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How do we license it?

A guide to licensing a mini-grid energy service company in Kenya

The German Climate Technology Initiative GIZ Promotion of Solar-Hybrid Mini-Grids Project

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A guide to licensing a mini-grid energy service company in Kenya

Lessons learned from the application for a power generation and distribution permit for the Talek Power Solar Mini-Grid Project

July 2015

GIZ ProSolar Promotion of Solar Hybrid Mini-Grids Project

This guidebook has been compiled based on the experience gained in licensing and operationalising the Talek Power solar hybrid mini-grid project in Narok County, Kenya. While this pilot project provides electricity to the surrounding community, it also acts as a learning tool for all mini-grid stakeholders in the country.

Talek Power

Table of contents

Forev	word <mark>6</mark>
Ackn	owledgements 7
List c	of abbreviations 8
1.	Introduction 9
2.	Licensing your mini-grid 11
	2.1 Licensing requirements 11
	2.2 How to fulfil the requirements 14
	2.3 Ten practical recommendations 16
3.	The application and the follow-up 19
4.	Additional requirements 20
5.	Annexes 21
	Annex 1: Approvals and licences for solar PV projects 22
	Annex 2: Example of letter to the county government 26
	Annex 3: Example of press advertisement 27
	Annex 4: Example of supply contract 28
	Annex 5: Example of customer service charter 33
	Annex 6: Enquiry for supply of electricity 39
	Annex 7: Customer complaints handling procedure 41

Foreword

This guidebook has been compiled following the development of a pilot hybrid mini-grid project in Kenya. The project consists of a solar-hybrid generation plant of 50 kW, a low voltage (LV) power distribution network in Talek centre, Narok County and a prepaid metering system. While the project provides electricity to the surrounding community, it is also meant to act as a learning tool for all mini-grid stakeholders in Kenya, supporting the Government's rural electrification efforts while helping to establish an effective solar hybrid minigrid policy.

A private sector-driven approach was replicated through the creation of a Special Purpose Vehicle (SPV), the Talek Power Company, which is meant to be transferred to the Government of Kenya. The Talek Power Company had to go through all the steps of licensing as an energy service company.

This guidebook captures the lessons learnt from the Talek Power Company experience on the licensing process and acts as a tool to facilitate the licensing process for mini-grid project developers. Here you will find practical guidance on each of the steps of the licensing pathway.

In the annexes are sample documents utilised during the licensing process, provided for the purpose of illustration only. The use of these annexes and any adaptation must be done with the support of appropriate professionals.

The authors of this material do not bear any liability resulting from an improper use of the provided annexes.

Acknowledgements

We would like to express our gratitude to the Ministry of Energy and Petroleum (MoEP) for their support in the licensing procedure of the Talek Power pilot project. We commend the Energy Regulatory Commission for providing a balanced electricity regulatory framework which aims at enhancing electricity access while protecting power consumers. Our appreciation goes to the County Government of Narok for the support brought to the Talek Power project at various stages, with a special thanks to the Rural Electrification Authority (REA) for their valuable contribution at initial site due diligence and site selection. We also give credit to the Kenya Power and Lighting Company for their very valuable contribution to the discussion during the Talek Power licensing process.

Last but not least, kudos to the entire team at the Talek Power project for their relentless efforts to achieve a state-of-the-art mini-grid, supplying the people of Talek with clean and reliable electricity.

The GIZ ProSolar team





Kenya Power







List of abbreviations

CR12	Company Registry Form 12
EIA	Environmental Impact Assessment
EOI	Expression of Interest
ERC	Energy Regulatory Commission
ESIA	Environmental and Social Impact Assessment
FIT	Feed-in tariff
IEK	Institution of Engineers of Kenya
IRR	Internal rate of return
KFS	Kenya Forest Service
KPLC	Kenya Power and Lighting Company
kV	Kilovolt
kW	Kilowatt
LV	Low voltage
MoEP	Ministry of Energy and Petroleum
MW	Megawatt
NEMA	National Environmental Management Authority
PPA	Power Purchasing Agreement
PV	Photovoltaic
REA	Rural Electrification Authority

1. Introduction

A mini-grid is an integrated system for local electricity generation, transmission and distribution that can operate in isolation from the national electricity distribution network. Mini-grids can supply concentrated settlements, including domestic, business and institutional customers, with power at grid quality level. They typically utilise renewable energy (solar, wind, biomass) plus battery, diesel or hybrid fuel sources to produce power. Mini-grids are characterised by small capacities (MW), local geographical coverage, and low or medium distribution voltages, usually 415V to 11 kV.

There are currently over 20 public mini-grids owned by the Ministry of Energy and Petroleum (MoEP) serving remote towns and their immediate environs across Kenya. These are diesel powered with a few having been hybridised, using either solar PV (photovoltaic) or wind. Implemented by the Rural Electrification Authority (REA), they are operated under contract by the Kenya Power and Lighting Company (KPLC).

