

Holds B. Sc. in Electrical Power & Equipments Engineering and M. Sc. in Digital Distance Protection. Has over 28 years hands-on experience working in Power Stations and Substation construction, testing and commissioning in Egypt, KSA, UAE, Libya, Kuwait, UK, Ireland and Australia.

## PERSONAL DATA

Nationality : Egyptian  
Birth Date : 02/09/1965  
Gender : Male  
Marital Status : Married

## EDUCATION

: B. Sc. in Electrical Power & Equipments Engineering, 1988  
: M. Sc. in Digital Distance Protection, Cairo University, 1995

## LANGUAGES

Arabic : Native Language  
English : Fluent  
German : Basics

## COMPUTER SKILLS

: Windows, MS Office, Internet  
: EDSA Software for Power System Load flow and protection coordination  
: ETAP POWER STATION 4.0

## TRAINING COURSES AND CERTIFICATIONS

: Project Management Professional Course.  
: Course in Protective Relays by Jack Royals and Steve Pickering Alstom-GEC (1994).  
: Course in Protective Relays 66/11KV Substation and Busbar Protection RADSS-ABB made by ELECTROIMPEX Co. in Sofia – Bulgaria (1994).  
: Course in Protective Relays, Cairo University (1994).  
: Avantis.pro training course for CMMS (Computerized Management Maintenance System) for two weeks in Jeddah – Saudi Arabia (2006).  
: CDM training by SAFTY & RISK MANAGEMENT (Sep. 2007).  
: Construction Design Management Regulation (Mar. 2008).  
: Safety Rules Training by NG (Mar. 2009).  
: TP 141 Relay Setting Authorization (from 2008 valid up to 2011).

- : Personal Training NGT EAK 17599 Energy Utility Skills Register EUSR ID EUSR105474 up to Apr. 2011.
- : A course in PCM600 2.3, RED 670, RET 670, REB500 ABB Sweden at Dubai (Apr./May 2011).
- : EDSA Software for Power System Load flow and protection coordination.
- : ETAP POWER STATION 4.0

## CHRONOLOGICAL EXPERIENCE RECORD

**Dates** : From Jul. 2015 till now  
**Employer** : Self Employed  
**Project** : In Cairo – Egypt, Ireland and Oman  
**Job title** : Free Lancer Protection and Control Consultant, Technical  
**Job Description** : Electrical Protection & Commissioning Consultant  
**Job Description** : Principal Protection Engineer / Commissioning Manager / Design Manager:  
 The services including Design Review of Protection System for Generation and Substation, Relay setting, Testing and commissioning, AIS, GIS, Protection Relays different types.

**Dates** : From Feb. 2015 till Jun. 2015  
**Employer** : TLI Group Ireland  
**Project** : In Ireland  
**Job title** : Protection & Commissioning Team Leader, Ireland  
**Job Description** : Testing and commissioning of 220/110KV substation, 110KV GIS Switchgear is ABB ELK-04, 220KV GIS Switchgear is ABB ELK-14C, 220/110KV, coupling transformers are CG Power 250MVA, protection and control systems including using Omicron 356 test set version 3.0 and Siemens software, Overcurrent Relays Type 7SJ611 and Distance Protection 7SA612, Busbar Differential/CBF relay is a Toshiba GRB100, Substation 220KV Sync scheme is a Synchrotact 5, Control System is a Siemens SAT250, Trafo differential relays are ABB RET670 also Commissioning programming and commissioning management and resources planning.

**Dates** : From Jan. 2013 till Jan. 2015  
**Employer** : Self Employed  
**Project** : In Cairo, Egypt  
**Job title** : Free Lancer Protection and Control Consultant  
**Job Description** : Technical Consultant for Power system protection / Lead Commissioning Engineer, able to use Omicron Device.

**Dates** : From Mar. 2012 till Nov. 2012  
**Employer** : GHD Consultant – Australia  
**Project** : In North Australia, Darwin City  
**Job title** : Substation Commissioning Manager  
**Job Description** :
 

- Manage commissioning activities at sites.
- Prepare testing plans.

