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IRENE W. GICHOHI

Personal Information

Date of birth: 1st June 1983

Nationality: Kenyan

Career Objective

To be a resourceful Engineer in the Electrical field by smart-working, willingness to learn and grow in order to acquire a vast knowledge in technology for development of our world.

Educational Background

October 2019: Calibration training, Time Electronics

June 2019: Metrology training, Time Electronics UK

April 2019: Certified Energy Manager (CEM) certification, Association of Energy Engineers (AEE)

November 2018: Measurement Uncertainty training, Kenya Bureau of Standards

March 2018: ISO/IEC 17025:2017 Implementation Training, Kenya Accreditation Service

January 2018: Foundation Calibration Course, Kenya Bureau of Standards

March 2013: General Electric, Canada

Protection system Training

Nov 2010: Institute of Safety and Health (IOSH)

Managing Safely Certificate

Aug 2004- May 2009 : Jomo Kenyatta University of Agriculture and Technology

BSc. Electrical and Electronics Engineering degree

Grade attained: **Second class honors-upper division**

Work Experience

Aug 2019 to date: KenGen Calibration Centre in charge

- Implement ISO/IEC17025:2017 General requirements for the competence of testing and calibration laboratories procedures and records.
- Implement ISO9001:2015 and ISO14001:2015 Quality Management policies, procedures and records.
- Develop Calibration procedures for equipment within Calibration Centre's scope.
- Prepare necessary documentation required for accreditation.
- Carry out market research on competitive prices for Calibration Centre.
- Carry out Calibration of equipment within Calibration Centre's scope.
- Carry out analysis of results, including statements of conformity or opinions and interpretations.
- Prepare Calibration Certificates.
- Managing Offsite Calibration services.
- Carry out daily checks of calibration equipment to ensure proper functionality.
- Report any malfunction of calibration equipment.
- Maintenance of equipment log for KenGen equipment within the laboratory scope.

June 2018 to Aug 2019: Electrical Engineer I at Kenya Electricity Generating company, Upper Tana.

- Ensure KenGen backfeed consumption from Kenya Power is reduced by implementing energy efficient ways and conserving power consumption.
- Conduct annual energy audits
- Oversee the implementation of energy efficiency and conservation measures recommended from the audits.
- Monitor and analyze energy efficient initiatives within the power station
- Programming and Commissioning of Supervisory Control and Data

Acquisition (SCADA) system.

- Project upgrades and improvement of existing Electrical systems. This entails seeking solutions in the work place in a bid to resolve problems, like modification of circuits, recalculation of protection settings for better system protection, improving energy efficiency among other things.

Feb 2013 to June 2018: Electrical Engineer II at Kenya Electricity Generating company, Seven Forks.

Duties:

- Oversee the implementation of energy efficiency and conservation measures recommended from Energy audits.
- Design Installation and commissioning of Protection Panels: I have been involved in installation and commissioning of protection schemes in various KenGen stations using Sepam relays, Micom relays, Siprotec relays and General Electric relays.
- Routine maintenance of Hydro electricity generating machines in Eastern Hydro. Carrying out quarterly, semi-annual and annual maintenance of generators, power transformers, excitation system, protection systems and related instruments.
- Calibration of instruments and protection relays. This includes the analogue meters, digital meters, transducers, and protection relays.
- Attending to electric power generating machine breakdowns: This involves studying schematic drawings, troubleshooting for the cause of the problem and rectifying the problem.
- Installation and Commissioning of power transformers.

Jan 2011 to 2013: Aggreko International Power Project – Area Design Engineer(South east Africa- Yemen & Pakistan)

Duties:

- Design of new power plants: This involved designing layout of the new power plant, coming up with list of equipment for the plant, drawing of single line diagrams up to the point of client connection.
- Incorporate energy efficient auxiliary systems during design to ensure reduced auxiliary power consumption.
- System Protection Training by PHC Connections: I was trained on various electrical faults, protection functions, fault calculations, protection

settings, and programming settings in ABB relays.

- Supervision of Installation and Commissioning of new power plants: This included supervision of the installation, testing and commissioning of containerized 800kW, 415V generators along with 6.3MVA containerized 415V/11kV transformers and switchgears. I was in charge of commissioning and performing Capacity Test of the entire plant and meter testing.

2009 Oct- to Dec 2010: Aggreko International Power Project, Assistant Electrical Engineer

Duties:

- **Installation, and commissioning of 80MW Aggreko Embakasi 4 power plant from Oct 2009 to June 2010.** Aggreko Embakasi Power plant had 400 diesel generators, 67 transformers & 4 switchgears units amounting to 290MW at 11kV, 50Hz.
- **Routine Maintenance of generators, transformers and switchgear:** Carrying out planned maintenance of diesel generators, transformers and switchgear.
- **Attending to electric power generating machine breakdowns.** This involved studying the machine schematic drawings, troubleshooting for the cause of the problem and rectifying the problem.
- **Performing High Voltage switching and Isolation procedures:** This was done before and after maintenance of generators, transformers and switchgear for safety purposes.

2009 August to Nov: Power Technology Solutions Ltd, Graduate trainee

Duties:

- High Voltage cable terminations in June 2009 during construction of Aggreko Embakasi plant. This included stripping the insulation of outdoor 11kV 500mm² single core aluminium and copper cables and terminating using heat shrink termination kits.
- Installation of 40MW Aggreko Embakasi 3 power plant from June to October 2009.
- I was involved in: laying of containerised 800kW, generators, transformers and switchgear equipment, termination of LV and MV cables, assembly of fuel system pipework, earthing.

- Designing using **AUTOCAD**

2008 May to Sept: Industrial attachment, Aggreko International Power Projects- Embakasi.

Duties :

- Preventive maintenance of generators, transformers and switchgear
- Breakdown maintenance of generators
- Control room operations

2007 May to July: Industrial attachment, Ministry of Public Works, Electrical section Nairobi.

Duties :

- AUTOCAD and ARCHICAD designs
- Trained in repair and maintenance of Electrical installations

2006 May-July :Industrial Attachment, KENGEN- Kipevu power station
Worked as a Student Trainee in the Diesel and Gas Turbine sections.

Duties :

- Preventive maintenance of motors, generators, transformers and switchgear
- Breakdown maintenance of generators and motors
- Control room operations

Professional memberships

Engineers Board of Kenya- Graduate Engineer (B5648)
Graduate member, Institute of Engineers of Kenya (G5641)
Member of Upper Tana Energy Management Committee,
Member- Association of Energy Professionals in Eastern Africa (AEPEA)

Achievements

Winner, Innovation Award in Women in Energy Awards Kenya 2018.

Interests and activities

Traveling, football, scrabble and reading.

References

1. Eng. Kuta Omar

Technical Services Manager

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2. Eng. Monicah Karanja

Chief Engineer

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