CONNECTION AGREEMENT

This Connection Agreement for (hereinafter referred to as "Agreement") is made at New
Delhi on thisday of 201 but the same shall be effective
from 201 (Effective Date)
Between
, son/daughter of, resident of,
OR a company duly incorporated under the Companies Act, 1956, having its registered office at;
OR a government entity having its registered office at
[hereinafter referred to as Consumer] which expression shall, unless repugnant to the context or meaning thereof, include its successors and assigns;
And
Tata Power Delhi Distribution Limited , a company incorporated under the Companies Act, 1956, having its registered office at TPDDL House, Hudson Lines, Kingsway Camp, Delhi-110009 hereinafter referred to as [hereinafter referred to as TPDDL] which expression shall, unless repugnant to the context or meaning thereof, include its successors and assigns;
That the Client and TPDDL shall hereinafter individually be referred to as 'Party' and collectively referred to as 'Parties';
Whereas, the Client has decided to install and maintain a Renewable Energy System on the following premises having capacity of (minimum 1kWp), which fall within the licensed supply area of TPDDL in terms of DERC (Net Metering for Renewable Energy) Regulations, 2014.
Whereas the Client has submitted application no for connection of the above Renewable Energy System, which has been accepted by TPDDL.
And whereas the energy generated from the above Renewable Energy System shall be accounted for as per the terms and conditions of this agreement

NOW THIS AGREEMENT WITNESSES AS FOLLOWS:

Article I. DEFINITIONS AND INTERPRETATION

- 1. In this Agreement, unless the context otherwise requires, the terms shall have the meanings set out hereunder:
 - a. Applicable laws shall mean such Central, State and local laws which apply to and govern the Parties including but not limited to the Delhi Electricity Reform Act, 2000, Electricity Act, 2003, Amendments thereto, the Indian Electricity Rules, 1956, Delhi Electricity Supply Code and Performance Standards 2007, Rules of works of licensee Regulations, DERC Net Metering Regulations 2014, DERC (Renewable Purchase Obligation) Regulations 2012 and others;
 - b. **Billing Period** means the period for which bill is raised;
 - c. *Commission/DERC* means Delhi Electricity Regulatory Commission
 - d. *Consumer* means means any person who is supplied with electricity for his own use by a licensee or the Government or by any other person engaged in the business of supplying electricity to the public under this Act or any other law for the time being in force and includes any person whose premises are for the time being connected for the purpose of receiving electricity with the works of a licensee, the Government or such other person, as the case may be;
 - e. *Day(s)* means any period specified by day(s) to be treated as working days, unless specified otherwise;
 - f. *Distribution System* means the system of wires and associated facilities between the delivery points on the transmission lines or the generating station connection and the point of connection to the installation of the consumers;
 - g. *Effective date* shall mean the date agreed to between the parties and specified in this Agreement on which the terms of this Agreement shall be deemed to be enforceable on the parties to this Agreement and shall be the date on which the renewable energy system is connected to TPDDL Distribution Network

- h. *Governmental Authority* means any national, state, or local government, any political subdivision or any governmental, judicial, public or statutory instrumentality, administrative agency, authority, body or other governmental entity having jurisdiction over the Site, the DG set, TPDDL, the Client or Operation & Maintenance of the DG set;
- i. *Guidelines* means Guidelines under DERC (Net Metering for Renewable Energy) Regulations, 2014 (attached as Annexure and is to be considered as part of this agreement)
- j. *Interconnection point means* the interface of Renewable Energy source with the Distribution System;
- k. *Invoice* means either a periodic bill/supplementary bill or a periodic invoice/supplementary invoice raised by TPDDL;
- 1. **kVAh** means kilo volt ampere hour;
- m. *kWp* means kilo watt peak;
- n. Net Meter means an appropriate energy meter capable of recording both import & export of electricity or a pair of meters one each for recording the net import and net export of electricity as the case may be;
- o. *Premises* includes any land, building, structure or rooftop or part or combination thereof;
- p. *Regulations* means Delhi Electricity Regulatory Commission (Net Metering for Renewable Energy) Regulations, 2014 (attached as Annexure and is to be considered as part of this agreement)
- q. *Renewable Energy Generator* means the person, which may either be the consumer of the premises or any third party, who is responsible for generating electricity from Renewable Energy sources installed at the consumer's premises;
- r. **Renewable Energy System** means the system to generate electricity from such source(s) which are recognized as renewable energy source(s) by Ministry of New and Renewable Energy (MNRE) or any other agency as may be notified by Government of India/Commission;

