

Rural and Renewable Energy Agency

Securing modern energy access for all Liberians



REQUEST FOR EXPRESSIONS OF INTEREST Operation, Maintenance and Customer Management of Lofa County Hybrid Mini Grid

Reference No: RREA/LIRENAP/O&M-01

Issue Date: February 19, 2025

Initial closing Date: March 10, 2025

Extended Date: July 17, 2025

Revised Closing Date: August 14, 2025

A. Background

The Government of Liberia has received financing from the World Bank toward the cost of the Liberia Renewable Energy Access Project (LIRENAP). The project is being implemented by the Rural and Renewable Energy Agency of Liberia (RREA), an autonomous agency of the Government of Liberia with mandate to secure modern energy access for all in Liberia. For details on the RREA, please check https://rrealiberia.org/new/.

A component of LIRENAP appertains to decentralized electrification in Lofa County, Liberia, which mainly involves the construction of the Solar Power Plant mini-grid with the following characteristics: (i) 5.0 MW solar PV plant with a 7.0 MWh lithium-ion battery energy storage system (BESS), (ii) a 1.8 MW back-up diesel power plant; (iii) 135 km of 33 kV distribution lines; (iv) 235 km of low voltage distribution lines; (v) at least 10,317 service connections to provide access to electricity for about 50,000 people, including small businesses, associations, and public institutions in Lofa County, Republic of Liberia.

B. Objective(s) of the Assignment

The overall objective of this assignment is to operate and maintain the Lofa County hybrid minigrid and its infrastructure for a period of 10 years with possible extension of up to 20 years, ensuring high-quality service with a minimum of 16 hours/day of operation for the first 18 months and 24 hours/day thereafter, maintaining an average service availability index (ASAI) of over 95%. At the end of the contract, the firm will transfer assets back to RREA. Additional duties include paying government fees through an affermarge arrangement, managing repairs and replacements, and fulfilling obligations outlined in Liberia's utility regulations and mini-grid codes.

C. Description of General Requirements

The private firm's responsibilities will include but not be limited to the following:

- Obtain required operation licenses from Liberia Electricity Regulatory Commission pursuant to the Electricity Mini-grid Code of Liberia (access here: <u>Liberia Electricity Regulatory Commission | LERC</u>)
- Safeguard the T&D network and diesel power plant until commissioning of the Solar PV +BESS after which commercial operation starts
- Operate and maintain the mini-grid and its associated infrastructure
- Carry out repairs, major rehabilitations, replacement of parts for all assets in line with an approved business plan
- Carry out studies to justify the necessity of expansion, renewal and extension of generation and distribution assets,
- Commercially operate the mini-grid including the exclusive right to charge, collect revenues from customers and cover the cost for major rehabilitations and replacement of assets in line with an approved business plan,
- Develop and implement an Operational Environmental and Social Management Plan (O-ESMP) to ensure compliance with environmental, health, safety, and social safeguard measures throughout the operation and maintenance of the mini-grid as the World Bank Standard.
- Pay to relevant government institutions required fees, levies, and taxes as per law,
- Mobilize financing (equity or debts) for working capital,
- Transfer all mini grid assets back to RREA at the end of the O&M period.

D. Submission of Expressions of Interest

The RREA now invites qualified firms ("Operator") to indicate their interest in providing the Services. Interested Firms should provide information and documentary evidence to demonstrate that they have the required qualifications and relevant experience to perform the Services. The shortlisting requirements are:

1. Core line of business and years in business:

• The firm shall be registered/ incorporated as a firm with core business in the field of the assignment.

2. Qualification and Experience of the Firm:

• Firm shall have a minimum of 10 years of operational and maintenance experience as either the sole operator or a primary consortium partner for at least three hybrid mini-grids. These mini-grids should include solar systems, with a total capacity of at least 2.0 MW, and/or serving a minimum of 6,000 active clients.

