

103243-ELE-15DMOPSy-E-2012

Senior Electrical Engineer

Holds a B. Sc. in Electrical Engineering and has about 8 years hands-on experience working in maintenance, operation and commissioning.

PERSONAL DATA

Nationality : Egyptian
Gender : Male
Residence : Nasr City, Cairo

EDUCATION

: B. Sc. in Electrical Engineering, Mansoura University, 2012

LANGUAGES

Arabic : Native Language
English : Fluent

COMPUTER SKILLS

: Windows, MS Office, Internet
: DIALUX (4.12), ETAP 2018, AutoCAD 2D, Navisworks, DIGSI 4.91, Smart Plant Electrical, Proteus, ATP draw & MATLAB

TRAINING COURSES AND CERTIFICATIONS

: 6 months of practical training, certified by SIEMENS, contains the following:

- Four months training program by Siemens Germany in Talkha Power Station as a part of Mega-Project Egypt Training which included:
 - Foundation Training.
 - Fundamental Technical Training.
 - Basic Operation Training for Combined Cycle Power Plant.
- Two months training by Siemens Germany in Germany as a part of Mega-Project Egypt Training which included:
 - Simulator Training (SPPA-T3000) for open and combined cycle in Siemens Operation and Maintenance Training Centre, Erlangen.
 - Gas Turbine (SGT5-8000H) Training in Siemens Training Centre and Factory, Berlin.
 - Steam Turbine (SST5-5000) and Generator (SGen5-2000H) Training in Siemens Training Centre and Factory, Essen.

: SWG and power transformers maintenance, Delta Fertilizers (Jul. 2010).
: PLC (Programmable logic controller), Mansoura University (20 hrs) (Sep. 2010).

- : Electrical maintenance for combined cycle power plant, Talkha Power Plant (Aug. 2011).
- : Electrical Installation in Industrial, commercial and Resident Buildings using AutoCAD, Mansoura University (12 hrs) (Feb. 2012).
- : Distributed Control System (DCS), ABB Cairo (15 hrs) (May 2015).
- : Protection Relays, ABB Cairo (15 hrs) (May 2015).
- : Hazardous Areas, PEP Arab (16 hrs) (May 2015).
- : Power System Protection Engineer certified by ABB Egypt.
- : Oriented as a Senior Electrical Engineer by ENPPI.

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From May 2019 till now
- Employer** : ENPPI - Engineering Co. for the Petroleum & Process Industries
- Job title** : Senior Electrical Engineer
- Job Description** :
- Responsible for planning, organizing and leading the assigned activities, including deliverables preparation and review.
 - Review and study technical drawings, specifications of electrical systems, and electrical layouts to ensure that installation and operations conform to standards and customers' requirements.
 - Operate computer-assisted engineering and design software and equipment to perform engineering tasks.
 - Confer with other engineers and customer to discuss existing or potential engineering projects and products.
 - Review specifications for purchase of materials and equipment.
 - Review detailed calculations to compute and establish manufacturing, construction, and installation standards and specifications.
 - Plan layouts of electric power generating plants and distribution lines and stations.
 - Utilize established methods of electrical engineering technology and of new developments to maintain the highest degree of technical competence.
 - Prepare job specifications & data sheets in accordance with standards requirements.
 - Perform electrical engineering activities conforming to the requirements of the customer, the company, and of applicable codes, standards and regulations.
 - Prepare material requisitions for the assigned equipment and material, ensuring they are checked, complete and accurate.
 - Prepare technical bid evaluations for the assigned equipment and material and obtain the assigned department manager's approval of recommendations before submitting to delegated project engineer.
 - Provide all possible assistance to the field construction engineers in interpreting the construction design drawings, participate in solving complicated field problems.
- Dates** : From May 2016 till May 2019
- Employer** : Siemens Energy

