# POWER PURCHASE AGREEMENT FOR ROOFTOP SOLAR PV PLANTS WITH GROSS METERING ARRANGEMENT

This Power Purchase agreement is entered into at (place) on this day of between Manipur State Power Distribution Company Limited
(MSPDCL), a Government of Manipur undertaking, a Company formed and incorporated in India under the Companies Act-1956, with its registered office located at
successors and permitted assigns) as party of the first part
AND  Manipur Renewable Energy Developing Agency (MANIREDA) having its registered Office at,through its authorized representatives,
AND,(Name) the consumer of MSPDCL residing at (address), hereinafter referred to as the "Seller" (which expression shall, unless repugnant to the context or meaning thereof, include its successors and permitted assigns) OR(Name of the third party owner of the Roof Top system who has taken on lease / is given / obtained the roof belonging to(Name of the roof / building) for the purpose of Commissioning & Maintaining the Solar Energy System herein after referred to as the "Seller" - as party of the third part.
whereas,  a. The Licensee agrees to provide grid connectivity to the eligible consumer for injection of the electricity generated from his Solar Rooftop capacitykW into the power system of Licensee as per conditions of this agreement and Joint Electricity Regulatory Commission for Manipur and Mizoram (JERC (M&M)) (Metering for Grid Connected December 2016)
Renewable Energy) Regulations, 2016 <b>b.</b> The Seller intends to install a SRTPV system of kWp capacity on the existing roof top of the premises situated at and bearing Consumer. No in the same premises under

- **c.** The Seller intends to sell the energy generated from the Solar Roof Top Photo Voltaic (SRTPV) system to MSPDCL on gross metering concept, from the date of commissioning of the SRTPV system.
- **d.** MSPDCL intends to purchase the energy generated by such SRTPV system, on gross metering concept, at the tariff determined by the JERC (M&M) for Rooftop Solar Plants in Manipur.

Now therefore, in consideration of the foregoing promises, the parties hereto, intending to be legally bound hereby agree as under:

## 1. Eligibility

Eligibility for gross metering has been specified in the relevant regulations of the JERC for Manipur and Mizoram. Eligible seller has to meet the standards and conditions for being integrated into grid/distribution system.

## 2. Technical and Interconnection Requirements

- 2.1 The eligible seller agrees that his Renewable Energy Plant and metering system shall conform to the standards and requirements specified in JERC for Manipur and Mizoram (Metering for Grid Connected Renewable Energy) Regulations, 2016 and in the following Regulations and codes as amended from time to time:
  - (i) Central Electricity Authority (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations, 2013as amended from time to time.
  - (ii) Central Electricity Authority (Installation and Operation of Meters) Regulation 2006, as amended from time to time.
  - (iii) JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013, as amended from time to time.
- 2.2 Eligible seller agrees that he has installed or shall install, prior to connection of Renewable Energy Plant to Licensee's distribution system, an isolation device (both automatic and inbuilt within inverter and external manual relays) and agrees for the Licensee to have access to and operation of this, if required and for repair & maintenance of the distribution system.
- **2.3** Eligible seller agrees that in case of a power outage on Licensee system, Renewable Energy Plant shall disconnect/isolate automatically and his plant shall not inject power into Licensee's distribution system.
- **2.4** All the equipment connected to distribution systems shall be compliant with relevant International (IEEE/IEC) or Indian standards (BIS) and installations of electrical

equipment must comply with Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010 as amended from time.

Any equipment failure in and during the operation within the premises of the renewable generating plant shall not come under the scope / obligations of MSPDCL.

- **2.5** Eligible seller agrees that licensee shall specify the interface/interconnection point and metering point. The meter should be sealed jointly after due verification of the meter readings.
- **2.6** Eligible seller and licensee agree to comply with the relevant CEA and JERC for Manipur & Mizoram Regulations in respect of operation and maintenance of the plant, drawing and diagrams, site responsibility schedule, harmonics, synchronization, voltage, frequency, flicker etc.
- 2.7 Due to Licensee's obligation to maintain a safe and reliable distribution system, Eligible consumer agrees that if it is determined by the Licensee that eligible consumer's Renewable Energy Plant either causes damage to and/or produces adverse effects affecting other consumers or Licensee's assets, eligible consumer shall have to disconnect Renewable Energy Plant immediately from the distribution system upon direction from the Licensee and correct the problem at his own expense prior to re connection.
- 2.8 The eligible consumer in respect of gross metering shall be solely responsible for any accident to human being/animals what so ever (fatal/non-fatal) that may occur due to back feeding from the solar plant when the grid supply is off. The licensee reserves the right to disconnect the consumer's installation at any time in the event of such exigencies to prevent accident or damage to life and property.

#### 3. Clearances and Approvals

The Seller shall obtain MSPDCL's and other statutory approvals from MANIREDA and clearances before connecting the SRTPV system to the distribution system.

#### 4. Access and Disconnection

- **4.1** MSPDCL shall have access to metering equipment and disconnecting device of SRTPV system, both automatic and manual, at all times.
- **4.2** In emergency or outage situation, where there is no access to a disconnecting device either automatic or manual, the MSPDCL shall have the right to disconnect services to the premise of the seller.

