

# Power Generation & Electrical (PG&E) Engineer (Solar Engineer)

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**Ref: 12004**

The Rwanda Institute for Conservation Agriculture (RICA) is a unique and innovative English language undergraduate institution dedicated to preparing the next generation of agricultural leaders of Rwanda and East Africa. Students at RICA will engage in curricular and co-curricular learning opportunities emphasizing Conservation Agriculture and One Health principles, oral and written communication, leadership, and entrepreneurship.

In an experiential learning environment, students will develop the knowledge and experience necessary for a wide range of careers in agriculture. Students at RICA will experience the six Enterprises including Beef Cattle and Small Ruminants, Dairy, Poultry and Swine, Row and Forage Crops, Vegetable and Tree Crops, Irrigation and Mechanization. The curriculum is designed to incorporate threads of Innovation, Conservation, OneHealth Systems Thinking, and Entrepreneurship. Communication, One Health Systems Thinking, and Entrepreneurship are woven throughout the curriculum. All RICA graduates will be innovative problem solvers able to operate farms and ranches, start agribusinesses, assume management roles in cooperatives, NGOs, and other agricultural enterprises, serve their communities as extension agents and technical and policy experts, or assume positions of agricultural leadership in Rwanda.

## **DESCRIPTION**

We are seeking a Power Generation & Electrical (PG&E) Engineer to ensure that all power generation & electrical systems are well-maintained and repaired according to manufacturer guidance. The PG&E Engineer will work within the Facilities Department to contribute to the smooth running of the Campus facilities, reporting to the PG&E Manager.

The RICA installation is a 1.5 MW solar powered generation facility located in Bugasera District utilizing SMA inverters, Ideematech tracking system, 3MWH LG battery backup, and Caterpillar diesel generators (300KVA x4). The facility also includes several electro-mechanical installations relating to the pumping of water to irrigation systems, as well as commercial buildings with electrical systems installed.

## **RESPONSIBILITIES**

- Assist the PG&E Manager in the daily maintenance and repairs of the solar power plant (inc. inspections on frames/mechanical tracking systems, solar panel cleaning, electrical tests on inverters, weather station maintenance).

- Perform electrical repairs relating to the pumping systems and generators.
- Perform general electrical repairs for the Campus Buildings, e.g. light fittings, replacement of wall sockets, cable and fuse repair on small appliances), to assist the Building Technicians.
- Work on planned preventative maintenance schedules and respond to emergency and unforeseen maintenance requests.

#### **MINIMUM QUALIFICATIONS**

- A Bachelor's Degree in electrical engineering or equivalent.
- 2-3 years experience in maintenance & repair of large-scale (>1MW) solar generation facilities; including PV maintenance, DC systems, AC medium voltage systems, and network communications and monitoring.
- Experience with SMA equipment (i.e. inverters) and SCADA systems required.
- Experience conducting general electrical/electrician repairs (residential properties).

#### **PREFERRED QUALIFICATIONS**

- Electrical & Mechanical Engineering degree combined; experience with mechanical engineering activities.
- Experience with maintenance & operation of large generator systems (e.g. 300KVA).
- Experience with maintenance of electrical systems relating to water pumping.
- Strong Analytical and diagnostic capabilities to troubleshoot and correct issues.

#### **HOW TO APPLY**

- Submit your application form using the following link:  
[https://docs.google.com/forms/d/e/1FAIpQLSdZ9uVolarfhCa40gy2wnEx1V563WPHPnaniQu5h\\_v7FuabgA/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSdZ9uVolarfhCa40gy2wnEx1V563WPHPnaniQu5h_v7FuabgA/viewform?usp=sf_link)

**Review of applications will begin May 15th, 2019 and continue until the position is filled.**

#### **Website**

<https://www.rica.rw/>



Approved By:

Date: November 2, 2018