

# Power Generation & Electrical (PG&E) Manager

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**Ref: 12005**

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 Manager (PG&E) to ensure that all power generation & electrical systems are well-maintained and continuously monitored, operationally efficient, in compliance with manufacturer warranty/defects liability agreements, and repaired according to manufacturer guidance. The PG&E Manager will work within the Facilities Department to contribute to the smooth running of the Campus facilities. 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**

- Manage all aspects of the day-to-day operation of the solar power generation facility in a safe and environmentally sound manner.
- Establish priorities for maintenance, execute preventive maintenance, and supervises the performance of emergency and routine maintenance for solar & electrical

installations supporting the campus. Includes compliance to manufacturer's guidance on warranty regarding maintenance & repairs for solar components.

- Coordinate repairs, preventative maintenance and inspections on other non-solar electrical installations supporting campus facility (including wiring, pump systems, distribution lines & junctions etc.) to ensure installation meets national safety codes.
- Train and manage plant operating, maintenance and administrative staff; includes quality assurance checks on solar technician activities/repairs.
- Procure parts, materials, services and support resolution of technical issues.

#### **MINIMUM QUALIFICATIONS**

- A Bachelor's Degree in electrical engineering or equivalent.
- 5 years experience in the management of large-scale (>1MW) solar generation facilities (as O&M Manager, Engineering Manager); including management of engineering teams, PV maintenance, DC systems, AC medium voltage systems, and network communications and monitoring.
- Experience with SMA equipment (i.e. inverters) and SCADA systems required.
- Skilled in the use of testing equipment and tools such as Thermographic Electrical Inspection, I-V Curve Tracing, Meggers, and Ground Fault Detection.
- Strong leadership, communication and technical skills; diligence/attention to details.
- Valid driver's license; willingness to travel between Bugasera & Kigali on regular basis.
- Proficiency in Microsoft Office; experience submitting regular reports on O&M tracking.

#### **PREFERRED QUALIFICATIONS**

- A Master's Degree (higher level than Bachelor's) in electrical engineering or equivalent.
- Awareness of national codes (Rwanda) relating to building/electrical safety.
- Experience with large-scale lithium-ion battery systems.
- Experience with maintenance & operation of large generator systems (e.g. 300KVA).
- Strong Analytical and diagnostic capabilities to troubleshoot and correct issues.
- Ability to read and understand electrical single-line & three-line diagrams / schematics.

#### **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