### NAGALAND ELECTRICITY REGULATORY COMMISSION

**(Rooftop Solar Grid Interactive System Net/Gross Metering) Regulations, 2019,**

**Dated: 24.10.2019**

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<th>Sl. No.</th>
<th>Description</th>
<th>Summary</th>
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<td>1.</td>
<td>Control Period</td>
<td>These Regulations shall come into force from the date of publication in the of the State of Nagaland and shall remain in force unless otherwise reviewed/amended.</td>
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<td>2.</td>
<td>Applicability</td>
<td>These Regulations shall apply to the Distribution Licensee, the eligible Consumers of the Distribution Licensee and third party owners of gross metering arrangement of Rooftop Solar (RTS) system in the State of Nagaland.</td>
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| 3.      | Eligibility | 1. The eligible consumer may install the Rooftop solar system (RTS) which:  
- Shall be within the permissible rated capacity as defined under these regulations.  
- Shall be located in the premises of the consumer.  
- Shall interconnect and operate safely with the Distribution system of the Licensee.  
2. These Regulations do not preclude the right of the State authority to undertake the RTS system above 500 Kw through alternative mechanism. |
| 4.      | General Principles | 1. Subject to the limits and other terms and conditions specified in these Regulations, the eligible consumer(s) of the Distribution Licensee shall be entitled to install RTS system under Net metering or Gross metering arrangement.  
2. Third party owners who have entered into a lease or commercial agreement for the rooftop in the premises of the eligible consumers, shall also be entitled to install rooftop solar system under gross metering arrangement with the Distribution Licensee, for such capacity which shall be cumulative of the prescribed limits of rooftop solar capacity for each eligible consumer(s) whose rooftop has been leased by the third party owner.  
3. Third party owners who have entered into a lease or commercial agreement for the rooftop in the premises of a group of consumer(s), shall also be entitled to install rooftop solar system under Net metering arrangement with the Distribution Licensee, for such capacity which shall be cumulative of the prescribed limits of rooftop solar capacity for each eligible consumer(s) of the group whose rooftop has been leased by the third party owner connected with the same Distribution transformer (up to the limit of as defined under these Regulation of DT capacity).  
4. The eligible consumer or third party owner as the case may be, availing Gross Metering arrangement under these regulations shall not be allowed to apply for Net Metering within the same premises.  
5. If the eligible consumer(s) installs RTS system under the Net Metering scheme, such eligible consumer(s) shall be entitled to use the power generated from the rooftop solar system at his premises (Self consumption). The surplus power can be injected to the distribution system of the Licensee at the interconnection point.  
6. The RTS system must be capable of detecting an unintended islanding condition and must have anti-islanding protection to prevent any feeding into the grid in case of failure of supply/grid.  
7. The consumer(s) may install grid interactive RTS system with or without battery backup.  
8. Every RTS system shall be equipped with automatic synchronization device.  
9. The inverter shall have the features of filtering out harmonics and other distortions before injecting the energy into the distribution system. Harmonic Distortion (THD) shall be within the limits specified in the Indian Electricity Grid Code (IEGC)/IEEE technical standards. |
| 5.      | Capacity of the Rooftop Solar (RTS) System | • The maximum peak capacity of the grid connected RTS to be installed in a consumer's premises shall not exceed 100% of the connected/sanctioned load/contracted demand of the consumer.  
• The capacity of the grid connected RTS system to be installed by an eligible consumer(s) or third party owner shall not be less than 1kwp and shall not exceed 500 kWp. |
<p>| 6.      | Central Financial Assistance/Incentive | The availing of CFA/Incentive shall be as per the Directive/Guidelines issued by MNRE, Govt of India, as amended from time to time. |</p>
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<td>7.</td>
<td><strong>Empanelment of Vendors/Agencies for Development of RTS System</strong></td>
<td>The Distribution Licensee or State Nodal Agency (SNA) shall invite expression of interest for empanelment of vendors/manufacturer of solar panel/system integrators for supply, installation, testing and commissioning of RTS system as per the MNRE guidelines.</td>
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<td>8.</td>
<td><strong>Capacity of Transformer</strong></td>
<td>The maximum cumulative capacity of RTS system to be allowed in the area fed from a Distribution transformer (DT) or any other transformer from which power is fed to the eligible consumers shall not be more than 100% of that DT or any other transformer.</td>
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<td>9.</td>
<td><strong>Procedure/Rule for application and grant of Grid connectivity</strong></td>
<td>The Procedure/Rule for application and grant of grid connectivity will be framed by Distribution Licensee who shall display the same on their website for intending consumers. The rules shall conform to Regulations, shall be non-discriminatory and shall provide expeditious disposal of the applications.</td>
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| 10. | **Interconnection with the Distribution System/Grid** | 1. The interconnection of the RTS system with the distribution system of the Distribution Licensee shall be made as per the technical specifications and standards for connectivity as specified by the Central Electricity Authority.  
2. The cost of evacuation system and interconnection of the RTS system with the distribution system shall be borne by the eligible consumer(s) or third party owner, as the case may be.  
3. The interface point shall remain same irrespective of the installed capacity of RTS system. The connectivity levels at which the RTS system shall be connected with the Distribution system shall be as provided in the NERC (Electricity Supply Code) Regulations, 2012 or the voltage level at which the consumer has been given supply by the distribution licensee.  
4. The distribution licensee shall have the right to disconnect the RTS system at any time without notice in the event of threat/damage from such RTS system to its distribution system to prevent any accident or damage. |
| 11. | **Metering Arrangement** | 1. All the meters installed at the RTS system shall comply with the CEA (Installation and Operation of Meters), Regulations, 2006 and subsequent amendments thereof.  
2. The appropriate meter(s) at the premises of the consumer shall be procured, installed and maintained by the Distribution Licensee at the cost of the eligible consumer. However, if the eligible consumer wishes to procure the appropriate Meter(s), he may procure such meter(s) and present the same to the Distribution Licensee for testing and installation.  
3. The installation of check meters shall be mandatory for rooftop solar system having rated capacity more than 50 kWp. For installation having capacity up to 50 kw, the eligible consumers or distribution licensee whosoever desires, may install check meter at their own cost. In any case, the distribution licensee shall own the check meter. The check meter shall be installed after the inverter of the RTS system.  
4. The specification and standards of the check meter shall be the same as or better than the consumer meter installed at the premises of the eligible consumer. |
| 12. | **Work Completion and Commissioning** | 1. RTS System more than 10KW: On receiving the completion report from the Vendor, the liceneces shall inspect/verify and commission the RTS system after obtaining safety approval from the Chief Electrical Inspector.  
2. RTS System of 10KW and below: On receiving the completion report from the Vendor, the Licensee shall inspect/verify and commission the RTS system. |
| 13. | **Energy Accounting and Settlement (Net Metering)** | 1. For each billing period, the distribution licensee shall record readings as below:  
2. The quantum of electricity injected (exported) into distribution system (grid) from RTS system.  
3. The quantum of electricity supplied (imported) by the distribution licensee to the eligible consumers.  
4. Net billed electricity, for which a payment is to be made by the eligible consumers.  
5. The excess electricity (electricity credit), if any, to be carried over to the next billing period after excluding credit from the previous billing (if any).  
6. The quantum of electricity generated by the RTS system shall be accounted towards RPO Compliance.  
7. If the electricity injected by the RTS system exceeds the electricity consumed during the billing period, such excess injected electricity shall be carried forward to the next billing period as electricity credit and shall be adjusted in the subsequent billing periods but within the settlement period (i.e. Financial year). |
8. If the electricity supplied by the distribution licensee during any billing period exceeds the electricity generated by the eligible consumer’s RTS system, the distribution licensee shall raise invoice for the net electricity consumption after taking into account any electricity credit balance remaining from the previous billing periods.
9. The excess injected electricity measured in kilo-watt hour may be utilized only to offset the consumption measured in kilo-watt hour and shall not be utilized to compensate any other fee and charges imposed by the Distribution Licensee/Commission.
10. There shall be no deemed generation charges payable to the eligible consumer of the RTS system.

