

Holds a B. Sc. in Electrical Power & Machines Engineering and has about 11 years hands-on experience, including 10 years working as Testing & Protection Engineer.

## PERSONAL DATA

Nationality : Egyptian  
Birth Date : 01/01/1983  
Gender : Male  
Marital Status : Married  
Residence : Currently KSA

## EDUCATION

: B. Sc. in Electrical Power & Machines Engineering, Cairo University (Fayoum Branch), 2005  
: Pre-master in Electrical Engineering, Fayoum University, 2010

## LANGUAGES

Arabic : Native Language  
English : Very Good

## COMPUTER SKILLS

: Windows, MS Office, Internet  
: Matlab (including Simulink)  
: ATP (Alternative Transient Program)  
: Software for protective relays & testers

## TRAINING COURSES AND CERTIFICATIONS

: Training at Pharaohs Company for Ceramics.  
: Training at Demo (220/132/66/11KV) & Qohafa (66/11KV) Substations (Egyptian Electricity Transmission Company).  
: Training at Emisal Company (Egyptian Company for Minerals & Salts).  
: Matlab Course at Syndicate of Engineers.  
: Protection Courses at Network Training Centre, Helwan (Egyptian Electricity Transmission Company).  
: Training about MPRT (Megger Protective Relay Tester).  
: Training about protective relays of ABB, Siemens, Areva, General Electric, SEL & Schneider.  
: Seminars about IEC 61850, Power factor improvement & Harmonic control.

: English: TOEFL Certificate with score of 590 from Language & Translation Centre, Fayoum University (Mar. 2010).

## CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Jan. 2014 till now
- Employer** : GeSCo (Gihaz Energy Services Company), Saudi Arabia
- Job title** : Testing & Commissioning Engineer
- Job Description** :
- Tabouk 2 Substation:
    - Testing mechanical protections & preparing cable schedule for changing 13.8KV shunt reactors (dry type replaced by oil-immersed type).
  - Dhuba 2 Substation (132/13.8KV):
    - Programming, testing, making required modifications, scheme check, function test & stability test for 132KV busbar & breaker fail protection (Micom P740).
    - Closed loop test with SAS.
  - Muabdah Substation in Makkah (110/13.8KV):
    - Programming, testing, making required modifications, scheme check, function test & stability test for 110KV busbar & breaker fail protection (Micom P740).
    - Testing (including stability test) 13.8KV busbar protection (MFAC with CT supervision MVTP).
    - Programming & testing reactive power transducers (Triad T302 made by Enerdis) & voltage transducers (UMT516 made by Iskra).
    - Testing ACCS (automatic capacitor control scheme).
    - Testing ABTS (automatic bus transfer scheme).
    - Closed loop test with SAS.
  - Wadi Jalil Substation in Makkah:
    - Modification & scheme check for 2 feeders 110KV (remote end for Muabdah substation).
    - Programming & testing cable differential with built-in distance protection (Micom P545) for 2 feeders 110KV (remote end for Muabdah substation).
    - Closed loop test with SAS.
  - Baraka Substation in Madinah (110/13.8KV):
    - Testing components of AC & DC distribution boards (OV / UV relays, insulation monitoring relays, timers, auxiliary relays, measuring instruments, MCCBs & MCBs).
    - Scheme check & function test of DC distribution board.
    - Testing alarm annunciators (RTK 256).
    - Programming, testing, making required modifications, scheme check, function test & stability test for 110KV busbar & breaker fail protection (Siemens 7SS52).
    - Programming, testing, making required modifications & scheme check for 110KV line feeder protection (line differential with built-in distance protection SEL-411L & 7SD).
    - Testing (including stability test) 13.8KV busbar protection (MFAC with CT supervision MVTP).
    - Programming, testing & scheme check for UVP (SEL-351A) & UFP (Micom P142).
    - Programming, testing, making required modifications, scheme

