



# EDWARD OSORE MAKONGE

## POWER CONTROLS & AUTOMATION SYSTEM

### CONTACT

PHONE:

+254712141833, +25377558707

EMAIL: [osoreedward@yahoo.com](mailto:osoreedward@yahoo.com)

ADDRESS: Po Box 225-00521

Nairobi, Kenya

WEBSITE:

<https://www.linkedin.com/in/edward-o-7681b030>

### PROFILE

Experience as a Power Generation Supervisor, Generator Foreman & Prime Power Technician with 10 years deployed to The Middle East/or Africa. Possess ability to effectively lead teams of personnel to provide Operational, Organizational and Direct Support level repair and maintenance of Electrical and diesel equipment in the world's harshest, hazardous environments. Experience on production generator sets up to 2.4MW. I have skills with operating and performing preventive maintenance & repairs on generators and power distribution switchgears. I possess knowledge of electrical testing & diagnostic equipment, inspection, maintenance & repair applicable to electrical power systems with voltage rating to 11KV, 3phase. Able to work long hours, exposed to weather and hazardous conditions. I am willing to bring to your Company fresh ideas, new perspectives, a diversity of experience, dedication to accurately diagnose electrical equipment's failures while striving to utilize my knowledge and expertise for optimal engineering results.

### EDUCATION

#### ZETECH UNIVERSITY-NAIROBI

2008 - 2010

Technical Diploma in Electrical & Electronics Engineering

#### DIRECTORATE OF INDUSTRIAL TRAINING COLLEGE-NAIROBI

2006

Journeyman Grade 1 Electrician

#### TECHNICAL UNIVERSITY-NAIROBI

2002 - 2004

Certificate in Electrical Engineering

## WORK EXPERIENCE

### **KBR Boss-Djibouti CLDJ/CADJ Prime Power Generator Foreman**

Oct 2019-To Date

- Operate and maintain 40MW Diesel Plant equipment's, Generators, Scada and Electrical systems, comprises of 11KV Switchgear, Pad Mount Switches, RMUs, Transformers, Primary Switching Center, and Secondary Distribution Centers. Cummins, Caterpillar, FG-Wilson, John Deere, Olympian, MQ Power and US Tactical Military generators (Cummins QSK60-G4, QST30-G4, KTA50-G3, QSK23-G3, QSK15-G8, NT855-G6, QSB3.3/4.5, Caterpillar C175-16,3516B, C32,C18,C15,C13,C9,C7.1,C3.3,3456 FG-Wilson, John Deere, Lister-Pitter, Yanmar, Kubota and Magnum light sets)
- Performed Electrical, Mechanical & Instrumentation job functions necessary to install & prepare power plant equipment's for initial startup.
- Operate and parallel engine driven generating units
- Control and manage daily inputs of data in Maximo asset management software
- Performs testing, troubleshooting and diagnosing of diesel engines
- Performs routine inspections, plans for preventive maintenance, condition monitoring, troubleshoots, corrective and emergency repairs on a total of 145 diesel units.
- Audit equipment's reports daily and inspect equipment's on regular basis to ensure compliance.
- Perform accurate complex mechanical and electrical troubleshooting and repairs on diesel engines
- Repairing and overhauling generating equipment & associated systems components
- Repaired and maintained aircraft ground power units: TLD GPU 412 and HOBAT 90CU24 400HZ
- Determining & isolating complex malfunctions through diagnostic testing & troubleshooting techniques.
- Performed inspections, interpreted inspection findings and determines corrective action
- Recommend solutions and changes for improving service levels
- Coordinating the work of other contractors on site directly involving Electrical and Mechanical works
- Bench checks components, sub disassembles, assemblies, test and commissioned
- Interprets data related to electrical power generating systems to prevent potential system failure
- Develops and establishes maintenance and operating procedures to ensure maximum efficiency
- Posts entries on operation, inspection, and maintenance records
- Mentor Maintenance Team by Motivating, providing guidance and directions to help them achieve their goals
- Able to diagnose machinery using CAT ET software
- Performed scheduled and unscheduled maintenance on equipment's
- Ensure adequate spare parts are maintain in stock to avoid downtime
- Perform oil analysis in the laboratory
- Determined repair and overhaul requirements, cost-effectiveness & associated system
- Lead and trained personnel's with guidance to perform duties with attention to detail and motivation
- Complies with applicable safety,environmental,health and waste management policies and procedures
- Ability to interpret and apply manufacturers repair manuals and technical specifications, schematic and engineering drawings and diagnostic codes
- Responsibilities for ensuring compliance with the health and safety at works act and implementing safe systems of work