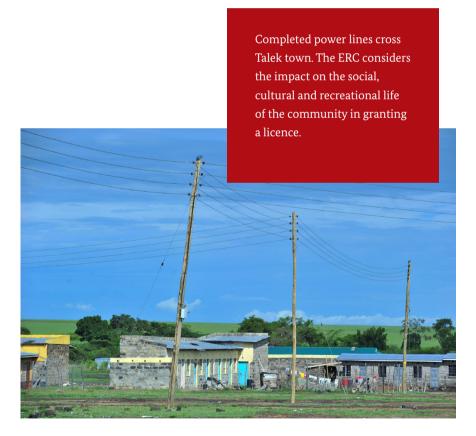
Several private-sector-owned mini-grids of varying sizes and sophistication are also in operation. These are typically below 50 kW and largely operate under the regulatory and licensing radar.

The following licences and/or permits are required to install and operate a minigrid.

During installation	During operation
• Solar installer licence (if solar technology is used)	 Power generation licence or permit Power distribution licence or permit
Importation licence or permit	Power supply licence or permit

It should be noted that an integrated mini-utility operator can apply simultaneously for generation, distribution and supply licences . Also, prior to any construction or installation activity, the operator or project developer must have environmental clearance in the form of an environmental and social impact assessment (ESIA) licence issued by the National Environmental Management Authority (NEMA).

If the operator is a company, proof of registration is the Company Registry Form 12 (CR12). The licensed applicant and facility operator must be registered and domiciled in Kenya.



2. Licensing your mini-grid

The commercial operation of mini-grids in Kenya is governed by and must comply with the following legislation:

- 1. The Constitution of Kenya
- The Energy Act, 2006, particularly sections 6(a) and sections 27 31. This will be replaced by the Energy Bill 2015 once approved by Cabinet and gazetted
- 3. Energy (Electricity Licensing) Regulations, 2012
- 4. The Environmental Management and Coordination Act of 1999
- 5. The Kenya Electricity Grid Code

It should be noted that existing energy policy and legislations are supportive of mini-grids. They do not give exclusivity to any single distributor, including KPLC. Under the new Energy Bill 2015, licences are required for all generation capacities. Section 176 of the Bill puts no capacity limits on licences, while the Energy Act 2006 says generation capacities of 3 MW and above require a licence. Until the Energy Bill 2015 is passed, installed capacities of less than 3 MW require only a permit.

Requirements as per Energy Act 2006		Requirements as per H	Energy Bill 2015
Installed capacity > 3MW	LICENCE	Any installed	LICENCE
Installed capacity < 3MW	PERMIT	capacity	LICENCE

2.1 Licensing requirements

For the application process the following documents are required, especially if renewable energy is involved as in the case of a solar hybrid mini-grid:

 The grant of the expression of interest (EOI) to exploit the requirement by the MoEP. It should be noted that the grant of an EOI is not an instruction to the Energy Regulatory Commission (ERC) to grant a licence. ERC as the sector regulator still needs to ascertain the technical and financial capability of the project developer, the compliance with the grid code and the project balance between community and investor's interests. Though the requirement of an EOI is only applicable if tariff support is required from the MoEP, for the sake of avoiding disputes which may arise from parallel developers having convergent interests in developing the same sites, the MoEP together with its development partners are currently working on a site allocation procedure which will establish a concessionary model. The procedure for allocating concessions is not yet published at the time of printing of this guidebook.

- b. Other documents required by ERC while lodging the application in accordance with the Energy Act, 2006, and the Energy (Electricity Licensing) Rules, 2010, comprise:
 - i. Three hard copies of duly-filled application forms and one digital copy
 - ii. An application fee of KSh 10, 000 in the form of a banker's cheque
 - iii. Audited accounts for the last three years where available
 - iv. A project report by a competent engineer
 - v. Copy of NEMA licence/permit in accordance with the Environmental Management and Coordination Act of 1999
 - vi. Description of the undertaking and a map showing location of the project to help identify location
 - vii. Three hard copies of duly-completed application and a soft version of the same (downloadable from the ERC website)
 - viii. Letter to the local county government giving notice of the project (see Annex 2)
 - ix. Copy of the Kenya Gazette and/or newspaper advertisements with wide circulation giving Notice of Application (15 days public notice) before making the application, stating window for any objection (see Annex 3)
 - x. An application for tariff and other charges the project will levy on the consumers. This should include the financial model used to arrive at the tariff.



Land survey at Talek Power location. A minigrid developer must have environmental clearance in the form of an ESIA licence issued by NEMA before starting construction.

In reviewing the application for grant of licence or permit, the ERC considers the following factors:

- 1. The impact of the undertaking on the social, cultural or recreational life of the community
- 2. The need to protect the environment and to conserve the natural resources in accordance with the Environmental Management and Coordination Act No. 8 of 1999 (EMCA 1999)
- 3. Land use or the location of the undertaking
- 4. Economic and financial benefits to the county or area of supply of the undertaking
- 5. The economic and energy policies in place at the time
- 6. The cost of the undertaking and financing arrangements
- The ability of the applicant to operate the system in a manner designed to protect the health and safety of users as well as other members of the public who would be affected
- 8. The technical and financial capacity of the applicant to render the service for which the licence or permit is required
- Any representations or objections made under sub-section (4) of section 28 of the Energy Act 2006

- 10. The proposed tariff offered to consumers
- 11. Any other matter likely to have a bearing on the undertaking

If there are several groups interested in providing the generation, distribution and retail services, ERC may invite applications for a licence or permit through a fair, open and competitive process.

