## 103292-ELE-12CMOQSy-E-2014

## **Electrical Operations & Maintenance Engineer**

Holds a B. Sc. in Electrical Power & Machines Engineering and has over 6 years' experience working in operation, maintenance and QC.

### PERSONAL DATA

Nationality : Egyptian Birth Date : 01/09/1992

Gender : Male

Marital Status : Married

Residence : Mahmoudia

#### **EDUCATION**

B. Sc. in Electrical Power & Machines Engineering, Alexandria University,

2014

### **LANGUAGES**

Arabic : Native Language

English : Very Good

## **COMPUTER SKILLS**

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

AutoCAD Electrical

Siemens Simatic step7 + Plc sim

: Proteus & Multisim

: DiaLUX

: MATLAB (Programming, SIMULINK)

POWEREX. (Short Circuit Calculations)

Micro C for PIC

# TRAINING COURSES AND CERTIFICATIONS

- : General training in Alexandria University engineering workshops (winding motors, electrical installations, welding cables and wires, electronic boards design) (2011).
- : Training in El-Atf Power Station 750MW in Middle Delta (2012).
- Microchip Microcontrollers Basic Applications in Jelecom Training Company (2012)
- : Attending Workshop to learn how to design a robot in Jelecom Company (2012).

- Electrical power distribution levels 1 & 2 (2013).
- : Attending Workshop about Home automation in Alexandria Faculty of Engineering (2013).
- : Training in El-Behira Company for electrical distribution (2013).
- : Plc application training in Jelecom Training Company (2013).
- : Classic Control course in Alexandria Faculty of Engineering (2014).
- : Substation & protection course in Smart Power Company (2014).
- : Plc advanced applications training in Alexandria Faculty of Engineering (2014).
- Practical Training in El-Atf Power Station 750MW in Middle Delta (2015, for 3 months.

#### CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Jan. 2019 till now

**Employer** : Ras Ghareb Wind Energy (RGWE)

Project: Ras Ghareb Wind Farm 262.5MW – 125 SG97 WTGs

Job title : Electrical Operations & Maintenance Engineer

Job Description: • Installation, Testing, Commissioning, Start-up, Operation and Maintenance of Ras Ghareb 262.5MW Wind Farm.

- Inspecting and witnessing the installation, testing and commissioning of 125 G97 Siemens Gamesa Wind Turbines with a total capacity of 262.5MW.
- Inspecting and witnessing the installation, testing and commissioning of 220KV AIS, 33KV switchgear, protection & control panels, AC/DC panels, black-start generator, and cables.
- Witnessing the testing and configuring of all substation protection and control relays and directing supervisory control and data acquisition (SCADA) and substation automation system (SAS) to ensure compliance with specifications and best performance.
- Continually observes the functioning of station equipment in substations, principally as revealed by various meters and gauges. Observes switchboard instruments for unusual operating conditions and performs the function necessary to restore the equipment to normal or remove it from service as required.
- Switches and maintains substation equipment for proper operation.
- Prepare the equipment for operation and starts, stops and controls the units, adjusting the load and voltage and accessory regulating equipment as required.
- Perform switching operations in accordance with standard operating procedures.
- Maintain daily operating log on all operations, both routine and emergency, and reports on line outages and weather conditions.
- Record readings of indicating and integrating meters, and changes, marks and checks charts of recording instruments.
- Act independently during an emergency by performing duties in rapid succession involving switching, adjusting load and/or voltage, or extinguishing fires.
- Issue protective tags through established safe clearance procedures for all equipment in the plant and substation.

- Note changes in load and makes routine adjustments to meet such changes without immediate supervision.
- Report unusual situations to supervision.
- Make minor adjustments and repairs.
- Maintain proper lubrication and cooling of the transformers, pumps, motor- generator sets and other rotating machinery.
- Analyze problems to determine the type of repair necessary and informs proper personnel.

Dates : From Aug. 2017 till Jan. 2019

Employer : Egyptian Electricity Transmission Company (EETC)
Project : Wadi El-Natroun 500/220/66/22KV GIS Substation

Job title : Electrical Operations Engineer

Job Description

- Continually observe the functioning of station equipment in substations, principally as revealed by various meters and gauges. Observe switchboard instruments for unusual operating conditions and perform the function necessary to restore the equipment to normal or remove it from service as required.
- Switch and maintain substation equipment for proper operation.
- Prepare the equipment for operation and start, stop and control the units, adjusting the load and voltage and accessory regulating equipment as required.
- Perform switching operations in accordance with standard operating procedures.
- Maintain daily operating log on all operations, both routine and emergency, and report on line outages and weather conditions.
- Record hourly readings of indicating and integrating meters, and change, mark and check charts of recording instruments.
- Act independently during an emergency by performing duties in rapid succession involving switching, adjusting load and/or voltage, or extinguishing fires.
- Issue protective tags through established safe clearance procedures for all equipment in the plant and substation.
- Note changes in load and makes routine adjustments to meet such changes without immediate supervision.
- Report unusual situations to supervision.
- Make minor adjustments and repairs.
- Maintain proper lubrication and cooling of the transformers, pumps, motor generator sets and other rotating machinery.
- Analyze problems to determine type of repair necessary and informs proper personnel.
- Perform sub-dispatching as required.
- Assist in training apprentices.
- May perform duties of Utility man as required.
- Perform other duties as assigned.

Dates : From Jul. 2016 till Aug. 2017

**Employer** : El Sewedy Electric PSP

**Project**: Beni Suef 4800MW Combined Cycle Power Plant

Job title : Electrical QC Engineer

#### **Job Description**

- Studying the project document and drawing & documents of quality control like Inspection test plan (ITP), Work instruction, Quality control procedure).
- Attending FAT (factory acceptance test) for (MV SWGR LV SWGR low & medium & high voltage cable & dry type transformer).
- Inspection for all material before installation and sign off MIR & MRV.
- Inspection of laying cable and termination for (low, medium cables).
- Supervision of testing of cable (continuity, insulation resistance, and Hipot test).
- Installation and Pre-commissioning inspection for all electrical equipment (Power and Distribution transformers, Medium & Low voltage panel boards, Generator circuit breaker, isolated phase bus).
- Supervision and inspection of low voltage system & light current systems.
- Inspection of primary and secondary grounding system.
- Preparation of final QC dossier for handing over to the client.
- Test and Commission Switch Gear Equipment such as Current Transformers (CT) and Voltage Transformers (VTs).
- Testing of Circuit Breakers, Isolators and Earth Switches (Timing test).
- Insulation Test, Ratio Test, Polarity Test, Saturation Test using CT Analyzer – Omicron, Insulation Resistance Tester – Megger.

#### **Acquired Skills:**

- Protection of Substation Main Equipment:
  - Testing and Maintenance of Surge Arrestor.
  - Testing and Maintenance of CT, PT, Isolator.
  - Testing and Maintenance of CB, Capacitor.
- Protective Relays:
  - Over current Relay.
  - Distance Relay.
- Electrical Installation for Building:
  - Lighting and Power Design.
  - Wiring and Electrical Panels.
  - Light Current.