



**RURAL ELECTRIFICATION AGENCY**  
ENERGY = EMPOWERMENT = EFFICIENCY  
**NIGERIA ELECTRIFICATION PROJECT (NEP)**



**THE WORLD BANK**

---

**TERMS OF REFERENCE**

**For**

**Consultancy Services for Supervision of the Development of Solar Power  
Supply to 100 Isolation and Treatment Centers under the COVID-19  
Intervention Program**

**REA-NEP/C/CQS/104/20**

**November 2020**

## **TERMS OF REFERENCE**

### **1. Background**

The recent outbreak of the COVID19 pandemic across the globe presents unique and severe challenges to health care systems. As it is presently an exponentially increasing pandemic, time is severely limited before many are infected and healthcare facilities become overrun with patients. In addition, it is reported to be highly contagious, with each infected person estimated to infect around 3 other people, and asymptomatic people being able to infect others. Global statistics show that approximately 20 percent of people infected with the virus are likely to require medical care (to receive oxygen and other treatments to mitigate symptoms), and 20 percent of these patients are expected to require intensive care, typically mechanically assisted breathing. Patients who require medical intervention typically remain in the hospital or clinic for around 2 weeks.

By early April 2020, the confirmed number of COVID-19 positive cases in Nigeria reached 288, with the number of unconfirmed cases estimated to be significantly higher given the likely number of asymptomatic cases and the challenges with rapidly mobilizing testing.

In response to the crisis, the Government of Nigeria has been urgently mobilizing its health facilities and other relevant agencies in order to deliver the critically needed medical services. Based on the current rate of electricity supply and reliability across the country, it is emerging that an essential need for the facilities at the front lines of the virus response is a reliable electricity supply to guarantee 24/7 power availability – including in facilities currently connected to the main grid but receiving unreliable power.

In order to meet this urgent need for reliable electricity, the Nigerian Rural Electrification Agency (REA), with support from the World Bank, is working to redirect existing funds it has available under the ongoing Nigeria Electrification Project (NEP) in order to rapidly deploy electric power systems to priority facilities across the country, under a newly launched Energizing Healthcare initiative. At the same time, the REA aims to ensure that the systems that are deployed as part of this emergency effort are designed, installed and operated in a way that can both ensure their effectiveness for the immediate crisis response need and allow for their later transformation into a portion or all of the long-term electricity supply to the nearby communities.

To this end, the REA is seeking to hire the services of eligible consultant to provide supervision support in ensuring the effectiveness and technical, operational and financial sustainability of the deployed solutions beyond the conclusion of the immediate construction phase (for a minimum post-commissioning period of 15-20 (fifteen to twenty) years).

### **2. Description of Project**

In response to the urgent COVID-19 crisis, the Nigerian REA is seeking to rapidly deploy electric power systems to key health facilities across the nation to provide them

with reliable 24/7 electricity, under a new Energizing Healthcare initiative. As part of this effort, the REA is seeking to redirect some of the financing it has received from the World Bank under the Nigeria Electrification Project (NEP) toward engaging qualified service providers to promptly install and operate such systems at scale across facilities targeted for urgent intervention (as detailed in Table 1). Specifically, the REA is aiming to mobilize approximately US\$7 – 8 million to provide electric power systems to an estimated 500 institutions across Nigeria.

**Table 1. Types of facilities targeted for urgent intervention**

Facility	Power Supply
<p><b>Type 1 Facility: Hospitals</b></p> <p>It is expected that hospitals (especially larger ones with at least 200 beds) in urban areas will be designated to treat COVID19 patients. In many cases these will have electricity supplies from the national grid and already have diesel backup generators.</p>	<p>On-grid, but often with intermittent supply</p>
<p><b>Type 2 Facility: Rural Clinics, Primary Health Centers, Small Rural Hospitals</b></p> <p>These facilities should be included in the emergency response where possible. They are on the frontline of the fight against the pandemic as they are often the only place that sick patients can access in rural areas. They are likely to provide palliative care, and possibly serve as referral clinics for more severe cases. Moreover, these clinics and health centers will gain more prominence if the pandemic spreads to rural communities; hence it is essential that they are well-equipped.</p>	<p>Off-grid or on-grid with unreliable supply</p>
<p><b>Type 3 Facility: Temporary Emergency COVID19 Facilities – Isolation wards, field hospitals</b></p> <p>Experience from other countries fighting the COVID19 epidemic indicates that temporary emergency facilities for processing and treating COVID19 patients will be needed. These will serve as isolation wards for suspected cases and for confirmed cases, with facilities for treatment of acute cases. These will often be built adjacent to existing hospitals, with screening facilities to separate COVID-suspected patients from non-COVID cases.</p>	<p>Newly built facilities linked to existing facilities that are either off-grid or on-grid with unreliable supply</p>