- Commissioning schedules.
- Coordinate with stakeholders the testing activities.
- Tend commissioning panel meetings.
- 66KV Siemens GIS Testing witnessing in behave of Power Water Company North Australia.

**Dates** : From Jan. 2011 till Nov. 2011  
**Employer** : ABB UAE  
**Projects** :

- Eskan Abu Dhabi 132/33KV S/S
- Fewa Rass Al Khema UAE 5 substations 132/33KV

**Job title** : Site Commissioning Manager  
**Job Description** : Supervise and manage commissioning activities, MST, commissioning team at site, this include the following:

- Manage a group of Sir-protection and commmissioning engineers (about 20 engineers).
- Prepare the overall commissioning program for substations to ADDC and FEWA.
- Prepare three weeks commissioning schedule.
- Follow all commissioning activities in substation and interface work with all subcontractors including ABB GIS, ABB Protection Relays and ABB SCMS.
- Prepare Commissioning Method Statements as required for busbar Protection Upgrading.
- Manage the cost of manpower resources based on the project requirements.

**Dates** : From Dec. 2009 till Dec. 2010  
**Employer** : Mott MacDonald Group  
**Projects** : Sadyat Islad 4 substation 132/22KV and one grid station – Abu Dhabi  
**Job title** : Senior Consultant Protection Engineer  
**Job Description** :

- Commissioning Resident Engineer at Saadiyat Island following the commissioning activities of 132/22KV Substation Protection System – Siemens Busbar Protection Type 7SS522/7SS523, Siemens Transformer Protection 7UT 513, 7SJ612, Feeder Line Protection 7SD522 and other Substation commissioning activities including GIS 132KV, GIS 22KV and 132/22KV Transformers.
- Commissioning of Substation Control System Siemens-SICAM PAS-6MD9.
- Commissioning of ABB Busbar Protection Type REB 500.

**Dates** : From Mar. 2007 till Nov. 2009  
**Employer** : ABB UK  
**Projects** :

- National Grid upgrading of protection system in central UK
- South Manchester Substation protection relays settings

**Job title** : Commissioning Team Leader  
(Commissioning Management Relay Setting Approved Engineer TP141)  
**Job Description** :

- Commissioning activities for 400 & 275KV substations including producing test sheets for NG protection such as RED670, REC561, P545 Relays in power system division, also producing the relay setting

- calculations for NG (TP 141 Relay Setting Engineer Authorization).
- Assist the Commissioning Manager in the co-ordination and management of company commissioning process (NICAP 2 project - West Burton AIS 400KV Project - South Manchester 275KV Alliance Project).
- Carry out fault level and protection setting - TP 141 Relay setting Authorization include Nicap 2 Relay setting, West Burton EDF Busbar Protection and Backup Directional relay for Generating units, South Manchester 275/132KV Mesh corners, SGT Protection, High Impedance Busbar Protection Calculations. Up loading of Setting Sheets (MARS) and Relay Configuration Files to NGT Live Link System.
- Produce NGT Thermal Rating Sheets, Protection DAR schedules.
- Produce NGT Switching Programs.

**Dates** : From Feb. 2006 till Feb. 2007

**Employer** : Generation Technical Support Services (GTS), Jeddah – KSA

**Projects** : The Job includes the following Power Stations in West of Saudi Arabia:

- SHOAIBA Power Plant 7x393MW
- Jeddah Power Plant GT units
- Rabigh Power Plant ST units, GT units and CCST units
- Madinah & Yanbu Power Plants 6x205MW, 2x30MW, 3x45MW GT units
- TABOUK Power Plant, GT units

**Job title** : Senior Protection Engineer

**Job Description** :

- Provide Technical expertise to review, update & unify Protection Maintenance procedures & standards across West Generation Region in Kingdom of Saudi Arabia.
- Review system disturbances & investigation all protection mis-operations.
- Provide bi-weekly report to SEC Technical Service Manager; perform related duties as assigned by the SEC Technical Service Manager. Include Generator, Step-Up Transformer Protections such As REG-216 From ABB also Multilin DGP and G60 from GE and Micom342 from Areva, 7UM61 from Siemens and other classical Static Relays from BBC Generator Protection and induction type from GE.

