Waseem

Waseem.293493@2freemail.com

Electrical Engineer

Aiming to develop my career in a challenging, highly managed environment, where I could focus more on the performance and the quality of my work.

**Key skills:**

* QA/QC/Testing/Commissioning, Design, Erection, Maintenance and Troubleshooting of E & I systems.
* Very well conversant with MS Excel™, MS Word™, MS Project™, LabVEIW™, MATLAB™, AutoCAD™, Autodesk Revit™, Computer powered analyzers and test equipment,
* Excellent ability of learning, adaptation and implementation with acute details,
* Excellent ability of supervision and training of technical subordinates,
* Excellent communication skills, technical report writing, event logging, scheduling, estimation, costing, procurement and project management.

**Professional Experience (18 year experience including 8 years in QA/QC/Testing of electrical equipment.)**

**Feb 2014 - Present:**

**Electrical Engineer (MEP)**

**Dar ul Zubarah Electrical and Sanitary Contractor. Sharjah UAE.**

Job Role:

While working as an Electrical Engineer for the company (SEWA licenced) with skilled workers and Forman, I gain the working knowledge of BIM for building electrical systems design including lighting, fire detection and alarms, BMS systems, data/voice structured cabling, access control and CCTV. I use Autodesk Revit™ on daily basis for 3D/2D drawing production, presentation and analysis of MEP design. I have following responsibilities:

* Communicate with Engineering Consultants for the pre-bid engineering works including material take-off, specification, Engineering Man hours, Method statements etc.
* Prepare procurement documents for the material/equipment/sub-contract prices. Present Bid review package, which includes bid basis, execution plan, strategy analysis, summary cost estimates and financial reports, ensuring Senior Management is provided with all necessary information to enable competitive pricing decisions.
* Preparation of erection schedule as per scope of work.
* Follow up with vendors and consultants regarding Engineering activities and coordination with the vendors for timely manufacturing and the delivery of equipment/Materials to the site. Inspection of Invoices after delivery of material to site.
* Every day Site Execution, work progress monitoring, preparation of site progress report to meet customer satisfaction along with proper safety at site.
* Review and comment enquiry document, scope of work, project specifications and other contract documents. Preparation/compilation of material take-off based on drawings, data-sheets, basic design, standards etc.
* Review and comment proposal drawings (equipment layout, cable routing plan, cable & conduit schedule and interconnection diagrams etc.)
* Review and comment calculations, drawings, communicate with the design engineer and discus the sequence of the work and prepare the work schedule.
* Prepare technical drawings, specifications of electrical systems, to ensure that installation and operations conform to standards and customer requirements.
* Arrangement for mobilization at site.
* Prepare specifications for purchase of materials and equipment.
* Investigate client complaints, determine nature and level of problem, and recommend and implement solutions.
* Coordinate manufacturing, construction, installation, maintenance support, documentation, and testing activities to ensure compliance with specifications, and client requirements.
* To prepare documentation for utilities connection and conduct the inspection done by SEWA inspectors.
* Maintain good relationships with the client, consultant and develop a professional team to establish the company as the contractor of choice.
* Managing the project operations with a view to ensure timely accomplishment of project targets within the time and cost parameters.

**Apr 2006 – Feb 2014**

**Assistant Director (Technical)**

**High Voltage & Short Circuit Testing Laboratory, WAPDA, Islamabad (Pakistan)**

Job Role:

High voltage and Short Circuit Testing Laboratory (19th in the world, 4th in Asia), is sole organization in Pakistan as well as Muslim world, certified with ISO9001:2008, laced with most sophisticated and state of the art equipment. This laboratory certifies the Electrical Power Equipment manufactured from all over the world, on the basis of variety of Quality Assurance / Quality Control Testing, according to **ANSI, IEC, IEEE, WAPDA** Specs, or any other discipline agreed upon.

