

Job Description

Post Title
Instrumentation & Control Technician
Responsible to
<p>Technical Manager (Electricity) The post holder will have a secondary reporting line to the following managers when working within the functional areas for which these managers have responsibility.</p> <p>Electricity Generation area: Electricity Generation Manager Electricity Distribution area: Electricity Distribution Manager Water, Wastewater & Sewage area: Water Operations Manager</p>
Normal Place of Work
Jamestown but will be required to attend each of Connect’s sites
Date
April 2024

Job Purpose

Responsible for the development and maintenance of instrumentation, control and electronic systems within Connect Saint Helena Ltd. The post holder will provide these services across all areas of the Company (electricity, water, and wastewater).

Key Tasks and Responsibilities

Reporting to the Technical Manager (Electricity), the main duties of the post are:

- Safe maintenance and operation of expensive and sensitive electrical, control and instrumentation assets across the electricity, water and wastewater sections within Connect. This will include but not be limited to work in the Power Station, Wind Farm, Solar Farm, Water Treatment Plants, Sewage Treatment Plant and other infrastructure within the control of Connect Saint Helena Ltd.



- Planning and implementation of maintenance programmes for electronics, control and instrumentation systems.
- To provide training, support and prepare instruction manuals for plant operators to ensure that they can perform basic checks and system resets.
- To prepare and maintain step by step instruction of system resets. Ensure that these are prominently displayed at all plant sites.
- Be responsible for testing, fault analysis and repair of the High/Low Voltage control systems
- Be responsible for testing, fault analysis and repair of the Generator Alternators where possible
- Be responsible for testing, fault analysis and repair on all other control gear within the Power station. e.g. Radiator Fans, Air Compressors and Battery Chargers.
- Carry out fault analysis of Generator and Feeder High Voltage switch circuit breakers
- Carry out swapping of High Voltage switch circuit breakers when faulty
- Collect and analyse data from the Generator, Feeder and Field switch gear in the event of a fault.
- Be responsible for fault finding/trouble shooting/repair where operators' interventions have been unsuccessful
- Compile and maintain appropriate documentation relating to instrumentation and control systems, including: system drawings, manuals, maintenance registers, fault logs, monthly reports, annual budget requirements, assets and spares inventory.
- Develop and maintain critical spares lists and work closely with Procurement to ensure that minimum stock levels are maintained.
- Ensure that service, maintenance and repairs are carried out to a high standard and prepare comprehensive and accurate records of the same.
- Ensure that adequate spare parts are available for electrical and control equipment and ensure adherence to standards.
- Act in a support capacity to the Electricity Generation, Electricity Distribution, Water Operations, and Project Managers to help develop technical direction for continuous improvement of electronic equipment and systems.
- Work with external contractors during installation of new electronic control equipment to ensure detailed operating knowledge. Disseminate appropriate basic system checks and resets to operator level; providing support until such time as operators are competent to perform independently.
- Perform repairs to electrical and electronic devices and equipment as required.
- Provide basic training and mentoring for the ICT Trainee Technician.
- Provide training/familiarisation for person(s) providing cover during the Instrumentation and Control Technician's absence.

Provide such technical advice and support as may be required. The post holder will have a secondary reporting line to function managers for Electricity Generation, Electricity Distribution and Water, Wastewater and sewage. This is to ensure direct communication with the associated manager when working in the individual areas.

Core Competencies

- A strong team player who is willing and able to share knowledge and coach others
- Flexible, adaptable, well organised, time conscious and able to prioritise
- Analytical thinking and fault finding ability
- Able to produce clear and concise written communication and accurate records
- Strong communication skills and able to adapt style to suit the audience.
- Willing to work outside normal hours and in adverse circumstances.
- Commitment to knowledge sharing and training in order to grow ICT capacity within the Company.

Person Specification

Attribute	Level	Essential	Preferred
Electrical Engineering, Electronics Engineering and/or Control and Instrumentation Engineering	HNC	Yes	
Experience within a utility company environment	Minimum of 5 years	5 years	
Experience with SCADA (or similar), Telemetry and PLC control systems	Minimum of 2 years	2 years	5 years
Computer literacy	Intermediate	Yes	
Excellent written and verbal English communication skills	Excellent	Yes	
Health & safety awareness in a safety critical environment	Strong	Yes	
Coaching/training skills	Good		Yes
Driving License		A	C
Compliance with Safety Rules and Procedures for HV/LV when working on, near, testing or operating electrical equipment and systems		Yes	
Experience with wind turbine maintenance	Minimum of 2 years	2 years	5 years
Safe working at heights	Certificate		Yes

Working Environment

This role will involve: -

- Driving
- Working in high noise level environments
- Working in proximity of high voltage rotating machines, high voltage distribution equipment and in live chambers
- Possible working at heights currently up to 20 metres
- Flexible working arrangements, for example, to undertake scheduled maintenance outside of normal working hours when equipment is not in use or at a time when there is a minimum impact on operations



- Emergency call-out and stand-by duties for the Company
- Working with HV/LV

Dimensions

Asset Responsibilities
<ul style="list-style-type: none"> • Tools and equipment valued at £20,000 • Software packages valued at £20,000 • Critical electricity generation and water and quality monitoring treatment equipment
Total Staff Supervision
Trainee ICT Technician
Budget Responsibilities
Feeding annual spares requirements into the overall generation budget
Key Contacts
<ul style="list-style-type: none"> • Plant Operators and Assistants • Electricity Generation, Electricity Distribution, Water Operations and Project Managers • Maintenance personnel and external contractors

Job Context

Connect Saint Helena Ltd. is the sole supplier of utility services on Saint Helena. Many of the systems are without backup and directly relate to the quality of the product, failure therefore results in consumer dissatisfaction.

This job profile is not an exhaustive list of duties and responsibilities. There may be other ad hoc duties that fall within the remit of the role that the job holder may need to complete. In addition, the job holder will be required to carry out any other reasonable duties as requested which are commensurate with the grading and level of responsibility for the role.