

Section 5.0 Expected Performance Using Natural Gas and Diesel Fuel (Not Guaranteed)

The expected performance for the plant is presented in the performance calculations included in this section. Calculations were performed for operation on both Natural Gas and #2 Diesel for the LM2500 PE, with and without water injection, at the design conditions listed. A performance summary is attached on the following pages.

80°F; 78% RH; 100 ft (Design Conditions)

		Total (2) Units		Total (2) Units		Total (2) Units		Total (2) Units
	Natural Gas				Diesel			
	LM2500PE		LM2500PE Water Inject		LM2500PE		LM2500PE Water Inject	
Gross GT Power ea. (kW)	20894		22056		20973		22463	
Net LHV HR (BTU/kWh)	9715	9711	10050	10046	9736	9732	10097	10093
Net Power (kW)	20393	40801	21477	42972	20597	41208	22022	44060
Auxiliaries (kW)	502	897	580	1141	375	737	441	865
Fuel usage (pph)	9956	19912	10850	21700	10960	21920	12150	24300
Fuel usage (MMSCFD)	5.1	10.2	5.6	11.2	--	--	--	--
Fuel usage (gpm)	--	--	--	--	25.3	50.6	28.1	56.2
Fuel Chemical HHV/LHV ratio	1.107	1.107	1.107	1.107	1.065	1.065	1.065	1.065
Water Injection (pph)	N/A	N/A	11320	22640	N/A	N/A	11990	23980
Water Injection (gpm)	N/A	N/A	22.6	45.3	N/A	N/A	24	48