<p><b>Type 4 Facility: Non-clinic Facilities – testing labs, cold chain, and others</b></p> <p>While not directly treating COVID19 patients, these facilities are critical to the country's response to the epidemic and include laboratories performing COVID19 testing, cooled warehouses and storage facilities for drugs and any eventual vaccine government buildings coordinating COVID-19 response including those outside the capital coordinating sub-nationally, and factories producing personal protective equipment such as face masks.</p>	<p>Off-grid or on-grid with unreliable supply</p>
--	---

While the electricity supply solutions are needed urgently, and are expected to be deployed within weeks, rather than months, they will need to carefully consider resilience to supply disruption risks and impacts on operating budgets of the facilities at which they'll be installed. Diesel supply is at an increased risk during an epidemic, and diesel costs can be up to 20% of a health facility's operating budget. In addition, whatever systems are installed are likely to remain at the facility after the crisis, which makes it essential to design systems for longer-term use.

As a result, an optimal solution for many facilities targeted for urgent intervention will be to:

1. Rapidly procure solar-diesel hybrid systems with battery storage, with the diesel generator portion of the system installed first, if necessary, to take up urgent load. The solar + storage components can be installed in subsequent days or weeks. This provides urgent electricity to the clinic in the short term, while removing the medium- and long-term fuel supply risk from the clinic's healthcare delivery supply chain.
2. Installed as part of an optimized solar electric system, the diesel generator serves an emergency need and is also a building block in a system that provides 24/7 electricity at the lowest cost.
3. This integrated solar-diesel hybrid system can then form the backbone for a community mini grid when the COVID19 crisis is over.

Given the urgent nature of the crisis, the overall process of mobilizing the qualified service providers by the REA is not expected to be sequential, as would be the case for project implementation under normal circumstances, but instead comprised of multiple activities happening in parallel.

As such, the following preparation, procurement steps are likely to happen in parallel and iteratively:

- Development and continuous update of a prioritized list of sites

- Identification of component suppliers and containerized systems installers and their respective inventories (including both diesel generator components, as well as solar + storage components) and delivery times
- Implementation of priority electrical load assessments for facilities
- Preparation of bid documents for containerized systems, individual components, and installation/O&M
- Rolling, direct procurement of containerized systems and components
- Matching of systems with facilities based on technical and geographic fit and urgency

Following these steps, the installation, maintenance, operation and handover steps are expected to take place as follows:

**I. Installation of systems and verification of service quality and reliability of supply:**

- Installation of the systems is expected to begin as soon as a match has been made between a facility and either a containerized system or an installer + components.
- Contracts with implementing firms will specify, among other terms and conditions, the time limit for completing installation and both procedures and standards to ensure safety and functionality.
- Verification of proper installation should be conducted in-person but can be done remotely if in-person verification is not possible at the time of verification, with in-person verification occurring as soon as possible thereafter. Deployment of the systems will be tracked through the Odyssey online platform.
- Where technically feasible (e.g. at least 2G GSM signal available), the systems' remote monitoring functionality may be linked directly with Odyssey so that system functioning can be verified and tracked, which will allow the REA to track which facilities have received systems, and the operational status and performance of the systems.

