



# **SIMPLIFIED LEGAL *And*** **REGULATORY GUIDE:**

**Nigerian Electricity Regulatory Commission  
(NERC) Mini-Grids Regulations, 2016**





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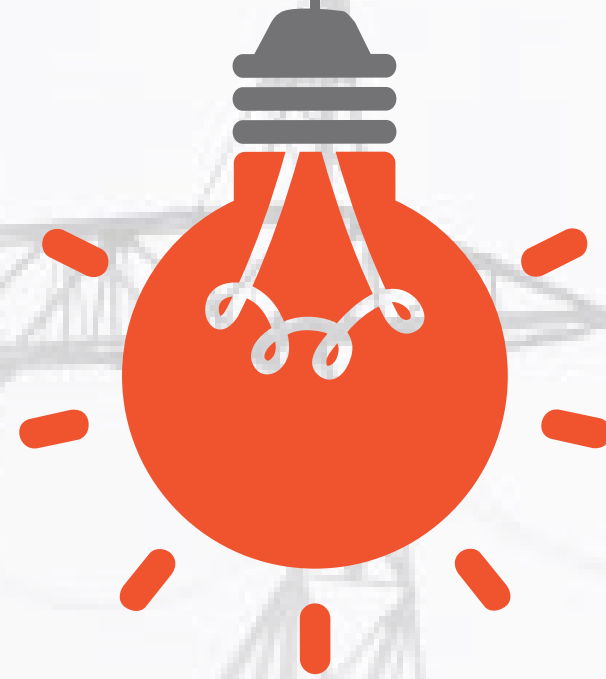
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# OVERVIEW

**Nigerian Electricity Regulatory Commission  
(NERC) Mini-Grids Regulations, 2016**



The Mini-Grids Regulations was introduced by NERC in 2016 as a regulatory guide for the operations of mini-grids in Nigeria. It applies to all mini-grids with generation capacity of up to 1MW, the owners, operators and users of the Mini-Grids as well as all other private or public stakeholders such as the Distribution Licensees or any federal or state institution or agency as the case may be interacting with Mini-Grid owners, operators and users in Nigeria.<sup>1</sup>The Glossary of Terms used in the Regulation and referenced in this guide can be found in the main Regulation<sup>2</sup> and in our [Glossary of Industry Terms](#).



NERC is empowered by the Electric Power Sector Reform Act, 2005 (EPSRA)<sup>3</sup>, as the major agency with the responsibility of formulating regulations to facilitate the implementation and enforcement of the provisions of the Act. NERC is vested with the authority to develop regulations relating to areas of administration, billing, licensing, procurement procedures, pricing and tariffs, mini-grids, etc.<sup>4</sup> The Mini-Grids Regulations is one of the many regulations formulated within the ambit of the Commission's powers. [Please refer to EL's guide on the Electricity Act.](#)




# OBJECTIVE

**Nigerian Electricity Regulatory Commission  
(NERC) Mini-Grids Regulations, 2016**

# OBJECTIVE

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The primary objectives of the Mini-Grids Regulation are:

- To ensure that all operations relating to mini-grids are implemented effectively.
- To provide a regulatory framework guiding mini-grid operations in Nigeria.



# KEY PROVISIONS

**Nigerian Electricity Regulatory Commission  
(NERC) Mini-Grids Regulations, 2016**



# KEY PROVISIONS



## ***Structure and Arrangement of Mini-Grids***

A Mini-Grid may be classified into two: Isolated Mini-Grid and Interconnected Mini-Grid. It is important to note that a Mini-Grid is required to have a generator in its network, which, may be operated by the Mini-Grid Operator or a third party.

## ***Geographical Delineation of Distribution Systems***

The Commission may grant a Permit to a Mini-Grid Developer to construct, own, operate, and maintain an Isolated Mini-Grid in a designated Unserved area. The Commission may also approve a Tripartite Contract with the respective Connected Community and Distribution Licensee, to construct, operate and maintain an Interconnected Mini-Grid in an Underserved Area.

