103162-ELE-12DPT-E-1998

Senior Protection, Testing & Commissioning Engineer

Holds a B. Sc. in Electrical Engineering and has about 18 years hands-on experience working in protection, testing and commissioning.

PERSONAL DATA

Nationality : Egyptian
Gender : Male
Marital Status : Married

EDUCATION

B. Sc. in Electrical Engineering, Menoufia University, 1998

LANGUAGES

Arabic : Native Language

English : Good

COMPUTER SKILLS

: Windows, MS Office, Internet

TRAINING COURSES AND CERTIFICATIONS

- Off-shore trainings:
 - Gas insulated switchgear (GIS) in Germany by SIEMENS (Mar. 2006).
 - Training on SIPROTEC numerical protection relays in Germany by SIEMENS (Mar. 2006).
 - SEL411L advanced line differential protection in KSA by SEL SCHWEITZER Engineering (Apr./May 2013).
- On-shore trainings:
 - On-site training by ALSTOM on theoretical and practical course related to numerical (distance, current, voltage) relays (Dec. 2002):
 - Distance protection relay MICOM P442.
 - Zero sequence voltage relay MICOM P921.
 - Over current protection relay MICOM P121.
 - Earth fault protection relay MICOM P120.
 - Training on testing and maintenance of medium voltage Panels (Sep./Oct. 2002).
 - Instrument transformer and power measurement (P1) in Cairo South Training Center (Nov./Dec. 2003).
 - Protection fundamentals (p2) in Cairo South Training Center (May 2004).
 - Feeder protection P4c in Cairo South Training Center (Feb./Mar. 2005).

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Nov. 2016 till Mar. 2017

Employer : <u>EGYPTROL</u>, SIEMENS AG Subcontractor

Project : Al-Burullus 4800MW Combined Cycle Power Plant

Job title : Protection, Testing & Commissioning Senior Engineer

Job Description: Testing and commissioning for:

Generator Protection relays 7UM622.

Generator transformer and Unit auxiliary transformer protection relays

7UT633.

- Excitation transformer and starting transformer protection relays 7SJ611.
- Over all differential protection relay 7UT633.
- Synchronization: Automatic paralleling device 7VE63.
- Synchronization: digital synchro check relay 7VK61.
- Differential protection Stability test.
- Interlocking verification between 500KV GIS, GCB and MV SWGR.
- Stability test.
- Protection schemes checking.
- Trip test.
- High speed bus bar fast transfer testing scheme, PLC, synch relay and operation.
- Current transformer testing and CT loop checking by secondary injection.
- Voltage transformer testing and VT loop checking by secondary injection.
- Generator transformer testing (Insulation resistance, Vector group, Turns ratio, DC winding resistance, Tan delta, check mechanical protection devices, check Tap changer, check Cooling Fans and oil Pumps).
- Unit Auxiliary transformer testing (Insulation resistance, Vector group, Turns ratio, DC winding resistance, bushing CT, check mechanical protection devices, check Tap changer, check Cooling Fans).
- Dry transformers (Insulation resistance, Vector group, Turns ratio).
- Transducers and energy meters testing.
- PT100 testing.
- Checking the protection, AVR and analog signals with the DCS.
- Back energization.
- Attend first fire of the Gas Turbine.
- Synchronization with the grid.
- Checking the differential stability on load.
- Attend tripping and fault analysis.
- Battery charger, UPS and LV switch gear commissioning.
- Battery discharge test.

Dates : From Mar. 2015 till Oct. 2016

Employer : **EGYPTROL**

Projects : • New West Damietta 4x125MW Power Plant

New Assiut 8x125MW Power Plant

Job title : Protection, Testing & Commissioning Senior Engineer

Job Description

Testing and commissioning for:

- Protection relays.
- Stability test for Bus Bar protection, Transformer Differential and REF protection, Line differential protection.
- Upgrading the old static and electromechanical protection systems by numerical protection relays.
- Power transformers (Insulation resistance, Vector group, Turns ratio, DC winding resistance, Tan delta, check mechanical protection devices, check Tap changer, check Cooling Fans).
- GIS (CT, VT, CB, Scheme and Interlocking).
- MV Switchgear (CT, VT, CB, Scheme and Interlocking).
- Drawings review.
- Fault analysis.
- Battery discharge.