2.2 How to fulfil the requirements

The documents required for the permit or licence can be obtained as follows:

	Document	Where and how to get it
1.	Three hard copies of completed application and a soft version of the same (downloadable from the ERC website)	 The project proponent must submit three copies of the paper application, which can be downloaded from the ERC website. The application form is presented in SCHEDULE 1 - FORM OF APPLICATION of the regulations www.renewableenergy.go.ke/downloads/policy-docs/electricity_licensing_regulations_2010.pdf The electronic version should be filled in and submitted online through the ERC secure portal https://portal.erc.go.ke:8443/
2.	For a licence (3 MW or above) an application fee of KSh 10,000 as a banker's cheque. For a permit (less than 3 MW) only a grant fee is payable after the permit is granted, which is KSh 5000 per Megawatt.	A banker's cheque can be obtained from any bank. Even though the cheque is submitted to the ERC, the cheque must be addressed to the Rural Electrification Authority.

	Document	Where and how to get it
3.	Audited accounts for the last three years	For an existing entity with more than three years existence and available accounts, audited accounts are mandatory. For business startups this can be waived by the ERC upon satisfactory explanation. Where accounts are available for three years, the audit entity or firm must be duly registered in Kenya.
4.	A project report by a competent engineer	A competent electrical engineer registered with the Institution of Engineers of Kenya (IEK) must provide a technical report which addresses the technical feasibility of the project and compliance with the electrical standards and the Kenya Grid Code.
5.	Copy of NEMA licence/ permit	An Environmental and Social Impact Assessment (ESIA) that includes stakeholder consultation must be undertaken and submitted to NEMA for review and approval. Once approved, an ESIA licence should be issued within 60 days. The ESIA process must be undertaken by a NEMA registered expert. Registered environmental experts can be found on the NEMA website at www.nema.go.ke
6.	Description of the undertaking and a map showing location of the project to help identify location	The description of the undertaking should outline in detail planned activities such as generation, distribution and retail in the case of an isolated mini-grid, where the proponent intends to undertake all these activities. It should also state clearly the location of the undertaking providing a map so as to allow the regulator to evaluate potential overlap of licensing.

2.3 Ten practical recommendations

In which form do I provide my electronic submission to ERC? Do not send a CD or USB stick or emails to ERC for the electronic submission of the application – this can only be done through the ERC online portal https://portal.erc.go.ke:8443/

Take note of the application number which the ERC system gives you at the end of the electronic submission process. This reference will be used for further communication related to your permit/licence application.

2 As a start-up company am I eligible to apply for a licence?

Entities with less than three years existence as a company or as a body are also eligible to apply. This includes startups with no track record. A letter to ERC explaining the duration of existence of the entity and a CR12 form from the Registrar of Companies should suffice.

3

Where do I get a competent engineer for my technical report?

A competent electrical/mechanical engineer registered by the Institute of Engineers in Kenya (IEK) should be able to provide a project report that is acceptable to ERC.

4

What should be captured in the technical report?

Ensure that the report spells out the technical feasibility of the project, include the design and line diagrams, and show how the project complies with the Kenyan Grid Code. ERC will check that the designed system can reasonably cover the demand, so make sure your feasibility study has collected sufficient data to justify the capacity you intend to install.

5

Am I free to submit a tariff model that is linked to my capital expenses?

Together with the project's technical feasibility, a tariff model (typically an excel spreadsheet detailing the assumptions and the financial workings) is essential in showing the project's financial sustainability for both the investor and the end user.

The objective is to allow a fair return to the investor and a fair tariff for the end user. ERC allows a maximum internal rate of return (IRR) cap of 18%. The capital cost of the project will be reflected in the tariff. The higher the tariff, the greater the likelihood that it will <u>not</u> be approved. The developer must therefore ensure that the project is implemented in the most economically efficient manner. The developer should be ready to justify that they delivered the project at the lowest cost.

6

Who can object to my application and how do I handle it?

In the interest of the public, the licence application is publicised through popular print media. Objections to the project, if any, must be lodged within a period of 15 days. Any individual, corporate or otherwise, is free to raise a objection to the application. These objections must be addressed objectively to the satisfaction of the ERC and the objecting entity. Late objections in principle are not considered, unless there is sufficient evidence that the project may have adverse effect on public or local authorities, companies, or bodies within the area of the undertaking.

How can I demonstrate my financial and technical capabilities? One of the requirements of the application process is that the developer demonstrates ability to develop, finance and operate the generation, distribution and retail infrastructure. The developer must therefore have organisational, financial and technical capabilities that can be demonstrated via the CVs and experiences of the team involved, the organisational structure of the company, and either the balance sheet of the developer/sponsor or access to funds by the developer to implement the project.



Is it a requirement to involve the county in my proceedings?

To ensure smooth development of the mini-grid, the developer should involve the county government at the earliest opportunity. Under the Fourth Schedule of the Constitution - Distribution of Functions between National and County Governments, the county governments have the responsibility for electricity and gas reticulation. Early involvement means that the stakeholder engagement process required as part of the ESIA process is smooth. A letter from the county government in support of the project is required by ERC as part of the documentation for approval.