- check & function test for RTCC (ZIV - RTV).
- Making required modifications, scheme check & function test for capacitor bank protection.
- Closed loop test with SAS.
- Ohud Substation in Madina:
  - Scheme check for protection panels of 2 feeders 110KV (remote end for Barakah substation).
  - Acceptance test for cable differential with built-in distance protection (SEL-411L & 7SD52) for 2 feeders 110KV (remote end for Barakah substation).
- Baydaa Substation in Madina:
  - Scheme check for protection panels of 2 feeders 110KV (remote end for Barakah substation).
  - Acceptance test for cable differential with built-in distance protection (SEL-411L & 7SD52) for 2 feeders 110KV (remote end for Barakah substation).
- Moatamarat Substation in Jeddah (110/13.8KV):
  - Making training for other engineers on programming & testing 110KV busbar & breaker fail protection (Siemens 7SS52).
  - Programming, testing, making required modifications, scheme check & function test for RTCC (TAPCON 260).
- Gulf Salman Substation in Jeddah (110/13.8KV):
  - Making training for other engineers on programming & testing 110KV busbar & breaker fail protection (Siemens 7SS52).
  - Programming, testing, making required modifications, scheme check, function test & stability test for 110KV busbar & breaker fail protection (Siemens 7SS52).
  - Testing ABTS (automatic bus transfer scheme).
  - Closed loop test with SAS.
- Madinah Industrial City (MIC) BSP (380/110/33/13.8KV) (under execution):
  - Scheme check & function test for 380KV GIS bays.
  - Programming, testing, making required modifications, scheme check & function test for 380KV trip circuit supervision & breaker fail protection (Siemens 7VK61).
  - Programming & testing 380KV line feeder protection (line differential with built-in distance protection) ABB - RED670, Siemens - 7SD & SEL-411L.
  - Programming & testing 380/110KV, 110/33KV & 110/13.8KV transformer differential protection (SEL-487E).
  - Programming & testing 380/110KV, 110/33KV & 110/13.8KV transformer restricted earth fault protection (Micom P142).
  - Programming & testing 380/110KV transformer distance protection (Micom P546).
  - Programming, testing, making required modifications, scheme check & function test for 380KV auto-reclosing (Siemens 7VK61).
  - Programming, testing & making required modifications for 110KV capacitor bank protection (SEL-487V & GE C70).
  - Trip test for 380KV breaker fail protection (Siemens 7VK61).
  - Trip test for 380KV busbar protection (Siemens 7SJ64 & Micom P142).
  - Trip test for 380KV line feeders (ABB - RED670, SEL-411L, Siemens - 7SD & Micom P546).

- End-to-end test for 380KV line feeders.
- Closed loop test with SAS.
- Madinah South (MDS) BSP (380/110/13.8KV) (Remote end for MIC):
  - Final setting test, trip test AR test & closed loop test for 380KV feeder MDS – MIC.
- Al-Salam BSP (380/110/13.8KV) (Remote end for MIC):
  - Final setting test, trip test AR test & closed loop test for 380KV feeder Al-Salam – MIC.

**Dates** : From Dec. 2006 till Dec. 2013

**Employer** : EETC (Egyptian Electricity Transmission Company)

**Job title** : Protection & Testing Engineer

**Job Description** :

- Programming, connecting & testing different protective relays of different manufacturers.
- Performing primary & secondary injection.
- Performing stability test for transformer differential & restricted earth fault relays.
- Troubleshooting in protection and control schemes.
- Design, implementation, modification, maintenance & test of interlock, control & alarm circuits.
- Making necessary modifications at site.
- Replacing old-fashion relays (static & electro-mechanical) by digital ones.
- Testing power transformers, CT, VT, SA, CB, isolators, cables & capacitor banks.
- Replacing oil CB's by SF6 CB's & replacing compressed air-operated disconnectors by others of motor-operated mechanism & making necessary modifications in wiring diagrams.
- Programming, connecting & calibrating energy meters, transducers & measuring instruments.
- Programming & connecting temperature indicators, tap position indicators & alarm annunciators.
- Familiar with power quality analyzers.
- Familiar with capacitor bank protection & control schemes.
- Programming, connecting & testing AVR (Automatic Voltage Regulator).
- Extension works in substations (such as adding new transformers, feeders & capacitor banks & replacing transformers by other ones of higher capacities), preparing necessary wiring diagrams & cable schedules, making necessary modifications in existing interlock, control & protection schemes & making necessary connections including internal panel connection & interface between panels.
- Work on mobile transformers. Two mobile transformers (66/11KV) were added during my work period. There were no wiring diagrams, so, it was necessary to follow connections & draw complete wiring diagrams. Protective relays installed were electro-mechanical & we replaced them by digital ones. Alarm systems were not operating & we installed alarm annunciators.
- Participating in preparing technical specifications of protective relays, switchgear equipments & testers.
- Work on transformer fire fighting systems.
- Measuring internal resistance for battery cells & tracing DC ground fault.

- Work on auxiliary service transformers, chargers, batteries & panels of AC & DC distribution.
- Simulation studies, fault calculations, CT & VT calculations & protective relay setting calculations.
- Fault analysis using available data from disturbance & event records of protective relays & SOE recorders.
- Training new engineers.

**Dates** : From Jul. 2006 till Nov. 2006  
**Employer** : Nasr Company for Intermittent Chemicals  
**Job title** : Electrical Engineer

**Dates** : From Feb. 2006 till Jun. 2006  
**Employer** : Pharaohs Group for Ceramics  
**Job title** : Electrical Engineer