



RURAL ELECTRIFICATION AGENCY

ENERGY = EMPOWERMENT = EFFICIENCY

NIGERIA ELECTRIFICATION PROJECT

TERMS OF REFERENCE

**FOR CONSULTANCY SERVICES FOR INDEPENDENT VERIFICATION AGENTS (IVAs) FOR THE MINI
GRID AND PRODUCTIVE USES COMPONENTS**

REF NO: REA-NEP/C/QCBS/02/2022

1. BACKGROUND

- 1.1. In support of the FGN's efforts to improving the country's power sector and in response to a request from the FGN, the Board of the African Development Bank (AfDB or the "Bank") approved a USD 200 million sovereign facility to support and finance the Nigeria Electrification Project (NEP). NEP will be implemented by the Rural Electrification Agency (REA or the "Implementing Agency") an Agency saddled with the responsibility of rural electrification. REA has developed the Off-Grid Electrification Strategy, which aims to provide access to clean and sustainable electricity to millions of Nigerians.
- 1.2. The proceeds of the AfDB's financing for NEP will be applied across the following four components (the "Project"): (i) **Component 1**: a minimum subsidy tender program awarding subsidies to private sector developers to catalyze the rollout of solar and/or hybrid mini-grid solutions across up to 300 sites split into 9 lots;(ii) **Component 2**: a result-based grant incentivizing solar home system installation companies and mini-grid developers to incorporate the distribution and sale of energy efficient productive use appliances in their regular line of activities; **Component 3**: phase 3 of the Energizing Education Program (EEP), a government-led initiative that aims to install dedicated power systems for eight federal universities; and **Component 4**: technical assistance and capacity building for a wide range of public and private sector stakeholders in the country's off-grid sector.
- 1.3. REA's Off Grid Electrification Strategy has a range of objectives focused on providing off grid rural communities access to clean and sustainable electricity. The relevant objectives for the purpose of this Terms of Reference (TOR) are as follows:
 - 1.3.1. To utilize the funding from the Nigerian Electrification Project (NEP) as a catalyst to scale up rapid implementation of off grid electrification across Nigeria and attract investment;
 - 1.3.2. To promote the use of decentralized, multi-demographic approach to power infrastructure delivery;
 - 1.3.3. To develop 10,000 mini grids by 2023 which will provide power to 14% of the population.
- 1.4. Specifically, within the support for mini grids, \$70 million is allocated for a minimum subsidy tender involving competitive bidding for 300 pre-selected mini grid sites clustered into 9 lots. Bidders are expected to compete on the basis of lowest subsidy requirement to build, own and operate a portfolio of

mini grids. Detailed economic and geospatial data will be made available to developers, along with standardized designs, incorporating solar PV and diesel generators, as well as smart meters using a prepaid system.

- 1.5. A further \$20 million is made available for a results-based grant to incentivize mini grid developers to include the distribution and sale of energy efficient productive use appliances in their electrification operations. The component serves to increase the productive use of power and activate the appliance market and make mini-grids more sustainable. This will encourage developers to make productive use appliances a part of their overall strategy for mini grid viability.
- 1.6. REA has done and is doing a significant amount of preparation work for the target communities where mini grids will be rolled out. Most importantly, this includes detailed energy audits in selected villages to understand energy consumption behavior within the communities. Significant work has also been carried out on the mini grid regulations, which are widely regarded as positive for encouraging the development of mini grids in the country.

2. OBJECTIVE OF THE ASSIGNMENT

- 2.1. The overall objective of this assignment is to support the verification processes prior to disbursement of grants under Components 1 and 2.
- 2.2. There will be two independent verification agents. One IVA will cover the northern part of the country (North East, North West, North Central), while the other IVA will cover the southern part (South East, South West, South South)
- 2.3. The assignment entails the verification of customer connections and satisfactory electricity service as required for the mini grid program under Component 1 (minimum subsidy tender) and more specifically provided in the Grant Agreement to be entered into with beneficiaries.

