### 102364-ELE-PT-E-2011

# **Testing & Commissioning Engineer**

Holds a B. Sc. in Electrical Power & Machines Engineering and has over 4 years hands-on experience, including 2 years working as Testing and Commissioning Engineer in Substations.

#### PERSONAL DATA

Nationality : Egyptian
Birth Date : 11/09/1989
Gender : Male
Marital Status : Single

Residence : 15 May City

### **EDUCATION**

: B. Sc. in Electrical Power & Machines Engineering, Cairo University, 2011

: High School: Omar Ibn Elkhatab, Cairo, 2006

# **LANGUAGES**

Arabic : Native Language English : Very Good

French : Good

### **COMPUTER SKILLS**

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

: MS Visio: Matlab: AutoCAD: Dialux

: Visual Basic
· Visual C++

## TRAINING COURSES AND CERTIFICATIONS

- : Control Professionals Company "CONTROPRO", the training involved an introduction to PLC "Allen Bradley" and HMI (Jul./Aug. 2011).
- : Network Training Center, the Training involved Distribution Transformers, Protection and Programmable Logic controller "PLC" (Jul. 2010).
- ABB Company, the training involved an overview of Machine drives with Focus on controlling induction motor and Programmable Logic controller "PLC" (Jul. 2010).

- : Gulf of Suez Petroleum Company, the training involved an overview of gas production with focus on instrumentation and Distributed control system "DCS" (Aug. 2009).
- : Arab Swiss Engineering Company "ASEC", the training involved an overview of cement production line of Helwan Cement Plant, with focus on Automation, Instrumentation, Power, PLC and Network (from Jun. till Aug. 2008).
- : Dyne Motors Company for Elevators "DMCE", I designed the control panel of Elevator using PLC, Microcontrollers, Contactors and Relays and implemented it (Aug./Sep. 2011).
- : Dyne Motors Company for Elevators "DMCE", the training involved an overview of Elevator Construction and control system (from Jun. till Sep. 2007).

### CHRONOLOGICAL EXPERIENCE RECORD

Dates : From May 2014 till May 2016

**Employer** : Alfanar Testing and Commissioning (AT&C) Company

Projects : • New Muhayil West 380KV/132KV/13.8KV in Muhayil Western Region

• As Safa 380KV/132KV/13.8KV in Riyadh Central Region

• Shaqra University 132KV/13.8KV in Shaqra Central Region

Swaidi 132KV/13.8KV in Riyadh Central Region
Olaya-2 132KV/13.8KV in Riyadh Central Region

King Fahad Medical CPS 132/13.8KV in Riyadh Central Region

Job title : Testing & Commissioning Engineer in Substations

Job Description : • Control Room Ac

Control Room Activities (ABB, Alstom, Siemens):

- MCB Test (ABB S202M-K6UC, GE E92SUCC10, SIEMENS 5SY5 206-7).

- Trip Relay Test (ABB RXMS1, ALSTOM MVAJ101), Lockout Relay Test (ABB LOR, ALSTOM MVAJ205, SIEMENS TR241), Bi-stable Relay Test (ABB RXMVB4, ALSTOM MVAJ104) and Auxiliary Relay Test (ABB RXSF1, ALSTOM MVAX12).
- Timer Test (ABB RXKL1, ALSTOM MVTT14).
- Meter Test (Schneider ION6200, CEWE Elite 440).
- 132KV Line Differential, Distance, Over Current, Earth Fault and Circuit Breaker Failure Protection Relay Test + TCS (SIEMENS 7SD522, ALSTOM P546, SEL 411L).
- 132KV/13.8KV Transformer Differential, Over Current, Earth Fault, Restricted Earth Fault, Standby Earth Fault and Circuit Breaker Failure Protection Relay Test + TCS (ABB RET670, ALSTOM P643, GE T60, ZIV 8IDV).
- 132KV Bus Section and Bus Coupler Over Current, Earth Fault and Circuit Breaker Failure Protection Relay Test +TCS (ABB REF615, ALSTOM P142).
- 132KV Bus Bar (BBA, BBB, BBCH) High Impedance Differential Protection Relay Test +TCS (ABB REB650, ALSTOM P142, SIEMENS 7SJ64).
- Energy Meter Test of 132KV and 13.8KV Revenue Metering Panel (Elster A1800).
- 13.8KV Capacitor Under Voltage, Over Voltage, Over Current, Earth Fault, Neutral Current Unbalance, Circuit Breaker Failure Protection Relay Test (ABB REC670, SEL 487V).

