# 103382-ELE-1MPT-E-2009

### Senior Electrical CSU Engineer

Holds a B. Sc. in Electrical Power Engineering and has over 13 years' experience working in testing, commissioning, protection and maintenance at Substation and Power Plant Industry in Egypt, Libya and Saudi Arabia.

#### PERSONAL DATA

Nationality : Egyptian Birth Date : 10/07/1987

Gender : Male
Marital Status : Married

Residence : Currently KSA

### **EDUCATION**

B. Sc. in Electrical Power Engineering, Alexandria University, 2009

: Master grade: Adaptive Protection (in progress)

#### **LANGUAGES**

Arabic : Native Language

English : Very Good

### **COMPUTER SKILLS**

: Windows, MS Office, Internet

: AutoCAD : MS Visio

## TRAINING COURSES AND CERTIFICATIONS

: GIS switchgear 500KV in GERMANY by SIEMENS.

: Substation Control System in GERMANY by SIEMENS.

: SFC and SEE systems in GERMANY by SIEMENS.

: Generator protection System in GERMANY by SIEMENS.

: Transformers training in GERMANY by SIEMENS.

: GT and ST generators in GERMANY by SIEMENS.

: EXCITATION maintenance (EX2100R) in FRANCE by GE.

: MARK VIE maintenance in FRANCE by GE.

GAS TURBINE maintenance frame 9E in FRANCE by GE.

Gas Insulated Switchgear (GIS) system in AL-SHABAB 220KV GIS

substation by SIEMENS.

- : Substation Control System (SCS) system in AL-SHABAB 220KV GIS substation by SIEMENS.
- : Protection system in AL-SHABAB 220KV GIS substation by SIEMENS.
- : Instrument transformers (P1) (Network Training Center).
- : Training in ALMANAYF 220KV transformers station at the sector of protection in Electrical Canal Zone.
- : Training course at Al-Nasr Company for Electrical Transformers (ELMACO).
- : Training course in JELECOM A.D PANASONIC Company in PLC Advanced Course
- : Training course in JELECOM A.D PANASONIC Company in PLC (level 2) & SCADA System Advanced Course.
- Fire and civic defense.

### CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Sep. 2022 till now

Employer : Jizan Integrated Gasification and Power Company (JIGPC)Project : JAZAN IGCC Power Plant Siemens SGT-5000F 3750MW, KSA

Job title : Senior Electrical CSU Engineer

**Job Description** 

- Provide technical support and input (Electrical Disciplines) to the Engineering / Technical Manager on the strategy related to Electrical, sustainability and energy efficiency.
- Hands-on commissioning and start-up of electrical components and systems such as transformers, high/low voltage and DC systems, protection systems, frequency converters and excitation equipment.
- Carrying out initial or repeat tests on electrical protection and control systems, as well as system optimization and troubleshooting.
- Commissioning of electrical control systems with associated HMI.
- Responsible for Commissioning, Start-up of Gas/steam turbines and generators auxiliary systems.
- Support the commissioning team during test and reliability run. Support PTW activities for isolation and normalization of plant equipment.
- Track and review progress through meetings.
- Prepare and maintain commissioning records of site observations, testing processes and checklists.
- Ensure compliance with regulations pertaining to Safety, Environmental and Health regulations within the scope of own responsibility.
- Provide day-to-day technical support to operations and maintenance to troubleshoot electrical equipment related issues.
- Lead electrical equipment failures and trips investigation and produce the associated reports.
- Develop and maintain the reliability reports for electrical equipment.
- Review the equipment historical data and conducting reliability studies.
- Develop and review electrical equipment design packages Conduct the review, provide advice and recommendations for amendments to the design at various stages of the project.
- Overall, in-charge of maintenance & troubleshooting activities for electrical equipment.
- Support in the review and approval of Maintenance Procedures, Instructions and Task Lists for electrical equipment and recommend

improvements to comply with international standards and industry's best practices.

From Jul. 2020 till Jan. 2022 **Dates** 

**Employer** EWI Global Talent Solution - SIEMENS AG

**Project** JAZAN IGCC Power Plant Siemens SGT-500F 3750MW, KSA

Job title Electrical Commissioning TFA/TCS

Responsible for electrical commissioning of DC/LV/MV Systems on **Job Description** 

construction site and handover of commissioned systems.

Perform electrical commissioning at large-scale power plant construction site on components like:

MV switchgears including protection circuits and interlocks.

- AC/DC switchgears including protection circuits and interlocks.
- LV transformers including protection circuits and interlocks.
- AC/DC and DC/DC converter, AC/DC Inverter, Batteries and Drives and feeders.
- Gas and steam turbine auxiliary systems such as AC and DC motors. Motor control center and support all disciplines during commissioning activities.
- Integrate and monitor the companies subcontracted to perform commissioning of electrical systems, and clarification of interfaces between the various subcontractors.
- Reporting disagreements or non-conformances to allow introduction of project-specific solutions and to ensure information feedback.
- Monitor contractors for compliance with contractual obligations, construction site regulations and the permit-to-work procedures.
- Ensure compliance with regulations pertaining to Safety, Environmental and Health regulations within the scope of own responsibility.
- Doing trouble shooting engineering problems including interfaces to other scopes and corrective action if required.
- Demonstrate essential functionalities and protection devices to the relevant authorities, depending on contractual requirements and rules and regulations.

