SCOPE OF WORK & RESPONSIBILITIES OF CONSULTANT

OPERATION

Engineer (SO/F) : 1 No.

- Should have worked as Operation/Commissioning engineer in 220MWe and above nuclear power plants in TG and auxiliary systems.

Nature of Job:

Monitoring and control of vital parameters in TG, Steam and water system, and auxiliaries.

Ensuring plant parameters within the specified normal range values,

Start-up and shutdown of various pumps, blowers and electrical equipment such as Condensate Extraction pumps, Boiler feed pumps, OGDHR pumps and Fans, etc.

Start-up of steam water system, feed water heating, TG warm up and rolling, synchronization to GRID and sustained operation of TG set.

Assisting and guiding commissioning team during commissioning, testing and integrated operation.

Forman/ senior operator in Operations for TG and SWS system:-2 No's

- Should have worked as Foreman/Senior operator in 220MWe and above in nuclear power plant in TG and auxiliary systems.

Nature of Job:

Round the clock operation,

Monitoring of various plant parameters and operation of equipment in TG, Steam and water system, and auxiliaries

Recording plant parameters within the specified normal range values,

Field operation for Start-up and shutdown of various pumps, blowers and electrical equipment such as Condensate Extraction pumps, Boiler feed pumps, OGDHR pumps and Fans, etc.

Field operations for Start-up of steam water system, feed water heating, TG warm up and rolling, synchronization to GRID and sustained operation of TG set.

Assisting commissioning team during commissioning, testing and integrated operation.

SCOPE OF WORK & RESPONSIBILITIES OF CONSULTANT

MECHANICAL

Engineer SO/F Level- 1 No.

- Should have worked as Mechanical Maintenance engineer in 220MWe and above nuclear power plant in TG and Auxiliary systems.

Nature of job:

- Reviewing the maintenance procedures for TG and auxiliary systems
- Coordinate turbine rolling, barring gear operation and trial runs.
- Maintenance of governing valves, control valves and stop valves.
- Maintenance of EHC (Electro-Hydraulic Control) system.
- Check functioning of turbine trip and emergency protection systems.
- Maintenance of lube oil, control oil and jacking oil systems.
- Maintenance of condensate extraction pumps (CEP).
- Maintenance of boiler feed pumps (BFP) and their driving turbines/motors, as applicable.
- Maintenance of cooling water pumps and seal water pumps.
- Maintenance of gland steam condenser and gland sealing system.
- Maintenance of vacuum pumps and air ejectors.
- Maintenance of heat exchangers, oil coolers and filters.
- Maintenance of circulating water and auxiliary cooling systems.
- Maintenance of HP and LP bypass valves.

Foreman/Senior Technician- 2 Nos

- Should have worked as Foreman/Senior technician in Mechanical Maintenance in 220MWe and above nuclear power plant in TG and Auxiliary systems.

Nature of Jobs:

- Conduct inspection of pumps, motors, gearboxes and rotating equipment.
- Checking mechanical seals, gland packing, bearings and couplings.
- Perform shaft alignment using dial gauges and laser alignment equipment.
- Inspect piping, valves, flanges and expansion joints.
- Carry out hydraulic testing and pressure testing wherever required.
- Identify oil leakage, water leakage and steam leakage.
- Monitor equipment health through vibration and temperature analysis.
- Check rotor run-out, eccentricity, shaft alignment and bearing clearances.
- Inspect and maintain journal bearings and thrust bearings.
- Check bearing metal temperature, vibration and oil parameters.
- Monitor differential expansion, axial displacement and rotor eccentricity.
- Inspect gland sealing and labyrinth sealing arrangements.

SCOPE OF WORK & RESPONSIBILITIES OF CONSULTANT

ELECTRICAL

Engineer SO/F Level- 1 No.

- Should have worked as Electrical Maintenance engineer in 220MWe and above nuclear power plant in TG and Auxiliary systems.

Nature of job:

- Supervise dismantling, cleaning, and inspection of internal components.
- Checking and servicing of motor, gearbox, bearings, and seals.
- Testing of local and remote operation, including control signals.
- Preparation of service and test reports.
- Inspection, testing & calibration of overload relays and protective relays.
- Checking of control circuits, interlocks, and indication circuits.
- Functional testing of motor feeders and protection circuits.
- Testing of electrical and mechanical interlocks.
- Troubleshooting of motor starter circuits and control wiring.
- Preparation of maintenance and test procedures, inspection, and test reports.
- Power evacuation system maintenance & condition monitoring.
- maintenance, troubleshooting, testing and commissioning of electrical power evacuation system like Generator, exciter, voltage regulator, Generator Transformer, Unit Auxiliary transformer, Generator circuit break, Isolated phase bus duct, Generator relay protection, Generator control panel, overhead conductor, 6.6 kV vacuum & 230kV SF6 gas insulated breakers., etc

Foreman/Senior Technician- 2 Nos

- Should have worked as Foreman/Senior technician in Electrical Maintenance in 220MWe and above nuclear power plant in TG and Auxiliary systems.

Nature of Jobs:

- Dismantling, cleaning, and inspection of internal components.
- Checking and servicing of motor, gearbox, bearings, and seals.
- Calibration of torque and limit switches.
- Checking of electrical connections, control circuits, and wiring.
- Setting and calibration of open/close limits and torque settings.
- Functional testing and verification of actuator operation.
- Testing of local and remote operation, including control signals.
- Inspection, testing & calibration of overload relays and protective relays.
- Checking of control circuits, interlocks, and indication circuits.
- Functional testing of motor feeders and protection circuits.
- Testing of electrical and mechanical interlocks.
- Troubleshooting of motor starter circuits and control wiring.
- Verification of earthing connections and panel safety arrangements.
- Calibration and testing of electromagnetic relays, contactors, Numerical relay etc.

SCOPE OF WORK & RESPONSIBILITIES OF CONSULTANT

INSTRUMENTATION

Engineer SO/F Level- 1 Nos

- Should have worked as Instrument maintenance engineer in 220MWe and above nuclear power plant in TG and Auxiliary systems.

Nature of job:

1. Verification of control logic for various plant systems, including open-loop and closed-loop control logics.
2. Commissioning support for pneumatic control valves, including functional and operational verification.
3. Commissioning support for the TG governor control system.
4. Commissioning support for the High-Pressure (HP) Bypass system.
5. Review and verification of commissioning procedures, test reports and commissioning-related documents.

Foreman/Senior Technician- 2 Nos

- Should have worked as Foreman/Senior technician in 220MWe and above Nuclear power plant in TG and auxiliary systems Instrument Maintenance.

2. Nature of works for Control Maintenance Foreman

1. Loop checking of field transmitters and switches associated with SWS and TG systems.
2. Commissioning of field-mounted transmitters and switches.
3. Commissioning and functional testing of pneumatic control valves.
4. Commissioning and functional testing of electrically operated valves through DDCS.
5. Calibration of field instruments and transmitters.
6. Commissioning of Steam Water Analysis system aS wet and dry panels, including associated online analysers.
7. Coordination and supervision of field instrumentation cable laying, termination and related activities.