

Senior System Control Engineer - Renewables, SCADA, Automation & Control, Telecommunications

Sector: All

Location: South Africa

Posted: 04/10/2021

Reference: MJ1726

Description

Job Location: Office based in Midrand, Gauteng

Reports to: Engineering Manager

Job purpose: Direct and control SCADA, Automation, Telecommunications and Renewable Energy, Automation and Control projects, from start to finish, to ensure that they are completed to the required standards within agreed timescales and within tendered scope.

Our client is a 100% black female owned, operated and managed renewable energy developer and strategic investor. Developing, owning, constructing and operating utility scale and small scale renewable energy projects. Has successfully bid, built and operated projects under South Africa's Renewable Energy Independent Power Producer Procurement Programme and is building a portfolio in Africa with the goal of being Africa's largest black female owned independent power producer.

Job specifics:

- National Diploma - Electrical Engineering (Heavy Current) with minimum of 5 years' experience of substations (heavy electrical environment – min 11KV is essential/electrical reticulation) OR B.Eng. Electrical Engineering with Minimum 3 - 5 yrs experience in substations.
- Project Engineering / Project Management experience.
- Professional Engineering (Pr.Eng or Pr.Tech Eng.)
- Membership with ECSA is preferred.
- Project Management Knowledge
- Industry Specific Knowledge
- Risk Management Knowledge
- OSH Act & other applicable Health & Safety Acts based on environment
- Tender & Project process & procedure
- Planning, Prioritising, Organised and Structured
- Project Management
- Financial Management
- Time Management
- Analytical Skills
- People Management
- Problem Solving Skills
- Strong Initiative
- Team Player with ability to work on your own
- Technical Skills
- Excellent Verbal & Written Communication skills
- Negotiation Skills

- Computer Literacy
 - MS Word
 - MS Excel
 - MS Outlook
 - MS Project
 - BuildSmart/Candy

Business Processes -

Stakeholder Management: To ensure that Engineering Manager is always kept well informed and to establish a free flow of information.

- Produce test results to Engineering Manager to keep him informed.
- Communicate issues, problems or concerns.
- Manage and maintain relationships through regular contact with Team leader, Energy Solutions Team members, Services departments, Automation Customers and Suppliers.

Project Design: To ensure that designs are done according to company standards and customer specifications, within financial constraints.

- Review all tender documents for the Automation and Control system of the specific project.
- Assist in designing the Automation and Control system for the specific project.
- Integrate budgeted equipment into the design as instructed by System Control Manager.
- Review Automation and Control design drawings during the design phase of the project.
- Produce project documentation (including SAT documents, FAT documents, FDS, DDS etc.)

Configuration and implementation: To ensure that the system functions to specifications as provided by the client and within budget.

- When approved - configure and implement design onto the budgeted equipment as per detailed instruction from Team leader.
- Configuration and engineering of the Automation and Control Communications equipment.
- Ensure that system is fully functional according to client specifications and according to engineering standards (e.g. IEEE, IEC etc.) for Automation and Control.
- Configure Automation & Control Equipment for the specific project (include. Gateways, HMI, protection IED's etc.).
- Ensure revision control policies are implemented.
- Configure cyber-security policies and procedures.
- Configure and optimize Substation LAN/WAN with networking equipment.
- Configure secure remote access and data retrieval systems.
- Configure master station applications.

Testing: To ensure that the configured system is functioning as designed with no errors or misconfiguration.

- Arrange scheduled FAT.
- Ensure performance & compatibility testing is performed.

Internally:

- Test entire system and generate test documentation as per System Control SAT and FAT documentation.
- Test all Automation and Control Equipment.

- Review all documentation provided by production and verify scheme is built according to design.

Externally:

- Repeat the test with client witnessing as per checklist.
- Obtain approval from client for test documentation.
- Verify the test again when system arrives on site according to the approved test documentation.
- Train SCADA / Engineers on HMI systems, Gateways and Configuring relays.
- Test substation and distribution automation systems.
- Test Substation LAN / WAN and test all cybersecurity policies and procedures.
- Test Remote Engineering Access and Data Retrieval Systems.

Support: To ensure on-going operation of the system including changes as needed by the client.

- Followed up reported queries by site visits.
- Correction, alterations, replacements of equipment is done as needed on site as per instruction.
- Provide training to clients and staff when required.
- Provide remote telephonic and RDP Support to clients.

Customer Perspective:

Communication to Internal Customers - To ensure a high level of accuracy & integrity of information.

- Provide FAT, Commissioning Divisions and other relevant Divisions with accurate information, arrange internal FAT.
- Assist with Commissioning queries.
- Ensure Automation and Control integration on site.
- Communicate with Design Engineer for configuration.
- Ensure that latest designs are obtained prior to configuration / implementation.
- Be able to manage and implement Multiple System Control Projects from Start to Finish.

Communication to External Customers: To ensure a high level of accuracy & integrity of information.

- Provide outsourced service provider with accurate specifications and designs, to enable deliverance of accurate price and data information for the tender and high-quality designs (supplier function).

Financial Focus:

Cost effectiveness - to contribute towards the financial health of the company.

- Eliminate unnecessary expenses
- Ensure operating costs are in balance with expected outcome thereof.
- Keep waste to absolute minimum.
- Implement cost saving initiatives as and where possible and applicable.
- Do orders on BuildSmart to manage System Control Finances according to the budget. Manage payments, invoices, PO's etc.

Learning, Growth & Innovation:

Performance Management: To establish an acceptable standard of work throughout the organisation and that leadership is lived daily.

Own career management by:

- Partaking in the performance management process in a positive way and follow-up actions when applicable.

Learning & Growth:

Individual - To ensure own individual growth, both as an employee and as a member of the training team.

- Keep updated with latest technology and development in own field of expertise.
- Ensure that all required field work skills and competencies are developed, and opportunities utilized.
- Submit technical papers for conferences and present at conferences.

Innovation - To ensure that innovation is embraced throughout the organisation.

- Suggest innovative ideas on how to improve processes in own areas of work, and in other areas where it could be beneficial.

Please send your Resume & Dedicated Motivational letter QUOTING THE REFERENCE NUMBER MJ1726 to: macey.johnson@shawenergyltd.com