From Dec. 2017 till Jul. 2020 **Dates** Shanahan Engineering Limited **Employer** 

PP13 Riyadh Power Plant GE 7F-5 (1800MW), KSA **Project** 

Job title Senior Electrical Commissioning Engineer

**Job Description** Responsible for Commissioning activities on all HV/LV Electrical

Equipment such as:

Power transformer protective relays (T60 GE, T35 GE).

Over current and undervoltage protective relays (P143 Micom).

Power transformers up to 580 MVA (ABB).

Generator Circuit Breaker (GCB) Type ALSTOM.

Motor control center (MCC) type (GE - HYUNDAI).

CT and VT primary and secondary injection test.

High Voltage test for MV and LV SWGRs.

13.8KV, 6.9KV MV and 480V LV switchgear (HYUNDAI).

High Speed Bus Transfer system (HSBT) function check

(BECHWITH M4272).

- ATS (Auto Transfer System function check (P143 Micom) for LV SWGR.
- O/C and synchrocheck relay type (SEL 451).
- Interlocking and Trip/Intertrip test for Electrical systems.
- Interface signals between different equipment's.
- Chargers, batteries and UPS (EMERSON).
- Plant electrical equipment (BOP), switchboards and diesel generators.
- Water Treatment plant (LV SWGR and Motors).
- DCS signals check with all electrical systems.
- Provide Stability test calculation and procedure before Energization.
- Provide all commissioning Method Statements and Energization procedures for all systems.
- Conduct commissioning and Maintenance activities.
- Provide all commissioning Method Statements and Energization procedures for all systems.
- Support walkdown and turnover process.
- Review pre-commissioning plans and procedures.
- Taking over Systems and Sub-systems from Construction Contractors for commissioning and startup purposes
- Receive Project documentation and understands Scope of Work related to his discipline.
- Interface with other disciplines to ensure integration of activities.
- Responsible for reviewing Engineering drawings for operability and value engineering, with feedback provided through the technical query.
- Compile all documentation generated during the commissioning, startup and testing phase into the system TOP.
- Ensure all pre-commissioning and commissioning documentation are maintained and procedures complied with during execution.
- Submit the completed TOP to the consultant for review and acceptance.
- Compliance in accordance with HSE Standard.

Dates : From Nov. 2016 till Dec. 2017

**Employer** : EEHC

Project: New Capital Combined Cycle Power Plant (4800MW) SIEMENS 8000H

4800MW, Egypt

Job title : Senior Electrical Protection & Maintenance Engineer

Job Description : Responsible for Maintenance activities on all HV/LV Electrical Equipment such as:

- Generator and Unit Auxiliary Transformers (SIEMENS).
- Gas turbine Electrical Generators and Protection system (SIEMENS).
- Water treatment plant (RO).
- ABB Generator Circuit Breakers.
- SIEMENS MV and LV Switchgear.
- Batteries and Battery chargers and Uninterruptible Power Supply.
- MV and LV motors.
- LV Switchgear (Load Center, MCC).
- GIS (Gas Insulated System) 500KV SIEMENS.
- All protection systems in the power plant.

Preventive and periodical maintenance of electrical equipment.

**Dates** : From Nov. 2015 till Nov. 2016

Employer : EDEPC

Project : Al-Shabab Combined Cycle Power Plant GE (500MW) ANSALDO

Job title : Senior Electrical Maintenance Engineer

Job Description : Responsible for Maintenance activities on all HV/LV Electrical Equipment

such as:

 Over current protective relays (MIFII GE, SEPAM S-series Schneider, 7SJ63 Siemens).

Power transformers up to 420 MVA (ALSTOM, Hyundai, ABB).

Motor control center (MCC) type (Schneider).

• 6.6KV MV and 0.4KV LV switchgear (Schneider).

On load tap changers motor drivers for transformers.

Switch gear (220KV and 11KV).

• Interface signals between different equipment's.

• Chargers, batteries and UPS systems.

 Plant electrical equipment (BOP), load center, switchboards and diesel generators.

Water treatment plant (motors and LV MCCs).

DCS signals.

Dates : From Aug. 2015 till Oct. 2015

**Employer**: SMART POWER in EGYPT (Hiring to Fast Track GE Projects)

Project : SHARM EL-SHEIKH Simple Cycle Power Plant 6 x LM6000 (360MW) GE

Job title : Lead Electrical Commissioning Engineer

Job Description : Responsible for commissioning activities on all HV/LV Electrical Equipment

such as:

Testing all interconnection signals between systems.

