

**104407-ELE-1MOTyz-S-1998**  
**Electrical Maintenance Technician**

Holds an Technical Industrial School Degree (Electrical) and has about 17 years' experience working in maintenance and operation at Nubaria Power Station.

## PERSONAL DATA

Nationality : Egyptian  
Birth Date : 03/05/1981  
Gender : Male  
Marital Status : Married  
Residence : El-Behira

## EDUCATION

: Technical Industrial School Degree (Electrical), 1998

## LANGUAGES

Arabic : Native Language  
English : Fluent

## COMPUTER SKILLS

: Windows, MS Office

## TRAINING COURSES AND CERTIFICATIONS

- : On-shore training on the Power Plant Electrical Equipments Operation (Feb./Mar. 2006).
- : On-shore training on the Components and the operation of Combined Cycle Power Plants (Aug. 2007).
- : On-shore training on the Power Plant Electrical Equipments Maintenance (Jan. 2013)
- : On-shore training on Electrical Equipments (Motor – Transformer – Generator) Maintenance (Apr./May 2018).
- : On-shore training on Battery, Battery Charger & UPS Maintenance (Dec. 2018).

## CHRONOLOGICAL EXPERIENCE RECORD

**Dates** : From Aug. 2010 till now  
**Employer** : Middle Delta Electricity Production Company (MDEPC)  
**Project** : Nubaria Power Station 1x750MW Combined Cycle (CCGT)

- Job title** : Electrical Maintenance Technician
- Job Description** :
- Supervise and execute all power plant Electrical equipment maintenance.
  - Implement the company EHS procedures within area of responsibility.
  - Proposing solutions for all possible operational malfunction.
  - 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 underground pipes.
      - Roads and buildings lighting systems.
      - Turbine Building Overhead 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.
- 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.

**Dates** : From Jan. 2006 till Aug. 2010

**Employer** : Middle Delta Electricity Production Company (MDEPC)

**Project** : Nubaria Power Station I & II 2x750MW Combined Cycle (CCGT)

**Job title** : Operation Technician

**Job Description** :

- Follow up the unit's start-up.
- Supervise and execute all power plant operation tasks under engineer's supervision.
- 6.6KV Electrical Switchgear Switching.
- Follow up the daily maintenance work on the equipments.
- Take and record the reading (pressure, temp., current, ...watt) for the equipments.
- Perform 500KV switchyard switching.
- Observe the status of the plant equipments (generator, transformer, Motors, Compressors, switchgear, ...chargers and UPS).