

2. General Plant Description

2.1 Design Conditions

Characteristic	Specification
Elevation	1020 Ft
Design ambient temperature	90°F
Minimum ambient temperature	-10°F
Maximum ambient temperature	105°F
Design relative humidity	43 %
Wind speed	120 mph
Wind applicable Code	UBC 1997
Wind exposure	C
Snow load	40 lb/ft ²
Seismic Zone	4
Seismic importance factor	1.15

2.2 Equipment Overview

2.2.1 Gas Turbine

Feature	Specification
Primary Fuel	Natural Gas
Starting Means	Load Commutated Inverter (LCI)
Air Filtration	Self-Cleaning
Inlet Air Cooling	Evaporative Cooler
Compressor/Turbine Cleaning	On and Off-line Compressor Water Wash
Emissions Control	Gas - Dry Low NOx

2.2.2 Generator

Feature	Specification
Frequency	60 Hz
Power Factor (pf)	0.85 Lagging
Power Factor (pf)	Capability to 0.95 Leading
Generator Excitation	Digital Static Bus Fed

2.2.3 Enclosures

Feature	Specification
Enclosure	Turbine Compartment
Compartment Freeze Protection	Included
Enclosure	Accessory Compartment
Enclosure	Load Compartment
Acoustic Barrier Wall	Exhaust Diffuser

2.2.4 Control Systems

Feature	Specification
Turbine-Generator	SPEEDTRONIC™ Mark VIe (TMR)
Location	Installed in PEECC (Packaged Control Compartment)