

Holds a B. Sc. in Electrical Engineering and has about 36 years experience including 29 years working in maintenance, testing and protection and became a General Manager.

## PERSONAL DATA

Nationality : Egyptian  
Birth Date : 11/11/1955  
Gender : Male  
Marital Status : Married  
Residence : El-Mahalla El-Kobra

## EDUCATION

: B. Sc. in Electrical Engineering, Helwan University

## LANGUAGES

Arabic : Native Language  
English : Good

## COMPUTER SKILLS

: Windows, MS Office, Internet

## TRAINING COURSES AND CERTIFICATIONS

- : Training course of operation and maintenance of gas turbine 135MW Siemens for Damietta Power Plant in Egypt.
- : Training course of operation and maintenance of gas turbine 135MW Siemens in Germany for 45 days.
- : Training course of operation and maintenance of steam turbine 140MW Alstom.

## CHRONOLOGICAL EXPERIENCE RECORD

**Dates** : From 2007 till 2015  
**Project** : Damietta Power Plant  
**Job title** : General Manager of electrical maintenance and protection tests

**Dates** : From 2002 till 2007  
**Project** : Damietta Power Plant  
**Job title** : Chief Engineer of electrical maintenance and protection tests

**Dates** : From 1994 till 2002  
**Project** : Damietta Power Plant  
**Job title** : Manager of Protection Department

**Dates** : From 1993 till 1994  
**Employer** : Saudi Arabia Electricity South Zone  
**Job title** : Protection Engineer

**Dates** : From 1988 till 1993  
**Project** : Damietta Power Plant  
**Job title** : Protection & Maintenance Engineer

**Dates** : From 1984 till 1988  
**Project** : Talkha Steam Power Plant  
**Job title** : Operation Engineer

**Dates** : From 1983 till 1984  
**Employer** : BBC  
**Project** : Cement Factory  
**Job title** : Erection Engineer for electrical equipment's

**Dates** : From 1981 till 1983  
**Employer** : Armed Forces

**Field of experience** :

- The maintenance works including the following:
  - Electrical Engineer for erection, commissioning, testing and putting in service of equipment in Combined Cycle Power Plant (Gas + Steam) with GEC Alstom Co.
  - Prepare the test certificates for protection devices.
  - Solve many problems and trouble shooting in station.
  - Perform the overhaul for gas turbine unit (Siemens) and steam turbine unit (Alstom) and it auxiliaries.
  - Study and scheduling protection and maintenance programs and spare part.
  - Study the protection systems in the plant and improve its performance.
  - Follow up the testes and commissioning for all electrical equipment's during start-up for the power plant.
  - Protection system study for all voltage levels (generator, transformer, T.L, Bus bar, Breaker failure, Auxiliaries) and repair the weak point in the system.
  - Prepare program of tests all protection system and re-commissioning for all protective relays and review the test trip after received the power plant.
  - Prepare the training courses for engineer in protection field and training the new engineers for protection system and maintenance.
  - Study and prepare the technical and specifications for buy numerical protection system.

- Study and analysis faults for power system in the power plants.
- Prepare programs for electrical equipment's maintenance from documents.
- Modify, Improvement and Upgrade in protection system power plant:
  - Study protection system for (generator, transformer, B.B, feeder, T.L, Motor) prepare test sheets, prepare test procedure for off protect in system (M.P.I.S), training for engineers and technicians.
  - From study result modify, Improvement and upgrading for protection system:
    - Purchase, erection and commissioning dead machine relay for all generator.
    - Recommend erection two relays (Main1, Main2) for loss excitation and revers power.
    - Incase mechanical protection for unit tripped without time not reverse power.
    - Over voltage and over flux protection must be for generators and off transformer and T.L (Auxiliaries T.L 220KV cut and down T.L 266KV and burn power transformer 125MVA).
    - Restricted earth fault relay must be installed for all power transformers to separated fault between transformer and feeders.
    - Numerical protection relay must be installed for old static and electromechanical relay.
    - Second harmonic blocking for earth fault relay for transformer.
    - Solve problem for socket protective relay CEE FRANCE the material for socket analyses acid material and Trouble operation unit.
    - AVR control system must be included protection function (over voltage, over flux, loss of excitation) built in not independent for protection system.
    - Inter lock between unit (C.B) 220KV and excitation (C.B).
  - Modify and improvement for protection system.
  - Upgrading and modernization for protection system for (generator, transformer, T.L, B.B).
  - Solve many troubles shooting.
- Modify and improvement and upgrading and modernization in electrical maintenance:
  - Electrical Engineer for erection, commissioning and tests for all electrical equipment's during start-up for the power plant (Gas turbine (Siemens) - steam turbine (Alstom)).
  - Prepare maintenance programs and inspection for all electrical equipment (gen – transf – circuit breaker – motor.....) from instruction manual and from experience working.
  - Training engineer and technicians for maintenance and inspection.
  - Prepare the program over all maintenance and inspection and tests for generation and discussion with Siemens and Alstom.
  - Upgrading for (AVR) excitation and static frequency converter system and commission and operation by (GE) converter.
  - Upgrading for batteries and battery charger +24, -24, 220v D.C and U.P.S (BORE-AEG).
  - Upgrading for overhead crane (cone crane).
  - Some points from working field electrical (maintenance).
  - Interlock between diesel generator and start-up.

- Interlock between earthing switch and start-up for unit S.F.C.
- Electrical test for generator after 20 years operation.
- Rewinding for rotor after 25 years operation (open cooling system).
- Consolation over hamming stator for generator Alstom.
- Must be upgrading for all system control, protection, U.P.S and electric System to steady state operation 20-25 years.
- General points:
  - Interlocking mechanical and electrical between tap changer off load and operation unit (transformer). Change tap ch. after unit off and earthing on the winding.
  - At inspection inside transformer must be earthed both windings to prevent generation charging changer for man.
  - Solve problem rise MVAR for transformer by decreasing Step tap-changer.
  - Solve problem dissolving gases (DGA).
  - Bay power transformer 152 MVA from ABB (Spain) and grantee 5 years (DGA).
  - Inspection power transformer, tap changer and maintenance.
  - Electrical test power transformer every 5 years.
  - Extent ion substation 220/60KV power transformer and G.I.S (two transformer 125MVA 220/66KV).
  - Preventive maintenance for gas isolation system (220/66KV) and leakage sf6.
  - Repair power transformer 152MVA-125MVAR.