



Job Title	Electrical Systems & Integration Engineer
Location	Cape Town
Start	As soon as possible
Terms	1 year contract <i>or</i> Contractor (3 month probation)
Salary	Market Related
Experience	1-3 years

// Company Overview

[Switch](#) is a tech company that offers software and hardware solutions for water and energy management. We specialise in smart metering and energy trading solutions.

Our mission is to build disruptive tech to accelerate a sustainable future.

Our smart metering product allows administrators to manage meters, monitor utility usage and facilitate billing and revenue collection. The Switch mobile app enables end users to pay for utilities and view live usage. Our energy trading product is designed for large scale management of electricity wheeling through the national grid. As the South African energy market opens to the private sector, Switch is at the forefront of providing cutting edge software solutions to Independent Power Producers and energy traders.

The goal is to be an industry standard software solution for managing smart metering and energy trading.

The energy trading industry is new and rapidly evolving, with that, our products and software require constant creative input and adaptations.



// Job Description

We designed this role for someone who bridges the gap between traditional electrical systems and modern energy data. You would be responsible for the physical installation of systems, the integration of smart meters and IoT devices, and the configuration of hardware-level communication protocols.

By applying for this technical role, you would become a key player in the transformation of the South African energy landscape.

// Details



40 hours a week (Monday - Friday)



Online and available from 09:00 to 15:30 from Monday - Friday, and can work flexibly for the remaining hours. Core office days are Tuesday, Wednesday and Thursday.



Either in our beautiful offices in Kalk Bay, Cape Town or on-site.



Daily standups and a weekly team meeting are mandatory.

// Key Responsibilities

- **Schematic Mastery:** Interpret Single Line Diagrams (SLDs) to plan installations and troubleshoot system layouts
- **Client Onboarding:** Act as the lead technical resource for advising or onboarding new clients, ensuring their hardware is correctly integrated into our network from day one
- **Hardware-Level Configuration:** Highly competent in configuring systems manually at the device level without the aid of our admin console.
- **Metering & Comms:** Install and commission various meter types (Direct Connect, CT-operated, etc.) and configure Modbus (RTU/TCP) and other industrial communication protocols.
- **Connectivity:** Set up and troubleshoot modems and gateways, ensuring stable data transmission from the site to our servers.

- **DB Management:** Expertly wire and balance Distribution Boards (DBs) while integrating monitoring hardware.
- **Protocols:** Understand and interact with various Industrial communication protocols and standards at a software level either via 3rd party software or programmatically via libraries such as GuruX

// Skills & Competencies

- **Electrical Background:** Strong experience in industrial/commercial electrical systems and DB wiring.
- **Protocol Knowledge:** Practical, hands-on experience with Modbus and communication protocols.
- **Hardware Literacy:** Deep understanding of different meter types and their specific wiring requirements.
- **Connectivity:** Comfortable configuring modems and troubleshooting network connectivity issues on-site.
- **Autonomy:** A "boots-on-the-ground" problem solver who can troubleshoot via local interfaces or serial connections.



// Qualifications & Experience

- Holding a Red Seal, Wireman's License, or a relevant Trade Certificate is highly advantageous.
- **Electrical Engineers** are encouraged to apply
- 1-3 years' experience in the energy systems industry, embedded hardware or communication infrastructure.
- Software programming qualifications are also beneficial.

// Personal Attributes

- Confident and comfortable engaging with people, particularly on-site.
- Proactive and self-driven, with ability to take ownership of tasks.
- Collaborative and team-oriented, with strong interpersonal skills.

- Adaptable in a fast-paced, technology-driven environment.
- Results-oriented with a problem-solving mindset.
- Sense of humor. We want to build a team that doesn't take life too seriously and we'd love you to join us in having a laugh!

// Performance Indicators (KPIs)

- Competency in assisting clients with their hardware specifications
- Commissioning efficacy which is the average commissioning time for installations / callback rates
- Meter uptime/data availability which is the percentage of time installed meters are successfully transmitting data to servers
- Client onboarding cycle time (time from contracts being signed to hardware configured)
- Safety incidents
- Documentation completeness (ensuring configurations are properly recorded for future maintenance)

// Perks

- Commission structure on any self-source projects.
- Beautiful office environment in Kalk Bay.
- Flexible work arrangements and leave policy.

// How to apply

If you are interested please send us your CV as a PDF attachment along with a brief letter of motivation (3 or 4 paragraphs) as to why you believe you be a good fit to info@switch.org.za with the subject line " Switch Electrical Systems Engineer - Your Name " and we will get back to you 😊