#### 101376-ELE-MPT-E-2006

# **Testing & Commissioning Engineer**

Holds a B. Sc. in Electrical Power Engineering and has over 11 years hands-on experience working in maintenance, protection, testing and commissioning.

### PERSONAL DATA

Nationality : Egyptian Birth Date : 27/12/1984

Gender : Male

Residence : Currently KSA

## **EDUCATION**

B. Sc. in Electrical Power Engineering, Alexandria University, 2006

### LANGUAGES

Arabic : Native Language

English : Good

## **COMPUTER SKILLS**

: Windows, MS Office, Internet

## TRAINING COURSES AND CERTIFICATIONS

: Protection training for transformers in ABB Company (Brazil) (Dec. 2011).

: Inspection and operation of trash rake system in ABU QIR Power Plant

(2x650MW) (Mar. 2012).

: Training in water treatment system of ABU QIR Thermal Power Plant

(2x650MW) (Dec. 2012).

## CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Oct. 2016 till now

Employer : Arab Technical Co. Ltd., KSA
 Project : SASREF Project (relay upgrading)
 Job title : Testing & Commissioning Engineer

Job Description : • CTs Testing.

CTs Loop Testing with Secondary and Primary Injection.

Remove old relay.

Install new relay (ABB REF615, REM615, REM620, RET, RED).

Modify all control circuit.

Testing new relay.

13.8KV, 6.6KV SWGR Functional Check.

Dates : From Jul. 2015 till Jul. 2016

Employer : Arab Technical Co. Ltd., KSA

Project : Petro Rapigh 13.8/4.16KV S/S

Job title : Testing & Commissioning Engineer

**Job Description** 

CTs Testing.

CTs Loop Testing with Secondary and Primary Injection.

VTs Testing and VTs Loop Testing.

Testing of ABB make Auxiliary Relays.13.8KV SWGR Scheme Wiring Check.

13.8KV SWGR Functional Check.13.8 MV Circuit Breaker Testing.

Bus bar stability for 13.8KV MV SWGR.

Bus bar and breaker HIPOT testing for 13.8KV.

ACDB & DCDB panel Scheme Testing & commissioning.

Testing & commissioning of ATS.

Protection panel Scheme Check.

13.8KV Load Shedding panel Scheme Testing & Commissioning.

Acceptance and Final Settings for the following Relays:

GE 369 motor protection relay.GE 750 over current relay.

- GE MIVII under voltage relay.

Dates : From Oct. 2014 till May 2015 Employer : Arab Technical Co. Ltd., KSA

Project : SADARA Project

Job title : Testing & Commissioning Engineer

Job Description : • CTs Testing.

CTs Loop Testing with Secondary and Primary Injection.

VTs Testing and VTs Loop Testing.

Testing of ABB make Auxiliary Relays.

13.8KV SWGR Scheme Wiring Check.

13.8KV SWGR Functional Check.

13.8 MV Circuit Breaker Testing.

Bus bar stability for 13.8KV MV SWGR.

• Bus bar and breaker HIPOT testing for 13.8KV.

Installing and Testing UPS system.

Dates : From Aug. 2013 till Jul. 2014

**Project**: Abu Qir New Thermal Power Station (2x650MW)

Job title : Electrical Maintenance Engineer

**Job Description** : Responsible for all periodic maintenance and tests for:

Generators and its control and auxiliary cabinets.

Generator and Power transformer multifunction protection relays.

AVR and Static excitation system.

Rectifiers, Inverters, CVT and Battery bank of UPS system.

Cummins Diesel Generators 1400 KVA.

• Rectifiers and H2 generators for Electro-chlorination system.

• Protection and measuring current transformer tests.

Voltage transformer tests.

