

101654-ELE-2CDPT-E-2012

Protection, Testing & Commissioning Engineer

Holds a B. Sc. in Electrical Power & Machines Engineering and has about 6 years hands-on experience in testing, commissioning, maintenance, protection and design review of electrical infrastructure in utility & private industry, mainly power delivery projects. Has extensive hands-on experience in testing and commissioning of power delivery projects, electrical layout and controls engineering, design review of multimillion dollars (13.8KV – 380KV) infrastructure capital projects for government and private industry.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 07/08/1990
Gender : Male
Marital Status : Single

EDUCATION

: B. Sc. in Electrical Power & Machines Engineering, Tanta University, 2012

LANGUAGES

Arabic : Native Language
English : Excellent

COMPUTER SKILLS

: Windows, MS Office, Internet
: PCM 600 (ABB Software)
: MR Suite (TAPCON Software)
: DIGSI STEP7 (Siemens Software)
: Matlab & Multisim
: MiCOM S1 Agile
: ETAP
: AcSELerator Quick Set (SEL Software)
: AutoCAD
: Enervista UR Setup (GE Software)
: Micro-station
: ZiverComPlus (ZIV Software)

TRAINING COURSES AND CERTIFICATIONS

- : Course in PLC applications basic training (LG – SIEMENS) in Jelecom Company.
- : Courses in soft skills in IEEE Committee.
- : 5-hours public training session on LEADERSHIP SKILLS.
- : Course in International Computer License (ICDL).

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Mar. 2015 till Nov. 2018
- Employer** : ALFANAR Testing & Commissioning Company
- Projects** :
 - Construction of Ashbilyah 380/132/13.8KV SS (9036), Al-Tokhi Construction, SEC-COA
 - Construction of Waad Alshamal 380/132/33KV BSP, Alfanar Construction, SEC-COA
 - Construction of Dahran South 380/115/13.8KV BSP, Siemens Construction, SEC-COA
 - Construction of Dammam North 380/115/13.8KV SS, Alfanar Construction, SEC-COA
 - Construction of Alfadhili 380/115/13.8KV BSP, ABB Construction, DOOSAN
 - Oil & Gas utility projects with Tecnicas Reunidas Company, ARAMCO
 - Construction of Alkhafji 380/115/13.8KV SS, Alfanar Construction, SEC-COA
- Job title** : Project Site Protection, Testing & Commissioning Engineer
- Job Description** :
 - Prepare comprehensive protocols for testing of protection relays and switchyard equipments.
 - Inspection of material for substation equipments (power transformer, circuit breakers, isolators, protection/control panels, protection relays, etc.
 - Testing and commissioning of protection relays.
 - Recommend corrective actions for project electrical and control discrepancies.
 - Create reports for upper management and clients pertaining to the progress, status of installation, commissioning, energization and testing work.
 - GIS:
 - 380KV GIS functions and operation commissioning check.
 - 110KV SIEMENS GIS functions and operation commissioning check.
 - 33KV Switch gear Functions and operation commissioning check.
 - 13.8KV Switch gear Functions and operation commissioning check.
 - Good known about whole Standard GIS and Switch gear testing Techniques:
 - Current Transformer Testing.
 - Voltage transformer testing.
 - Bus bar Contact resistance testing.
 - Circuit breaker testing (Timing test and Insulation Test).

- Gas Leakage Test and Gas Density Switch test.
- GIS and Switch gear current transformer stability test.
- Power transformer stability test.
- Good known about Whole Protection Schemes Testing such as:
 - GIS Bus bar Protection Panel Scheme Check.
 - Over Head Transmission lines Protection Panel Scheme Check.
 - Power Transformer protection Panel scheme Check.
 - Circuit Breaker Failure protection Panel scheme check.
 - Power Transformer On load tap changer (AVR) with Fan control Panel scheme check.
 - Trip Circuit Supervision Panel Scheme Check.
 - Circuit Breaker Closing Operation by synchronizing Panel scheme Check.
 - 13.8KV Switchgear Automatic Bus Transfer Panel (ABTS) scheme check.
 - 13.8KV Switchgear Automatic Capacitor Control Panel (ACCS) scheme.
 - Check according to MVAR, Voltage Control Techniques.
 - Bus bar Protection Relay Test (REB 500, REB650).
- Good known about some protection relays testing such as:
 - Distance with Built-In Diff. Relay (SIEMENS 7SD522, RED670 & MICOM P546).
 - Distance (SIEMENS 7SA522, REL670).
 - Transformer Protection (RET670, 7UT).
 - BCU test (REC670, 6MD).
 - Under/Over voltage relay Test (ABB, SIMENS AND MICOM).
 - Synchronizing Relay Test (ABB, SIEMENS).
 - A lot of small relays used in the SS.