**Dates** : From Jan. 2005 till Jan. 2006

**Employer** : DUBAI Electricity & Water Authority (DEWA), Dubai – UAE

**Job title** : Senior Transmission & Maintenance Protection Engineer

**Job Description** :

- Testing and supervision of Protective Relays of different types for feeders, Transformers, Busbars 400KV and 132KV systems use the more recent test equipments as Omicron, FRIJA 300.
- Review system disturbances & investigation all protection mis-operations.
- Work with Area Protection Staff to review protection coordination issues; provide training & guidance to all Protection Maintenance Staff.
- Provide bi-weekly report to DEWA Protection maintenance Manager; perform related duties as assigned by the DEWA Protection Maintenance Manager.

**Dates** : From Jan. 2002 till Dec. 2004  
**Employer** : TOSHIBA / MITSUI Co., Riyadh – KSA  
**Job title** : Senior Transmission & Maintenance Protection Engineer  
**Job Description** :

- Managed all drawings submission and approval with the customer SEC-CRB and fully coordinated with subcontractors ABB Saudi and SST Company, including all site activities supervision and remote end protection modifications at 17 Remote Ends Substations.
- Provided technical negotiations with the customers, with full knowledge of international standard of protection relays and customer specifications.
- Followed up of protection relays commissioning for the main substation and remote end substations.

**Dates** : From Feb. 2001 till Jan. 2002  
**Employer** : SIEMENS, Egypt  
**Job title** : Senior Protection/Commissioning Engineer  
**Job Description** :

- Commissioning Protection Engineer for PT, CT, Control Circuit, Tap change control, power transformer testing, interface circuit for power transformer 220/33KV in Al Ezz factory for steel in Suez Gulf in Egypt.
- Commissioning of distance relay Siemens make type 7SA513, Alstom make type EPAC 220KV lines in Libya.

**Dates** : From Feb. 1999 till Jan. 2001  
**Employer** : SIEMENS-WESTINGHOUSE, Damman – KSA  
**Job title** : Senior Design Protection Engineer  
**Job Description** :

- Project with SCECO-E (Saudi Arabia) for modification of protection schemes of replacement of distance relays in 3 S/S and phase comparison relay replacement with line differential relay type LFCB Alstom made.
- The project also covered distance relay settings, C.T. and P.T. sizing, SCADA point list, SEC point list, Fault Recorder point list, Single line diagram, relay and control line diagram and testing and commissioning of the protective relays.

**Dates** : From Nov. 1998 till Jan. 1999  
**Employer** : SIEMENS AG, Egypt  
**Project** : Malawi West S/S 220/66/33/11KV  
**Job title** : Site Manager  
**Job Description** : The scope of work covered complete installation and testing of S/S.

**Dates** : From Jan. 1996 till Oct. 1998  
**Employer** : CEGELEC, Egypt  
**Job title** : Protection/Commissioning Engineer  
**Job Description** :

- Commissioning of Taba S/S 500/400/220/22KV (interconnection cable between Egypt and Jordan) GEC Alstom Relays.
- Commissioning of Luxor S/S 220/66/11KV GEC Alstom Relays.

**Dates** : From Feb. 1995 till Jan. 1996  
**Employer** : ISCOA (Siemens Westinghouse), KSA  
**Job title** : Protection/Commissioning Engineer  
**Job Description** : Covered the following job sites:
 

- 1996: King Saudi University S/S protective relays.
- Modification and installation of directional over current relays and i.e. relays of 69KV grid station for SCECO-E in Saudi Arabia.
- Sep./Oct. 1995: Commissioning relays of gas turbine generators for low rate radar base, Panesma Co. for Saudi Air Force.
- From Jul. till Sep. 1995: Westinghouse Kuwait (Head Office in Orlando USA).
- Project for Sabah El Salam 'C' S/S GIS SF6 132/69/11KV. Complete testing and energization of S/S (Reyrole protections, GEC busbar protection MBCZ 10).

