

22.9 Performance Guarantee Test

22.9.1 The Contractor shall carry out Performance Guarantee Tests as per Annexure A
Clause No. 6.00.00 of the Technical Specification/specifications

The Contractor shall ensure the following Performance Guaranteed Values for
the Power Plant:

Sr. No.	Parameter description	Performance guaranteed values
1	Unit GROSS HEAT RATE:- Unit gross heat rate in kcal / kWh at rated steam parameters & 0.1 ata as exhaust pressure, with zero percent make up, at TMCR condition and at reference ambient parameters as per Technical specifications	2239.77
2.	Total auxiliary power consumption of all auxiliaries at TMCR condition (%)	7.017
3.	SPM – mg/Nm ³ (with one field in each gas path out of service)	50
4.	Gross electrical power output at Generator terminals (MW)	600
5.	Boiler steaming capacity at BMCR condition (tph)	2068
6.	Unburnt Carbon in fly ash by weight (%) (Max)	1

The Contractor guaranteed Turbine cycle Heat Rate as 1950 kcal/kWh. The Contractor agreed to guarantee Unit Gross Heat Rate as 2239.77 kcal/kWh, considering (minimum) 99.5% piping efficiency. However improved piping efficiency shall be considered later based on the actual Main steam parameters measured during PG Test. Formula to be used for calculating piping efficiency shall be $\{ (1 - (I_B - I_T) / I_B) \times 100 \}$, where I_B , I_T are values of enthalpy of main steam at Boiler outlet & Turbine Inlet respectively. Contractor indicated that piping loss is not considered on BE calculation. The Unit gross heat rate shall be calculated by the formula, $UHR = THR / BE / PE$.