9 What if the county government does not write the letter of support?

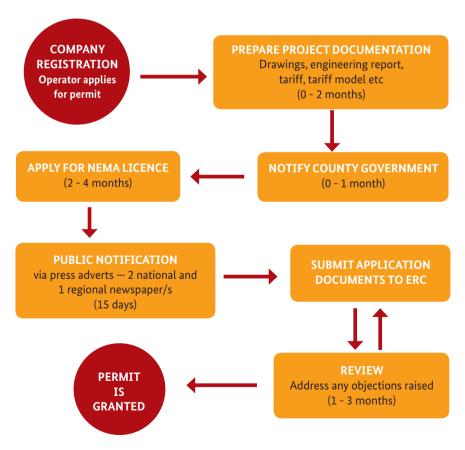
The letter from the county is a mandatory requirement to demonstrate that local government is supportive of the initiative and that the services being offered are for the good of its residents. This requirement is non-negotiable and must be delivered. It is therefore incumbent upon the developer to ensure that a letter of support or letter of no objection is issued by the county government.

10 What are my obligations as a developer with regard to health and safety issues?

Health and safety is covered under the environmental (ESIA) report, which should therefore address how all the project health and safety issues will be handled. The environmental permit granted by NEMA gives a construction deadline. If the issues are not resolved and the project is not implemented by the given date, a new environmental permit needs to be obtained.

3. The application and the follow-up

Subject to the provisions of section 27 of the Energy Act, 2006, a licence is required for the generation, transmission or distribution of electrical energy. If the undertaking involves a capacity of 3,000 kW or less, a permit is required in order to supply electrical energy to other persons or consumers. Any undertaking where electrical energy is transmitted in a distribution network must meet the minimum requirements as approved by the Energy Regulatory Commission. Here you see the permitting and licensing work flow, and issues that need to be addressed.



All the approvals and licences, requirements and timelines for solar PV projects are summarised in Annex 1. Most of these are relevant and applicable in the case of the hybrid mini-grid system involving solar PV and diesel generators. Note that the feed-in tariff (FIT) requirements do not apply to mini-grids not seeking tariff support from the MoEP.

4. Additional requirements

For mini-grids covering supply of electrical energy, additional documents that address the quality of service and supply agreements need also to be developed. Specifically, the following are essential before permits can be granted: Supply agreements (see Annex 4) Customer service charter (see Annex 5) Customer complaints handling procedure (see Annex 6)



A public baraza on how power will be distributed. Involve the country government and stakeholders early in order to ensure their support for your project.

5. Annexes

In the annex are sample documents you will need during the licensing process, and they are provided here for the purpose of illustration. The use of these annexes and any adaptation must be done with the support or guidance of the appropriate professionals. The authors of this material do not bear any liability resulting from an improper use of the provided annexes.

- Annex 1: Approvals and licences for solar PV projects
- Annex 2: Example of letter to the county government
- Annex 3: Example of press advertisement
- Annex 4: Example of supply contract
- Annex 5: Example of customer service charter
- Annex 6: Enquiry for supply of electricity
- Annex 7: Customer complaints handling procedure

Prerequisite	None	 Approval for Expression of Interest and Detailed Feasibility Study
Application Fee	None	Application fee for EIA is 0.1% of total project cost with a minimum of KSh 10,000 and no upper capping
Duration	Within 90 days	45 to 90 working days
suing Purpose Duration Application gency Fee	The Ministry of Energy and Petroleum wants to determine how the proposed power plant can be integrated into the national power development plan and estimate the suitability of the power plant location for interconnection, including interconnection facilities and costs	Ensuring sustainable development and protection of the environment
Issuing Agency	Ministry of Energy and Petroleum	National Environment Management Authority
Approval/Licences	Approval for Expression of Interest and Detailed Feasibility Study	Environmental Impact Assessment
	-	0

ANNEX 1: Approvals and licences for solar PV projects

	act	e of User act	act	act	sion iled act of User
Prerequisite	• Environmental Impact Assessment	Approval for Change of UserEnvironmental Impact Assessment	• Environmental Impact Assessment	• Environmental Impact Assessment	 Approval for Expression of Interest and Detailed Feasibility Study Environmental Impact Assessment Approval for Change of User
Application Fee	KSh 200	KSh 200 for application form	None	None	None
Duration	60 days	60 to 90 days	30 days	30 days	Waiting time 180 days Negotia- tions 90 days
Purpose	Control of land use and development	Safety of buildings, planning control	To grant access and use rights of KFS lands	To compensate affected landowners for land and ecosystems taken over by the transmission lines to gain access to the grid or consumption areas	Secure energy supply
Issuing Agency	County government	County government	Kenya Forest Service	Kenya Forest Service	Kenya Power
Approval/ Licences	Approval for Change of User	Development Permit	Special Use Licence (applies to power plants and sub- stations situated on KFS land)	Wayleave Authorisation (applies to transmission and distribution lines passing through KFS land)	Negotiate FIT-based Power Purchasing Agreement
	m	4	ы	Q	►

	Prerequisite	 Approval for Expression of Interest and Detailed Feasibility Study Environmental Impact Assessment Approval for Change of User Approval for Change of User Development Permit Negotiate FIT-based Power Purchasing Agreement Negotiate FIT-based Power Purchasing Agreement Special Use Licence (applies to power plants and sub-stations situated on KFS land) Wayleave Authorisation (applies to transmission and distribution lines passing through KFS land)
	Duration Application Prerequisite Fee	None
	Duration	30 days
and a solution of the second and and and solution of the second s	Purpose	Evaluating the PPA with respect to fair consumer tariffs, fair kW price paid by Kenya Power, and amount of energy provided (firm)
	Issuing Agency	Energy Regulatory Commission
	Approval/ Licences	Approval of Power Purchasing Agreement (FIT-based)
		ω