-

**II. Operation and maintenance by system installer:**

- The initial O&M period for the systems is expected to commence on the date of commissioning and end 3 months after the date of commissioning or until a long-term operator is identified and fully contracted, once the 3 months period has fully elapsed.
- In some cases, there may be a firm conducting the installation and another firm responsible for O&M during the initial O&M period.
- The installer, or in certain cases, the contracted service provider to the installer, will be expected to:

- Ensure proper functioning of the system for the full duration of the initial O&M period, as defined above
- Provide on-site, hands-on training to dedicated staff in the IT
- Provide an operations and maintenance manual
- Conduct regular site visits to carry out routine maintenance
- Provide continuous remote monitoring of the entire system
- Respond to faults within a time limit defined in the contract
- Remain available for remote troubleshooting support
- Update the system software and interface when needed
- Keep records and activity logs
- 

### **III. Handover to a long-term operator/mini grid:**

- At the conclusion of the initial O&M period, the installer, or the installer's contracted service provider will be expected to:
    - o Hand over the system to the long-term owner/operator in good working order
    - o Provide training on system operations and maintenance
    - o Participate in inspections of the works
  - The installer, or in some cases the installer's contracted service provider, will be expected to remain available remotely to answer questions and support the owner-operator during a two-month transition period that will begin on the last day of the initial O&M period
  - For most sites, the facility's electricity system is likely to become the basis for the generation system of a mini grid that will serve the surrounding community. In these cases, the installer or the installer's contracted service provider will be expected to cooperate with REA and the future mini grid operator in their preparations. This includes sharing detailed technical and energy demand data and facilitating site access to REA and mini grid developer employees.
1. In order to ensure the smooth, timely and effective implementation of these phases, and in particular the installation, maintenance, operation and handover stages, as well as, where applicable, help convert them into long-term mini grid operators, the REA is seeking the support of a qualified firm, or consortium of firms, to carry out the monitoring and supervision activities of the supply, installation and commissioning aspects of the project through an Owner's Engineering firm. The tasks of the Consultant sought after for this assignment specifically encompass the following activities:
- (i) Owner's Engineer functions
  - (ii) Field supervision
  - (iii) Environmental, Social and Gender based violence compliance oversight

- **3.0 Objective**

The objective of the consulting services shall be to ensure that the electric power systems deployed to key health facilities to provide them with reliable 24/7 electricity are implemented with a high standard of workmanship and quality; on schedule; within the budget; in accordance with the REA specifications, requirements and drawings provisioned in the Contract (to be signed between the REA and the selected service providers); to acceptable environmental and social standards and in accordance with the World Bank Safeguards Policies.

- **4.0 Scope of Work**

The objectives of the services will be achieved through the following major activities:

- **4.1 Owner's Engineer and field supervision**

- a. Provide Support in the development of implementation plan, Bid Technical Evaluation & Support during contract preparation and contract negotiations:**

- Provide expert inputs into the final designs on the basis of which tender documents have been prepared
- Provide a comprehensive review and expert inputs on the Execution Plan put together by the REA team; take ownership of its regular update as part of the monthly progress reporting under the overall Owner's Engineer activities
- Provide support in the review of bidders' equipment drawings as they are received to ensure that they meet the requirements and the specifications
- Support the REA in the drafting of Legal Agreements through helping define the roles and responsibilities of each stakeholder and providing support on the drafting of suitable agreements between them
- Put in place a Management Dashboard (potentially with the use of the Odyssey platform) that will enable the REA to carry out rapid status checks on the status of deployment, installation and O&M of the various systems at their respective sites

- b. Installation of Equipment, Construction and Civil Works:**

The Consultant shall perform the duties of the Engineer as defined in the Owner's Engineer's contract for the above works and specifically carry out the following duties:

- Review designs and drawings of the equipment, construction, schedules, layouts, as well as programs of works submitted by the service provider and approve or amend them as appropriate in consultation with the REA
- Review and confirm quality assurance program of the service provider
- Monitor and supervise on site testing of the all the major equipment to ensure that they meet the requirement and specifications under the contract in

consultation with the REA (and whenever feasible in the presence of the REA staff)