### **RAY International LLC Oman/Dubai - Power Plant Engineer**

Feb 2014–Sept 2019

- Supervise, manage, and schedule multi-skilled level operations and maintenance team, includes: Power generation operators, Mechanics, Electrical Technicians and administrative support personnel.
- Supervises and complete scheduled and unscheduled work request on HV switchgear, HV Transformers, LV Panels and Generators
- Generate service jobs and budgetary estimates
- Plan and Supervise Top & Major overhaul of diesel engines (Cummins QSK78-G9, KTA50-G3, VTA28-G5, CAT C175-16) and spare parts order
- Perform hands on inspects,operates,and maintains the paralleling and HV Switch gear systems, SCADA and PLC control systems, alarm response to ensure maximum system reliability
- Recommend solutions and changes for improving service levels
- Ensure prompt and accurate completion of all maintenance work
- Ensure adequate spare parts maintain in stock to avoid downtime
- Complies with applicable safety,environment,health and waste management policies and procedures
- Quick respond to Station power outages and equipment failure as required and report to client on time
- Follow up Electrical and Mechanical Foreman activities related to ensure compliance with the requirements of the project documentation
- Assist with Electrical & Mechanical related diagnose and repairs
- Perform routine inspections to identify and respond on system failure relating to and impacted on component failure in timely manner
- Supports colleagues within the team in rebuilding/overhauling generator sets.
- Actively engaged in safety, participating in safety programs, safety activities, performed risk assessments and demonstrate leadership in personal safety of other staff members
- Management of Power Generation and Mechanical works
- Prepare Daily/Monthly Consumption and Generation Reports
- Provide trainings and updates to staffs on contract deliverables, new policies, procedures and regulatory changes
- Demonstrate strong leadership by problem solving

#### **RMA Group Kabul- Automotive/Generator Instructor.**

Jun 2013 – Jan 2014

- Covered Apprenticeship Task Book, (ATB) on Generator and Automotive Engineering
- Provide detailed technical instruction in all aspects of both automotive and generator repair for students aspiring to become Service technicians.
- Training includes classroom lecture and demonstration ,hands-on,safety,tools and equipment usage, and customer service strategies
- Prepared and conducted lecturers for various automotive technical classes such as basic Electricity, Engine components and functionality,
- Prepared and presented technical system flow diagrams and power point presentations for various automotive and generator systems
- Conducted work group sessions to help students understand the material through hands-on experience
- Tested, evaluated, and communicated performance and progress with students in timely and accurate manner
- Tested and evaluated students and essential monitored performance progress to ensure no one gets left behind
- Instructed students on fundamentals in automotive repairs as well as preventive maintenance
- Trained to develop instructional skills and understand student needs
- Arrange for additional assistance on a student by student basis (tutors)
- Evaluated level of individual progress and make adjustments to fit their need for efficiency
- Explain automotive and generator repairs and issues and provide great customer service
- Repair procedures using charts manuals and experience
- Test the functionality of parts and systems
- Basic auto care and maintenance tasks such as oil changes, fluid level checks

#### **Kinetics Control Limited Nairobi -Power Support Supervisor**

Jan -May 2013

- Lead a team in performing installation ,maintenance and repair works
- Performed routine equipment readiness and condition inspections as required and document standardized inspection forms
- Maintain supply of critical spare electrical equipment as outlined in the system
- Generate Daily and Monthly reports for Safaricom BTS sites
- Supervise staffs working on BTS sites across the country
- Provide technical support on sites in the event of system failure
- Maintain,Repair,install generator changeover panels, electrical and communication equipment's
- Complete scheduled and unscheduled work request on LV switchgears, Air Conditioners, Rectifiers, Battery banks and Generators.
- Ensure adequate spare parts maintain in stock to avoid downtime,
- Performed all work in compliance with applicable codes,standards.safety and environment regulations

