

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

PERSONAL DATA

Nationality : Egyptian
Birth Date : 24/06/1992
Gender : Male
Marital Status : Married
Residence : Helwan, Cairo

EDUCATION

: B. Sc. in Electrical Power & Machines Engineering, Helwan University, 2014

LANGUAGES

Arabic : Native Language
English : Very Good

COMPUTER SKILLS

: Windows, MS Office, Internet
: C++
: Matlab and LabVIEW
: ETAP, AutoCAD, Revit

TRAINING COURSES AND CERTIFICATIONS

- : PMP® Exam Prep Ext. Program, Evorestte Consulting and Training (from Feb. till Apr. 2017):
- Introduction.
 - Project Management Concepts.
 - PM Process Groups and Knowledge Areas.
 - Project Integration Management.
 - Project Scope Management.
 - Project Time Management.
 - Project Cost Management.
 - Project Quality Management.
 - Project Human Resource Management.
 - Project Communications Management.
 - Project Risk Management.
 - Project Procurement Management.

- Project Stakeholder Management.
- : Laboratories Quality, NIS (Feb. 2016):
 - Uncertainty Estimation.
 - In House Calibration.
 - ISO 17025 Requirements.
 - Quality Control.
 - Internal Audit.
- : Electrical power system distribution level 1 (AutoCAD, Lighting, Sockets, Air Condition (HVAC), Lifts & Pumps, Circuit Breakers, Cable Sizing and Selection, Cable Trays, Bus Bar, Trunking, Transformer sizing and Selection, Generator Sizing, UPS, Feeding System according to Egyptian Code, Short Circuit Calculation, Voltage Drop, PF Correction), Training Center, Cairo, Egypt.
- : Electrical power system distribution level 2 (Fire Alarm Systems, MATV Systems, Data Network, Camera Systems, Telephone Systems, Access Control, Sound Systems, Nurse Call Systems), Training Center, Cairo, Egypt.
- : Auto Desk Revit MEP; Training Center, Cairo, Egypt:
 - Electrical Design in Revit: Electrical settings (Voltage definition & Distribution system), Adding circuit components, Adding panels, Creating circuits, Wiring, Adding sockets, Panel schedule.
 - Shop Drawing: Adding Junction box, Connecting conduits, Creating groups, Finishing the projects, Annotating Dimensions & Tagging, Creating sheets, Schedule and Quantities.
 - Lighting Calculation.
 - Converting 2D to 3D.
 - Fire Alarm.
- : Power System Protection Level 1, Training Center, Cairo, Egypt:
 - Low voltage system protection: Types of faults, L.V Circuit breaker selection, Fuse selection criteria, Low voltage relays, Protection configuration and schemes.
 - High & Medium Voltage system protection (Main Elements of a protection system):
 - Circuit breakers (main types & operations).
 - Instrument transformers (C.T & V.T).
 - Types of relays.
 - Requirements of protection in an electrical system:
 - Reliability.
 - Dependability.
 - Security.
 - Selectivity.
 - Stability.
 - Economic.
 - Main and backup protections.
 - Power system elements protection:
 - Transmission line protection.
 - Motor & generator protection.
 - Transformer protection.
 - Bus-Bar protection.
- : Operation and maintenance of transformers, electrical protection; Egyptian Company for electricity transmission, Helwan, Egypt (Jun. 2012).

- : Siemens, Cairo, Egypt (Jun. 2012):
 - Classic Control (Contactor, Overload, Timer, Relay and Switches).
 - PLC level 1 (Programming by Ladder Diagram).
- : Cairo South Power Station, Helwan, Egypt (Jun. 2012): Operation and maintenance of steam power plant - gas power plant - combined cycle power plant, acquaintance with boilers - turbines - generators - circuit breakers - transformers - instruments, acquaintance with the station administration system.
- : OMICRON Academy (Nov. 2015 (Cairo - Egypt), Feb. 2016 (Berlin - Germany), Aug. 2016 (Cairo - Egypt)):

Partial Discharge Testing on Power Transformers, Generators and Motors with the MPD 500/600:

 - Measure partial discharge on high voltage devices with the MPD 500/600.
 - Perform measurements to determine the insulation condition and identify fault types and fault location.
 - Evaluate aging and deterioration processes in primary assets by partial discharge measurements.
 - Monitor the quality of the production process by performing measurements on assembled parts.
 - Apply partial discharge technology to design or redesign devices exposed to high voltage.
 - Understanding the physics behind partial discharges.
 - Getting to know the MPD system and understand how partial discharges are measured.
 - Connecting the MPD to high voltage devices, such as power transformers, 9 generators, motors.
 - Performing partial discharge tests according to IEC 60270 and the IEC standard of the test object.
 - Performing real partial discharge hands on sessions.
 - Interpreting partial discharge test results.
 - Getting to know PRPD, 3PARD and 3CFRD/3FREQ diagrams to discriminate noise.
 - Classifying partial discharge types and determine the risk for the test objects.
 - Synchronous and multichannel partial discharge testing for optimized test results.
 - Performing measurements in frequency and time domains.
 - Handling interferences (unit gating, amplitude gating, dynamic gating).
 - Getting to know the software of the MPD 500/600 for efficient measurement.
- : Electrical Workshops - Faculty of Engineering - Helwan University (Jun. 2011):
 - Lighting workshop.
 - Cables workshop.
 - Machines workshop.
 - Electronics workshop.
 - Motor Winding workshop.

