

Holds a B. Sc. in Nuclear Engineering and has over 33 years hands-on experience working in Power Stations, Oil & Gas and Petrochemical Industry.

## **PERSONAL DATA**

Nationality : Egyptian  
Birth Date : Dec. 1963  
Gender : Male  
Residence : Alexandria

## **EDUCATION**

: B. Sc. in Nuclear Engineering, Alexandria University, 1986

## **LANGUAGES**

Arabic : Native Language  
English : Very Good

## **COMPUTER SKILLS**

: Windows, MS Office (Word, Excel, Access, Power Point), Internet  
: AutoCAD (10, 13, 14, 200, 2002)  
: Autoplant  
: Smart Plant Viewer  
: Pspice  
: Mathcad  
: Microsoft Front Page 2000

## **TRAINING COURSES AND CERTIFICATIONS**

: Mitsubishi Electric Corporation, Energy System Center, Nubaria Power Station Site (2005):

- Excitation system maintenance and troubleshooting.
- Excitation system lecturer and training.

: Electrical maintenance for generators, start-up and excitation system, Generator protections, SIEMENS AG Power Generation – Frankfurt, Germany (2005).

: Assembling, testing, operation and maintenance of 500KV Gas Circuit Breakers (GCB), Japan (AE) Power Systems – Tokyo, Japan (2004).

: Operation and troubleshooting of steam power plants 2x300MW, Abu Qir Training Center – WDEPC, EGYPT (2003).

- : Protection of generators and transformers, fire fighting and safety in power station, Abu Qir Training Center – WDEPC, EGYPT (1998).
- : Operation and maintenance MV and LV Circuit breakers – basic electronics, Abu Qir Training Center – WDEPC, EGYPT (1997).
- : Windows, MS Office and Internet, Abu Qir Training Center – WDEPC, EGYPT (1996).
- : PLC programming and its applications, North Cairo Training Center – Cairo Electricity Production Company – CNEPC, EGYPT (1993).
- : Test and detection failures of MV and LV power cables, Cairo Electricity Distribution Company Training Center – Dokki, Cairo (1988).

## CHRONOLOGICAL EXPERIENCE RECORD

**Dates** : From Oct. 2019 till now  
**Project** : Talkha GIS SS 5 Power transformers 220/66KV, 125MVA, 220 & 66 & 6.3KV SWG (MDEPC, EEHC, Egypt)  
**Job titles** : Electrical Maintenance Manager  
**Job Description** :

- Managing crews of maintenance staff working under normal and short period outage conditions prepare and execute PM, CM of all electrical equipments in the required time schedule.
- Follow up and witness the construction, pre-commissioning, commissioning and start-up for the new 125MVA transformer upgrade.

**Dates** : From Nov. 2018 till Aug. 2019  
**Employer** : SIEMENS O&M  
**Project** : Beni Suf CCPP 4800MW  
**Job titles** : Electrical Maintenance Advisor Engineer & Deputy Manager  
**Job Description** :

- Prepare and review electrical predictive maintenance procedures.
- Prepare and review electrical maintenance work plan data for BFS maintenance program.
- Managing crews of maintenance staff working under normal and short period outage conditions prepare and execute PM, CM of all electrical equipments in the required time schedule.
- Advise and work on the Electrical corrective and preventive maintenance.

**Dates** : From Jan. 2016 till Jun. 2018  
**Employer** : SIEMENS AG PG  
**Project** : Beni Suf CCPP 4800MW - EG1018, Egypt:

- 8 Siemens Gas Turbines type SGT5-8000H.
- Gas turbine electrical equipment, power control system (UBA01 /UBA02).
- LV SWG, AC MCC (BFA/BMA), DC power supply system (BUA, BUB), Battery/Battery charger (BTA/BTL) and DC/DC Convertor (BUK).
- Gas and fire protection system covering GT enclosure and fuel gas skid.
- 12 Generators type SGen5-2000 H (110/60), hydrogen cooled, 500MVA, 22KV, 50Hz, Rotor, two poles, direct radially cooled.
- GT Generator electrical equipment, 4SFC for 8GTG, static excitation equipment (SEE) fully controlled convertor bridge type B6C.
- Change over function for operation 4Gas turbine via 2SFC.