Dates : From May 2013 till Feb. 2015

Employer : Bahrawy Consultancy Group

Projects :

- Installation Automatic Meter Reading System (AMR) for high voltage 63 substations (KSA)
- Replacement of 110KV LPOF (Low Pressure Oil Filled) cable circuits (KSA)
- Installation of alternated power source & Retrofitting of medium voltage switchgear (Power and Water Utility Company for Jubail & Yanbu – Marafiq & Yanbu) (KSA)
- Diversion of 44BC substation from Berri PP to Jubail-2 230/115/34.5KV substation (KSA)

Job title : Secondary Protection Design Engineer

Job Description :

- Full electrical base and detailed design for substations.
- Prepare Single Line Diagram.
- Prepare Protection Single Line Diagram & Relaying and Metering One Line Diagram.
- Prepare Interfacing between all substation panels.
- Reviewing Manufacturer Offers & Project PTS (Project Technical Specification).
- Prepare total substation Point List (Alarm, Fault Recorder, SOE and

SCADA Point List).

- Preparing CT & VT sizing & protection relays calculations & cable sizing.
- Full substation cable schedules and final termination.
- AC/DC load calculations, Battery sizing and AC/DC single line diagram.
- AC/DC single line diagram.
- Cables design of all substation panels (local, remote, protection & common).
- Interface between different suppliers with different drawings.
- Design review for supplier drawings.
- All the functions for different voltage levels 500, 220 & 66KV.

Dates : From Nov. 2012 till May 2013

Employer : Electro Hydraulic Automation Co. (EHA)

Electro Hydraulic Automation, a leading company of high quality Automation products & services. The Company is established in 1981 in Egypt, for Electronic Services (Design, Fabricate, Repair, etc.), Hydraulic Services & Automation Services & since that time EHA develops the Automations & Hydraulic with superior After Sale Service in Egypt. We automatize the electrical machines & achieve the automation projects, considered one of the general famous Automation Products Company in Egypt & Middle East.

Job title : Industrial Maintenance & Control Engineer (Trainee)

- Field of experience** :
- Professional Strength:
 - Experience in function check of all different substations GIS and Control scheme (380-132-115-13.8-33).
 - Experience in testing advanced relays (Line, Transformer, Bus Bar) with protection relays (ABB, Areva, Siemens, SEL, ...).
 - Experience in testing/understand power system all primary equipment's like CT, PT, Breakers, isolator, switch gear panels, LCC panel and all application of control and protection panels etc.
 - Commissioned new 380/132/13.8KV S/S.
 - Testing & Commissioning of protection relays installed on 380/132/13.8KV transmission lines.
 - Substation Protection Relays configuration & all types of Aux relays testing using Freja.
 - Proficiency in understanding and interpretation of applicable international Codes and Standards such as ANSI, IEEE, IEC, etc.
 - Testing & Commissioning of Control/relay panels for transformer & Transmission lines.
 - Extensive knowledge of all types of simple Protection Relays, Circuit Breakers, CT, PT, GIS (380/132KV), Functionality procedure and checks.
 - Hands-on experience in the all aspects of verification and correction all of Protection Schemes.
 - Technical Support to Design and Engineering Team about scheme modification and new scheme implementation related to Control & Relay panel business up to 380KV system.
 - Tasks:
 - Testing and commissioning of protection relays and C&R panels.
 - Testing/understand power system all primary equipment's like CT, PT, Breakers, isolator, surge arrestor, Battery, power cables, Bus

Bar, power Transformers, switch gear panels, earth resistance, NGT, LCC panel and all application of control and protection panels.

- Advanced knowledge of distance, Line differential, generator, transformer, bus bar, Motor, incoming and outgoing feeders' relays including Electromechanical, Static, Digital & Numerical relays using secondary injection test kit.
- Able to test Main advanced numerical protection relays (Differential, distance, transformer) of various manufacturer's products like ABB, Siemens, Alstom.
- Able to test backup protection (Over current, earth fault etc.. relays of various manufacturer's products like ABB, Siemens, Alstom, Schneider and GE relays.
- Make complete function scheme for 380KV GIS, 132KV GIS and 13.8KV SWGR.
- Testing of GIS contact resistance, C.B timing test, CT test, VT test CT loop secondary injection VT loop secondary injection.
- Working in Omicron CPC 100, ODEN, high pot equipment, Tan delta equipment Megger, Freja.
- Test & Commission Control Panels with all type of Auxiliary Relays and AC/DC Schemes.
- Dew point measurements of SF6.
- SF6 Gage Test.
- Test & Commission Energy Meter panels using ZERA.
- Test all types of Trip Relays.
- Test & Commission ANNUNCIATOR Module ABB type (SACO).
- Primary injection and stability test for EHV (380KV).
- Training experiences:
 - Spent one month as a Trainer in Middle Delta Electricity Production Company (Nubaria Power Plant with 2250MW).
 - Spent one month as a Trainer in Alexandria Oil Soap Company.
 - Spent one month as a Trainer in Cairo Petroleum Refining Company – Tanta Branch – GEO.