A Mini-Grid Developer that desires a Permit must submit to the Commission an accurate description of the proposed distribution and generation system. In the case of different Feeders being connected to the same generator, the Commission may define each Feeder separately or all feeders together as one Mini-Grid in so far as the aggregate power generated and distributed through the feeders does not exceed 1 MW.

## ***Registration, Grant of Permit and Mandatory Conditions***

The Commission may grant a Permit to an Isolated Mini-Grid larger than 100 kW of Distributed Power and up to 1 MW of Generation Capacity, when the following conditions are fulfilled:

- An application has been received by the Commission for the intended area.
- Confirmation that based on the Distribution Licensee's expansion plans approved by the Commission, the Mini-Grid activities will not interfere with the expansion plans into the designated Unserved Area.
- Written consent of the Distribution Licensee of the intended area where the proposed operational area of the Mini-Grid Developer will be within the five-year expansion plan of the Distribution Licensee.
- The intended geographic location is an Unserved Area which has not been assigned to an Independent Electricity Distribution Network Operator (IEDNO) or any other Mini-Grid Developer.
- Submission of the executed agreement between the Community and Mini-Grid Developer for approval by the Commission.



- All necessary land for construction and installation of all assets has been acquired or leased.
- The tariff is calculated based on the MYTO methodology and approved by the Commission.
- Execution of the Health and Safety confirmation form and submission to the Commission.

In addition, a Mini-Grid Developer of an Isolated Mini-Grid with a Distributed Power of up to 100kW may apply for a permit or obtain a registration using a prescribed form.

For interconnected Mini-Grids, the Connected Community, the Mini-Grid Developer, and the Distribution Licensee are expected to sign a Tripartite Contract that becomes binding on all parties after it has been approved by the Commission. The Tripartite Contract will be approved when:

- An application has been received by the Commission for the intended area.
- The proposed retail tariff is calculated using the MYTO methodology, agreed by the Mini-Grid Developer, the Distribution Licensee and Connected Community and approved by the Commission.

- The Mini-Grid Developer, the Distribution Licensee and the Connected Community have executed a Tripartite Contract which shall contain certain information including- the usage right for the Distribution Licensee's network infrastructure which shall become an Interconnected Mini-Grid;; the tariff for electricity generated by the Mini-Grid and fed into the Distribution Licensee's network (if applicable); the availability of stable nominal voltage and effective system protection at the Connection Point of the generator with the Licensee's Distribution Network (if applicable); the agreement of the Connected Community to purchase electricity from the Mini-Grid for the tariffs defined, etc.

Pending the grant of the Permit by the Commission, a Mini-Grid Developer of a Mini-Grid of up to 100kW of Distributed Power can commence operations as a Registered Mini-Grid Operator.

A Mini-Grid Permit Holder is obligated to construct, operate, and maintain its Distribution Network in compliance with the relevant Technical Codes and Standards. The Permit Holder must also comply with the EPSRA, the terms and conditions of the Permit, the Tripartite Contract, the Agreement with the Community, Customer Contract, the rules and regulations and decisions, orders, and directions from the Commission. Also, the Commission must be granted



access to any information by the Permit Holder, relevant to fulfill its tasks under the EPSRA or the Regulation.

### **Mini-Grid Operation under a Permit**

The Regulations mandate the Mini-Grid Permit Holder to operate its Distribution Network and related facilities in compliance with the Technical Codes and Standards, and the terms and conditions of its Permit or Tripartite Contract and in accordance with other standards as may be prescribed by the Commission periodically. When there is an inconsistency with the provisions of the Regulation and the Technical Codes and Standards, the provisions of the Technical Codes will prevail.

A Registered Mini-Grid Operator is obligated to supply electricity according to the contract signed with the Community or the Connected Community. In addition, all Operators must comply with safety guidelines and existing environmental legislation.

