

Holds a B. Sc. in Telecommunications & Electronics Engineering and has over 16 years hands-on experience working in protection, testing and commissioning.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 15/10/1981
Gender : Male
Marital Status : Married
Residence : Tanta

EDUCATION

: B. Sc. in Telecommunications & Electronics Engineering, Menoufia University, 2005

LANGUAGES

Arabic : Native Language
English : Very Good

COMPUTER SKILLS

: Windows, MS Office, Internet
: Visual Basic 6
: AutoCAD Electrical 2015
: EPlan electric P8 version 2.4

TRAINING COURSES AND CERTIFICATIONS

: Power transformer testing & maintenance.
: PLC programming & applications (PLC-1).
: Electrical control circuits and diagrams for substations (CCS).
: On-load tap changer (MR).
: Instrument transformers & power measurement (P1).
: Protection fundamentals (P2).
: Power transformers protection (P4B).
: Courses in Network Training Center of Egyptian Electricity Transmission Co. (EETC):

- Distance protection relays of Siemens (Fundamentals).
- Distance protection for transmission lines 7SA6xx (part 1).
- Distance protection for transmission lines 7SA6xx (part 2).

- Auto recloser relays.
- : Courses in Training Activity Center of EETC:
 - Training in O/C &E/F (P143) – Distance protective relay (P444) – Cable line differential protective relay (P545) and Centralized bus bar protective relay (P746) from Schneider Electric Company for five days in Egypt.
 - Training on DIGSI 5 version 6.2 and later operating software program for all Siprotec 5 devices and Training on Centralized Bus bar protective relay (7SS85) from SIEMENS Company for three days in Egypt.
 - Training on fault recorder devices (IDM/T5) and Hathaway replay plus program for configuration, testing and commissioning, analysis of faults on electrical networks for four days in Egypt.

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Aug. 2007 till now
- Employer** : Egyptian Electricity Transmission Co. (EETC), Delta Zone
- Projects** :
 - KAFR EL ZAYAT 500/220/66/11KV GLS S/S (from Aug. 2011 till Dec. 2012):
 - Testing and Commissioning Engineer for protection relays used in O.H.T.L and Power Transformers, Bus bar protection, Bay control units, Capacitor bank and Feeders of Areva as (MicomP442, MicomP632, MicomP132, MicomP741, MicomP743) and Siemens Relays as (7SA522, 7SA611, 7VK611, 7SJ6X, 7UT613, 7RW600, 7SS522, 7SS525).
 - Pre-commissioning of scheme checking as interlocking of switchgear control, distance scheme, differential scheme, stability scheme, capacitor bank stage control and other control circuit schemes with different systems.
 - BANHA POWER PLANT 220KV GIS S/S (Mar./Apr. 2014):
 - Testing and commissioning protection relays of overhead transmission lines, Breaker failure, synchro check and auto reclose, Bus bar protection (Siemens relays as 7SA612, 7SA522, VK611, 7SS522, 7SS523).
 - Delta Zone in General Management of networks (in different times):
 - Extension of Tanta 220/66KV Substation (2x175 MVA, 1x75 MVA) making Secondary designing and installing wiring control and protection schemes of power transformers 220/66/11KV.
 - Prohibition of El Mahall West 66/11KV Substation making Secondary designing and installing wiring control and protection schemes of OHTL and power transformers.
 - Testing and commissioning protection relays of power transformers (MicomP441, P442, 7SA612 as Line protection relay-7UT612, SPAD346C, RET615, MICOM P632, MicomP642, 7UT82 as Differential relays - 7SJ602, REF615, MICOM P122, P14D as Overcurrent and Eart Fault relays).
 - Making the Stability of Transformers and Commissioning of Scheme checking of Distribution outgoing feeders 11KV and testing protective relays in the distribution section of Siemens, ABB, SCHNEIDER ELECTRIC, GE and AREVA.
 - South Tanta 66/11 Indoor S/S (from Jan. till Jun. 2015):
 - Testing and commissioning protection relays used in O.H.T.L and Power Transformers, Bus bar protection Capacitor bank and

Outgoing Feeders Siemens Relays (7SA612, 7SJ803, 7SJ602, 7UT612, 7VK612, 7SS522, 7SS523) and GE Protection Relays (P444, D60, T60, F650, B90, HID High impedance REF).

