



**REGIONAL ELECTRICITY ACCESS AND
BATTERY ENERGY STORAGE TECHNOLOGY PROJECT
(BEST) - P167569
REQUEST FOR EXPRESSIONS OF INTEREST
(CONSULTING SERVICES – INDIVIDUAL CONSULTANT SELECTION)**

**Recruitment of a Power Engineer, specialist in Battery Energy Storage
Technology, to support the RCU during the project implementation
NG-ECOWAS-DEM-413891-CS-INDV**

Closing Date: 10th May 2024 at 5:00 pm GMT

Contract: Time Based

Position: Power Engineer, Specialist in Battery Energy Storage Technology

E-mail for submission: ecowas-reap@ecowas.int; and copy to lkouassi@ecowas.int,
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1. BACKGROUND

In order to improve the population access to electricity, ECOWAS is working for the establishment of a regional electricity market through the development of power generation and transmission infrastructure, and it is intensifying initiatives related to the access to electricity. Thus, ECOWAS initiated, with the support of World Bank, the Regional Electricity Access Project (REAP) to be implemented in the form of a series of projects to gradually cover 11 countries including 9 of the ECOWAS.

Phase 1 of the REAP, entitled ECOWAS-REAP, covers The Gambia, Guinea Bissau and Mali. The objective is to allow 2.04 million people to benefit from electricity services. The funding is 225 million USD. Components of ECOWAS-REAP are (i) Design, supply and installation of the electricity distribution infrastructures, (ii) supervision of the construction and technical advisory and (iii) project coordination and technical assistance. A Project Implementation Unit (PIU) was created in each country involved. Also, a Regional Coordination Unit (RCU) was created within ECOWAS Directorate of Energy and Mines.

Then, Phase 2 of the REAP, entitled Regional Electricity Access and Battery Energy Storage Technology Project (BEST) started preparation in 2022. It covers Mauritania, Niger, and Senegal for the “Access” component and Côte d’Ivoire, Mali, and Niger for the “Battery” component. The objective is to increase people’s access to electricity and to contribute to stability and better energy flow in the WAPP transmission system. The funding is 465 million USD. The components of BEST project are: (i) Design, supply and installation of electricity distribution infrastructure, (ii) design, supply and installation of BEST equipment, (iii) supervision of the construction and technical advisory, and (iv) project coordination and technical assistance. National Project Implementation Units (PIU) have also been created in each country involved.

Among the experts of the RCU are Power Engineers, to provide some services and work closely with other engineers in the Owners' Engineer team and in the national Project Implementation Units (PIU), then report to the RCU Coordinator. The RCU set up for ECOWAS-REAP was also entrusted to coordinate the BEST project, and it has become imperative to reinforce the RCU's ability to effectively support the countries having the battery component to have the required knowledge of the battery energy storage technology. In line with the above, ECOWAS Commission, under the World Bank's project funding, plans to recruit a **Power Engineer for Battery (BEST Project)** to expand the Regional Coordination Unit (RCU)'s team.

2. SCOPE OF WORKS

The Power Engineer for Battery will be responsible to contribute to project technical preparation and project implementation and ensure project technical supervision and monitoring of the construction works, as well as to ensure knowledge transfer of the relatively new technology to the countries. Activities to be performed by him/her include but are not limited to the following:

- (1) Provide engineering support to the national PIUs (Mali, Niger and Cote d'Ivoire) and the RCU teams as the key expert on battery energy storage technology in relation to the ongoing BEST project;
- (2) Contribute to the drafting and/or the review of all technical documents, including electrical designs, technical specifications, fire and explosion risk assessments, pre-fire plans, technical reports and proposals submitting by contractors' firms related to battery energy storage technology;
- (3) build capacity of the countries, including with respect to trainings on battery.

Assist in the preparation of next phases of the regional projects having a battery component in coordination with the Senior Power Engineer for preparation, particularly in aspects related to the engineering design technology selection, sizing, and system integration, for the future projects

- (4) of battery storage system(s), equipment specifications, protection and control, and other technical aspects under the general management of the RCU Coordinator;
- (5) Contribute in the preparation of tender documents for the ongoing and future projects and ensure that they include all technical requirements and applicable international standards;
- (6) Participate in the technical bidding evaluation process and support tender evaluation process, bidding report and contracts preparation;
- (7) Attend Factory Acceptance Tests, and inspect the quality, and quantity of BESS equipment;
- (i) Supervise the installation of BESS equipment's and infrastructure to ensure their conformity with approved design and drawing;
 - (8) Undertake site inspections and supervise commissioning of BESS equipment and infrastructure in coordination with the Owners Engineer;
 - (9) Provide engineering support to the Power Engineers for Battery of the national PIUs of beneficiary countries in their collaboration with the Owners Engineer and in particular, review the reporting of the Owners Engineer, check and review the invoices of Owners Engineers and contractors;
 - (10) Follow up on correspondences between the Owners' Engineer, Contractors, national PIUs and the other stakeholders;
 - (11) Monitor the implementation of the project schedule to ensure adherence with the project timeline;
 - (12) Monitor the implementation of the Quality Management Plan set up by contractors and safety arrangements during works (Personal protective equipment, Staff certifications to handle specific electricity-related tasks, etc.);

- (13) Collect all relevant information on the construction, anticipate and identify problems and risks arising and recommend necessary actions to the RCU and project financiers;
- (14) Assess and advise on all proposed technical variations and report on justification or otherwise of claims;
- (15) Contribute in the elaboration of annual work plans, annual budgets, as well as the quarterly, biannual, and annual reports of the project;
- (16) Assist the RCU Coordinator in supervising the Owners Engineers and contractors' performance in handling technical issues, then provide corrective instructions as needed;
- (17) Assist and advise the RCU Coordinator;
- (18) Respond effectively to any other tasks assigned by the RCU Coordinator and undertake any other activities related to WB funded regional project(s), as instructed by ECOWAS Director of Energy and Mines.

3. QUALIFICATION REQUIREMENTS

Qualifications and skills

- (ii) Must hold at least a Master's Degree in Power/Electrical Engineering, Electromechanical Engineering, Electrochemistry, Energy system or equivalent;
- (iii) Good skills in information technology and communication tools;
- (iv) Experienced computer user, including excellent knowledge of Microsoft Office suite;
- (v) Excellent written presentation and reporting skills.

General experience

- (vi) Significant exposure to the electricity sector with a minimum of 5 years professional experience in power systems, including performing electrical designs of integrated BESS, or supervision of installation of battery technology or BESS management.

Specific experience

Have been involved at least in one (1) engineering project on battery energy storage technology.
Must have experience in BESS

4. LANGUAGE REQUIREMENT

Candidates must speak and write French and must have working ability to write and speak in English.

5. CONTRACT

Time based contract applies for this position. The payment will be done accordingly. This position is subjected to the competitive remuneration.

6. DURATION

One (01) year period extensible based on satisfactory performance, including a probation period of three (03) months.

7. SUBMISSION OF APPLICATION

- a. The application document should be composed of: **Update CV, cover letter and supporting documents all scanned in one single pdf attached file.**
- b. Further information can be obtained only by email at the following address: ecowas-reap@ecowas.int with copy to kouassi@ecowas.int et banwone@ecowas.int,

These addresses are for request of further information. The submission of application shall be made through the email address provided for the REOI in the following paragraph “7.c”.

- c. Expressions of interest must be delivered latest by **10th May 2024 at 5:00 pm GMT** at to the address: ecowas-reap@ecowas.int with copy to kouassi@ecowas.int, banwone@ecowas.int, akoumoin@ecowas.int . Any other delivery will not be considered.