

104397-ELE-1MTyz-S-1997
Electrical Maintenance Technician

Holds an Technical Industrial School Degree (Electrical) and has about 9 years hands-on experience working in maintenance at Nubaria Power Station.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 12/08/1980
Gender : Male
Marital Status : Married
Residence : El-Behira

EDUCATION

: Technical Industrial School Degree (Electrical), 1997

LANGUAGES

Arabic : Native Language
English : Fluent

COMPUTER SKILLS

: Windows, MS Office

TRAINING COURSES AND CERTIFICATIONS

: On-shore training on the Power Plant Electrical Equipments Maintenance (Dec. 2013).
: On-shore training on Fire Fighting (Jan. 2013).

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From May 2008 till now
Employer : Middle Delta Electricity Production Company (MDEPC)
Project : Nubaria Power Station 1x750MW Combined Cycle (CCGT)
Job title : Electrical Maintenance Technician
Job Description :

- Execute all power plant Electrical equipment Maintenance.
- Implement the company EHS procedures within responsibility.
- Perform the routine maintenance programs (PM & PDM).
- Emergency maintenance & troubleshooting and tests for the following systems under Engineers Supervision:
 - Gas Turbine:

- GE gas turbine frame 9FA Generator.
- Static start system for gas turbine "LCI" model LS2100.
- Static excitation system EX2100.
- Medium & low voltage motors (Unit Auxiliaries).
- DC & UPS Systems.
- Auxiliary (Dry) Transformers for LCI & Excitation.
- Motor Control Center (MCC) in the PEECC.
- Power Transformer:
 - Main transformer (2x300) MVA, 15.75/500KV HYUNDAI, delta/star for gas turbine unit
 - Main transformer (1x340) MVA, 19/500KV HYUNDAI, delta/star for steam turbine.
 - Auxiliary transformers (2x32) MVA, 15.75/6.3/6.3KV.
- Medium & Low Voltage Switchgear:
 - Medium voltage SWGR (6.3KV) Schneider.
 - 400 V Load Center Schneider Model.
 - 400 V Motor Control Center (MCC) Schneider Model.
 - Back up Diesel generator 2.000 KVA 1.600 KW (ELECTRA MOLINS, Model EMO-2000).
- 500KV Switchyard:
 - 500KV Live tank circuit breakers GL317 (AREVA).
 - 500KV Disconnect Switch S2DAT & S2DA2T.
 - 550KV Current Transformers IOSK 550.
 - 550KV Voltage Transformers VEOS 525 & CVE550.
 - Earthing Switches.
 - Grounding System.
 - DC Battery Chargers and Batteries.
 - UPS System.
 - Generator protection system (GE Relays - G60 & C60).
 - Transformer protection system (GE Relays - T60 & T35).
 - Generator Circuit Breaker (ABB – HEC 100L Model).
- Generator Circuit Breakers:
 - Generator Circuit Breaker (ABB – HEC 100L Model).
- Steam Turbine:
 - ALSTOM Steam turbine Generator.
 - Static excitation system.
 - Medium & Low Voltage Motors.
 - Support Mechanical team during Inspections (CI & Major).
 - Make Cable Termination.
 - Cathodic protection for the under ground pipes.
 - Roads and buildings lighting systems.
 - Turbine Building Over head Electrical cranes (120/20ton).
 - Pump house overhead cranes (20/5Ton).
 - Iso phase bus duct from main transformers to Aux. transformer and generator.
 - Perform Electrical Tests under Engineers Supervision for the following:
 - 500KV Switchyard:
 - C.B contact Resistance test.
 - C.B timing test.
 - C.B function & Interlocks test.
 - Voltage transformer insulation resistance.
 - Voltage transformer turns ratio.

- Current transformer insulation resistance.
- Current transformer polarity test.
- Current transformer $\tan \delta$.
- Disconnecter switch alignment.
- Disconnecter switch function & interlocks test.
- Electrical connection cables insulation resistance.
- Electrical connection cables continuity.
- Primary current injection.
- Electrical Generator:
 - Stator windings Hipot test.
 - Stator winding insulation resistance & polarization index measurements.
 - Stator DC winding resistance measurement.
 - Rotor insulation resistance & polarization index measurement.
 - Rotor DC winding resistance measurement.
 - Rotor winding AC impedance measurement.
- Main Power Transformer:
 - Insulation Resistance & polarization index measurement.
 - DC winding Resistance measurements at each tap.
 - Windings Insulation power factor measurement ($\tan \delta$).
 - Bushing Insulation power factor measurement ($\tan \delta$).
 - Oil Insulation power factor measurement ($\tan \delta$).
 - Oil dielectric strength test.
 - Turns ratio at each tap.
- Generator Circuit Breaker:
 - C.B contact Resistance.
 - C.B timing test.
 - C.B function & Interlocks test.
 - Voltage transformer insulation resistance measurement.
 - Voltage transformer turns ratio check.
- Auxiliary power transformer 15.75/6.3/6.3KV:
 - Insulation Resistance & polarization index measurement.
 - DC winding Resistance measurements at each tap.
 - Windings Insulation power factor measurement ($\tan \delta$).
 - Bushing Insulation power factor measurement ($\tan \delta$).
 - Oil Insulation power factor measurement ($\tan \delta$).
 - Oil dielectric strength test.
 - Turns ratio at each tap.
 - AVR setting and on load Tap changer checks
- Medium Voltage switchgear 6.3KV (Schneider Electric):
 - Bus bar Insulation resistance measurements.
 - Bus bar Hipot test.
 - C.B DC contact Resistance measurement.
 - Circuit Breaker Timing Test.
 - Function & interlock testing.
 - Protection relays (SEPAM S20, S40, M41) test.
- LV load center 400V:

- Bus bar Insulation resistance measurements.
- Bus bar Hipot test
- LC transformer tests.
- Back up diesel Generator:
 - Stator Winding Insulation resistance measurements.
 - Stator Winding Hipot test.
 - Stator Dc winding Resistance measurement.