

Holds a B. Sc. in Electrical Power & Machines Engineering and has about 15 years hands-on experience in multi-discipline projects, such as construction, testing & operation & maintenance of 500KV / 380KV / 220KV / 132KV / 13.8KV power transformer Substations. Also Upgrade Power Transmission System at SAOO (Saudi Aramco Oil Operation).

## **PERSONAL DATA**

Nationality : Egyptian  
Birth Date : 27/09/1979  
Gender : Male  
Marital Status : Married  
Residence : Currently KSA

## **EDUCATION**

: B. Sc. in Electrical Power & Machines Engineering, Mansoura University, 2003

## **LANGUAGES**

Arabic : Native Language  
English : Good

## **COMPUTER SKILLS**

: Windows, MS Office (Word, Excel, Access, Power Point), Internet  
: Programming Languages (Fortran, C++ & Matlab)  
: PLC Device  
: Electrical Design (Electronic work bench and PSpice)  
: Simulation Programs (In touch, Isa graph & PSCAD)

## **TRAINING COURSES AND CERTIFICATIONS**

: At South Network Training Center, Helwan:

- Instrument Transformer and power measurement.
- Protection Fundamentals.
- Feeder protection.
- Digital protection.
- Electrical Control Circuits and Diagrams for Substation.

: Training at Talkha Electric Power Station for 2 years.  
: Programming and testing the electrical instrument related to rockets in the army.

: Matlab programming course.

## CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From 2015 till now
- Employer** : Al-Gihaz Company
- Projects** : Upgrade Power Transmission System at SAOO:
- 115/4.16KV AIN DAR GOSP-1 S/S – East Saudi Arabia
  - 115/4.16KV AIN DAR GOSP-2 S/S – East Saudi Arabia
  - 115/13.2KV AIN DAR GOSP-4 S/S – East Saudi Arabia
  - 132/13.8KV AIN DAR WIP S/S – East Saudi Arabia
  - 115/13.2KV SHED GOSP-2 S/S – East Saudi Arabia
  - 115/4.16KV SHED GOSP-3 S/S – East Saudi Arabia
  - 115/4.16KV SHED GOSP-5 S/S – East Saudi Arabia
  - 115/13.2KV SHED ACC S/S – East Saudi Arabia
  - 66/4.6KV ABQAIQ GOSP-5 S/S – East Saudi Arabia
  - 115/4.16KV HAW GOSP-2 S/S – East Saudi Arabia
  - 115/4.16KV HAW GOSP-3 S/S – East Saudi Arabia
  - 115/4.16KV HAW GOSP-4 S/S – East Saudi Arabia
  - 115/13.8KV HARADH GOSP-1 S/S – East Saudi Arabia
  - 115/13.8KV HARADH GOSP-2 S/S – East Saudi Arabia
  - 115/4.6KV HARMALIYAH GOSP-1 S/S – East Saudi Arabia
  - 115/4.16KV HAW WIP S/S – East Saudi Arabia
  - 115/13.8KV UTHMANIYAH WSP S/S – East Saudi Arabia
  - 115/4.16KV UTHMANIYAH GOSP-4 S/S – East Saudi Arabia
  - 115/13.8KV UTHMANIYAH GOSP-7 S/S – East Saudi Arabia
  - 115/13.8KV UTHMANIYAH GOSP-8 S/S – East Saudi Arabia
- Job title** : Lead Electrical Engineer
- Job Description** :
- Assumed the responsibility of Lead Electrical Engineer at Al-Gihaz Company in AlGihaz Industrial Project Business Unit. Such multitasked role includes dialogue with clientele, preparation for basic and detail design of 50%, 90% and IFC Packages, review of detail design 50%, 90% and IFC packages, technical requirements, preparation of material take-off (MTO) and material requirements, review of vendor technical offers, vendor and client meetings, review of purchase requisitions (PR), preparation of technical bid evaluations (TBE), technical appraisals (TA) and material submittals, review of all nonmaterial requirements packages (NMR's) and interconnection diagrams along with the cable schedules, red line and mark-up drawings, involved in the planning schedule for activity preparation and finalization, shutdown schedule preparation, bidding meetings, site visits and material take off (MTO).
  - Involved in new projects site visit, estimation.
  - Quality Control (QC):
    - Supervised site QC activities as per Aramco Standards and IFC Drawings.
    - Preparation of Request for Inspection (RFIs) for Material receiving Inspection, Installation Inspection, Testing and Commissioning Inspection as per the SAIC, SATR and SATIP.
    - Conducting Inspection with Aramco Inspector.