- Speed control for compressor washing and boiler purging function.
  - Equipment for rapid de-excitation, DC side over voltage protection.
  - 4 Steam turbines type SST5-5000, 418MW, 8 Heat Recovery Steam Generator triple pressure type with reheat.
- Job Description** :
- Electrical I&C Construction Deputy Site Manager and QA/QC.
  - Technical Field Advisor (TFA).
  - Review and follow up project hazard area E& I installation for third party inspection, reporting and rectifying the findings for the two phases.
  - Construction power installation and operation supervision.
  - Electrical systems pre-commissioning support.
  - Electrical system:
    - 12 IPBD, 8 GCB (ABB), 12MV 11KV SWG (Siemens), 16 LV SWG AC 690 and 400/230V, 8 LV DC SWG 220V, 12 Battery sets, 12 Battery chargers, 12 DC/DC converter system, 12 Generator transformers, 8 units auxiliary transformers, 20 LV distribution transformers, 12 generator metering and measuring system, 12 automatic synchronizing and synchro check system, 12 units protection system (generator and transformer), 8 high speed bus bar transfer system.
    - 500KV gas insulated SWG, 12 stepup transformer bays, 8 OHTL bays each included 2 sets of bus bar disconnectors (one with one built in earthing switch) 2000A, one circuit breaker 2000A, one set of disconnector with built in earthing switches (one high speed earthing switch), one set of inductive voltage transformer, one set of current transformer.
    - 2 Bus section bay, each included with one CB400A, 2 DS 400A, 2 set of VT, 2 set of CT, 2 set of high speed earthing switch for BB earthing, substation automation system, protection system.
- Dates** : From Mar. 2015 till Dec. 2015
- Employer** : Engineering of the Petroleum and Process Industries (ENPPI) – EGYPT
- Project** : Polyethylene Plant of ETHYDCO, located at Alexandria, Egypt:
- Two bay GIS SWG 66KV, 3-PH, 3W, 50HZ, 600A, can be extended from both sides, indoor metal clad, SF6 type, with vacuum CB's, IP65 Enclosure.
  - Two power transformers, 66/11KV, 40/56MVA.
  - One vacuum MV SWGR, 11KV, 3150A, 31.5KA, 3Sec.
  - One vacuum MV SWGR, 6.6KV, 800A, 12.5 KA, 3Sec.
  - 3-Three LV MCC's, 400/230V, 3+N+PE, 50HZ, 5000A, 80KA, 1sec.
  - One LV MCC, 400/230V, 3+N+PE, 50HZ, 3200A, 65KA, 1sec.
  - One EMCC, 400/230V, 3+N+PE, 50HZ, 2500A, 80KA, 1sec.
  - 6-six power transformers, 11/0.42KV with ratings, 2.5/3.5MVA, Z=7% (ONAN).
  - 2-two power transformer, 11/0.42KV with ratings, 1.25/1.75MVA, Z=6% (ONAN).
  - AC UPS, 230V, 50HZ, 1PH+N+PE, 800A, Two battery sealed Ni-Cd, back up (30Min).
  - 110V DC UPS, Two battery sealed Ni-Cd, back up (60Min).
  - 8-eight PVSD cabinets, 400/230V, 3+N+PE, with different ratings, 40A, 10KA, 1sec & 50A, 2.5KA, 1sec for power feeding of different LV motors.
- Job Description** : Electrical Construction Supervision and Technical Field Advisor.

**Dates** : From Jul. 2014 till Feb. 2015  
**Employer** : Engineering of the Petroleum and Process Industries (ENPPI) – EGYPT  
**Project** : PACKAGING PLANT GAS FOR INTERNAL MARKET (PAGMI) – GUIRIA / VENEZUELA:

Two phases:

- Phase 1:
  - Early gas production phase by two 36 inch pipe lines, slug catcher with temporary conditioning unit.
  - Main project module is 600 MMSCFD using these process facilities slug catcher, water drainage control system, two up and down stream metering skids, closed and open drain system packages, gas dehydration and conditioning and oily water separation system, Cathodic protection system for closed& open drain pipes and tanks systems, Fire fitting system, F&G detection and protection system, Power feeding from 220KV National grid with emergency standby generators and new grounding grid (IS, NIS, Power earth systems).
- Phase 2:
  - Installation of project extraction facilities with a capacity of 1000 MMSCFD of natural gas, the plant will condition the feed gas and supplying to LNG plant and supplying liquids to the internal and external markets.

