Annexure-I

POWER PURCHASE AGREEMENT FOR SOLAR POWER PLANTS INSTALLED FOR INDIVIDUAL GRID CONNECTED PUMPS UNDER

PM-KUSUM (CONPONENT- C) WITH NETMETERING

This Power Purchase agreement is entered into at(place).... on this.... Dayof.....between TP Central Odisha Distribution Limited(TPCODL) a Joint Venture between Tata Power and the Government of Odisha with its registered office located at Bhubaneswar, Odisha ,represented by.....here in after referred to as the" TPCODL", (which expression shall, unless repugnant to the context or meaning there of, include its successors and permitted assigns),as party of the first part

AND

.....(Name), an agricultural consumer of TPCODL residing at(address)..... ,

having his land and grid connected pump set at Village ..... GP..... Block..... Subdivision..... District..... Herein after, referred to as the "farmer"(which expression shall, unless repugnant to the context or meaning thereof, include his successors and permitted assigns)as party of the second part.

Whereas,

a. Under Component C of PM-KUSUM scheme, the farmer intends to set up a solar Power Plant of appropriate capacity and in order to reduce his grid power consumption on account of irrigation and increase his income through sale of unutilized solar power to TPCODL , is desirous to connect the said solar Power Plant to the at LT Distribution system of the latter via net meter as per relevant orders of the Odisha Electricity Regulatory Commission (OERC) vide Order No. .....dated: .....

b. As per provisions of the scheme, the farmer intends to install a solar Power Plant of .....kWp capacity on his agricultural land situated at..... having holding No ..... khata No ..... patta no..... under ..... Sub-Division of TPCODL.

c. The farmer intends to sell the un-utilised solar power generated from the solar Power Plant on net metering basis, from the date of commissioning of the solar Power Plant.

Explanation:*the "Commissioning"meansthe stage at which the solar Power Plant starts generating power for the use by the farmer and injects surplus power ifany,into the grid.*

d. TPCODL intends to purchase the energy, generated by such solar power plant on Net-metering basis, at the tariff determined by the OERC.

Now therefore, in consideration of the foregoing premises ,the parties, here to,intending to be legally bound, here by agree as under:

1. Technical and Interconnection Requirements:

Farmers shall ensure his solar power system complies with the following technical and inter-connection requirement and shall:

1. Comply with the applicable standards and conditions, in respect of integrating the solar Power Plant with the distribution system.

2. Connect and operate the solar Power Plant to TPCODL's distribution system, in accordance with the State Grid code, and distribution Code as amended from time to time.

3. Install a suitable inverter with automatic built-in isolation device before the point of connection with TPCODL's distribution system,.

4. Provide external manual isolation mechanism with suitable locking facility ,so that Solar Power Plant will not back-feed into the TPCODL"s network in case of power outage of the TPCODL's distribution system, and it shall be accessible for TPCODL to operate, if required, during maintenance / emergency conditions.

5. Install all the equipment of the solar power plant compliant with relevant International (IEEE/IEC)and Indian standards(BIS) as well as technical specifications provided by MNRE, GOI from time to time.
6. (a) The Solar power plant system shall be designed, engineered, constructed and operated by the Farmer or any other person on his behalf, with reasonable diligence, subject to all applicable Indian Laws ,Rules, Regulations as amended from time to time and orders having the force of law.

   (b) The farmer, shall commission the solar power plant within six months from the date of approval of the PPA.

7. Adhere to the following power quality measures, as per the International and Indian standards and/or such other measures stipulated by OERC/TPCODL:

   i. Harmonic current: Harmonic current injections from a generation unit shall not exceed the limits specified in IEEE519.

   ii. Voltage at the injection point should be in the operating range of 80% to110% of the nominal connected voltage.

   iii. Flicker: Operation of Photovoltaic system shouldn't cause voltage flicker in excess of the limits stated in the relevant sections of IE C standards or other equivalent Indian standards ,if any.

iv. Frequency: When the system frequency exceeds the upper limit, specified in the IEGC as amended from time to time, the solar power plant shall shift to island mode.

v. DC Injection: Photovoltaic system should not inject DC power more than0.5% of full rated output at the interconnection point or 1% of rated inverter output current into distribution system under any operating conditions.

vi. Power Factor: While the output of the inverter is greater than 50%,a lagging power factor of greater than0.9,shall be maintained.

vii. The solar power plant, in the event of voltage or frequency variations must island/disconnect itself, asper IEGC/OEGC Regulations, within the stipulated period.

2. Safety:

The farmer shall comply with the following safety measures:

1. The Farmer shall comply with the Central Electricity Authority (Measures relating to Safety and Electricity Supply) Regulations,2010.
2. The Farmer shall ensure that, the design, installation, maintenance, and operation of the solar power plant are in a manner conducive to the safety of the solar power plant as well as the TPCODL's distribution system.
3. If the farmer's solar power plant either, causes damage to and/or produces adverse effects on the other consumers' or TPCODL"s assets, Farmer will disconnect the solar power plant immediately, from the distribution system, by himself or upon directions from the TPCODL and rectify the same at his own cost before reconnection.