• Proven ability to operate and maintain hybrid systems that combine solar, battery, and diesel technologies. The firm should demonstrate experience of working within Sub-Saharan Africa, in particular in rural areas, A demonstration of the successful completion of at least two similar assignments in the region will be an added advantage

3. Technical and managerial capability of the firm:

- Operational and Technical Proficiency:
 - i. Extensive experience in Power Quality and Load Management for mini-grids.
 - ii. Demonstrate proficiency in providing O&M services, including predictive maintenance, customer service, and connection expansion for mini-grid systems, ensuring client satisfaction and efficient system utilization
- Demonstrate ability to address and manage power theft and commercial losses effectively, minimizing losses and ensuring sustainability
- Demonstrate ability to expand household connections through innovative approaches
- Demonstrate experience in leveraging finance for replication or expansion of the renewable energy mini grids

4. Institutional and Managerial Strength:

- The firm should demonstrate that they have a reputation for excellence, supported by a strong institutional capacity, technical expertise, and a robust managerial framework.
- Evidence of a high-quality management system, supported by a team of competent technical staff.

5. Financial Capability:

- Demonstrate financial capacity to manage the projected expenditures prior to collection of adequate revenues (estimated to be at least **US\$ 1 million**).
- Experience in investing in mini grids in developing countries, particularly in contexts where financial and technical challenges are prevalent.

6. Environmental and Social Requirements:

- Interested firms must demonstrate their experience in integrating environmental and social sustainability into mini-grid operations by providing for each of their reference projects information on:
 - i. Compliance with environmental, social and safety regulations;
 - Engagement with stakeholders, mitigation of social impact, design and implementation of community benefit programs and handling of complaints;
 - iii. Organization of waste management, in particular of lithium-ion and diesel residues
 - iv. Management of occupational health and safety;
 - v. Gender and social inclusion; and
 - vi. Integration of climate resilient measures in mini grid operation.
- E. To demonstrate their qualifications and experience in meeting the above shortlisting/selection criteria, Consultants are requested to submit, as a minimum, the supporting documentation and meet requirements listed below.

- 1. A company profile (or link to website), including core areas of business.
- 2. Company information: name, status, address, telephone number, facsimile number, year of establishment, contact person for the Project) number of permanent staff and partners, fields of expertise.
- 3. Evidence of how the applicant meets the criteria in section C above including provision of details of most relevant projects undertaken for the specified years, including value of previous services, location, number of staff involved in the contract, name of the Client, name of partners for contract execution and share of services, contract commencement and completion dates, a brief description of the contract.
- 4. Audited financial statements for the past 3 years.
- 5. A firm can only use its own qualifications and experience and not of its parent, sister, or subsidiary companies or its employees. The firm's incorporation/trade/registration documents are issued by the concerned government authority of the country of the firm.
- 6. The firm must not exceed 7 MB in submitting to expression of interests

RREA reserves the right to request the firm for verification of any submitted document/information.

Key Experts will not be evaluated at the shortlisting stage.

F. Invitation

The RREA now invites eligible Firms with required technical and financial capacities to indicate their interest in providing the Services. Interested Firms must provide information indicating that

An Operator will be selected using the Least Cost Selection (LCS) method based on the World Bank' Procurement Regulations, Revised in February 2025.

Further information and the detailed Terms of Reference (TOR) for the assignment can be obtained electronically at the following email addresses and Website, from Mondays to Fridays, from 0900 to 1600 hours GMT:

Email:

<u>info@rrealiberia.org,augustinem@rrealiberia.org</u>,samueln@rrealiberia.org,dehkonteew@rrealiberia.org,tenniei@rrealiberia.org Website: <u>www.rrealiberia.org</u>

Expression of Interest clearly marked Services for the Operation, Maintenance and Customer Management of Lofa County Hybrid Mini Grid, must be delivered in a written form (in electronic/mail copy) to the address below, on or before 4:00 p.m. Local Time, on August 14, 2025.

Attn: Samuel Bocay Nagbe Jr.

Executive Director

Rural and Renewable Energy Agency

LEC Sub-station, Newport Street

1000 Monrovia 10, Liberia

Email: samuelnrrealiberia.org

Electronic submission should also be copied to the following addresses:

info@rrealiberia.org; stephenp@rrealiberia.org;

augustinem@rrealiberia.org,tenniej@rrealiberia.org,dehkonteew@rrealiberia.org

Only shortlisted firm will be issued the Request for Proposals.