- The list of equipment to be inspected are as follows but not limited to:
  - a. PV modules & Module support structure (MMS)
  - b. Inverters (PV inverters & Battery Inverters).
  - c. Transformers & Generators (when included in the design)
  - d. Control Systems and Switch gears
  - e. Any diesel generation and fuel storage infrastructure associated with the system
- Supervise the installation of the electrical and mechanical equipment, construction and civil works in a satisfactory and safe manner in accordance with the specifications and contract requirements
- Review any changes to the service provider's Programs of Work during construction
- Approve all items of equipment, plant, materials, etc. to be incorporated in the civil works
- Check, set out, and provide base line surveys with benchmarks for the service provider to establish their survey control for construction.
- Monitor the delivery of equipment to ensure smooth and timely completion of the works
- Supervise the testing and commissioning of all equipment
- Hold regular meetings with the service providers to review project progress, technical issues, and measures to achieve the targeted cost, quality and schedule control.
- Manage safety, social, and environmental related issues during the construction in cooperation with the REA
- Conduct measurement and verification of work quantities and certification of the service provider's invoices for approval and recommend release of payments
- Issue stop orders of work with prior approval of the REA
- Perform tests on materials as and, when required, to ensure satisfactory suitability of materials for use in the works at the field laboratory established by the service provider
- Monitor service provider's progress of work
- Wherever applicable, support the REA in taking over the sites and prepare items of work to be completed by the service provider until the commissioning of the sites
- Prepare, process and issue variation orders if any
- In consultation with the REA, prescribe the format for payment certificates of the service provider
- Verify the amount of work done under each item of the Bills of Quantities or Bill of Engineering and Measurement (BEME) and check the service



provider's payment requests before submitting to the Employer for approval and release of payments

- Make recommendations to the REA regarding settlement of claims by the service provider
- Update the cost of contract works.
- Prepare items of work to be completed by the service provider during Maintenance/Defects Liability Period
- Assist the REA in commissioning the projects upon completion including supervision of resolution of possible defects found during acceptance tests
- Review & revise the detailed "O&M Manuals" prepared by the service providers for use by REA in the subsequent operation of the projects
- Prepare a "Completion Report" for the works under the contract, including a summary of final costs, and supply 3 copies of the same to the REA for future reference.

-

#### **4.2 Project Management:**

**Contract procedures:** Formulate and establish procedures for the proper management, administration and quality assurance of all contracts for the construction of the projects as well as the Consultant's own services, and shall carry out monitoring and control of these procedures

**Reports:** check and approve the following reports, which shall be in a format agreed with the REA and which shall be submitted in number of copies to be agreed with the REA:

- I. Monthly report, which will incorporate submission of the following documents:
  - a. Cumulative expenditure record and estimated cost at completion of each item
  - b. Claims received, under consideration and settled
- II. Quarterly project progress monitoring reports (summary reports on instrumentation monitoring or similar construction performance system) and quarterly financial monitoring reports
- III. Technical reports on instrumentation monitoring or similar construction performance
- IV. Completion Reports for all major structures or elements of the contract works, incorporating as-built records and drawings
- V. Any special reports as requested by the REA.

#### **c. 4.3 Program management:**

- Within 7 days of award of the Consulting contract, the Consultant shall prepare, and submit to the REA for consent, a detailed program of all of the activities related to the execution of the projects. The Consultant's program shall be based on the reviewed and accepted programs of the Civil and Electrical Works and shall include all activities that interface or otherwise relate to the work being done by the different sub-Contractors or other involved parties.

- Submission of program data shall include as a minimum:
  - Tabular listings giving:
    - ✓ Early starts and finishes of works
    - ✓ Late starts and finishes of works
    - ✓ Information on assumed shutdown periods; and
    - ✓ Vacation days, and other non-working time periods.
- When this program has been approved by the REA, it shall become the new baseline program for monitoring the execution of the Project (the progress monitoring with milestones) and shall not be modified or revised by the Consultant without the prior consent of the REA
- If an update of the project program is required, a revised program shall be prepared by the service provider and reviewed by the Consultant and resubmitted to the REA for its consent. When approved, this program will become the new baseline program for all future work.

#### **4.4 Project relations:**

The Consultant shall promote good project relations and in so doing shall monitor project labor relations, living conditions, health and safety programs, and community relations to identify potential problems and resolve them promptly. Problems that cannot be resolved promptly by the Consultant through the construction and equipment contracts shall be reported forthwith to the REA for action at the earliest possible.

#### **4.5 Commissioning of works:**

The Consultant shall be responsible for supervising the commissioning of all structures and systems on the project sites. The Consultant shall prepare commissioning procedures, involving the REA's operating staff, coordinate testing and commissioning programs. During construction, the Consultant shall make himself fully aware of the state of all structures and plant of the civil works, and ensure that the service provider or unauthorized personnel do not use or operate the structures and systems prior to or after commissioning except as authorized by the Consultant.

