

Holds a B. Sc. in Electrical Power & Machines Engineering and has over 16 years experience working in maintenance, protection and testing at Nubaria Power Station.

## PERSONAL DATA

Nationality : Egyptian  
Birth Date : 05/01/1984  
Gender : Male  
Marital Status : Married  
Residence : El-Behira

## EDUCATION

- : B. Sc. in Electrical Power & Machines Engineering, Menoufia University, 2006
- : Postgraduate: Making boast graduate studies about the modification for the improvement of the gas turbine (V94.3A) to raise the active power and making studies about the generator behavior after this modification.

## LANGUAGES

Arabic : Native Language  
English : Good

## COMPUTER SKILLS

- : Windows, MS Office, Internet
- : Dialux, Ecodial and Elec. AutoCAD

## TRAINING COURSES AND CERTIFICATIONS

- : Training on operating Gas Turbine unit in Nubaria Combined Cycle Power Plant.
- : Training on Gas insulated System Switch yard in Nubaria Combined Cycle Power Plant.
- : Training on Maintenance Gas Turbine unit in Nubaria Combined Cycle Power Plant.
- : Generator.
- : Generator auxiliary system.
- : Maintenance & operation generator and auxiliary system.
- : Excitation system maintenance and trouble shooting.
- : Static frequency converter System maintenance and trouble shooting.

: English: TOEFL certificate.

## CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Oct. 2012 till now
- Employer** : Middle Delta Electricity Production Company (MDEPC)
- Project** : Nubaria Power Station (3x750MW Combined Cycle)
- Job Description** :
- During Maintenance Periods:
    - Review and receive the required spare parts which developed by different contractors.
    - Preparing maintenance programs for generators and aux. systems, main and aux. transformers, MV & LV switchgear, and all other aux. Systems.
    - Following up the maintenance programs, periodic inspection for electrical equipment, analyzes, and troubleshoots all faults and errors.
    - Following up the overhauls of both of gas turbine generators and their auxiliary systems and carrying out the required maintenance, inspection and testing.
    - Following up the overhauls of steam turbine generator and auxiliary systems and carrying out the required maintenance, inspection and testing.
    - Performing the periodic tests of protection digital relays and electrical equipments.
  - During Commissioning and Start-up Period (for Nubaria Power Station Module III 1x750MW):
    - Follow up Commissioning activities for all electrical equipments installed in the site such as Medium & low voltage cables, 500KV Air Insulated Switchyard, 6.3KV Medium Voltage Switchgear, low voltage load centers, motor control centers, batteries, battery chargers, DC & UPS system, large power transformers (main & auxiliary).
    - Follow up Commissioning for Gas and steam Turbine Generators and its accessories as following: protection system, motors, interconnection cables, lighting system, Excitation transformer, static excitation system, Static start isolation transformer & load commutated inverter (LCI).
    - Testing of generator protection relays such as G60 (GE MULTILIN) product and MICOM P343 (Areva product).
    - Testing of generator circuit breaker protection relays such as C60.
    - Testing of unit overall protection relay such as T60.
    - Testing of the 500KV air insulated switchyard circuit breakers, CTs, VTs, and disconnecting switches (Megger, contact resistance, timing, interlocking and control circuit).
    - Testing of the main & aux. power transformers (Megger, DC resistance, turns ratio).
    - Testing and commissioning of main & Aux. transformer protection relay such as T60 & T35 and MIF II (GE MULTILIN).
    - Testing for 6.3KV switchgear, Schneider protection relays SEPAM

(S20, S40 and M41), 6.3 to 0.4KV dry type transformers, 400 V load centers, MCC, and emergency diesel generator.

- Testing and commissioning for the gas and steam turbine generators such as Megger, High potential, DC winding resistance.
- Testing and commissioning for the DC/UPS system.
- Overall commissioning of the plant (Interfacing between the different systems such as interlocking, status signals, alarms, trip signals, and CT & VT signals).
- Construction work:
  - I can do work as construction of fire alarm (conventional and addressable) and firefighting system.
  - Also doing normal and emergency lighting with Dialux and Ecodial program.
  - Erection, testing and operation of sound and paging system.
  - Making maintenance for some small (power) diesel.
  - Erection, testing and operation of cameras system.