Furthermore, Permit Holders must enter into standard connection agreements with customers who accept to connect to the Mini-Grid. The Metering Code must apply to all Registered Mini-Grids and Isolated Mini-Grids operated under a Permit and Interconnected Mini-Grids operated under a Tripartite Agreement except where derogation has been granted by the Commission following an application

for same by the Mini-Grid Operator., The tariff and billing model of the Mini-Grids must be described in the standard contract between the Operator and the customers in the Community.

A Permit Holder is also obligated to operate within the geographical area specified in its Permit or Tripartite Contract.

Where a Distribution Licensee extends its network to a Mini-Grid of a Registered Mini-Grid Operator, the Registered

If a Distribution Licensee extends its network to an Isolated Mini-Grid under a Permit, the Mini-Grid Permit Holder may convert to an Interconnected Mini-Grid Operator or transfer all assets that the Isolated Mini-Grid does not want to remove from the Mini-Grid System to the Distribution Licensee in return for compensation based on the mechanics captured in the Regulation. Where the parties fail to agree to the terms of the compensation, the Commission would act as an arbiter to determine the compensation to be paid.

Mini-Grid Operator is required to decommission and remove all its assets and equipment within two (2) months following supply of electricity by the Distribution Licensee to the area. The Registered Mini-Grid Operator will not be entitled to any refund or compensation in this instance.<sup>5</sup>





It should be noted that all assets disposed of by the Mini-Grid Operator must be done in an environmentally friendly manner and in accordance with environmental legislation in force.<sup>6</sup>

### ***Exclusivity Period and Site Reservation for Project Development Purposes***

To acquire/ renew an exclusivity agreement for project development purposes by an Isolated Mini-Grid Developer, the following process should be followed:

- A Community may grant an exclusive right to develop an Isolated Mini-Grid project until commissioning at a certain site whereas, a Community may grant to the Mini-Grid Developer an exclusivity period of up to 12 months.
- The Isolated Mini-Grid Operator may request the Commission an extension beyond 12 months upon justification where necessary.
- The Distribution Licensee and the Community may grant an exclusive right to develop an Interconnected Mini-Grid project until commissioning at a certain site.

The Commission and the Community or the Distribution Licensee may ask the developer to provide materials that signify its commitment<sup>7</sup> before signing an exclusivity agreement. The Commission will not grant a permit or license or approve a Tripartite Contract as applicable to a Mini-Grid Developer for a site that an exclusivity agreement has been executed regarding same. A site that is within the 5-year extension of exclusivity beyond 12 months will not be granted by the Commission where the site is within the 5-year extension plan of the Distribution Licensee. It should be noted that the Mini-Grid Developer is recommended to consult the Commission or the Distribution Licensee before signing the initial exclusivity agreement with the community. In addition, the Distribution Licensee reserves the right to integrate the Community to its distribution network.



# KEY STAKEHOLDERS

Nigerian Electricity Regulatory Commission  
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# KEY STAKEHOLDERS

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## ***Nigerian Electricity Regulatory Commission***


The primary agency for the supervision and control of the Regulations as specified in the EPSRA is the Commission. The Commission was established as a corporate body to regulate the generation, transmission, distribution of electricity in Nigeria through promoting efficiency in industry and market structures, electric fencing, regulating prices and ensuring safety in the production and delivery of electricity.<sup>8</sup> The Commission is vested with the responsibility of monitoring and overseeing mini-grid activities to facilitate competition and prevent abuse of market power. In addition, the Commission may amend or repeal the provisions of the Regulation.<sup>9</sup> In addition, the monitoring of the installations, use and maintenance of mini-grids throughout Nigeria is the responsibility of the Commission.

The background of the slide features a faint, dark silhouette of a high-voltage power transmission tower, also known as a pylon, which is a lattice structure. It is positioned centrally and extends from the bottom towards the top of the frame, serving as a thematic backdrop for the text.

# **PRICING** **AND TARIFFS**

**Nigerian Electricity Regulatory Commission  
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# PRICING AND TARIFFS

A large, stylized illustration of a lightbulb is positioned on the left side of the page. The lightbulb is orange with a grey base and a white filament. Inside the lightbulb, there is a faint, grey silhouette of a person wearing a hard hat. The lightbulb is surrounded by several small, orange, rectangular shapes that resemble light rays or sparks. The entire illustration is set against a light grey background.