**Dates** : From Jun. 1989 till Jan. 1995  
**Employer** : Egyptian Electricity Authority (EEA)  
**Job title** : Protection/Commissioning Engineer (Protection Maintenance Dept.)  
**Job Description** :
 

- Cairo North I Combined Cycle Project (750MW), including all Switchgears, MCC, GIS, Batteries, Unit Transformers and Station Transformers, Scada Systems.
- Cairo West Thermal Power Plant 2x350MW, including all Switchgears, MCC, GIS, Batteries, PS, Unit Transformers and Station Transformers, Scada Systems.
- Provided supervision, installation and commissioning of power stations and substations protective relay and control systems.
- Basaten S/S extension third transformer 220/66/11 as representative of E.E.A. for testing and commissioning.
- Abu Zabal 500/220KV Mitsubishi made GEC relays.
- Bahtem S/S extension for the third transformer AEG made, Cairo North.
- Provide Technical expertise to review, update & unify Protection Maintenance procedures & standards across Cairo Electricity Zone in Transmission system.
- Review system disturbances & investigation all protection mis-operations.
- With Area Protection Staff to review protection coordination issues; provide training & guidance to all Protection Maintenance Staff.
- Work with Technical Institutes to ensure Protection Trainees follow latest standards & procedures
- Provide bi-weekly report to Protection Maintenance Manager; perform related duties as assigned by the Protection Maintenance Manager.

**Field of experience** : Ability to test the following relays:
 

- Distance relays L8B ABB made RAZFE-ABB, RAZOA-ABB, LHY3-ABB, SD35C-AEG, PD551-AEG, OPTIMHO-ALSTOM, MICROMHO-ALSTOM, REZ-1-ABB, Micom Relays P442, Sel Relays and 7SA513 Siemens Relays, 7SA522 Siemens.
- Over current relays MCGG22-ALSTOM, RACID-ABB, VIGRACK-G.SHNIDER, MCO-ABB, Micom Series Areva and ARGUS-1 REYROLE.
- Directional over current relays: MCGG22+METI 13 ALSTOM D.E.F. with

- PLC Schemes ABB, 2DAP, ARGUS-2 REYROLE.
- Busbar Protection: MBCZ 10 Alstom B.B. Protection – AEG made, SIEMENS B.B P Type 7SS522/7SS523, RADSS-ABB, TRANSFORMER DIFFERENTIAL RELAY DUBIAS M.
- Generator Protection: Loss of Field – ABB, Out of step-ABB, Reverse Power BASLER U/O Frequency Relays – BASLER LPG111/Alstom Negative Phase Protection – BASLER Power factor Protection BASLER O/C Protection MCO-ABB, MX3IPG1A Areva and 7UT512 Tr. Differential Prot SIEMENS, 7UT513 SIEMENS.
- Phase Comparison Relay: P10 Alstom, SOLKAR RF REYROLE, MBCI, LFCB103 GEC.
- PLC Schemes Applied for Distance Protection Blocking and Tripping Schemes.
- Fault Recorders: ENERTIC – FRANCE, HATHAWAY – USA.
- Troubleshooting of control circuits of Desil Generators and substations control and interlocking of C.B. and D/S, E/S.
- Battery and Battery chargers simplex type (Floating and boost charging).
- Good knowledge about GIS SF6 maintenance gas filling machine DELO, Dew Point, management, etc.
- Transformer testing up to 500KV, oil filtering machine (knowledge), transformer oil test (breakdown test).

Key Qualifications / Specialization:

- Skills in managing / maintaining building / site electrical systems.
- Electrical power, equipment and instrumentation and energy management experience.
- Power Stations and Substation construction, testing and commissioning.

Clients I have approval and worked with:

- Egyptian Electricity Company
- Al Ezz Factory for steel in Suez Gulf in Egypt
- GECOL Lybia
- SEC EAST KSA
- SEC Central KSA
- SEC West KSA
- Saudi Aramco Eastern Region
- Sabic Eastern Region
- DEWA Dubai UAE
- TRANSCO Abu Dhabi
- ADDC Abu Dhabi
- NATIONAL GRID UK - Central Alliance
- EDF UK
- PWC Australia
- ESB Ireland