

Holds a B. Sc. in Electrical Engineering and has about 9 years hands-on experience in the field of power and substation operation, maintenance, commissioning and start-up, that includes inside plant engineering, outside plant equipment engineering, installation and construction, site supervision and consultancy, has also troubleshooting skills.

## PERSONAL DATA

Nationality : Egyptian  
Birth Date : 28/11/1981  
Gender : Male  
Marital Status : Married  
Residence : Sharkia

## EDUCATION

: B. Sc. in Electrical Engineering, Al-Azhar University, 2006

## LANGUAGES

Arabic : Native Language  
English : Excellent

## COMPUTER SKILLS

: Windows, MS Office (Word, Excel, Power Point), Internet  
: GE Turbine Mark Vie ToolBox  
: GE Turbine Graphic Design program (Cim Viewer)  
: Yokogawa DCS Centum VP  
: Schneider Electric Unity Pro  
: Schneider Electric Citect SCADA/ Vijeo Citect Design  
: Photoshop 8 (CS3, CS4)  
: Fire Work (CS3, CS4)

## TRAINING COURSES AND CERTIFICATIONS

: Gas turbine operation & maintenance, GT aux., GT control systems, GT troubleshooting, Compressor performance & maintenance philosophy by Mitsubishi Heavy Industries in Project site of Sidi Krir Combined Cycle (3 weeks) by Japanese group.  
: Off-shore training for Generator operation & maintenance by Mitsubishi Electric Corporation Energy Systems Center in Sidi Krir Combined Cycle Project (1 week).

- : Auxiliaries operation and troubleshooting e.g. feed water pumps, both turbine and electrical, (drum level control); circulate water pumps (sea pumps), condensate pumps, service pumps, closed cycle cooling water system and air compressors...etc. by Toshiba (3 weeks).
- : Ansaldo Steam turbine generator operation & maintenance, Condenser, ST Auxiliaries, ST safe start-up and shut-down, Steam turbine troubleshooting by Ansaldo Company in Sidi Krir by Ansaldo groups (4 weeks).
- : Off-shore training for safe start-up, shut-down Heat recovery steam generator with 3 drums (multi-pressure HRSG and all its Auxiliaries for example pre-heater sys re-heater sys. Recirculation sys. Drains and vents and blow down system...etc. by Dutch group from NEM Company (3 weeks in class, 2 weeks in local, 3 weeks in control room).
- : Off-shore training for MV SWGR'S type (RONEX). LV SWGR'S TYPE (BLOCK Set). Circuit breaker safe operation and maintenance. Protection function. Transformer classification, concept type and routine tests. EMCS system overview sepam configuration and its characteristics by French groups in Schneider Electric Company (1 week).
- : Power station operation course in Abu Qir Training Center (4 weeks).

## CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Aug. 2008 till now
- Employer** : Egyptian Elec. Auth.
- Project** : Sidi Krir Combined Cycle Power Station  
(2x250MW Gas Turbine Mitsubishi frame 7, 2 NEM Heat Recovery Steam Generators, 1 Ansaldo Steam Turbine Generator 250MW)
- Job Description** :
- Shift Charge Engineer:
    - Supervise the erection works with Gas Turbine Contractor.
    - Help in modifying the interface systems with Sidi Krir 1 & 2 Power Plant like Service water sys., demi water, hydrogen sys., etc.
    - Safe start-up and shutdown for the gas turbine units.
    - First start and flushing for the lines for the systems e.g closed cooling sys. lube Oil, seal oil, instrument & service air sys.....etc.
    - Responsible for reliability and performance test for unit.
    - Make maneuver with dispatch center 220KV.
    - Isolate the different systems for maintenance work.
    - Safe start-up and shutdown for the units.
    - Responsible for reliability and performance test for unit 1 & 2.
    - Responsible for reliability and performance test for desalination plant unit 1 & 2.
    - Responsible for performance test and safe operation for hydrogen plant.
  - From Dec. 2008 till Aug. 2009:
    - Make maneuver with dispatch center 220KV.
    - Isolate the different systems for maintenance work.
    - Safe start-up and shutdown for the units.
    - Responsible for reliability and performance test for units 1 & 2.
    - Responsible for reliability and performance test for desalination plant units 1 & 2.
    - Responsible for performance test and safe operation for hydrogen plant.