#### **4.6 Review of Operation and Maintenance manuals provided by the service provider:**

The Consultant shall review and finalize the detailed O&M manuals for the complete systems and all subsystems provided by the service providers under the construction and equipment contracts. The Consultant shall liaise with the REA and the service providers to ensure that uniform, complete, high quality O&M manuals are prepared for the sites.

#### **4.7 Additional Assistance to REA:**

As directed by the REA, the Consultant shall assist the REA in carrying out specific tasks directly or indirectly related to the Project, such as, but not necessarily limited to, the following:

- I. In the event that the Consultant is required to deal with any dispute pursuant to the service provision contract, the services required and the remuneration for such services shall be deemed to be additional to the scope of the Consulting Services Agreement, provided that such dispute does not arise from any failure of the Consultant to properly perform his duties under the Agreement and provided further that the Consultant shall assign senior staff other than the field staff responsible for the supervision work to deal with such dispute.
- II. Supervising in initiating work on future phases of the Project, if required.
- III. Technology transfer to enhance the REA's technical knowledge on solar power development and project management capacity through on-the-job training.

#### o **4.8 Environmental & Social compliance oversight**

Under the ongoing Nigeria Electrification Project, the Government of Nigeria – through the Federal Ministry of Environment - and the World Bank have agreed on and adopted an Environmental and Social Management Framework, which guides the environmental and social processes and procedures for the activities under the Project. As agreed by the REA and the World Bank, the urgent COVID-19 response Energizing Healthcare initiative focused on supplying power systems to healthcare facilities across the country will utilize financing, frameworks and structures established under NEP in order to leverage existing systems and reduce processing and deployment time. As part of this agreement, it was determined that the activities under this emergency program will be guided by the existing E&S processes and procedures as contained in the ESMF developed for the NEP. As such, as part of their bid, the service providers bidding on the installation and the first 3 months of O&M of the systems to each of the facilities will be required to demonstrate that they have put in place all of the environmental and social staff, processes and procedures as stipulated under the bid.

Given the urgent nature of the activities under this initiative and the critical need to attract as many qualified bidders as possible, it has been agreed that the tender for the service providers will provide a two-month waiver period after the award of the contracts to the selected vendors in order to provide them with the opportunity to put in place all the required E&S staff, processes and procedures.

As such, as part of this Consulting assignment, the selected Consultant will be expected to oversee the preparation and implementation of these deliverables by the selected service providers throughout the entire period under the bid (i.e. preparation, installation, commissioning and 12 months of system O&M).

As part of this responsibility, the consultant will be expected to ensure that the selected service providers:

- Within two weeks of the award of the bids, have all the required Environmental & Social processes and staff in place as detailed in the tender
- Within two weeks of the award of the bids, have familiarized themselves with the ESMF adopted under the NEP
- Within two weeks of the award of the bids, provide the PMU with a functional ESMS following the template/guide in the ESMF
- Ensure all sites meets the exclusion criteria stipulated for the NEP
- Within two weeks of the award of the bids, have familiarized themselves with the checklist within it and are able to prioritize sites according to risk categories
- For low-risk category sites, are able to prepare and execute Environmental & Social Management Plans (ESMP)
- For high-risk category sites, are able to prepare and execute an Environmental and Social Impact Analysis (ESIA)

The Consultant will be expected to provide regular updates on the status of completion of these by each selected service provider as part of the monthly progress report.

• **5.0 Qualifications of the Firm**

Must have valid registration (i.e. certificate of incorporation) and must have been established for no less than 5 years prior to the date of the EOI.

The Consulting firm sought for this assignment must be an Engineering firm with a minimum of two (2) years of continuous experience serving as an Owner's Engineer in solar hybrid power plants in Nigeria or other similar developing countries. The selected firm will be expected to have experience in the design and supervision of construction of solar-hybrid projects, including power stations, civil structures, and other appurtenant works. Emphasis is placed on the need for relevant design and construction supervision engineers to have knowledge and previous experience of similar works to those at the project sites. It is particularly important that the engineers shall have substantial previous experience in dealing with contractual matters and contract claims.

The Consultant will assign adequately qualified key personnel to carry out the Consulting Services. In particular, the key personnel should possess the qualification and experience indicated as follows.