POWER SYSTEM DESCRIPTION:

- Two OHTL 34.5KV fed from substation two step down TFR 230/34.5KV.
- GIS SWG 34.5KV, 170KV, 3-PH, 3W, 60HZ,2500A, 40KA, 3Sec can be extended from both sides, indoor metal clad, SF6 type, with vacuum CB's, IP65 Enclosure including the followings: Two main incomings vacuum CB's, 2500A, 34.5KV, 40KA for 3 Sec and one bus tie CB 2500A, 40KA working on ATS control.
- 10 ten outgoing CB's rating 1250A, 40KA: Feed two power distribution centers:
  - 4.16KV, 60KV, 3 PH, 3 W, 2000A, 31.5KA, 3Sec, double ended, Indoor metal-enclosed SWG (model: PIX-12), IP 42 enclosure, containing removable (draw out) vacuum circuit breakers are two main incomings CB, 2000A, 31.5KA for 3sec, 6-Six outgoing feeders CB rating, 1250A, 31.5KA, 12KV and 8-Eight fuse contactor MV Starter NEMA H2, rating 180A.
  - Two power centers with its power transformers feeding, 0.48KV, 8KV, 3PH, 4W, 60HZ, 4000A, 85KA, 1Sec, double ended, Indoor metal-enclosed SWG (model: SK), modular type sheet steel cubicles IP 54 enclosure, containing power buses, a ground bus and removable (draw out) air circuit breakers including:
    - Two main incomings CB's 400A, 0.48KV, 60 HZ, 85 KA for 1Sec, tagged PDC with 10 outgoing feeders vacuum CB rating, 800A, 85KA, 0,48KV.
    - One bus-tie air CB 400A, 0.48KV, 60 HZ, 85 KA for 1Sec.
    - Ten outgoing air CB 1600A, 0.48KV, 60 HZ, 85 KA for 1Sec.
    - Two CB's outgoing for capacitors bank protection, 200KVAR.
  - Three motor control centers with its power transformers feeding, 0.48KV, 3PH, 4W, 60HZ, 1600A, 50KA, 1Sec, Indoor, and IP 52 Enclosure.
- 4-Four, 0.48KV distribution panel boards with its power transformers feeding.

- 208V, Five distribution panel boards with its power transformers feeding.
- 208V, One Emergency distribution panel boards.
- AC & DC UPS systems with its batteries.
- Two power supervisory control system (PSCS).
- One interface relay panel (IRP).
- 0.48 KV, 3PH, 60HZ, 4W, 4000A, 85KA rated withstand current bus duct with indoor and outdoor parts connecting between LV SWG and power transformers.
- 4.16KV, 3PH, 60HZ, 3W, 2000A, 31.5KA rated withstand current bus duct with indoor and outdoor parts having degree of protection NEMA 4X, connecting between MV SWG and power transformers.
- 24-Twenty four neutral ground resistors rated 4.16KV, 60HZ, 400A, 10 sec.
- 4-Four, 200KVA power factor capacitor banks automatically controlled with number of steps, 6 on each bus.

**Job Description** : E&I Construction Team Leader and Technical Field Advisor (TFA).

**Dates** : From Jul. 2011 till Jun. 2014

**Employer** : Engineering of the Petroleum and Process Industries (ENPPI) – EGYPT

**Project** : KALABSHA 40,000 BOPD OIL FACILITY – EGYPT:

- Two gas turbine generators 11KV, 3PH, 50HZ, 2x3.75MW by Solar.
- One emergency diesel generator 400V, 3PH, 50HZ, 1x0.8MW by Mantrak.
- 11KV SWGR, 1250A, 25KA, 3sec & 3.3KV SWGR, 0.4KV, 3200A, 65KA, 1sec SWGR by ABB.
- Two power transformers, 2.5MVA, 11/3.3KV SWGR, Dyn11 ONAN and two transformers, 2.0MVA, 11/0.4KV, Dyn11 ONAN.
- One DC UPS, one AC UPS by Borri.
- Six process trains, indirect forced draft heater, production separator, heater treater.
- Two instrument & service air compressors with its compartments.

**Job Description** : E&I Construction Team Leader and technical support for pre-commissioning and commissioning works.

**Dates** : From May 2010 till Jul. 2011

**Employer** : Engineering of the Petroleum and Process Industries (ENPPI) – EGYPT

**Project** : Phase-VII Main Compression Project, Alexandria:

- Early gas production phase by two 36 inch pipe lines, slug catcher, two sand removal, closed and open drain system packages, oily water system.
- Cathodic protection system – CPC Co. Ltd and new grounding grid jointed with the existing grid (IS, NIS, Power earthing systems).
- Siemens gas turbine generators, 11KV, 50HZ, 3x1x6.72MW and its 0.4KV MCC"s, 1000A, 50KA, 1sec, 3PH+N+G (TN-S) system by Siemens.
- Power transformers, 11/0.4KV, 4x3.15MVA, 2x2.5MVA, 2x2.0MVA, ONAN, DYN11 by Schneider Electric.
- Four LV Bus duct, 5000A and two Bus duct, 4000A.
- Two MNTRAK Emergency DG-2x1.85MVA.
- Five gas compressors 220-GT-1100 GE/NP by Nuovo Pignone/GE.