**Dates** : From Jan. 2011 till Oct. 2012  
**Employer** : Middle Delta Electricity Production Company (MDEPC)  
**Project** : Nubaria Power Station (3x750MW Combined Cycle)  
**Job title** : Electrical Protection Engineer  
**Job Description** :

- Doing all tests of protection relays (Distance relays, Transformers protection relays, Generator protection relays, Medium voltage protection relays).
- Testing many types of protection relays like SIEMENS, ABB, ALSTOM, AREVA, GE Multilin and BECKWITH ELECTRIC:
  - ABB relays (RED670 - REF542PLUS - REF615 - REU610 - REM543 - RET543 - REL316\*4, REL531 - REJ523 - REU525).
  - SIEMENS relays (7UM62 SIPROTIC).
  - Micom family relays (P741 - P742, P437 - P442 - P126 - P632 - P141 and P143).
  - GE Multilin relays (UR family T35-T60-SR489-MIFII-MIV-DTP).
  - BECKWITH ELECTRIC relays (M-3425A, M-3310).

**Dates** : From Jan. 2008 till Dec. 2010  
**Employer** : Middle Delta Electricity Production Company (MDEPC)  
**Project** : Nubaria Power Station (3x750MW Combined Cycle):

- Four Siemens gas turbines 250MW (modules I & II).
- Two Mitsubishi steam turbines 250MW (modules I & II).
- Two GE gas turbines 250MW Frame MS9001FA (module III).
- One Alstom steam turbine 250MW (module III).
- Four off load power transformer (ZTR) 500KV/16.5KV (modules I & II).
- Four on load power transformer (ZTR) 16.5KV/6.3KV (modules I & II).
- Two off load power transformer (ZTR) 500KV/15KV (modules I & II).
- Two off load power transformer (Hyundai) 500KV/15.75KV (module III).
- Two on load power transformer (Hyundai) 15.75KV/6.3KV (module III).
- One off load power transformer (Hyundai) 500KV/19KV (module III).
- 220KV Air Insulated Switchyard (modules I & II).

- Job Description** : Electrical Maintenance Department for Nubaria Power Station for the:
- Medium Voltage Switchgear of 6.3KV Low voltage switchgear 400 V.
  - Batteries, DC systems and UPS systems.
  - Water treatment station.
  - Medium voltage.
  - Corrective & preventive maintenance for the following:
    - Medium voltage 6.3KV switchgear with 4 incoming feeders.
    - 6.3/0.4KV dry transformers.
    - Motors control center MCC.
    - Local distribution panels.
    - Low voltage induction motor.
    - Medium voltage induction motors.
    - Emergency diesel generators.
    - Electrical cranes.
    - Elevators.
    - Air compressors.
    - Power transformer.
    - Measuring potential & current transformer.
    - 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 and bus ducts with high dc voltage.
  - Testing for motors (rotation direction, earthing, 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 trouble shooting.
  - Maintenance for generator auxiliary system.
  - Operation for generator and generator auxiliary system.
  - Excitation system.
  - Automatic voltage regulator (AVR).
  - Excitation rectifier.
  - Excitation transformer of steam turbine generator 15KV / 600 v.
  - Excitation field circuit breaker.
  - Auto & Manual excitation control.
  - Excitation commissioning and start-up.
  - Excitation system maintenance and trouble shooting.
  - Thyristor control excitation.
  - Static frequency converter (SFC).
  - Machine control converter (MCC).
  - Line control converter (LCC).

**Dates** : From Jan. 2007 till Jan. 2008

**Job Description** : Worked as a Construction Electrical Engineer in the environmental measures and efficiency improvement project at Siemens, location at Shoubra El-Kheima Power Plant - Cairo (construction of all electrical and control panels, cable pulling, commissioning, and start up for the four units steam power plant) (steam turbines).