

Annexure-D II

Min. Qualification for O&M Contract Staff

Sr. No.	POSITIONS	QUALIFICATIONS	EXPERIENCE, Nos. of years
1	Station In Charge /Plant Manager	BE (Mech. /Elect /C & I)	25-30
2	HOD	BE (Mech. /Elect)& BOE	18-25
3	Shift In Charge	BE (Mech. /Elect) & BOE	10-15
4	Asst. Shift In Charge/Asst Manager	BE (Mech. /Elect) &BOE	5 - 10
5	Control Room Engineers	Deg./Dip (Mech. /Elect)/BOE	3 - 10
6	Plant Operators (GT, STG, HRSG, FC, Boiler, Electrical, Balance of Plant)	Diploma (Mech./Elect./C & I)	3 - 10
7	Maintenance Manager/OMC Manager	BE (Mech. /Elect)/C&I	15 - 25
8	Maintenance Engineer - Mechanical	Deg./Dip (Mech.)/BOE	5 -10
9	Maintenance Engineer - Electrical	Deg./Dip (Elect)	5 -10
10	Maintenance Engineer – C & I/IT	Deg.(Inst.)/Diploma-IT	5 -10
11	Chemical & Environment Manager	M Sc./B Sc./ Diploma (Chem. Engg.)	10-15
12	Fire & Safety In Charge	Dip (Industrial Safety)	5 -10
13	Fireman/Safety officer	Dip (Industrial Safety/Fire)	3 - 5
14	Materials (Stores) /Procurement	Deg./Dip (Mech./Elect.)	5 - 10
15	Store Keeper	Graduate/Diploma	3 - 5
16	HR/Admin In-Charge	Graduate/ Post Graduate	7 - 10
17	Documentation/Assistant	Graduate/ Post Graduate	2 - 5
18	Accounts In Charge	B Com/ M Com/ CA	3 - 10
19	Civil In Charge	Deg./Dip (Civil)	3 -10
20	Mechanical Supervisors	Dip./ITI (Mech.)	3 - 10
21	Mechanical (Fitters/Welders)	ITI (Mech.)	3 - 10
22	Electrical Supervisors	Dip./ITI (Elect.)	5 - 10
23	Electrical Technicians	ITI (Electrical)/Diploma	3 - 10
24	Instrumentation Supervisors	Dip. (C & I.)	7 - 10
25	Instrumentation Technicians	Dip/ITI (C & I)	5 - 10
26	Maintenance Support	-X/XII Pass/ITI	1 - 5
27	Lab. Assistant	B Sc. (Chemistry)	3 - 7

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Remarks:

1. Manpower working as Boiler operator /Engineer should have requisite Boiler proficiency certificate.
2. Manpower working as Electrical technician/operator should have necessary Electrical license.
3. O&M Contractor to ensure that any other certification required by manpower for meeting the statutory requirements/Govt regulations/Electricity Rules/Acts for operating CPP should be a pre-requisite before O&M phase starts.
4. All manpower shall have worked in similar capacity Power Plant with minimum Capacity of single Unit of 30MW & Boiler of 100 TPH, High pressure.
5. All C&I specific engineers shall be competent for the following control system jobs.
 - a. MARK-VI Gas turbine control system
 - b. Agnace/Equivalent fire protection system.
 - c. DCS (MaxDNA).
 - d. Yokogawa DCS (Centum VP)
 - e. Vibration Monitoring System (Bentley Nevada)
 - f. BMS –PLC (Honeywell Safety Manager)
 - g. UB FD fan PLC (GE Fanuc)
 - h. EDG – PLC (GE Fanuc)
 - i. EDG –PC (Siemens S7-200)
 - j. HSD Centrifuge –PLC (Siemens S7-200)
 - k. Gas Boosting Compressor PLC
 - l. Ingersoll Rand microprocessor based system.
 - m. Allen Bradley PLC (Nitrogen compressor)
 - n. Wood ward governor Peak 125 & peak -723
 - o. Analyzers used in Power Plant.
 - p. All field instrumentation Maintenance/Repair activity.
 - q. SAP
6. **Minimum of the following jobs must be done by engineer in house for above control system.**
 - Control system HMI and engineering software configuration in OWS & EWS.
 - Control system hardware (CPU/I/O etc.) replacement and configuration.
 - Logic, back up, Graphics, modification and implementation
 - Loop configuration, add/ removal and simulation.
 - Alarm and system diagnostic analysis competency.