

## Net Metering Connection Agreement

This Agreement is made and entered into at (location)\_\_\_\_\_ on this (date)\_\_\_\_\_ day of (month)\_\_\_\_\_ Year\_\_\_\_\_ between

The Eligible Consumer, by the name of \_\_\_\_\_ having premise at (address)\_\_\_\_\_ as first party

AND

\_\_\_\_\_ the Distribution Licensee (herein after called as Discom) represented by \_\_\_\_\_ (*designation of office*) and having its registered office at \_\_\_\_\_ (address)\_\_\_\_\_ as second party of this agreement.

Whereas, the eligible consumer has taken the responsibility to set up or facilitate the requisite Photovoltaic system of *capacity* \_\_\_\_\_ *KWp* and sought connectivity to the Discom network under net- metering arrangement.

And whereas, the Discom agrees to provide connectivity to the eligible consumer for the electricity generated from the *Grid- Interactive SPV plant in to the power system of Discom as per conditions of the agreement and Assam Electricity Regulatory Commission (Grid Interactive Solar PV Systems) Regulations, 2015 as amended from time to time.*

Both the party hereby agrees to as follows:

### **1. Eligibility**

1.1 Eligible consumer is required to be aware, in advance, of the standards and conditions his system has to meet for being integrated into grid/distribution system.

1.2 Eligible consumer agrees that connection of Photovoltaic system to Discom's distribution system shall be bound by requirements of state Distribution Code and/or Discom's conditions of service. The grid shall continue to perform with specified reliability, security and quality as per the Central Electricity Authority Technical Standards for Connectivity of Distributed Generated Resources Regulations, 2014 of the Central Electricity Authority as amended from time to time.

1.3 *The eligible consumer agrees that his solar generation plant and net metering system will conform to the standards and requirements specified in the following Regulations and Codes as amended from time to time*

- (i) *Central Electricity Authority(Installation and Operation of Meters), Regulations , 2006*
- (ii) *Assam Electricity Regulatory Commission (Electricity Supply Code and Related Matter Matters) Regulations, 2004*
- (iii) *Assam Electricity Regulatory Commission Distribution Code Regulations*

1.4 The Eligible consumer shall also agree to conform to the specifications and standards applicable to the solar PV systems as may be prescribed by the Ministry of New and Renewable Energy, Govt. of India from time to time.

## **2. Technical and Interconnection Requirements**

2.1 Eligible consumer agrees that he has installed or will install, prior to connection of Photovoltaic system to Discom's distribution system, an isolation device (both automatic and inbuilt within inverter and external manual relays) and agrees for the Discom to have access to and operation of this, if required, for repair and maintenance of the distribution system.

2.2 Eligible consumer agree that in case of a power outage on Discom's system, photovoltaic system will shut down, unless special transfer and isolating capabilities have been installed on solar photovoltaic system.

2.3 All the equipment connected to distribution system must 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 Electricity Supply) Regulations, 2010 as amended from time to time

2.4 Eligible consumer agrees that Discom will specify the interface/inter-connection point and metering point.

2.5 Eligible consumer agrees to adhere to following power quality measures as per International or Indian standards and/or other such measures provided by Commission/Discom.

**a. Harmonic current:** Harmonic current injections from a generating station shall not exceed the limits specified in IEEE 519.

**b. Synchronization:** Photovoltaic system must be equipped with a grid frequency synchronization device.

**c. Voltage:** The voltage-operating window should minimize nuisance tripping and should be under operating range of 80% to 110% of the nominal connected voltage. Beyond a clearing time of 2 seconds, the Photovoltaic system must isolate itself from the grid.

**d. Flicker:** Operating of Photovoltaic system shouldn't cause voltage flicker in excess of the limits stated in the relevant sections of IEC standards or other equivalent Indian standards, if any.

**e. Frequency:** When the Distribution system frequency deviates outside the specified conditions (50.5 Hz on upper side and 47.5 Hz on lower side), the Photovoltaic system shouldn't energize the grid and should shift to island mode.

- f. **DC Injection:** Photovoltaic system should not inject DC power more than 0.5% of full rated output at the interconnection point or 1% rated inverter output current into distribution system under any operating conditions.
- g. **Power Factor:** While the output of the inverter is greater than 50%, a lagging power factor of greater than 0.9 should operate.
- h. **Islanding and Disconnection:** The Photovoltaic system in the event of voltage or frequency variations must island/disconnect itself within IEC standard on stipulated period.
- i. **Overload and Overheat:** The inverter should have the facility to automatically switch off in case of overload or overheating and shall restart when normal conditions are restored.
- j. **Paralleling device:** Paralleling device of Photovoltaic system shall be capable of withstanding 220% of the nominal voltage at the interconnection point.

