## 104829-ELE-DE-E-2012

# Senior Substation Tendering & Technical Support Engineer

Holds a B. Sc. in Electrical Power & Machines Engineering and has over 8 years hands-on experience working in design, tendering and technical support.

#### PERSONAL DATA

Nationality : Egyptian Birth Date : 01/09/1990

Gender : Male

Residence : Mokattam, Cairo

#### **EDUCATION**

B. Sc. in Electrical Power & Machines Engineering, Ain Shams University,

2012

M. Sc. in Electrical Power & Machines Engineering, Ain Shams University,

2020

#### **LANGUAGES**

Arabic : Native Language

English : Very Good

German : Fair French : Fair

### **COMPUTER SKILLS**

: Windows, MS Office, Internet

AutoCAD

: Bentley mirco station

DialuxETAP

: Micro C for pic & Proteus electronic design

: Matlab & C/C++ programming

Revit

: CDEGS Earthing software

## TRAINING COURSES AND CERTIFICATIONS

: Matlab (Jelecom).

: Electrical distribution (AutoCAD – ETAP – Dialux) (Jelecom).

: Microcontroller (Jelecom).

: Programmable Logic Control (PLC).

: English: Toefl IBT test.

: German: Goethe certificate.

#### CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Jan. 2018 till now

**Employer**: ENERGIA-PTS

Projects : • Damietta Furniture City 220KV GIS substation

New Housh Eissa 220KV GIS substation

Gerza 220KV GIS substation

New Abu Rawash 66KV GIS substation

• EL TEBEEN 66KV GIS substation

Job title : Senior Substation Tendering & Technical Support Engineer

**Job Description**: Main Duties to design but not limited to the following:

 Defining scope of work and supply for the project based on the specification document.

Preparing RFQs and subject to different suppliers.

 Study proposed offers from vendors & giving comments on them if necessary for correct qualification.

Preparing tender documents & subject to EETC.

 Preparing AC/DC auxiliary system then study proposed offers from panel builders.

 Coordinate with suppliers for getting the best offer technically and commercially.

 Preparing initial design drawings like SLD & layout + calculations like NER & Zigzag Transformer.

Preparing all Preliminary BOQs.

 Giving support to project engineers based on past experience in Substations.

• Follow approvals on Guarantee schedules & documents with EETC.

 Giving technical support to vendors in order to get final approvals from EETC.

 Preparing contract documents including guarantee schedules and technical specification.

Dates : From Aug. 2017 till Dec. 2017

**Employer**: Madkour EPC

Job title : Electrical Design Engineer

**Job Description**: Main Duties to design but not limited to the following:

Station Service Transformer Sizing.

 Study proposed offers of LV panels from different vendor & giving comments on them.

AC Single line.

DC Single line diagram.

LVAC CB Sizing.

LVAC Cable Sizing.

Battery & Battery Charger Sizing.

DC CB Sizing.

- DC Cable Sizing.
- Circuit breaker setting (MCCB, AIR, etc.).
- Short Circuit Calculation.
- Indoor/Outdoor Lighting & Auxiliary Power.
- LV Cable Raceway along with loading and filling calculation.
- Preparing B.O.Q for the materials.
- Panel board schedule (Lighting, Auxiliary power).
- DC & AC cable termination.
- Interfacing between auxiliary panels & control & protection panels.

Dates : From Jun. 2015 till Jul. 2017

Employer : DAR Engineering (Alfanar Co.)

Projects : • Al Wajh 380/132/33/13.8KV BSP

Modon Jeddah Expansion 380/110KV S/S

• Airport II 110/13.8KV S/S

Yanbu Phase 3 Seawater Desalination PlantGovernment Compound Makkah 110/13.8KV S/S

MURJAN 110/13.8KV S/S

Job title : Electrical Design Engineer

**Job Description**: Main Duties to design but not limited to the following:

Station Service Transformer Sizing.

• Study proposed offers from different vendor & giving comments on them.

AC Single line diagram.

DC Single line diagram.

LVAC CB Sizing.

LVAC Cable Sizing.

Battery & Battery Charger Sizing.

DC CB Sizing.

DC Cable Sizing.

• Circuit breaker setting (MCCB, AIR, etc.).

Short Circuit Calculation.

Shielding System.

Grounding & earthing System (Reinforcement & Equipment earthing).

Indoor/Outdoor Lighting & Auxiliary Power.

Opening and Cable Duct Bank.

MV & HV Cable Routing.

LV Cable Raceway along with loading and filling calculation.

Preparing B.O.Q for the materials.

Panel board schedule (Lighting, Auxiliary power).

DC & AC cable termination.

Interfacing between auxiliary panels & control & protection panels.

Dates : From Jun. 2014 till May 2015 Employer : Electric Power System (EPS)

Projects : • New Gamasa GIS Substation 220/66/11KV

BADR GIS Substation 500/220KV

Job title : Medium - High Voltage Tender & Design Engineer

**Job Description**: • Designing proposal single line diagram for substations (GIS / AIS) using appropriate software.

- Preparing tendered documents for the substations including various chapter and sections.
- Revising contractor documents based on the specification documents.
- Adding comments and giving approval with seniors to the contractor proposed documents after revising them.

Dates : From May 2013 till May 2014

Employer : Egyptian Aviation Services (EAS)Project : Sharm El-Sheikh Airport (Egypt)

Job title : Electrical Engineer

Job Description

- Troubleshooting for any malfunction in the electrical systems for the ground service equipment.
- Using wiring diagrams and advanced diagnostic tools in the troubleshooting process.
- Monitor preventive maintenance plans and evaluate its performance.
- Record any work has been done because of any malfunction in every equipment logbook.
- Lead group of technicians and organize the work for them.

#### Skills:

- PLC SIEMENS S7 300.
- Microcontrollers (PIC & AVR).
- Excellent knowledge about the design of electrical substations (GIS & AIS).
- Excellent knowledge about electrical protection and it' different schemes.
- Electronic circuits design and power electronics.
- Ability to study any building/substation layouts in order to start electrical work in them.
- Good knowledge about hydraulic and pneumatic systems.

#### Papers & Publications:

- "The Effect of the Fault Impedance on the Performance of the Directional Over Current and Directional Earth Fault Relays in Compensated and Uncompensated Transmission Line Networks - A case study", "GCC Cigre Qatar 2016".
- "Enhancement of the steady state and transient performance for closed loop speed control of DC Motor using fuzzy logic algorithm", International Journal of Engineering Research & Technology (IJERT) ISSN: 2278-0181 IJERTV8IS100117 Published by: www.ijert.org Vol. 8 Issue 10, October-2019.