101467-ELE-PT-E-2005
Testing & Protection Engineer

Holds a B. Sc. in Electrical Power & Machines Engineering and has about 9 years hands-on experience, including 8 years in testing and protection.

PERSONAL DATA

Nationality	:	Egyptian
Birth Date	:	01/09/1983
Gender	:	Male
Marital Status	:	Married
Residence	:	Helwan

EDUCATION

: B. Sc. in Electrical Power & Machines Engineering, Helwan University, 2005

LANGUAGES

Arabic	:	Native Language
English	:	Good

COMPUTER SKILLS

: Windows, MS Office (Word, Power Point), Internet
: Zelio programming
: AutoCAD

TRAINING COURSES AND CERTIFICATIONS

: Bus bar protection, The Center of Training Networks, Mar./Apr. 2010.
: Training in instrument transformer (current & voltage transformer), The Center of Training Networks, Dec. 2009.
: Modern techniques for protection relays of electrical network, The Egyptian Company for Electrical Power Engineering System, Oct. 2009.
: Fundamental of protections, The Center of Training Networks, Jan. 2009.
: Summer trainings:
- Training in PLC type SIEMENS S700, The Center of Training Networks (2004).
- Training in transformer maintenance & static relay (2003).
- Training at Egyptian Company for Iron and Steel (2003).

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Sep. 2012 till Mar. 2015

Employer : Al-Jazirah Engineers & Consultants – KSA

Job Description : My work in GIS Substation 380KV (Alstom):

- Working as Protection Engineer for Digital relays (ABB, ALSTOM) in Ras Azawr – Riyadh Water Transmission System:
  - Transmission over head line 380KV:
    - Distance + DEF relay types (RED670, P546).
  - Transmission over head line auto reclose 380KV:
    - Auto reclose relay type (REC670).
  - Power transformer 380/13.8/13.8KV:
    - Differential relay (RET 670).
    - Restricted earth fault (MFAC14).
    - Directional or non directional over current (P142).
    - Over flux (RALK).
  - Shunt RACTOR 150MVAR:
    - Differential relay (MCAG14).
    - Over voltage (RAEDK3).
  - 380KV BUSBAR:
    - Differential relay (MCAG14).
  - Breaker Failure:
    - Breaker Failure fault relay (RAICA).
  - Testing for CT 3000/1 A:
    - Insulation resistance.
    - Winding resistance measurement.
    - Polarity or flick test with battery.
    - Magnetizing current.
    - Loop resistance measurement.
    - Turns ratio.
  - Testing for VT 380/0.11KV:
    - Insulation resistance.
    - Winding resistance measurement.
    - Polarity or flick test with battery.
    - Magnetizing current.
    - Loop resistance measurement.
    - Turns ratio.
  - ALSTOM 380KV C.B testing:
    - Contact resistance, Tripe and Closing time.
    - Pole discrepancy.
    - Hydraulic & sf6 gas alarms.
    - Dc contact measurement.
  - Testing power transformer 380/13.8KV, 69MW (ALSTOM):
    - Insulation resistance.
    - Winding resistance measurement (all taps).
    - Insulation power factor.
    - Magnetizing current.
    - Turns ratio (all taps).
    - Vector group.
  - Testing LCC panels for 380KV substations (ALSTOM).
  - Scheme check for control and protection.

Dates : From Feb. 2007 till Sep. 2012

Project : El-Kureimat Thermal Power Station (2x627MW) & 500/220KV Substation

Job title : Protection Engineer for Digital, Static and Electromagnetic Relays

Job Description :

- Protection testing of GIS Substation 500/220KV (MITSUBISHI):
  - Over all outage for circuit breaker 500 & 220KV.
  - Protection of Transmission Lines 500KV:
    - Distance relay (ABB relays).
    - Directional earth fault (ABB relays).
    - Under voltage (ABB relays).
  - Protection of Transmission Lines 220KV:
    - Distance relay (ABB relays).
    - Directional earth fault (ABB relays).
    - Under voltage (ABB relays).
  - Protection of tie transformer (500/220KV, 500MW):
    - Differential relay (GEC ALSTHOM relays).
    - Restricted earth fault relay (GEC ALSTHOM relays).
    - Directional over current relay (GEC ALSTHOM relays).
    - Over flux relay (GEC ALSTHOM relays).
  - Protection of Bus Bars 500 and 220KV (GEC ALSTHOM relays).
  - Protection of Bus coupler 220KV (ABB relays).
  - Schemes check for (Transmission line, transformer, bus bar, breaker failure, Locaen and close timing testing for 220 & 500KV circuit breakers.
  - Protection of medium Voltage Switchgear 11KV (ABB relays).
  - Testing of Fault Recorders (IDM) and Fault Locators (ABB relays).
  - Engineering and replacing the old fusion fault recorder by the newer Digital fault recorder (IDM).
- Testing for VT 380/0.11KV:
  - Insulation resistance.
  - Winding resistance measurement.
  - Polarity.
  - Magnetizing current.
  - Loop resistance measurement.
  - Turns ratio.
- Testing for CT 2000/1 & 1500/1 A:
  - Insulation resistance.
  - Winding resistance measurement.
  - Polarity or flick test with battery.
  - Magnetizing current.
  - Loop resistance measurement.
  - Turns ratio.
- Testing for VT 500 & 220/0.1KV:
  - Insulation resistance.
  - Winding resistance measurement.
  - Polarity or flick test with battery.
  - Magnetizing current.
  - Loop resistance measurement.
  - Turns ratio.
- Contact resistance, Tripe and Closing time testing for C.B (500 & 220KV).
- Tester used:
  - Mainta.

- Severker.
- Xs92a.
- QZW415.

- Protection testing of Generation Station (GE):
  - Protection of Generator (23KV, 627MW) and step up Transformer 23/500KV type (GE relays).
  - Protection of Auxiliary Transformer 220/6.3KV (GE relays).
  - Protection of Power Transformer 500/220/11KV and Start-up Transformer 220/6.3KV (GEC ALSTHOM).
  - Protection of medium Voltage Switchgear 6.3KV (ABB relays).
  - Protection of emergency Diesel Generator (ABB relays).
  - Protection of low Voltage Equipments Power Centers (ABB relays).
  - Calibration and programming of (Voltage, Current, MW, MVAR, MWH, Power Factor, Frequency) Transducers.
- Protection testing of 6.3KV switchgear (A.B):
  - Motor protection for medium voltage (spam).
  - Service transformer protection for medium voltage (spaj).
  - Bus bar protection for medium voltage over / under voltage and residual voltage (spau).
  - Contact resistance, Tripe and Closing time testing for C.B (6.3KV).
- Maintenance testing including:
  - Adjustment of motorizing valves (Auma, Limit Torque, Eim Control).
  - Installation and commissioning tie transformer (500/220/11KV, 500MW).
  - Commissioning and installation for new single phase step up transformer 23/525/√3 KV, 259 MVA.
  - Over all outage for generator 811 MVA, 23KV.
  - Medium and low voltage motors.
  - Batteries and battery chargers.
  - UPS system 220V, 60KVA.
  - Control panels, low voltage motor control centers (M.C.C.) and load centers.
  - Power center 6.3/0.4 KV.
  - Heat tracing system.

Dates : From 2006 till Feb. 2007

Employer : Helwan Construction Company

Job Description : Construction and installation:

- Automatic transfer switch panels between two sources main source and emergency diesel generator.
- Synchronization panel between main source and diesel generator source.
- Motor control panels and protection for sum pump and filling pump.