# **REPUBLIC OF RWANDA**



## **MINISTRY OF INFRASTRUCTURE**

# **Ministerial Guidelines on Minigrid Development**

June, 2019.

# Contents

PREFACE	
LIST OF ABBREVIATIONS	4
CHAPTER 1: GENERAL PROVISIONS	
Article1: Rationale	5
Article 2: Objectives	
Article 3: Definitions	5
CHAPTER TWO: MINI-GRID DEVELOPMENT PROCEDURES	6
Article 4: Investment Process	6
Article 5: Timelines	
Article 6: Implementation Approach	8
Article 6.1: Scope	9
Article 6.2: Prefeasibility and Feasibility Studies	9
Article 6.3: Memorandum of Agreement Term	9
Article 6.4 Billing	9
Article 6.5 Delivery point	9
Article 6.6 Tariff	10
Article 7: Request for Proposals (technical and financial)	10
Article 8: Site confirmation by REG	10
Article 9: Standards	
Article 10: Commencement	11



## **PREFACE**

The Government of Rwanda set an ambitious target of universal access to electricity by 2024, with 52% of the household connected to the grid and 48% connected to off-grid solutions.

The Rural Electrification Strategy and the Energy Sector Strategic Plan indicates that off grid electrification through both solar home and mini-grid systems will be used to provide access to electricity in off-grid demarcated locations with implementation expected to be achieved through partnerships with Mini-grid Project Developers. Mini grids are expected to contribute up to 10% of the off-grid target.

This document focuses exclusively on the guidelines for mini-grid development and is aligned to National Electrification Plan where potential mini-grid sites were demarcated.



## LIST OF ABBREVIATIONS

ESSP	Energy Sector Strategic Plan
GoR	Government of Rwanda
ISO	International Standards Organisation
IEC	International Electrotechnical Commission
MININFRA	Ministry of Infrastructure
MPDs	Mini-Grid Private Developers
NEP	National Electrification Plan
RDB	Rwanda Development Board
REG	Rwanda Energy Group
RFP	Request for proposals



## **CHAPTER 1: GENERAL PROVISIONS**

## Article1: Rationale

The National Electrification Plan published in 2019 demarcates a number of sites for mini-grid development in Rwanda. These guidelines have been developed as a guiding document for interested Mini-Grid Private Developers on procedures for investing in mini-grid development.

## **Article 2: Objectives**

These guidelines will help in streamlining the process for investors as well as clarify the procedure for mini-grid development under the off-grid sub-sector. They are expected to create a conducive working environment for mini-grid project developers and consequently contribute to the 300,000 off grid connections target per year in line with the ESSP in order to reach the 100% electrification target by 2024.

## **Article 3: Definitions**

- 1. **Liense:** refers to any document issued by the Authority which authorizes the licensee to carry out the activities specified in the license under the conditions prescribed therein;
- 2. Licensee: any person who holds one of the licenses issued by the Authority under this Regulation;
- 3. **Person:** an individual or organization which is legally permitted to enter into a contract, and be sued if it fails to meet its contractual obligations;
- 4. Authority: Rwanda Utilities Regulatory Authority;
- 5. **Cost of Service Study:** A study conducted or commissioned by the Authority to determine the actual costs of providing service to individual customers, groups of customers, or an entire customer base;
- 6. **Electricity Licensing Regulations:** Regulations N° 002/ENERGY/EL/RURA/2013 of 25th July 2013 on Electricity Licensing adopted by the Regulatory Board.

CKG

## CHAPTER TWO: MINI-GRID DEVELOPMENT PROCEDURES

## **Article 4: Investment Process**

The Investment process will be administered through either solicited or unsolicited process as outlined below:

## 1. Solicited proposals shall be done according to the following steps

## **Step 1:** Call for Proposal by REG

- Call for proposals for mini grid sites with or without Feasibility Study
- Request for proposal will be open to any site in Rwanda demarcated as off-grid in the National Electrification Plan

## Step 2: Technical and Financial Proposal review by Joint GoR Team

- Conduct review of the technical and financial proposals
- Negotiation of the Memorandum of Agreement

## **Step 3: Memorandum of Agreement Award by MININFRA**

Award of the Memorandum of Agreement to conduct full feasibility study

## Step 4: Detailed Feasibility Study review by REG

- Conduct a detailed feasibility study for the project
- Approval of Feasibility study

## **Step 5:** Tariff negotiation and Licensing by RURA

Mini Grid Developers will be required to negotiate the end user tariff before obtaining license for start of electricity production, transmission, distribution or sales activity.