S/N	PERSONNEL	REQUIRED QUALIFICATION & EXPERIENCE	MAN /MONTH
<b>Owner's Engineer</b>			
1	Programme Manager	Bachelor's Degree in Engineering, preferably electrical, with 10 years of general experience and over 3 years of experience in solar power construction projects.	1/ 9

2	Project Manager	Bachelor's Degree in Engineering, preferably electrical, with 5 years of general experience and over 3 years of experience in solar power construction projects.	6/ 9
3	Resident Engineers (Construction Installation & Commissioning)	Bachelor's Degree in Engineering, preferably electrical, with 6 years of general experience and over 3 years of experience in solar power construction projects.	30/ 9
4	Lead, Review Team (Solar)	Bachelor's Degree in Electrical Engineering with 4 years of general experience and over 2 years of experience in solar power construction projects.	1/ 3
5	Lead, Review Team (Civil)	Bachelor's Degree in Civil Engineering with 4 years post qualification experience in Foundations, Structures and at least 2 years of experience in solar power projects.	1/ 3
<u>6</u>	Financial Expert	Bachelor's Degree in Accounting with 5 years post qualification experience in Project Management Accounting, and at least 2 years of experience in solar power projects.	1/ 9
7	Lead, Review Team (Electrical)	Bachelor's Degree in Electrical Engineering with 2 years post qualification experience in solar power construction projects.	1/3
8	Safeguard Specialist (Health, Safety & Environment)	Bachelor's Degree in Sciences & Social Sciences or equivalent with 2 years of post-qualification experience in HSE with at least 3 years of experience in solar power projects.	6/ 6
9	Gender Based Violence (GBV) officer	Bachelor's Degree in Social Work or other Social Sciences with knowledge of gender issues in development, particularly GBV, with 3 years of post-qualification experience in GBV and least 1 year of experience in solar power projects.	1/ 6

10	Administrative Support Staff	Bachelor's degree in any discipline, with proficiency in Microsoft Office Applications and experience in document management as well as document drafting (minutes etc.)	6/9
11	Lead, Legal	Law Graduate with at least five (5) years of Professional Practice experience in the relevant field and also having license of Nigerian Law School or its equivalent.  Must be a registered member of a legal professional body in the country or its equivalent	1/6

In order to maintain close liaison between project management, design, and construction supervision, the REA requires that the Consultant, contract management, construction supervision, and design staff members all be located on the REA selected project sites or at minimum in the six (6) geo-political zones in Nigeria.

## 6.0 KEY STAFF INPUTS

The proposed estimated staff inputs are as follows:

**Table 3. Estimated consultant staff time inputs**

S/N	KEY EXPERT	NO	TIME INPUTS (MAN-MONTH)	TOTAL MAN-MONTHS
1.	Program Manager	1	9	9
2.	Project Manager	6	9	54
3.	Resident Engineers (Construction Installation & Commissioning)	30	9	270
4.	Lead, Review Team (Solar)	1	3	3
5.	Lead, Review Team (Civil)	1	3	3
6.	Financial Expert	1	9	9
7.	Lead, Review Team (Electrical)	1	3	3
8	Safeguard Specialist (Health, Safety & Environment)	6	6	36
9.	Gender Based Violence (GBV) officer	1	6	6
10.	Administrative Support	6	9	54
11.	Lead, Legal	1	6	6
	<b>Total (Man-Months)</b>			<b>453</b>

## 7.0 Deliverables

In the course of the service, the consultant is required to provide reports as listed below, covering various contracts and activities at the project site:

- **Inception Report:** This should include the revised methodology and work plan with clearly defined strategy for carrying out the assignment with timelines for the various outputs. The report should:
  - indicate the objective, scope and the implementation approach that re-confirm completion of the assignment within the duration;
  - This should be presented in person by the Consultant at the PMU office. Consultant must submit (3) hard copies and a soft copy of the inception report.
- 
- **Progress Report:** The Consultant shall prepare and submit monthly progress reports encompassing all the activities under the deliverables section of the assignment for the duration of the services. This report should be detailed, and include progress pictures and illustrations where necessary. The consultant shall provide all data required by REA to enable proper and timely monitoring of the contract and to ensure that the contract is completed on schedule. As part of the progress report, and based on service provider's programme of work, the Consultant shall determine and project possible and reasonable payment amounts and intervals for the duration of the contract, in order to provide the REA information on the status of cash flow during the contract duration for disbursement / payment preparation.
- **Completion/Final Report:** Upon issuance of completion certificate to the service provider, the Consultant shall prepare and submit the Completion Report on the service detailing the project objective, work scope, achievements, problems, issues on the contract physical works implementation and the consultancy service.