3. Clearances and Approvals

The Farmer shall obtain TPCODL's and other statutory approvals and clearances before connecting the solar power plant to the distribution system.

4. Access and Disconnection

1. TPCODL shall have access to metering equipment and disconnecting device of the solar power plant ,both automatic and manual, at all times.
2. Inemergencyoroutagesituation,wherethereisnoaccesstoadisconnectingdevice either, automatic or manual, the TPCODL shall have the right to disconnect power supply to the farmer.

5. Liabilities

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

6. Commercial Settlement-

Tariff:

i. The TPCODL shall pay for the Net energy at Rs....per kWh, as determined by the OERC in the Order dated.....,for a period of 25 years.

ii. If for any reason the date of commissioning is delayed, beyond the date of commissioning agreed. The tariff payable by the TPCODL shall be lower of the:

i. Tariff agreed to in this agreement

OR

ii. Any revised tariff, determined by the Commission, prevailing on the date of commissioning

OR

iii. 90%of the tariff agreed to in this agreement.

iii. The farmer, shall pay the Electricity tax and other statutory levies, pertaining to solar power generation, as may be levied from time to time.

iv. The Farmer shall not have any claim for compensation, if the Solar power generated by his solar power plant system could not be absorbed by the distribution system due to failure of power supply in the grid/distribution system for the reasons, such as line clear, load shedding and line faults, whatsoever. However , TPCODL will take adequate care to make the lines fully available during sunshine hours.

7. Metering:

The Vendor on behalf of the farmer, shall install a two smart meters - on the generation side of solar power plant to measure solar power generation, the other one a Bi-directional meter (whole current/CT operated) at the point of interconnection to the distribution system, at a suitable place, accessible for recording export of energy, from the solar power plant to the grid and import of energy for operation of the pump of the farmer from the grid. The bi-directional meter, shall comply with the Central Electricity Authority(Installation and operation of meters)Regulations,2006 and shall have the following features:

i. Separate registers, for recording export and import energy with facility to download by Meter Reading Instrument(MRI).

ii. kVA, kW and kVAR measuring registers for both import and export.

iii. The Meter shall have RS232 (or higher) communication optical port / Radio Frequency(RF)port to support Automatic Meter Reading(AMR).

8. BILLING AND PAYMENT:

1. TPCODL shall issue monthly/quarterly electricity bill for the net energy on the scheduled date of meter reading.
2. In case, the exported energy is more than the imported energy, TPCODL shall pay for the net energy exported, asper Tariff agreed in this agreement, within 30 days from the date of issue of bill, duly adjusting the fixed charges and electricity duty, if any.

3. Incase, the exported energy is less than the imported energy, the Farmer shall pay TPCODL for the Net energy imported as per the prevailing retail agricultural tariff, determined by the Commission from time to time.
4. The TPCODL shall pay interest at the same rates, as is being levied on the consumers, for late payment charges, in case of any delay in payment beyond 30 (thirty) days period from the date of issue of bill, for the Net energy exported.

Explanation: *Net metered energy means the difference of meter readings of energy injected by the solar power plant into the grid (export) and the energy drawn from the grid for use by the Farmer (import,)recorded in the bi-directional meter.*

9. Term and Termination of the Agreement

1. This agreement, shall be in force for a period of 25 years from the date of commissioning of the solar power plant unless terminated otherwise, as provided hereunder.

2. If the TPCODL commits any breach of the terms of the Agreement, Farmer shall serve a written notice specifying the breach and calling upon the TPCODL 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, Farmer may terminate the agreement by delivering the termination notice, if the TPCODL fails to remedy/ rectify the same.

3. If the Farmer commits any breach of the terms of the Agreement, TPCODL shall serve a written notice specifying the breach and calling upon the Farmer 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, the TPCODL may terminate the agreement by delivering the termination notice, if the Farmer fails to remedy/rectify the same.

4. Upon termination of this Agreement, Farmer shall cease to supply power to the distribution system and any injection of power shall not be paid for by the TPCODL.

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.

IN WITNESS WHERE OF ,the Farmer and the TPCODL have entered into this Agreement executed as of the date and they are first set for the above

For AND ON BEHALF OF **TP Central Odisha Distribution Company Limited**	**For AND ON BEHALF OF farmer**
By: (Name)Designation:Address :	By: (Name)RRNo : Address:
1.WITNESS in Presence of Name: Designation:	1.WITNESS In Presence of Name:
2.WITNESS in Presence of Name: Designation:	2.WITNESS In Presence of Nam