CKG

## 2. Unsolicited proposals shall be done according to the following steps

## Step 1: Proposals submission for mini-grid projects development at RDB

- Mini grid Project Developers submit proposals for mini-grid projects development
- Conduct due diligence of proposals submitted

## Step 2: Technical and Financial Proposal review by Joint GoR team

- Conduct Technical and Economic review of the proposals
- Negotiation of the Memorandum of agreement

## **Step 3: Memorandum of Agreement Award by MININFRA**

Award of the Memorandum of Agreement to conduct full feasibility study

## Step 4: Detailed Feasibility Study review by REG

- Mini Grid Developers to conduct detailed feasibility study for the project
- Approval of Feasibility study

## Step 5: Tariff negotiation and Licensing by RURA

• Mini Grid Developers will be required to negotiate the end user tariff before obtaining License for start of electricity production, transmission, distribution or sales activity.



## **Article 5: Timelines**

## 1. Sites for Solicited Proposals

No	Activity	Timeline
1	Request for proposals	21 days
2	Shortlisting / due diligence	21 days
3	Evaluation of proposals	30 days
4	Feasibility studies and EIA	120 days
5	Tariff negotiation and Licensing	30 days

## 2. Sites for Unsolicited Proposals

No	Activity	Timeline
1	Reception of proposals	NA
2	Shortlisting / due diligence	21 days
3	Evaluation of proposals	30 days
4	Feasibility studies and EIA	120 days
5	Tariff Negotiation and Licensing	30 days

## **Article 6: Implementation Approach**

- a. For solicited Proposals, REG shall publish a request for proposal for sites to be published.
- b. While for unsolicited proposals, MPDs will submit their proposals for development of mini grid site under NEP demarcations to RDB with the following documents:
  - 1. Business Registration in Rwanda Development Board (RDB)
  - 2. Tax clearance certificate from Rwanda Revenue Authority (RRA)
  - 3. Social Security clearance certificate from Rwanda Social Security Board (RSSB)

acc.

## Article 6.1: Scope

MPDs will design, construct, own, maintain and operate mini-grid power stations sites identified under the National Electrification Plan as specified in the RURA's Minimum Technical Requirements for Mini-grids in Rwanda.

## Article 6.2: Prefeasibility and Feasibility Studies

- a) The shortlisted companies will be requested to conduct a pre-feasibility study based on the site visits conducted. This Prefeasibility Study will inform the Technical and Financial Proposals to be submitted to REG for evaluation by the Joint Team to choose the most competitive proposal. Details of proposal evaluation will be included in the request/call for proposals. A template for prefeasibility study will be available at REG
- b) After the award of the Memorandum of Agreement, the MPD will be required to conduct a detailed feasibility study for the mini-grid site awarded. This feasibility study will be used in the negotiations. For the sites whose feasibility studies have already been conducted, the MPDs will be required to review the reports for their understanding.

## **Article 6.3: Memorandum of Agreement Term**

The Memorandum of Agreement term shall be negotiated based on the financial model under the Build Own Operate and Transfer (BOOT) Model.

## **Article 6.4 Billing**

MPDs shall install prepaid meters to the beneficiaries (end users) for payment of electricity services

## Article 6.5 Delivery point

The electricity supply delivery point shall be the houses of the beneficiaries (end users of mini grid electricity).

CUG

#### **Article 6.6 Tariff**

The tariff to the end user will be negotiated between the MPD and a technical committee representing the Government of Rwanda and later on approved by RURA.

## Article 7: Request for Proposals (technical and financial)

After shortlisting and due diligence of the interested companies, REG will request the shortlisted MPDs to submit their proposals (technical and financial) for the mini-grid systems to be developed.

The technical proposal will provide information on; technology and standards to be used, site requirements, prefeasibility study report of the sites to be developed, implementation roadmap that will include timeline for different activities such as; detailed feasibility study, Environmental Impact Assessment (EIA), site approval from District authorities, expected financial close.

The financial proposal will highlight; the financial status of the mini-grid developer by providing an audited financial statements for the immediate past three (3) years, access to finance to cater for project investment and operational costs whereby debt-equity ratio should not exceed 70 to 30 percent respectively.

## **Article 8: Site confirmation by REG**

Following the approval of proposals (technical and financial); REG will officially confirm that the site can be developed by the MPD after which a Memorandum of Agreement will be negotiated. Once concluded, the MPD will be expected to conduct a detailed feasibility study of the mini-grid to be developed.

**Note:** Sites that received REG's approval before the completion of NEP report will be considered by the REG management for confirmation on a case by case.



## **Article 9: Standards**

Power distribution infrastructure should be required to meet REG reticulation standards and standards the RURA's Minimum Technical Requirements for Mini-grids in Rwanda while generation units should be in line with the IEC and ISO Standards

## **Article 10: Commencement**

These guidelines come into force on the date of their publication.

Done at Kigali, on .....

ally

Minister of Infrastructure