- Preparation of Loop Packages as per Aramco standard and test reports.
- Preparation of Energization packages as per Aramco standards and test reports.
- Pro-Active to the respective disciplines Engineer to avoid the violation.
- Continuous Monitor of site activities under QC requirements.
- Preparation of Surveillance log to active the QC requirement and to avoid the violation & NCRs.
- Giving NCR to the Corresponding Departments.
- Excellent Knowledge in Saudi Aramco Standards such SAMSS, SAES, SATIP, SATR, SAIC.
- Installation Inspection, Pre-Commissioning Inspection and Final Commissioning Inspection of all Electrical Equipments.
- Preparation of Red line drawings as per the site condition.

<b>Dates</b>	:	From 2011 till 2015
<b>Employer</b>	:	Saudi Electricity Company
<b>Projects</b>	:	<ul style="list-style-type: none"> <li>• 132/13.8KV Khalidiya S/S, Najran – Saudi Arabia</li> <li>• 132/33KV Al-Namas S/S, Abha – Saudi Arabia</li> <li>• 380/132/13.8KV Namerah S/S, Baha – Saudi Arabia</li> <li>• 132/13.8KV Baish S/S, Jizan – Saudi Arabia</li> <li>• 132/13.8KV Al-Khaniq S/S, Najran – Saudi Arabia</li> <li>• 132/13.8KV Jizan Town S/S, Jizan – Saudi Arabia</li> <li>• 132/33KV Sabia S/S, Jizan – Saudi Arabia</li> <li>• 132/33KV CPS-2 S/S, Jizan – Saudi Arabia</li> <li>• 380/132/13.8KV Al-Shuqaiq S/S, Jizan – Saudi Arabia</li> <li>• 132/33KV Dhran Al-Jnoub S/S, Najran – Saudi Arabia</li> <li>• 132/13.8KV Khamies South S/S, Abha – Saudi Arabia</li> <li>• 380/132/13.8KV Muhaiel West S/S, Abha – Saudi Arabia</li> <li>• 380/132/13.8KV Nagran University S/S – Saudi Arabia</li> <li>• 132/13.8KV Roukibah S/S – Saudi Arabia</li> <li>• 132/13.8KV Iskan S/S – Saudi Arabia</li> </ul>
<b>Job title</b>	:	Senior Commissioning Engineer (Site Team Leader Comm. Coordinator)
<b>Job Description</b>	:	<ul style="list-style-type: none"> <li>• Prepare &amp; review the site test procedure and test sheet formats.</li> <li>• Coordinate with the testing and commissioning subcontractors and supervise them during work execution.</li> <li>• Prepare the testing schedules and energization procedure.</li> <li>• Supervise installation, testing and commissioning for EHV, HV and MV substations.</li> <li>• Performing Scheme design developing and modification.</li> <li>• Supervise installation, testing and commissioning for different types of latest Protection, inter-tripping and fault recording Equipment.</li> <li>• Supervise installation &amp; testing all types of protection relays (distance, differential), bus bar and transformer stability test.</li> <li>• Carry out all required function and scheme check tests for different manufactures schemes.</li> <li>• Scheme Check for Relay panels &amp; Bus bar protection panel.</li> <li>• Prepare the procedure for Tr. &amp; B/B stability and perform the Tr. &amp; B/B stability test.</li> <li>• Supervise installation, testing and commissioning of 380, 132, 33 &amp;</li> </ul>

- 13.8KV Control Panels, Scheme Check.
- Supervise installation, testing and commissioning of 380, 132, 33 & 13.8KV Relay Panels, Scheme Check.
- Supervise the termination of control and protection panel.
- Perform interfacing check & over all interlocking check.
- Carry out function check for AVC, ABTS system.
- Carry out all tests for power cables testing & commissioning works.
- Carry out all tests on transformer, C.T, V.T, C.B (Primary injection test, Secondary injection test, Winding resistance test, Polarity test, Knee point test, Ratio test & Resistance test) and Switchgear equipment.
- Supervise installation, testing and commissioning for new installation in the area substations reinforcement.
- Supervise installation, testing and commissioning of Digital Energy Meter (ABB).
- Supervise installation, testing and commissioning of Synchronizing panel and scheme Check.
- Supervise installation, testing and commissioning of Load Shedding Panel & SCADA Interface Panels.
- Supervise installation, testing and commissioning of Power Factor correction in SOA (Automatic Capacitor Control System) ACCS.
- Perform Configuration for Sequence of Events Recorder (SER) & Fault Recorder (FR) and apply testing by injection.
- Officially visited various substations in southern region of K.S.A. for the preparation of modification in protection Scheme of existing substation.