The IVA will also establish the validity and correctness of the subsidy claims submitted by grant beneficiaries under Component 2 by authenticating that the energy efficient appliances and equipment are supplied, metered and are in use by the specified end-users.; and other details more specifically provided in the Grant Agreement to be entered into with beneficiaries.

2.4. SCOPE OF WORK

- 2.5. The following escalating, risk-based verification is suggested as a starting point for the IVA. However, the IVA should specify the recommended method of auditing, based on best practices, which also balances costs with accuracy and reliability.

Audit Level	Name	When to apply
Audit Level 1	Telephone sample	Combination of verification of online status of systems in GSM networks [linked Application Programming Interface (API)] followed by phone survey for verifying sales details.
Audit Level 2	Field sample	This will be undertaken to verify the Audit Level 1.
Audit Level 3	Full grantee and customer audit	If there is evidence of, or concern about record keeping or a significant lack of integrity in the claims data of a grantee.

2.6. The IVA will develop an appropriate phone verification strategy using justifiable sampling methods based on the submitted grantee claims under Components 1 and 2.

2.7. The IVA will report on the verification outcomes based on agreed upon template with the REA/PMU.

2.7.1. Field verification

2.7.1.1. Upon completion of the phone verification process, the IVA will proceed to undertake field verification. The specific locations to be visited will be based on:

- An appropriate sampling process for field verification.
- Specifically identified users highlighted for follow-up during phone verification.

2.7.1.2. The IVA will carry out a field visit to the end-users/customers and do interviews with them to verify on the spot if the end-users/customers have reliable access to energy for the energy efficient productive use appliances or equipment supplied.

- The interviews will be carried out in a language well understood by the end-user; and
- Collect answers to a set of pre-defined questions to include those from the above phone verification.

2.7.1.3. The IVA will be required to provide GIS co-ordinates of the visited MSMEs and households. GPS camera with date and time-stamp, GPS coordinates, and address of the location will be used to obtain aforementioned data.

2.7.1.4. Provide photographic evidence of end-users/customers and their appliances or equipment.

2.7.1.5. End-user/Customers who are not metered and those who are outside of the GSM network present an added risk due to the inability for remote monitoring or verification. Hence, to the extent that sales to these customers form part of the claim, the IVA should conduct on-site physical verification of the customers with relevant documentation as in 2.7.1.3.

2.7.2. Full Audit

2.7.2.1. If irregularities are present during the verification process of the two key methods above and the grantee fails the systems audit, the IVA will proceed to conduct a full audit.

2.7.2.2. This would entail checking the grantees management and record collecting systems to determine whether there has been an error in recordkeeping or whether fraudulent activities may be taking place.

2.7.3. Reporting, mediation, proposed adjustments. The IVA will:

2.7.3.1. document the findings and make recommendations related to both the phone and field verification processes.

2.7.3.2. present the findings and recommendations of the verification exercise to the REA PMU after concluding the verification exercise;

2.7.3.3. submit, in the reports, pictures of end-users/customers and their appliances or equipment taken during the Field Verification stage (if applicable);

2.7.3.4. propose adjustments to the incentive claims based on verification findings. This includes increasing, decreasing or removing altogether specific claim items or categories of claim items. The IVA will thus be responsible to report errors or omissions in the claims and provide recommendations on how to deal with them. The recommendations of the IVA on the claims are not

binding on the PMU but will be important in assisting them make informed decisions;

2.7.3.5.propose the percentages for thresholds for deferring/suspending a claim, based on the risk review, and taking into consideration progress made in the activities;

2.7.3.6.provide an assessment of the likelihood of fraud which may require further investigations;

2.7.3.7.work closely with Odyssey Energy Solutions to integrate monitoring and verification processes into the online platform.

3. Summary of key deliverables

3.1.The IVA will submit a verification approach inception report to the PMU, which will cover:

3.1.1.Sampling size and spot checks to be done through remote verification (monitoring of live systems, phone calls, etc.)

3.1.2. Phone and field questionnaires for the grantee's claimed customers

3.1.3.The questionnaires and reporting format will be reviewed and jointly pre-agreed with the PMU, before implementation.