Function test of switchyards, GCBs and transformers.

• Check all drawings of MCC, switchgear, TCP, GSU, switchyard and

protection panels.

Revision all punch lists for systems.

Chargers, batteries and UPS.

Dates : From Mar. 2015 till Jul. 2015

**Employer**: SAHARA GROUP in EGYPT (Hiring to Fast Track GE Projects)

Projects : • North Giza Combined Cycle Power Plant (2250MW) MITSUBISHI

New Assiut Simple Cycle Power Plant (1000MW) GE frame 9EA

New West Damietta Simple Cycle Power Plant (500MW) GE frame 9EA

Job title : Electrical Commissioning Engineer

**Job Description**: Responsible for commissioning activities on all HV/LV Electrical Equipment such as:

• Generator protection Relay (G60).

Breaker failure relay (C60).

Transformer protection relay (T60- T35-MIFII).

GLAC and GNAC for C.Ts and V.Ts connections.

Interface signals between different equipments.

Dates : From Dec. 2014 till Feb. 2015

Employer : ONTRAK Company in EGYPT (Hiring to Fast Track GE Projects)
 Project : PORT SAID Simple Cycle Power Plant 2 x LM6000 (120MW) GE

Job title : Electrical Commissioning Engineer

Job Description : Responsible for commissioning activities on all HV/LV Electrical Equipment

such as:

• Testing generator protection relays (G60 - BECKWITH).

• Testing switchgear protection relays (D60 - MICOM P921 - MICOM

P111).

• Check all drawings of MCC, switchgear, TCP, GSU, switchyard and

protection panels.

Interface signals between different equipments.

Dates : From Oct. 2012 till Nov. 2014

**Employer** : EDEPC

Project : Al-Shabab Simple Cycle Power Plant (1000MW) GE frame 9EA

Job title : Electrical Maintenance Engineer

Job Description : Responsible for Maintenance activities on all HV/LV Electrical Equipment

such as:

Power transformers up to 165 MVA (Hyundai, ABB).

Motor control center (MCC) type (Schneider, INABENSA, MSAT).

• 6.6KV MV and 0.4KV LV switchgear (Schneider).

On load tap changers motor drivers for transformers.

• Switch gear (220KV, 66KV and 11KV).

Interface signals between different equipments.

Chargers, batteries and UPS.

Water treatment plant.

Plant electrical equipment (BOP), load center, switchboards and diesel

generators. DCS signals.

Dates : From Oct. 2009 till Sep. 2012

**Employer**: BAB AL-MADINA GENERAL CONSTRUCTION

**Project** : Rehabilitation of control and protections systems using SCADA, LIBYA

Job title : Electrical Protection Engineer

Job Description : Responsible for protection activities on all HV/LV Electrical Equipment such

as:

Power transformers protective relays and making stability test.

Protective relays (7SA522 - 7SJ632 - 7UT612 SIEMENS).

 Circuit breakers (AREVA, SIEMENS, ABB and SCHNEIDER) up to 220KV.

Control and protection signals with the control center.

 Control and protection systems for new substations 220KV (SIEMENS), 66KV (VATECH conventional, AREVA GIS, ABB, COGELEX), 30KV (GEC, SIEMENS, AREVA).

Replace all existing protective relays by digital ones of SIEMENS.

Programming all relays with software.

Transformers AVRs (VC100BU and MK30).

Tap changers motor drivers for transformers.

#### Familiar with different types of protection relays such as:

- SIEMENS protective relays such as (7SJ631, 7SJ632), distance relays (7SA522, 7SA612), differential relays (7UT612), control relay (6MD664), Synch & Auto reclose relay (7VK611), Breaker failure relay (7VK610).
- GE protective relays such as (T35, T60 for differential relays), (MIFII for over current & earth relays), (G60- BECKWITH for generator protection), (C60 for breaker failure relay).
- Sensitive earth fault protection such as (KCGU110).
- ALSTOM relays such as (PD571, EPAC3000, MICOM P120, P111, P921).
- ABB protective relays such as (rex 521, REF615, REG 630, REG 670).
- Secondary testers (omicron CMC156, CMC256, CMC256 plus, CMC356) and (FREJA 300).
- CPC100 Primary injection.
- OMICRON CT analyzer.
- WRT winding Resistance Tester.
- Using PCM600 software for testing all ABB protection devices.
- Using OMICRON software for testing all protection devices.
- ISSCOM M4272 software for Bechwith and HSBT relays.
- Using DIGSI V4.87 software for all SIEMENS protection devices.
- Using Enervista software for all GE protection devices.
- Using SFT2841 software for all SCHNEIDER protection devices.
- Using AcSELerator QuickSet software for SEL protection relays.
- Using Schneider Easergy Studio software for all Micom protection devices.
- Design logic circuits with CFC chart in SIEMENS relays.