Major Responsibilities:

My responsibility is to receive test request, review design and discus with the design engineer about specimen design and test request with accordance to standard adapted, asses lab capabilities, issue schedule for test, design and implement the circuit for the particular test specimen, conduct the test, analyze the results and issue the report. I have performed following tests:

* Routine Test, Temperature Rise Test and Short Circuit Test on 10/13MVA, 20/26MVA and 31/40MVA **Power Transformers**.
* Routine Testing, Temperature Rise Test and Short Circuit Test on 5kVA to 630kVA **Distribution Transformers**.
* Accuracy Test, Short Circuit Test, Lightening Impulse Test, Power Frequency Test, Induced Over Voltage Test, Partial Discharge Test on **CTs and PTs**.
* Short Circuit Test, Temperature Rise, Lightening Impulse Test and Power Frequency Test (wet & dry) on 11kV **Dropout Cutout**.
* Accuracy Measurement, Lightening Impulse, Power Frequency, Insulation resistance Test on Static and Electro-mechanical **Energy meters**.
* Lightening Impulse Test on **incoming, outgoing industrial Bus Coupler Panels** for medium voltage.
* Lightening Impulse, Power Frequency (Wet and Dry) and Radio Influence Voltage Test on 132 kV, 220 kV and 500 kV **Isolators**.
* Proof Current and Proof Voltage Test on **Disconnecting Stick**.
* Bending, Partial Discharge, Lightening Impulse, Power Frequency, Capacitance and Tan Delta Test, Heating Cycle and Short Circuit Test on HV **Cables**.
* Partial Discharge, Lightening Impulse, Power Frequency, DC, Salt Fog, Tracking Resistance, Humidity Test on HV **Cable Termination Kit**.
* Viscosity, Pour Point, Flash Point, Break Down Capacitance and Tan Delta Test on **Transformer Oil**.

Tests performed routinely include:

* Transformer Turn Ratio Test.
* Transformer Winding Resistance Measurement.
* No-Load Losses and Load Losses.
* Lightening Impulse Test.
* Power Frequency Test.
* Induced Over Voltage Test
* Capacitance Measurement.
* Partial Discharge Test.
* Calculation of Transformer Losses.
* Harmonics Test.
* Zero Sequence Test.

Testing and Commissioning Experience

* Testing and commissioning of 250 MVA Transformer at 500kV Grid Station at Rawat.
* Testing and commissioning of 160 MVA Transformer at 220kV Grid Station at Bahria Town Rawalpindi.
* Testing and commissioning of CTs and PTs at 220kV Grid Station at Bahria Town Rawalpindi.

Additional Duties

* Preparation of procedure sheets regarding the ISO Certification
* Preparation of work instructions/job descriptions (equipment and staff)
* Review drawings, prepare estimation and bill of quantities (BOQ) for tender civil works in the lab.
* Preparation of procurement documents for the new test instruments.
* Inspection and handover (reception) of the new instruments (as lab representative).
* Preparation of training material, and carry out training to the technical subordinates regarding the new instruments.
* To configure and maintain the instruments, data loggers and analyzers used in the testing procedures.
* To rectify faults occurring in the laboratory’s power system, i.e. in-coming VCB panel, BUS-COUPLER panel, main short circuit generator (16kV, 23.5kA, 50Hz, 3-cycles, L-N), its drive motor (11kV, 2.5MW), its control/instrument panel, protection relays, jacking oil pumping system, Backup Breakers panel and high speed high current making switch, 200kVA motor generator sets for routine testing, 1800kV Impulse generator, high frequency generator (200Hz) for induced over voltage test and any malfunction in automatic test sequencing system and data acquisition and analysis system.

I have hands on experience of using some precision instruments ie:

* Wide Band Power Analyzer D6100™, (NORMA) for harmonics, zero sequence, load-losses and no-load-losses.
* Multi-amp® Transformer ohm-meter (Megger®, USA)
* Micro-ohmmeter MOM600A™, (GE energy, Germany.)
* Three Phase Transformer Turn Ratio Test set (Megger®, USA)
* AVO® B131 Dual Display LCR Meter (AVO International, England)
* HIOKI 3265 Clamp on AC/DC Hi Tester (HIOKI, JAPAN)
* Escort ELC-120 LCR Meter
* Series 3000 Temperature logger (Thermo Electron Co. USA) for temperature rise testing.
* Multi-amp OCR-8015-E, Circuit Breaker Automatic recloser Unit (Dallas, Taxas)
* Circuit Breaker Analyzer System TM1800™, (GE Energy, Germany.)
* Single/Three Phase Energy Meter Test set (Zera) for electro-mechanical and electro-static energy meter accuracy measurement.
* Single/Three Phase Energy Meter Test Bench (Shenzenclou, China)
* Designed and Built data acquisition system to analyze and display the results automatically, (equipped with national instruments NI-DAQmx and LabVEIW™ software.)

