We Energies' generating system

April 2019

NATURAL GAS

Concord Generating Station

Location:
This plant occupies 150 acres of land in Wisconsin next to Concord Substation, near Watertown, Wis.

Type of plant:
Natural gas-based, peak-load plant used during hours of high demand.

Initial cost:
$107 million

Units:
4 units

Year in service:
Units 1 and 2: 1993
Units 3 and 4: 1994

Generating capacity:
Unit 1: 100 megawatts
Unit 2: 100 megawatts
Unit 3: 100 megawatts
Unit 4: 100 megawatts

Total net generating capacity:
400 megawatts

Concord Generating Station

Fuel:
Primary fuel: Natural gas
Secondary fuel: #2 ultra low-sulfur fuel oil

Fuel handling:
Natural gas: Pipeline
Transportation: Fuel oil tanker trucks
Storage: 1.5 million gallons
Tank size: 40 feet high and 80 feet in diameter

Average fuel use:
Natural gas: 1.2 million cubic feet per hour per unit
Fuel oil: 9,000 gallons per hour per unit

Emission control:
Demineralized water injection for NOx control

Storage: 1.2 million gallons
Tank size: 2 tanks, 30 feet high and 60 feet in diameter

Water source: Deep well

Control room:
All major functions in the plant are controlled by operators with computer support to continuously monitor and report on pressures, temperatures, flow rates, etc. In addition, the computer aids in start-up, shutdown, load adjustments and information for future reference.