100025-ELE-PT-E-1992
Senior Protection Engineer

Holds a B. Sc., M. Sc. and PHD degree in Electrical Power Engineering. Has about 17 years hands-on experience, including 9 years in protection of 2x625MW Power Station and 500/220/11KV Substation and 7 years in testing and commissioning of high voltage and extra high voltage Substations. He is highly qualified to perform and manage all duties related to power stations and substations electrical testing and commissioning.

PERSONAL DATA

Nationality	:	Egyptian
Birth Date	:	01/05/1969
Gender	:	Male
Marital Status	:	Married
Residence	:	Giza, Cairo

EDUCATION

: B. Sc. in Electrical Power Engineering, Cairo University, 1992

: M. Sc. in Electrical Power Engineering (Power System Protection: Digital Protection of Power Transformers), Cairo University. 1999

: PHD degree in Electrical Power Engineering (Power System Protection: Digital Relaying Algorithms for Solving the Problems of Current Transformers Saturation Problems), Cairo University, 2006

LANGUAGES

Arabic	:	Native Language
English	:	Excellent

COMPUTER SKILLS

: Windows, MS Office (Word, Excel, Power Point), Internet

: MS Qbasic

TRAINING COURSES AND CERTIFICATIONS

: On-shore trainings:

- On-site training by Mitsubishi Electric on Operation, Alarms Interlock and Fire Fighting system.
- Instrument Transformers & Power Measurements (P1) at Cairo South Training Institute, Oct. 1994.
- Basic Protection (P2) at Cairo South Training Institute, Nov./Dec. 1994.
- Power System Operation (P.S.O.) at Cairo South Training Institute, May/Jun. 2000.

- Feeder Protection (P4C) at Cairo South Training Institute, Jun. 2000.
- Digital Energy Meters Course at Energy Efficiency Improvement & Greenhouse Gas Reduction Project, Jan. 2000.
- On-site Theoretical and Practical training of Distance relay MICOM P442, Zero Sequence Voltage relay MICOM P921, Over Current relay MICOM P121 and Earth Fault relay MICOM P120.

: Off-shore trainings:

- The Utility Boiler Operators Training Program at Babcock & Wilcox in Cambridge, Ontario – CANADA, Oct. 1995.
- Training on Distance relay MICOM P44, Voltage relay MICOM P921 and Over current and Earth fault relays MICOM P12 at Alstom Company factory in Lattes – FRANCE, Jan. 2003.

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Apr. 2007 till now

Employer : PESCO

Job title : Testing & Commissioning Engineer

Job Description :

- The Yemen National Petroleum Company (SAFER), Saad Al-Kamel Site:
  - Design of protection upgrading of 6.3KV switchgear (Transformer and Motor protection).
  - Installation, testing and commissioning for protection upgrading.
  - Testing for all relays (generator protection, transformer protection and motor protection).
  - Performing routine test for all the existing protective relays for Transformers, Motors and Generators.
- Dubai Electrical and Water Authority (DEWA): installing, testing and commissioning of new Automatic Voltage Regulator systems for 400/132KV life power transformers in three substations (Najma, H station and Mushrif):
  - Design review of all the drawings and other technical documents related to the project.
  - Supervising the installation of control panels, cables and inter-panel wirings.
  - Testing and commissioning for AVR relays, panels, panel interfacing and control.
- Mareb Power Station in Yemen Republic: Testing and commissioning of the protection of power transformers.
  - Design review of all the drawings and relays settings.
  - Testing and commissioning for the protective relays and function check for the protection panels.
- Ministry of Electricity and Water Kuwait, Kifan 300/132/33 KV S/S:
  - Drawing review and scheme check for all the electrical drawings.
  - Function check for all protection panels, control panels and on load tap changer controller.
  - Reviewing and verifying the interlocking schemes for the switchgear.
  - Primary injection for current transformers and stability check for bus bars and transformers protection.

- End to End test to distance protection of UG cable.
- Energizing the 300KV and 33KV Bus bars.

- Ministry of Electricity and Water Kuwait, Quran 300/132/33KV S/S:
  - Drawing review and scheme check for all the electrical drawings.
  - Function check for all protection panels, control panels, and on load tap changer controller.
  - Updating the protection of the remote substations.
  - Primary injection for current transformers and stability check for bus bars and transformers protection.