| 14. | Wheeling/Banking Charges | The RTS system under these Regulations shall be exempted from all wheeling, cross subsidy, transmission and distribution, and banking charges and surcharges. |
| 15. | Energy Accounting and Settlement (Gross metering) | 1. The Distribution Licensee shall be responsible for billing of the electricity injected by the RTS system into the distribution grid.
2. The Distribution Licensee, shall reimburse the eligible consumer or the third party owner as the case may be, for the quantum of injected electricity by RTS system during the billing period by way of 'Solar Injection Compensation'.
3. The quantum of the electricity generated/injected by the RTS system shall be accounted towards RPO Compliance.
4. Rebate/delayed payment surcharge of the Solar Injection Compensation as the case may be, shall be levied.
5. There shall be no deemed generation charges payable to the eligible consumer(s) or third party owner of the RTS system. |
| 16. | Solar Renewable Purchase Obligation (Solar RPO) | • In case of net metering scheme, the quantum of solar electricity generation by eligible consumer, who is not defined as obligated entity from the RTS system, shall qualify towards compliance of Renewable Purchase Obligation (RPO) for the Distribution Licensee in whose area of supply the eligible consumer is located.
• In case of gross metering scheme, the total quantum of solar electricity injected into the grid by eligible consumer, who is not defined as obligated entity, shall qualify towards deemed Renewable Purchase Obligation (RPO) for the Distribution Licensee in whose area of supply the eligible consumer is located. |
| 17. | Eligibility to participate Renewable Energy Certificate Mechanism | • Nothing contained in these Regulations, shall apply to the Rooftop Solar generator intending to sell power under the Renewable Energy Certificate Mechanism and he/she shall be free to sell power under such mechanism as per the provisions of Central Electricity Regulatory Commission (Terms and Conditions for recognition Energy Generation) Regulations, 2010 and subsequent amendments thereof.
• The eligibility for Renewable Energy Certificate and issuance of such renewable energy certificate shall be as per the eligibility criteria specified under Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 and subsequent amendments thereof. |