101579-ELE-M-E-2005
Electrical Maintenance Engineer

Holds a B. Sc. in Electrical Power & Machines Engineering and has about 8 years experience, mainly in maintenance.

PERSONAL DATA

Nationality	:	Egyptian
Birth Date	:	10/01/1977
Gender	:	Male
Marital Status	:	Married
Residence	:	El-Behira

EDUCATION

: B. Sc. in Electrical Power & Machines Engineering, Al-Azhar University, 2005

LANGUAGES

Arabic	:	Native Language
English	:	Very Good

COMPUTER SKILLS

: Windows, MS Office (Word, Excel), Internet

TRAINING COURSES AND CERTIFICATIONS

: Basic operation / maintenance (training) Siemens gas turbine v94.3A, Nubaria, Mar. 2008:
- Introduction to the plant.
- Electrical and I&C part.
- Gas turbine part.

: Operation and maintenance of HRSG, Nubaria, Mar./Apr. 2008.

: Operation and maintenance (training) of switchyard 500KV & 220KV, Nubaria, Apr. 2008.

: Amplissima user training program, Talkha Gas Turbine Power Plant, Mar. 2010:
- Plant module function.
- Report generator function.
- Document module function.
- Work order module function.
- Store module function.

- Preventive maintenance module function.
- Purchasing module function.
- System administrator function.

CHRONOLOGICAL EXPERIENCE RECORD

Project : Nubaria Power Station:

- 2x750MW Combined Cycle, consists of 2 modules, each module consists of 2 Gas Turbines (2x250MW) Model V94.3A Heavy Duty (from Siemens Company, Germany) & 2 Heat Recovery Steam Generators (HRSG - from Alstom Company, France) & 1 Steam Turbine 250MW (from Mitsubishi Company, Japan).
- The switchyard:
  - 6 Main transformers 500/16.5KV
  - 4 Tie transformers 500/220KV
  - 8 Feeders 220KV

Job title : Electrical Maintenance Engineer

Job Description :

- Medium voltage:
  - Corrective & preventive maintenance for the following:
    - Medium voltage 6.3KV switchgear with 4 incoming 6.3/0.4KV dry transformers.
    - Motors Control Center (MCC).
    - Local distribution panels.
    - Low voltage induction motor.
    - Medium voltage induction motors.
    - Emergency diesel generators.
    - Elevators.
    - Air compressors.
    - Power transformers.
    - Measuring VT & CT.
    - DC system (chargers & batteries).
    - UPS system.
    - Distribution DC system.
    - Lighting & earthing system.
    - Plant grounding.
    - Electric loop wiring test.
    - Insulation resistance test for all types of cables, motors & bus ducts with high DC voltage.
    - Testing for motors (rotation direction, earthling, winding, insulation resistance, etc.).
- Generator Gas Turbine & Steam Turbine:
  - Generator auxiliary system.
  - Generator design & structure and visual check in inside generator.
  - Maintenance for generator and troubleshooting.
  - Maintenance for generator auxiliary system.
  - Operation for generator and generator auxiliary system.
  - Minor inspection for gas turbine (stator & rotor):
    - Stator:
      - Measure insulation resistances of stator winding.
      - Check stator winding condition (visual), TE & EE.
      - Check of flexible strips.

        - Rotor:
            - Check for true running.
            - Check rotor end winding area.
            - Measure insulation resistances of rotor winding.
            - Voltage drop test on slip ring supply lead.
            - Check rotor wedges and retaining rings (visual).
        - Cooler:
            - Check cooling water inlet and outlet pipes.
            - Check vent pipes.
            - Check drain pipes.
            - Check mounting of all coolers.
            - Check condition and performance of temperature measuring device.
    - Major inspection for gas turbine (stator & rotor):
        - Stator:
            - Measure insulation resistances of stator winding.
            - Check stator winding condition (visual), TE & EE.
            - Check of flexible strips.
            - D.C. over potential test.
            - A.C. high voltage test.
            - Partial discharge test.
            - Dissipation factor tan δ test.
        - Rotor:
            - Check for true running.
            - Check rotor end winding area.
            - Measure insulation resistances of rotor winding.
            - Voltage drop test on slip ring supply lead.
            - Check rotor wedges and retaining rings (visual).
            - Winding resistance test.
            - Winding impedance test.
        - Cooler:
            - Check cooling water inlet and outlet pipes.
            - Check vent pipes.
            - Check drain pipes.
            - Check mounting of all coolers.
            - Check condition and performance of temperature measuring device.
- Excitation System (Steam Turbine):
    - Automatic Voltage Regulator (AVR).
    - Excitation rectifier.
    - Excitation transformer of steam turbine generator 15KV/600V.
    - Excitation field circuit breaker.
    - Auto & Manual excitation control.
    - Excitation commissioning and start-up.
    - Excitation system maintenance and troubleshooting.
    - Thyristor control excitation.
- Static Frequency Converter (SFC):
    - Machine Control Converter (MCC).
    - Line Control Converter (LCC):
        - Visual check of condition.
        - Check operator functions from central control room.
        - Analysis of alarms and alarm report.

        - Check of all screw terminals.
        - Check electronics cabinet installed with voltage regulator equipment.
        - Check power supply including incoming diode dust filter flow indicator.
        - Fixing the clamp of circuit breaker.
    - Starting transformer of gas turbine generator 6.3KV/1.8KV.
- Static Excitation Equipments (SEE):
    - Visual check of condition.
    - Analysis of alarms and alarm report.
    - Check operator functions from central control room.
    - Check electronics cabinet installed with voltage regulator equipment.
    - Check power supply including incoming diode dust filter flow indicator.
    - Fixing the clamp of circuit breaker.
    - Automatic Voltage Regulator (AVR).
    - Excitation field circuit breaker.
    - Auto & Manual excitation control.
    - Excitation commissioning and start-up.
    - Excitation system maintenance and troubleshooting.
    - Thyristor control excitation.
    - Excitation rectifier.
    - Excitation transformer of gas turbine generator 6.3KV/720V.

Project : Nubaria Power Station:
- Two GE gas turbines (2x250MW)
- Two horizontal STF HRSG
- Turbine (HP, IP, LP) Alstom STG 250MW

Job title : Electrical Project Constructions Engineer / Training Engineer

Job Description :
- Approving designs & submittals.
- Site acceptance tests.
- Commissioning and start-up for Combustion Turbine Generator (GE).
- Delivering training courses for students of engineering colleges and new Engineers at Nubaria Power Station.