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Jun. 2017 till Jun. 2018
Employer : Alfancar Testing and Commissioning, KSA
Job title : Testing & Commissioning Engineer
Job Description :

- Testing & Commissioning of Power Transformers up to 750 MVA, 380KV as per the IEC, ANSI and the Owner Standard as following:
 - Winding Resistance Measurement, Turns Ratio & Vector group, Capacitance & Tan delta, Insulation Resistance, Short Circuit Impedance, Zero Sequence Impedance, Excitation Current, Magnetic Balance, Temperature Indicators Calibration, Secondary Current Injection Test for winding temperature indicators, Testing of OLTC, Neutral Ground Resistors, Dielectric Frequency Response, Sweep Frequency Response Analyzer, Fans Function Test, Supervision Equipment Function Test, Oil break down and DGA Devices.
 - Testing of Shunt Reactors, Oil Distribution Transformers, Grounding Transformers and Dry Type Transformers.
 - High Voltage Testing of Gas Insulated Switch Gear (GIS).
 - High Voltage Testing of MV Cables (up to 33KV).
 - Testing of Current Transformers, Voltage Transformers.
 - Testing of Surge Arrestors, RMU's, Grounding Impedance Measurement.
- Have a experience in Aramco projects - Oil & Gas (Jazan Economic City - Yanbu) - JGC, HITACHI, PETROFAC, Saipem - Air Products & Chemicals, also in SEC projects for testing & commissioning of substation 380KV & 110KV & 132KV.

Dates : From Feb. 2015 till May 2017
Employer : El-Sewedy Transformers, subsidiary of El-Sewedy Electric, Egypt
Job titles :

- Senior Testing & Commissioning Engineer (from Jan. 2017 till May 2017)
- Junior Testing & Commissioning Engineer (from Feb. 2015 till Jan. 2017)

Job Description :

- Responsible for performing all tests "Routine, Type and Special" on transformers types "Power Type up to 125 MVA, 220KV, Dry Type up to 10 MVA, 33KV and Oil Dist Type up to 10 MVA, 33KV" as per the IEC (60076) and the customer specification if exist.
- Analyzing the test results to investigate whether it comply with the followed standards or not and Failure analysis if exist.
- In Charge of a Complete test activity on all transformers, like 40 MVA 66/11.86KV, 125 MVA 220/72.5/24KV...etc.
- Routine Tests: Turns Ratio Measurement, DC Resistance Measurement, Capacitance & Tan delta Measurements, Insulation Resistance measurement, No load & Load Loss measurements, Separate Source Voltage Withstand Test, Lighting Impulse voltage withstand test, Induced Over Voltage test and Partial Discharge Measurement Test.
- Type Tests: Temperature Rise Test, Lighting Impulse with chopped wave Voltage Withstand Test and Switching Impulse Voltage Withstand Test according to the latest Edition of IEC (60076) Part 2 & 3.
- Special Tests: Zero Sequence Impedance Test, Harmonics Measurements, Sweep Frequency Response Analyzer (SFRA) Test,

- sound level measurement. Also involved in the Lab. Calibration activity.
- Handling the Time Schedule of the Tested Transformer with the Customer and preparing the Testing agenda of it.
 - Analyzing the test results to investigate whether it complies with the followed standards and the contract request or not and failure analysis if exist.
 - Prepare and/or monitor complex construction and commissioning schedules to ensure timely completion of the work.
 - Responsible for Performing Commissioning Tests on all transformers types at Customers site and all substations rates 220KV, 66KV before Energizing i.e. DC Resistance, Turns Ratio, Tan Delta, Insulation Resistance, Voltage Impedance, Magnetic balance, Oil Break down voltage, (D.G.A) Dissolves gases analysis and SFRA, DFRA.
 - Performance of troubleshooting activities at location to diagnose problems, determine appropriate resolution and implement corrective actions.
 - Performance of a wide range of engineering tasks to ensure the technical integrity for proper Testing and commissioning.
 - I was involved in the testing Process of several prototype transformers for ex. a Power Transformers rated (125 MVA, 220/72.5/24KV), (30 MVA 132/12KV), a Dry Type Transformer rated 3150 KVA, 22/0.4KV (before and after S.C test which was held successfully at KEMA Laboratory), 66 MVA 161/34.5KV, 33 MVA 161/34.5/11.5KV (before and after S.C test which was held successfully at CESI Laboratory).
 - Familiar with the IEC60076 Testing Standards.
 - Involved in obtaining ISO 17025 Accreditation Certificate for the Transformers Testing Labs.
 - Also performing a complete test activity on several transformers from different manufacturer like BHARAT (India), TBEA (China), El Maco (Egypt).