<b>Dates</b>	:	From 2004 till 2011
<b>Employer</b>	:	Egyptian Electricity Transmission Company
<b>Job title</b>	:	Protection & Testing Engineer
<b>Job Description</b>	:	<ul style="list-style-type: none"> <li>• Installing and testing protection relays in transformers stations 220/66/11KV.</li> <li>• Supervised assembly and erection to completion of outdoor 220/66/11KV equipment, control and protection system.</li> <li>• Doing the basic tests for new transformers stations and put it in service.</li> <li>• Testing and calibration of measuring instruments like voltmeters, amp meters, power meters, frequency meters, PF meters, power recorder, energy meters and transducers.</li> <li>• Design and testing of inter looking schemes, control and alarm schemes, synchronizing schemes, voltage regulating schemes, bus bar schemes and breaker failure schemes.</li> <li>• Calculating operating and setting values for protection relays.</li> <li>• Maintaining and designing control circuits for any part in transformers station (i.e. power transformers, circuit breakers, isolators, compressors, etc.).</li> <li>• Working on the operating programs for the digital relays such as ABB, SIEMENS, AREVA, SEL and G.E.</li> <li>• Testing power transformers (winding insulation, ratio test, D.C. resistance test and vector group test).</li> <li>• Testing circuit breakers (measuring contact resistance, measuring closing and tripping time and measuring circuit breaker insulation).</li> <li>• Testing current transformers (insulation test, saturation test (magnetic curve), polarity test and ratio test).</li> </ul>

- Testing voltage transformers (insulation test and ratio test).
- Testing the protection relays in the transformer power stations with the device tester as (Manta - Savarker - fregaa300 – Isa - Q.Z.).
- Working in construction the distance, over current, differential protection relay in the transformer power station such as: AREVA Micom P441, p442, P143, P120, etc. – SEL311c – Siemens 7SA610, 7SA611, 7UT612, 7SJ602 – G.EDTP- ABB REL511, 316x4, REF542, RET521v2.3 transformer protection – A/R – SPAD340c – KBCH120 – KCGG142 – MICRO MHO – L8 – LH1W – RD110 – RAZFE – R30 – D202 – FAULT RECORDER (HATHAWAY)).
- Testing and commissioning all distance protection Relays and power transformer commissioning in Kafr Elzayat substation (500KV).
- Testing the stability of BUS BAR (220KV) such as: INX2 – INX5 – MBCZ10 – MBCZ16 - INERTIC – 7SS10 – 7SS13 – ABB REB 500 – MICOM P740.
- Witness upon two Companies (EGEMAC & SIEMENS) in Kafr Elzayat substation (500/220/66KV).

**Dates** : From 2003 till 2004  
**Employer** : Potable Water & Sanitary Drainage Field – Light Current Applications  
**Job title** : Protection Engineer  
**Job Description** :

- Protected Generators, Motors and Transformers from over current and earth fault.
- Designing and construction of electrical control panel for all operated water pumps.

**Technical Skills:**

- General Electric Motors Protection Devices Software.
- Siemens Protection Devices Software.
- Areva Protection Devices Software.
- ABB Protection Devices Software.
- Omicron (Protection Devices Tester) Software.
- Frija 300 (Protection Devices Tester) Software.
- Differential – Distance – Over Current – REF.
- Testing all protection relays of 500KV and 220KV over head lines.
- Testing all protection relays of power transformer.
- Protection Test Equipment and Software:
  - Programma from GE Energy SVERKER (650 & 750).
  - OMICRON (CMC X56 family and CT Analyzer).
  - FREGAA 300.
  - ISA RTDS and TDMS software.
  - MEGGER PCIT/S1/MIT.

**Field of experience** :

- Background in design and experience in protective relays testing.
- Experienced in design of control, protection schemes and power system high voltage equipment installation and testing.