ANNEX 1: Approvals and licences for solar PV projects

	 Approval for Expression of Interest and Detailed Feasibility Study Environmental Impact Assessment Approval of (FIT-based) Power Purchasing Agreement 	Approval for Expression of Interest and Detailed Feasibility Study Approval of Power Purchasing Agreement Electricity Generation Licence
Prerequisite	 Approval for Expression of Interest and Detailed Feasibility Study Environmental Impact Assessment Approval of (FIT-based) Purchasing Agreement 	 Approval for Expression of Interest and Detailed Feasibility Study Approval of Power Purch Agreement Electricity Generation Li
Application Prerequisite Fee	KSh 10,000 (application fee)	KSh 10,000
Duration	90 days	90 days
Purpose	Compliance with the FIT policy	Compliance with Energy Act and Electricity Licensing Regulations 2010
Issuing Agency	Energy Regulatory Commission	Energy Regulatory Commission
Approval/ Licences	Electricity Generation Licence	Electricity Distribution and/or Supply Licence
	ത	10

Source of information: Renewable Energy Portal www.renewableenergy.go.ke

ANNEX 2: Example of letter to the county government

Our Reference: Date:

The County Secretary County Government of XXXX P.O. Box _____ XXXX

Dear Sir/Madam

<u>Re: Notification of intent to apply for Electricity Generation, Distribution and</u> <u>Supply Permit for 50 kW AT XYZ Centre of XXXX County</u>

In accordance with the Energy Act, No. 12 of 2006 section 7(1), we hereby notify you that XYZ Power Company Limited intends to make an application to the Energy Regulatory Commission for a 50 kW Solar-Hybrid Generation, Distribution and Supply of Electricity Permit for XYZ Centre in XXXX County. The grant of the permit to the project will not have adverse effect on any public or local authority, companies, or bodies within the area of the undertaking. A copy of the application (subject to confidentiality considerations) will be available, once lodged, for inspection by the public at our offices.

Thank you in advance for your continued support of the project.

Yours faithfully,

(Signed)

Name Project Director XYZ Power Company Limited

ANNEX 3: Example of press advertisement

THE ENERGY ACT (NO. 12 of 2006)

XYZ POWER COMPANY LIMITED

APPLICATION FOR ELECTRIC POWER GENERATION, DISTRIBUTION AND SUPPLY PERMIT

NOTICE is hereby given that XYZ Power Company Limited, having its registered offices at ______ and address P.O. Box ______ in the republic of Kenya, ('the applicant'), pursuant to the provisions of Section 28 of the Energy Act, 2006, will on ______ (date) make an application to the Energy Regulatory Commission for the Electric Power Generation, Distribution and Supply permit for 50 kW solar-hybrid power plant, distribution and supply networks for XYZ Centre in XXXX County. The grant of the permit will NOT have adverse effect on any public or local authorities, companies, persons or bodies of persons within the area of the undertaking.

A copy of the application (subject to confidentiality consideration) will be available (once lodged) for inspection by the public at the registered office of the applicant. Any public or local authority, company, person or body of persons desirous of making any representation on or objection to the application must do so by a letter addressed to the Energy Regulatory Commission and marked on the outside of the cover enclosing it "Energy Act" on or before the expiry of fifteen (15) days from the date of the application and a copy of such representation or objection must be forwarded to the registered office of the applicant.

Dated the _____ (date)

Name _____ Project Director XYZ Power Company Limited

ANNEX 4: Example of supply contract

Pursuant to section 44 of the Energy Act and any subsequent revision thereof, **XYZ Power Company Limited** have developed this standard customer contract to stipulate the minimum level of service we commit to give to our customers as well as conditions we expect our esteemed customers to adhere to so as to enjoy our services to the maximum.

1. Electricity supply contract

This contract sets out the standard terms on which XYZ Power Company Limited supplies electricity to its customers. All customers within the project area have a right to supply on these terms unless a customer with special needs engages the project for a negotiated contract.

If you have electricity supplied by us to a number of premises at different sites in the project area or in the same building, this contract applies separately to each of those premises (or accounts).

This contract works in conjunction with the standard customer electricity connection and distribution technical requirements stipulated in the **Kenya Electricity Grid Code**.

2. Customer details form

Customers entering into contract with XYZ Power Company Limited shall fill the Customers Supply Details Form (Annex 1 to this contract).

3. Enquiries, complaints and dispute resolution

Retail and billing enquiries should be reported to our customer service office during normal weekday working hours.

Other complaints can be directed to our project office, or by calling the project office telephone lines, or by writing to the Project Manager P.O. Box, XXXX code...... We will attend to any enquiries and resolve all complaints as soon as reasonably possible, and in compliance with **Energy (Complaints and Disputes Resolutions) Regulations**, **2012**.

4. Application for supply

Before we can supply you with electricity, you need to:

- i. apply to us in writing, over the phone or electronically
- ii. provide any details about yourself or your premises that we reasonably request
- iii. demonstrate that you have a legal right of occupation of the premises
- iv. Show that you are within reach of our electricity network
- v. Pay any applicable charges

Final supply connection to your premises will be subject to us obtaining wayleave consent from any of your neighbours who are between our nearest electricity supply lines and your premises.