**Job Description** :

- Five 0.4KV MCC's by ABB, five 230V DC/UPS by CEG.
- Two 11KV SWGR, 1000A & 630A, 25KA.3Sec, Two 0.4KV SWGR, six 0.4KV MCC's, 5000A, 4000A, 3200A, 3PH+N+G (TN-S)System by Schneider Co.
- Two instrument & service air compressors with two train dryers.
- E&I Construction Team Leader and technical support for pre-commissioning and commissioning.
- Follow up all electrical construction activities phases, technical support for subcontractors, walk through and inspect the completed construction systems, issue construction punch list and prepare & review mechanical completion certificates & pre-commissioning all project electrical systems.

**Dates** : From Dec. 2008 till May 2010

**Employer** : Engineering of the Petroleum and Process Industries (ENPPI) – EGYPT

**Project** : El Gamil Plant Upgrading, Port Said:

- New Power generation (Four GE Turbo generators - 4x1x14MVA and Two CGT Emergency DG-2x18.5MVA).
- New Substation and & control building and new extension inside three existing substations.
- New compression area (four Turbo compressors – 4x21.179MW) by Nuovo Pignone/GE.
- Production increase and metering system.
- Four Instrument & utility air compressors and two train dryers by ATLAS.

**Job Description** : Electrical Lead Engineer for pre-commissioning & commissioning and reliability test for handover the all systems to the client.

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

**Employer** : Power System Project (PSP) - Elsewedy Co.

**Project** : Nubaria III 750MW Combined Cycle Power Station (contract no. CP-117)

**Job title** : Project Engineer

**Job Description** :

- Preparing and initialize projects proposals and feasibility studies.
- Reviewing documents of bids prepared by consultants.
- Evaluating contractors offers.
- Coordinating in contract award.
- Monitoring and scheduling the activities and budget of project.
- Monitoring the QC/QA and safety program for the project.

**Dates** : From Jan. 2006 till Dec. 2007

**Employer** : SIEMENS AG Power Generation Co.

**Job Description** :

- El-Kureimat Power Station 750MW Combined Cycle:
  - Electrical & Instrument Construction Site Manager for fuel oil system erection.
  - Also, work as a Guarantee Engineer to clarify & prepare replying for the punch items & warranty claims and close it with the client.
  - Work as Electrical & Instrument Construction Engineer, inspection all electrical systems for the right installation and sorting the punch items, (PROKABEL) program supervisor for cables laying, connections, testing.
  - Different type's cable laying, termination and testing, also cable



- routes installation and supervision, trays, MV & LV SWG panel's installation, MCC's, DC & AC UPS, quantity survey, review and cost calculations for all electrical equipments installation of construction contractors & subcontractors.
  - Tenders study, send and reply the letters of the client and subcontractors.
  - Preparation and reviewing the marked up & As-Built construction drawing drawings and filing the project documents.
  - Inspection the constructed electrical systems, issuing the construction punch list and Erection Construction Certificates (ECC's).
- New Talkha Power Station 750MW Combined Cycle:
  - Electrical & Instrument Construction Site Manager for fuel oil system erection.
  - Guarantee Engineer to clarify & prepare replying for the punch items & warranty claims and close it (from Jul. 2006 till Nov. 2006 and Mar. 2007).
  - Electrical & Instrument Construction Engineer, inspection all electrical systems for the right installation and sorting the punch items, (PROKABEL) supervisor for cable laying, terminations and testing.
  - Different type's cable laying, termination and testing, also cable routes installation and supervision, trays, MV & LV SWG panel's installation, MCC's, DC & AC UPS, quantity survey, review and cost calculations for all electrical equipments installation of construction contractors & subcontractors.
  - Tenders study, send and reply the letters of the client and subcontractors.
  - Preparation and reviewing the marked up & As-Built construction drawing drawings and filing the project documents.
  - Inspection the constructed electrical systems, issuing the construction punch list and Erection Construction Certificates (ECC's).
  - Resident Guarantee Engineer for the above two projects (EGY263 and EGY264 Projects).

