

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

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.

The location...

Gerald Gentleman Station is located near the south shore of Sutherland Reservoir, east of State Highway 25 in west-central Nebraska. The plant is NPPD's largest electric generating facility and has consistently been recognized as one of the lowest cost, coal-fired generating stations in the nation.

The plant...

GGG 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.

Sub-bituminous, low-sulfur coal from Wyoming is used as fuel to generate steam to turn the station's turbines. The coal is transported to GGS from mines in Wyoming (over Burlington Northern Santa Fe rail lines) to Wallace, Neb., and then over tracks owned by NPPD. The station's unit train cars are also owned by NPPD.

A second rail spur, built in 1994, allows coal to be shipped directly from the Union Pacific Railroad. This spur allows competition, resulting in lower costs for coal delivery to GGS, which at full capacity, burns as much as 840 tons of coal per hour. Wyoming coal is used because it is low in sulfur content, thus greatly reducing discharges of sulfur-dioxide gases, which helps GGS meet air quality standards.



Because NPPD is committed to meeting federal and state air pollution and water quality standards and regulations, the original design of GGS included state-of-the-art measures for environmental protection. These measures have been further improved as needs have been identified.

More recently, the facility installed emission control systems containing baghouses, a technology which removes 99.8 percent of the particulate matter from the station's exhaust gases.

Other environmental protection measures at the plant site include a sewage treatment plant, a waste water evaporation pond, managed coal storage and a runoff pond. Boiler and cooling system modifications have also been

undertaken at the station to improve overall 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. Systems have also been installed to wet down flyash to minimize it from blowing outside of the disposal area.

Faced with prolonged drought in western Nebraska, in 2005, GGS constructed a nearby well field to supply the station with supplemental cooling water. Located on NPPD property adjacent to the plant, the wells help the plant comply with regulatory temperature limits of the discharge water.