



ACTED

Terms of Reference for Electro- Mechanic Officer (Solar Energy Technician)

Position: **Electro Mechanic Officer (Solar Energy Technician)**

Location: **Maban Refugee Camps, Upper Nile State**

Duration: **6 months.**

Date of Issue: **22nd June-2023**

Date of Closure: **14th July-2023**



Background ACTED

ACTED is a French humanitarian NGO, founded in 1993, which supports vulnerable populations, affected by humanitarian crises worldwide. ACTED provides continued support to vulnerable communities by ensuring the sustainability of post-crisis interventions and engaging long-term challenges facing our target populations, in order to break the poverty cycle, foster development and reduce vulnerability to disasters. Our interventions seek to cover the multiple aspects of humanitarian and development crises through a multidisciplinary approach which is both global and local, and adapted to each context. Our 3,300 staff are committed in responding to emergencies worldwide, to supporting recovery and rehabilitation, towards sustainable development.

JOB PURPOSE

Maban refugee camps comprises of a number of different water system structures that includes motorized boreholes that is generators, solar systems, submersible pumps, surface pumps, distribution network. The water systems boreholes are run on Solar and Generators, operating the submersible pumps, surface pumps and provision of power for lighting. The surface pumps boost water to camp storage tank facilities. These systems are regularly maintained to ensure water provision in the camps are not interrupted. We also strive to ensure the water provision to the refugees meets UNHCR standards. The Electro Mechanic Officer key role is to ensure non interrupted water supply to the refugees through regular operationalization of water provision systems of well-functioning generators and solar systems.

CHAIN OF COMMAND

Under the authority of:

- Senior Electro Mechanic Officer

Line Management:

- Electro Mechanic volunteers.

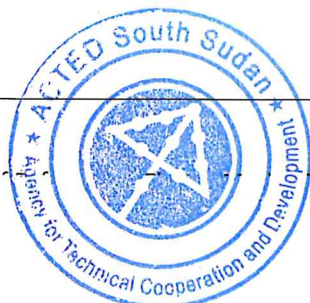
WORKING RELATIONS

Internal Relations:

- Area Coordinator
- WASH Coordinator
- Project teams
- FLATS

External Relations:

- Beneficiaries/Community leaders
- Other Partners



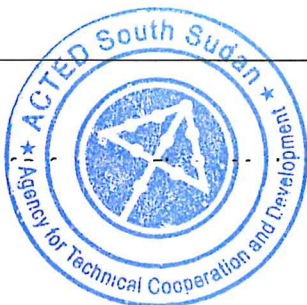
OBJECTIVE

To ensure for the water provision to the refugees is uninterrupted and meets UNHCR standards through installation of solar systems, generators systems, also maintenance of the same throughout the project period. And that services are provided in a timely and professional manner, according to objectives, goals and indicators, in line with donor requirements and based on beneficiary needs.

DUTIES AND RESPONSIBILITIES

Project planning, implementation, monitoring and reporting.

1. Take lead in the management of the solar pumping systems equipment and shared generator set in terms of routine maintenance, repairs, services, cleaning, and reporting.
2. Analyze and interpret data from environmental tests and troubleshoot equipment (Generator and Solar) problems, whenever they arise.
3. Set-up of a routine maintenance schedule, recording of operational data of the solar pumping systems in collaboration with generator mechanics.
4. Maintain equipment records and filing systems as part of quality control and assurance programs in generator and solar operation.
5. Repair and maintenance of solar systems, inverters, solar connections and troubleshooting of instruments panel.
6. Installation of new solar pumping systems and retrieval of the old and defective ones ensuring they are well wired and operational.
7. Retrieve, repair and installation of booster, surface pumps and submersible pumps.
8. Monitoring of all electrical installations in the generator rooms and making recommendations of their replacements or repairs.
9. Repair and maintenance of the standby control panels, change over switches and other electrical equipment.
10. To keep records of all the electrical repairs those have been done in the field and in the workshop.
11. Prepare the BoQs for all electrical power installations with the focus on solar equipment.
12. Support refugee community staff during electrical faults of the generators/solar systems
13. To assist in supervision of the contractors doing upgrade or installations of the solar power systems.
14. Advise and recommend the power requirement for electrical gadgets.
15. Together with borehole attendants and team leader, maintain cleanliness and safety of the solar water pumping systems, submersible and booster pumps in the field.
16. Supporting the WASH Officer in procurement of the necessary fast moving spare parts and working tools for the repair of the solar water pumping systems and pumps.
17. Modify models of electrical devices or installations to match needs on the ground or to meet specifications.
18. Apprentice training (electrical) and technical guidance to borehole generator operators on electrical aspects of water supply systems, dozers, generators, submersible pumps
19. Maintain up to date records of work done and prepare routine reports.
20. Develop weekly work plan and prepare weekly or monthly activity reports.
21. Work closely with beneficiaries to ensure ownership through training, guidance, and support.
22. Perform any other duties assigned by the line manager.



KEY PERFORMANCE INDICATORS

- Develop weekly or bimonthly work plan with Consultation with line manager.
- % of key WASH activities completed as planned target that includes water systems maintenance, generators, solar pumping systems. etc
- % of capacity building conducted to the WASH team staff (volunteers and national) on basic operation and maintenance of water supply systems, generators, and solar and other training needs.
- # of internal reports shared and submitted on time on weekly or monthly basis on solar and generators systems
- # of project documentation on activities (best practices and lessons learnt) developed and shared
- # of key follow ups conducted on WASH issues and sharing feedback on Complaints received

Professional Qualifications

- Higher national diploma or Ordinary diploma in Electrical Engineering with focus on SOLAR systems Installations or related field from a reputable institution.
- Competent servicing, maintenance, and repair of in fluid power engines, AC/DC circuits, and electro-mechanical devices.
- Experience in the installation of SOLAR water pumping systems
- Proficient in the use of multimeters, megohmmeters, and other basic power instruments.
- Minimum of 4 years working in a busy set up with proven experience in undertaking installation and maintenance of SOLAR systems, diesel run generators, submersible pumps, booster pumps (electrical aspect). Some of which should be in emergency setting.
- Extensive experience in borehole equipping, retrieval and installation of submersible pumps, knowledge in borehole drilling/development is an added advantage.
- Experience of working with INGO in a similar capacity will be an added advantage.
- Experience in capacity building and training of staff and target groups
- Demonstrated experience of integrating gender and diversity issues into WASH Programming.
- Perfect verbal and /or written communication in English and Arabic
- Demonstrated strong analytical, managerial, leadership, communications, and interpersonal skills.
- Ability to work well and Under pressure.
- Willingness to take up a position post and reside in a fragile context.
- Ability to work independently and as part of a team, with strong interpersonal and communication skills is required.
- Ability to work with Microsoft Word, Excel, Power Point and Outlook.



How to Apply

- To apply, please submit a copy of your resume/CV clearly detailing all prior experience in the position advertised, roles and responsibilities for the position, and your personal outcome/achievements while in each position. This should be written in English, and may be typed or handwritten.
- Please submit a cover page detailing your name, nationality, gender, level of education, location of residence, availability, and why you are interested in this position.
- Submit the above two documents to the Acted Maban Office (Doro), Juma.John@acted.org, Or Acted Country Office (Juba) at Hai-Cinema Behind Concord Hotel or via email to ssd.recruitment@acted.org, no later than **14th July 2023**. Please write the recruitment reference on any documents.
- A detailed review of all applications will be conducted. Those who are requested, will be contacted for a technical test. Those who pass the technical test will be called back for an oral interview.