**Dates** : From Jan. 2004 till Dec. 2006  
**Employer** : WDEPC (West Delta Electricity Production Company) / EEHC (Egyptian Electricity Holding Company) – Egypt  
**Project** : Nubaria Plant 2x750MW Combined Cycle  
**Job title** : Lead Electrical Engineer  
**Job Description** :
 

- Preparing and initialize projects proposals and feasibility studies.
- Reviewing documents of bids prepared by consultants.
- Evaluating contractors offers.
- Coordinating in contract award.
- Monitoring and scheduling the activities and budget of project.
- Monitoring the QC/QA and safety program for the project.
- Reviewing rotating equipment spare parts and sharing in the selection of the required operational spare parts.
- Preparing the technical reports for mechanical equipment and preparing the punch lists during pre-commissioning.
- Lead Electrical Engineer in charge of 500/200KV outdoor switchyards

including GIS switchgear & Gas/Steam turbine generators & major pump drives / miscellaneous pump and drives purchase orders.

- Design review and engineering for electrical control and interlock systems.
- High, medium, low voltage power transformers & batteries, battery chargers, AC UPS & HV, MV, LV XLPE Power cables & Surge, lightning arrestors, wave traps, C.V.T, C.C.V.T.I.V.T for (HV, MV and LV) switchgears, generators and MV, LV motors.
- Witnessing all factory & site tests, pre-commissioning / commissioning of all the above mentioned electrical equipments.
- Tenders study and quantity surveyor, sorting drawing and files.

**Dates** : From Jan. 1990 till Dec. 2003  
**Employer** : West Delta Electricity Production Company  
**Project** : Matrouh Power Station 2x30MW  
**Job title** : Shift Chief Engineer  
**Job Description** :

- Operation Engineer to finding the troubleshooting and maintenance.
- Analyze the trouble shooting and the trip reasons for all power unit compartments.
- Organize the maintenance schedules and prepare the work permit requests and orders.

**Dates** : From Jan. 1998 till Dec. 2000  
**Employer** : West Delta Electricity Production Company  
**Project** : SIDI KRIR Power Station 2x300MW  
**Job title** : Electrical Commissioning Engineer (part time)  
**Job Description** : Witnessing tests, pre-commissioning / commissioning of Indoor GIS 220/66KV switchyard & MV/LV switchgears and desalination plants (MSF).

**Dates** : From Jan. 1989 till Dec. 1990  
**Employer** : Mitsui Engineering and Shipbuilding Company – Osaka Japan  
**Project** : Barge Power Station 2x30MW mounted in Marsa Matrouh  
**Job title** : Shift Chief Engineer  
**Job Description** : Assistance Electrical Engineer for test, pre-commissioning / commissioning of the electrical equipments.

**Dates** : From Jan. 1988 till Dec. 1989  
**Employer** : Behira Electricity Distribution Company  
**Project** : 11KV Grid Power Distribution System, Marsa Matrouh  
**Job title** : Electrical Project Engineer  
**Job Description** : Installation MV & LV Cables, 11/0.4KV Power transformers, testing & detection failures of MV and LV cables.

**Field of experience** :

- Power generation, Substations, Oil and Gas, petrochemical industries (Gas / Steam Turbine, boilers, Generators, Large and medium capacity transformers, MV & LV SWG, AC/DC UPS Engineering review, installation, pre-commissioning and commissioning of the above electrical equipments.



- Desalination plants, water treatment / sewage / demineralization / hypochlorination, water intake, steam boilers.
- 500/220KV Switchyard, 11/6.3/0.4KV Switchgear, 66KV indoor / outdoor GIS substation, 11/6.3KV distribution projects.
- Warranty Engineer for the OC/CC Power plants.
- Preparation of tender document, study and analysis.
- Design review and engineering for electrical control and interlock systems.
- Study and negotiate with all project partners, consultant group, contractor and subcontractors.
- Witnessing, check and perform most of FAT & SAT routine tests for all electrical equipment, functional & interlock tests / pre-commissioning of the power plant, AC & DC UPS systems, excitation and start-up system of generators, all auxiliaries and ancillaries of the plant(e.g. MV/LV Switchgears, MV Large capacity Motors / various size LV Motors, MCC (motor control centers), batteries and chargers, UPS, firefighting systems and clock systems, indoor/outdoor lighting systems, HV/MV/LV/XLPE Power cables testing, laying, cable routes trays/Ladders, pulling chambers, duct banks, earth/lightning systems, compressors/overhead cranes, motorize valves.
- Managing crews of maintenance staff working under normal and pressure conditions of short period outage preparing and executing PM, CM of all electrical equipments in the required time schedule.
- Managing crew of shift, execute all operational electrical works with the national networks (dispatch centers).
- Test and detection trouble shootings, faults and failures of control circuit for most electrical equipment in power plants and substations, test and detection failures of low and medium voltage cables.
- Providing competitive and high-quality tender document and relevant business suggestions for quotation, making presentation and negotiation to clarify the tender with customers, Responsible for bidding projects.