3.1.4.Verification completion labelling and progress tracking to be done through the online platform Odyssey Energy customized site

3.1.5.Quarterly reporting to the PMU on the total number of claims and verifications completed for each claim

4. **QUALIFICATION AND EXPERIENCE OF FIRM**

The consultancy firm with the following qualifications is invited to participate in the independent verification agent's assignment.

4.1.The IVA will be a top tier consulting or audit firm with a minimum of five (5) years operational existence as an organization, and must show evidence of having supervised the construction of energy projects or conducted technical audit of energy projects.

4.2.The firm must have a Minimum of two (2) similar assignments in the last five (5) years

4.3.The IVA must have the capacity to verify transactions, with:

- Demonstrated experience in verification exercises, socio-economic studies and field or on-site studies
- Proof of accounting, audit and finance background will be essential

- Experience in organizational and project assessments including systems review
 - Past roles in project transaction verification will be an advantage
- 4.4. The IVA shall demonstrate that it has the ability to deploy resource persons in multiple rural locations if and when necessary. Those resource persons must be fluent in local language and English.
- 4.5. The IVA must have experience with rural economies through past assignments. Familiarity with rural energy interventions will be advantageous including engagement with energy access companies and productive use appliance and equipment or service providers
- 4.6. Excellence in computer skills is mandatory for all proposed staff.
- 4.7. Ability to deploy a robust data collection and management system with capacity to track GIS coordinates for the field visits evidence of similar deployment in the past will be essential
- 4.8. The Consultant shall provide the following experienced personnel to carry out the assignment with the following minimum qualifications:
- 4.8.1. *Coordinator*: The Coordinator should have at least a higher education degree in Accounting and Auditing, eight (8) years of experience and be able to show leadership skills for backing the team and reporting clearly on the outcomes for the contracted period.
- 4.8.2. *Senior Auditors*: Two Senior Auditors will be required. One auditor with at least a degree in Auditing or Accounting and the other with at least a degree in engineering or energy management. Both will possess at least five (5) years of experience in similar activities. The Auditors will primarily use desk/remote verification methods using the submitted claims on the online platform and the systems' live status (where applicable). They will liaise and work with the field resource team as applicable.
- 4.8.3. *Field verification specialists*: Four specialists with at least a BSC in Engineering or related subject with 3 (three years) experience on development of mini grids. The team will need to demonstrate clear capacity for managing risk in the field related aspects especially on integrity and plan for preventing collusion possibilities.

5. REPORTING SCHEDULE

The Firm shall report to the Head, Project Management Unit NEP, through a designated Task Manager/Co-ordinator. The PMU shall be conducting periodic quality and performance review of the IVA processes, operations and outputs.

6. **DURATION OF ASSIGNMENT:** The initial phase of the assignment is 24 months with the possibility of extension upon satisfactory performance.

7. **REMUNERATION AND PAYMENT**

7.1. Terms of Payment for Consulting Services

Payments to the Consultant shall be made based on the time inputs of the staff and the actual expenditures incurred (evidenced with appropriate receipts) under the reimbursable component of the contract, as well as submission of the reports listed in paragraph 3 and 4 in a manner acceptable to the Client.

- 7.2. Reports of each deliverable will be submitted as follows: One Electronic copy and three hard copies.

8. **FACILITIES TO BE PROVIDED BY THE CLIENT**

REA will provide the Consultant with the relevant documents and information (as may be applicable) to enable the consultant to perform the assignment.

9. **SELECTION METHOD**

The Consultant will be selected in accordance with the QCBS Method set out in the AFDB procurement framework for group funded operations, October 2015. www.afdb.org.

10. **TRANSFER OF KNOWLEDGE**

The Consultant shall work closely with selected members of the Rural Electrification Agency (REA) and relevant staff of the Project Management Unit (PMU). The Consultant shall have an obligation to transfer knowledge and skills that are used during the course of the Project.

11. **COPYRIGHT AND OWNERSHIP**

All raw and finished materials shall be owned by the REA. The Consultant shall maintain confidentiality of all information received from the REA and other sources concerning all data and insights obtained during the course of the Project.