- DCS Unit Operation Engineer (from Nov. 2008 till Dec. 2009):
  - Boiler operation processes e.g. boiler start up and normal operation air control, fuel control, soot blowing, both natural gas and oil (Mazout) firing.
  - Turbine operation processes e.g. turbine start-up and normal operation, vacuum preparations, seal steam system, seal oil system, lube oil, control oil...etc.
  - Electrical responsibilities in the shift such as central dispatch 220KV maneuvers, electrical insulation for equipments in maintenance.
  - Unit auxiliaries operation processes including: feed water pumps, both turbine and electrical, (drum level control); circulate water pumps (sea pumps), condensate pumps, service pumps, closed cycle cooling water system and air compressors...etc.
  - Desalination plant operator multi flash chamber (2 x 5000 ton/day).
- Local Operator Engineer (from Aug. 2008 till Nov. 2009):
  - Prepare the different system for operation.
  - Check the equipments in operation.
- Electrical Control Engineer:
  - 220 V DC Batteries & Battery Chargers.
  - UPS System.
  - Live Tank SF6 Circuit Breaker 500KV.
  - Disconnected Switch 500KV in Sidi Krir.
  - Disconnected Switch 220KV in El-Shabab.
  - Potential Transformer.
  - Current Transformer 2000/1.
  - Live Line Washing System.
  - Medium Voltage Switchgear.
  - 6.3KV SF6 Circuit Breaker and MCC.
  - Electric Maintenance of GE Gas Turbine Frame (9FA): Excitation Ex2100, LCI 2100, GTE, Motors.
- Supervision the specification and construction of steam turbine.
- I was West Delta Witness Engineer during construction, commissioning and start-up of the Gas turbine, HRSGs and steam turbine.
- Calibration of all instruments in field:
  - Pressure indicators & transmitters & switches.
  - Level transmitters & Switches.
  - Flow transmitters & Switches.
  - Thermocouples - RTD - temperature indicators.
  - Maintenance for circulation water pump, service water pump and closed cooling water pump.
- Work as 2 HRSG NEM Operation & Maintenance Engineer, NEM Company - WDEPC Sidi Krir Power Station Combined Cycle Project:
  - Calibration of all instruments in field:
    - Pressure indicators & transmitters & switches
    - Level transmitters & Switches.
    - Flow transmitters & Switches.
    - Thermocouples - RTD - temperature indicators.
    - Installation of all instrument installation, cable trays, conduits, instrument racks, installation of all transmitters.
    - Loop checks from control room to the field of all instruments

- and start-up of 2 HRSGs - NEM.
- Commissioning and start-up for put in service all instrument system before steam flow.

**Further experiences :** GE Gas turbine (8x125MW) 1100MW Simple Cycle, EDEPC, El-Shabab Power Station:

- Calibration of all instruments in field:
  - Pressure indicators & transmitters & switches.
  - Level transmitters & Switches.
  - Ultrasonic Level transmitters & Switches.
  - Flow transmitters & Switches.
  - Thermocouples - RTD - temperature indicators.
  - Installation of all instrument Installation, cable trays, conduits, instrument racks, installation of all transmitters.
  - Loop checks from control room to the field of all instruments and start-up of 8 GT.

**Field of experience :**

- Project Tests:
  - GE Frame 9E Turbine Instrumentation Calibration test.
  - GE Frame 9E Turbine I&C Commissioning and Start-up.
  - GE Frame 9E Turbine Performance & Reliability Test.
  - Yokogawa DCS FAT (Factory Acceptance Test).
  - Yokogawa DCS SAT (Site Acceptance Test).
  - Siemens GIS Control System SAT.
  - EMIT PROTECNO (Schneider PLC) Damien Water Station I&C Commissioning.
  - CI (Combustion Chamber inspections) & installing new DLN (Dry Low Nox) Burners.
- Relevant Experience:
  - Electrical Power Produced & Transmitted & DCS (Distributed Control System) at Abu Sultan Station (Jun., Jul. and Aug. 2008).
  - GE Frame 9E Turbine (Mark VIe) Operating & Maintenance at El-Shabab 1000MW Power Plant (Feb. 2011).
  - GE Mark VIE at El-Shabab 1000MW Power Plant (Mar. 2011).
  - GE Frame 9E Turbine (Mark II) Operating and Maintenance at Cairo South Power Plant (Apr. 2011).
  - CO2 Fire Fighting at El-Shabab 1000MW Power Plant (Jun. 2011).
  - DCS Operating and Maintenance at El-Shabab 1000MW Power Plant (Jul. 2011).
  - IBM Maximo Assets Management (Spare Parts Management program) at Intercom Co. (Sep. 2011).