5. Wiring of your premises

Wiring within your premises is your responsibility and must comply with applicable codes, standards and Electric Power (Electrical Installation Work), Rules 2006 or any amendments thereof.

6. Keep us informed of changes

You must inform us promptly if there is a change in:

- i. your contact details
- ii. access to the meter
- iii. your premises' wiring or appliances which may affect the quality or safety of our supply

7. Supply quality and back-up

Your electricity supply is subject to a variety of factors, which include accidents, weather, the acts of third parties, and the need to work on the electricity generation and distribution systems. Accordingly, from time to time you may experience variations in the quality or frequency of your electricity supply, or interruptions to your supply.

If you need guaranteed uninterrupted supply for your premises it is your responsibility to install a back-up power supply.

if you have sensitive electronic equipment such as computers, you should decide whether you need to protect that equipment through use of line filters or other measures.

If you need any advice about back-up power supply options or other protective measures, please call our enquiries line on

We otherwise commit to maintain your electricity supply within the quality standards stipulated in the Kenya Electricity Supply Grid Code as reasonably possible.

8. Customer service

We will meet the customer service standards described in our Customer Service Charter in our dealings with you.

i. Account/meter deposit

On opening an account, all customers are required to pay a security deposit of KSh or twice the estimated monthly electricity consumption, whichever is higher.

We may draw on the security deposit provided by you if you fail to pay an amount due under the contract.

ii. Units sold /metering

The quantity of electrical energy sold shall be determined in accordance with section 58 of the Energy Act or any amendments thereof.

iii. Billing and meter reading

Billing will be monthly and based on actual meter readings or estimated consumption, provided that where estimated consumption is used it will not be for more than three (3) consecutive months.

iv. Payment of your accounts

You will be required to clear all arrears in your account twenty one (21) days after the issuance of your electricity account bill, failure of which your supply shall be disconnected forthwith until the outstanding amount is paid in full or you negotiate credit extension terms with us.

v. Disconnection of your supply

We may arrange for your premises to be disconnected:

(a) if you do not have a legal right of occupancy of the premises

(b) if you fail to pay an account by the due date

(c) if you fail to comply with any of your other obligations under this contract

(d) as permitted or required by the **Energy Act article 61** (e) if you request for a disconnection

vi. Reconnection and reconnection surcharge

We commit to reconnect your account within 12 hours after resolving the issue that necessitated the disconnection.

We may levy a reasonable surcharge for reconnection depending on the reason for disconnection and how the disconnection was done.

vii. Charges and tariffs

Our charges for electricity are shown in our Schedule of Charges and Tariffs as approved by the Energy Regulatory Commission. The Schedule of Charges forms part of the terms of this contract and must be read in conjunction with this contract. A copy of our Schedule of Charges and Tariffs is available from us free of charge on request, or from our website

9. Change of any of the contract terms

We commit to give notice of changes to any of the contract terms and undertake to initiate consultation with you on the new terms.

10. Our access to your premises

You must allow our employees, contractors and agents to enter your premises:

- i. to read or test meters
- ii. to inspect, maintain, repair or replace our property
- iii. where otherwise permitted by law

11. Your right to privacy

We respect your privacy and are committed to complying with this as provided for in our constitution and other applicable statutes.

12. Our liability

Subject to the limitations described in this clause, we are liable for any loss, liability or expense which you may suffer or incur as a direct result of any negligence or breach of contract by us.

We are not liable to the extent your equipment caused or contributed to the problem.

We are not liable for an interruption to your electricity supply if the interruption:

- i. was caused by events or circumstances beyond our control
- ii. arose despite us having complied with all relevant performance standards and best practices

13. Dispute resolution

The parties will seek to settle any dispute arising under this contract in accordance with the Energy (Complaints and Dispute Resolutions) Regulations, 2012.

This does not prevent a party exercising its rights under this contract or applying to a court for urgent relief.

14. Assignment

You may not assign your rights or obligations under this contract without our consent.

For and on behalf of the customer
Signature
Date

For and on behalf	of XYZ Power Company Limited	
Signature	Designation	
Date		

ANNEX 5: Example of customer service charter

Foreword

At XYZ Power Company Limited we are committed to provide you with efficient and sustainable electricity services at reasonable cost. In compliance with subsection 4.2.5 of the Kenya Electricity Grid Code, we have come up with this Customer Service Charter to describe in a clear and a simplified way the level of services you as our esteemed customer should expect from us. We have also enumerated some commitments we desire of you so that you can enjoy our services to the fullest.

This Customer Service Charter is not meant to change any of your rights and obligations but should aid to cement the relationship between yourself and the company.

We trust you will find this Customer Service Charter informative, easy to use and a good reference document for your long term engagement with us.

We are committed to serve you to our utmost best.