- s. *Settlement Period* means period within which surplus energy generated in solar plant will be adjusted to subsequent bill; this will be considered as Financial Year
- t. **Year or Financial Year** means the period beginning from first day of April in an English calendar year and ending with the thirty first day of March of the next year.
- 2. References to Clauses and Schedule shall be to clauses of and schedules of this Agreement.
- 3. References to persons shall include companies, bodies, corporate, unincorporated associations and partnerships.
- 4. Words importing the singular shall include the plural and vice versa
- 5. This Agreement along with the DERC (Net Metering for Renewable Energy) Regulations, 2014 and the Guidelines thereto, constitutes the entire understanding and Agreement arrived at between the Parties hereto.
- 6. Unless the context otherwise requires, words or expressions occurring in this agreement and not defined herein but defined in the Delhi Electricity (Supply Code and Performance Standards) Regulations, 2007, DERC (Net Metering for Renewable Energy) Regulations, 2014 and guidelines thereto, Electricity Act, 2003, Electricity Rules, 1956, relevant Tariff Order shall bear the same meaning as in the Act/ Electricity Rules/Tariff Order or in absence thereof, the meaning as commonly understood in the Electricity Supply Industry.

Article II. A. OBLIGATIONS OF TPDDL

- 1. TPDDL shall provide the Renewable Energy System connectivity to its Distribution System subject to operational constraints as defined in Regulations and Guidelines.
- 2. The capacity of the Renewable Energy System shall be subject to the Regulations and Guidelines as amended from time to time.

- 3. TPDDL shall ensure at all times that the interconnection of the Renewable Energy System with its Distribution System is in complete conformity with the applicable laws, including the Central Electricity Authority (Technical Standards for connectivity of the Distributed Generation Resources) Regulations, 2013 and the Central Electricity Authority (Measures relating to Safety and Electric Supply), Regulations, 2010, as amended from time to time
- 4. TPDDL shall, within fifteen (15) days from the date of installation of the Renewable Energy System shall procure, test and install the Net Meter. In case the Net Meter is procured by the applicant, the TPDDL, within fifteen (15) days from the intimation from the applicant regarding procurement of the Net Meter, shall test and install the Net Meter so procured.
- 5. For TPDDL's Distribution System up to the point of Net Meter, the responsibility of safe operation, maintenance and rectification of any defect in the system shall lie with TPDDL

B. RIGHTS OF TPDDL

- 1. TPDDL may disconnect the Renewable Energy System at any time in the event of possible threat/damage, from such Renewable Energy System to its distribution system, to prevent an accident or damage subject to clause II.A.3. and III.2. of this agreement of this agreement,
- 2. In case the Renewable Energy System sought to be connected to TPDDL's Distribution System is higher than the sanctioned load at the premises of the Consumer, the Consumer of the said Premises should have already paid the Service Line cum Development Charges at the time of the registration of the Renewable Energy System, as defined in Regulations and Guidelines, equal to the differential amount between the capacity of the RE system and the existing sanctioned load. Such SLD charges shall be determined as per the DERC (Supply Code and Performance Standards) Regulations, 2007 as amended from time to time and relevant issues issued by the DERC from time to time.

Article III. OBLIGATIONS OF THE CONSUMER AND RENEWABLE ENERGY GENERATOR

1. The Consumer shall provide access for installation of both the Renewable Energy Meter and Net Meter to TPDDL for measuring the quantum of energy injected into and from the TPDDL Distribution System.

- 2. The Renewable Energy Generator shall be responsible for safe operation, maintenance and rectification of any defect of the Renewable Energy System up to the point of Net Meter.
- 3. The Renewable Energy Generator may install grid interactive Renewable Energy system with or without battery backup at the Consumer Premises. Provided that if the Renewable Energy Generator, prefers connectivity with battery backup (full load backup/partial load backup), in all such cases the inverter shall have separate backup wiring to prevent the battery/ Decentralized generation(DG) power to flow into the grid in the absence of grid supply.

Manual isolation switch shall also be provided.

- 4. As per the DERC (Net Metering for Renewable Energy) Regulations, Guidelines, 2014, the Renewable Energy Generator must ensure that the Renewable Energy System Complies with the following IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013:
 - (i) Harmonic current injections from a generating station shall not exceed the limits specified in IEEE 519
 - (ii) Renewable Energy System must be equipped with a grid frequency synchronization device. Every time the generating station is synchronized to the electricity system. It shall not cause voltage fluctuation greater than +/- 5% at point of connection.
 - (iii) 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 second, the Renewable Energy system must isolate itself from the grid.
 - (iv) Operation of Renewable Energy System should not cause voltage flicker in excess of the limits stated in IEC 61000 standards or other equivalent Indian standards, if any.
 - (v) When the Distribution system frequency deviates outside the specified conditions (50.5 Hz on upper side and 47.5 Hz on lower side), there should be over and under frequency trip functions with a clearing time of 0.2 seconds.
 - (vi) Renewable Energy 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.
 - (vii) While the output of the inverter is greater than 50%, a lagging power factor of greater than 0.9 should operate. The Renewable Energy

- System in the event of fault, voltage or frequency variations must island/disconnect itself within IEC standard on stipulated period.
- (viii) The inverter should have the facility to automatically switch off in case of overload or overheating and should restart when normal conditions are restored.
- (ix) Paralleling device of Renewable Energy System shall be capable of withstanding 220% of the normal voltage at the interconnection point.