## List of Reports

The list of reports expected to be submitted are listed below:

**Table 4. Expected deliverables**

<b>S/N</b>	<b>DESCRIPTION</b>	<b>DELIVERY TIMELINES</b>	<b>REMARKS</b>
1.	Inception Report	Two (2) weeks from commencement date	Upon submission and approval of the report
2.	Weekly Progress Report 1	4 weeks from commencement	Upon submission and approval of the report
3.	Weekly Progress Report 2	6 weeks from commencement	Upon submission and approval of the report
4.	Weekly Progress Report 3	8 weeks from commencement	Upon submission and approval of the report
5.	Weekly Progress Report 4	10 weeks from commencement	Upon submission and approval of the report
6.	Draft Final Report for the construction stage	12 weeks from commencement	Upon submission and approval of the report
7	Final Report for the construction stage	13 weeks from commencement	Upon submission and approval of the report
8	Quarterly progress report 1 on O&M stage	20 weeks from commencement of O&M stage	Upon submission and approval of the report



9	Quarterly progress report 2 on O&M stage	26 weeks from commencement of O&M stage	Upon submission and approval of the report
10	Quarterly progress report 3 on O&M stage	32 weeks from commencement of O&M stage	Upon submission and approval of the report
11	Quarterly progress report 4 on O&M stage	39 weeks from commencement of O&M stage	Upon submission and approval of the report

### **8.0 Reporting**

The Consultant will report to the Head, Project Management Unit (HPMU).

### **9.0 Consultant's Facilities**

**Housing and Office:** The Consultant shall arrange their own accommodation and office.

**Consultant Transportation:** The Consultants shall arrange rental vehicles, including all necessary costs, such as drivers, fuels, maintenance fees, and insurances.

**Equipment and Miscellaneous:** The Consultant shall arrange the office equipment, including computers with necessary software, at their own cost.

**International and Local Trips and Hotel Accommodation in Nigeria:** The cost of all travel and accommodation shall be included and arranged by the Consultant.

### **10.0 Duration of Assignment**

The proposed duration of the assignment shall be nine (9) months with an estimated Four Hundred and Fifty-Three (453) man-months.

#### **10.10 Facilities/Data to be provided by the REA**

The REA will provide the Consultant with the relevant documents and information that will enable the consultant to meet the deliverables.

### **11.0 Remuneration and Payment**

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 as listed earlier and acceptable to the Client.

Reports of each deliverable will be submitted as follows: 1 (One) Electronic copy and 3 (three) hard copies. After the delivery of each deliverable, REA will review the submissions (Deliverables) and confirm whether the reports are satisfactory within one week. The consultant will incorporate comments into the final copies of the reports, which will be submitted in 3 (three) hard copies and 2 (two) soft copies.

### **12.0 Special Health and Safety Conditions**

Given the nature of this assignment, the consultant will need to take special precautions to avoid person-to-person transmission of COVID-19 as they carry out all activities under this TOR. This should include the use of personal protective equipment by all of the consultant's employees working in and around healthcare facilities, maintaining strict physical distancing for on-site and in-office activities, and following protocols for personal hygiene, for the duration of the contract. **The Consulting Firm is fully responsible for the health and safety of its workers.**

### **13.0 Copyright and Ownership**

All raw and finished materials would be owned and copyrighted, permission to use materials by the consultant for other projects shall require a written permission of the employer and the Consultant shall maintain in strict confidence all information received from the employer concerning imports, financial records and nature of the business. Any existing intellectual property that the consultants bring into the project (e.g. energy audit approaches, benchmark databases, etc.) will remain the property of the consultants, but any reports emanating from this material will become the property of the REA.

### **14.0 Consultant Selection Method**

The Consultant will be selected in accordance with the Consultant Qualification Selection (CQS) Method set out in the Procurement Regulations for IPF Borrowers dated July 2016, revised November 2017 and August 2018, available on [www.worldbank.org/procure](http://www.worldbank.org/procure).