### **DynCorp International Kandahar–Generator Mechanic**

Jan 2011-Dec 2012

- Perform Preventive Service and repairs on 4160v switchgear and generators in accordance with procedures and manufacturer recommendation
- Perform preventive and remedial maintenance,troubleshooting,on-site equipment repair, installation/removal, system operations, and scheduled maintenance of diesel generators
- Test and repair all safety circuits on generators
- Monitor power plant parameters and make necessary adjustments to ensure operation are within established guidelines
- Respond to breakdowns with appropriate immediate and subsequent action while on shift and on call
- Keep hourly logs of meter readings and record events as enfolds during shift operation
- Oversee the plant lockout/Tag out program and perform equipment isolation in accordance with plant lockout/tag out procedures
- Complete maintenance records and document all maintenance performed
- Perform inspection, interprets inspection findings and determines corrective action
- Bench checks components and subassemblies
- Troubleshoot malfunctions and inspects parts for excessive wear and other conditions
- Solves maintenance problems
- Interprets data related to Electrical Power generation systems to prevent potential systems failure
- Synchronizes multi-generators
- Identifies and record engine and generator Malfunctions
- Posts entries on operation, inspection and Maintenance records
- Removes, repairs and replaces defective power generating equipment components
- Perform other duties as required v Maintain control of power plant tools and manuals
- Provide in-service training to other employees on maintenance and repairs of Emergency Power Supply
- Responsible for facility custodianship of work area, hand ,power, and shop tools
- Responsible for ensuring compliance with the Health and Safety at Works Act and Implementing Safe Systems of work
- Performs other duties as assigned by supervisor

### **Sun flag Textile Limited Nairobi–Plant Electrician**

Jan 2005-Nov 2010

- Performed PM and repair on all switchgears control circuits and generators with procedures and manufacturers recommendations
- Tests and repaired all safety circuits on generators and textile machines control units and Identify route out chronic machine failures
- Troubleshoot and repaired complex electrical and electronic systems on all production levels and related equipment to component level

- Read, understand, and use complex industrial mechanical, electrical and electronic schematics, blueprints, and equipment manuals
- Inspect, maintain, repaired and overhaul electromechanical and solid state electrical equipments, using a variety of electrical test equipment, multimeter, powered and non-powered tools and equipment
- Install, repaired and maintained machinery and equipment such as conveyor systems, boiler and weaving machines
- Troubleshooting, interpretation and technical drawing of power and control diagrams of machines
- Repair electronic control module; for instance working with logic gates, thyristors, diodes, bridge rectifiers, integrated circuit, resistors capacitors to mention but a few.
- AC/DC Motor servicing
- Maintenance of Humidity plant and air compressors
- PLCs knowledge, VFD, automation and process controls
- Knowledge in process automation, variable speed drives, Pressure switch, pressure transducer, sensors, monitoring relays, starters and protection relays

## AWARDS AND APPRECIATIONS

- 11KV/LV Senior Authorize Personnel at RAECO Project Oman May 2016
- Fire warden Certificate from Ray International Oman Dec 2014
- Certificate of Appreciation from Liam P. Walsh CPT Black watch Company Commander Forward Operating Base Terra Nova Sept 2012
- Certificate of Appreciation from CPT Jackson R. Irish of Mountain Division Forward Operating Base Pasab Mar 2012
- Certificate of Appreciation from Patrick D. Frank Colonel in Commanding Forward Operating Base Pasab Mar 2012
- Recommendation from Site manager FOB Wilson DynCorp International LOGCAPIV
- Overall best Student at Zetech University awarded by vice-president of Kenya Oct 2010
- Certificates Of Appreciation from KBR BOSS Project Djibouti Dec 2022

## REFERENCE

- Jivynalis Busolo Sr. Business process analyst KBR- Maximo +17132761030, +13118242047
- Gireesh Kumar Operation Manager at Cummins Arabia Saudi Arabia [gireesh.kumar@cummins.com](mailto:gireesh.kumar@cummins.com) +966593472603
- Fredrick Kyalo Management Engineer at Safaricom (K) [kicondu@yahoo.com](mailto:kicondu@yahoo.com) +254720533268
- Nasser Al Madhani Mechanic at Global Chemicals Oman [al\\_madhani\\_57@hotmail.com](mailto:al_madhani_57@hotmail.com) +96898818983
- Prakash Achuthanarayanan Customer Sales & Services Cummins Arabia Dubai [Prakash.achuthanarayanan@cummins.com](mailto:Prakash.achuthanarayanan@cummins.com) +971505543317

- Rangnath Jha Area Manager Group A Ray International L.L.C Oman [rangnathj@rayoman.com](mailto:rangnathj@rayoman.com)  
+96899079627