Dates : From Mar. 2004 till Apr. 2007
Employer : GE MELSA (the local agent of General Electric company in KSA)
Projects : In KSA
Job title : Testing & Commissioning Engineer
Job Description :

- Al-Taif GIS substation 380/110/13.8:
  - Drawings review and schemes check for the protection and control drawings.
  - Function check for the protection panels, MEMIC panels, Local control cabinets (LCC).
  - Testing most types of protective relays.
  - Testing and calibrating all types of transducers (Current, Voltage, M.W., M.VAR. and Frequency).
  - Primary injection for current transformers and stability check for bus bars and transformers protection.
- Al-Safa GIS substation 110/13.8KV:
  - Drawing review and scheme check for all the electrical drawings.
  - Function check for the protection panels, MEMIC panels.
  - Testing the most types of protective relays.
  - Testing and calibrating the transducers (Current, Voltage, M.W., M.VAR. and Frequency).
- Khaiber outdoor substation 110/33/6.6KV:
  - Drawing review and scheme check for all the electrical drawings.
  - Function check for the protection panels, MEMIC panels, Local panels (LCC).
  - Reviewing and verifying the interlocking schemes for the switchgear.
  - Testing the most types of protective relays.
  - Testing and calibrating all types of transducers and digital meters (Current, Voltage, M.W., M.VAR. and Frequency).
  - Primary injection for current transformers and stability check for bus bars and transformers protection.
  - Preparing the start-up procedures for the substation.
- The rehabilitation of 8034 substation 110/33KV in central region in KSA:
  - Drawing review and scheme check for all the electrical drawings.
  - Function check for all protection panels, control panels, Local panels (LCC).
  - Reviewing and verifying the interlocking schemes for the switchgear.

- Testing and calibrating all types of transducers and digital meters (Current, Voltage, M.W., M.VAR. and Frequency).
- Primary injection for current transformers and stability check for bus bars and transformers protection.

- Petrochemical factory (Samsung) in Algobail industrial area in KSA:
  - Responsible on testing and commissioning 11KV switchgear, MCC and motor protection relays.

Employer : Egyptian Navy
Project : Working on a destroyer of the Egyptian Navy warships
Job title : Team Leader for testing and calibration of all types of meters
Job Description : Leading and technical support for a team consists of 8 persons (engineers) for testing and calibrating the following types of meters (according to the American Navy standards):

- Pressure and temperature switches.
- Pressure and temperature gages.
- Pyrometers.
- Tachometers.
- Current, Voltage, M.W. Meters.

Dates : From Feb. 1994 till Oct. 2003
Employer : Egyptian Electricity Authority (EEA)
Project : El-Kureimat 2x625MW Power Station and 500/220/11KV Substation
Job title : Protection Engineer
Job Description : Commissioning, testing and calibration of:

- All protection equipments for extra high voltage transmission lines 500 and 220KV.
- All protection equipments for 500/220/11KV - 500 MVA, 23/500KV – 825 MVA, 220/6.3KV - 35 MVA Power Transformers.
- Bus bar protection for 500 and 220KV Bus bars.
- All protection equipments for generator and generator transformer 2x625MW.
- All protection equipments for medium voltage 11/6.6/6.3KV switchgears.
- All protection equipments for 6.3KV high rating motors.
- All protection equipments for low voltage (0.4KV) distribution boards.
- On and off load calibrations of all types of electric meters (current, volt, power factor, M.W., M.W.H., etc.).
- Calibration of Frequency, Voltage, Current, Power Factor, MW, MVAR transducers.
- Programming and testing of Digital Fault Recorders of 500 and 220KV transmission lines.
- Programming and testing of Digital Fault Locators of 500 and 220KV transmission lines.
- Programming and testing of Digital Event Recorders.

Published Papers:

- "AN IMPROVEMENT MULTIFUNCTION POWER TRANSFORMER PROTECTION METHOD", published in the 8th International Middle East Power System Conference "MEPCON 2001", Helwan University Cairo, Dec. 29th to 31st, 2001.
- "A NEW ALGORITHM FOR COMPENSATING THE SECONDARY CURRENT DURING CURRENT TRANSFORMER SATURATION", The 10th International Middle East Power System Conference "MEPCON 2005", Suez-Canal University, Port-Said, Dec. 2005.
- "A NEW ALGORITHM FOR CURRENT TRANSFORMERS SATURATION DETECTION", The 10th International Middle East Power System Conference "MEPCON 2005", Suez-Canal University, Port Said, Dec. 2005.

Training experiences:

At ISCOSA TRAINING CENTER in Dammam – KSA:

- Visitor Instructor for the following courses (Apr./May 2003):
  - Transformer Principles & Applications.
  - Reactive Power Control.
- Visitor Instructor for the following courses (Aug. till Oct. 2002):
  - Transformer Principles & Applications.
  - Transformer Testing & Maintenance.
  - Industrial Switchgear Troubleshooting Maintenance & Testing.