKOTA COUNTIES OF OPERATION:

Brookings Brown Spink

Changes may occur. Contact the operator to discuss their pipeline systems and areas of operation

of the cleanest coal-based power plants in the country. More than \$825 million has been invested in state-of-the-art environmental equipment for all Basin Electric and subsidiary facilities. The average annual operating, maintenance and depreciation cost for environmental control equipment is nearly \$80 million. This investment is part of Basin Electric's pledge to protect the air, land and water.

CONTACTS

Groton Generation Station 13870 406th Avenue Groton, SD 57445-0186 Joe Nelson Operations & Maintenance Supervisor

Deer Creek Station 20615 484th Ave Elkton, SD 57026 Terry Ackerman Superintendent of SD Operations

IN AN EMERGENCY, OR TO REPORT ASUSPECTED LEAK, PLEASE CALL:

Basin Electric Power Cooperative 1-701-223-5616 or Toll-Free 1-800-339-5616



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