2.6 Eligible consumer agrees to furnish all the data such as voltage, frequency and breaker, isolator position in his system, as and when required by the Discom. He may also try to provide facilities for online transfer of the operational data.

2.7 *The Eligible consumers shall not use a 'hybrid inverter' i.e a 'solar inverter' provision of feeding power from the grid.*

2.8 *The eligible consumer may install Rooftop Solar System with or without battery back- up; provided that, if the eligible consumer prefers connectivity with battery back-up, the inverter shall have a separate back-up wiring to prevent the battery/Decentralized Generation(DG) power from flowing in to the grid in the absence of grid supply, both automatic and manual switch shall also be provided*

2.9 *The eligible consumer shall be responsible for the safe operation , maintenance, and rectification of any defect of the Rooftop Solar System up to the point of Net meter from the solar plant, beyond which point the responsibility of safe operation, maintenance and rectification of any defect in the system, including the Net Meter, shall rest with the Discom*

2.10 *The existing meter shall be replaced by Bi- Directional Meter (whole current/CT operated) and a separate solar generation meter shall be available to measure solar power generation. Bi- Directional Meter (whole current/CT operated) shall be installed at interconnection point to Discom's network for recording export, import, net energy*

2.11 *The meter shall be as per approved make, design, rating and parameters of the Discom*

### **3. Safety**

- 3.1 Eligible consumer shall comply with the provisions of Central Electricity Authority (Measures Relating to Safety and Electricity Supply) Regulations 2010 and relevant provisions of National Electrical Code particularly those related to Solar PV installations.
- 3.2 Eligible consumer agrees that the design, installation, maintenance and operation of the photovoltaic system are performed in a manner conducive to the safety of the photovoltaic system as well as the Discom's distribution system.
- 3.3 Due to Discom's obligation to maintain a safe and reliable distribution system, eligible consumer agrees that if it is determined by Discom that eligible consumer's photovoltaic system either causes damage to and/or produces adverse effects affecting other distribution systems's consumers or Discom's assets, eligible consumer will have to disconnect photovoltaic system immediately from the distribution system upon direction from the Discom and correct the problem at his own expense prior to a reconnection.

### **4. Clearances and Approvals**

- 4.1 The eligible consumer agrees to obtain all the necessary approvals and clearances (environmental and grid connected related), if applicable before connecting the Roof-top solar photovoltaic system to the distribution system.

### **5. Access and Disconnection**

- 5.1 Discom shall have access to metering equipment and disconnecting means of photovoltaic system, both automatic and manual, at all time.
- 5.2 In emergency or outage situation, where there is no access to a disconnecting means, both automatic and manual, such as a switch or breaker, Discom may disconnect service to the premise.

### **6. Liabilities**

- 6.1 Eligible consumer and Discom will indemnify each other for damages or adverse effects from either party's negligence or intentional misconduct in the connection and operation of photovoltaic system or Discom's distribution system.
- 6.2 Discom and eligible consumer will not be liable to each other for any loss of profits or revenues, business interruption losses, loss of contract or loss of goodwill, or for indirect, consequential, incidental or special damage, including, but not limited to, punitive or exemplary damages, whether any of the said liability, loss or damages arise in contract, or otherwise.
- 6.3 Discom shall be liable for delivery or realization by eligible consumer for any fiscal or other incentive provided by the Central/State Government.

**7. Commercial Settlement**

8. All energy accounting and commercial settlement under this agreement shall follow Net-Metering guidelines as incorporated under Assam Electricity Regulatory Commission (Grid Interactive Solar PV Systems) Regulations, 2015 as amended from time to time.

**9. Connection Costs**

9.1 The eligible consumer shall bear all costs related to setting up of photovoltaic system including metering and interconnection costs. The eligible consumer agrees to pay the actual cost of modifications and augmentation to the distribution facilities required to connect photovoltaic system in case it is required.

9.2 Cost for interconnection equipment including the isolators, meters etc. are also to be borne by the eligible consumer.

**10. Termination**

10.1 The eligible consumer can terminate agreement at any time by providing *Discom with 30 days* prior notice.

10.2 Discom has the right to terminate the agreement on *30 days prior* written notice. If eligible consumer breaches a term of this agreement and does not remedy the breach within 30 days of receiving written notice from Discom of the breach.

10.3 Eligible consumer agrees that upon termination of this Agreement, he must disconnect forthwith the photovoltaic system from Discom's distribution network and to Discom's satisfaction.

In the witness, where of Mr. \_\_\_\_\_ for an on behalf of \_\_\_\_\_(Eligible consumer) and Mr. \_\_\_\_\_ for and on behalf of \_\_\_\_\_ (Discom) agree to this agreement.

\_\_\_\_\_  
\_\_\_\_\_