Signed _____ Date _____

Project Director

1. Introduction

- 1.1 At XYZ Power Company Limited we are committed to ensure that, as a consumer of electricity, you enjoy a range of competitive offers with refreshingly uncomplicated and hassle-free service. Should you need to talk to us, you can be assured that you will be treated as a valued customer by us and get the information you need in a simple, straightforward way.
- 1.2 This Customer Charter provides you with our mutual rights and obligations and sets out what you can expect as our customer. The Charter outlines the key points that cover the supply of electricity to your premises and complements the terms and conditions of the relevant statutes, rules and regulations, which include the:
 - Energy Act, 2006
 - Kenya Electricity Grid Code
 - Energy (Licensing) Regulations, 2102
 - Electric Power (Supply) Rules, 2006
 - Energy (Complaints and Dispute Resolution) Regulations, 2012
 - Electric Power Safety Code
 - XYZ Customer Complaints Handling Procedures

2. Application for connection to a supply of electricity

- 2.1 If you require a new connection to supply of electricity:

 - 2.1.2 While submitting the form, please attach a copy of your identification document, a copy of your tax PIN certificate and a route sketch to give us directions to your premises.
 - 2.1.3 We shall appraise your application and advise you on the applicable connection charge based on resources required to make your connection, account deposit based on one and a half times (1.5) your estimated monthly consumption of electrical energy (for post-paid customers only), and other terms and conditions within the following time frames:

Type of connection	Time	
Requiring a meter only	7 days	
Requiring low voltage extensions	14 days	

- 2.1.4 You should have the internal wiring of your premises carried out by an electrical contractor duly registered with the Energy Regulatory Commission and appropriate wiring certificates submitted to us before your actual connection can be done and your electricity supply energised.
- 2.2 We shall allow you to comply with the terms and conditions for connection and make the necessary payment of the charges within ninety days (90) days from the date of our advice. Inability to pay within the ninety (90) days will lead to a withdrawal of our offer.

3. Permission to lay electric supply lines

- 3.1 After you have made payment for the connection, we shall initiate the acquisition of the permissions and approvals necessary to lay the electric supply lines that facilitate a connection of electricity supply to your premises.
- 3.2 In the event that we have difficulties, we may request you to assist us to contact some of the persons from whom we shall be seeking permission to lay the electric supply lines, should such persons be known to you.
- 3.3 If the required right of way is totally denied, we will be forced to use an alternative route which may mean we revise your charges for the new connection, necessitating a top up of your contribution. If this happens you will be advised accordingly.

4. Getting you connected

4.1 Upon payment of applicable charges and compliance with all other terms and conditions, the connection of electricity supply to your premises shall be made within the following time frames:

Type of connection	Time
Requiring a meter only	3 days
Requiring low voltage extensions	7 days

4.2 We shall supply you with electrical energy at the voltages specified here below.

Type of connection	Supply voltage	Max. variation
Single phase supply		10% above & 5% below
Three phase supply given on a four-wire system	230/400 volts	nominal voltage

5. Type of electrical supply

The supply of electrical energy shall be given by means of alternating current at a frequency of 50 cycles per second, maintained subject to a variation not exceeding 2.5% above or below the nominal frequency.

6. Determination and payments for electricity supplied

- 6.1 The quantity of electrical energy supplied to you shall be determined either:
 - 6.1.1 By means of a meter or meters duly type-approved by Kenya Bureau of Standards in consultation with Energy Regulatory Commission.

Such meter or meters shall be supplied by us or if you so wish, by you, our valued customer. In either case the meter or meters shall be housed in suitable housing provided by you.

- 6.1.2 Or as may be agreed between you and us.
- 6.2 We shall bill you for the electrical energy consumed monthly, based on actual or estimated readings of your meter or as our agreement provides. Where we have implemented a pre-paid system approved by the ERC, we require you to buy tokens for your energy use.
- 6.3 We shall obtain an actual reading of your meter or confirm the working of your pre-paid meter in accordance with the following schedule:

Type of consumer/premises	Min. number of actual readings per year
Rural residential	2
Urban residential	3
Rural commercial	3
Urban commercial	4
Small industrial	6
Medium and large industrial	8

- 7. Disconnection and reconnection of supply due to payment difficulties (for postpaid customers)
 - 7.1 If you anticipate any difficulties in paying for our services, please talk to one of our customer service staff for advice on the steps you need to take to avoid disconnection.
 - 7.2 In the event that your account is in arrears and no arrangements have been made with us, we shall discontinue our supply to you fourteen (14) days after the date that the payment fell due.

8. Electricity supply interruptions

- 8.1 Any time we need to interrupt your supply for the purposes of maintenance, to connect other customers, or for any other reason, we shall give you not less than forty eight (48) hours notice, and the supply so interrupted shall be restored not later that ninety minutes (90) minutes after the restoration time indicated in the notice.
- 8.2 We shall at all times exercise due diligence to ensure that the frequency and duration of unplanned interruptions of your supply are kept to a bare minimum as much as is practical.

9. Consumers obligations

9.1 To enable us serve you better we shall require you to:

9.1.1	Report any supply interruptions, abnormal events or conditions
	that would adversely affect the electricity supply system, and for
	this purpose, you may inform us through:
	Telephone contacts
	Email
	Fax
	Or visit the customer service centre nearest to you.
9.1.2	Ensure that your internal wiring is kept in a good state of repair

- 9.1.2 Ensure that your internal wiring is kept in a good state of repair at all times.
- 9.1.3 Keep the electric supply lines on your property free from interference by vegetation, structures or any other thing.
- 9.1.4 Allow access by our staff to inspect, repair, maintain, replace or generally work on the electric supply lines within your property.
- 9.1.5 Inform us as soon as possible if you notice your electricity supply meter has stopped working or suspect it may not be accurately recording your consumption.