Article IV. METERS AND METER READING

- 1. Meters shall be Meter Reading instrument (MRI) compliant or AMR (Automatic Meter Reading) or AMI (Advanced Metering Infrastructure) compliant for recording meter readings.
- 2. All the meters shall adhere to the standards as specified in CEA (Installation and Operation of meters) Regulations 2006 and (Installation and Operation of meters) Regulations, 2010 as amended from time to time.
- 3. The Net Meter shall be, as per single phase or three phase requirement. All the meters to be installed for net metering shall be of the same or better Accuracy Class Index than the existing meter installed at Consumer Premises.
- 4. The Renewable Energy Meter and the Net Meter at the premises of the consumer shall be procured and installed by TPDDL as per the provisions of DERC (Supply Code and Performance Standards) Regulations 2007. However, if the consumer of the premises wishes to procure the Net Meter, he may procure such meter and present the same to the TPDDL for testing and installation.
- 5. All meters, including the Renewable Energy Meter shall be installed at an accessible location of the Premises to facilitate easy access for meter reading to TPDDL.
- 6. Cost of the Net Meter, which is capable of recording both import and export of electricity, shall mean the differential cost between existing consumer meter, if removed and such a new Net Meter is installed to be borne by the consumer.
- 7. In case net metering is done with the help of two unidirectional meters, the cost of additional meter, other than the existing consumer meter shall be borne by the consumer.

- 8. The charges for the testing and installation of the Net Meters shall be borne by the consumer of the premises and for the Solar Energy Meter shall be borne by TPDDL. This will be required to be done as per frequency prescribed by the Commission or as per requirement of TPDDL.
- 9. The Net Meters to be installed for the consumers of the premises under the ambit of time of day tariff shall be time of day (ToD) compliant.
- 10. Any dispute regarding the theft of electricity and tampering of meter(s) shall be settled as per the relevant provisions of the Electricity Act 2003 and the DERC Supply Code and Performance Standards Regulations, 2007, as amended from time to time.

Article V. BILLING AND PAYMENT OF CHARGES

The parties agree hereto on the following conditions governing the billing and payment mechanism for the services rendered under this Agreement

- 1. The accounting of electricity generated, consumed and injected by the Renewable Energy Generator under these regulations shall become effective from the date of connectivity of Renewable Energy System with the distribution system under these Regulations from the Effective Date of this agreement.
- 2. The procedure for billing and energy accounting shall be applicable as directed by the Commission from time to time.
- 3. The TPDDL shall show, separately, the energy units exported, the energy units imported, the net energy units billed and/or the energy units carried forward, if any, to the consumer in their bill for the respective billing period.
- 4. If during any billing period, the export of units exceeds the import of units consumed, such surplus units injected by the consumer shall be carried forward to the next billing period as energy credit and shown as energy exported by the consumer for adjustment against the energy consumed in subsequent billing periods within the settlement period.
- 5. During any billing cycle, the TPDDL shall raise invoice for the net electricity consumption, as per applicable tariff, only after adjusting / netting off of the unadjusted energy credits of the previous billing cycle(s).
- 6. The surplus energy measured in kilo-watt hour shall be utilized to offset the consumption measured in kilo-watt hour only unless otherwise allowed by the Commission from time to time. In case the Consumer is billed on kVAh.

during injection of surplus energy to the grid, the Power Factor shall be assumed equal to unity.

- 7. Tariff at the end of financial year for surplus energy

 The Consumer shall be paid for net energy credits which remain unadjusted at
 the end of the financial year at the rate of Average Power Purchase Cost
 (APPC) of the TPDDL for the respective year on provisional basis.

 Subsequently after true up of the power purchase cost of the TPDDL, by the
 Commission, adjustment amount between provisional rate and trued up rate of
 average power purchase cost shall be credited/debited to the account of
 consumer in the next billing cycle after issuance of the true up order of the
- 8. There shall be no deemed generation charges payable to the Renewable Energy Generator or consumer of the premises.

Article VI. PROCEDURE OF BILLING & ACCOUNTING

Procedure of billing & accounting for a Consumer shall be as determined by the Commission from time to time in the Regulations, Guidelines thereto as amended from time to time, Tariff Orders and circulars/notifications.

Article VII. NECESSARY APPROVALS

relevant year by the Commission.

The Renewable Energy Generator shall, at all times, be required to obtain the necessary approvals for setting up the Renewable Energy System in accordance with the provisions of the Central Electricity Authority (Technical Standards for Connectivity of Distributed Generation Resources) Regulations, 2013 as amended from time to time and operation of the Renewable Energy System.

