We Energies' generating system

September 2008

NATURAL GAS

Germantown Power Plant

The first "peaker" plant built by We Energies to be used primarily during times of peak demand.

Location:
This plant occupies 75 acres of land in Germantown, Wis.

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

Initial Cost:
$38 million

Units:
a) 4 units, each with 2 gas turbines and 1 generator
b) 1 unit with 1 gas turbine

Year in Service:
a) 1978
b) 2000

Generating Capacity:
Units 1-4: 63 megawatts per unit
Units 5: 93 megawatts

Total Net Generating Capacity:
345 megawatts

Germantown Power Plant

Contribution to Total System Electric Energy Production Capability:
Less than 1 percent

Voltage:

Generator:	13,800
Step-Up Transformer:	138,000

Fuel:

Primary Fuel:	Unit 5 - natural gas
Secondary fuel:	#2 low-sulfur fuel oil
Units 1-4:	low sulfur fuel oil

Fuel Handling:

Natural Gas:	Pipeline
Transportation:	Tanker trucks
Storage:	600,000 gallons of storage tank capacity
Tank size:	10 ft. deep and 100 ft. in diameter

Average Oil Use:
20,000 gallons per hour at full load

Control Room:
One operator monitors and controls all the major functions in the plant. Start-up also can be accomplished by remote control from the system control facility in Pewaukee, Wis.