- Project** : Burullus Power Plant:
- 4x1200MW combined cycle multi shaft system (Siemens MEGA Project), Gas Turbine (SGT5-8000H), Steam Turbine (SST5-5000) and Generator (SGen5-2000H).
 - SPPA T3000 control system (Siemens).
 - 500KV GIS (Siemens) 24 bays 8DQ1 type.
- Job title** : Operation Engineer
- Job Description** :
- Perform all duties related to the monitoring, maintenance and operation of plant auxiliary equipment, including periodic walk downs of the boiler and turbine buildings as well as outside locations such as the condenser and storage tanks.
 - Knowledge and understanding of all plant safety regulations. Report any unusual or unsafe condition to the Shift Charge Engineer. Maintain a fire watch. Knowledge of the locations and be able to use, firefighting equipment.
 - Position and configure plant equipment such as: opening and closing of valves, starting/stopping of pumps and compressors, visual inspections of the combustion process, operation of the crane system, orderly storage of materials, checking and maintaining fluid levels and gases for proper operation.
 - Maintain data logs.
 - Operate all machinery in accordance with safe engineering practices to ensure safety of personnel and equipment.
 - Perform tag out and lockout procedures on electrical and mechanical equipment.
 - Cooperation with maintenance department to identify and troubleshoot plant equipment and perform mechanical, electrical and instrument maintenance as required.
 - Attain proficiency in performing the duties of the Control Room Operator.
 - Assist the Shift Charge Engineer in the operation of the plant, from the Control Room as well as the plant floor.
 - Monitor and coordinate plant visitors not normally assigned to the site.
 - Assist with and co-ordinate on the job training of plant personnel.
 - Frequent contact with Operations Manager, Operation Engineer and Shift Charge Engineer on Shift to receive instructions and exchange technical information.
 - Frequent contact with all members of shift to exchange technical and procedural information.
- Dates** : From Apr. 2015 till May 2016
- Employer** : Delta Fertilizer Co.
- Project** : Main substation of Delta:
- 2 x 35MVA power transformers 66/11KV (Brown Boveri (BBC) made).
 - 11KV & 2.2KV SWGs (Foster Weller made) with electromechanical protection relays types (BBC, CGE) installed on air C.Bs type (SACE Bergamo).
 - Additional ABB protection system (Relion series relays) using with 11KV SWG controlled by ABB Freelance controller (900F).
 - 0.4KV SWG (Culter Hammer "Eaton" made) with electromechanical protection relays.

- Job title** : Electrical Operation & Maintenance Engineer
- Job Description** :
- Testing and commissioning for SWG components (Protection relays, C.Bs, Measurement instruments,).
 - Breakdown & preventive maintenance of the site's electrical loads and devices (Motors, cables, switches, lighting loads,).
 - Carrying out the trouble shooting of the substation, SWG and the site for all electrical devices and loads.
 - All periodic operation and control actions of the substation.
 - Selectivity of the required electrical components (cables, switches, contactors, fuses,).
 - Man power management for day to day work.
 - Spares and store management for the substation trouble shooting and annual maintenance.
 - Responsible for modifying the work carried out in the substation.
 - Technical Core Competencies:
Well knowledge and excellent capacity with the installation, testing & commissioning of the following electrical systems:
 - ABB Relion series protection relays (REF601, REM615 & REF630).
 - Siemens feeder protection Relay (7SJ8011).
 - ABB Motor AC drive (ACS800).
 - ABB Freelance controller (900F) using Modbus communication protocol.
 - Classic protection control of feeders, outgoing, motors & power transformers at various voltages (11, 2.2 & 0,4KV).
 - Electromechanical relays (Over & under voltage, over current, Instantaneous over current, short circuit current, thermal over load,....) and measurements instruments.
 - AC induction motors (11, 2.2 & 0,4KV) with full protection and control system.
 - Electrical beam winches 30 Ton & 10 Ton (Defries Titano).
 - Air compressor Atlas Copco (GA500).
- Dates** : From Apr. 2013 till Apr. 2015
- Employer** : Egyptian Armed Forces
- Project** : Military Service
- Job title** : Electrical Maintenance Engineer for (PV, UPS) systems & electronic circuits
- Job Description** :
- Full implementation of the system installation for PV & UPS systems.
 - Performing the periodic test for power electronic circuits & Photo Voltaic (PV) system devices and fixing technical problems if any.
 - Testing and performing the required maintenance of electronic and control circuits of diesel generators.
 - Following up The process of assembling solar cells to build solar power arrays.
 - Preparing maintenance reports for devices malfunction and required correction action.
 - Preparing the required spare parts request and store inventory control.
 - Raising manpower and tools requirements report on daily basis.
 - Technical Core Competencies:
Well knowledge and excellent capacity with the installation, testing & commissioning of the following electronic systems:
 - Solar inverters with varies capacities up to 100 KW (Conext,

- Xantrex, Heart Interface, Power Star,).
- Battery charging regulators up to 100 A (STECA, Xantrex,).
 - Control circuits of diesel generators (AVR, Speed Governor, KN2,) for various types (Cummins, Allis, On nan, Caterpillar, DEUTZ, Volga,).
 - Measuring and testing most of power electronic components.
 - Complete mastery of releasing and installing the electronic components in cards, test their tracks and fix or reconnect the disconnected one.
 - ICs validity determination device (Boardmaster).