

# ODISHA ELECTRICITY REGULATORY COMMISSION

## (Mini-Grid Renewable Energy Generation and Supply) Regulations, 2019, dated: 10.06.2019

Sl. No.	Description	Summary
1.	<b>Control Period</b>	N. A.
2.	<b>Objective</b>	To promote and facilitate the development management of Renewable Energy Generation and Supply through Mini-grid project in the State of Odisha.
3.	<b>Applicability</b>	These Regulations shall apply to new and existing Mini-Grid Projects having capacity above 10 kW up to 1000 kW set up for generation and supply of electricity to consumers in the mini-grid served area and/or sale to the Distribution Licensee in the State of Odisha. The existing Mini-Grid Projects shall ensure the compliance of these Regulations and shall meet the Technical Standards and Safety measures as per these Regulations within six months of notification.
4.	<b>Models for Business Operations</b>	<p><b>1. Model A: Non -existence of Grid:</b></p> <ul style="list-style-type: none"> <li>• The MGO shall build, commission, operate and maintain the Mini-Grid Project for generation and supply of electricity through the PDN as per the Standard of Performance (SoP) specified in these regulations in areas where the Distribution Licensee's System doesn't exist.</li> <li>• The MGO shall be entitled to supply entire quantum of electricity generated from the Mini-Grid Projects to the consumers at mutually agreed tariff or at the tariff decided by the State Government of Odisha under any State sponsored schemes to be implemented by the State Government.</li> <li>• The MGO shall have the option to transfer the ownership of the PDN to the Distribution Licensee with mutual consent on depreciated value of assets as on last date of previous financial year, provided the PDN conforms to the standards of the Distribution Licensee's system.</li> </ul> <p><b>2. Model B: Grid pre-exists:</b></p> <ul style="list-style-type: none"> <li>• The MGO shall build, commission, operate and maintain the Mini-Grid Projects for generation and supply of electricity through the PDN as per the SoP in the Mini-Grid Areas where the Distribution Licensee's System pre-exists.</li> <li>• After supplying electricity to the consumers for a minimum period of six (6) months, the MGO may opt for one of the following electricity supply options: <ul style="list-style-type: none"> <li>➤ Continue to supply entire quantum of electricity generated to the consumers through the PDN as per the standard of Performance (SoP) at mutually agreed tariff as per the arrangement;</li> <li>➤ The MGO shall supply to the consumers at the mutually agreed tariff as per the arrangement given in the Clause 4.3(a) above and sell excess/surplus electricity to the Distribution Licensee at the inter-connection point at the applicable FIT, to be decided by the Commission.</li> <li>➤ On expiry of at least one (1) year, the MGO may opt to generate and supply entire electricity to the Distribution Licensee at the inter-connection point at the applicable FIT, to be decided by the Commission.</li> </ul> </li> </ul>
5.	<b>Technical Standards for Construction of the PDN</b>	The safety measures and technical standards for construction of PDN shall conform to CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 and as per manual for design and construction of lines issued by Rural Electrification Co-corporation and followed by the distribution licensees in the state of Odisha as amended from time to time.
6.	<b>Technical Standards for Interconnection with the Grid</b>	<ul style="list-style-type: none"> <li>• The inter-connection of the Mini-grid with the Distribution Licensee's system shall comply with the CEA (Technical Standards for connectivity of the Distributed Generation Resources) Regulations, 2013 and amendments thereto.</li> </ul>