- 13.8KV Load Shedding Under Frequency Protection Relay Test (ABB REF615, ALSTOM P142, SIEMENS 7SJ64).
- 132KV/13.8KV AVC (Automatic Voltage Control) Relay Test (TAPCON 260).
- 13.8KV ACSE (Automatic Change Over Switching Equipment) Relay Test (ABB REC670).
- 13.8KV ACCS (Automatic Capacitor Control) Relay Test (ABB REC670).
- Function Scheme Check for 132KV Line Protection Panel, 132KV/13.8KV Transformer Protection Panel, 132KV Bus Section and Bus Coupler Protection Panel, 132KV Bus Bar (BBA, BBB, BBCH) Protection Panel, 13.8KV Capacitor Protection Panel, 13.8KV Load Shedding Under Frequency Protection Panel, 132KV/13.8KV AVC (Automatic Voltage Control) Panel, 13.8KV ACSE (Automatic Change Over Switching Equipment) Panel and 13.8KV ACCS (Automatic Capacitor Control) Panel.
- SAS Open Loop and Closed Loop Test
- Final Trip Test.
- 13.8KV Switchgear Activities (ABB, Schneider):
  - MCB Test.
  - CB Timing Test.
  - Meter Test.
  - Auxiliary Relay Test.
  - CT Test, CT Secondary Circuit Injection Test, CT Loop and Single Earth Point Test.
  - VT Test and VT Secondary Circuit Injection.
  - Overcurrent and Earth fault Relay Test (ABB REF615, ALSTOM P142, ZIV 7IRV).
  - Scheme Check (Single Bus Single Breaker Scheme) such as Feeder, Incomer, Capacitor, Bus Section and Bus Riser.
  - Operation and Interlocking Test.
  - SAS Open Loop and Closed Loop Test.
  - Final Trip Test.
- 380KV and 132KV GIS Activities (ABB, Hyundai):
  - SF6 Gas Purity and Dew Point Test.
  - SF6 Gas Density Gauge and Its Pressure Switch Test.
  - Contact Resistance Test.
  - CB Timing Test.
  - Earth Switch & Disconnector Switch Timing Test.
  - Annunciator Test.
  - MCB Test.
  - Meter Test (Schneider ION6200, Cewe Elite 440).
  - Auxiliary Relay Test.
  - CT Test, CT Secondary Circuit Injection Test, CT Loop and Single Earth Point Test.
  - VT Test and VT Secondary Circuit Injection.
  - ACDB and DCDB Scheme Check.
  - Bay Control Unit and Synchro check Relay Test.
  - LCC Function Scheme Check of 132KV GIS (Double Bus Single Breaker Scheme) such as Line, Transformer, Shunt Reactor, Bus Section and Bus Coupler.
  - LCC Function Scheme Check of 380KV GIS (One and Half Breaker Scheme) such as Line, Transformer, Shunt Reactor and Bus

Section.

- Operation and Interlocking Test.
- SAS Open Loop and Closed Loop Test.
- Aware of Equipment such as:
  - Freja 300.
  - Megger Sverker 760.
  - Omicron CMC 256.
  - Omicron CPC 100.
  - Omicron CT Analayzer.
  - Zera MT3000.
  - Megger Egil Circuit Breaker Analyzer.
  - Megger B10E.
  - Fluke Multimeter and Clamp Meter.

- Megger Timer TM200.

Dates : From Mar. 2013 till Apr. 2014

**Employer** : Dyne Motors Company for Elevators

Job Description : I worked in the field of Designing, Installing and Troubleshooting Control

panels (PLC, Microcontroller, Contactors, Relays) and ist interface to the mechanical components of the elevator system, 3-phase induction Motor

(two speed direct online, one speed using VVVF inverter), and UPS.

Dates : From Jan. 2012 till Mar. 2013

**Employer** : Egyptian Army

**Project**: Military Service in Olympic Village

Job Description : I worked in the field of Installations including Ring Main units, Transformers,

Diesel Generators, ATS and utilization of street, hotel and Stadium using

AutoCAD.

#### Control Skills:

- Automatic Control (Contactors, Relays, Overloads, Circuit breakers).
- Programmable Logic Control "PLC" (SIEMENS, Allen Bradley, ABB, LG).
- Supervising Control and Data Acquisition "SCADA" (WINCC, IFIX).
- Microcontroller (PIC).

#### **Distribution Skills:**

Substation (380KV/132KV/13.8KV GIS, Protection Relays, Feeding systems (Ring Main Unit "RMU", Transformers, Low Voltage Distribution Panels), Cables, Cable Trays, ATS (Diesel generators and UPS), Power factor correction "P.F", lighting, Light Current (Fire Alarm systems, CCTV systems, Telephones and Data network, Sound Systems).