Dates : From Nov. 2006 till Jan. 2015 Employer : SIEMENS Ltd Saudi Arabia

Projects

- JEDDAH:
 - JNW, Al Sanabel, HHR1and New Al Kandarah 380/110/33/13.8KV substations.
 - HVE, AL Faysaliah, AL Jamaah and KMT 380/110/13.8KV substations.
 - Al Rewais, Al Rehab, Al Bawadi, HPR, AL Salamah, Al Naeeim, New Airport, ABS, WBS, KKH 110/13.8KV substations.
 - Abhor North, Thwal 33/13.8KV substations.
 - AL MADINAH:
 - AL Madinah East 380/110/13.8KV substation.
 - YANBU:
 - SWCC 380/110/13.8KV substation.
 - MAKKAH:
 - HVM and Old Al Aziziah 380/110/13.8KV substation.
 - New AL Aziziah, Mina1, Arafat, Um Al Qura and Al Jamom 110/13.8KV substations.
 - RIYADAH:
 - Power plant 2 132KV GIS.
 - AL TAIF:
 - Ushairah, Gaya, wadi leyah, TPS and AL Taif North substation 110/13.8KV.
 - JIZAN:
 - AL Kudmi 380/132/33/13.8KV substation with AREVA.
 - AL DAHRAN:
 - Al Dahran 132/33/13.8KV substation.
 - AL JUBAIL:
 - Sadaf 33, 13.8KV SWG.
 - Hadid 33, 13.8KV SWG.
 - Sabic 33, 13.8KV SWG.
 - AL QASSIM:
 - 12 substations 33/13.8KV.
 - OFF-SHORE ARABIAN GULF:
 - Work for ENPPI testing and commissioning of three 33KV PDPs.
 - DUBAI:

 Work for J.RAYMCDERMOTT testing and commissioning of three 13.8KV Platforms.

Job title

Testing & Commissioning Senior Engineer

Job Description

Testing and commissioning for:

- Siemens Protection relays (7SA522, 7SD522, 7SS522, 7UT61x, 7SJxx, 7VK61x, 7VH60x, 7VH83x ...).
- SEL Protection relay SEL411L, SEL311L (line differential and distance protection).
- Alstom Protection relays (micom P54X, P12X, P94X).
- Protection schemes of (380, 132, 110, 33 and 13.8KV) Bus bar, cables, OHL and Transformers protection.
- Upgrading the old static and electromechanical protection systems of (380, 132, 110, 33 and 13.8KV) Bus bar, cables, OHL and Transformers protection in live substations by numerical relays.
- Stability for Bus Bar protection, Transformer differential Protection, Transformer restricted earth fault protection and line differential protection.
- Drawing review and scheme check for all the electrical drawings.
- Reviewing and verifying the interlocking schemes for the switchgear.
- Fault analysis.
- Close loop test with Load Dispatch Center.
- Current and voltage transformers.
- Transformer AVR systems.
- Circuit breakers tests (timing, contact resistance, insulation resistance).
- High voltage test for 33 and 13.8KV switchgear.
- Metering and transducers.

Dates

From Aug. 1999 till Nov. 2006

Employer

Egyptian Electricity Holding Company (EEHC)

Project

El-Kureimat (2x627MW) Thermal Power Plant & 500/220/11KV Substation

Job title

Protection Engineer

Job Description

- Protection of Generator and step up Transformer 23/500KV.
- Protection of Power Transformer 500/220/11KV and start-up Transformer 220/6.3KV.
- Protection of Transmission Lines 500 and 220KV.
- Protection of Bus Bars 500 and 220KV.
- Protection of medium Voltage Switch Gear 6.3 and 11KV.
- Protection of Diesel Generator.
- Protection of low Voltage Equipments (Power Centers).
- (Voltage, Current, MW, MVAR, MWH, Power Factor, Frequency) Transducers.
- Testing of Fault Recorders and Fault Locators.
- Make Fault Analysis.

Familiar with Testers:

- Omicron: CPC100 + CPTD1, CMC356 and CT analyzer.
- ISA: STS5000, TD5000, DRTS64 and CBA3000.
- Megger: sverker 900, Oden primary injection, MOM200A, TM1700, TORKEL840 + extra load unit TORKEL870.