		<ul style="list-style-type: none"> <li>The islanding mode of operation of mini-grid is allowed as per provisions stated in OBRC order dated 19.08.2016 on Net metering/bi-directional metering and connectivity norms for small scale PV system.</li> <li>The cost for interconnection network from the mini-grid project to interconnection point shall be borne by the MGO.</li> </ul>
7.	<b>Metering Arrangement</b>	<ul style="list-style-type: none"> <li>The metering shall be provided at the generation end, interconnection point with the Distribution Licensee's system, and the consumer end, as the case may be.</li> <li>All the meters shall adhere to the standards and provisions specified in the CEA (installation and operation of meters), Regulations 2006 and amendments there to.</li> <li>Generation meter readings at Mini-grid project shall be considered for the purpose of the fulfillment of RPO for the obligated entity/entities.</li> <li>All the meters shall be periodically calibrated Consumer meters should be calibrated at an interval of the least five years.</li> </ul>
8.	<b>Power Purchase Agreement</b>	<ol style="list-style-type: none"> <li>In case of partial or entire sale of electricity generated from the Mini-grid, the MGO shall enter into the PPA with the GRIDCO / Distribution Licensee.</li> <li>The quantum of energy sale to the Distribution Licensee shall be determined on the basis of Joint Meter Reading (JMR), recorded by the MGO along with representative of GRIDCO/ Distribution Licensee.</li> <li>The PPA shall be approved by the Commission.</li> </ol>
9.	<b>Distribution Franchisee Framework</b>	The Distribution Licensee may appoint MGO as the DF in the Mini-Grid Area as per mutually agreed terms and conditions.
10.	<b>Migration Options:</b>	9.1 The Mini Grid Operator intending to migrate shall inform the Commission, the State Nodal Agency and the concerned Distribution Licensee for migration to another option with a proposed model. In case of state sponsored schemes. State Government shall also be informed.
11.	<b>Exit Options</b>	<ul style="list-style-type: none"> <li>The MGO shall be allowed to transfer the ownership either of the generating assets and/or distribution asset to the distribution licensee or any other MGO, as the case may be, as per mutually agreed terms and conditions provided that the existing agreement and Feed -in - tariff determined by the Commission shall remain unchanged.</li> <li>The exit options will be governed by the relevant clauses given in the Agreement(s) signed by the MGO with the consumers / distribution licensee.</li> </ul>
12.	<b>Tariff for the Mini-grid Projects</b>	<ul style="list-style-type: none"> <li>The Commission shall determine the Tariff for sale of electricity from mini-grid plant to the distribution licensee as per provision under Section 62 of the Act on the application filed by the MGO.</li> <li>The GRIDCO/Distribution Licensee shall enter into the Power Purchase Agreement (PPA) with the MGO within one month of receipt of notice from MGO for purchase of electricity from the mini-grid project as per the tariff determined by the Commission.</li> </ul>
13.	<b>Energy Accounting and Settlement for supply to consumers</b>	<ul style="list-style-type: none"> <li>The MGO and the consumer shall mutually decide on the billing cycle for the purpose of raising invoices and payment cycle for payment of bill.</li> <li>The billing cycle shall be on monthly/bi-monthly basis as mutually decided by the MGO and the consumers served by the Mini-Grid project developed by the MGO.</li> </ul>
14.	<b>Energy Accounting and Settlement for supply to the Distribution Licensee</b>	The MGO shall raise invoice against the electricity injected into the Distribution Licensee's System at the interconnection point based on the billing period of the Distribution Licensee. The distribution licensee shall pay the MGO at the applicable tariff, to be determined by the Commission, as per the terms of PPA.
15.	<b>Energy Accounting and Settlement for the activities of Distribution Franchisee</b>	The MGO shall raise invoice to the Distribution Licensee on activities of the Distribution Franchisee in compliance with the conditions of DFA. The terms and conditions with respect to the payments and the performance of the Distribution Franchisee shall be specified in the DFA.

<b>16.</b>	<b>Renewable Purchase Obligation</b>	The quantum of electricity generated from the mini-grid as recorded in generation meter shall qualify as having complied with the RPO for the Distribution Licensee /GRIDCO.
<b>17.</b>	<b>Duties of the Mini-Grid Operator</b>	The MGO shall perform the functions as outlined under the PPA with GRIDCO DISCOMs and the DFA (as applicable) with the Distribution Licensee of the area.