Dates : From Dec. 2010 till Jul. 2013

Project : Abu Qir New Thermal Power Station (2x650MW)

Job title : Electrical Testing & Commissioning Engineer

**Job Description**: • Steam Turbine Generators "816 MVA" on load / no load tests.

- Multifunction Protection Relays for Generators and transformers.
- Transducers and energy meters for whole generator system.
- DC and UPS system for whole power station.
- Power transformers of excitation and water treatment system.
- AVR and Static excitation system.
- High tension test for generators and its Iso Phase Bus.
- Generator internal condition monitoring system (Partial discharge Vibration - Rotor short turn detector).
- Rectifiers and H2 generators for Electro-chlorination system.
- Cummins Diesel Generators "1400 KVA".

Dates : From Nov. 2009 till Dec. 2010

**Project** : Abu Qir New Thermal Power Station (2x650MW)

Job title : Electrical Site Engineer

**Job Description**: • Design and deliver construction power for all the contractors in site.

- Following submittals from contractors and give technical notes on it.
- Inspecting the installations of Cathodic protection for all underground piping.
- Inspecting all electrical materials that received at site (MRR inspections).
- Supervision for all electrical construction work done by contractors.

#### Further experiences:

- Testing and Commissioning at Marafiq 115/13.8KV S/S:
  - CTs Testing.
  - CTs Loop Testing with Secondary and Primary Injection.
  - VTs Testing and VTs Loop Testing.
  - Testing of ABB make Auxiliary Relays.
  - 13.8KV SWGR Scheme Wiring Check.
  - 13.8KV SWGR Functional Check.
  - 13.8 MV Circuit Breaker Testing.
  - Bus bar stability for 13.8KV MV SWGR.
  - Bus bar and breaker HIPOT testing for 13.8KV.
- Instructor for AL-RIADAH TRAINING CENTER:
  - Give a training course about (Advanced Electrical Safety) five days in JEDDAH to SCECO Company.
  - Trained 8 persons through that course how to work in hazards area and study OSHA standard.
  - Trained 7 persons through that course generator protection course.
  - Trained 10 persons through that course electrical interlock.
  - Trained 5 persons through that course how to read electrical drawing.

Trained 9 persons through that course power system.

#### Field of experience:

- Preparing and Scheduling on the projects before proceeds to site.
   Customer liaison and handling technical queries of customers.
- Preparation of test procedures, test formats, work schedule and testing equipments.
- Testing and commissioning of power system products.
- Reading, implementing and understanding the Engineering drawings, schemes.
- Relay Setting Calculation and Configuration of logics as per schematic diagram & Testing and Commissioning of Relays for various needs.
- Responsible for Testing and commissioning of Control and Relay panels, Switchgear Panels, Refurbishment, Trouble shooting and Investigation at site on Protection and control Scheme.
- Training to Customer at site or in-plant during Inspection.
- Responsibility on site Safety for Self and Team & Managing contractor workers.
- Relay Testing:
  - Executed preparation of new scheme with existing scheme, Erection/Installation, Testing and commissioning of numerical protective relaying schemes replacing existing ones for different protection like Generator protection, Transformer protection, Line protection, Motor protection, etc.
  - Arranging required materials and tools, Preparation of work schedule, wiring schedule, calculation of relay settings, wiring and configuration of relays as per scheme, safety and customer requirements with team.
- Experience with NUMERICAL RELAYS (GE Relays):
  - GE 369 motor protection relay.
  - GE 469 motor protection relay.
  - GE 750 over current relay.
  - GE MIVII under voltage relay.
- Familiarity with Testing Devices:
  - FREJA 300 3-Ph secondary injection test kit.
  - B10E Variable DC supply.
  - Programma EGIL circuit breaker analyzer.
  - Phenix BK130 AC dielectric test system (Hipot).
  - OMICRON CMC 256plus.
  - SVERKER 760 1-Ph secondary injection test kit.
  - OMICRON CPC100 primary test system.
  - Programma TM1800 circuit breaker analyzer.
  - ODEN Primary injection test kit.
  - Megger MIT 520/2 5KV insulation tester.
  - Programma MOM200 and Megger DLRO Contact Resistance Micro-Ohmmeter.
  - ZeroWaste-IR6L SF6 Analyzer.