- Pre-commissioning of scheme checking as interlocking of switchgear control, distance scheme, differential scheme, stability scheme of power Transformers and Busbar system.
- BANHA EAST 220/66KV GIS and Indoor S/S (Apr./May 2016):
 - Testing and commissioning protection relays used in O.H.T.L and Power Transformers, Bus bar protection, Capacitor bank and Outgoing Feeders GE Relays (D60 Distance protection, T60 Differential protection, B90 Bus bar protection, F650 as OC, DOC, EF, DEF and REF relay, MIF II, MIV II) and SIEMENS protection relay 7SA611 distance relay and 7RW600 Over fluxing relay.
 - Pre-commissioning of scheme checking as interlocking of switchgear control, distance scheme, differential scheme, stability scheme, capacitor bank stage control and other control circuit schemes with different systems.
- SOUTH HELWAN 500KV PP (Mar./Apr. 2017):
 - Testing and commissioning protection relays used in O.H.T.L and Power Transformers ALSTOM Relays (MICOM P442, MICOM P443 Distance protection, MICOM P643 Differential protection, MICOM P141 as OC, DOC, EF and DEF relay, MICOM P841 as Auto Recloser, Synchro check and Breaker Fail relay, P741, P742, P743 Bus Bar protection Relays).
- SAMANOUD 500/220KV S/S (Berlin City - Germany) (Sep. 2017):
 - Inspection and testing the elements of Gas-Insulated Switchgears Type 8DQ1-1 for rated voltage 550KV and Type 8DN9 for rated voltage 220KV of Siemens GIS in Berlin City - Germany.
- EL MOTAWREEN 66/22KV:
 - Testing and commissioning protection relays used in O.H.T.L and Power Transformers ATCTEQ Relays (AQ-L359, Line Differential and Distance protection, AQ-T352 Differential protection, F215 FEEDER MANAGER as OC, DOC, EF and DEF relay, AQ-F310 as Synchro Check Relay), Distributed Bus Bar Protection (AQ-D389 and AQ-F310 BUs).
- Others duties in Egyptian Electricity Transmission Company in Delta Zone:
 - Routine test of protection relays for Overhead transmission lines, power transformers bus bar protection with EHV, HV and Medium voltage.
 - Solving trouble shooting in the control scheme system in substation and making Upgrading to protection Schemes with digital protection relays on O.H.T.L and Power transformers and other elements of Substations as mentioned in CV Details.

Job title : Control, Protection, Testing & Commissioning Engineer

Job Description :

- Control Schemes:
 - Experienced in secondary design schematics diagram of AIS/GIS Substation for LCC, control and protection schemes for power substation applications including power transformers (500/220, 220/66KV and 66/11KV), EHV and HV Overhead Transmission lines and AC/DC distribution schematics diagrams according to power substation applications Using ELCAD and EPLAN Electric

- P8 Software.
- Establishing control systems and interconnects wiring in protection and control panels of substation elements as EHV, HV Overhead Transmission Lines, power transformers and Outgoing feeder distribution.
- Doing Services, maintenance and fault finding on existing installations in control systems and protection schemes in power substations.
- Have experience in mechanism operation of 500, 220 and 66KV AIS/GIS substations as circuit breakers, disconnectors, earthing switches.....etc.
- Experience in electrical and mechanical diagram of circuit breakers and disconnectors, Earthing Switches (ABB, MERLIN GERIN, SCHNIDER ELECTRIC, ALSTOM, SIEMENS AREVA and EGEMAC) can be used in high voltage levels in outdoor substations and GIS substations.
- Experience in electrical and control diagram of circuit breakers of 11KV type (ABB, EGEMAC, TEPECO) used in power distribution.
- Have experience in capacitor banks (TEPECO, Schneider Electric and Nokia) and control system of it.
- Deep knowledge of contactors type (AREVA, ALSTOM and Schneider Electric) can be used in medium voltage of capacitor banks.
- Protection, Testing and Commissioning Engineer:
 - Experience in testing and commissioning of protective relays (SIEMENS, ABB, AREVA, ALSTOM, GE, SCHNEIDER ELECTRIC) for power substation applications including EHV, HV Overhead transmission lines, power transformers, bus bars and feeder protection as mentioned below:
 - Ability of analyzing post-fault event using data from Fault and Event Recorders and digital relay records.
 - Have experience in static, numerical and digital distance protection relays and Line Differential protection Relays.
 - Have experience in static and digital transformer protection relays.
 - Have experience in Feeder protection relays.
 - Have experience of frequency relays as single Function for load shedding according to substation applications.
 - Have experience of over and under voltage protection relays.
 - Have experience of auto reclose relays (internal A/R as the function in different relays and external A/R) of different companies.
 - Have experience in Separate synchronizing relays.
 - Have experience in Auxiliary relays as (Trip relays, Trip Circuit Supervision, Time Delay Relays and Annunciator relays).
 - Have experience in Breaker fail relays as single function.
 - An experienced in Bus Bar protection relays with Low/High impedance Scheme.
 - Have experience in power substation with different schemes as Double Bus bar, 1 and 1/2 C.B and single Bus Bar Schemes of SIEMENS, ABB, ALSTOM, MERLIN GERIN, XD EGEMAC, SCHNEIDER ELECTRIC).
 - Deep knowledge of Substation Automation System (SAS) and WEB Technologies which used in different digital Relays.
 - Have experience in Bay Control Units (BCUs) of Siemens, ABB,

GE.

