

# EXTERNAL JOB OPPORTUNITY N°016/ADMIN/RH/VESAU/2022

Position	Power Generation Supervisor
Contract Duration	2 years
Reporting to	Chief Operating Officer
Number of supervised persons	Power plants (3), Plant Manager and plant staff
Expected Start Date	June 2022
Location	North Kivu, Democratic Republic of Congo and Virunga National Park sites (Matebe, Mutwanga, Ivingu)
Post open to	Expatriation/ International

## **CONTEXT**

The Virunga National Park (PNVi), a UNESCO World Heritage Site, is the oldest park in Africa. It covers 7,800 km², is home to some of the last remaining mountain gorillas and is considered one of the most biodiverse places in the world. The Virunga Foundation (VF), a UK-based NGO, was awarded the management of Virunga National Park in partnership with the Congolese Institute for Nature Conservation (ICCN).

VF has launched an extensive social and economic development programme to anchor its conservation efforts in the broader context of a just and green economic transition for local communities (5 million people, 70% of whom live below the poverty line as defined by the World Bank) in North Kivu province. In addition to park conservation, VF has established 4 development priorities: electricity, entrepreneurship, agriculture and tourism.

## **Electricity**

Virunga Energies ("VE"), wholly owned by VF, is the company responsible for the electrification of North Kivu Province. Currently, VE operates 3 hydroelectric power plants for a total of ~30 MW, transmits and distributes electricity in the regions of Rutshuru, Lubero, Mutwanga and in the city of Goma. The company is in advanced discussions with donors to increase power generation and significantly expand its distribution network. It is estimated that each MW distributed locally creates between 800 and 1000 additional jobs, of which an average of 10% are occupied by former members of armed groups, establishing a direct link between electrification and the development of peace in a region affected by insecurity for several decades.



## **Entrepreneurship**

The entrepreneurship programme aims to support (micro) businesses in their development and to remove the obstacles that (small) entrepreneurs face. The programme is divided into two main activities:

- 1. The granting of innovative loans (the repayment of a loan is based on the entrepreneur's electricity consumption);
- 2. The management of 2 industrial zones of approximately 5 hectares each, intended to accommodate companies with an industrial project.

#### **Agriculture**

The agricultural programme helps farmers in North Kivu to improve agricultural yields and supports agro-industrial processing activities that generate added economic value. To this end, VF supports the following agricultural and fisheries value chains: maize, potatoes, cocoa, coffee, papain, chia, palm fruits and fish from Lake Edouard.

#### **Tourism**

Virunga promotes the development of international ecotourism, respectful of the environment and for the benefit of the local population (profits are reinvested locally). Currently, it is possible to visit one of the world's most active volcanoes (last erupted on 22 May 2021), the last remaining mountain gorillas, Tchegera Island and the savannah animals in the Rwindi plains (Lulimbi camp).

In order to continuously improve its capacity to serve high quality and reliable clean electricity, Virunga Energies is recruiting one (1) Power Generation Supervisor.

## MAIN RESPONSIBILITIES

The main responsibilities of the Production Supervisor will be to:

- Supervise, operate and maintain the three (3) hydropower plants in accordance with the highest international standards and procedures and if necessary implement these procedures;
- 2. Monitor and forecast the production of electrical energy from the hydropower plants;
- 3. Train and develop staff;
- 4. Develop HSSE measures where necessary.



## 1. Supervise, operate and maintain the three (3) hydropower plants.

- Ensure the effective transition of three sites from a construction-based mode (operating as independent entities) to an operations-based mode (same SOPs, same systems, etc.)
- Ensure that the power plants operate 24 hours a day, 7 days a week with little or no incidents (minimum unplanned downtime);
- Maintain records, prepare reports and write correspondence regarding the operational efficiency and reliability of the plants;
- o Conduct daily analysis of operational effectiveness and efficiency of all plants;
- Develop and implement appropriate standard operating procedures in all plants and refine the maintenance strategy;
- o Maintain a list of all spare parts (critical and non-critical) for the different plants;
- Supervise the lead engineer and technicians on all repair and maintenance work.

# 2. Monitor and forecast the energy supply of the three (3) hydroelectric power plants

- Forecast the energy production capacity of each plant based on meteorological and hydrological studies of their associated rivers;
- Communicate forecasts to relevant stakeholders and proactively identify risks of mismatches between demand and production;
- Improve operational procedures to optimise energy production.
- Prepare weekly and monthly production reports (including detailed incident reports).

#### 3. Train and develop staff

- Monitor the daily performance of staff and teams;
- Replace plant managers during their leave;
- Identify staff development needs, develop training programmes and ensure that training is taken up;
- Propose a career development plan for each category of staff;
- Proactively identify high potential employees.

#### 4. HSE

- Improve the health and safety of all staff, stakeholders and visitors;
- Maintain a zero accident policy in all plants;
- Draft new HSE protocols and regularly update existing HSE protocols for the safe operation of all plants, in coordination with Virunga's social department.



In addition to the above responsibilities, the Production Supervisor is expected to carry out any work assigned by the Operations Manager and the management team.

# **DESIRED PROFILE**

#### 1. Skills

- Team-oriented but autonomous mentality;
- Ability to deal with uncertainty and ambiguity;
- Strong leadership, written and verbal communication skills;
- Good training and coaching skills;
- Excellent planning and analytical skills;
- Problem solving and troubleshooting skills;

#### 2. Qualifications and knowledge

- University degree in engineering in a relevant field (electrical, electromechanical or mechanical) to manage hydroelectric power plants with a minimum of 7 years experience;
- Ability to train and supervise operators and power plant personnel;
- Knowledge of HSE policy is an asset;
- Excellent oral and written skills in French and English, Swahili is an asset;
- o Proficiency in Microsoft Office suite, especially Excel;

## 3. Experiences

- 7 years of professional experience in the energy sector, including at least 2 years as a power plant operator/technician and at least 2 years in the management and operation of a hydroelectric plant;
- Practical experience in programming and repairing PLCs, control panels and motors;
- At least 3 years experience in an industrial environment with medium voltage equipment;
- Experience of working for an international company or organisation in sub-Saharan Africa, particularly in the DRC is an advantage.



#### 4. Other

- o Strong interest in the energy sector;
- o Ability to live in remote locations
- o Ability to work in volatile security environments;
- High flexibility and quick adaptation to dynamic situations, etc.

## 5. How to apply

Send the file containing all your application documents in PDF or Word format to recruitment/sarl@virunga.org

NB: The elements of the candidate's file must be contained in a single Word or PDF file.

The deadline for applications is 04/05/2022