Article VIII. <u>DISPUTE RESOLUTION</u>

Any dispute in billing shall be settled as per the DERC (Guidelines for Establishment of Forum for Redressal of Grievances of the Consumers and Ombudsman) Regulations, 2003.

Article IX. <u>TERM AND TERMINATION</u>

The term of this agreement shall be coextensive with the life of the Solar Energy System to be connected which is _____ years, (but which shall in no event extend beyond 25 years).

Otherwise, the agreement may be terminated in the following circumstances:

- (a) Upon request of the consumer to disconnect Renewable Energy System from the Distribution System while retaining TPDDL supply. In such case, all the outstanding dues will be settled in the final bill, the RE system shall be disconnected from the system, along with the RE meter/Net meter and shall be replaced with the standard consumption meter.
- (b) Upon change of address of the Consumer. If the Consumer elects to leave the current premises and surrender the supply of electricity from TPDDL, he/she shall inform TPDDL in writing, a minimum of 5 days before change in address. The RE system shall be disconnected along with the RE meter, Net meter. The Consumer is at liberty to assign the RE system to the next occupant of the Premises, but such new Consumer shall have to enter into a new agreement with TPDDL, re-register the project and complete all the commercial formalities. This agreement can, in no way, be assigned or transferred to another person.
- (c) In case the RE system is not being operated in strict compliance with all the applicable laws, regulations and/or is posing threat to safety of the grid or to other consumers. TPDDL reserves the right to ask the consumer to disconnect the RE system from the grid. In case the consumer fails to comply, TPDDL shall disconnect the consumer premises from the grid immediately, without prior notice to the consumer, until such time as the RE system is not disconnected. In such cases, the SLD charges shall not be refunded, and TPDDL may initiate appropriate proceedings at the concerned forum for violation of any laws, regulations.

Article X. <u>MISCELLANEOUS</u>

- 1. **SEVERABILITY**: If any provision of this Agreement becomes invalid or unenforceable by the courts of any jurisdiction to which it is subject, such invalidity or unenforceability shall not prejudice the remaining provisions of this Agreement, which shall continue in full force and effect.
- 2. **WAIVER OF RIGHTS**: No delay or forbearance by either party in exercising any right or power under this Agreement shall be construed as a waiver of such right or power, nor shall any single or partial exercise of such right or power preclude any further exercise of such right or power.
- 3. **ASSIGNMENT**: The parties shall, in no way be permitted to assign this agreement to any other person.

4. GOVERNING LAW

The agreement shall be governed by the laws of India and any issue arising therefrom shall be subject to the jurisdiction of the courts at Delhi

5. NOTICES

All communications, notices and consents provided for herein shall be in writing and be given in person or by means of telex, telecopy or other wire transmission (with request for assurance of receipt in a manner typical with respect to communications of that type) or by registered or certified mail, return receipt requested and shall become effective: (a) on delivery if given in person; (b) on the date of transmission if sent by telex, telecopy, or other wire transmission or (c) on receipt if sent by mail.

Notices shall be addressed as for	ollows:
If to TPDDL:	
If to Consumer:	

6. **INDEMNITY**

The Consumer shall defend, indemnify, save and hold harmless the other party, its officers, directors, shareholders, agents, contractors and employees from and against any and all actions, suits, proceedings, judgments, liabilities and losses, damages, costs, demands and third party claims for any loss, damage and expenses, (including reasonable legal costs) including those filed claiming damages for loss to any property or death or bodily injury to any person or praying for any other relief, in connection with or arising out any cause of action connected with the RE system installed under the terms and conditions of this agreement.

That Consumer only shall be liable to indemnify any third party in regard to any damage, loss resulting to third parties due to any action or activity undertaken under this agreement.

7. COMPLETE AGREEMENT

- (a) This Agreement has been executed in the English language only and only the English language shall be the controlling language for interpretation thereof. No translation, if any, of this Agreement into another language shall be of any force or effect in the interpretation of this Agreement or in determination of the intent of either of the Parties hereto.
- (b) The Parties have executed two (2) copies of this Agreement and each copy is to be treated as original and primary evidence of the understanding arrived at between the Parties.

IN WITNESS WHEREOF THE PARTIES HAVE CAUSED THIS AGREEMENT TO BE EXECUTED BY THEIR RESPECTIVE DULY AUTHORIZED OFFICERS AS OF THE DATE SET FORTH ABOVE.

FOR NORTH DELHI POWER LIMITED	FOR
SIGNATURES	SIGNATURES
NAME	NAME
DESIGNATION	DESIGNATION
AUTHORISED SIGNATORY	AUTHORISED SIGNATORY

IN THE PRESENCE OF:

WITNESS 1	WITNESS 2

SIGNATURES
NAME
ADDRESS