10. Attendance to customers in service centres, on telephone and in correspondence

- 10.1 If you have made an appointment to see any of our staff, they will attend to you within 15 minutes of the time agreed upon.
- 10.2 If you walk into any of our service centres without prior appointment, we shall attend to you within 30 minutes.
- 10.3 We shall answer 90% of your calls within 60 seconds.
- 10.4 We shall investigate and answer all your queries relating to charges, metering and claims within 14 days of receipt.

11. Complaints and dispute resolution

- 11.1 If you have a complaint or are dissatisfied with any of our services or practices you should, in accordance with our Complaints Handling Procedures (*see Annex 7*), register the complaint or dissatisfaction with us, and we shall do all within our means to address it.
- 11.2 In the event that you have exhausted our Complaints Handling Procedures and you still remain dissatisfied, recourse is available to you at the Energy Regulatory Commission, in accordance with the Energy (Complaints and Dispute Resolution) Regulations, 2012.

Annex 6: Enquiry for supply of electricity (Annex to Customer Service Charter)

Customer application no.			
Project office	Date		
Type of premises	Desired voltage		

Applicant's data

Surname/Company name			First name				Middle name	
ID type	ID no.		Citizenship	P.I.N.		Contact address		
County		Village/estate		Sti	Street/road			Home/house name
Customer contact person		Name of village elder				Name	Name of Area Asst.Chief	
Mobile tel. number Em		Email a	il address		Occupation			

Supply data

County	Village/estate	Street/road	Home/house name
Plot/ LRN			
Observations			

Power data					
Type of Application	New	Additional load	Modification		
	()	()	()		
Fixed Appliances: No. kW	1	Plug points	Lighting points		
Cookers		Rating No.	Rating No.		
Immersion heater					
Air Conditioners					
Motors: No. of phases Hp Purpose for which required					
1.	1.				
2.					
3.					
Desired connection type:					
Single phase overhead ()					
Single phase underground ()					
Three phase overhead ()					
Three phase undergrour	nd ()				
Applicant's signature					

D

ANNEX 7: Customer complaints handling procedure (Annex to Customer Service Charter)

1. How to contact us

We value your compliments, comments and feedback on our services. You can reach us via: Post Office address XYZ Power Company Limited P.O. Box XXXX. Email Twitter...... Facebook......

2. How to make a complaint

It is your right as our valued customer to inform us as soon as possible if any of our services do not meet your expectations, and you can do this through any of the following channels:

a) By telephone

This is the fastest way to reach us to address any of your concerns pertaining to our services to you.

We commit to deal with telephone complaints when they arrive and should we be unable to address your concerns immediately, we will request your telephone contacts, investigate the issue you raise with us in detail, and revert with an appropriate feedback in the shortest time possible depending on the complexity of the issue(s).

b) In writing

We will acknowledge all written correspondence within three (3) working days of receipt.

In instances where an answer is not readily available by the time of our acknowledgement, we will advise on the time a definite resolution to your problem will be effected after our investigations.

c) By email

Any email communication to us will be treated as in (b) above.

d) In person

You can speak to our customer service staff at the office nearest to you.

They will be able to handle your complaints or refer you to the correct personnel so that you do not have to make several trips to follow up.

Should the issue require further investigation, our customer care staff concerned will note it down, refer it to competent personnel for resolution, and revert to you as soon as practical.

3. Our complaint handling process

Our desire is to resolve your complaint(s) as soon as we receive them and we will try at all times to do this. We have put in place the process below to ensure your complaints are addressed exhaustively.

- i. We will receive your complaints through the channels outlined in 2(a) to 2(d) above.
- ii. The complaint will be recorded and a unique reference number raised and given to you for any further follow-up and for our tracking purposes.
- iii. The complaint is addressed and resolved and you are informed.
- iv. If the complaint requires further investigation, it is passed to the section and staff concerned and you are informed when to expect our feedback.
- v. The investigation team may visit your premises for further details or to rectify the error.
- vi. The resolution is entered into our database and you are notified of the outcome and any mitigating factors to prevent recurrence.
- vii. Should your complaint not be resolved to your satisfaction, you should request the same to be escalated to the next level within our project hierarchy.
- viii. Should you still remain dissatisfied after exhausting our project complaint process hierarchy, you are at liberty to contact the Energy Regulatory Commission to mediate on the complaint.

4.	Danger co	mplaints				
	In the event of imminent danger to life or property such as					
	electrocution or electrical fires, apart from calling our project					
	office	, you should				
	i.	inform the police by calling 999				
	ii.	and/or the fire brigade by calling,				
	iii.	or ambulance services by calling				
		as is appropriate.				
	Also s	hout for help and tackle the danger with all available				
	means while ensuring that your safety and that of others is not					
	comp	romised.				



Wiring the KCB Bank branch in Talek, Narok County, in preparation for the switch to solar power. Mini-grid investors are transforming the face of rural Kenya.

SOME USEFUL CONTACTS

Here are some useful links where investors can get more information on the requirements mentioned in this guidebook.

Energy Regulatory Commission (ERC) www.erc.go.ke www.renewableenergy.go.ke

Institution of Engineers of Kenya (IEK) www.iekenya.org

Kenya Power (KPLC) www.kplc.co.ke

Ministry of Energy and Petroleum (MoEP) www.energy.go.ke

National Environment Management Authority (NEMA) www.nema.go.ke

Rural Electrification Authority (REA) www.rea.co.ke NOTES

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