# 5. Liabilities

The Seller shall be solely responsible for availing any fiscal or other incentive provided by the State/ Central government, at his own expenses.

### 6. Commercial Settlement

**6.1** All the commercial settlement under this agreement shall follow the Joint Electricity Regulatory Commission for Manipur and Mizoram (Metering for Grid Connected

Renewable Energy) Regulations, 2016 and subsequent amendments thereof.

#### 6.2 Tariff:

- b. The Seller shall pay the Electricity tax and other statutory levies, pertaining to SRTPV generation, as may be levied from time to time.
- c. The seller shall not have any claim for compensation, if the Solar power generated by his SRTPV system could not be absorbed by the distribution system due to failure of power supply in the grid/distribution system for viz such as plan / un-plan outage, load shedding and line faults, whatsoever.

# 7. Metering:

- 7.1 The seller shall arrange to install export meter of appropriate specification the existing meter to the generation side of SRTPV plant to measure solar power generation to the distribution system, at a suitable place in the premises accessible for recording export of energy from the SRTPV system to the grid. The meter shall comply with the Central Electricity Authority (Installation and operation of meters) Regulations, 2006 and shall have the following features:
  - i. Separate register for recording export energy with facility to download by Meter Reading Instrument (MRI).
  - ii. kVA, kW and kVAR measuring register for export of energy.
  - iii. Meter shall have RS232 (or higher) communication optical port/Radio Frequency (RF) port to support Automatic Meter Reading (AMR).

## 8. Energy Accounting, tariff and Settlement:

- 8.1 The energy accounting, tariff and settlement of the renewable energy system other than rooftop solar energy system shall be as per the connection agreement or power purchase agreement executed between the seller and the distribution licensee provided that the power purchase agreement shall be vetted by the Commission. The accounting of the electricity generated, consumed and injected by the rooftop solar system under these regulations shall become effective from the date of connectivity of such system with the network of distribution licensee.
- **8.2** The procedure for billing and energy accounting in respect of gross metering rooftop solar energy system shall be as under:-
  - (1) For electricity injected to the licensee's grid from solar energy system, joint monthly reading or any other mechanism approved by the Commission in

respect of power exported to licensee shall be taken by the authorized representative of the seller (i.e. developer of the solar power plant) and the licensee. The seller shall submit monthly invoice for energy sold to licensee after each meter reading duly supported by the joint meter reading document and photograph of the energy meter showing reading.

(2) The applicable tariff for the rooftop solar energy shall be the levelised tariff determined and fixed by the Commission from time to time. Terms and conditions of payment of the cost of power purchased by the licensee from the seller shall be as per mutually agreed and duly incorporated in the power purchase agreement executed between the eligible consumer or third party owner of the solar energy system and the licensee as the case may be.

#### **8.3 BILLING AND PAYMENT:**

- (1) MSPDCL shall issue monthly electricity bill for the gross energy based on joint meter reading statement on the scheduled date of meter reading.
- (2) MSPDCL shall pay for the gross energy exported as per Tariff agreed in this agreement within 60 days of issue of bills.
- (3) MSPDCL shall pay interest at the same rates as is being levied on the consumers for late payment charges in case of any delay beyond 30 (thirty) days period from the date of settlement for payment of energy credits.

Explanation: Gross energy means a metering arrangement where all renewable energy generated is exported to the grid through an independent meter without accounting for self-consumption / self use.

## 9. Term for Termination of the Agreement

- **9.1** This agreement shall be in force for a period of 25 years from the date of commissioning of the SRTPV system unless terminated otherwise as provided here under.
- 9.2 If the MSPDCL commits any breach of the terms of the Agreement, Seller shall serve a written notice specifying the breach and calling upon the MSPDCL to remedy/rectify the same within 30 (thirty) days or at such other period and at the expiry of 30 (Thirty) days or such other period from the delivery of the notice, Seller may terminate the agreement by delivering the termination notice, if the MSPDCL fails to remedy/rectify the same.
- 9.3 If the Seller commits any breach of the terms of the Agreement, MSPDCL shall serve a written notice specifying the breach and calling upon the seller to remedy/ rectify the same within 30 (thirty) days or at such other period and at the expiry of 30 (Thirty) days or such other period from the delivery of the notice, MSPDCL may

terminate the agreement by delivering the termination notice, if the seller fails to remedy/ rectify the same.

9.4 Upon termination of this Agreement, seller shall cease to supply power to the distribution system and any injection of power shall not be paid for by the MSPDCL.

# 10. Dispute Resolution:

All the disputes between the parties arising out of or in connection with this agreement shall be first tried to be settled through mutual negotiation.

The parties shall resolve the dispute in good faith and in equitable manner.

In case of failure to resolve the dispute, either of the parties may approach the appropriate Forum of law.

IN WITNESS WHEREOF, the Seller, the MSPDCL and MANIREDA have entered into this Agreement in three originals executed on the date and year first set forth above.

For AND ON BEHALF OF SELLER:
Name :
Connection No:
Address :
For AND ON BEHALF OF MANIPUR STATE POWER DISTRIBUTION COMPANY LTD (MSPDCL)
Name :
DESIGNATION:
Address :
For AND ON BEHALF OF MANIPUR RENEWABLE DEVELOPING AGENCY (MANIREDA)
Name :
DESIGNATION:
Address :