**May 2002 - May 2006:**

**Electrical Engineer (Inspection)**

**Saadi Cement Pvt. Ltd.**

**Hattar Industrial Estate, Hattar, Haripur**.

Job Role:

During this job I was in Electrical section of MIS department. My responsibilities included:

* Daily inspection of the plant.
* Check daily maintenance log book.
* Prepare the report of daily fault occurrences in electrical equipment and instrumentation of the cement plant, status of the work, find reasons, propose remedy and follow up.
* Ensure and enforce the safety guidelines during shutdown and emergency maintenance conducted by E&I department.
* To design and implement the weekly, monthly and yearly preventive maintenance plan for electrical equipment.
* To oversee maintenance work during shutdown and ensure that the work is completed in time and satisfactorily.
* Maintain the preventive maintenance records according to the ISO 9001:2000.
* Compile the report regarding activities for weekly, monthly and annual meeting.

**Mar 1997 - May 2002:**

**Electrical Engineering (Plat-III)**

**Dewan Salman Firbre Ltd.**

**Hattar Industrial Estate, Hattar, Haripur**.

Dewan Salman Fibre Ltd., is the Asia’s one of the largest industries that produces acrylic fiber. It’s a chemical process industry and owns its own 23.7 MW power generation plant, a waste water treatment facility and unloading and tanker storage facility for highly hazardous and extremely flammable liquids like DMF and ACN. It consists of total 4 plants running 24/7, and controlled by DCS.

Job Role:

* Supervise the general shift for daily, weekly, yearly and shutdown maintenance of the chemical process as per plan.
* Inspection of VCB, transformers, 11kV feeder, motors, VFDs, PLCs, Relay logic controls, cable trays, control and power cables, junction boxes, instrumentation and their cabling and look for any abnormality.
* Checking of daily current logs of the motors, and find any abnormality.
* Prepare the daily report for the preventive maintenance.
* Issue work orders and supervise the maintenance tasks.

Responsibilities:

* Inspection of the plant for any abnormality, rectification of fault without disturbing the normal operation of the plant, investigation of the cause, determination of the severity of the abnormality and level of influence on the operation of the plant.
* To write the detailed report for the Manager’s office of engineering department.
* Discuss the procedure for work with shift engineer and conduct the job accordingly.
* To communicate with production department, discus the urgency of the job and arrange the work permit.
* To ensure the safety during the work and close the work permit at the end of the job.

Additional assignments (during the extension of the plant):

* Supervised the erection and commissioning of 11000/415V transformers, switch gear and control gear panels.
* Supervised the erection and commissioning of UPS.
* Supervised the laying and termination of 11kV cable from power station.
* Supervised the erection of motor control panels, VFD Panels, PLC panels.
* Supervised the fabrication of motor control circuit as per drawing.
* Supervised the installation of cable trays and laying of power and control cables.
* Supervised the cable termination, cable tagging and verification of the cabling as per drawing.
* Supervised pre-commissioning of VFD Panels and PLC Panels.
* Supervised the installation and termination of PITs, FITs, TITs, LITs.
* Supervised erection and commissioning of fully automatic packing and baling system.
* Worked with various types of sensors and instruments used in automation like hall-effect sensor, rotary/linear position encoders, inductive/photo-electric/capacitive proximity sensors, solenoid valves, pneumatic control systems.
* Designed and fabricated the electrical control system for additional automatic waste material bucket dispenser during extension of the Plant.
* Also worked with foreign engineers during DCS extension and testing/commissioning.

**Education**

April 2010:

Preston University, Kohat, Pakistan

Bachelor of Technology (HONS) Electrical.

January 1998:

NWFP Board of Technical Education, Peshawar, Pakistan

Diploma of Associate Engineer Electrical (3-Year)

**On job training/workshops**

November 11-13 2009:

National Physical and Standards Laboratory (NPSL)

 in collaboration with

Pakistan National Accreditation Council (PNAC)

 Training Course in

Lab. Quality Management based on ISO 17025:2005

**Other Skills:**

* Driving licence for light vehicle manual.
* AutoCAD® MEP, Autodesk Revit, AutoCAD Electrical, BIM, BMS
* MS Office™, MS Project™, Primavera™ , LabVIEW™, MATLAB™
* VFD, PLC, Analyzers (programing/configuration), Relay logic.
* Computer (hardware and networking/communication)
* Electronics/Electrical (circuit design/repair)
* Micro-Controller projects (programming and hardware design)

**Languages:**

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| --- | --- | --- |
| Language | Written | Verbal |
| English | Excellent | Fluent |
| Arabic | Working knowledge | Working knowledge |

**Reference from UAE:**

Will be provided on demand.