

Recreational opportunities near GGS

NPPD is committed to protecting public health and safety. The District also offers recreational opportunities such as fishing, hunting and boating at nearby Sutherland Reservoir. Due to availability of open water, NPPD has seen an influx of geese, ducks, and bald eagles that spend winter at the reservoir, which also supplies cooling water for the plant.



Gerald Gentleman Station Facts

Unit 1

Generating Capacity.....	665,000 kilowatts (net)
Type.....	Coal Fired
Construction Cost.....	\$335 million
Physical Size.....	275 ft high - 500 ft wide - 500 ft long
Chimney Height.....	550 feet
Cooling Water Circulating Capacity.....	263,000 gal. per minute
Coal Capacity at Full Capacity.....	420 tons per hour
Boiler Manufacturer.....	Foster Wheeler
Turbine-Generator Manufacturer.....	Brown-Boveri (Alstom)
Ground Breaking.....	May 25, 1973
Commercial In-Service Date.....	April 2, 1979

Unit 2

Generating Capacity.....	700,000 kilowatts (net)
Type.....	Coal Fired
Construction Cost.....	\$287 million
Physical Size.....	275 feet high – 320 feet wide – 500 feet long
Chimney Height.....	550 feet
Cooling Water Circulating Capacity.....	265,000 gal. per minute
Coal Capacity at Full Capacity.....	420 tons per hour
Boiler Manufacturer.....	Babcock & Wilcox
Turbine-Generator Manufacturer.....	General Electric
Ground Breaking.....	June 7, 1977
Commercial In-Service Date.....	January 1, 1982

Combined Units

Tons of Structural Steel.....	33,300
Cubic Yards of Concrete.....	212,000
Linear Feet of Pipe.....	620,000
Feet of Electrical Cable.....	7,250,000
Operating Personnel.....	201

Commitment to Safety

Safety shall always come first:

There is no condition that requires any of us to work in an unsafe manner.



For more information about NPPD visit:
www.nppd.com



Nebraska Public Power District

Always there when you need us

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A Closer Look at...

**Gerald
Gentleman**
STATION



The name...

Gerald Gentleman aided in the initial organization of the Platte Valley Public Power and Irrigation District and served that District for 36 years.



During his service as general manager of Platte Valley, Gentleman also took an active role in the formation and statewide expansion of Nebraska Public Power System and Consumers Public Power District. These two entities, as well as Platte Valley, later merged to become today's Nebraska Public Power District. After his retirement, he acted as a consultant and assisted with the many intricate and difficult financial challenges involved in accomplishing the merger.

A native of Platte Center, Neb., Gentleman worked in Kearney and York before moving to North Platte in 1925. Upon Platte Valley's formation in 1933, he became board secretary and a member of the staff. He was named general manager in 1939. He also served as secretary, vice chairman, and chairman of the Board of Managers of NPPS from 1940 to 1965. He died in 1978 at the age of 82.

Where we are . . .

Gerald Gentleman Station is located near the south shore of Sutherland Reservoir, east of State Highway 25, south of Sutherland, Neb. The plant is NPPD's largest electric generating facility and continues to be recognized as one of the lowest cost, coal-fired generating stations in the nation.

About GGS . . .

GGS consists of two, coal-fired power generating units that supply electricity to NPPD's electrical grid system. Units 1 and 2 generate 665,000 and 700,000 kilowatts, respectively, and went into operation in 1979 and 1982 respectively.

The plant uses low-sulfur coal from Wyoming as fuel to generate steam to turn the station's turbines. This reduces discharges of sulfur-dioxide gases, allowing GGS to meet current air quality standards. Coal is transported by rail to GGS and can be served by two competing rail companies, resulting in lower costs for coal delivery to GGS.

Commitment to environmental standards...

Because NPPD is committed to meeting federal and state air and water quality standards and regulations, the original design of GGS included state-of-the-art measures for environmental protection. Over time and with changing regulations, these measures have been further improved.

NPPD installed new low NOx burners and associated equipment in both Unit 1 and Unit 2 resulting in reduced NOx emissions by more than



50 percent annually. In 2016 a new activated carbon injection system will be placed in service that is expected to eliminate more than 90 percent of the coal's mercury emissions. NPPD and GGS are involved in a Department of Energy program to study carbon sequestration for utility scale facilities.

Previous projects put into place to meet evolving standards have included baghouses, a technology that removes particulate matter released from the station, a new sewage treatment facility, a waste water evaporation pond, with boiler and cooling system modifications have also been undertaken to improve pollution control. Additional systems have been added to coal handling equipment, and the inactive coal pile is covered with a surface preparation to reduce the blowing of coal dust.

GGS impact on the local economy...

In Nebraska, the use of coal as a generating resource for electricity, combined with the transportation of coal, collectively generates nearly \$4.9 billion annually in output according to a study conducted by the Bureau of Business Research at the University of Nebraska-Lincoln.

Operations at GGS have a significant impact on the local economy in the North Platte/Lincoln County area. The plant has an employment level of 219 and combined with wages has a direct impact of \$152 million on the local economy and total impact of \$184 million. Local fiscal impact from GGS, sales and property tax, has an impact locally of \$5.3 million.