The Interconnected Mini-Grid Operator is required to pay the Distribution Licensee a usage charge which must be agreed between the Operator and the Distribution Licensee and approved by the Commission. If both the Operator and the Distribution Licensee are not able to reach an agreement on the usage charges, the usage charge for the distribution network will be used to reduce financial losses on the Distribution Licensee's side on the one hand and the requirement for low-cost distribution grids in high electricity demand areas of Mini-Grid Operators on the other hand. Accordingly, the basis for the calculation shall be the lost profit of the Distribution Licensee from electricity sales within the part of the distribution network and cut out to the Mini-Grid Operator. The usage charge shall be calculated based on the average profit generated by the Distribution Licensee within the last twelve (12) months plus any operation and maintenance costs.<sup>10</sup>

Using the MYTO methodology approved by the Commission, retail tariffs for Mini-Grid Permit Holders are determined and they are subject to technical and non-technical losses of 10%. A registered Mini-Grid Operator may decide to determine the retail tariffs and other charges using the MYTO calculation tool; by an agreement between the Operator and the Community to be submitted to the Commission.<sup>11</sup>



# INCENTIVES AND INVESTMENT OPPORTUNITIES

Nigerian Electricity Regulatory Commission  
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# INCENTIVES AND INVESTMENT OPPORTUNITIES



The Mini-Grid Regulation was developed to facilitate investments in the electricity sector particularly for the purpose of accelerating electricity access in both unserved and underserved areas in Nigeria. In addition, the Regulation encourages DisCo investors to consider setting up companies that will take on the mantle of mini-grid development in their respective franchise areas based on unique models that can be adopted and applied or partner with mini-grid developers regarding mini-grid projects.<sup>12</sup>.



# **SANCTIONS AND PENALTIES**

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# SANCTIONS AND PENALTIES

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When there is sufficient material evidence in the possession of the Commission that the Mini-Grid Operator is violating or is going to violate the terms and conditions of the permit or the Tripartite Contract, the Commission may serve an order to the Operator to mandate or prohibit the things specified in the Order. The Order must specify the period that the Operator is expected to rectify or avoid the violation. Where no compliance is undertaken on the part of the Operator within the stipulated period, the Commission may be forced to enforce the Order through an enforcement mechanism established by it.<sup>13</sup>

# DISPUTE RESOLUTION

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Disputes are resolved based on the procedures stipulated in the Regulations.<sup>14</sup>

# Referenced Statutory Instruments

- Electric Power Sector Reform Act (EPSRA) No.6 LFN 2005
- Nigerian Electricity Regulatory Commission (Business Rules of the Commission) Regulations, 2006.
- Nigerian Electricity Supply and Installation Standards Regulation, 2015

Endnotes

1 Section 4 of the Mini-Grids Regulation, 2016  
2 NERC Official website, available at <https://nerc.gov.ng/index.php/library/documents/Regulations/NERC-Regulation-for-Mini-Grid/>  
3 NERC Official website, available at <https://nerc.gov.ng/doclib/advertisements/7-electric-power-sector-reform-act-2005/file>  
4 See Section 32(1)(e), Section 81, Section 96(1), 96 (2)f of the EPSRA, No 6 LFN 2005  
5 Section 19(6)  
6 Section 19(5)  
7 E.g., Letter of Intent (“LOI”) from investor, endorsement letter from the State Government  
8 Sections96 & 70(8) of the EPSRA  
9 Section 26  
10 Section 20, Annex 8  
11 Ibid  
12 Section 22  
13 Ibid  
14 Section 25  
15 Section 16(3)

# DISCLAIMER

This document titled the “Simplified Legal and Regulatory Guide” of the referenced country is not expected to form the basis of, or be construed as standard legal advice; nor should any of its contents and representations be strictly relied upon for any activities. Electricity Lawyer (EL) will not be liable for decisions whatsoever that are made based on the contents of the document.

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