- Electrical Design Engineer:
 - Secondary Design and develop electrical schematic Diagrams and system layouts for power substations.
 - Creating and editing symbol libraries according to the company standard which required and used.
 - Using EL CAD-Planning and Documentation System-AUCOTEC for different Schemes design.
 - Using EPLAN Electric P8-efficient engineering for all design.
- Software Tools of protective relays:

Have ability to use software tools of different protective relays for application configuration Files, Validating setting Files, monitoring measurements and visualizing faults in online and off-line mode.

 - Using DIGSI 4 for all SIPROTEC protective relays including setting parameters, commissioning, controlling, testing, display editor for creating default and single line diagram, SIGRA for visualizing and evaluating fault records and CFC for creating new functionality.
 - Using MICOM S1 Studio of AREVA, MICOM STUDIO of Schneider Electric and MICOM S1 Agile of ALSTOM for all protective relays including programmable scheme logic PSL editor for programming the functionality of OPTO isolated input, output relays, LED and user alarms.
 - Using PCM 600 for IED devices of ABB.
 - Using Ener vista Launchpad of GE for protection devices.
 - An experienced in Hathaway Replay plus of IDM/T5 for evaluating faults records in Fault Recorder units.
 - Deep knowledge in DIGSI 5 for SIPROTEC 5 protection Relays of Siemens.
 - Good Experience in AQ-ARCTEQ Relays using Euro Cap Software for Configuration and Setting Tools of AQ- ARCTEQ Protection Relays.
 - An experienced in HMI500 software of ABB used for REB500 and REB500sys distributed bus bar protection.
 - Experience in how to use test Equipment as Sverker 750, FERJA 300/306, ISA DRTS 64, ISA DRTS 34, OMICRON CMC256 and CMC356 for testing and commissioning protective relays.
 - Deep knowledge in testing of HV/MV Circuit breaker and Disconnecting Switches (timing using TM1600, contact resistance using DSM 200, dielectric test).

Dates : From Jan. 2006 till May 2007
Employer : 6 October for Milling & Marketing Co.
Job title : Electrical Engineer
Job Description :

- Experience in power system and control system of AC and DC motors of variety HP with different voltage.
- Doing maintenance and finding faults on existing installations of control scheme, operating equipments and devices.
- Skill in electronics cards which are used in operating equipments as flow meters, electronics scales and cylinders for milling.
- Have acknowledge in troubleshooting of plc modules (S7-200 & S7-300) and programming it using ladder diagram.

- Skilled design local and remote control schemes for operating equipments to suitable for the sequence cycle of milling and take into considerations safety requirements in design to avoid mal-operation of operators.
- Responsible for design of AC/DC schematics diagram for industrial equipments.
- Have acknowledge of capacitor banks for improving power factor in low voltage schemes and solve trouble shouting in control system of it.
- Deep acknowledge of circuit breakers can be used in low voltage industrial installations with different operating currents with 3 or 4 pole versions, contactors with 220 VAC, 48 VDC, 24 VDC and auxiliary relays, sensors, limit switches.....etc.
- Experience in ABB circuit breakers of 22KV, power transformer (11/0.4KV) and trouble shooting of control system.

- Field of experience :**
- 15 years working as Protection, Control, Testing and Commissioning Engineer in Egyptian Electricity Transmission Co. of Power Substation for Transmission and Distribution applications with variety range of voltage levels (500/220/66/11KV) including:
 - HV/MV Equipment (Transformers - GIS Substation - Circuit Breakers - Disconnectors and Switches - Instrument Transformers - Capacitors and Reactors).
 - Protection Relays (Transformer Protection - Line protection - Bus Bar Protection - Feeder protection - Auxiliary Relays and Accessories).
 - Automation and control which support a variety of substation control, Communication, Monitoring, Protection and automation applications and functions.
 - Fault and Event Recorders.
 - Power Metering solutions.
 - Engineered Solutions including engineering and services that integrate protection, control and automation system as (Secondary Design Review - Secondary design of Local Control Cubicle, Control Panels and Protection panels - Wiring - Testing and Commissioning support for protection and control of power system applications).
 - Software Tools for creating configuration files and validation setting files of protection devices, Software Tools for Drawing and designing secondary schematics diagram of power system applications.
 - Equipment's Testing which used in protection relays and HV/MV equipment of power system.
 - Good experience in different AC/DC chargers and DC batteries used in power substations.
 - Have experience in mechanical protective relays of power transformers as buchloz, pressure relief relays, oil and winding temperature indicators.
 - Experience in low voltage components used in control system as MCB, push buttons, selector switches, discrepancy switches, aux relays, lock out relays.....etc.
 - Deep knowledge in on-load tap changer of power transformers including motor drive unit, Automatic Voltage Regulators and how to transmit signal of position indicators of MR and ABB with different types.

- Good experience in measuring devices as ammeters, voltmeters, energy meters...etc.
- Have knowledge in fire fighting protection scheme of power transformers.