

## **Net Metering Connection Agreement**

Approved renewable generation capacity (peak) \_\_\_\_  
Registration no. \_\_\_\_\_  
Date of Registration \_\_\_\_\_  
Reference of application fees deposited \_\_\_\_\_  
Reference of registration fees \_\_\_\_\_  
Date of connectivity \_\_\_\_\_

This Agreement is made and entered into at New Delhi on this \_\_\_\_\_ day of (month) \_\_\_\_\_ of \_\_\_\_\_ year between \_\_\_\_\_ (herein after call as consumer residing at \_\_\_\_\_ (address) \_\_\_\_\_ as first party and Secretary, NDMC (herein after called as NDMC) and having office at Palika Kendra, Sansad Marg, New Delhi as second party of the agreement.

### **1. Eligibility**

1.1 The consumer is registered consumer of NDMC having the following details:-

- 1) K. No. \_\_\_\_\_
- 2) Consumer No. \_\_\_\_\_
- 3) Sanctioned Load \_\_\_\_\_
- 4) Address of Electric Supply \_\_\_\_\_
- 5) Billing Address \_\_\_\_\_
- 6) Date of existing Electric Connection \_\_\_\_\_

1.2 The 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 of NDMC.

1.3 The consumer agrees that connection of Photovoltaic system to NDMC distribution system shall be bound by requirements of Distribution Code and/or NDMC conditions of service and Delhi Electricity Regulatory Commission (Net Metering for Renewable Energy) Regulations, 2014. The grid shall continue to perform with specified reliability, security and quality as per the Central Electricity Authority (Grid Standard) Regulations 2010 as amended from time to time.

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

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

2.2 The consumer agrees that in case of a power outage on NDMC system, photovoltaic system will shut down, unless special transfer and isolating capabilities have been installed on photovoltaic system.

2.3 Technical specifications of net meter and renewable energy meter shall be in compliance to the specifications approved by CEA / DERC / NDMC as applicable.

2.4 All the equipment connected to NDMC distribution system shall be compliant with relevant International (IEEE/IEC) or Indian standards (BIS) and installations of electrical equipment must comply with Indian Electricity rules, 1956 and various Central Electricity Regulations.

2.5 The consumer agrees that NDMC will specify the interface/inter-connection point and metering point.

2.6 The consumer agrees to adhere to following power quality measures as per International or Indian standards and/or other such measures provided by DERC / NDMC.

**A. Harmonic current:** Harmonic current injections from the renewable energy generating station shall not exceed the limits specified in IEEE 519 / CEA (Technical standards for connectivity of the distributed generation resources) Regulations, 2013 as applicable.

**B. Synchronization:** Photovoltaic system must be equipped with a grid frequency synchronization device and shall be in compliant with IEEE 519 / CEA (Technical standards for connectivity of the distributed generation resources) Regulations, 2013 as applicable.

**C. Voltage:** The voltage-operating window shall minimise nuisance tripping and shall 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:** Operation of Photovoltaic system shall not 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 shall shift to island mode within 0.2 Seconds.

**F. DC Injection:** Photovoltaic system should not inject DC power more than 0.5% of full rated output at the interconnection point or 1% of rated inverter output current into distribution system under any operating conditions. This should be in compliant to IEEE 519 / CEA (Technical standards for connectivity of the distributed generation resources) Regulations, 2013 as applicable.

**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 fault, voltage or frequency variations must island/disconnect itself within IEC standard on stipulated Period.

**I. Overload and Overheat:** The inverter shall have the facility to automatically switch off in case of overload or overheating and should 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.

2.7 The consumer agrees to furnish all the data such as voltage, frequency, and breaker, isolator position in his system, as and when required by the NDMC. He may also provide facilities for online transfer of the real time operational data, if possible.

### **3. Safety**

3.1 The consumer shall comply with the Central Electricity Authority (Measures Relating to Safety and Electricity Supply) Regulations 2010.

3.2 The 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 NDMC distribution system. The consumer shall maintain the overall conditions of the photovoltaic system service in compliant to the CEA (Grid Standards) Regulations, 2010 / Distribution supply code.

3.3 As it is the obligation of NDMC to maintain a safe and reliable distribution system, consumer agrees that if it is determined by NDMC that consumer's photovoltaic system either causes damage to and/or produces adverse effects, affecting the distribution systems of other consumers or NDMC assets, the consumer will have to disconnect photovoltaic system immediately from the distribution system upon direction from the NDMC and correct the problem at his own expense prior to a reconnection.

3.4 The consumer shall install the equipments in compliant with BIS / IEC / IEEE and shall install the meters in compliant with CEA (Installation an Operation of meters) Regulations, 2006 and additional conditions issued by DERC / NDMC in respect of Net meters and renewable energy meter.

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

4.1 The consumer agrees to attain all the necessary approvals and clearances (environmental and grid connected related) before connecting the photovoltaic system to the distribution system.

4.2 The consumer shall install the Net meter duly tested and certified by any NABL accredited laboratory.

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

5.1 NDMC shall have access to metering equipment and disconnecting means of photovoltaic system, both automatic and manual, at all times.

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, NDMC may disconnect service to the premise.

### **6. Liabilities**

6.1 The consumer and NDMC shall 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 NDMC distribution system.

6.2 NDMC and consumer will not be liable to each other for any loss or profits or revenues, business interruption losses, loss of contract or loss of goodwill, or for indirect, consequential, incidental or special damages, 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 NDMC shall not be liable for delivery or realization by consumer for any fiscal or other incentive provided by the central government.

## **7. Commercial Settlement**

All the commercial settlement under this agreement shall follow the Net metering regulations of Delhi Electricity Regulatory Commission (Net Metering for Renewable Energy) Regulations, 2014. Both parties agree to settle the dues / units as per the guidelines issued by DERC from time to time.

## **8. Conditions for System Connectivity**

8.1 The parties shall abide by the Central Electricity Regulatory Commission Regulations in respect of procedure of grant of Connectivity. The consumer shall submit the following documents to NDMC for the grant of connectivity:

- ✓ Synchronization Circuit Details.
- ✓ Safety Report.
- ✓ Protection Circuit Details.
- ✓ Test Certificates of System.
- ✓ Schematic diagram of Renewable Energy system.
- ✓ Test certificate of Net meter issued by NABL accredited laboratory.

## **9. Connection Costs**

9.1 The eligible consumer shall bear all costs related to setting up of photo-voltaic system including metering and interconnection costs as per the estimate issued by NDMC. The consumer agrees to pay the actual cost of modifications and upgrading of the distribution facilities required to connect photo-voltaic 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 consumer can terminate agreement at any time by providing NDMC with 90 days prior notice.

10.2 NDMC has the right to terminate Agreement on 30 days prior written notice, if consumer breaches a term of this Agreement and does not remedy the breach within 30 days of receiving written notice from NDMC of the breach.

10.3 Consumer agrees that upon termination of this Agreement, he must disconnect the photovoltaic system from NDMC distribution system in a timely manner and to NDMC satisfaction.

In the witness, where of Mr. \_\_\_\_\_ for an on behalf of \_\_\_\_\_ (Consumer) and Mr. \_\_\_\_\_ for and on behalf of Secretary, NDMC agree to this agreement.

Signed, Sealed and Delivered by

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**(Second Party)**

**(First Party)**

Authorized Signatory  
For and on behalf of  
New Delhi Municipal Council

Address:- \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Witnesses: -**

**1) Signature  
Name & address**

**2) Signature  
Name & Address**

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